

**50Hz**



# **GENERAL CATALOGUE**

[www.foras-pumps.it](http://www.foras-pumps.it)





# The energy of experience

 **FORAS**  
WATER PUMPS

registered trademark of  
PENTAX INDUSTRIES S.p.A.

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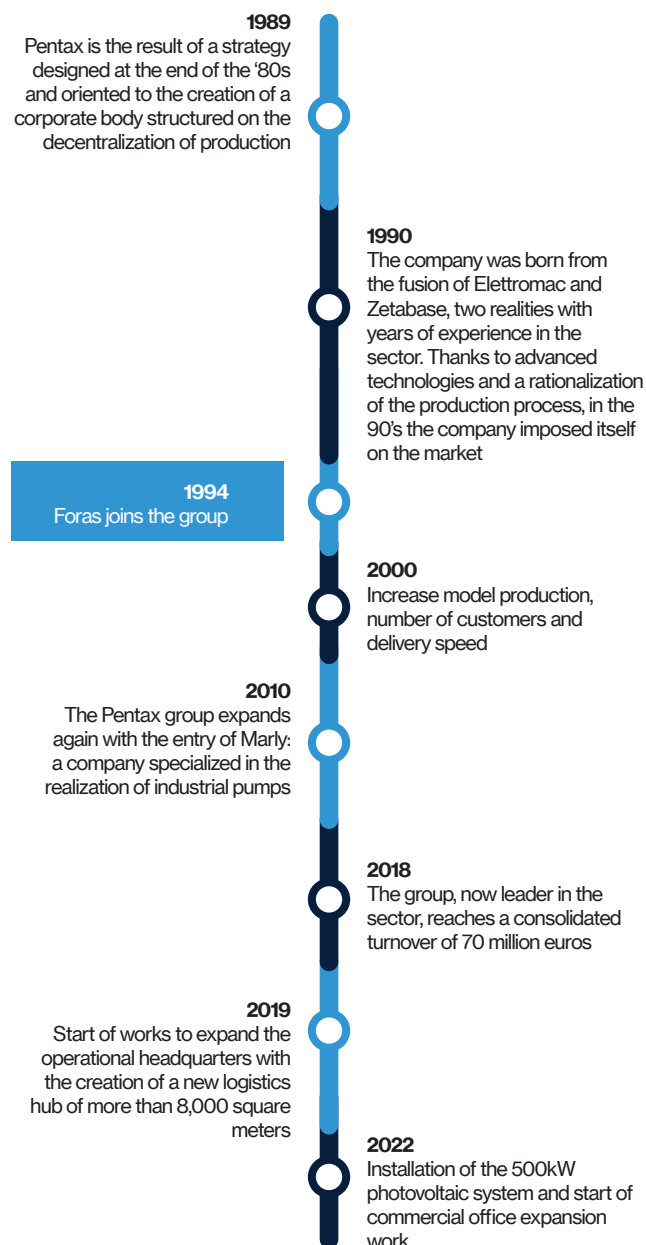
[www.foras-pumps.it](http://www.foras-pumps.it)





# HISTORY

For many years **Pentax** has held a large share of the world market for motorized pumps. The sales department is constantly working to better serve existing customers and to open up new markets. This is possible thanks to the wide range of products available which allows to cover most of the applications in the pump field. Special attention is also paid to market surveys, so that any new requirements can be immediately transferred to the research and development department: the best way to properly develop and forecast future scenarios.



# MISSION

After more than **20 years of activity** we can finally trace the guidelines that have governed and directed the industrial development of **Pentax Industries SpA**. Actions and processes that have intersected with the obvious aim of creating value, benefits to be redistributed to the various components of the production and distribution process.

A rational allocation of available resources, together with a refined program of production decentralization have allowed the company to adapt to changing market conditions, each time with extreme rapidity.

Maximum attention to the markets, therefore, with the commitment to respond in real time to the specific needs of the different markets, paying particular attention to technological progress. All this in the perspective of a careful policy for **customer satisfaction**.



**“Creating value is our main goal”**

*Gianluigi Pedrollo, Chair man*



# VALUES



## Reliability

Choosing Pentax means choosing safety at every stage

## Quality

Where there is control, there is reliability: the basis for success

## Speed

Impeccable delivery time

## Flexibility

Pentax studies each case thoroughly, identifies the best solution and then takes action with security

## Variety

The best service: a wide range of Pentax products, one for every need



# OFFICIAL JOURNAL OF THE EUROPEAN UNION

## Regulation UE 547/2012

### ANNEX II

«The benchmark for most efficient water pumps is  $MEI \geq 0,70$ ».

«The efficiency of a pump with a trimmed impeller is usually lower than that of a pump with the full impeller diameter. The trimming of the impeller will adapt the pump to a fixed duty point, leading to reduced energy consumption. The minimum efficiency index (MEI) is based on the full impeller diameter».

«The operation of this water pump with variable duty points may be more efficient and economic when controlled, for example, by the use of a variable speed drive that matches the pump duty to the system».

Information on benchmark efficiency is available at:

[www.europump.org/efficiencycharts](http://www.europump.org/efficiencycharts).















# INDEX

## PERIPHERALS

17



PE

20



PL

22



PC

24

## SELF-PRIMING

27



JA

30



JXF

33



PLUS A

36



PLUS SA

38



PA

40



JAM

42



JA 150-300

45



MON/A

48



JXM

50

**THREADED CENTRIFUGAL**

**53**



KM

56



KBJ

61



KB

64



RA

69



SD

72



SC

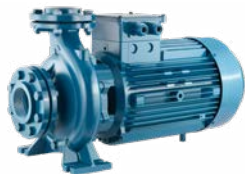
80



SE

83

**CENTRIFUGAL FLANGED 87**



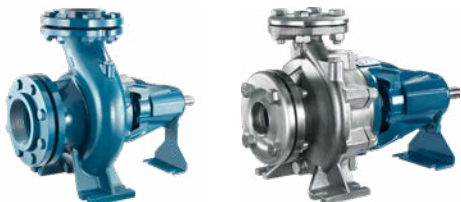
MN 96

---



MNG-MNGX 97

---



MA-MAX \ 4MA-4MAX 98

---



KMS 138

**MULTISTAGE HORIZONTAL 145**



PLUS 148

---



PLUS S 153

**MULTISTAGE VERTICAL 161**



PLUS V/L 164

---

PLUS LG 165

---



PLUS SV/SL/SLX 173

---

PLUS SLG/SLXG 180

---





PLUS HX 185

---

PLUS HS/HX 191

**IE3-IE4 MOTORS 209**



80-132 210

---

160-355 211

**BOOSTER SET 217**



AQUADOMUS 218

---



AQUASET 220

---



AQUASET+VSD 221

---



SELF-PRIMING 222

---



THREADED CENTRIFUGAL 225

---



CENTRIFUGAL FLANGED 228

---



MULTISTAGE 231

**DRAINAGE AND SEWAGE 239**



SP/SPV 242

---



SPM 245

---



DR 247

---



FC 249

---



DB 255

---



FM 257

---



FM4 262

---



FTR 101 266

---



FTR/FTRT 268

---



DC 273

---



DS 276

---



FV 278

---



FV4 282

**DEEPWELL BOREHOLE 287**



5FES 292

---



4E 296

---



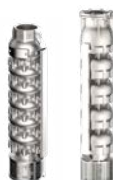
6E 306

---



6-8-10LMG lines 313

---



6LRH & 6LM lines 343

---



8LR & 8LM lines 376

---



10-12LM & E14 lines

415

## DEEPWELL BOREHOLE MOTORS

447



4MFE/6MFE

449



4MPC/6MPC

452



6R/8R/10R

456



PTR12/PTR14

462

## SWIMMING POOL

465



POOL1

466



POOL1 EASY

468



POOL2

470



POOL2 EASY

472



POOL2-I

474



POOL2-IM 476

---



POOL3 478

---



POOL4 480

---



V-POOL4 482

---



POOL4-I 484

---



POOL4-IM 486

---



POOL5 488

---



POOL6 490

---



DOMESTIC FILTER 492

---



FILTRATION KIT 492

---



## INDUSTRIAL LINE 493

BMV-4BMV 495

---

BMH-4BMH 503

---

HP SERIES 511

---

PSC 514

---

VP SERIES 517

## ACCESSORIES 521

ELECTRONIC FLOW CONTROL 522

---

VARIABLE SPEED DRIVE 523

---

PROTECTION/CONTROL PANEL 527

---

TANKS 532

---

MEMBRANES 532

---



PRESSURE SWITCHES 533



PRESSURE GAUGES 533



FLEXIBLE HOSES 533



CONNECTORS 534



VALVES 534



FLOAT SWITCHES 534



CABLES JOINTS 535

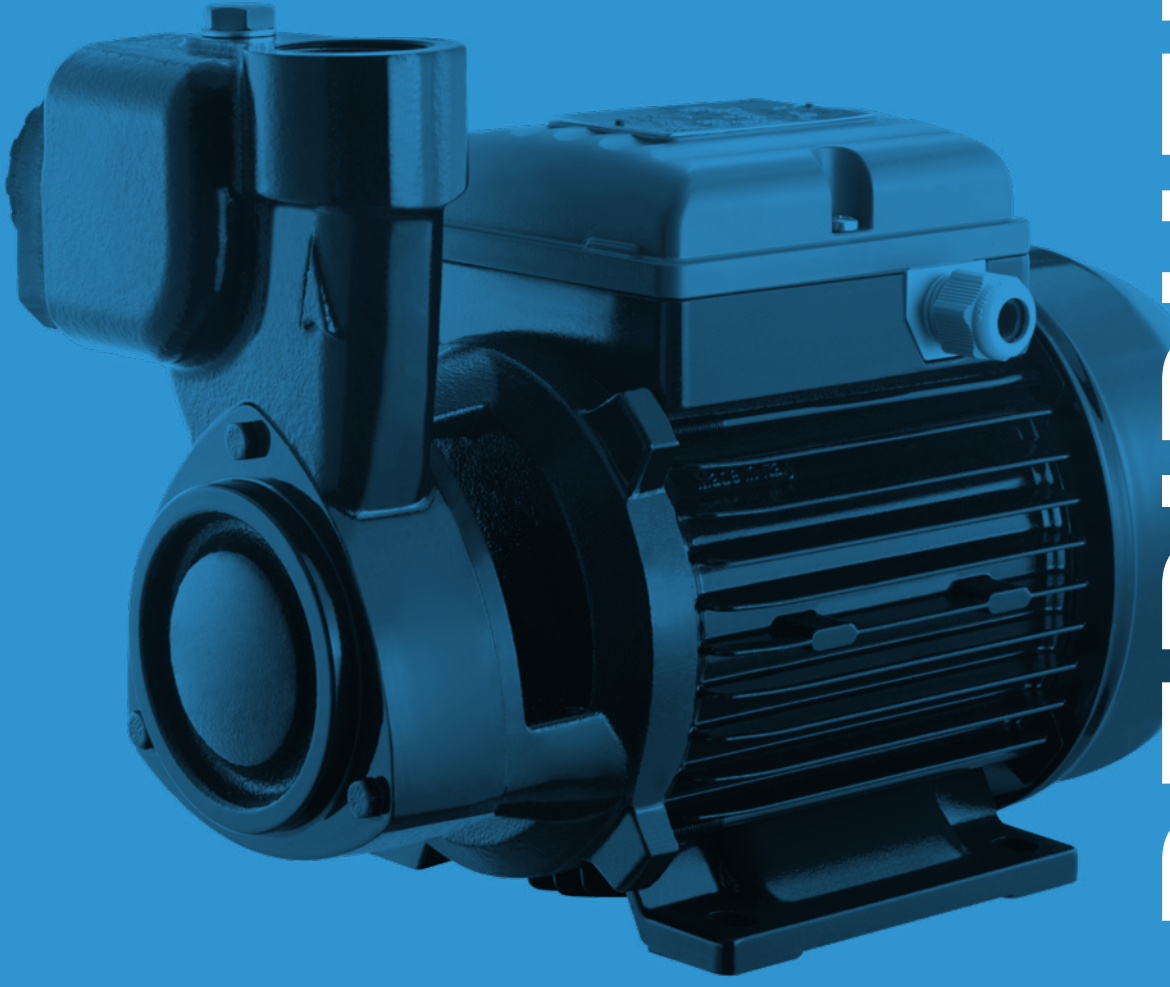


LEVEL PROBES 535

**GENERAL SALES CONDITIONS 536**

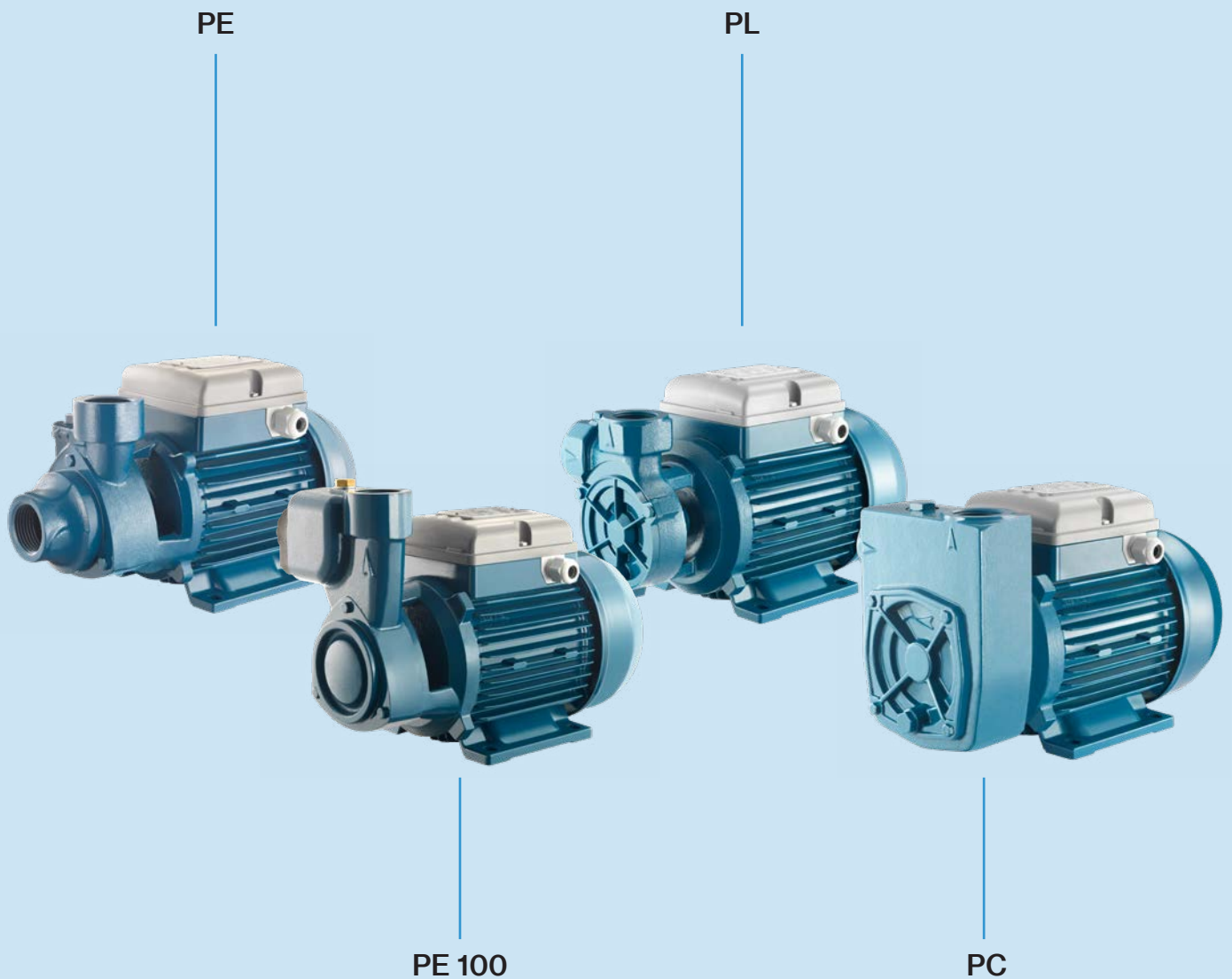






# PERIPHERALS

# PERIPHERAL PUMPS

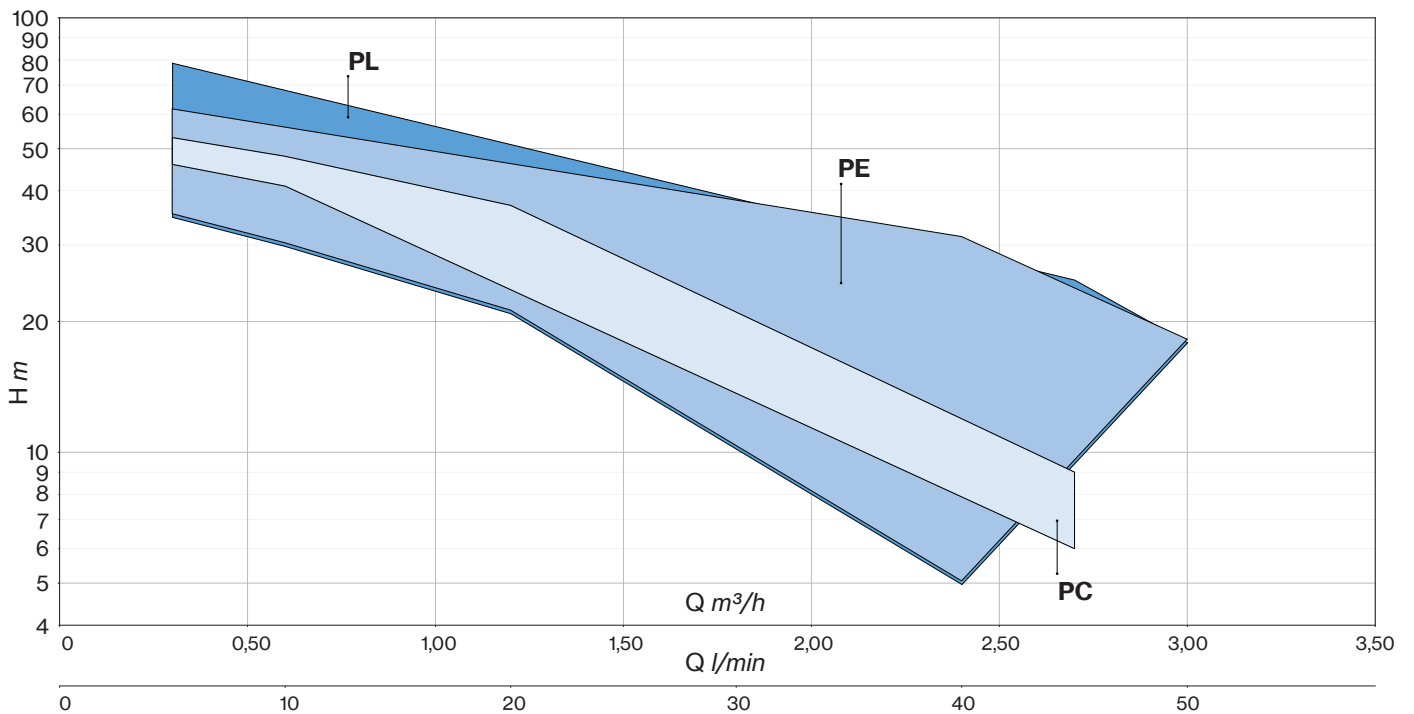


Range of peripheral and liquid ring type positive displacement pumps; they are characterized by the high ratio between the performances offered and the power required.

## **Applications:**

- Small domestic installations
- Boiler feeding
- For washing
- Pressurization of industrial plants
- Small autoclaves
- Transfer of liquids

# PERIPHERAL PUMPS





PE

PE A

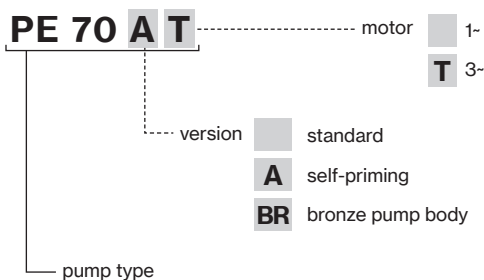
Peripheral positive displacement pumps with front suction (PE) and side suction with self-priming system (PE A) for small household systems and simple industrial applications; characterised by a considerable ratio between performance and required output.

### Construction features

<b>Pump body</b>	cast iron, bronze (50BR)
<b>Motor bracket</b>	cast iron, cast iron or bronze (50BR)
<b>Impeller</b>	brass
<b>Mechanical seal</b>	ceramic-graphite-NBR
<b>Motor shaft</b>	stainless steel AISI 416
<b>Liquid temperature</b>	0 - 90 °C
<b>Operating pressure</b>	max 6 bar (50) max 8 bar (70, 100) max 9 bar (90)

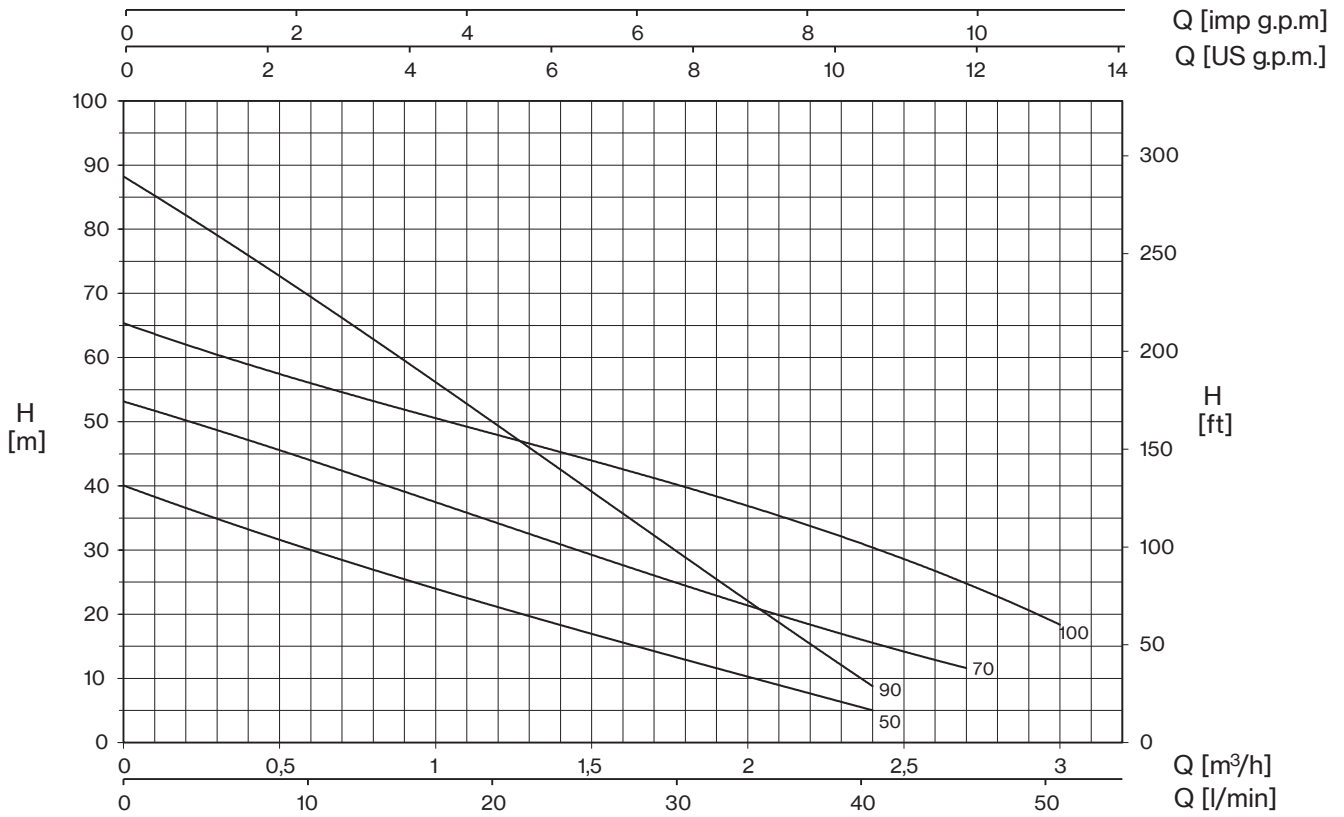
### Motor

	3- 230/400V - 50Hz
<b>2 Poles induction motor</b>	1- 230V - 50Hz (with thermal protection)
<b>Insulation class</b>	F
<b>Protection degree</b>	IPX4

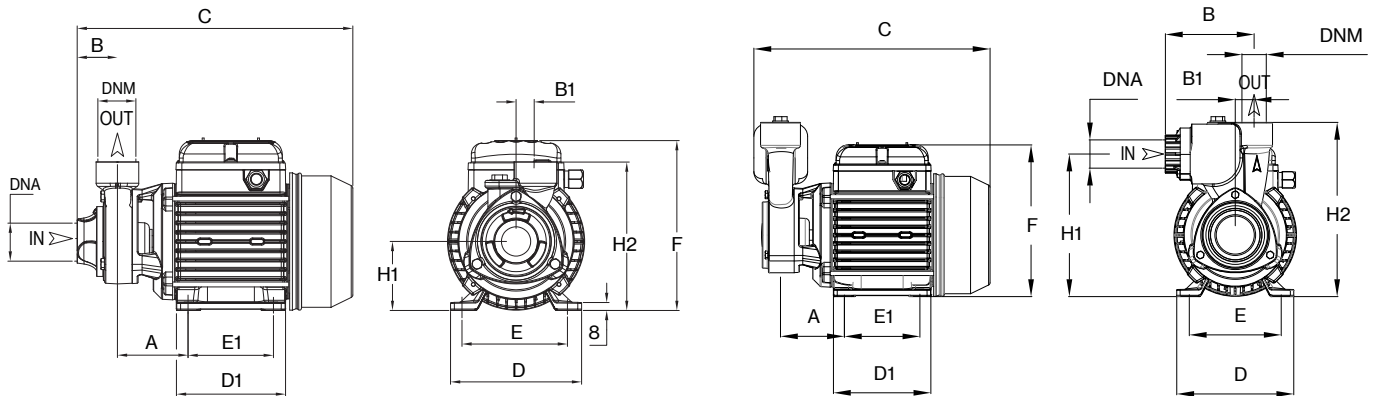


TYPE	LOTS			
	TRUCK		CONTAINER	
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
PE 50F(BR)	85×110×170	198	85×110×190	220
	80×120×170	207	80×120×190	230
PE 50A	80×110×170	105	85×110×190	135
PE 70A	80×120×160	171	80×120×190	190
PE 100-90	85×100×160	180	85×100×190	200
PE 100A	80×120×145	102	80×120×190	136





TYPE - 50 Hz		P2		P1		CURRENT		Q (m³/h - l/min)							
1-	3-			1-	3-	1- 230V	3- 400V	0	0,3	0,6	1,2	1,8	2,4	2,7	3
		HP	kW	kW		A		H (m)							
								0	5	10	20	30	40	45	50
PE 50F	PE 50FT	0,5	0,37	0,5	0,5	2,3	1,0	40,0	35,0	30,0	21,0	13,0	5,0		
PE 50BR	PE 50BRT	0,5	0,37	0,5	0,5	2,3	1,0	40,0	35,0	30,0	21,0	13,0	5,0		
PE 50A	PE 50AT	0,5	0,37	0,5	0,5	2,3	1,0	40,0	35,0	30,0	21,0	13,0	5,0		
PE 70	PE 70T	0,7	0,5	0,9	0,9	4,0	1,7	53,1	48,8	44,1	33,8	24,7	15,5	11,6	
PE 70A	PE 70AT	0,7	0,5	0,9	0,9	4,0	1,7	53,1	48,8	44,1	33,8	24,7	15,5	11,6	
PE 100	PE 100T	1	0,74	1,1	1,1	5,2	2,0	65,0	61,0	56	48,0	39,0	31,0	25,1	18,0
PE 100A	PE 100AT	1	0,74	1,1	1,1	5,2	2,0	65,0	61,0	56,0	48,0	39,0	31,0	25,1	18,0
PE 90	PE 90T	1	0,74	1,2	1,1	5,6	2,0	88,2	79,2	69,3	49,5	28,8	8,8		



TYPE		DIMENSIONS (mm)																
1-	3-	A	B	B1	C	D	D1	E	E1	F	H1	H2	DNA	DNM	I	L	M	Kg
PE 50F	PE 50FT	63	50	20	260	120	101	100	80	158	63	143	1" G	1" G	265	150	175	
PE 50BR	PE 50BRT	63	50	20	260	120	101	100	80	158	63	143			265	150	175	7
PE 50A	PE 50AT	63	89	20	240	120	101	100	80	158	150	184			300	170	195	7,5
PE 70	PE 70T	71,5	42	20	256	120	101	100	80	158	63	145			285	150	180	8,5
PE 70A	PE 70AT	71,5	101	20	248	120	101	100	80	158	157	193			300	170	195	9
PE 100	PE 100T	72,5	41	20	280	135	112	112	89	172	71	152			300	170	195	10,5
PE 100A	PE 100AT	71,5	101	20	271	135	112	112	89	172	165	201			290	170	230	11
PE 90	PE 90T	74,5	50	20	286	135	112	112	89	172	71	158			310	185	195	11



Peripheral positive displacement pumps with side suction for small household systems and simple industrial applications; characterised by a considerable ratio between performance and required power; frontal brass insert avoiding the risk of blockage.

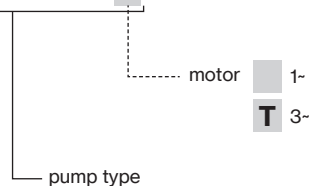
### Construction features

<b>Pump body</b>	cast iron and brass
<b>Motor bracket</b>	cast iron
<b>Impeller</b>	brass
<b>Mechanical seal</b>	ceramic-graphite-NBR
<b>Motor shaft</b>	stainless steel AISI 416
<b>Liquid temperature</b>	0 - 90 °C
<b>Operating pressure</b>	max 8 bar

### Motor

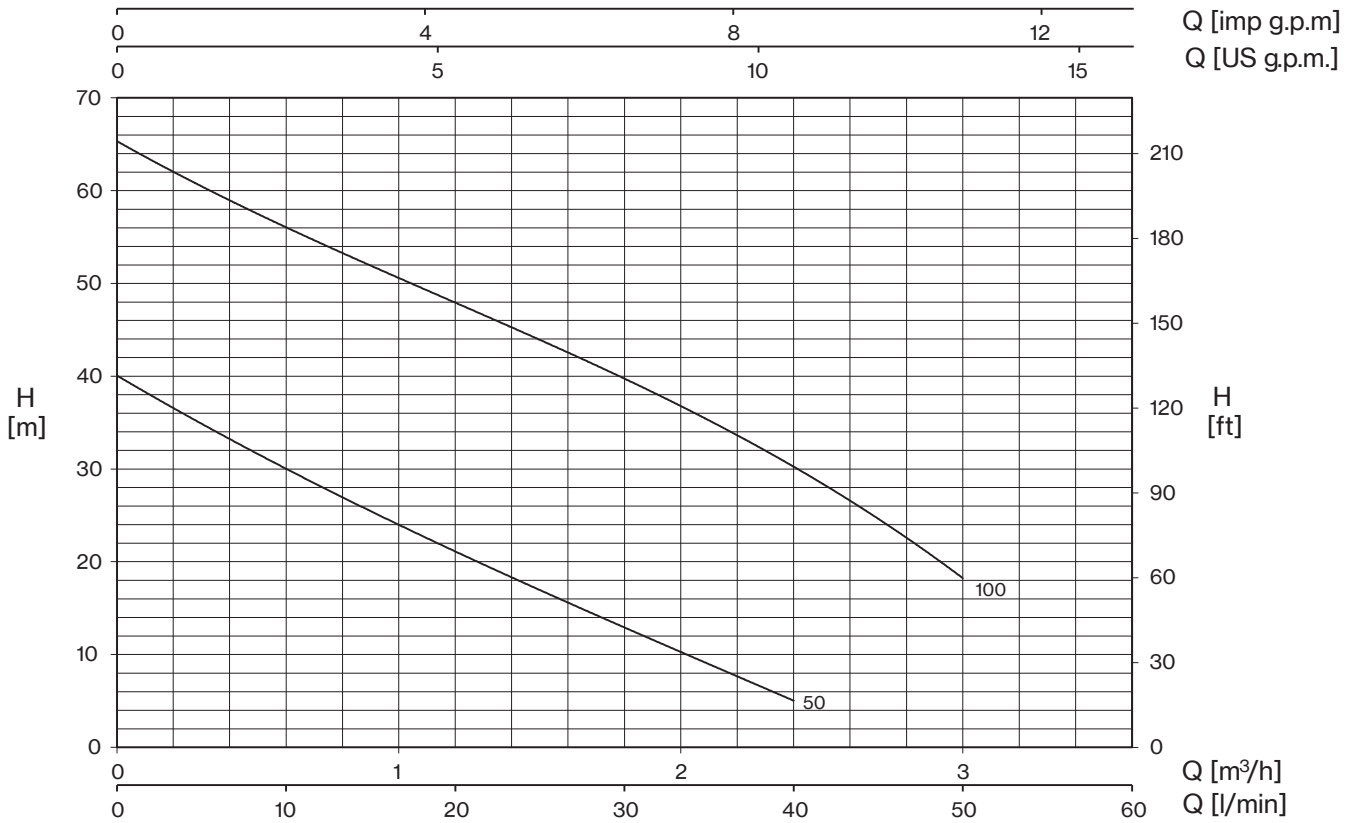
	3~ 230/400V - 50Hz
<b>2 Poles induction motor</b>	1~ 230V - 50Hz (with thermal protection)
<b>Insulation class</b>	F
<b>Protection degree</b>	IPX4

**PL 50 T**

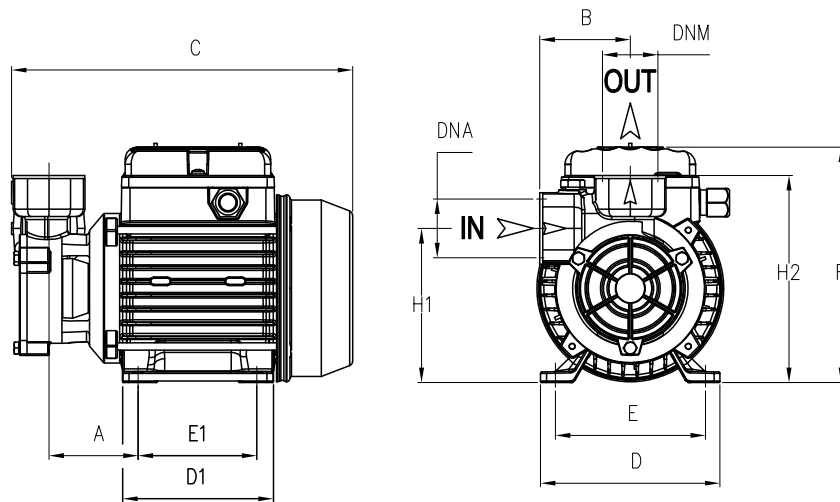


TYPE	LOTS			
	TRUCK		CONTAINER	
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
<b>PL 50</b>	85×110×170	207	85×110×190	220
	80×120×170	198	80×120×190	230
<b>PL 100</b>	85×110×170	105	85×110×190	135
			80×120×170	136





TYPE - 50 Hz		P2		P1		CURRENT		Q (m <sup>3</sup> /h - l/min)					
1-	3-			1-	3-	1- 230V	3- 400V	0,3 5	0,6 10	1,2 20	1,8 30	2,4 40	3 50
		HP	kW	kW		A		H (m)					
<b>PL 50</b>	<b>PL 50T</b>	0,5	0,37	0,5	0,5	2,3	1,0	35,0	30,0	21,0	13,0	5,0	
<b>PL 100</b>	<b>PL 100T</b>	1	0,74	1,11	1,13	5,2	2,0	61,0	56,0	48,0	39,0	31,0	18,0



TYPE		DIMENSIONS (mm)															
1-	3-	A	B	C	D	D1	E	E1	F	H1	H2	DNA	DNM	I	L	M	Kg
<b>PL 50</b>	<b>PL 50T</b>	67	60	235	120	101	97	80	165	105	140			265	145	165	5,7
<b>PL 100</b>	<b>PL 100T</b>	71,5	60	263	135	112	112	89	172	124	156	1" G	1" G	310	185	195	9,2



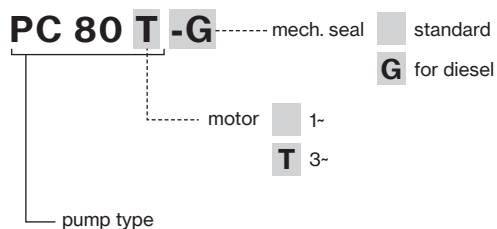
Volumetric pumps with liquid ring impeller that gives considerable suction power. Particularly suitable for liquid transfer (including volatile liquids). The pumps have a frontal brass cover thus avoiding the risk of blockage.

### Construction features

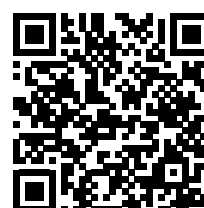
<b>Pump body</b>	cast iron and brass
<b>Motor bracket</b>	cast iron
<b>Impeller</b>	brass
<b>Mechanical seal</b>	ceramic-graphite-NBR
<b>Motor shaft</b>	stainless steel AISI 416
<b>Liquid temperature</b>	0 - 90 °C
<b>Operating pressure</b>	max 8 bar

### Motor

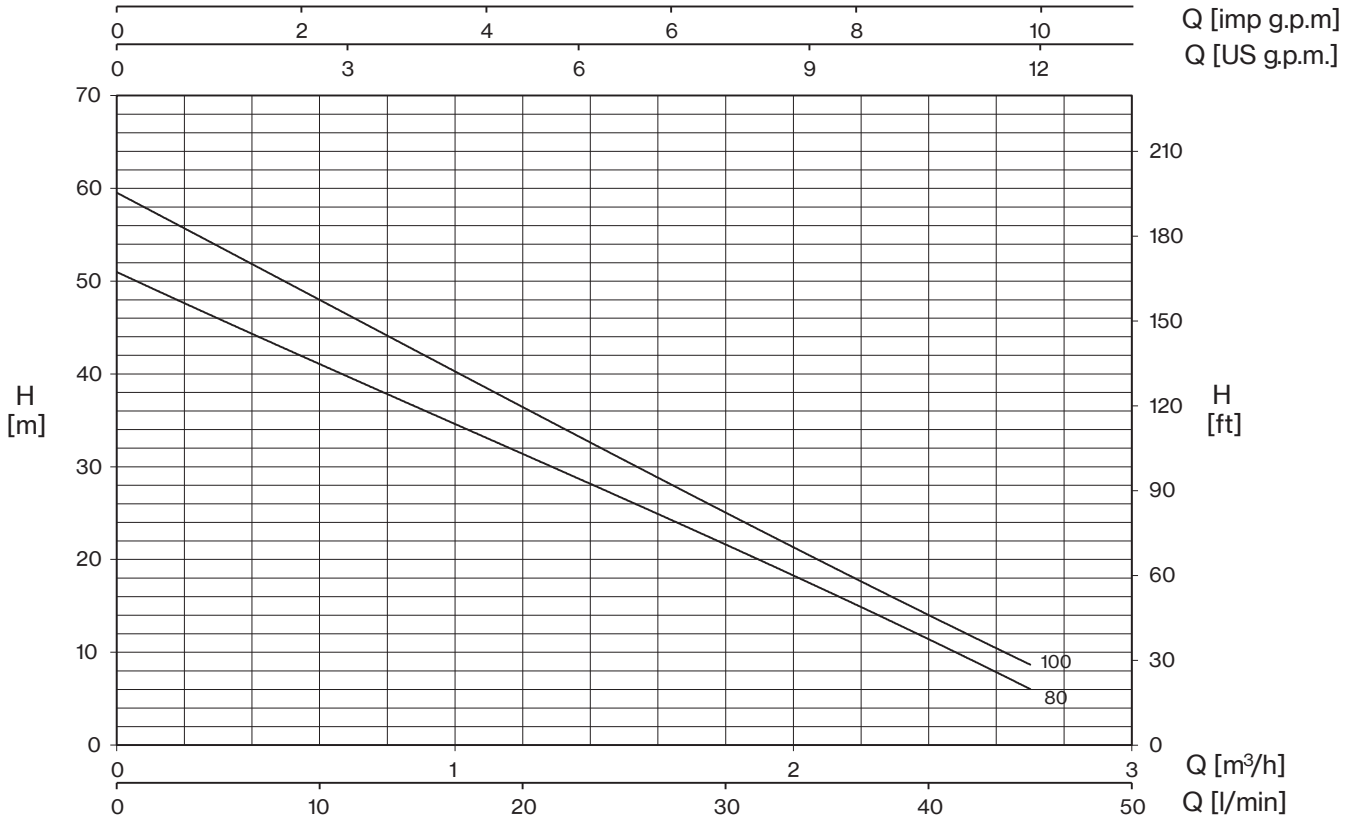
	3~ 230/400V - 50Hz
<b>2 Poles induction motor</b>	1~ 230V - 50Hz (with thermal protection)
<b>Insulation class</b>	F
<b>Protection degree</b>	IPX4



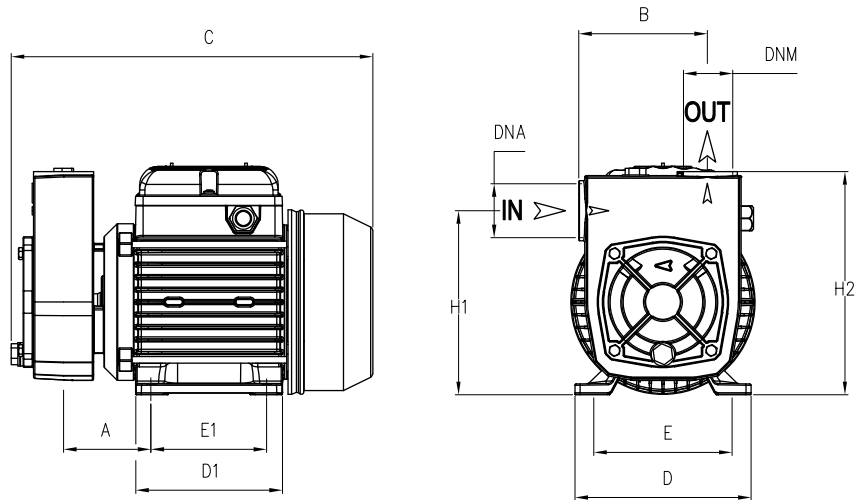
TYPE	LOTS			
	TRUCK		CONTAINER	
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
<b>PC 80-100</b>	85×110×170	105	85×110×190 80×120×170	135 136







TYPE - 50 Hz		P2		P1		CURRENT		Q (m³/h - l/min)					
1-	3-			1-	3-	1- 230V	3- 400V	0,3 5	0,6 10	1,2 20	1,8 30	2,4 40	2,7 45
		HP	kW	kW		A		H (m)					
<b>PC 80</b>	<b>PC 80T</b>	0,8	0,59	1,03	0,94	5,0	1,7	46,0	41,0	31,5	21,5	11,5	6,0
<b>PC 100</b>	<b>PC 100T</b>	1,0	0,74	1,17	0,98	5,4	2,1	53,0	48,0	37,0	25,0	13,5	9,0



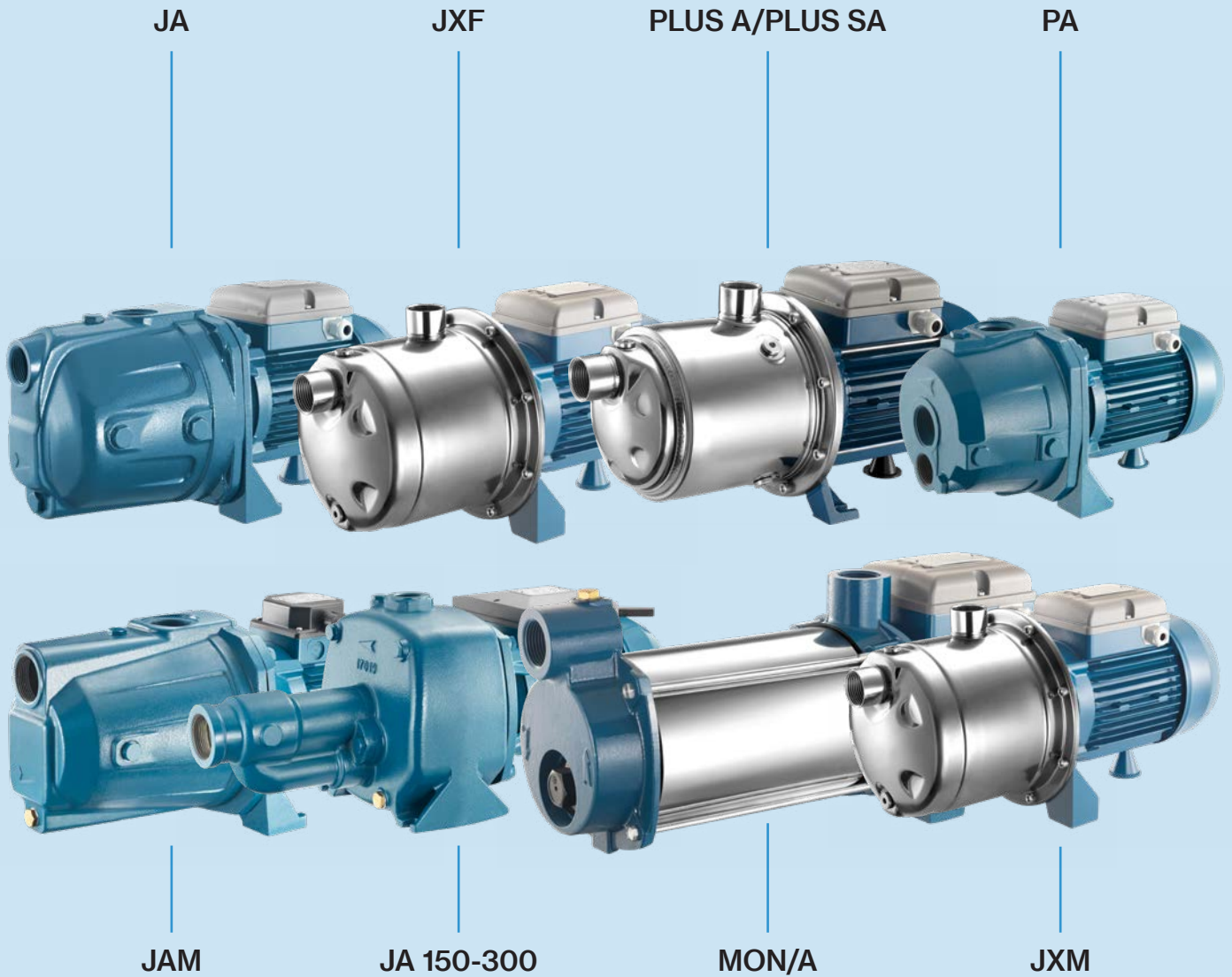
TYPE		DIMENSIONS (mm)														
1-	3-	A	B	C	D	D1	E	E1	H1	H2	DNA	DNM	I	L	M	Kg
<b>PC 80</b>	<b>PC 80T</b>	70	98,5	270	135	112	112	89	141	170			310	185	195	11,1
<b>PC 100</b>	<b>PC 100T</b>	70	98,5	270	135	112	112	89	141	170	1" G	1" G	310	185	195	11,8





**SELF-PRIMING**

# SELF-PRIMING PUMPS



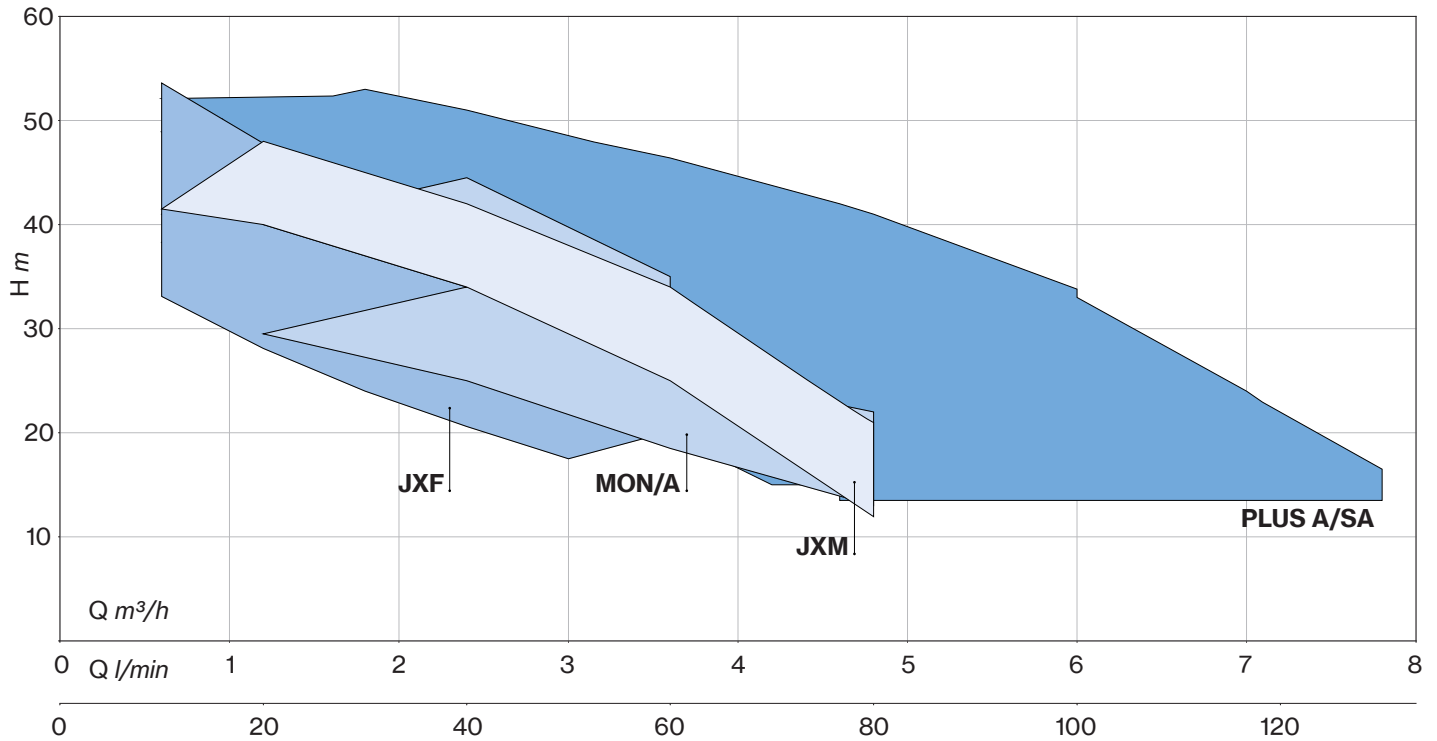
Wide range of single and multistage self-priming pumps, characterized by the fact of being able to handle liquids in the presence of dissolved gases.

## Applications:

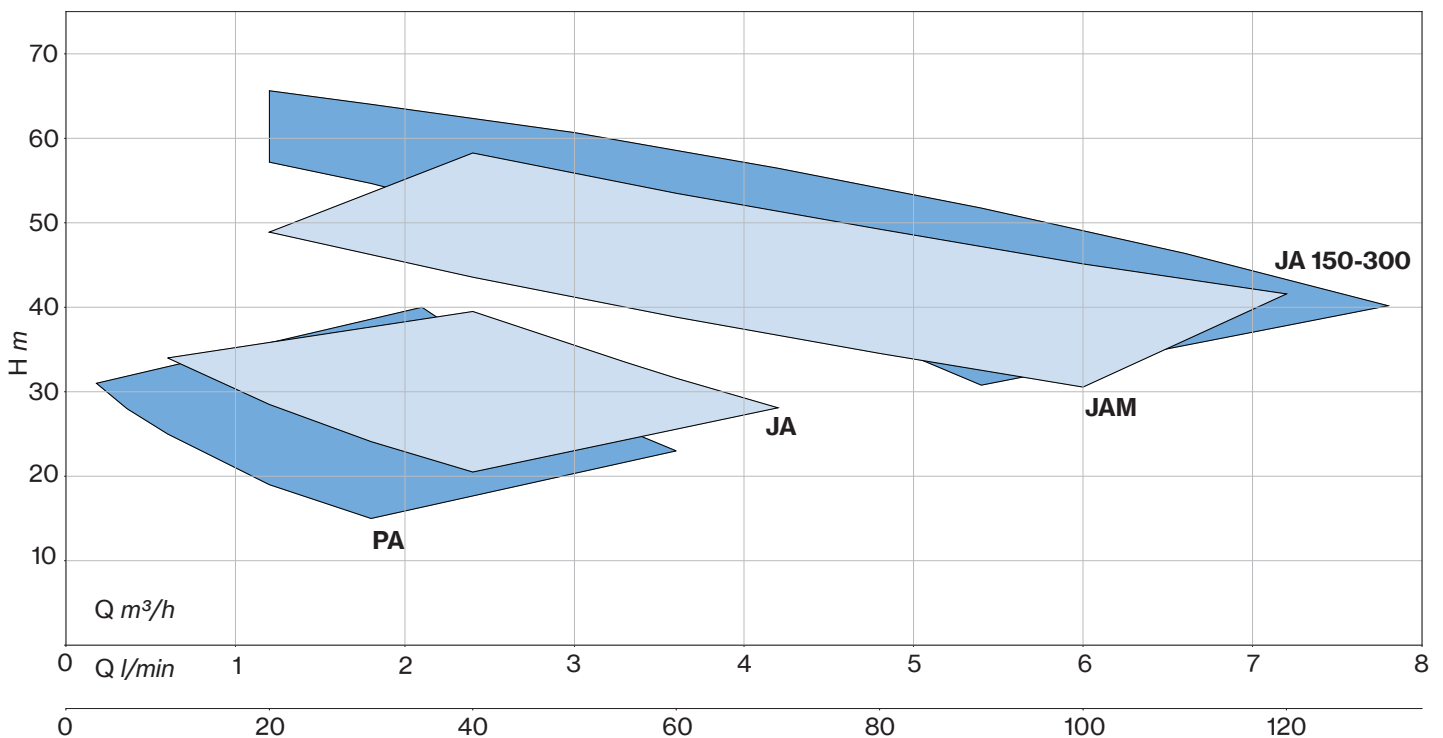
- Water supply
- Pressurization
- Liquid transfer
- Irrigation and tank emptying
- Small automatic systems of pressure increase

# SELF-PRIMING PUMPS

## Stainless steel



## Cast iron





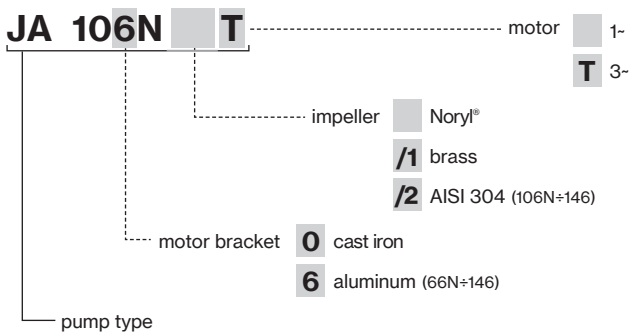
Self-priming centrifugal pump for water supplies (even if mixed with gas) in small household systems, connected to autoclave tanks, for transferring liquids and emptying tanks; also used for gardening.

### Construction features

<b>Pump body</b>	cast iron
<b>Motor bracket</b>	aluminum
<b>Impeller</b>	Noryl®, brass, steel AISI 304 for 106N÷146
<b>Mechanical seal</b>	ceramic-graphite-NBR
<b>Motor shaft</b>	stainless steel AISI 416
<b>Liquid temperature</b>	0 - 50 °C
<b>Operating pressure</b>	max 6 bar (66N÷86N) max 7 bar (106N÷146)

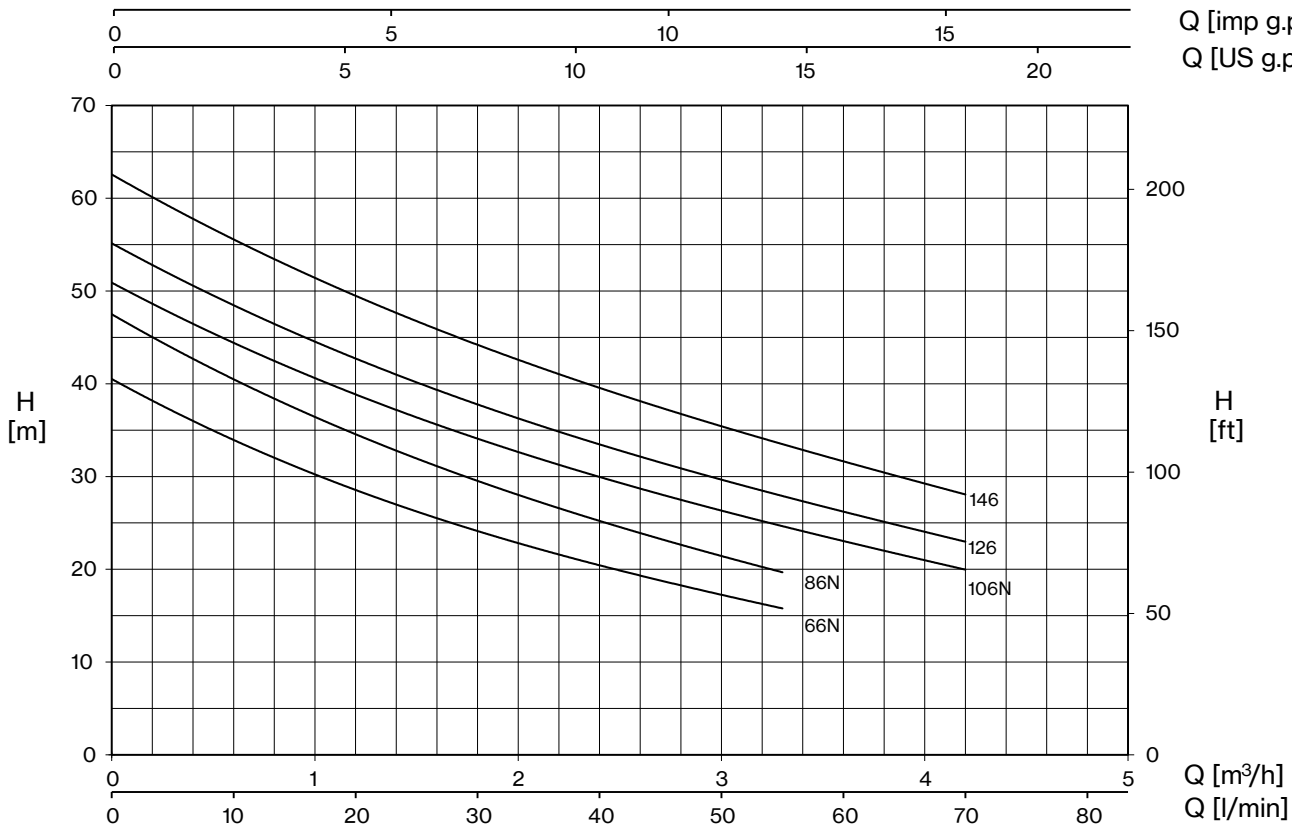
### Motor

	3~ 230/400V - 50Hz
<b>2 Poles induction motor</b>	1~ 230V - 50Hz (with thermal protection)
<b>Insulation class</b>	F
<b>Protection degree</b>	IPX4

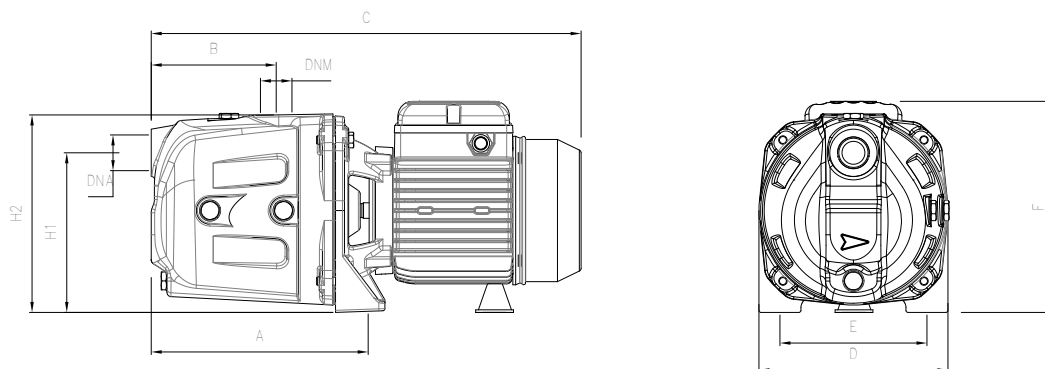


TYPE	LOTS			
	TRUCK		CONTAINER	
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
<b>JA 66N÷146</b>	85×110×145	60	85×110×190	80
			80×120×190	64





TYPE - 50 Hz		P2		P1		CURRENT		Q (m³/h - l/min)								
1-	3-			1-	3-	1- 230V	3- 400V	0	0,6	1,2	1,8	2,4	3	3,3	3,6	4,2
		HP	kW	kW		A		H (m)								
								0	10	20	30	40	50	55	60	70
JA 66N	JA 66NT	0,6	0,44	0,7	0,67	3,1	1,3	40,5	34,0	28,5	24,1	20,5	17,2	15,8		
JA 86N	JA 86NT	0,8	0,59	0,82	0,78	3,6	1,4	47,5	40,5	34,5	29,6	25,2	21,4	19,7		
JA 106N	JA 106NT	1	0,74	1,04	0,92	4,7	1,7	50,9	44,3	38,9	34,1	30,1	26,3	24,6	23,0	20,0
JA 126	JA 126T	1,2	0,88	1,14	1,07	5,2	1,9	55,1	48,5	42,6	37,8	33,5	29,7	27,9	26,2	23,0
JA 146	JA 146T	1,5	1,1	1,3	1,25	6	2,5	62,5	55,7	49,4	44,2	39,5	35,5	33,5	31,6	28,1

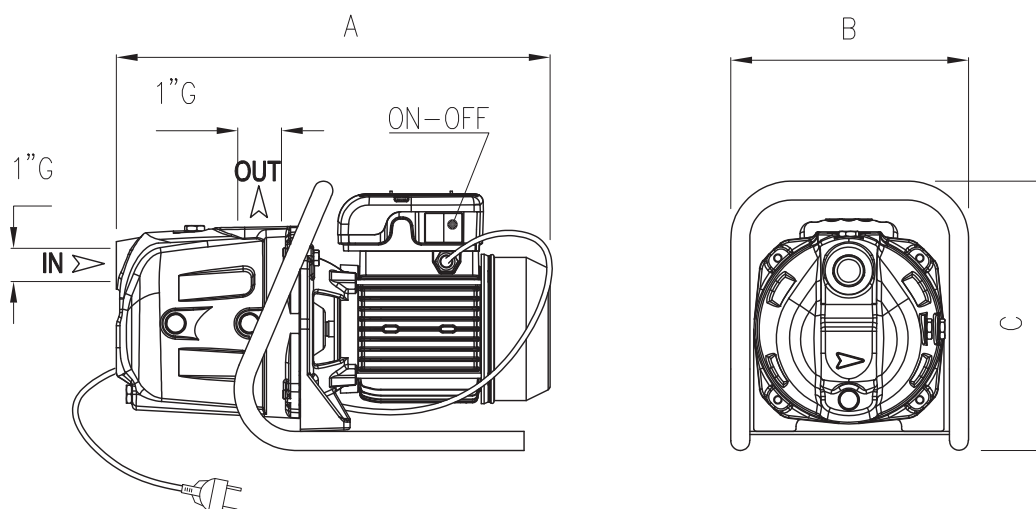


TYPE		DIMENSIONS (mm)													
1-	3-	A	B	C	D	E	F	H1	H2	DNA	DNM	I	L	M	Kg
JA 66N	JA 66NT	214	119	410	180	140	195	150	185			440	194	215	12
JA 86N	JA 86NT	214	119	410	180	140	195	150	185			440	194	215	12,5
JA 106N	JA 106NT	214	119	410	180	140	195	150	185	1" G	1" G	440	194	215	14
JA 126	JA 126T	214	119	410	180	140	195	150	185			440	194	215	14,5
JA 146	JA 146T	214	119	410	180	140	195	150	185			440	194	215	15

# JA GARDEN

Portable electropumps complete with handle, cable with plug and switch.  
The performances depend on adopted pump type.

TYPE - 50 Hz	P2		P1	Pipe		Performance	
	HP	kW	kW	Suction	Delivery	Q (l/min)	H (m)
JA 66N GARDEN	0,6	0,44	0,7	1" G	1" G	10-55	34,0-15,8
JA 86N GARDEN	0,8	0,59	0,82			10-55	40,5-19,7
JA 106N GARDEN	1	0,74	1,04			10-70	44,3-20,0
JA 126 GARDEN	1,2	0,88	1,14			10-70	44,3-20,0
JA 146 GARDEN	1,5	1,1	1,3			10-70	55,7-28,1



TYPE	DIMENSIONS (mm)		
	A	B	C
JA 66N GARDEN	410	266	252
JA 86N GARDEN	410	266	252
JA 106N GARDEN	410	266	252
JA 126 GARDEN	410	266	252
JA 146 GARDEN	410	266	252





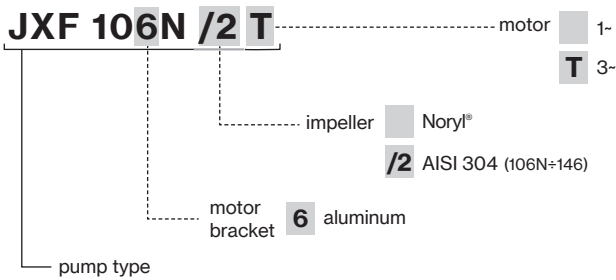
Self-priming centrifugal pumps for domestic applications such as domestic systems where air is mixed with water. Recommended in combination with pressure set for water transfer, rainwater harvesting and garden irrigation systems.

### Construction features

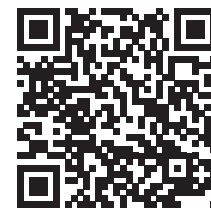
<b>Pump body</b>	stainless steel AISI 304
<b>Motor bracket</b>	aluminum
<b>Impeller</b>	Noryl®; steel AISI 304 (106N, 126, 146)
<b>Mechanical seal</b>	ceramic-graphite-NBR
<b>Motor shaft</b>	stainless steel AISI 416
<b>Liquid temperature</b>	0 - 50 °C
<b>Operating pressure</b>	max 8 bar

### Motor

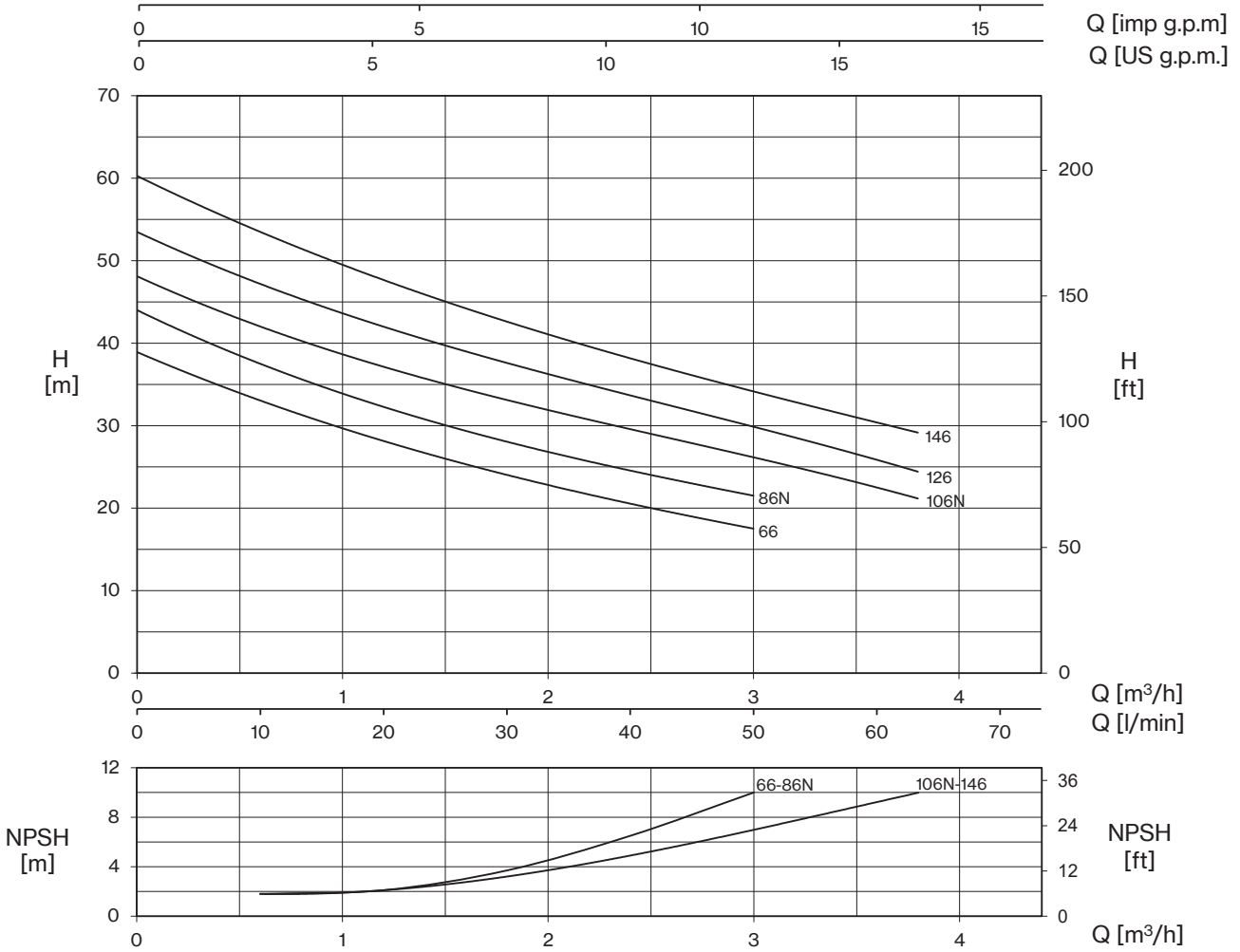
	3~ 230/400V - 50Hz
<b>2 Poles induction motor</b>	1~ 230V - 50Hz (with thermal protection)
<b>Insulation class</b>	F
<b>Protection degree</b>	IPX4



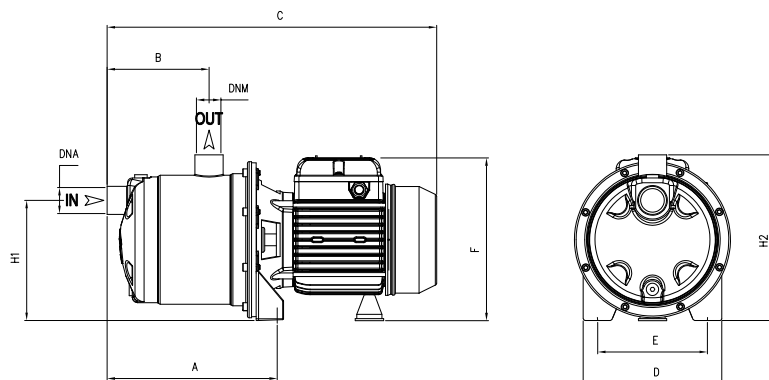
TYPE	LOTS			
	TRUCK		CONTAINER	
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
<b>JXF 66÷146</b>	85×110×150	60	85×110×190	80



# JXF



TYPE - 50 Hz		P2		P1		CURRENT		Q (m³/h - l/min)							
1~	3~			1~	3~	1~ 230V	3~ 400V	0	0,6	1,2	1,8	2,4	3	3,6	3,8
		HP	kW	kW		A		H (m)							
JXF 66	JXF 66T	0,6	0,44	0,67	0,63	2,9	1,2	38,9	33,1	28,1	24,0	20,6	17,5		
JXF 86N	JXF 86NT	0,8	0,59	0,75	0,76	3,3	1,4	44,0	37,5	32,3	28,0	24,6	21,5		
JXF 106N	JXF 106NT	1	0,74	1,04	0,92	4,7	1,7	48,0	42,3	37,0	33,0	29,6	26,2	22,7	21,0
JXF 126	JXF126T	1,2	0,88	1,14	1,03	5,2	1,9	53,4	47,4	41,9	37,5	33,7	29,9	26,0	24,3
JXF 146	JXF 146T	1,5	1,1	1,3	1,23	6,0	2,5	60,2	53,6	47,8	42,4	38,0	34,4	30,5	29,0



TYPE		DIMENSIONS (mm)													
1~	3~	A	B	C	D	E	F	H1	H2	DNA	DNM	I	L	M	Kg
JXF 66	JXF 66T	208	128	410	175	140	215	153	210			430	210	235	8,5
JXF 86N	JXF 86NT	208	128	410	175	140	215	153	210			430	210	235	9,5
JXF 106N	JXF 106NT	208	128	410	175	140	215	153	210	1" G	1" G	430	210	235	10,5
JXF 126	JXF126T	208	128	410	175	140	215	153	210			430	210	235	11
JXF 146	JXF 146T	208	128	410	175	140	215	153	210			430	210	235	11,5

# JXF GARDEN - BOX

Portable electropumps complete with handle, cable with plug and switch.  
The performances depend on adopted pump type.

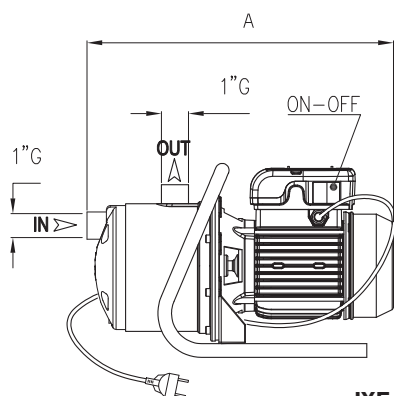


JXF GARDEN

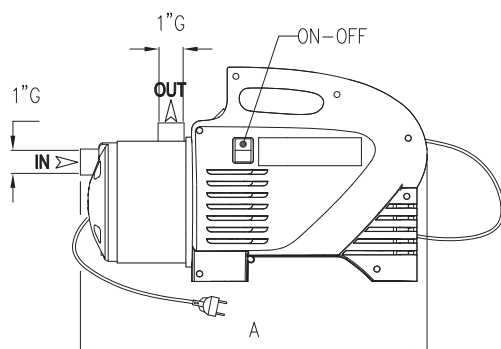


JXF BOX

TYPE - 50 Hz	P2		P1	Pipe		Performance	
	HP	kW	kW	Suction	Delivery	Q (l/min)	H (m)
JXF 106N GARDEN-BOX	1	0,74	1,04	1" G	1" G	10-63,3	42,3-21,0



JXF GARDEN



JXF BOX

TYPE	DIMENSIONS (mm)		
	A	B	C
JXF 106N GARDEN	410	175	285
JXF 106N BOX	429	209	287



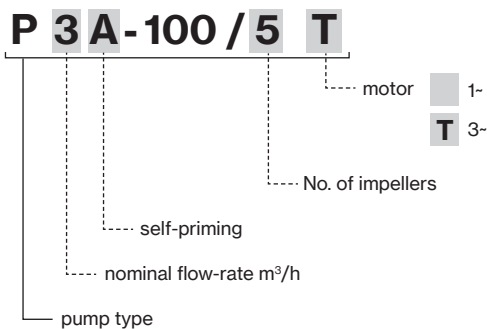
Self-priming horizontal multistage stainless steel pumps suitable for domestic use, also in combination with autoclave tank. Suitable for drinking water or glycol, for water treatment, heating, air conditioning and washing systems.

### Construction features

<b>Pump body, mechanical seal housing</b>	stainless steel AISI 304
<b>Motor bracket</b>	aluminum
<b>Impellers, diffusers</b>	Noryl®
<b>Mechanical seal</b>	ceramic-graphite-EPDM
<b>Motor shaft</b>	stainless steel AISI 303
<b>Liquid temperature</b>	-5 ÷ +35 °C
<b>Operating pressure</b>	max 7 bar

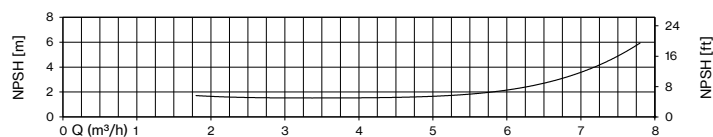
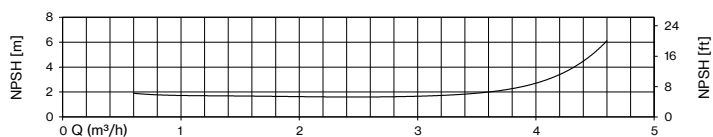
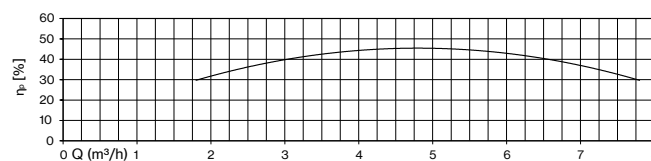
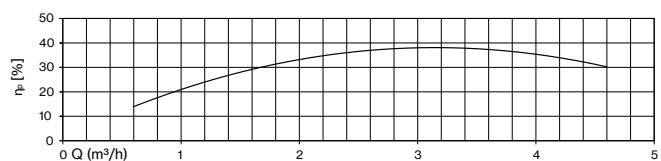
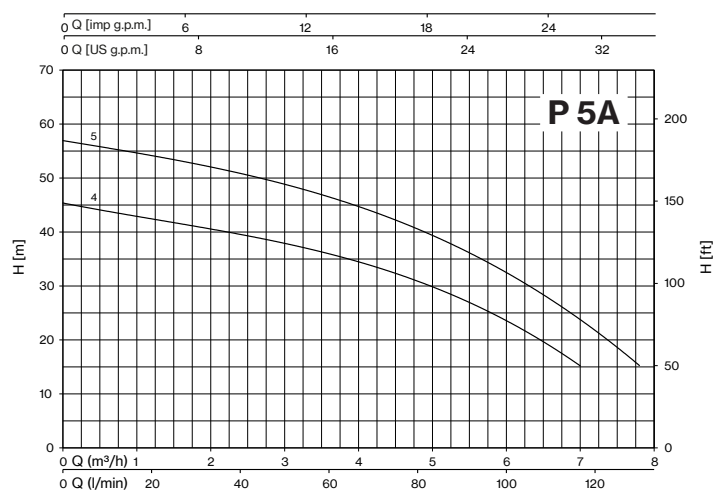
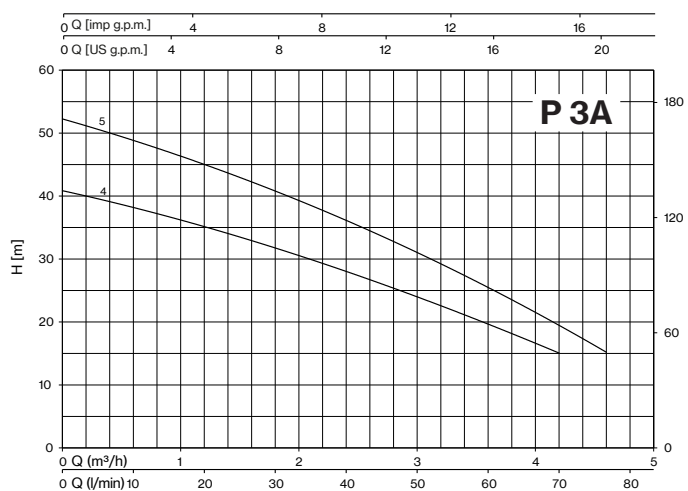
### Motor

	3~ 230/400V - 50Hz
<b>2 poles induction motor</b>	1~ 230V - 50Hz (with thermal protection up to 1.85 kW)
<b>Insulation class</b>	F
<b>Protection degree</b>	IPX4

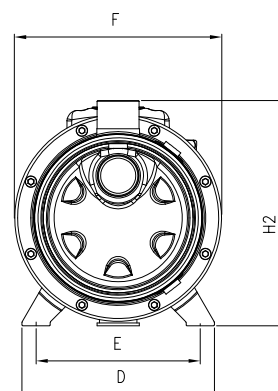
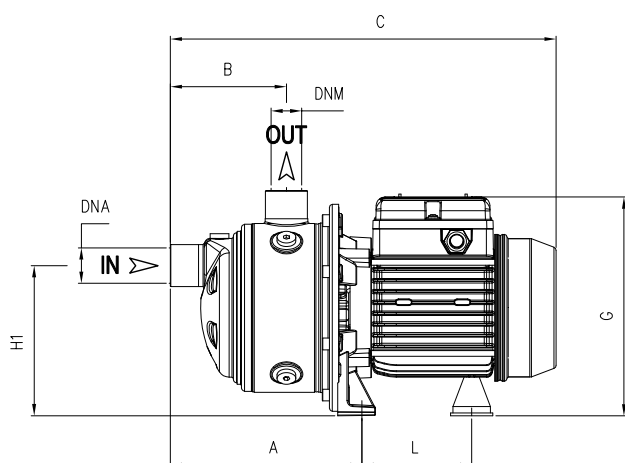


TYPE	LOTS			
	TRUCK		CONTAINER	
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
<b>P 3A-90/4</b>	85×110×160	70	85×110×185	80
<b>P 3A-100/5</b>	80×120×150	42	80×120×175	49
<b>P 5A-120/4</b>	80×120×150	42	80×120×175	49
<b>P 5A-150/5</b>	80×120×150	42	80×120×175	49





TYPE - 50 Hz		P2		P1		CURRENT		Q (m³/h - l/min)												
1~	3~			1~	3~	1- 230V	3- 400V	0	0,6	1,2	1,8	2,4	3,6	4,2	4,6	4,8	6	7	7,8	
		HP	kW	kW		A		H (m)												
P 3A-90/4	P 3A-90/4T	0,9	0,66	0,9	0,88	4	1,8	40,8	38,3	35,1	31,8	27,9	19,8	15,0						
P 3A-100/5	P 3A-100/5T	1	0,75	1,06	1,01	4,8	1,9	52,2	48,9	45,1	40,8	36,0	25,4	19,8	15,0					
P 5A-120/4	P 5A-120/4T	1,2	0,9	1,13	1,13	5,2	2,5	45,3			41,3	39,6	35,6	33,4	31,7	30,8	24,0	15,0		
P 5A-150/5	P 5A-150/5T	1,5	1,1	1,47	1,39	6,8	2,8	56,8			53,0	51,0	46,1	43,2	41,2	40,1	33,0	24,0	15,0	



TYPE		DIMENSIONS (mm)												Kg
1~	3~	A	B	C	D	E	F	G	L	H1	H2	DNA	DNM	
P 3A-90/4	P 3A-90/4T	238,8	175	405	164	140	178	190	93,7	128	192	1" G	1" G	9
P 3A-100/5	P 3A-100/5T	262,8	199	452	164	140	178	203	104,7	128	192			11,5
P 5A-120/4	P 5A-120/4T	238,8	175	428	164	140	178	203	104,7	128	192	1" G	1" G	11,5
P 5A-150/5	P 5A-150/5T	262,8	199	514	164	140	201	211	128,2	134	198			14,5



Self-priming horizontal multistage stainless steel pumps suitable for domestic use, also in combination with autoclave tank. Suitable for drinking water or glycol, for water treatment, heating, air conditioning and washing systems.

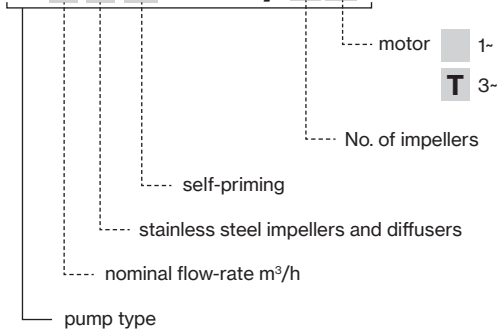
### Construction features

<b>Pump body, mechanical seal housing</b>	stainless steel AISI 304
<b>Motor bracket</b>	aluminum
<b>Impellers, diffusers</b>	stainless steel AISI 304
<b>Mechanical seal</b>	ceramic-graphite-EPDM
<b>Motor shaft</b>	stainless steel AISI 303
<b>Liquid temperature</b>	-15 ÷ +110 °C
<b>Operating pressure</b>	max 7 bar

### Motor

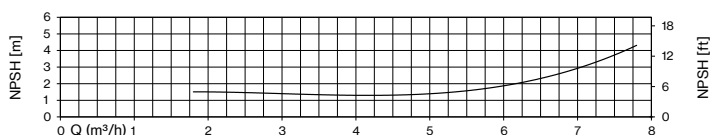
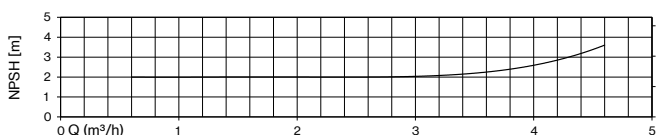
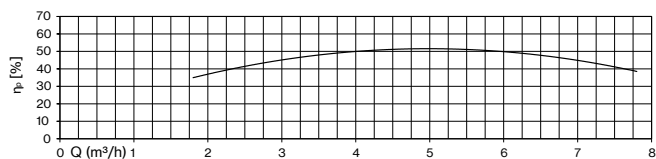
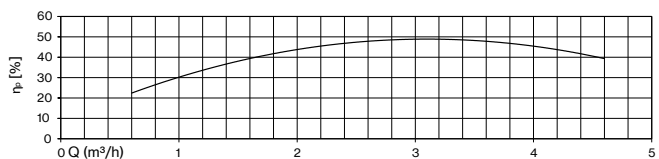
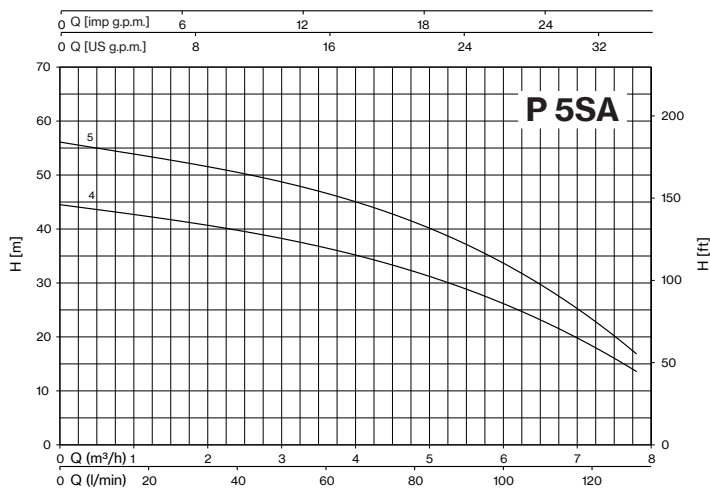
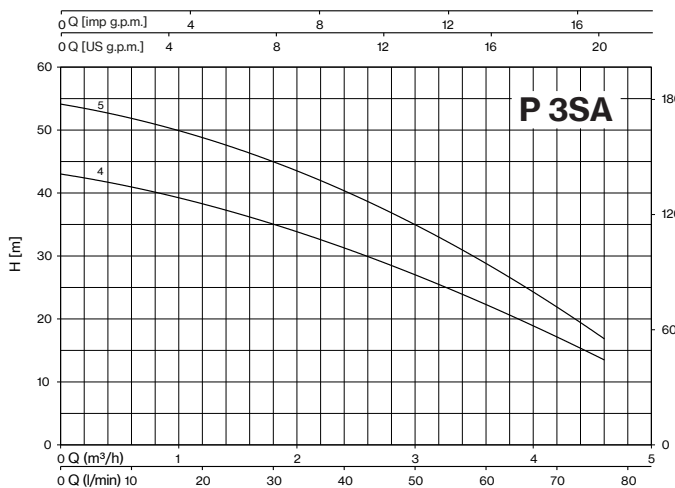
	3~ 230/400V - 50Hz
<b>2 poles induction motor</b>	1~ 230V - 50Hz (with thermal protection up to 1.85 kW)
<b>Insulation class</b>	F
<b>Protection degree</b>	IPX4

### P 3 S A - 100 / 5 T

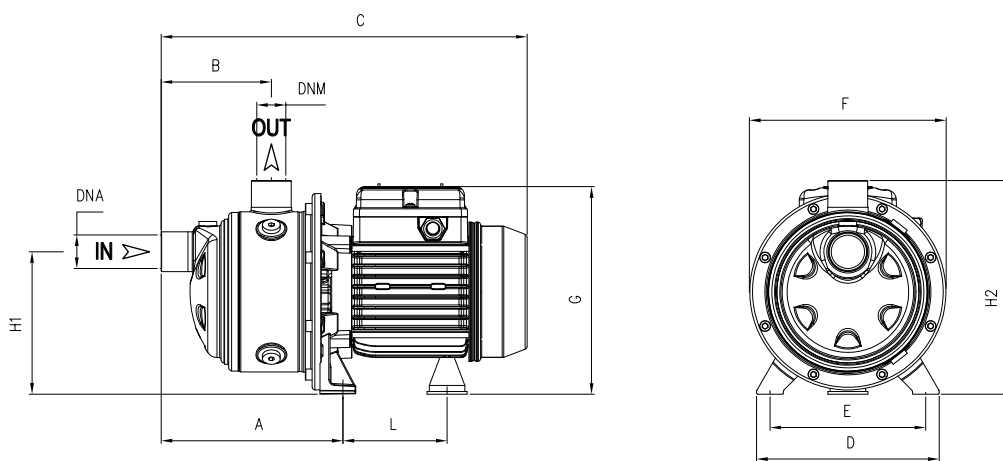


TYPE	LOTS			
	TRUCK		CONTAINER	
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
<b>P 3SA-90/4</b>	85×110×160	70	85×110×185	80
<b>P 3SA-100/5</b>	80×120×150	42	80×120×175	49
<b>P 5SA-120/4</b>	80×120×150	42	80×120×175	49
<b>P 5SA-150/5</b>	80×120×150	42	80×120×175	49





TYPE - 50 Hz		P2		P1		CURRENT		Q (m³/h - l/min)											
1-	3-	HP	kW	1-	3-	1- 230V	3- 400V	0	0,6	1,2	1,8	2,4	3,6	4,6	4,8	6	7	7,8	
				kW	A	H (m)													
P 3SA-90/4	P 3SA-90/4T	0,9	0,66	0,83	0,8	3,6	1,7	43,0	41,0	38,3	35,0	31,3	22,3	13,5					
P 3SA-100/5	P 3SA-100/5T	1	0,75	0,99	0,92	4,4	1,7	54,0	52,1	48,8	44,9	40,2	29,0	16,8					
P 5SA-120/4	P 5SA-120/4T	1,2	0,9	1,09	1,08	4,9	2,4	44,5			41,0	40,0	36,4	32,8	32,0	26,2	18,5	13,5	
P 5SA-150/5	P 5SA-150/5T	1,5	1,1	1,39	1,31	6,5	2,7	56,0			52,4	50,5	46,4	42,0	41,0	33,8	23,8	16,5	



TYPE		DIMENSIONS (mm)													Kg
1-	3-	A	B	C	D	E	F	G	L	H1	H2	DNA	DNM		
P 3SA-90/4	P 3SA-90/4T	238,8	175	405	164	140	178	190	93,7	128	192			10	
P 3SA-100/5	P 3SA-100/5T	262,8	199	452	164	140	178	203	104,7	128	192			12,5	
P 5SA-120/4	P 5SA-120/4T	238,8	175	428	164	140	178	203	104,7	128	192	1" G	1" G	12,5	
P 5SA-150/5	P 5SA-150/5T	262,8	199	514	164	140	201	211	128,2	134	198			15,5	



PA 106



PA 200 T



4"



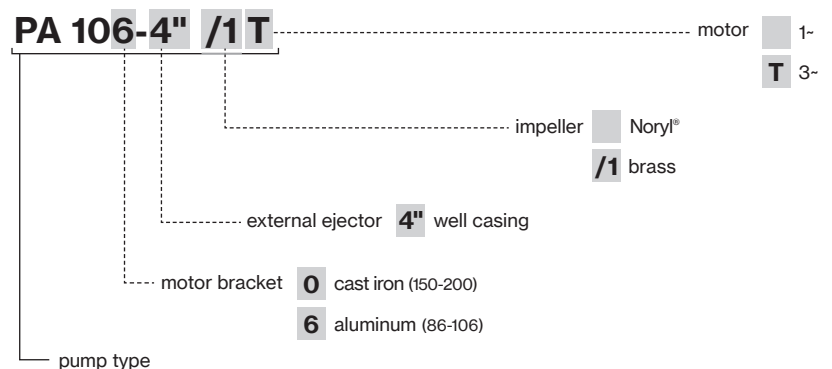
Self-priming centrifugal pumps with 4" external ejector. Suitable for water supply (even if mixed with air) of small domestic systems, that can be connected to an autoclave tank.

### Construction features

<b>Pump body</b>	cast iron
<b>Motor bracket</b>	aluminum (86÷106), cast iron (150÷200)
<b>Impeller</b>	Noryl® or brass
<b>Mechanical seal</b>	ceramic-graphite-NBR
<b>Motor shaft</b>	stainless steel AISI 416 (86÷106), stainless steel AISI 303 hydraulic part (150÷200)
<b>Liquid temperature</b>	0 - 50 °C
<b>Operating pressure</b>	max 8 bar

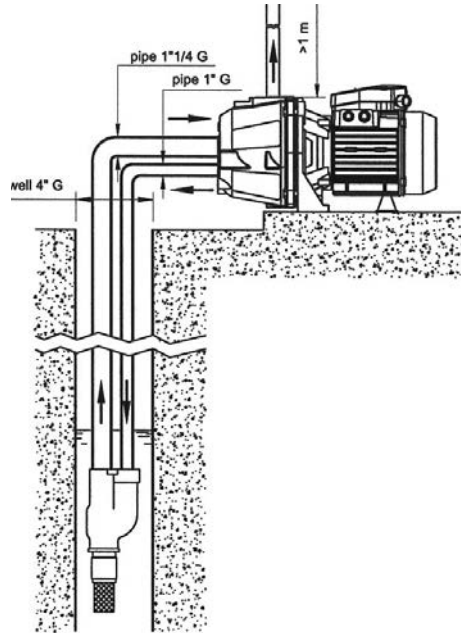
### Motor

	3~ 230/400V - 50Hz
<b>2 poles induction motor</b>	1~ 230V - 50Hz (with thermal protection)
<b>Insulation class</b>	F
<b>Protection degree</b>	IPX4

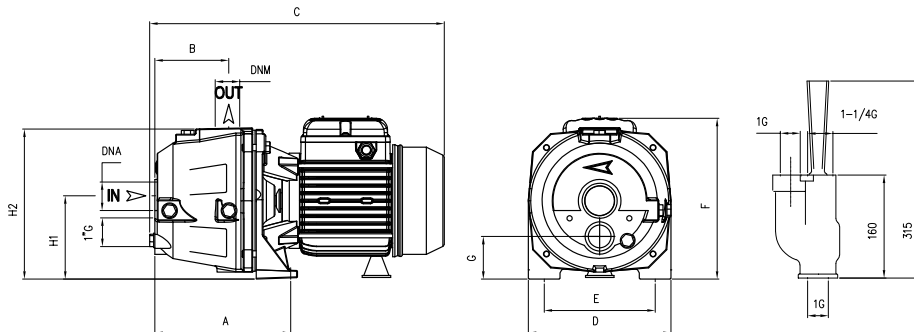


TYPE	LOTS			
	TRUCK		CONTAINER	
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
PA 86-106	85×110×145	60	85×110×190	80
PA 150-200	80×120×140	35	80×120×190	49





TYPE - 50 Hz		P2		P1		CURRENT		Ejector type	Suction depth. m	Q (m <sup>3</sup> /h - l/min)									
1~	3~	HP	kW	1~ kW	3~ kW	1~ 230V A	3~ 400V A			0,18	0,36	0,6	0,9	1,2	1,5	1,8	2,1	3	3,6
H (m)																			
PA 86	PA 86T	0,8	0,59	0,8	0,81	3,7	1,4	P 20	15	31	28	25	22	19	17	15	12		
								P 30	20	28	23	18	15	13	11				
PA 106	PA 106T	1	0,74	1,02	1,05	4,7	2,3	P 20	15	40	37	34	30	27	24	21	18		
								P 30	20	37	34	30	25	21	17				
PA 150	PA 150T	1,5	1,1	1,65	1,65	8,2	3	P 20	15									21	
								P 30	20							50	42	35	25
PA 200	PA 200T	2	1,5	2,22	2,22	10,3	4,1	P 20	15									30	
								P 30	20							49	46	35	27



TYPE		DIMENSIONS (mm)														
1~	3~	A	B	C	D	E	F	G	H1	H2	DNA	DNM	I	L	M	Kg
PA 86	PA 86T	168	82	360	180	140	195	52	97	188	1" 1/4 G	1" G	440	200	225	16
PA 106	PA 106T	168	82	360	180	140	195	52	97	188			440	200	225	18
PA 150	PA 150T	125	74	415	220	177	230	60	112	240			525	230	280	28,5
PA 200	PA 200T	125	74	415	220	177	230	60	112	240			525	230	280	29



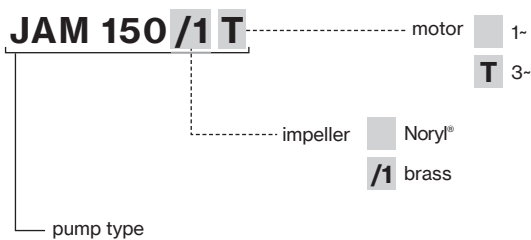
Self-priming centrifugal pumps for water supply (even if mixed with air) connected to autoclave tanks. Suitable for domestic installations, liquid transfer and tank emptying; also used for garden irrigation.

### Construction features

<b>Pump body</b>	cast iron
<b>Motor bracket</b>	cast iron
<b>Impeller</b>	Noryl® or brass
<b>Mechanical seal</b>	ceramic-graphite-NBR
<b>Motor shaft</b>	stainless steel AISI 416
<b>Liquid temperature</b>	0 - 50 °C
<b>Operating pressure</b>	max 8 bar

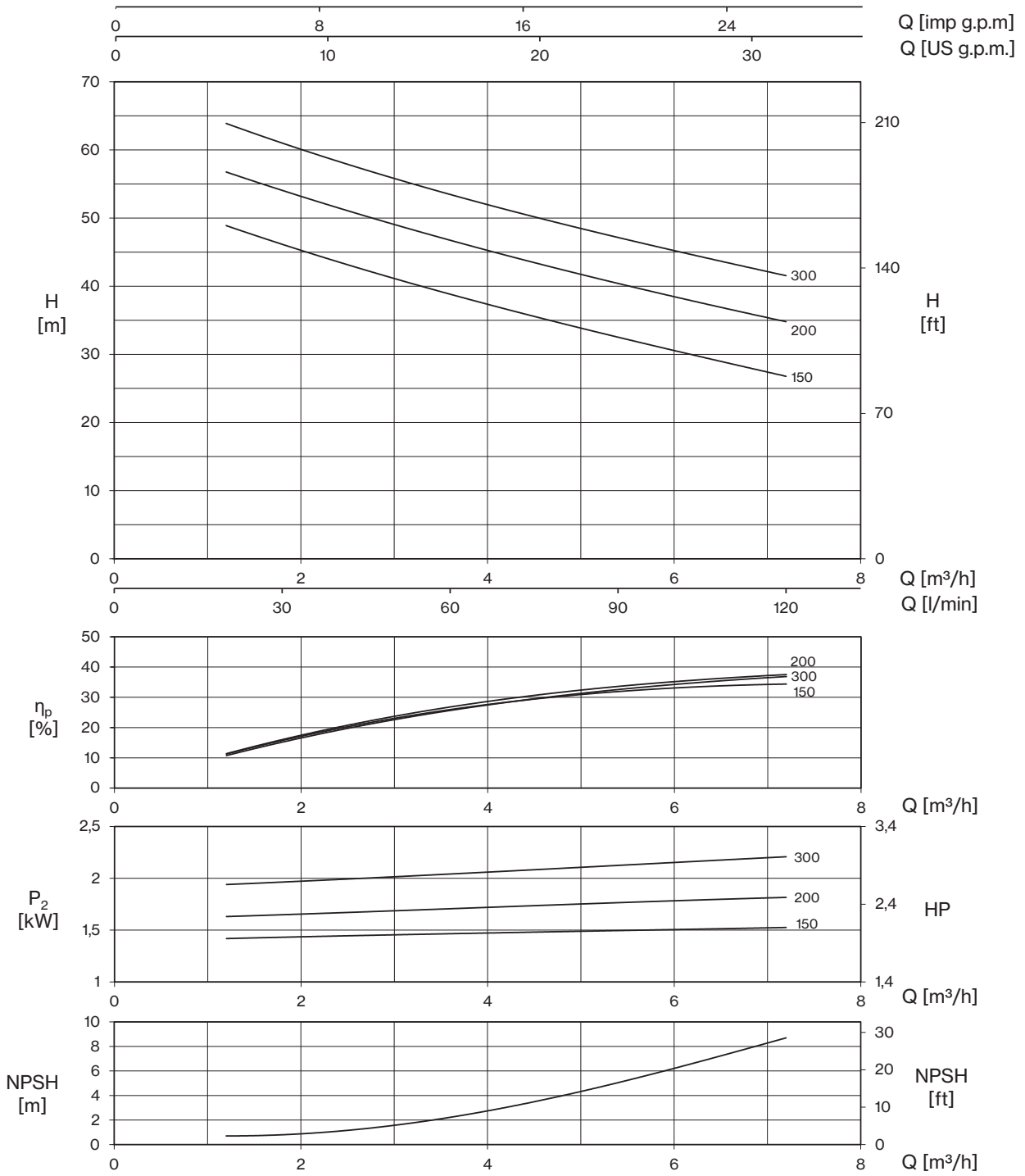
### Motor

	3~ 230/400V - 50Hz
<b>2 Poles induction motor</b>	1~ 230V - 50Hz (with thermal protection)
<b>Insulation class</b>	F
<b>Protection degree</b>	IPX4



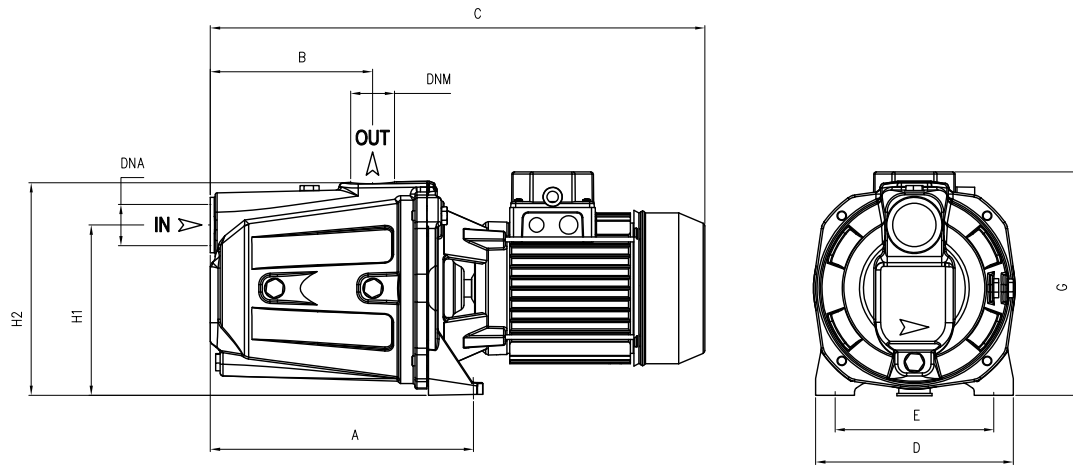
TYPE	LOTS			
	TRUCK		CONTAINER	
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
<b>JAM 150-300</b>	80×120×145	35	80×120×180	49





TYPE - 50 Hz		P2		P1		CURRENT		Q (m³/h - l/min)						
1-	3-			1-	3-	1- 230V	3- 400V	0	1,2	2,4	3,6	4,8	6	7,2
		HP	kW	kW		A		0	20	40	60	80	100	120
		H (m)												
JAM 150	JAM 150T	2	1,5	1,9	1,8	8,5	3,7	54,8	48,9	43,6	38,8	34,5	30,6	26,8
JAM 200	JAM 200T	2,5	1,85	2,3	2,2	10,4	4,4	62,7	56,8	51,5	46,8	42,4	38,4	34,8
JAM 300	JAM 300T	3	2,2	2,7	2,6	12,5	5,2	70,0	63,9	58,3	53,5	49,2	45,1	41,6

# JAM



TYPE		DIMENSIONS (mm)															
-1	-3	A	B	C	D	E	F	G	H1	H2	DNA	DNM	I	L	M	-1	-3
<b>JAM 150</b>	<b>JAM 150T</b>	269,6	167	538	203	165	220	231,5	175	220	1" 1/2 G	1" 1/4 G	<b>565</b>	<b>235</b>	<b>232</b>	29	30,5
<b>JAM 200</b>	<b>JAM 200T</b>	269,6	167	538	203	165	220	231,5	175	220			<b>565</b>	<b>235</b>	<b>232</b>	30	29,5
<b>JAM 300</b>	-	269,6	167	608	203	165	220	231,5	175	220			<b>638</b>	<b>230</b>	<b>255</b>	38	-
-	<b>JAM 300 T</b>	269,6	167	538	203	165	220	231,5	175	220			<b>565</b>	<b>235</b>	<b>232</b>	-	30

# JA 150-300

Self-priming



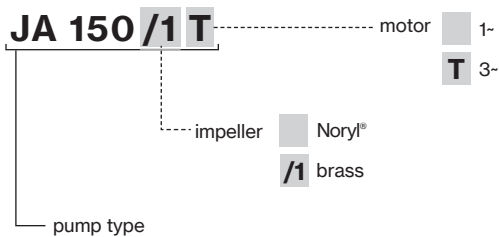
Self-priming centrifugal pumps for water supply (also mixed with air) of small and medium domestic and civil installations, that can be connected to an autoclave tank.

## Construction features

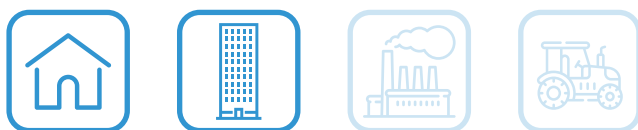
<b>Pump body</b>	cast iron
<b>Motor bracket</b>	cast iron
<b>Impeller</b>	Noryl® or brass
<b>Mechanical seal</b>	ceramic-graphite-NBR
<b>Motor shaft</b>	stainless steel AISI 303 hydraulic side
<b>Liquid temperature</b>	0 - 50 °C
<b>Operating pressure</b>	max 8 bar

## Motor

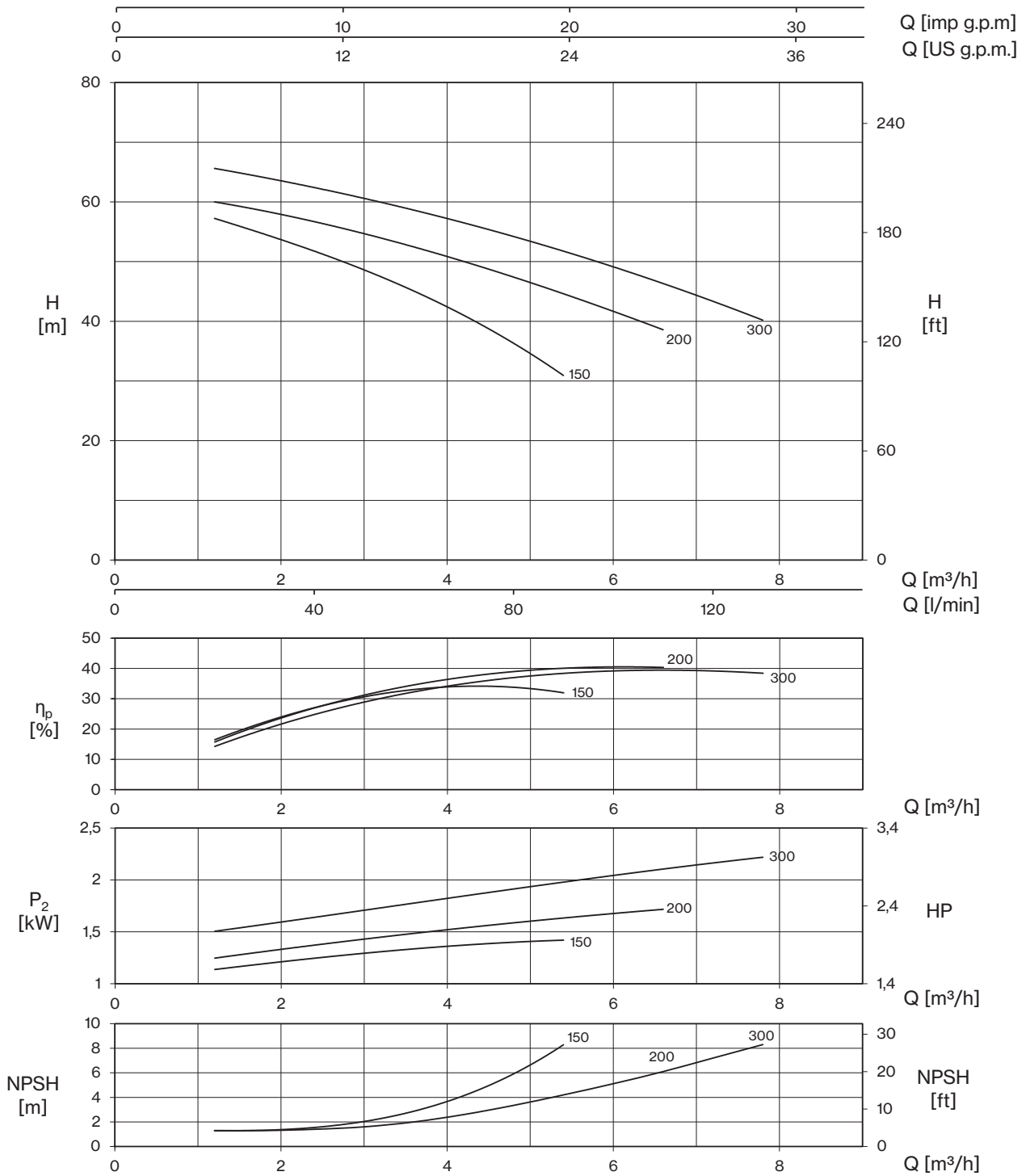
	3~ 230/400V - 50Hz
<b>2 Poles induction motor</b>	1~ 230V - 50Hz (with thermal protection)
<b>Insulation class</b>	F
<b>Protection degree</b>	IPX4



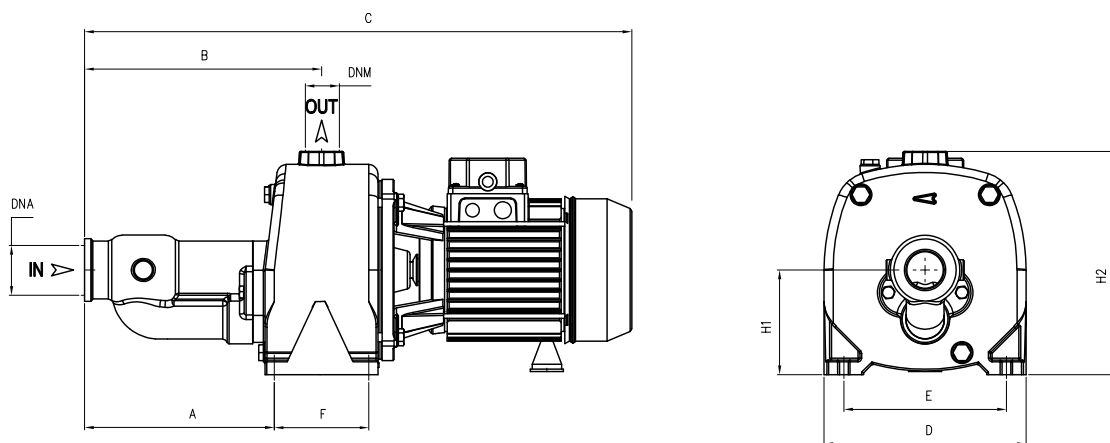
TYPE	LOTS			
	TRUCK		CONTAINER	
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
<b>JA 150-300</b>	85×110×140	30	85×110×190	42





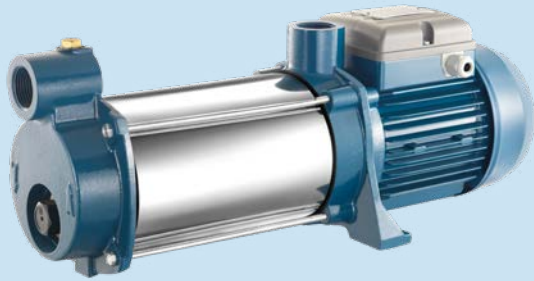
# JA 150-300



TYPE - 50 Hz		P2		P1		CURRENT		Q (m³/h - l/min)							
1-	3-			1-	3-	1- 230V	3- 400V	0	1,2	1,8	3	4,2	5,4	6,6	7,8
		HP	kW	kW		A		0	20	30	50	70	90	110	130
		H (m)													
JA 150	JA 150T	2	1,5	1,8	1,7	8,2	3,6	61,5	57,2	54,7	48,5	40,9	30,8		
JA 200	JA 200T	2,5	1,85	2,2	2,1	9,9	4,3	62,8	60,0	58,5	54,7	50,1	44,5	38,7	
JA 300	JA 300T	3	2,2	2,8	2,6	13,0	5,2	68,4	65,6	64,0	60,7	56,5	51,7	46,4	40,2



TYPE		DIMENSIONS (mm)													 Kg	
-1	-3	A	B	C	D	E	F	H1	H2	DNA	DNM	I	L	M	-1	-3
JA 150	JA 150T	204	257	626	220	177	105	112	240	1" 1/2 G	1" G	638	230	255	33	34
JA 200	JA 200T	204	257	626	220	177	105	112	240			638	230	255	32,5	33
JA 300	-	204	257	696	220	177	105	112	240			777	259	280	42	-
-	JA 300T	204	257	626	220	177	105	112	240			638	230	255	-	34



Multi-stage centrifugal pumps, horizontal and self-priming, particularly suitable for constructing small and medium sized pressurisation systems; able to suck liquids mixed with air.

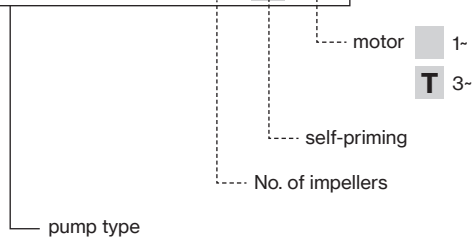
### Construction features

<b>Pump body</b>	cast iron
<b>Motor bracket</b>	cast iron
<b>Impeller</b>	Noryl®
<b>Mechanical seal</b>	ceramic-graphite-NBR
<b>Motor shaft</b>	stainless steel AISI 416
<b>Liquid temperature</b>	0 - 50 °C
<b>Operating pressure</b>	max 11 bar

### Motor

	3~ 230/400V - 50Hz
<b>2 poles induction motor</b>	1~ 230V - 50Hz (with thermal protector)
<b>Insulation class</b>	F
<b>Protection degree</b>	IPX4

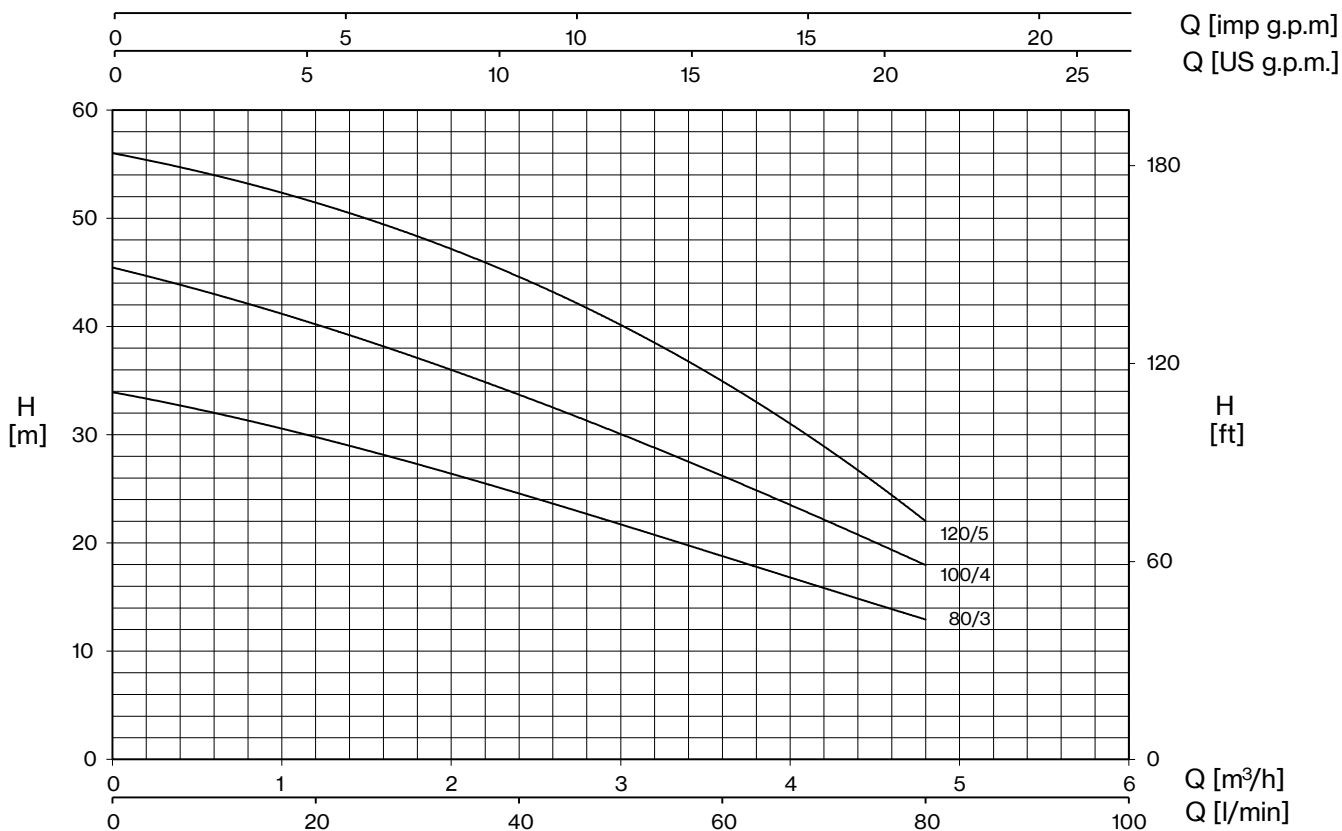
### MON 100 /4 A T



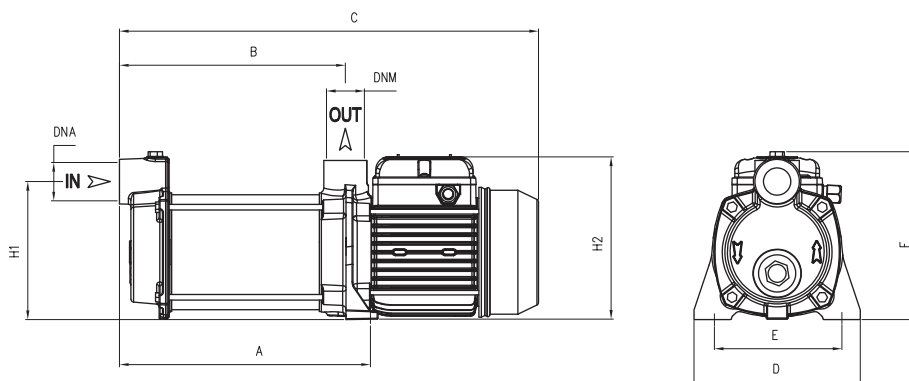
TYPE	LOTS			
	TRUCK		CONTAINER	
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
MON/A	80×120×150	48	80×120×190	64









TYPE - 50 Hz		P2		P1		CURRENT		Q (m³/h - l/min)				
1~	3~			1~	3~	1~ 230V	3~ 400V	0	1,2	2,4	3,6	4,8
		HP	kW	kW		A		0	20	40	60	80
		H (m)										
MON 80/3 A	MON 80/3 AT	0,8	0,59	0,83	0,88	3,8	1,6	34,0	29,5	25,0	18,5	13,0
MON 100/4 A	MON 100/4 AT	1	0,74	1,07	1,1	5,0	1,9	45,5	40,0	34,0	26,0	18,0
MON 120/5 A	MON 120/5 AT	1,2	0,88	1,27	1,33	6,1	2,3	56,0	51,5	44,5	35,0	22,0



TYPE		DIMENSIONS (mm)													
1~	3~	A	B	C	D	E	F	H1	H2	DNA	DNM	I	L	M	Kg
MON 80/3 A	MON 80/3 AT	245	224	425	180	140	185	150	175			440	200	215	14
MON 100/4 A	MON 100/4 AT	270	240	450	180	140	185	150	175	1" G	1" G	500	200	215	15,5
MON 120/5 A	MON 120/5 AT	295	264	475	180	140	185	150	175			500	200	215	16



Multi-stage centrifugal pumps, horizontal and self-priming, particularly suitable for constructing small and medium sized pressurisation systems; able to suck liquids mixed with air.

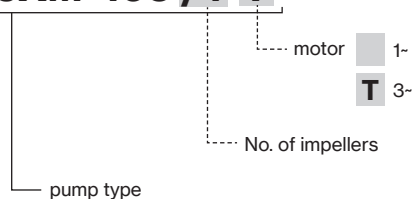
### Construction features

<b>Pump body</b>	stainless steel AISI 304
<b>Motor bracket</b>	aluminum
<b>Impeller</b>	Noryl®
<b>Mechanical seal</b>	ceramic-graphite-NBR
<b>Pump shaft</b>	stainless steel AISI 416
<b>Liquid temperature</b>	0 - 50 °C
<b>Operating pressure</b>	max 8 bar

### Motor

	3~ 230/400V - 50Hz
<b>2 poles induction motor</b>	1~ 230V - 50Hz (with thermal protection)
<b>Insulation class</b>	F
<b>Protection degree</b>	IPX4

### JXM 105 /4 T



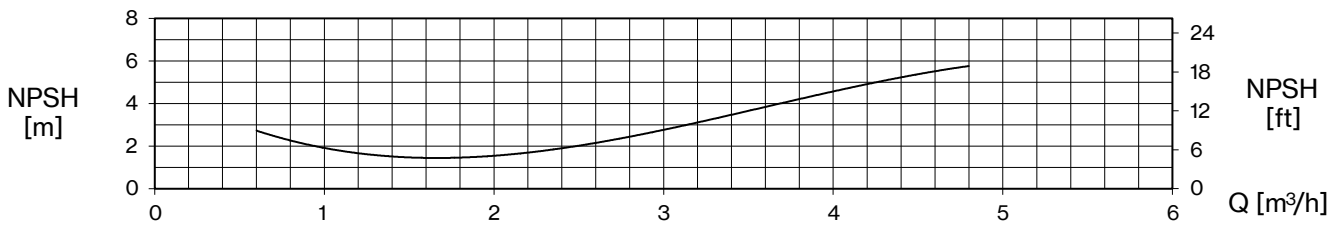
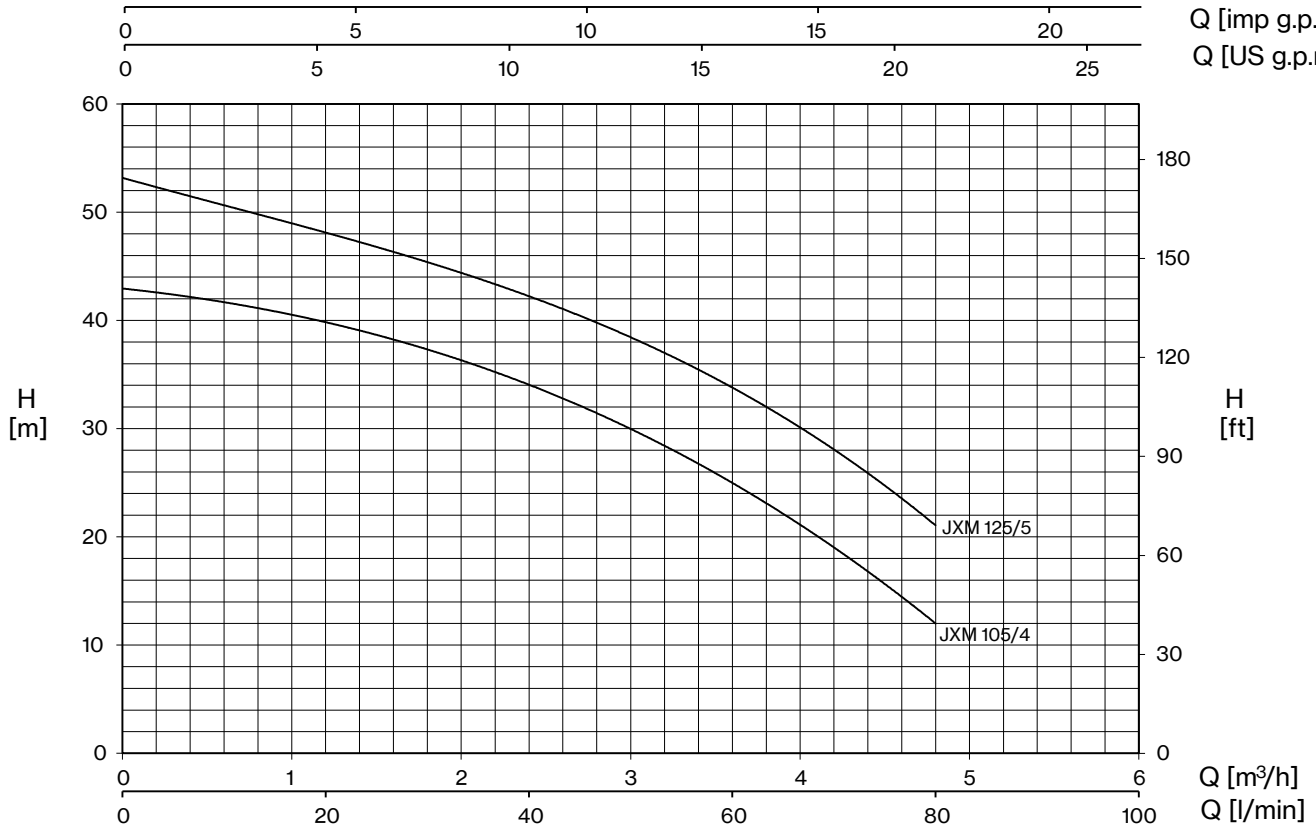
TYPE	LOTS			
	TRUCK		CONTAINER	
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
JXM	85×110×170	60	85×110×190	80



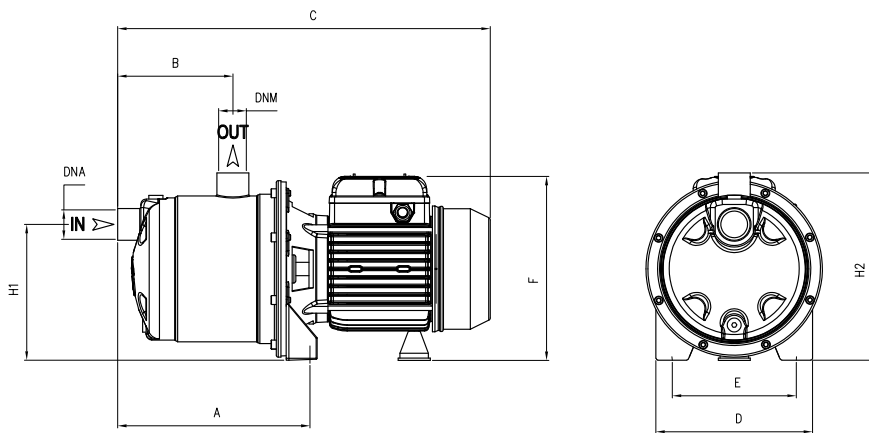
# JXM

Q [imp g.p.m.]

Q [US g.p.m.]



TYPE - 50 Hz		P2		P1		CURRENT		Q (m³/h - l/min)					
1~	3~			1~	3~	1~	3~	0	0,6	1,2	2,4	3,6	4,8
		HP	kW	kW		A		H (m)					
JXM 105/4	JXM 105/4T	1	0,74	1,07	1,1	5,0	1,9	43,0	41,5	40,0	34,0	25,0	12,0
JXM 125/5	JXM 125/5T	1,2	0,88	1,27	1,33	6,1	2,3	53,0	51,0	48,0	42,0	34,0	21,0



TYPE		DIMENSIONS (mm)													
1~	3~	A	B	C	D	E	F	H1	H2	DNA	DNM	I	L	M	Kg
JXM 105/4	JXM 105/4T	208	128	410	175	140	215	153	210	1" G	1" G	430	210	235	11
JXM 125/5	JXM 125/5T	208	128	410	175	140	215	153	210	1" G	1" G	430	210	235	11,5

# JXM GARDEN-BOX

Portable electropumps complete with handle, cable with plug and switch.  
The performances depend on adopted pump type.

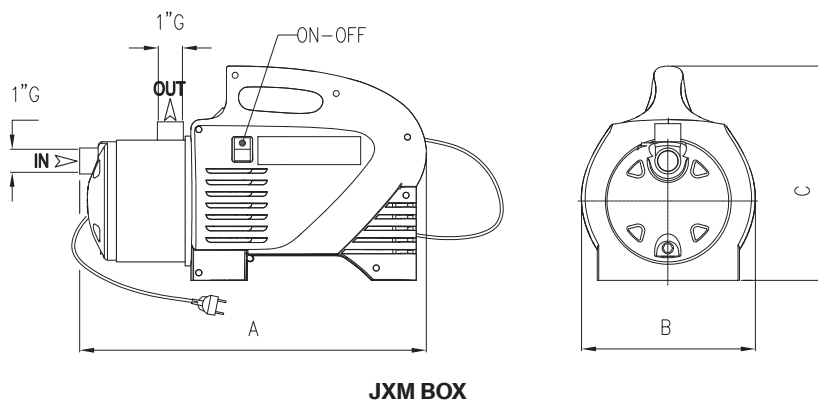
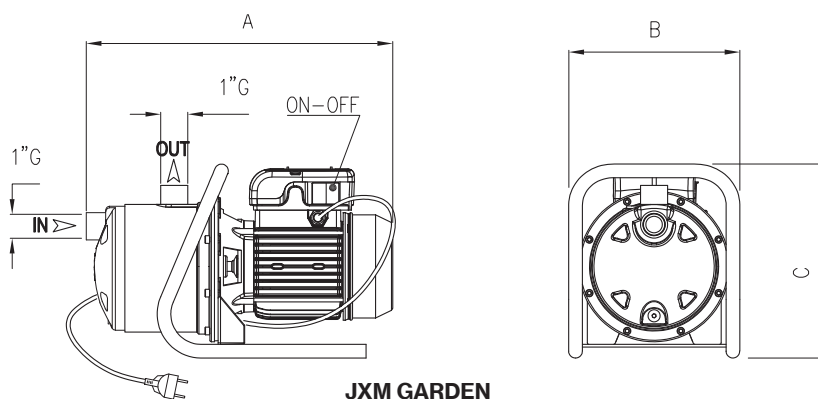


JXM GARDEN

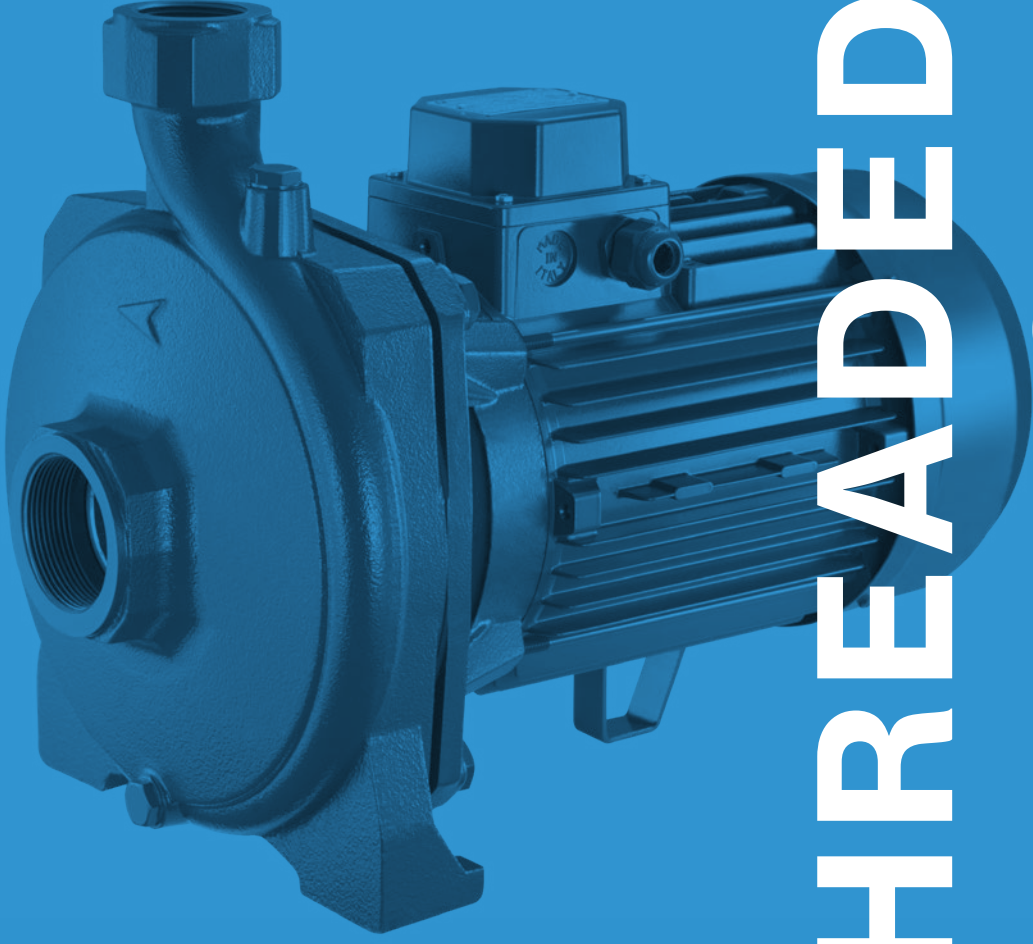
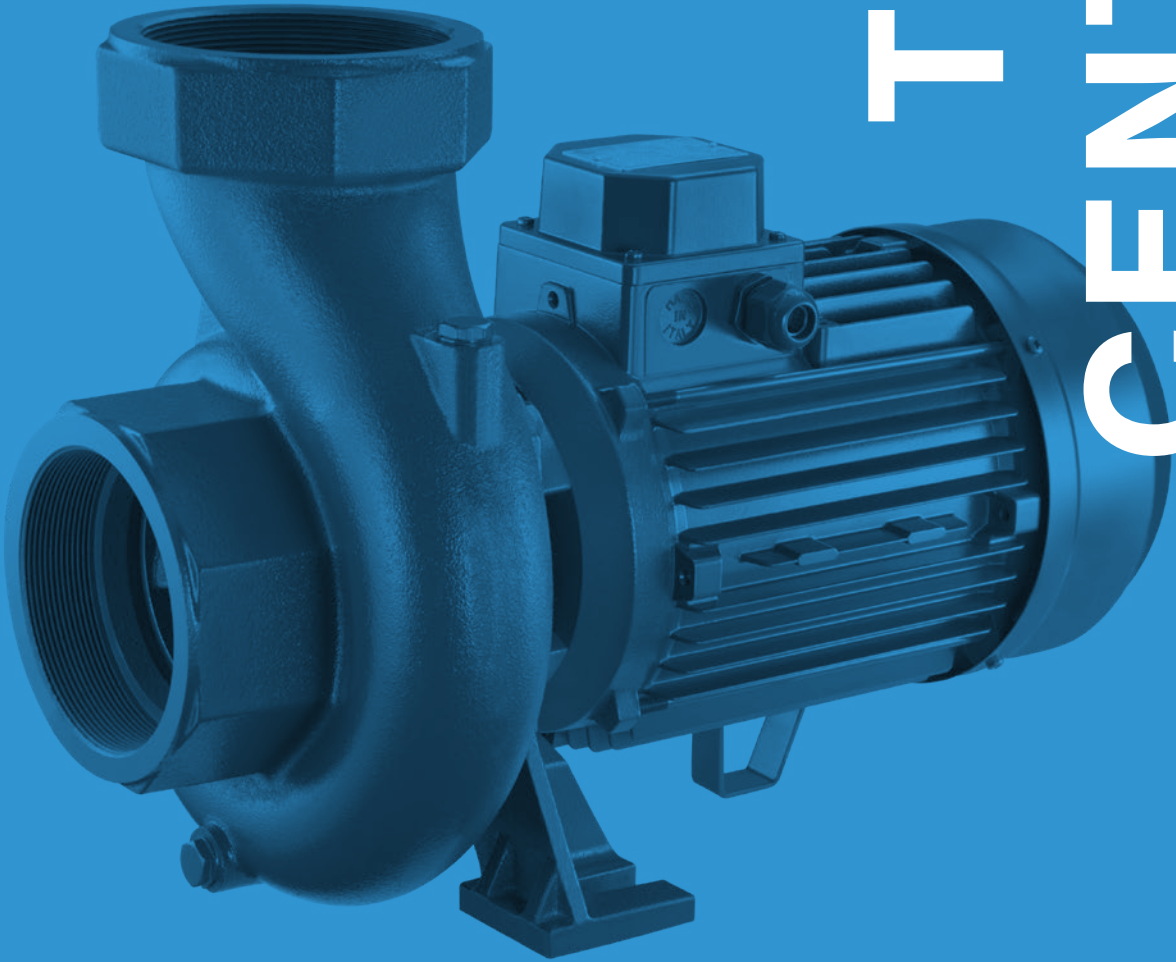


JXM BOX

TYPE - 50 Hz	P2		P1	Pipe		Performance	
	HP	kW	kW	Suction	Delivery	Q (l/min)	H (m)
JXM 100/4 GARDEN-BOX	1	0,74	1,07	1" G	1" G	10,0-80,0	41,5-12,0
JXM 120/5 GARDEN-BOX	1,2	0,88	1,27			10,0-80,0	51,0-21,0

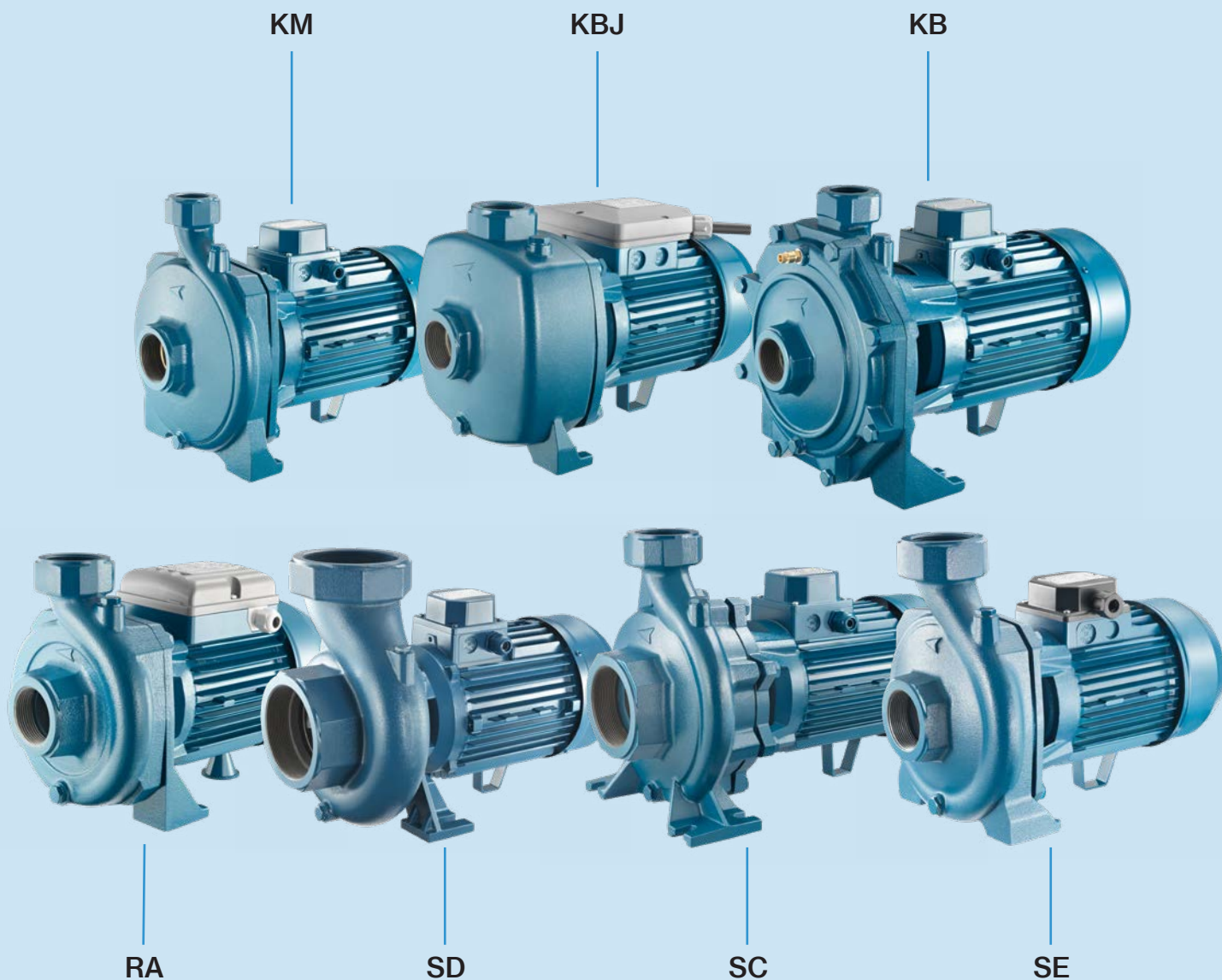


TYPE	DIMENSIONS (mm)		
	A	B	C
JXM 100/4 GARDEN	410	175	285
JXM 120/5 GARDEN	410	175	285
JXM 100/4 BOX	429	209	287
JXM 120/5 BOX	410	175	285



# THREADED CENTRIFUGAL

# THREADED CENTRIFUGAL PUMPS



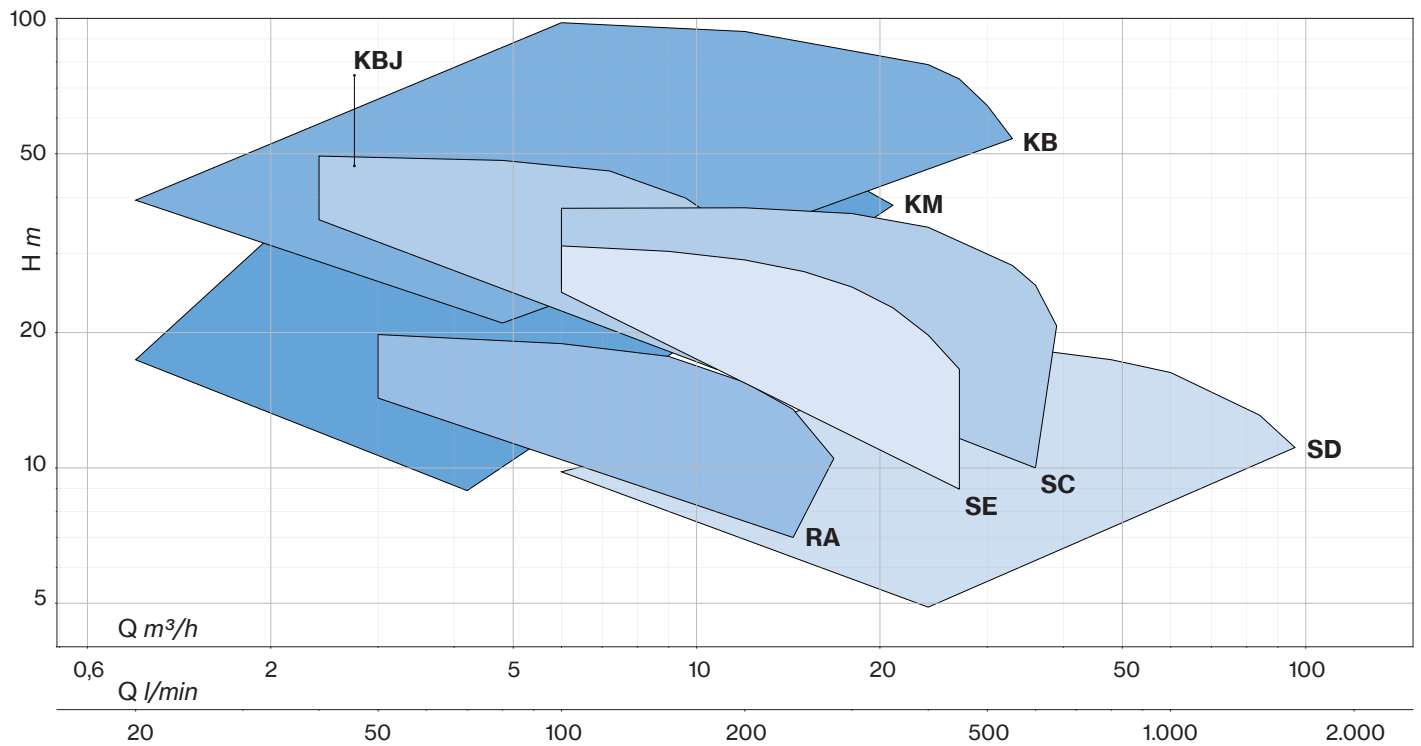
Extremely silent single and double impeller centrifugal pumps, designed for a wide range of applications

## Applications:

- Water supply
- Pressurization
- Water circulation systems for heating and air conditioning
- Liquid transfer in industry and horticulture



# THREADED CENTRIFUGAL PUMPS





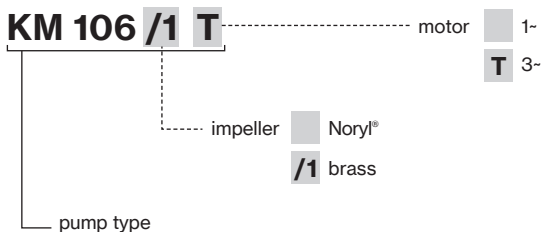
Single-impeller centrifugal pumps, extremely quiet, suitable for domestic, civil and industrial applications. The pumps guarantee constant pressure at the variation of flow rates.

### Construction features

<b>Pump body</b>	cast iron
<b>Motor bracket</b>	cast iron (45, 50, 164÷550); aluminum (86-106)
<b>Impeller</b>	Noryl® (45) Noryl® or brass (50÷314) brass (400-550)
<b>Mechanical seal</b>	ceramic-graphite-NBR
<b>Motor shaft</b>	steel AISI 416 (45÷106) steel AISI 303 (164÷550)
<b>Liquid temperature</b>	Noryl® impeller: 0 - 50 °C brass impeller: 0 - 90 °C
<b>Operating pressure</b>	max 6 bar (45÷106) max 8 bar (164÷550)

### Motor

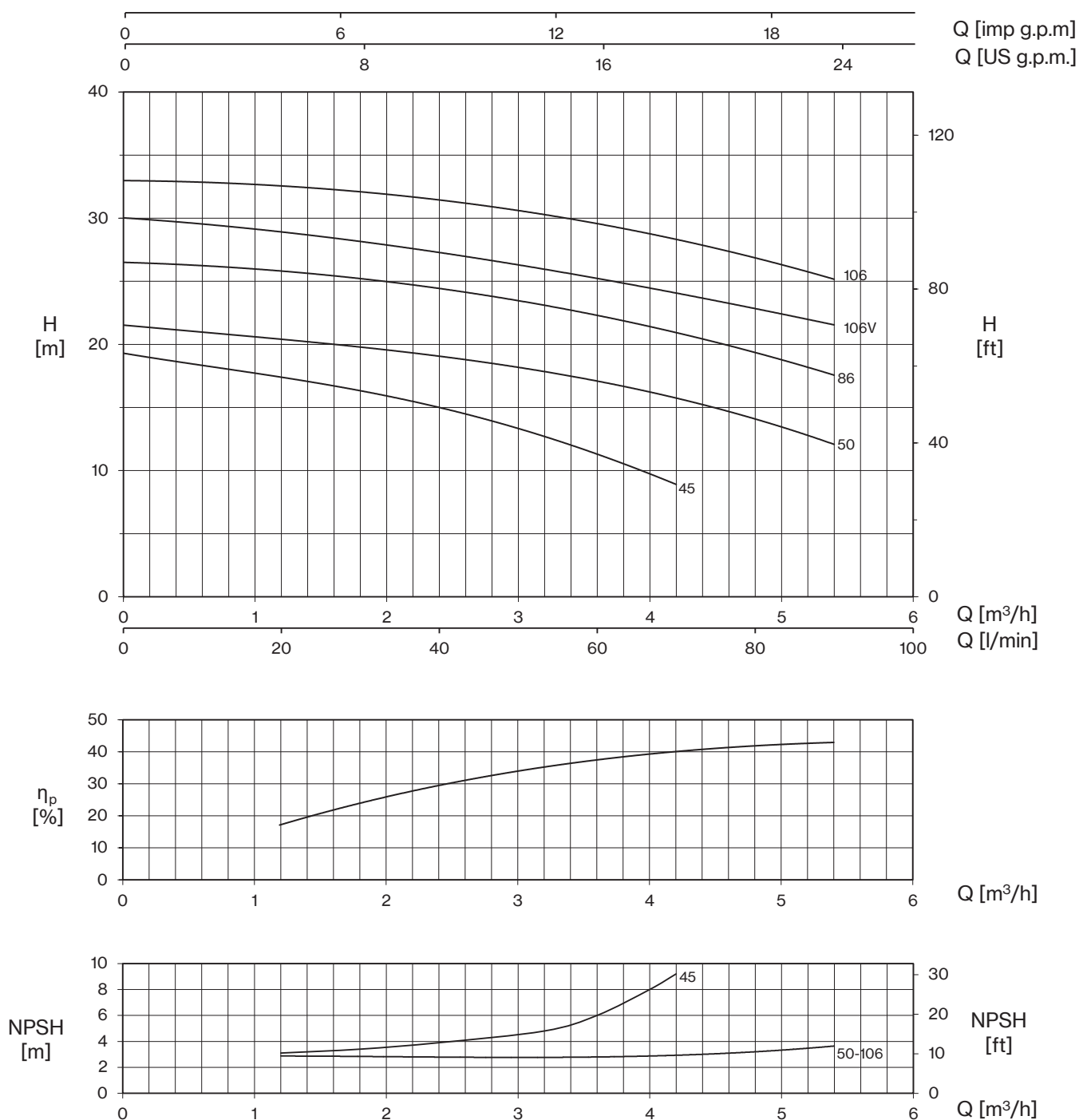
	3~ 230/400V - 50Hz
<b>2 Poles induction motor</b>	1~ 230V - 50Hz (with thermal protection up to MEC 80)
<b>Insulation class</b>	F
<b>Protection degree</b>	IPX4



TYPE	LOTS			
	TRUCK		CONTAINER	
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
<b>KM 45-50</b>	80×120×145	102	80×120×190	136
<b>KM 86-106</b>	85×110×145	65	85×110×195	91
<b>KM 164÷314</b>	85×110×140	40	85×110×170	60
<b>KM 314 (1~)</b>	85×110×150	24	85×110×180	30
<b>KM 400÷550</b>	85×110×150	24	85×110×180	30

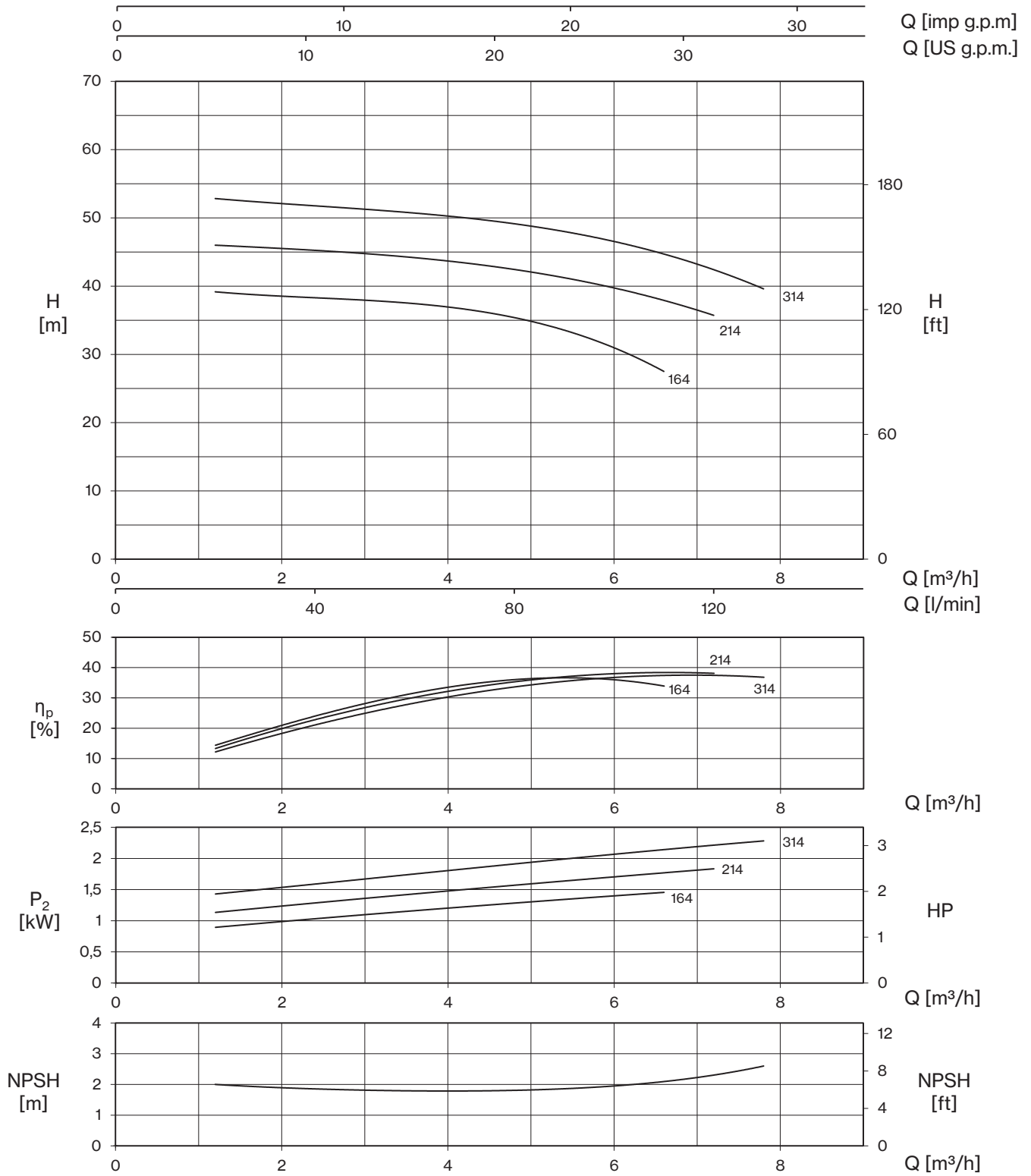




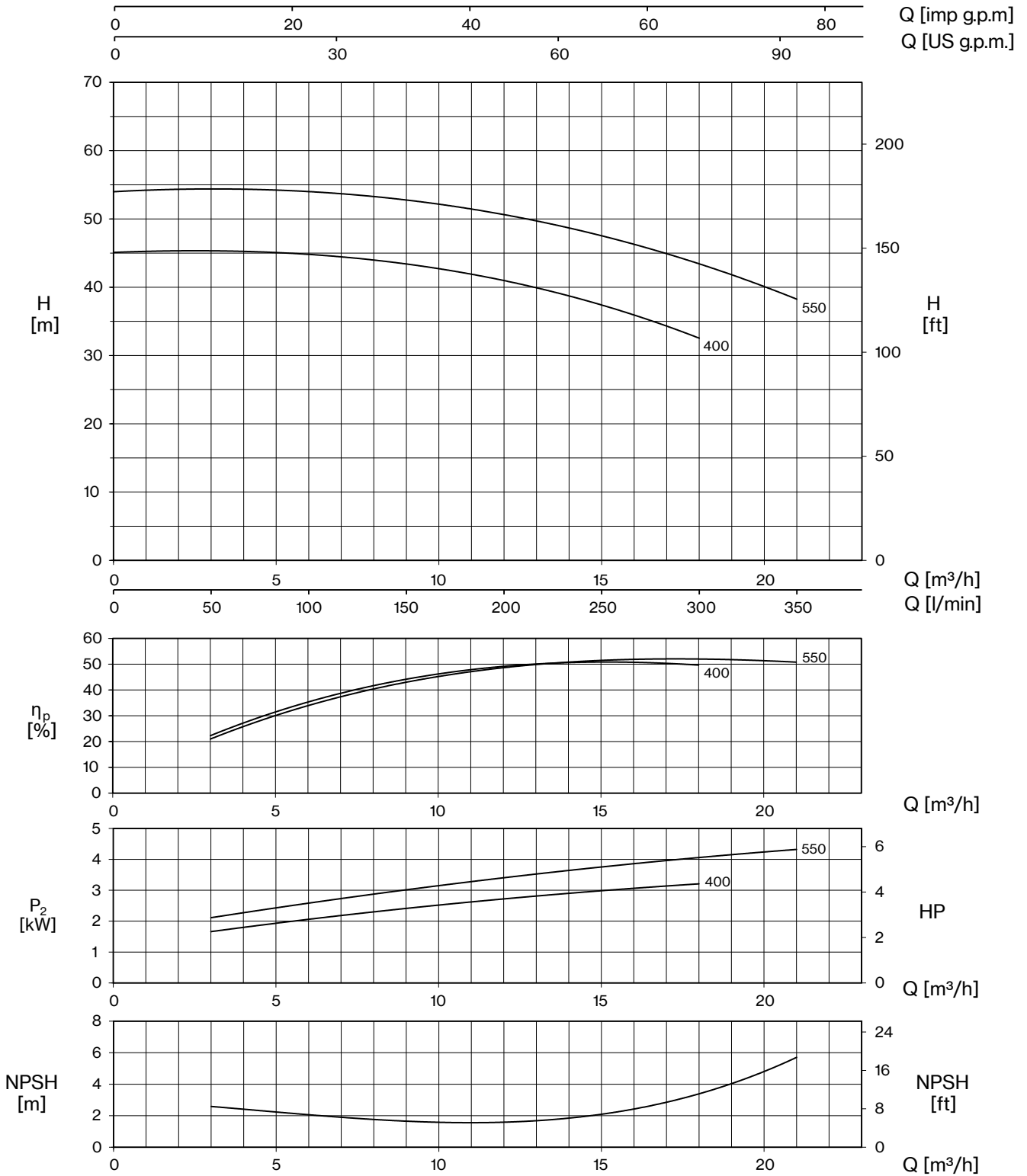


TYPE - 50 Hz		P2		P1		CURRENT		Q (m³/h - l/min)						
1~	3~			1~	3~	1~ 230V	3~ 400V	0	1,2	2,4	3,6	4,2	4,8	5,4
		HP	kW	kW		A		0	20	40	60	70	80	90
		H (m)												
KM 45	KM 45T	0,4	0,3	0,51	0,56	2,3	1	19,3	17,4	15,0	11,3	8,9		
KM 50	KM 50T	0,5	0,37	0,59	0,65	2,8	1,1	21,5	20,5	19,0	17,0	15,8	14,2	12,0
KM 86	KM 86T	0,8	0,59	0,9	0,94	4,5	1,7	26,5	25,8	24,5	22,2	20,9	19,5	17,5
KM 106V	-	1	0,74	1,05	-	4,6	-	30,0	29,0	27,2	25,2	24,1	22,9	21,5
KM 106	KM 106T	1	0,74	1,16	1,17	5,7	2	33,0	32,5	31,5	29,6	28,3	26,8	25,2

# KM

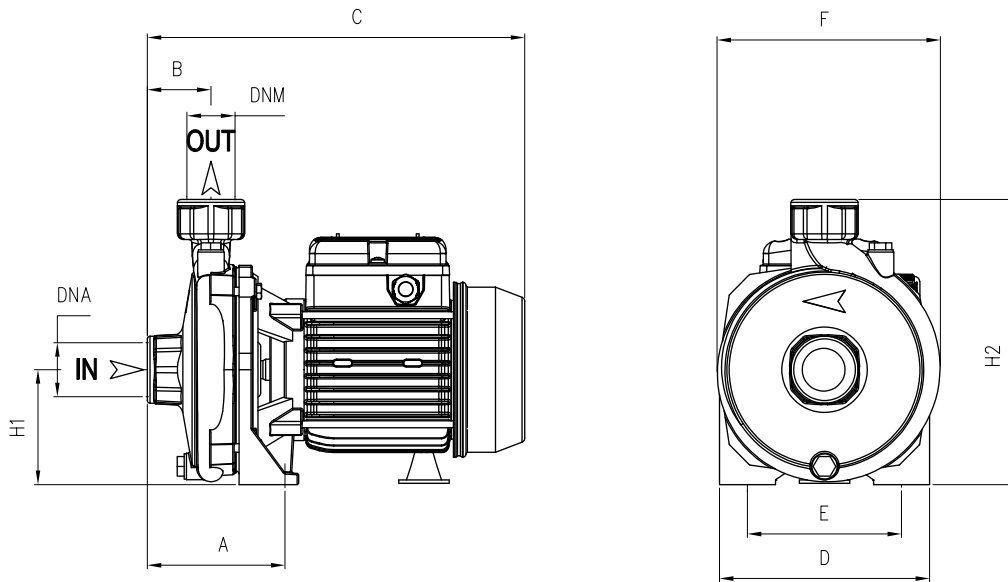




TYPE - 50 Hz		P2		P1		CURRENT		Q (m³/h - l/min)									
1-	3-			1-	3-	1- 230V	3- 400V	0	1,2	2,4	3,6	4,8	6	6,6	7,2	7,8	
		HP	kW	kW		A		0	20	40	60	80	100	110	120	130	
		H (m)															
<b>KM 164</b>	<b>KM 164T</b>	2	1,5	1,8	1,8	8,2	3,7	39,4	39,1	38,6	37,2	35,2	31,5	27,2			
<b>KM 214</b>	<b>KM 214T</b>	2,5	1,85	2,3	2,2	10,4	4,4	46,3	45,9	45,5	44,1	42,1	39,8	38,2	35,5		
<b>KM 314</b>	<b>KM 314T</b>	3	2,2	2,8	2,6	13,0	5,2	53,2	52,7	52,1	50,8	48,8	46,3	45,0	42,9	39,2	

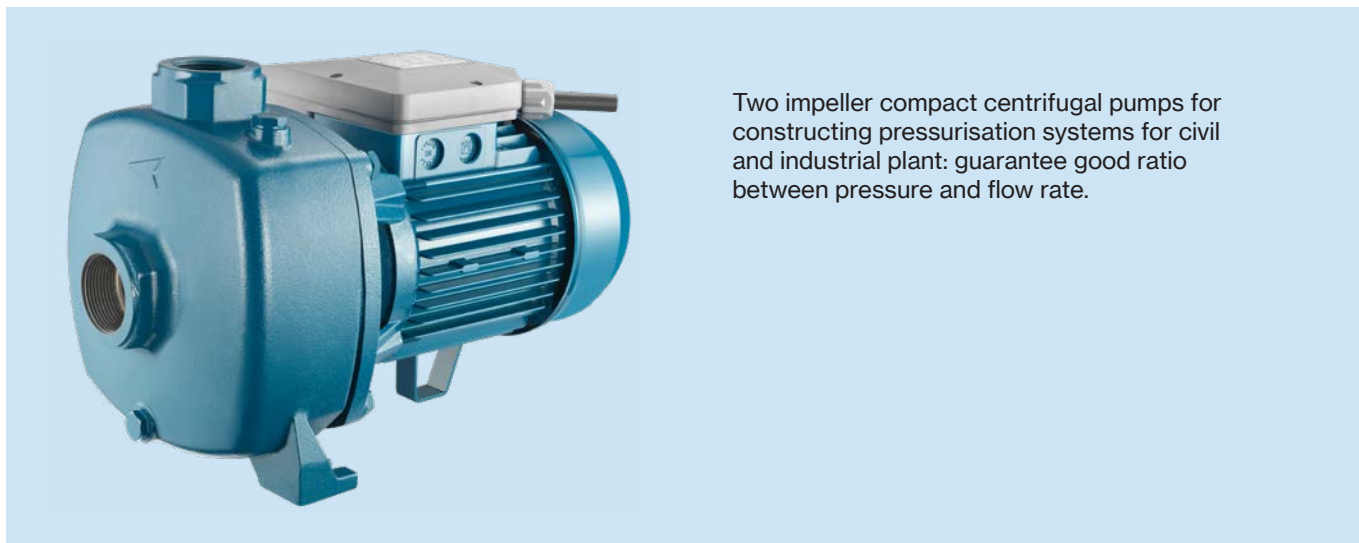


TYPE - 50 Hz		P2		P1		CURRENT		Q (m³/h - l/min)							
1-	3-			1-	3-	1- 230V	3- 400V	0	3	6	9	12	15	18	21
		HP	kW	kW		A		H (m)							
KM 400	KM 400T	4	3	3,6	3,7	16,0	6,7	45,1	45,2	44,9	43,4	40,9	37,4	32,5	
-	KM 550T	5,5	4	-	4,9	-	9,0	54,1	54,1	54,0	52,9	50,7	47,5	43,2	38,4

# KM



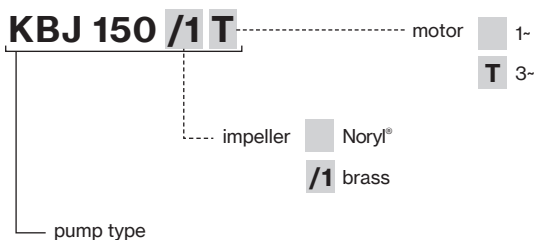
TYPE		DIMENSIONS (mm)														
-1	-3	A	B	C	D	E	F	H1	H2	DNA	DNM	I	L	M	-1	-3
<b>KM 45</b>	<b>KM 45T</b>	95	45,5	265	150	110	160	82	202	1" G	1" G	290	175	225	8,5	8,5
<b>KM 50</b>	<b>KM 50T</b>	95	45,5	265	150	110	160	82	202			290	170	230	9,5	9,5
<b>KM 86</b>	<b>KM 86T</b>	110	46,5	300	180	140	185	97	234	1" G	1" G	325	200	265	13,5	13
<b>KM 106V</b>	-	110	46,5	300	180	140	185	97	234			325	200	265	14	-
<b>KM 106</b>	<b>KM 106T</b>	110	46,5	300	180	140	185	97	234	1" ¼ G	1" G	420	230	309	25,5	26,5
<b>KM 164</b>	<b>KM 164T</b>	117	46,5	378	220	180	225	115	285			420	230	309	26,5	25,5
<b>KM 214</b>	<b>KM 214T</b>	117	46,5	378	220	180	225	115	285	1" ¼ G	1" G	520	235	320	34,5	-
<b>KM 314</b>	-	117	46,5	446	220	180	225	115	285			420	230	309	-	27
-	<b>KM 314T</b>	117	46,5	378	220	180	225	115	285	2" G	1" ¼ G	480	255	342	46	41,5
<b>KM 400</b>	<b>KM 400T</b>	108	54	460	240	190	250	133	323			480	255	342	-	45,5
-	<b>KM 550T</b>	108	54	460	240	190	250	133	323							



Two impeller compact centrifugal pumps for constructing pressurisation systems for civil and industrial plant: guarantee good ratio between pressure and flow rate.

Construction features	
<b>Pump body</b>	cast iron
<b>Motor bracket</b>	cast iron
<b>Impeller</b>	Noryl® or brass
<b>Mechanical seal</b>	ceramic-graphite-NBR
<b>Motor shaft</b>	stainless steel AISI 303
<b>Liquid temperature</b>	0 - 50 °C
<b>Operating pressure</b>	max 8 bar

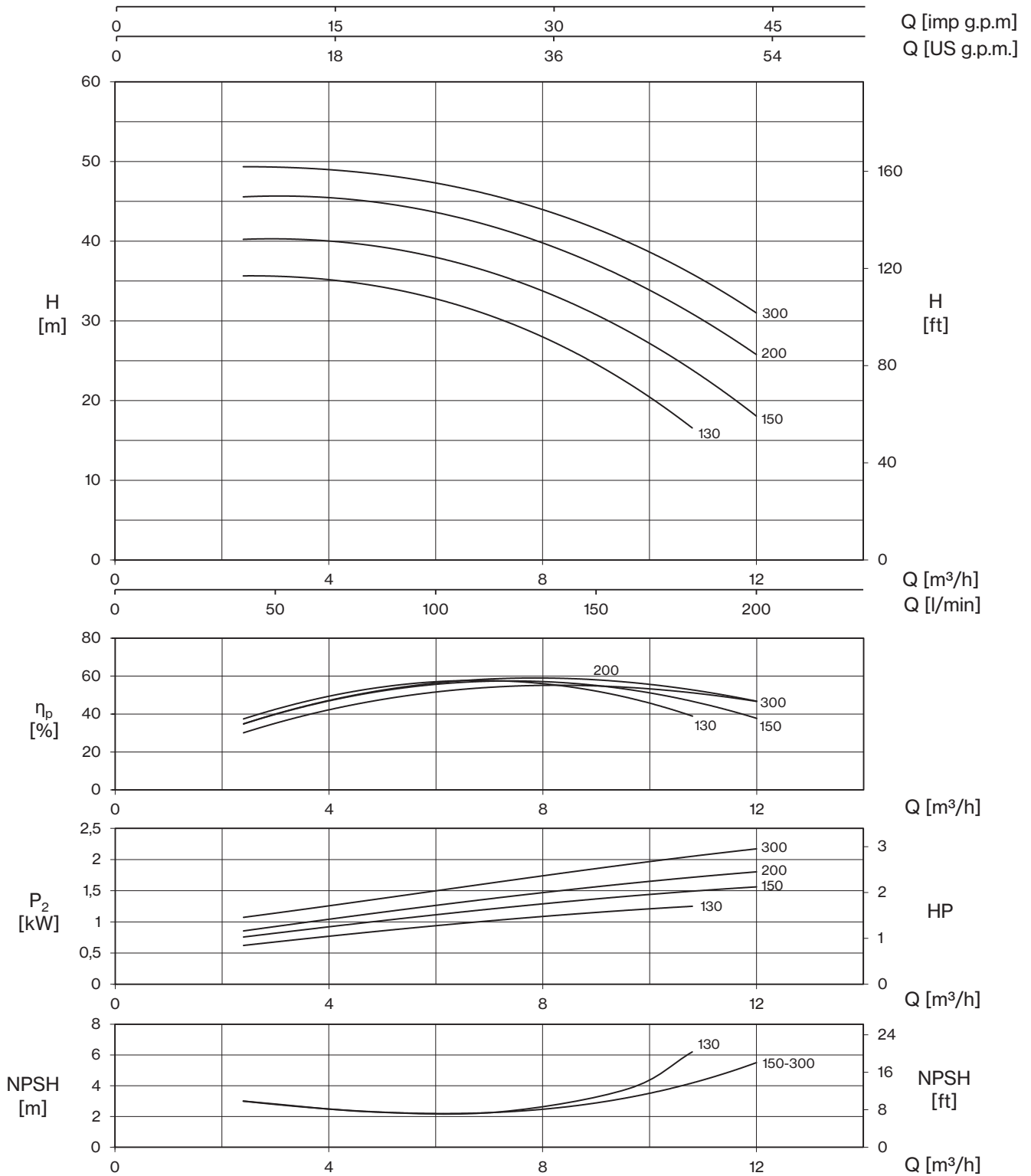
Motor	
	3~ 230/400V - 50Hz
<b>2 Poles induction motor</b>	1~ 230V - 50Hz (with thermal protection)
<b>Insulation class</b>	F
<b>Protection degree</b>	IPX4



TYPE	LOTS			
	TRUCK		CONTAINER	
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
<b>KBJ</b>	85×110×130	40	85×110×190	60

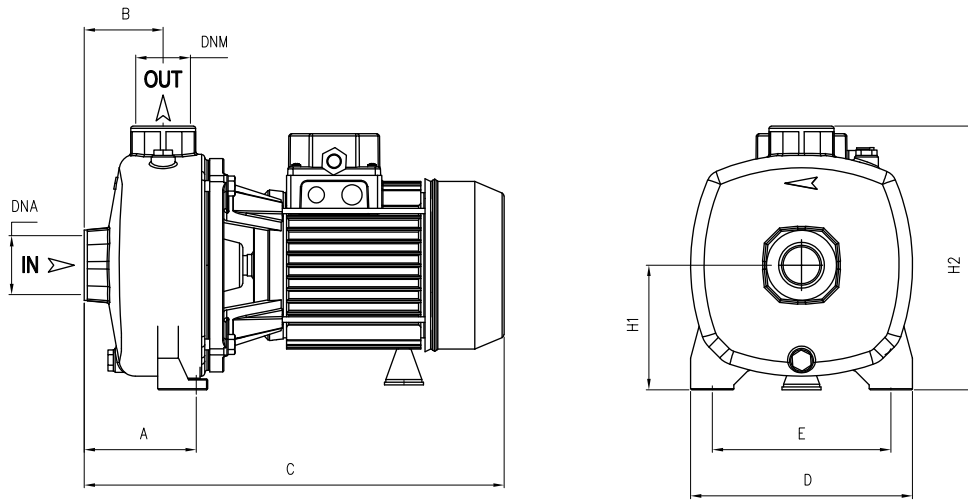




# KBJ



TYPE - 50 Hz		P2		P1		CURRENT		Q (m³/h - l/min)						
1-	3-			1-	3-	1- 230V	3- 400V	0	2,4	4,8	7,2	9,6	10,8	12
		HP	kW	kW		A		H (m)						
<b>KBJ 130</b>	-	1,8	1,3	1,6	-	7,4	-	35,1	35,6	34,5	30,2	22,2	16,6	
<b>KBJ 150</b>	<b>KBJ 150T</b>	2	1,5	2,0	1,9	8,9	3,7	39,2	40,2	39,5	35,7	28,7	23,9	18,0
<b>KBJ 200</b>	<b>KBJ 200T</b>	2,5	1,85	2,3	2,2	10,4	4,4	44,9	45,6	44,8	41,7	35,2	30,8	25,8
<b>KBJ 300</b>	<b>KBJ 300T</b>	3	2,2	2,6	2,5	12,4	5,1	49,5	49,4	48,3	45,8	39,8	35,8	31,1





TYPE		DIMENSIONS (mm)													
-1	-3	A	B	C	D	E	H1	H2	DNA	DNM	I	L	M	-1	-3
<b>KBJ 130</b>	-	108	73	415	205	165	115	242	1" 1/2 G	1" 1/4 G	433	220	287	23,5	-
<b>KBJ 150</b>	<b>KBJ 150T</b>	108	73	415	205	165	115	242			433	220	287	24	25
<b>KBJ 200</b>	<b>KBJ 200T</b>	108	73	415	205	165	115	242			433	220	287	25,5	25
<b>KBJ 300</b>	-	108	73	485	205	165	115	242			520	235	320	34	-
-	<b>KBJ 300T</b>	108	73	415	205	165	115	242			433	220	287	-	26,5



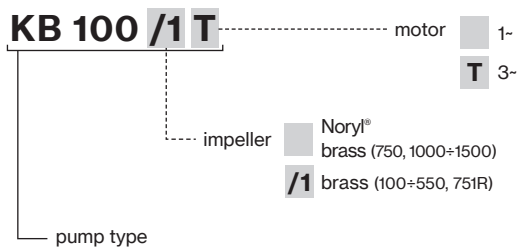
Two impeller centrifugal pumps for constructing pressurisation systems for civil and industrial plant; the two counter-posed impellers guarantee high head and flow rate.

### Construction features

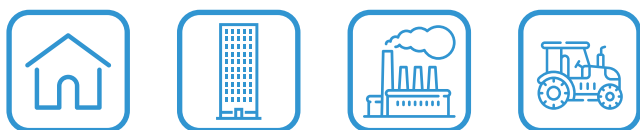
<b>Pump body</b>	cast iron
<b>Motor bracket</b>	cast iron
<b>Impeller</b>	Noryl® or brass (100÷900) brass (750÷1500)
<b>Mechanical seal</b>	ceramic-graphite-NBR
<b>Motor shaft</b>	stainless steel AISI 303 stainless steel AISI 416 (100)
<b>Liquid temperature</b>	Noryl® impeller: 0 - 50 °C brass impeller: 0 - 90 °C
<b>Operating pressure</b>	max 6 bar (100) max 11 bar (160÷1500)

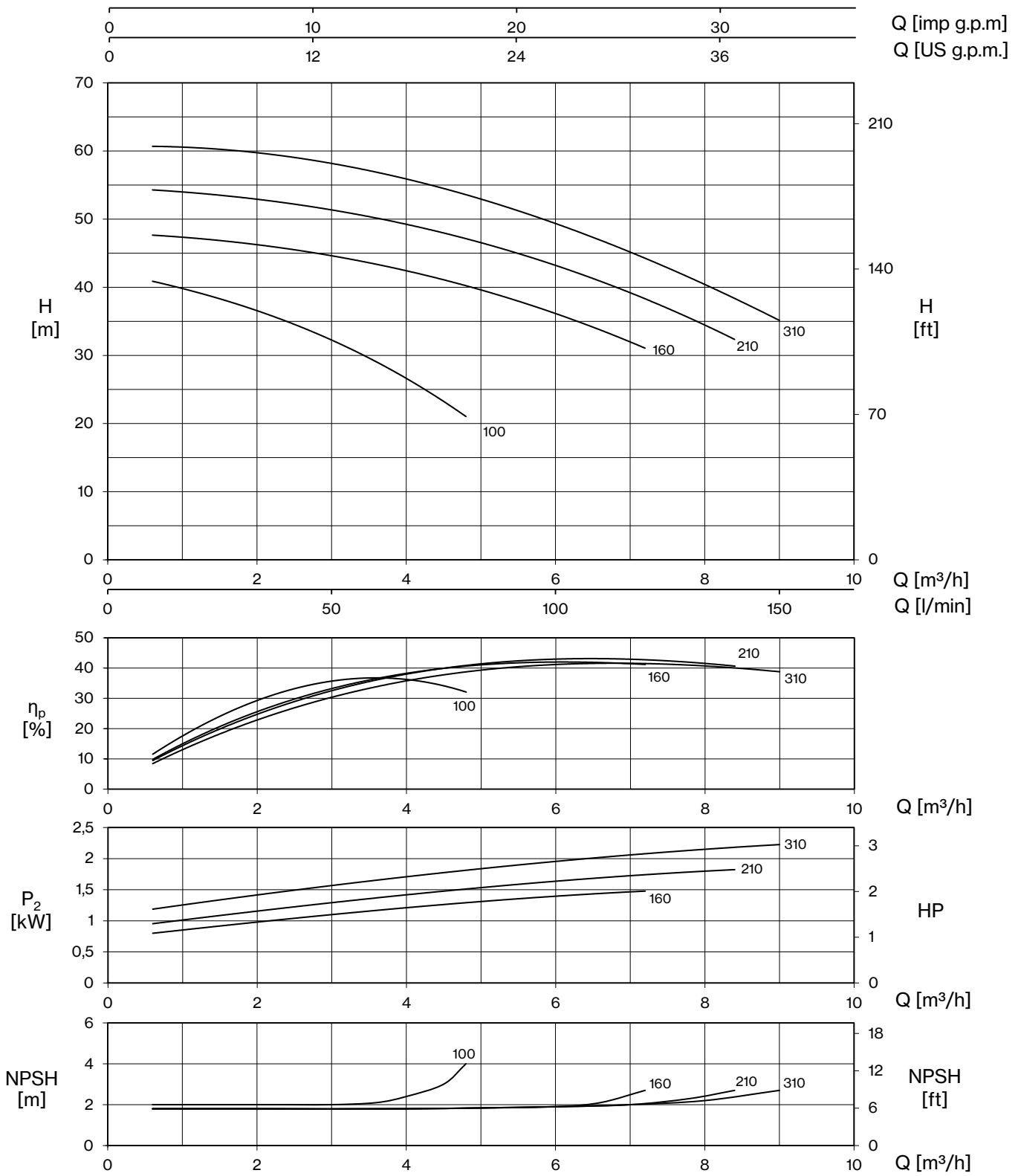
### Motor

	3~ 230/400V - 50Hz P ≤ 4kW
<b>2 Poles induction motor</b>	1~ 230V - 50Hz (with thermal protection up to MEC 80)
<b>Insulation class</b>	F
<b>Protection degree</b>	IPX4 IPX5 (KB750÷1500)



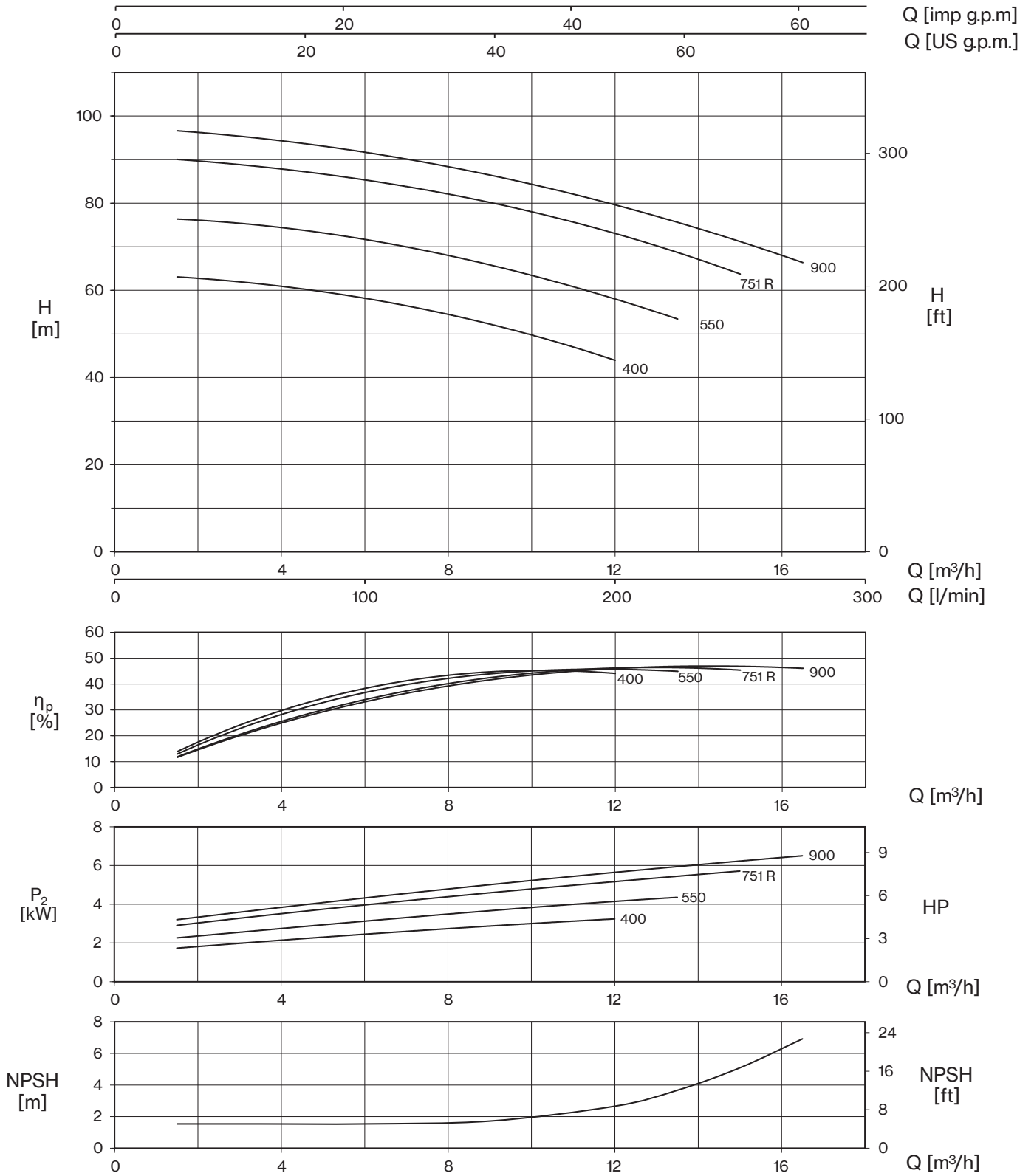
TYPE	TRUCK		CONTAINER	
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
<b>KB 100</b>	90×110×145	65	90×110×195	91
<b>KB 160-KB 310T</b>	85×110×130	40	85×110×190	60
<b>KB 310</b>	85×110×150	24	85×110×180	30
<b>KB 400÷900</b>	80×120×150	24	80×120×180	30
<b>KB 750÷1500T</b>	100×120×140	18	100×120×185	24



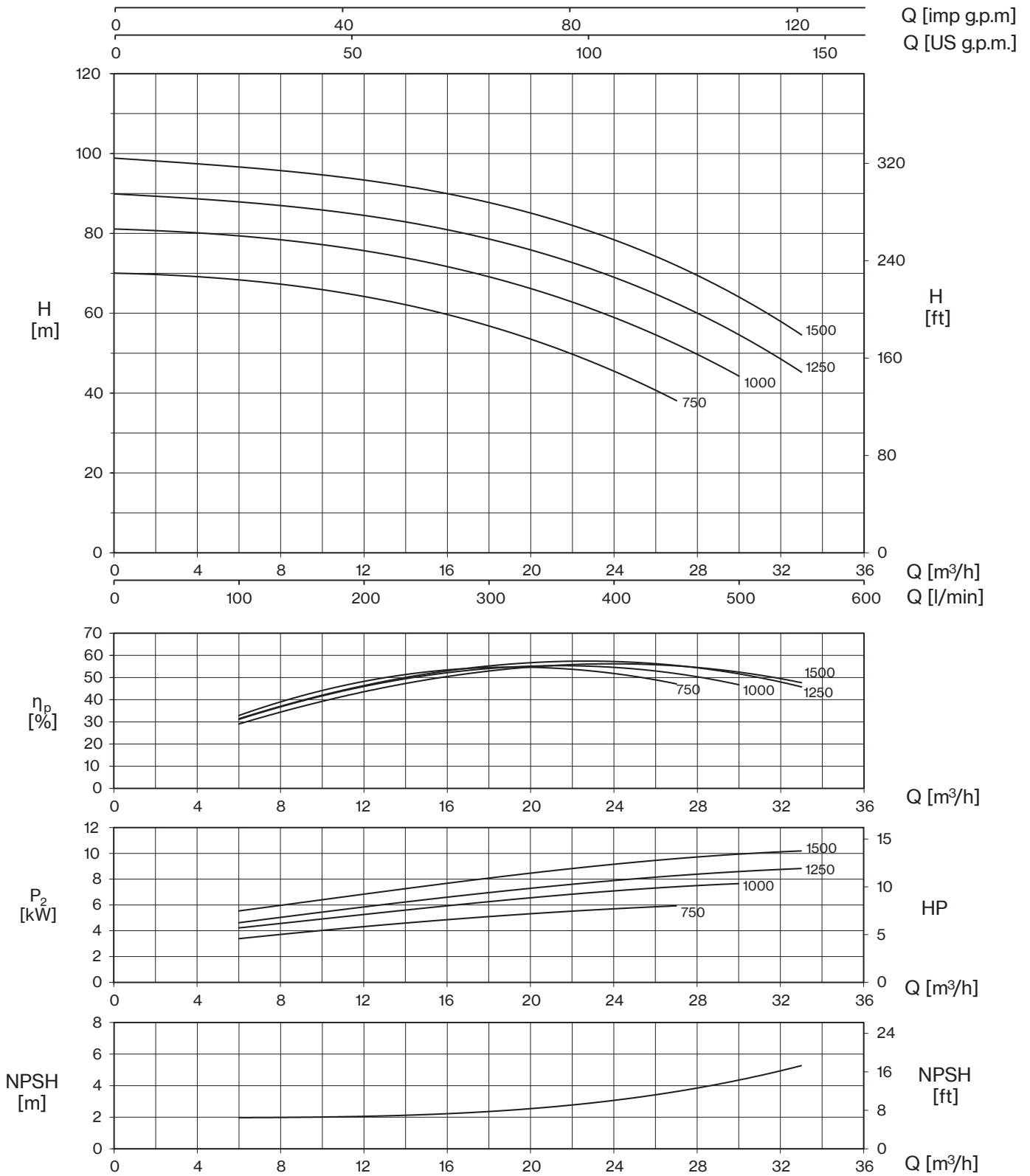


TYPE - 50 Hz		P2		P1		CURRENT		Q (m³/h - l/min)											
1-	3-	HP	kW	1-	3-	1- 230V	3- 400V	0	0,6	1,2	1,8	2,4	3,6	4,8	6	7,2	8,4	9	
								0	10	20	30	40	60	80	100	120	140	150	
				kW		A		H (m)											
<b>KB 100</b>	<b>KB 100T</b>	1	0,74	1,17	1,15	5,4	2,4	42,0	40,8	39,4	37,4	34,7	29,2	21,0					
<b>KB 160</b>	<b>KB 160T</b>	2	1,5	1,9	1,8	8,5	3,7	48,3	47,7	47,1	46,5	45,7	43,5	40,1	36,2	31,1			
<b>KB 210</b>	<b>KB 210T</b>	2,5	1,85	2,3	2,2	10,4	4,4	54,9	54,4	53,8	53,0	52,3	50,5	47,1	43,1	38,3	32,4		
<b>KB 310</b>	<b>KB 310T</b>	3	2,2	2,8	2,6	13,0	5,2	61,4	60,9	60,3	59,8	59,2	57,1	53,6	49,3	44,2	38,3	35,2	

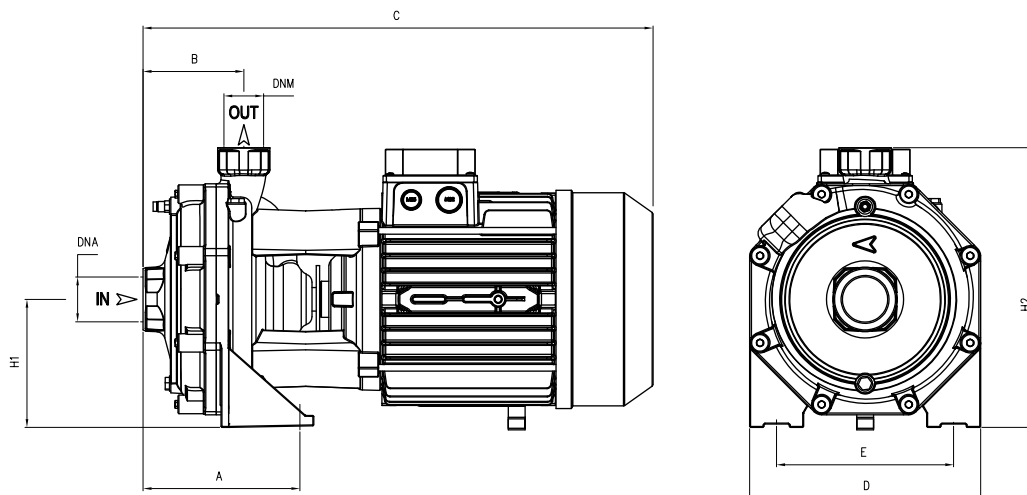
# KB



TYPE - 50 Hz		P2		P1		CURRENT		Q (m³/h - l/min)											
1-	3-			1-	3-	1- 230V	3- 400V	0	1,5	3,0	4,5	6,0	7,5	9,0	10,5	12	13,5	15,0	16,5
		HP	kW	kW		A		H (m)											
KB 400	KB 400T	4	3,0	3,7	3,8	16,4	6,7	63,6	63,1	62,0	60,3	58,2	55,5	52,3	48,4	43,9			
KB 550	KB 550T	5,5	4,0	5,2	5,0	23,3	9,1	76,9	76,4	75,4	73,8	71,7	69,0	65,9	62,1	58,0	53,4		
-	KB 751RT	7,5	5,5	-	6,5	-	11,5	90,7	90,0	88,9	87,3	85,3	82,9	80,1	76,8	73,1	68,8	63,7	
-	KB 900T	10	7,5	-	7,3	-	13,3	97,5	96,6	95,4	93,7	91,7	89,2	86,5	83,3	79,8	75,2	71,2	66,4



TYPE - 50 Hz	P2			P1	CURRENT	Q (m³/h - l/min)						
						0	6	12	18	24	27	30
	HP	kW	kW	3- 400V	0	100	200	300	400	450	500	550
3-				A	H (m)							
<b>KB 750T</b>	7,5	5,5	6,7	11,1	70,0	68,5	63,9	57,1	45,3	38,2		
<b>KB 1000T</b>	10	7,5	8,5	13,9	80,7	80,4	75,0	68,5	59,7	52,6	43,7	
<b>KB 1250T</b>	12,5	9,2	9,8	16,3	89,5	88,8	84,1	77,7	69,7	63,0	54,2	45,1
<b>KB 1500T</b>	15	11,0	11,2	18,6	98,3	97,8	93,5	85,7	78,9	73,3	64,0	54,0



TYPE		DIMENSIONS (mm)													
-1	-3	A	B	C	D	E	H1	H2	DNA	DNM	I	L	M	-1	-3
<b>KB 100</b>	<b>KB 100T</b>	122	72	328	180	140	98	228	1" G	1" G	350	195	265	15,5	15
<b>KB 160</b>	<b>KB 160T</b>	115	82	408	210	170	110	265	1" 1/4 G		433	220	287	25,5	26,5
<b>KB 210</b>	<b>KB 210T</b>	115	82	408	210	170	110	265	1" 1/4 G	1" G	433	220	287	26	27
<b>KB 310</b>	-	115	82	477	210	170	110	265			520	235	320	35,5	-
-	<b>KB 310T</b>	115	82	408	210	170	110	265	1" 1/2 G	1" 1/4 G	433	220	287	-	27,5
<b>KB 400</b>	<b>KB 400T</b>	145	95,5	498	266	212	135	305			553	274	318	48	44
<b>KB 550</b>	<b>KB 550T</b>	145	95,5	498	266	212	135	305	1" 1/2 G	1" 1/4 G	553	274	318	56,5	48
-	<b>KB 751RT</b>	145	95,5	532	266	212	135	305			553	274	318	-	56
-	<b>KB 900T</b>	145	95,5	532	266	212	135	305	2" G	1" 1/4 G	553	274	318	-	62
-	<b>KB 750T</b>	190	120	605	275	210	150	330			675	390	300	-	78
-	<b>KB 1000T</b>	190	120	605	275	210	150	330	2" G	1" 1/4 G	675	390	300	-	84
-	<b>KB 1250T</b>	190	120	645	275	210	150	330			675	390	300	-	91,5
-	<b>KB 1500T</b>	190	120	645	275	210	150	330	675	390	300	-	95,5		





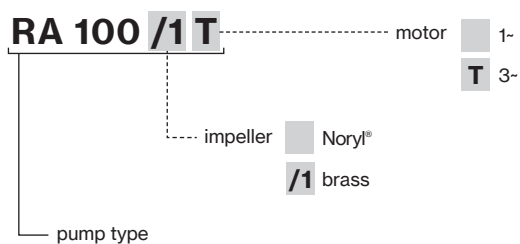
Medium delivery centrifugal pumps for agricultural applications. Equipped with an open impeller that allows the pumping of nonclean liquids, guaranteeing the free passage of small solids (Ø max. 10 mm).

### Construction features

<b>Pump body</b>	cast iron
<b>Motor bracket</b>	cast iron
<b>Impeller</b>	Noryl® or brass
<b>Mechanical seal</b>	ceramic-graphite-NBR
<b>Motor shaft</b>	stainless steel AISI 416
<b>Liquid temperature</b>	Noryl® impeller: 0 - 50 °C brass impeller: 0 - 90 °C
<b>Operating pressure</b>	max 6 bar

### Motor

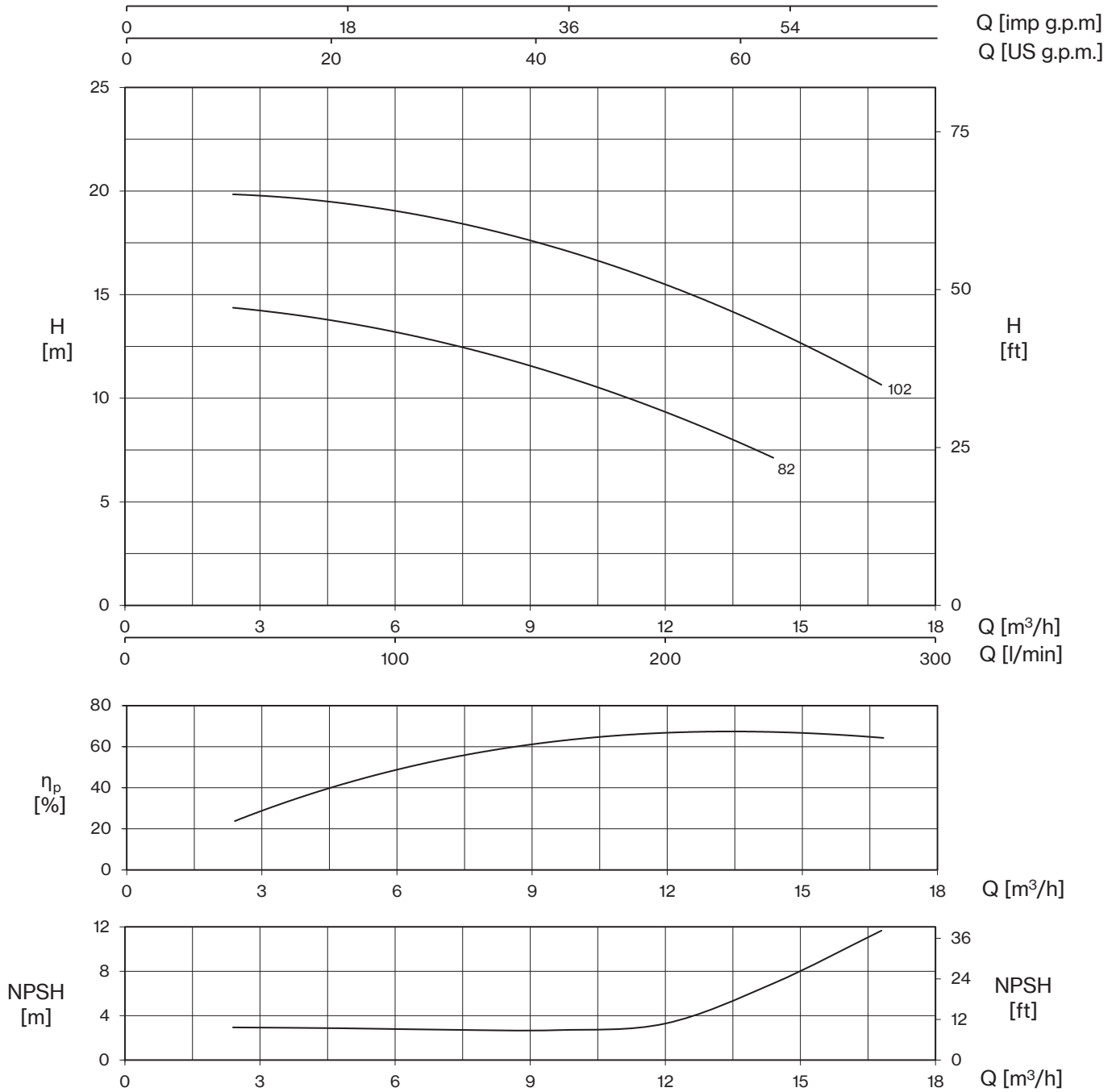
	3~ 230/400V - 50Hz
<b>2 Poles induction motor</b>	1~ 230V - 50Hz (with thermal protection)
<b>Insulation class</b>	F
<b>Protection degree</b>	IPX4



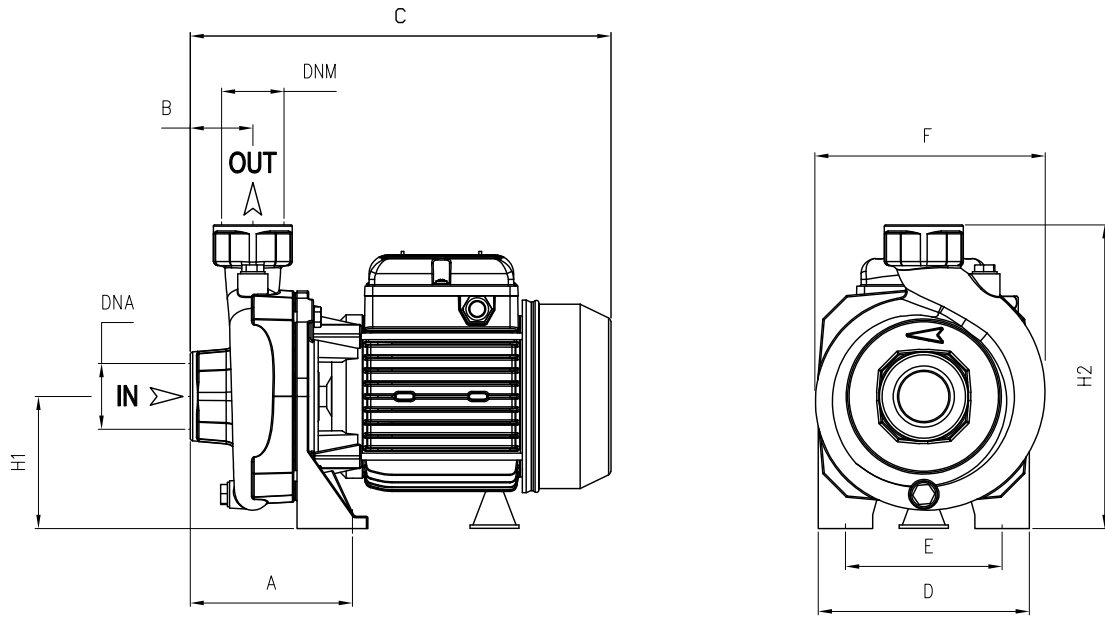
TYPE	LOTS			
	TRUCK		CONTAINER	
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
<b>RA</b>	85×110×145	65	85×110×195	91





# RA



TYPE - 50 Hz		P2		P1		CURRENT		Q (m³/h - l/min)						
1~	3~			1~	3~	1~ 230V	3~ 400V	0	3	6	9	12	14,4	16,8
		HP	kW	kW		A		H (m)						
RA 82	RA 82T	0,8	0,59	0,73	0,83	3,4	1,5	15,0	14,3	13,0	11,6	9,5	7,0	
RA 102	RA 102T	1	0,74	1,14	1,20	5,3	2,4	20,5	19,8	18,9	17,7	15,5	13,5	10,5



TYPE		DIMENSIONS (mm)													
1~	3~	A	B	C	D	E	F	H1	H2	DNA	DNM	I	L	M	
RA 82	RA 82T	120	45	308	155	115	170	97	222			325	200	265	13
RA 102	RA 102T	120	45	308	155	115	170	97	222	1" 1/2 G	1" 1/2 G	325	200	265	14



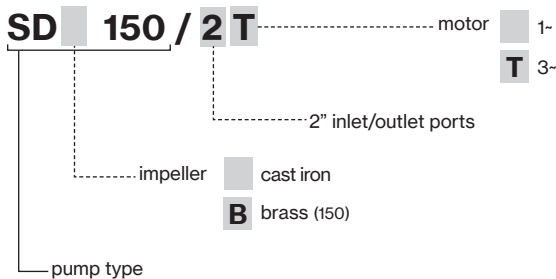
Single-impeller, medium to high-flow rate centrifugal pumps with 2", 3" and 4" delivery openings. Mainly used in agriculture for flood and sprinkler irrigation, and water withdrawal from reservoirs or canals.

### Construction features

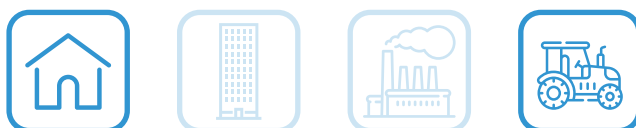
<b>Pump body</b>	cast iron
<b>Motor bracket</b>	cast iron
<b>Impeller</b>	cast iron or brass (SDB)
<b>Mechanical seal</b>	ceramic-graphite-NBR
<b>Motor shaft</b>	stainless steel AISI 303 stainless steel AISI 416 (SD 80÷120)
<b>Liquid temperature</b>	0 - 90 °C
<b>Operating pressure</b>	max 6 bar

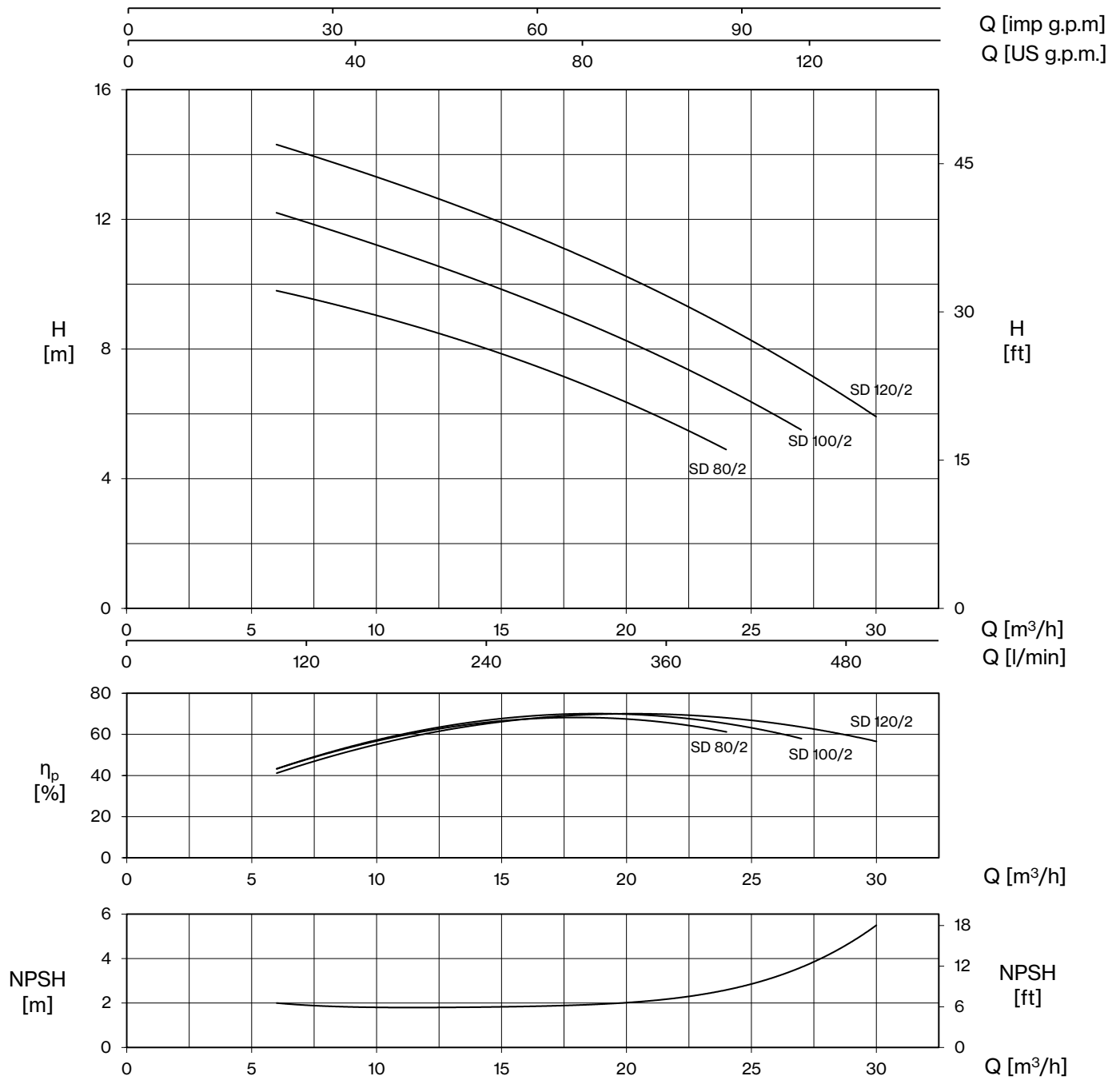
### Motor

	3~ 230/400V - 50Hz
<b>2 Poles induction motor</b>	1~ 230V - 50Hz (with thermal protection up to MEC 80)
<b>Insulation class</b>	F
<b>Protection degree</b>	IPX4

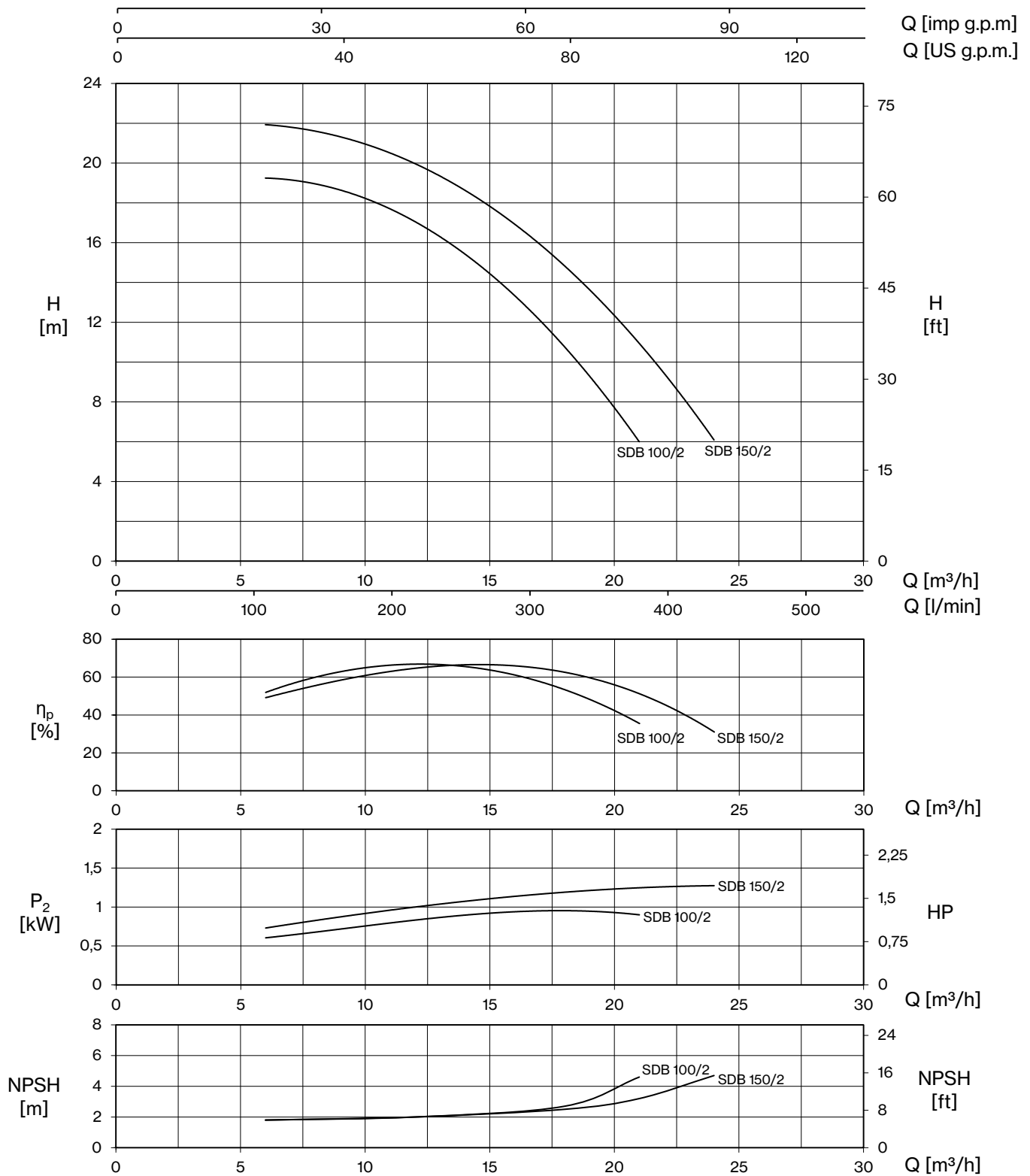


TYPE	LOTS			
	TRUCK		CONTAINER	
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
<b>SD 80/2÷120/2</b>	90×110×145	65	90×110×195	91
<b>SD 150/2-200/2</b>	85×110×140	40	85×110×205	60
<b>SD 200/3-300/3</b>	85×110×150	30	85×110×180	60
<b>SD 400/3÷550/4</b>	80×120×150	30	80×120×180	60
<b>SD 750/4T-1000/4T</b>	100×120×140	18	100×120×185	24



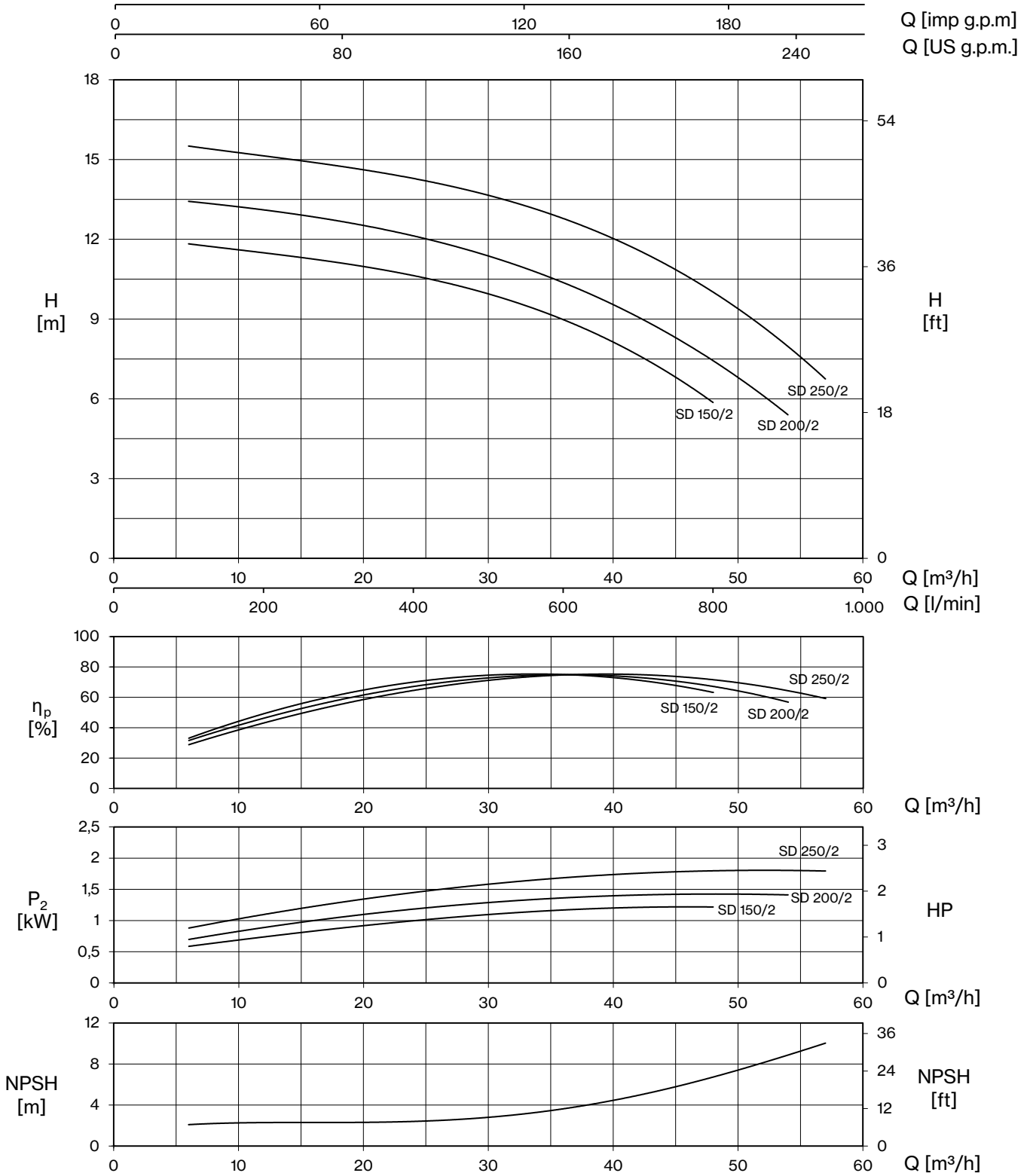


TYPE - 50 Hz		P2		P1		CURRENT		Q (m³/h - l/min)						
1-	3-			1-	3-	1- 230V	3- 400V	0	6	12	18	24	27	30
		HP	kW	kW		A		H (m)						
SD 80/2	SD 80/2T	0,8	0,59	0,8	0,7	3,5	1,3	10,1	9,8	8,6	7,0	4,9		
SD 100/2	SD 100/2T	1	0,74	1	0,85	4,5	1,6	12,8	12,2	10,7	8,9	6,8	5,5	
SD 120/2	SD 120/2T	1,2	0,9	1,2	1,1	5,4	2,0	15,0	14,3	12,8	10,9	8,7	7,4	5,9



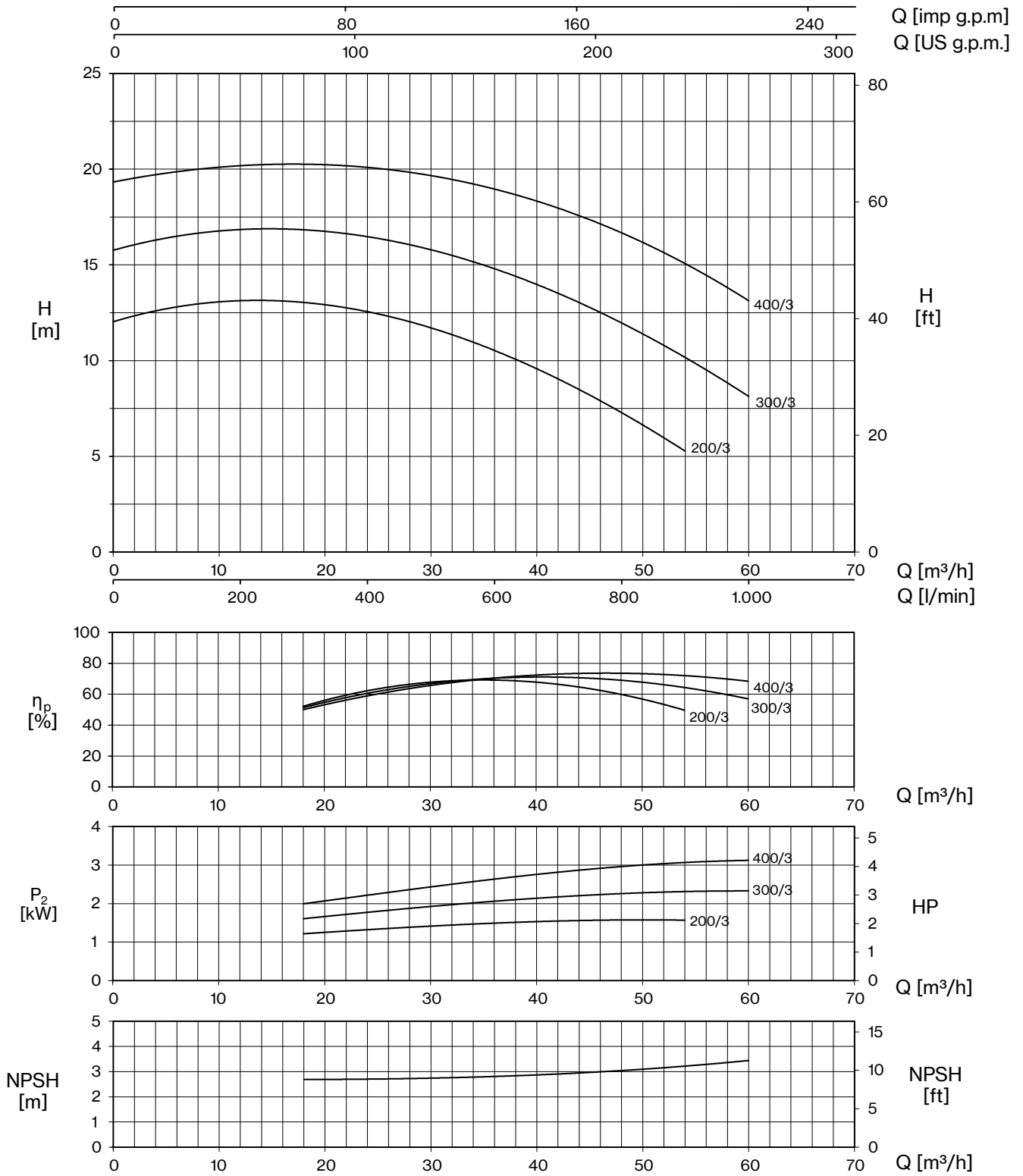
TYPE - 50 Hz		P2		P1		CURRENT		Q (m³/h - l/min)					
1-	3-			1-	3-	1- 230V	3- 400V	0	6	12		18	21
		HP	kW	kW		A		0	100	200	300	350	400
		H (m)											
SDB 100/2	-	1,5	1,1	1,3	-	6,1	-	18,8	19,2	17,1	10,8	6,0	
SDB 150/2	SDB 150/2T	1,8	1,3	1,6	1,5	7,4	3,5	21,6	21,9	19,9	15,0	10,8	6,1



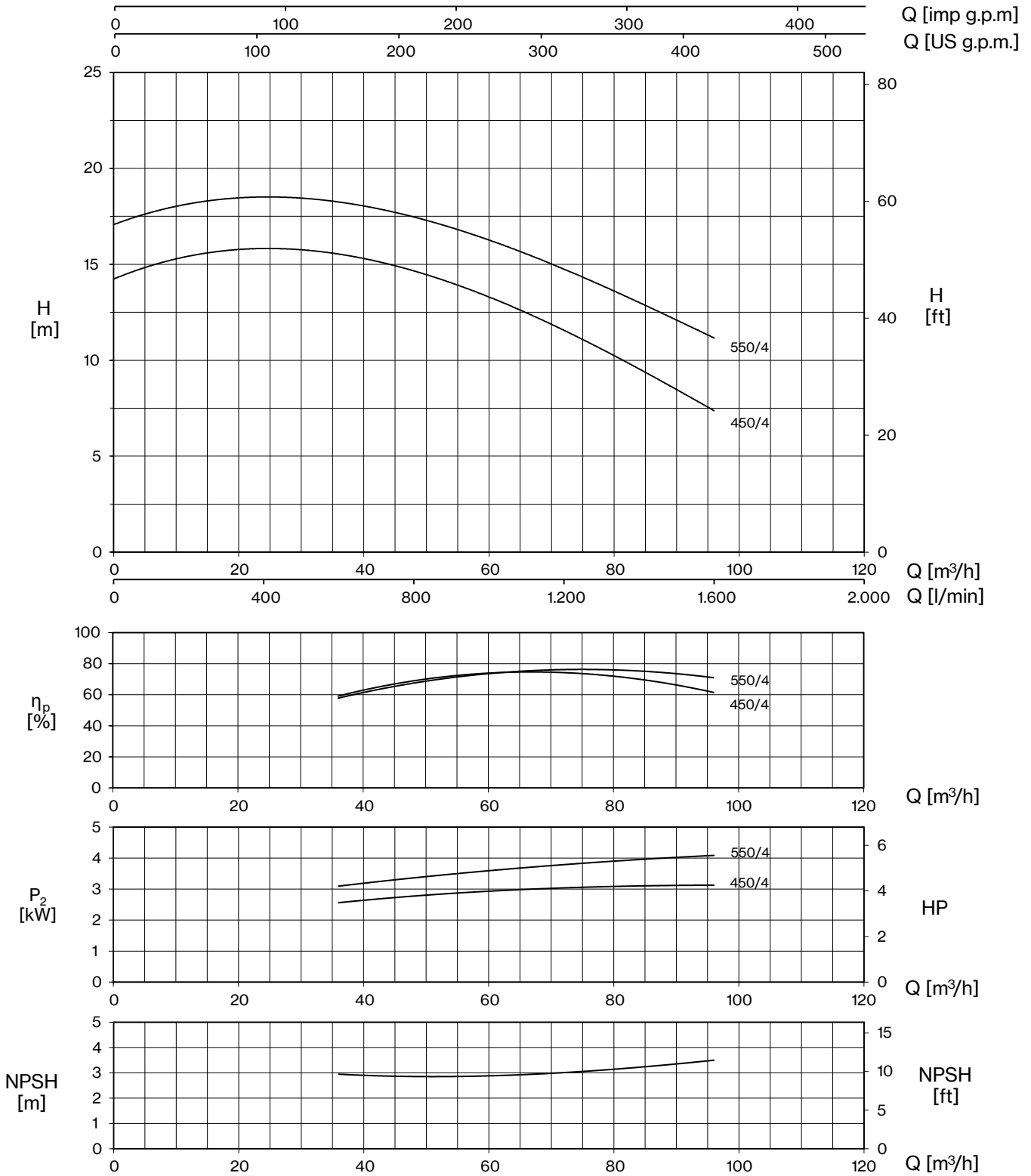


TYPE - 50 Hz		P2		P1		CURRENT		Q (m³/h - l/min)										
1-	3-			1-	3-	1- 230V	3- 400V	0	6	18	24	30	36	42	48	54	57	
		HP	kW	kW		A		0	100	300	400	500	600	700	800	900	950	
		H (m)																
SD 150/2	SD 150/2T	1,8	1,3	1,5	1,4	7,1	3,4	11,9	11,8	11,1	10,6	10,0	8,9	7,6	5,9			
SD 200/2	SD 200/2T	2	1,5	1,7	1,7	8,0	3,6	13,5	13,4	12,6	12,1	11,4	10,4	9,1	7,3	5,4		
SD 250/2	SD 250/2T	2,5	1,85	2,2	2,1	9,9	4,3	15,6	15,6	14,6	14,3	13,8	12,9	11,6	9,9	7,9	6,9	

# SD

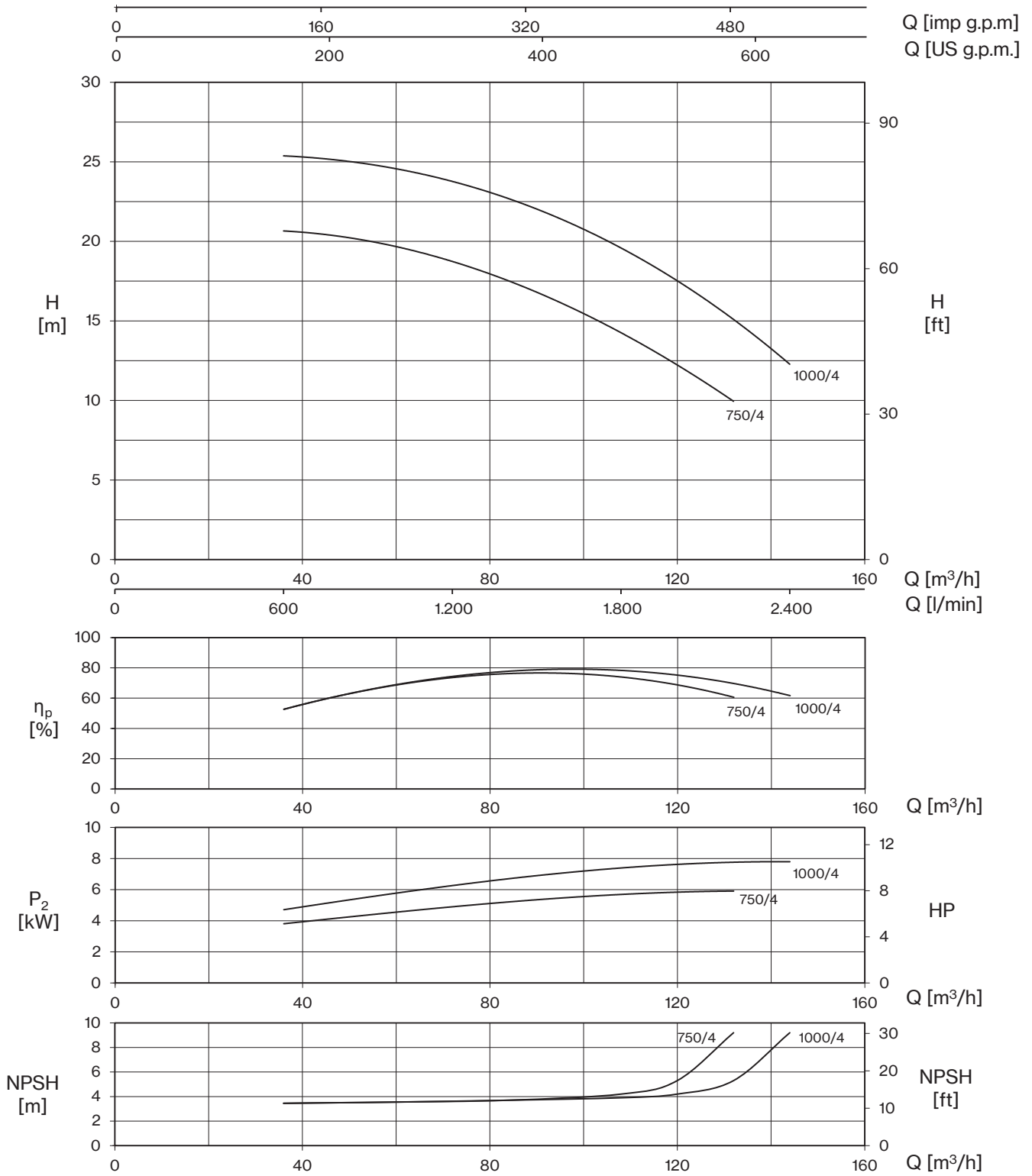


TYPE - 50 Hz		P2		P1		CURRENT		Q (m³/h - l/min)									
1-	3-			1-	3-	1- 230V	3- 400V	0	18	24	30	36	42	48	54	60	
		HP	kW	kW		A		0	300	400	500	600	700	800	900	1000	
		H (m)															
SD 200/3	SD 200/3T	2	1,5	1,9	1,9	8,9	3,5	12,0	13,0	12,6	11,8	10,6	9,0	7,2	5,3		
SD 300/3	SD 300/3T	3	2,2	2,7	2,7	12,4	5,0	15,8	16,8	16,5	15,7	14,7	13,6	12,0	10,1	8,2	
-	SD 400/3T	4	3	-	3,6	-	6,6	19,3	20,3	20,1	19,6	18,9	18,0	16,8	15,0	13,1	

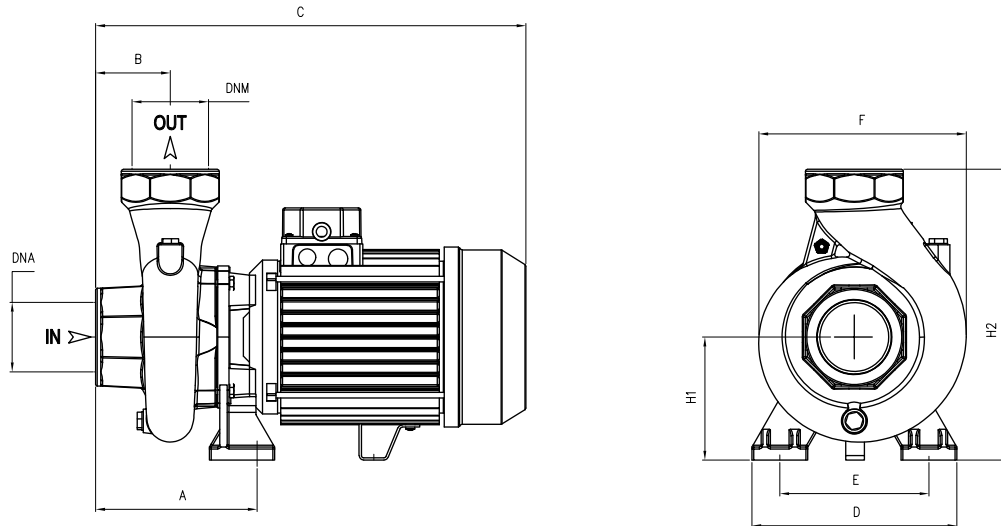




TYPE - 50 Hz		P2		P1		CURRENT		Q (m³/h - l/min)						
1-	3-			1-	3-	1- 230V	3- 400V	0	36	48	60	72	84	96
		HP	kW	kW		A		0	600	800	1000	1200	1400	1600
		H (m)												
SD 450/4	SD 450/4T	4	3	3,6	3,6	16,1	6,5	14,2	15,5	14,7	13,4	11,5	9,6	7,4
-	SD 550/4T	5,5	4	-	4,7	-	8,5	17,1	18,3	17,4	16,3	14,7	13,1	11,1

# SD



TYPE - 50 Hz	P2		P1	CURRENT	Q (m³/h - l/min)									
					0	36	48	60	84	108	120	132	144	
	HP	kW	kW	A	0	600	800	1000	1400	1800	2000	2200	2400	
3-														
					H (m)									
SD 750/4T	7,5	5,5	6,7	11,6	18,9	20,6	20,4	19,7	17,4	14,3	12,3	9,9		
SD 1000/4T	10	7,5	8,8	15,4	23,6	25,3	25,2	24,6	22,6	19,5	17,6	15,2	12,2	



TYPE		DIMENSIONS (mm)													 Kg	
-1	-3	A	B	C	D	E	F	H1	H2	DNA	DNM	I	L	M	-1	-3
SD 80/2	SD 80/2T	127	45	315	155	115	178	97	247	2" G	2" G	340	195	280	14,5	14
SD 100/2	SD 100/2T	127	45	315	155	115	178	97	247			340	195	280	16	15
SD 120/2	SD 120/2T	127	45	315	155	115	178	97	247			340	195	280	16,5	16
SDB 100/2	-	130	70	395	180	130	195	90	240	2" G	2" G	420	230	309	23	-
SDB 150/2	SDB 150/2T	130	70	395	180	130	195	90	240			420	230	309	23	23
SD 150/2	SD 150/2 T	150	53	400	180	140	218	115	285	2" G	2" G	420	230	309	27	27,5
SD 200/2	SD 200/2T	150	53	400	180	140	218	115	285			420	230	309	26	27,5
SD 250/2	SD 250/2T	150	53	400	180	140	218	115	285			420	230	309	27,5	28
SD 200/3	SD 200/3T	176,5	80	485	184	130	225	112	292	3" G	3" G	520	235	320	33	28
SD 300/3	SD 300/3T	176,5	80	485	184	130	225	112	292			520	235	320	33	30,5
-	SD 400/3T	176,5	80	485	184	130	225	112	292	4" G	4" G	520	235	320	-	36,5
SD 450/4	SD 450/4T	165	85	515	200	150	250	130	330			546	265	355	46,5	42,5
-	SD 550/4T	165	85	515	200	150	250	130	330			546	265	355	-	47
-	SD 750/4T	117	83	559	215	170	254	134	333	4" G	4" G	675	390	300	-	56,5
-	SD 1000/4T	117	83	559	215	170	254	134	333			675	390	300	-	63



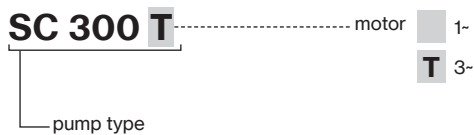
Centrifugal pumps characterized by medium flow rate and stable head as the flow rate changes. Suitable for flood and sprinkler irrigation, water withdrawal from reservoirs or canals and industrial applications.

### Construction features

<b>Pump body</b>	cast iron
<b>Motor bracket</b>	cast iron
<b>Impeller</b>	cast iron
<b>Mechanical seal</b>	ceramic-graphite-NBR
<b>Motor shaft</b>	stainless steel AISI 303
<b>Liquid temperature</b>	0 - 90 °C
<b>Operating pressure</b>	max 6 bar

### Motor

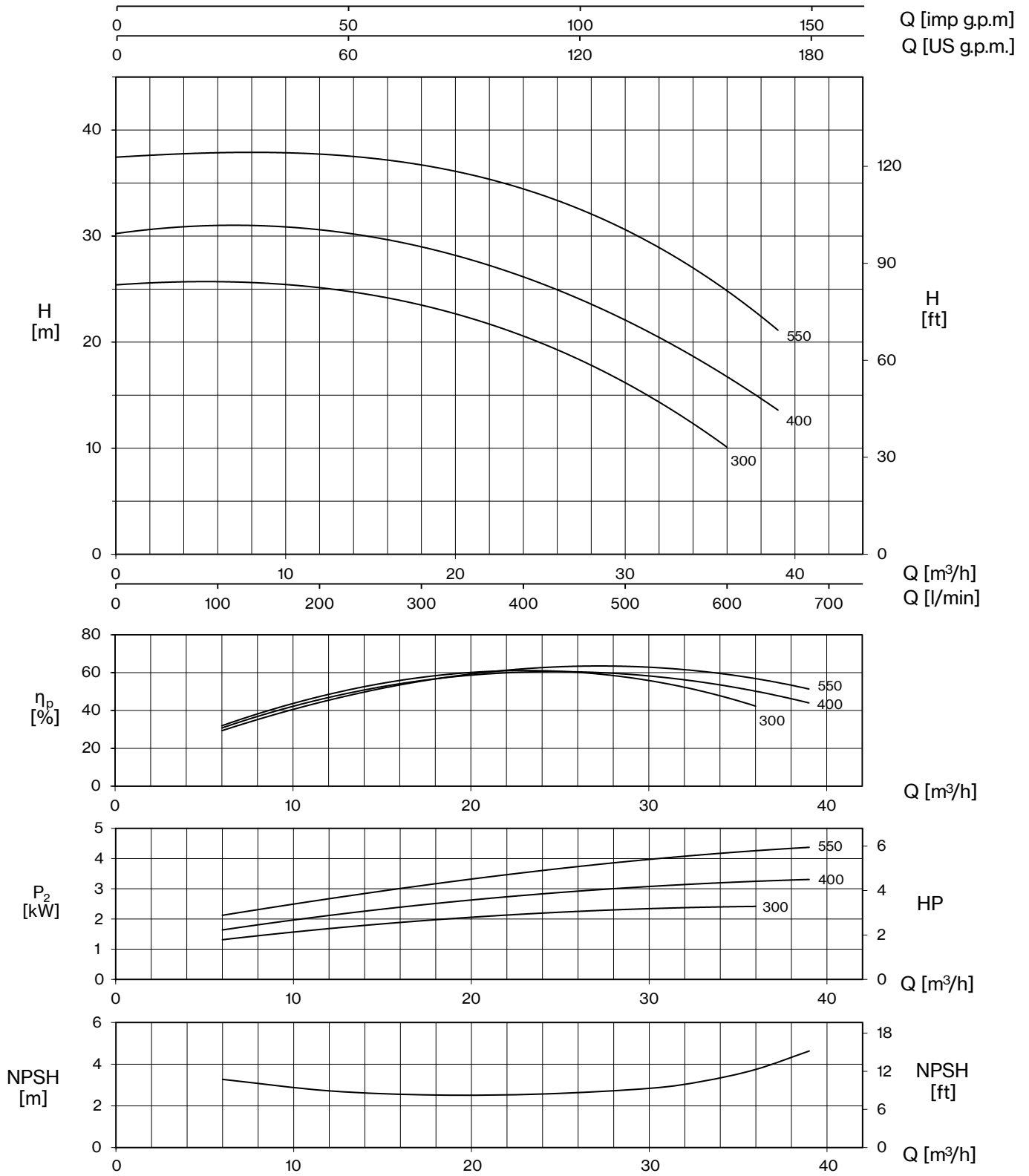
	3~ 230/400V - 50Hz
<b>2 Poles induction motor</b>	1~ 230V - 50Hz (with thermal protection)
<b>Insulation class</b>	F
<b>Protection degree</b>	IPX4



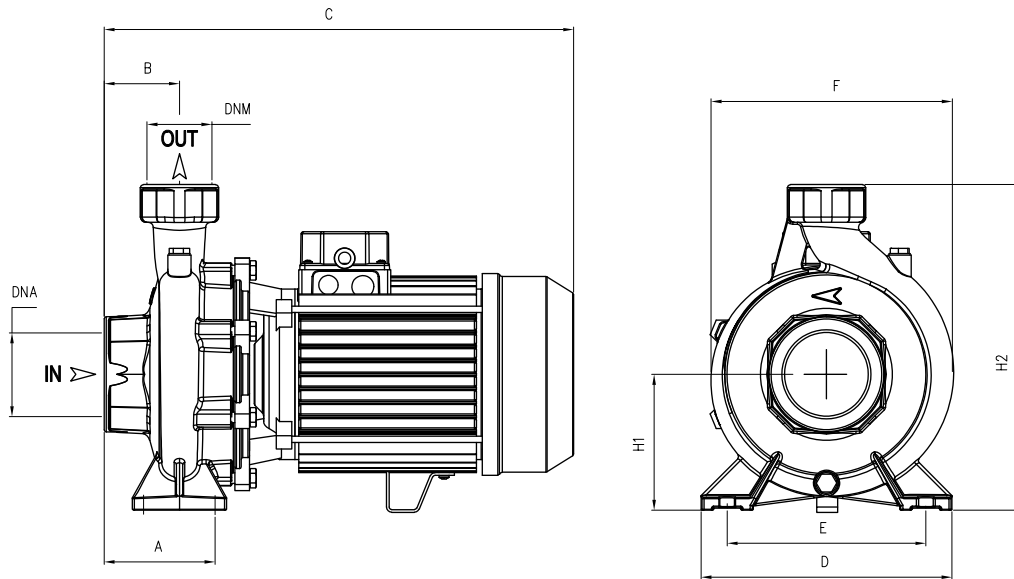
TYPE	LOTS			
	TRUCK		CONTAINER	
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
<b>SC 300÷550</b>	85×11×140	30	85×110×180	30









TYPE - 50 Hz		P2		P1		CURRENT		Q (m³/h - l/min)								
1-	3-							1-	3-	0	6	12	18	24	30	33
		HP	kW	kW		1- 230V	3- 400V	0	100	200	300	400	500	550	600	650
		H (m)														
SC 300	SC 300T	3	2,2	2,8	2,8	12,7	5,2	25,4	25,6	25,3	23,5	20,5	16,2	13,5	10,0	
SC 400	SC 400T	4	3	3,8	3,8	17,0	6,9	30,3	30,8	30,7	29,1	26,1	22,0	19,5	16,7	13,6
-	SC 550T	5,5	4	-	5,0	-	9,1	37,4	37,8	37,9	36,8	34,3	30,2	28,2	25,5	20,7



TYPE		DIMENSIONS (mm)														
1-	3-	A	B	C	D	E	F	H1	H2	DNA	DNM	I	L	M	1-	3-
SC 300	-	105	70	465	240	190	240	126	306	3" G	2" G	530	280	355	38	-
-	SC 300T	105	70	425	240	190	240	126	306			530	280	355	-	35
SC 400	-	105	70	480	240	190	240	126	306			530	280	355	45,5	-
-	SC 400T	105	70	465	240	190	240	126	306			530	280	355	-	38,5
-	SC 550T	105	70	480	240	190	240	126	306			530	280	355	-	45,5



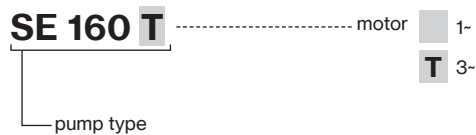
Centrifugal pumps characterized by medium flow rate and stable head as the flow rate changes. Suitable for flood and sprinkler irrigation, water withdrawal from reservoirs or canals and industrial applications.

### Construction features

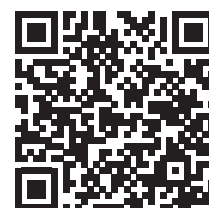
<b>Pump body</b>	cast iron
<b>Motor bracket</b>	cast iron
<b>Impeller</b>	brass
<b>Mechanical seal</b>	ceramic-graphite-NBR
<b>Motor shaft</b>	stainless steel AISI 303
<b>Liquid temperature</b>	0 - 90 °C
<b>Operating pressure</b>	max 6 bar

### Motor

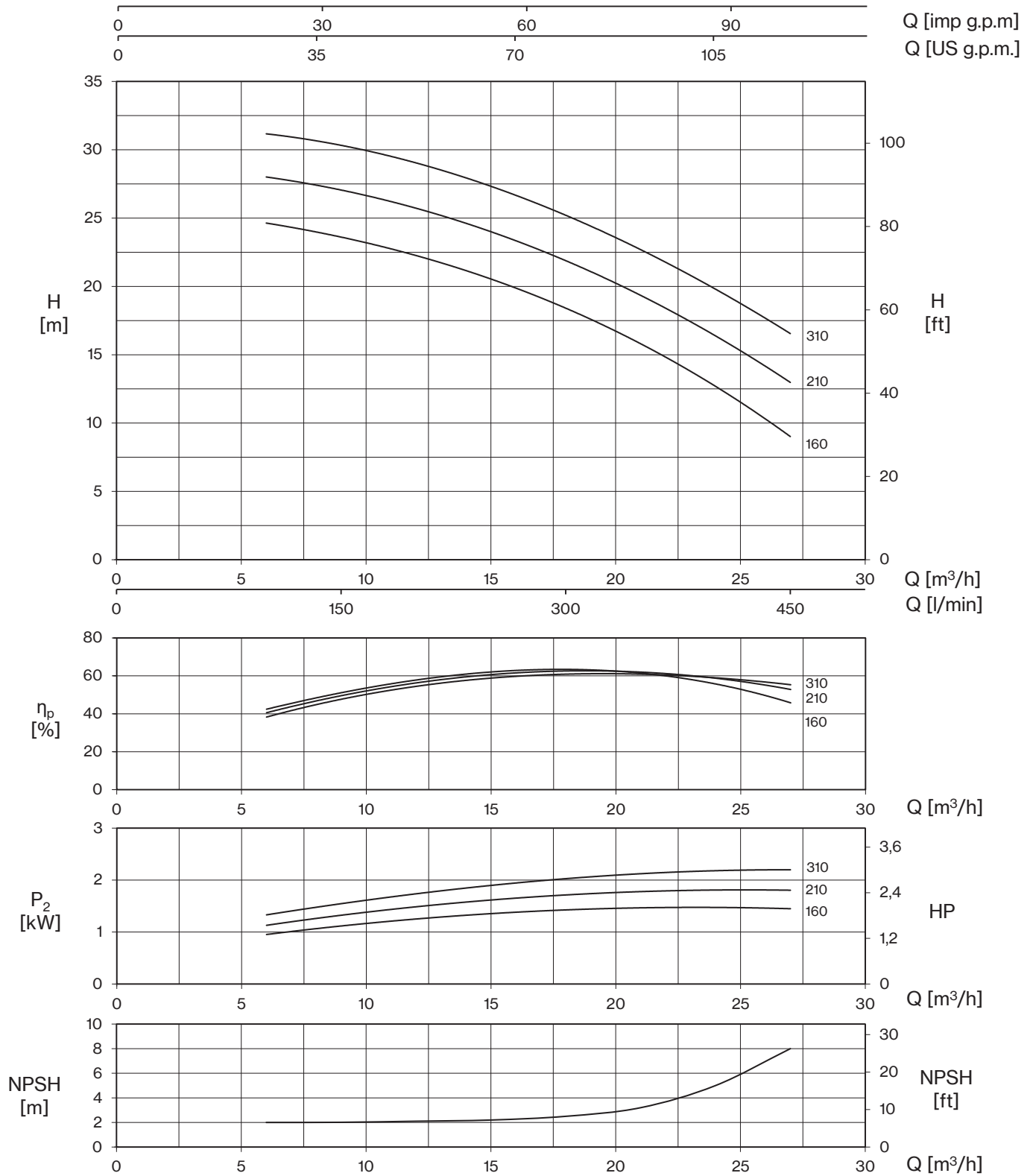
	3~ 230/400V - 50Hz
<b>2 Poles induction motor</b>	1~ 230V - 50Hz (with thermal protection up to MEC 80)
<b>Insulation class</b>	F
<b>Protection degree</b>	IPX4



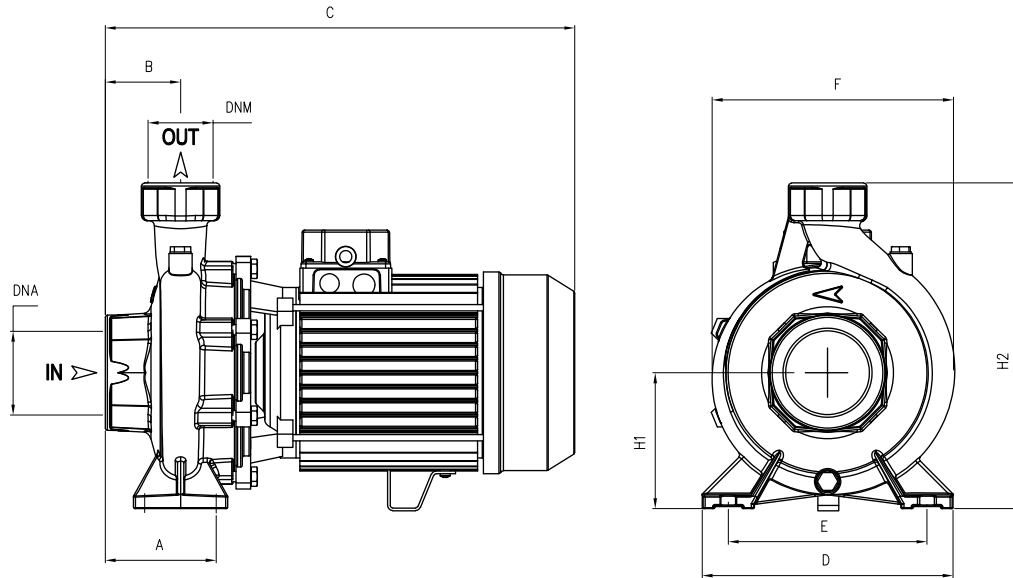
TYPE	LOTS			
	TRUCK		CONTAINER	
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
SE 160÷310	85×110×140	40	85×110×195	60





# SE



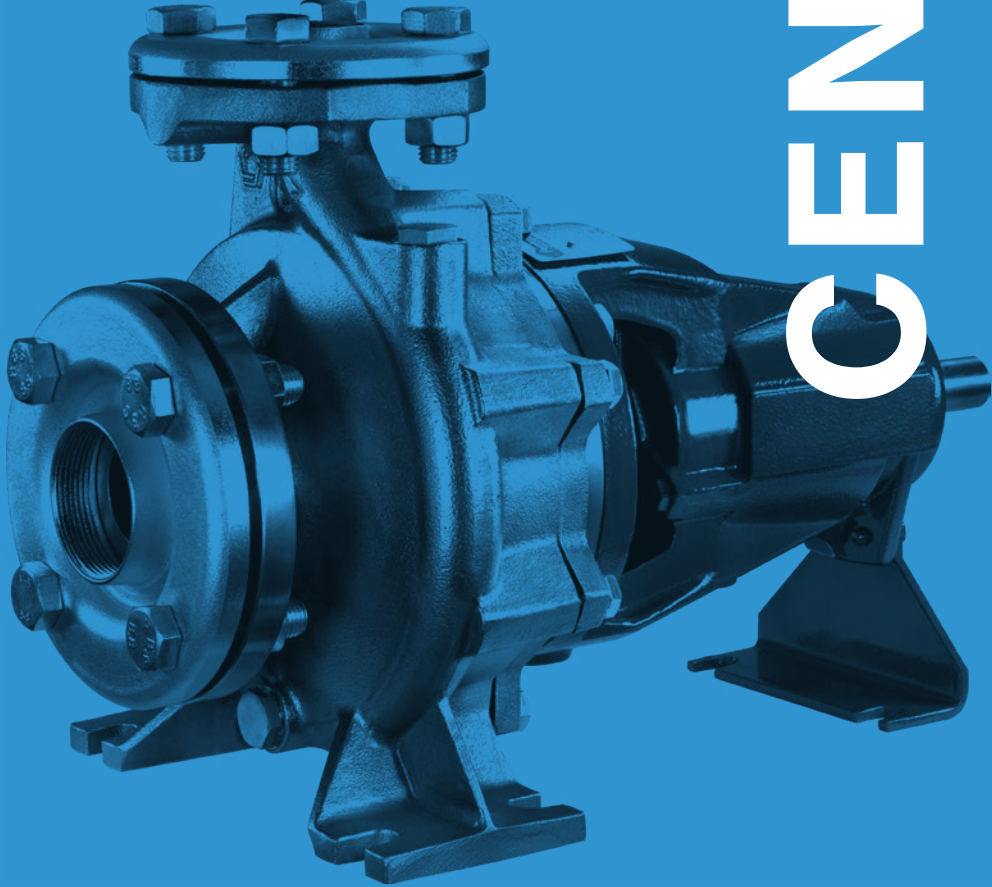
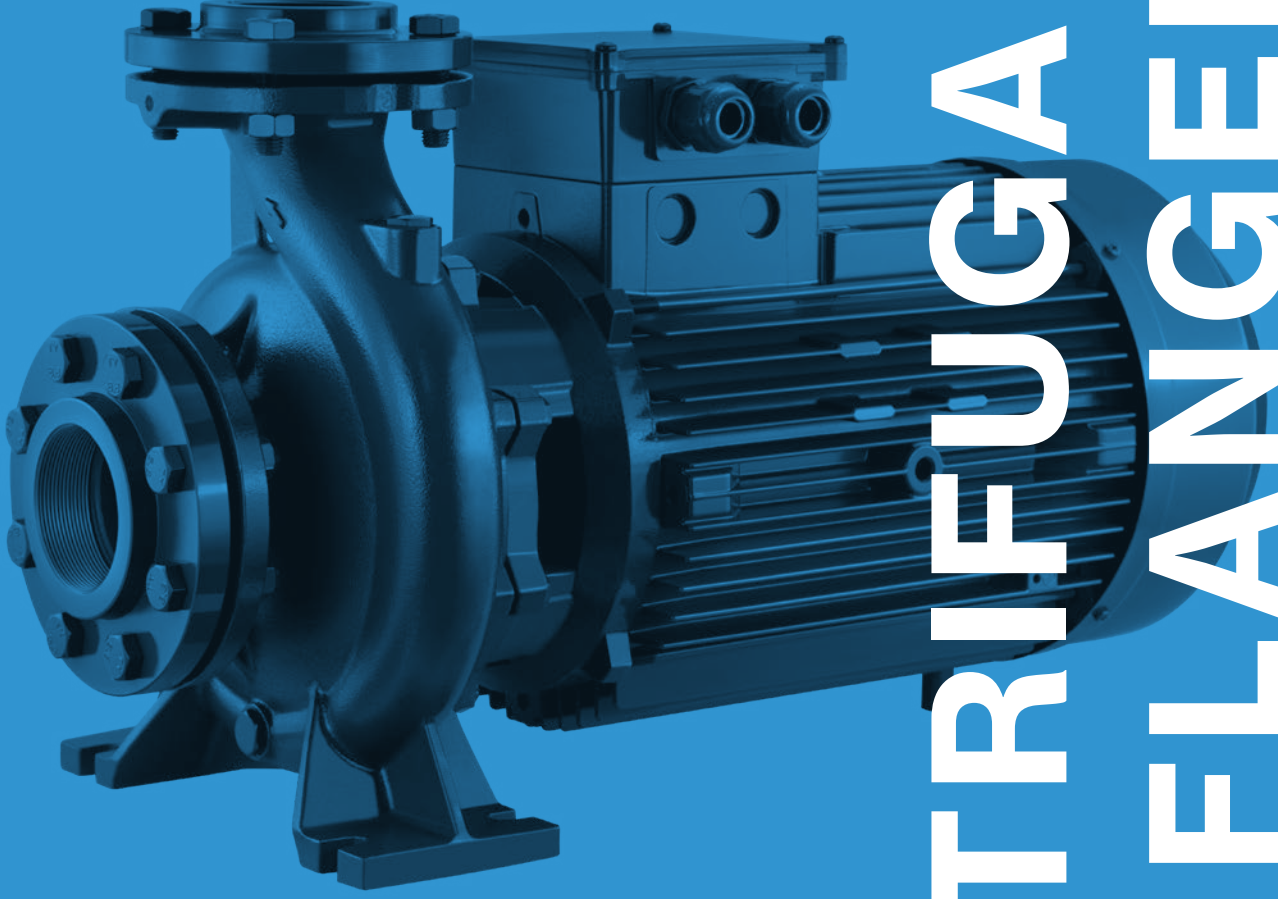
TYPE - 50 Hz		P2		P1		CURRENT		Q (m3/h - l/min)								
1-	3-			1-	3-	1- 230V	3- 400V	0	6	9	12	15	18	21	24	27
		HP	kW	kW		A		0	100	150	200	250	300	350	400	450
SE 160	SE 160T	2	1,5	1,8	1,8	8,2	3,7	24,8	24,6	23,7	22,3	20,5	18,4	15,8	12,8	9,0
SE 210	SE 210T	2,5	1,85	2,3	2,1	10,4	4,3	28,3	28,0	27,1	25,7	23,9	21,9	19,3	16,4	13,0
SE 310	SE 310T	3	2,2	2,6	2,6	12,3	5,2	31,6	31,2	30,3	29,0	27,3	25,3	22,7	19,7	16,6



TYPE		DIMENSIONS (mm)														
1-	3-	A	B	C	D	E	F	H1	H2	DNA	DNM	I	L	M	1-	3-
SE 160	SE 160T	105	48	395	200	160	215	110	285	2" G	2" G	420	230	309	26,5	27,5
SE 210	SE 210T	105	48	395	200	160	215	110	285			420	230	309	26	26,5
SE 310	-	105	48	465	200	160	215	110	285			520	235	320	35,5	-
-	SE 310T	105	48	395	200	160	215	110	285			420	230	309	-	28

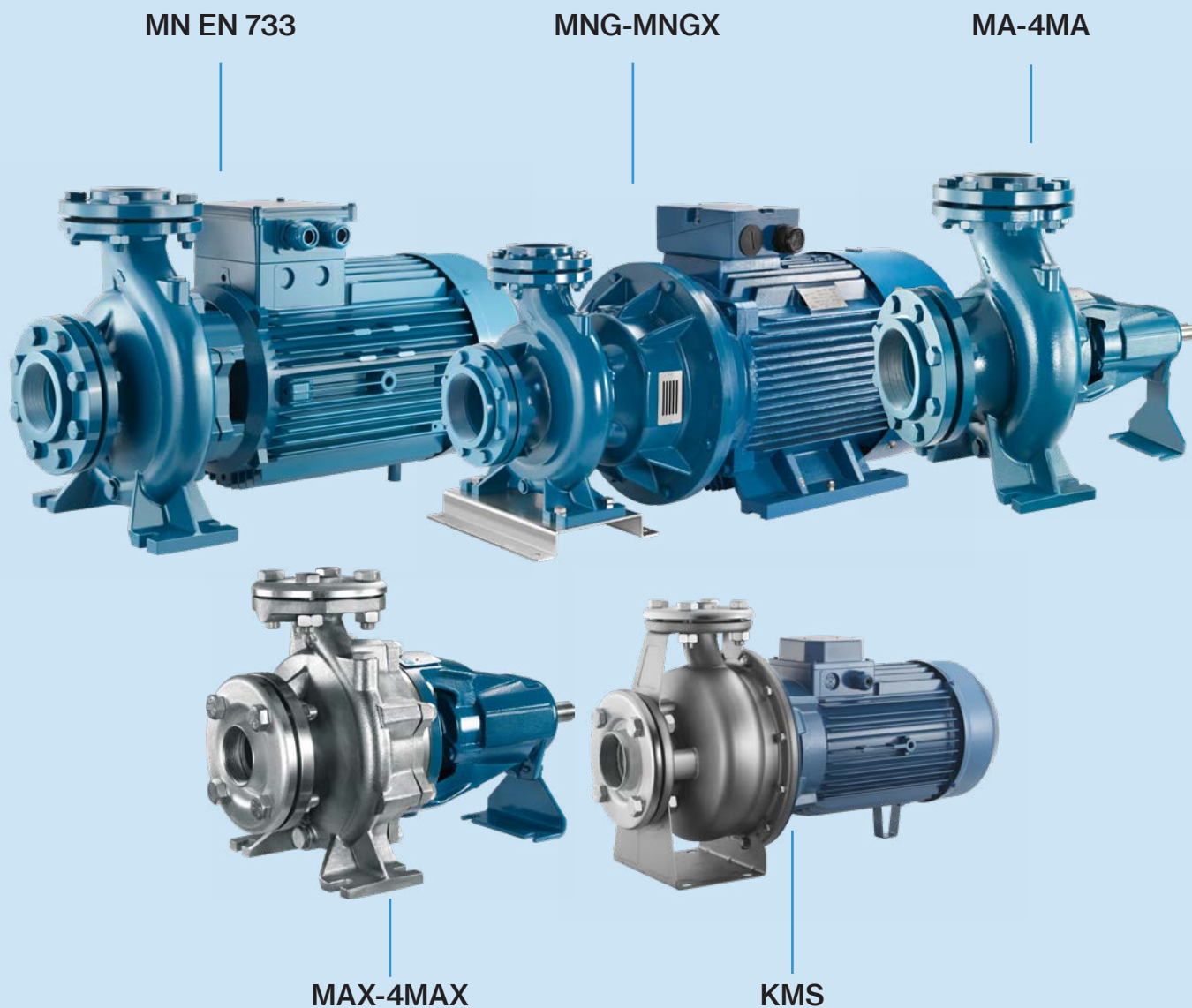






# CENTRIFUGAL FLANGED

# CENTRIFUGAL FLANGED PUMPS



Wide range of centrifugal free axle and monobloc pumps, flanged with axial suction with hydraulic part entirely made of cast iron (MN, MNG, MA), in AISI 304 (KMS) and AISI 316 (MAX).

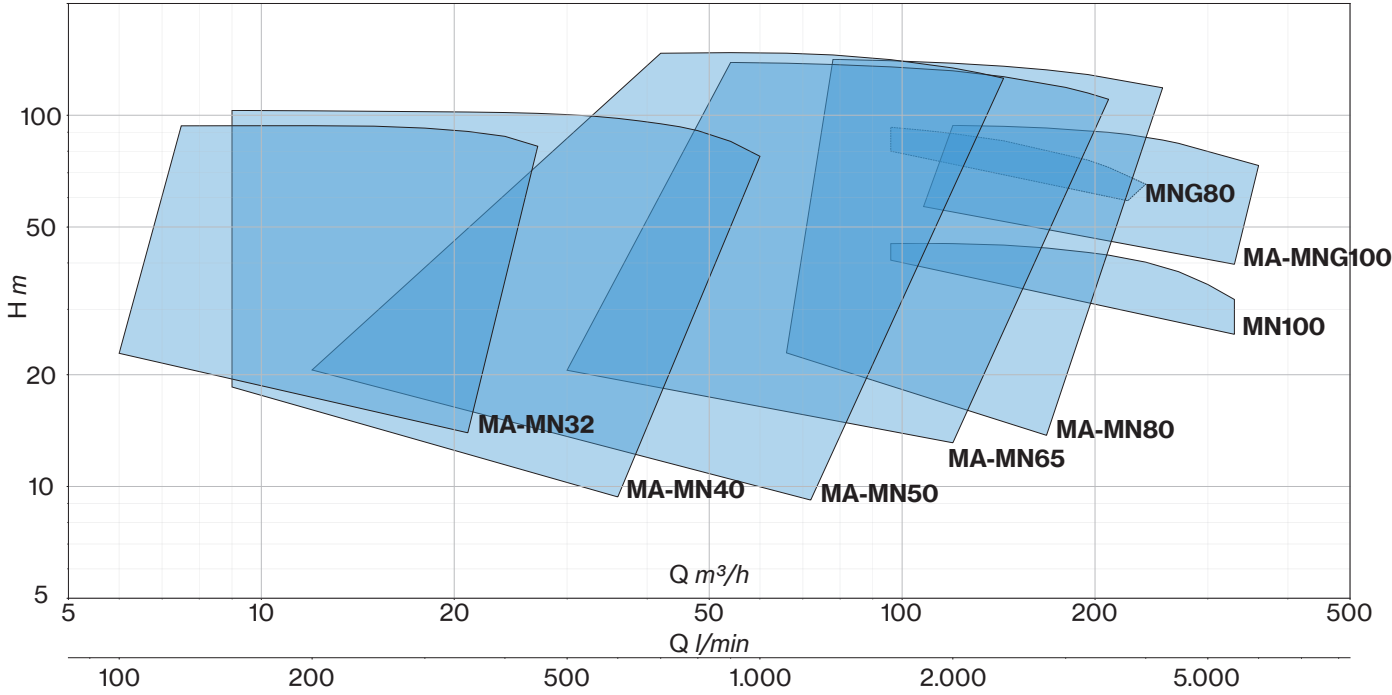
## Applications:

- Water supply
- Pressurization
- Circulation of water in heating and air conditioning systems
- Fluid transfer in industry and agriculture

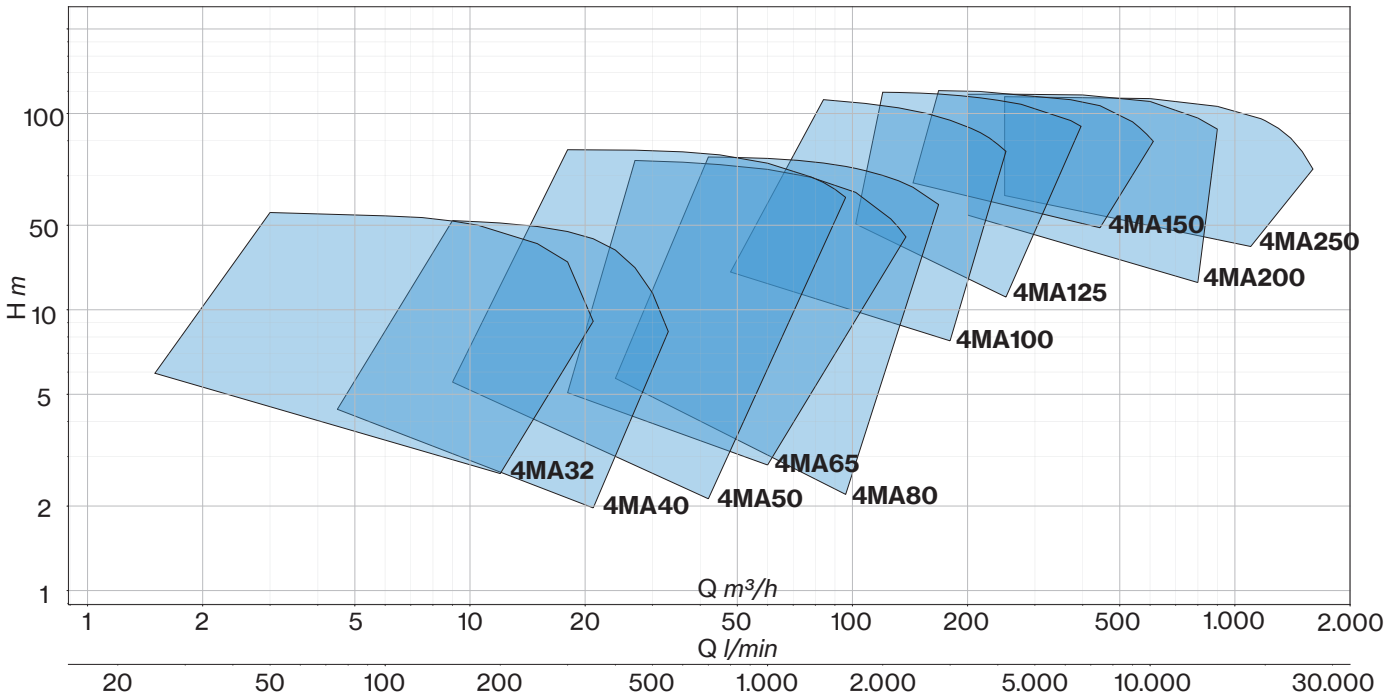
# MN-MNG-MA

Centrifugal Flanged  
EN 733

## 2 Poles



## 4 Poles



# MN-MNG-MA-4MA

Centrifugal Flanged  
EN 733

**MN:** Front suction close-coupled centrifugal pumps with close impeller mounted on IE3 motor shaft extension. Pump casing with axial suction and radial delivery on top, main dimensions and performance according to EN 733.

**MNG-MNGX:** Front suction centrifugal pumps connected to IE3 standard motor (stub-shaft construction). Pump casing with axial suction and radial delivery on top, main dimensions and performance according to EN 733.

**MA-MAX-4MA-4MAX:** Single-stage end-suction centrifugal frame-mounted pumps. Dimensions in accordance with EN 733.

TYPE	2 POLES					4 POLES					
	MN	MNG	MNGX	MA	MAT MAX MATX	Flow rate	Head	4MA 4MAT	4MAX 4MATX	Flow rate	Head
						m <sup>3</sup> /h	m			m <sup>3</sup> /h	m
32-160C	■	-	-	■	■	6 ÷ 21	22,8 ÷ 14	■	■	1,5 ÷ 12	5,9 ÷ 2,6
32-160B	■	-	-	■	■	6 ÷ 24	27,7 ÷ 17	■	■	1,5 ÷ 12	7,2 ÷ 3,6
32-160A	■	-	-	■	■	6 ÷ 27	36,2 ÷ 22,1	■	■	1,5 ÷ 15	8,8 ÷ 4
32-200C	■	-	-	■	■	6 ÷ 27	40,3 ÷ 28,7	■	■	3 ÷ 18	10,8 ÷ 4,2
32-200B1	■	-	-	-	-	6 ÷ 27	48 ÷ 37,9	-	-	-	-
32-200B	■	-	-	■	■	6 ÷ 30	48 ÷ 35,4	■	■	3 ÷ 18	12,7 ÷ 6,3
32-200A1	■	-	-	-	-	6 ÷ 30	58,3 ÷ 46,6	-	-	-	-
32-200A	■	-	-	■	■	6 ÷ 33	58,3 ÷ 44,3	■	■	3 ÷ 21	15,7 ÷ 6,8
32-250C	■	-	-	■	■	6 ÷ 27	72 ÷ 61,3	■	■	3 ÷ 21	17,2 ÷ 6,5
32-250B	■	-	-	■	■	7,5 ÷ 27	84 ÷ 73,2	■	■	3 ÷ 21	20 ÷ 8,3
32-250A1	■	-	-	-	-	7,5 ÷ 27	93,6 ÷ 85,3	-	-	-	-
32-250A	■	-	-	■	■	7,5 ÷ 27	93,6 ÷ 85,5	■	■	3 ÷ 21	22,2 ÷ 9,1
40-125C	■	-	-	■	■	9 ÷ 36	18,5 ÷ 9,4	■	■	4,5 ÷ 21	4,4 ÷ 2
40-125B	■	-	-	■	■	9 ÷ 39	23,4 ÷ 13,2	■	■	4,5 ÷ 21	5,5 ÷ 3,3
40-125A	■	-	-	■	■	9 ÷ 42	27,6 ÷ 16,8	■	■	4,5 ÷ 24	6,3 ÷ 3,4
40-160B	■	-	-	■	■	9 ÷ 36	29,2 ÷ 20,5	■	■	4,5 ÷ 24	7,5 ÷ 2,5
40-160A	■	-	-	■	■	9 ÷ 42	34,9 ÷ 23,4	■	■	4,5 ÷ 24	8,9 ÷ 4,5
40-160AP	■	-	-	■	■	9 ÷ 48	39,8 ÷ 25,3	■	■	4,5 ÷ 24	11,1 ÷ 6,8
40-200B1	■	-	-	-	-	9 ÷ 39	45,5 ÷ 32,3	-	-	-	-
40-200B	■	-	-	■	■	9 ÷ 42	45,5 ÷ 29,4	■	■	6 ÷ 24	11,4 ÷ 4,7
40-200A1	■	-	-	-	-	9 ÷ 39	56,5 ÷ 44,4	-	-	-	-
40-200A	■	-	-	■	■	9 ÷ 42	56,5 ÷ 41,6	■	■	6 ÷ 24	13,9 ÷ 8,3
40-200AP	■	-	-	■	■	9 ÷ 45	61,4 ÷ 42,2	■	■	6 ÷ 24	14,9 ÷ 9,4
40-250C	■	-	-	■	■	9 ÷ 36	64,4 ÷ 55,4	■	■	9 ÷ 27	15,2 ÷ 6,6
40-250B	■	-	-	■	■	9 ÷ 39	79,9 ÷ 62,1	■	■	9 ÷ 30	18,2 ÷ 8,3
40-250A1	■	-	-	-	-	9 ÷ 42	84,6 ÷ 72,8	-	-	-	-
40-250A	■	-	-	■	■	9 ÷ 45	84,6 ÷ 69	■	■	9 ÷ 33	20,8 ÷ 8,4
40-250BM	■	-	-	■	■	9 ÷ 54	93,2 ÷ 72	-	-	-	-
40-250AM	■	-	-	■	■	9 ÷ 60	103 ÷ 77,5	-	-	-	-
50-125B	■	-	-	■	■	12 ÷ 72	20,6 ÷ 9,2	■	■	9 ÷ 42	5,5 ÷ 2,1
50-125A	■	-	-	■	■	12 ÷ 72	24,3 ÷ 14,2	■	■	9 ÷ 45	6,4 ÷ 2,9
50-160B1	■	-	-	-	-	21 ÷ 66	33,5 ÷ 21,5	-	-	-	-
50-160B	■	-	-	■	■	21 ÷ 72	33,5 ÷ 18,9	■	■	9 ÷ 42	8 ÷ 2,3
50-160A1	■	-	-	-	-	21 ÷ 72	39,8 ÷ 27,6	-	-	-	-
50-160A	■	-	-	■	■	21 ÷ 78	39,8 ÷ 25,4	■	■	9 ÷ 48	9,4 ÷ 3,1
50-200C	■	-	-	■	■	24 ÷ 72	49,7 ÷ 28,9	■	■	9 ÷ 39	12 ÷ 3,2
50-200B	■	-	-	■	■	24 ÷ 72	54,6 ÷ 35	■	■	10,5 ÷ 42	13,1 ÷ 4,2
50-200A1	■	-	-	-	-	24 ÷ 78	61,8 ÷ 39,8	-	-	-	-

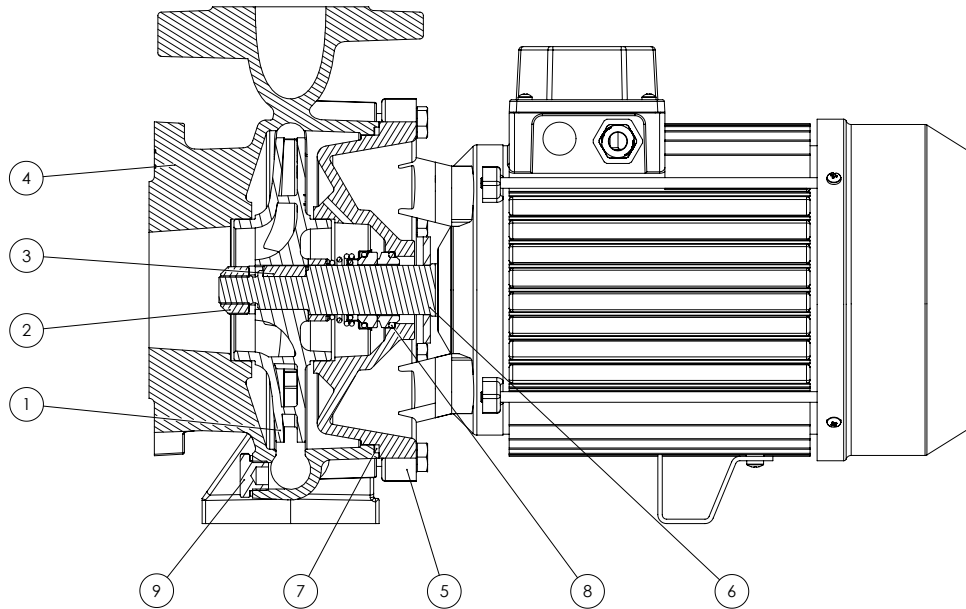
TYPE	2 POLES						4 POLES					
	MN	MNG	MNGX	MA	MAT MAX MATX	Flow rate	Head	4MA 4MAT	4MAX 4MATX	Flow rate	Head	
						m <sup>3</sup> /h	m			m <sup>3</sup> /h	m	
50-200A	■	-	-	■	■	24 ÷ 78	61,8 ÷ 39,8	■	■	10,5 ÷ 45	14,7 ÷ 4,6	
50-250C1	■	-	-	-	-	27 ÷ 60	68,2 ÷ 56,2	-	-	-	-	
50-250C	■	-	-	■	■	27 ÷ 66	68,2 ÷ 52,1	■	■	12 ÷ 45	17,7 ÷ 7,5	
50-250B	■	-	-	■	■	27 ÷ 72	78,4 ÷ 58,5	■	■	12 ÷ 48	20 ÷ 8,2	
50-250A	■	-	-	■	■	27 ÷ 78	88,3 ÷ 61,8	■	■	12 ÷ 54	22,9 ÷ 8,4	
50-315DN	-	-	-	■	-	42 ÷ 132	90,4 ÷ 73,4	-	-	-	-	
50-315C	-	-	-	-	-	-	-	■	■	18 ÷ 84	24,7 ÷ 16,8	
50-315CN	-	-	-	■	-	42 ÷ 132	105 ÷ 88,7	-	-	-	-	
50-315B	-	-	-	-	-	-	-	■	■	18 - 90	31,4 - 21,6	
50-315BN	-	-	-	■	-	42 ÷ 144	124,3 ÷ 103,5	-	-	-	-	
50-315A	-	-	-	-	-	-	-	■	■	18 - 96	37,2 - 25,1	
50-315AN	-	-	-	■	-	42 ÷ 144	146,9 ÷ 125,8	-	-	-	-	
65-125B1	■	-	-	-	-	30 ÷ 108	20,6 ÷ 15	-	-	-	-	
65-125B	■	-	-	■	■	30 ÷ 120	20,6 ÷ 13,1	■	■	18 ÷ 60	5,1 ÷ 2,8	
65-125A1	■	-	-	-	-	30 ÷ 120	25,2 ÷ 18,8	-	-	-	-	
65-125A	■	-	-	■	■	30 ÷ 132	25,2 ÷ 16,8	■	■	18 ÷ 72	6,3 ÷ 3	
65-160C	■	-	-	■	■	42 ÷ 144	30,6 ÷ 13,9	■	■	24 ÷ 78	7,6 ÷ 2,9	
65-160B	■	-	-	■	■	42 ÷ 144	35,1 ÷ 20,4	■	■	24 ÷ 78	8,6 ÷ 3,6	
65-160A1	■	-	-	-	-	42 ÷ 138	42,5 ÷ 31,7	-	-	-	-	
65-160A	■	-	-	■	■	42 ÷ 144	42,5 ÷ 30,9	■	■	24 ÷ 84	9,9 ÷ 4,6	
65-200C1	■	-	-	-	-	54 ÷ 132	46,1 ÷ 28,9	-	-	-	-	
65-200C	■	-	-	■	■	54 ÷ 138	46,1 ÷ 26,8	■	■	27 ÷ 84	11,6 ÷ 5	
65-200B	■	-	-	■	■	54 ÷ 144	53,9 ÷ 34,6	■	■	27 ÷ 84	13,1 ÷ 7	
65-200A	■	-	-	■	■	54 ÷ 144	61,8 ÷ 44,4	■	■	27 ÷ 84	14,8 ÷ 9,3	
65-250B	■	-	-	■	■	54 ÷ 144	80,6 ÷ 47,3	■	■	27 ÷ 84	21 ÷ 8,7	
65-250A	■	-	-	■	■	54 ÷ 150	91,6 ÷ 57,9	■	■	30 ÷ 90	22,9 ÷ 8,8	
65-315CM	-	-	-	-	-	-	-	■	■	27 ÷ 126	23,5 ÷ 13,9	
65-315CN	-	-	-	■	-	54 ÷ 180	96,5 ÷ 80,8	-	-	-	-	
65-315BM	-	-	-	-	-	-	-	■	■	27 ÷ 132	28,9 ÷ 17,2	
65-315BN	-	-	-	■	-	54 ÷ 195	117,9 ÷ 96,3	-	-	-	-	
65-315AM	-	-	-	-	-	-	-	■	■	27 ÷ 138	34 ÷ 18,2	
65-315AN	-	-	-	■	-	54 ÷ 210	138,8 ÷ 110,4	-	-	-	-	
80-160E	■	-	-	■	■	66 ÷ 168	22,9 ÷ 13,7	■	■	24 ÷ 96	5,7 ÷ 2,2	
80-160D	■	-	-	■	■	66 ÷ 180	27,3 ÷ 16,4	■	■	27 ÷ 102	6,8 ÷ 2,6	
80-160C1	■	-	-	-	-	66 ÷ 195	30,9 ÷ 18,4	-	-	-	-	
80-160C	■	-	-	■	■	66 ÷ 195	30,9 ÷ 18,4	■	■	30 ÷ 108	7,4 ÷ 3,1	
80-160B	■	-	-	■	■	66 ÷ 210	35,9 ÷ 22	■	■	33 ÷ 120	8,9 ÷ 3,5	
80-160A	■	-	-	■	■	66 ÷ 225	40,5 ÷ 23,9	■	■	36 ÷ 132	9,8 ÷ 3,8	
80-200B	■	-	-	■	■	72 ÷ 225	54,5 ÷ 38,5	■	■	42 ÷ 132	13,1 ÷ 7,1	
80-200A	■	-	-	■	■	72 ÷ 240	61,7 ÷ 43,9	■	■	42 ÷ 144	14,7 ÷ 7,5	
80-250B	-	■	■	■	■	96 ÷ 225	80 ÷ 58,8	■	■	42 ÷ 132	19,2 ÷ 11,1	
80-250A	-	■	■	■	■	96 ÷ 240	92,8 ÷ 65,2	■	■	42 ÷ 144	22,9 ÷ 12,6	
80-315B	-	-	-	-	-	-	-	■	■	42 ÷ 150	28,3 ÷ 19,9	
80-315BN	-	-	-	■	-	78 ÷ 255	112,4 ÷ 90,8	-	-	-	-	
80-315A	-	-	-	-	-	-	-	■	■	42 ÷ 168	35 ÷ 23,7	
80-315AN	-	-	-	■	-	78 ÷ 255	141,4 ÷ 118,5	-	-	-	-	
100-160B	■	-	-	-	-	96 ÷ 330	40,7 ÷ 25,7	-	-	-	-	
100-160A	■	-	-	-	-	96 ÷ 330	45,1 ÷ 31,9	-	-	-	-	
100-200D	-	-	-	■	■	108 ÷ 300	43,1 ÷ 26,6	■	■	48 ÷ 168	10,8 ÷ 4,8	
100-200C	-	-	-	■	■	108 ÷ 330	48,4 ÷ 28,1	■	■	48 ÷ 168	12 ÷ 6,3	
100-200B	-	■	■	■	■	108 ÷ 330	56,8 ÷ 39,7	■	■	48 ÷ 180	13,6 ÷ 7,8	
100-200A	-	■	■	■	■	108 ÷ 360	62,2 ÷ 42,5	■	■	48 ÷ 192	15,4 ÷ 9,1	
100-250E	-	-	-	-	-	-	-	■	■	60 ÷ 180	16,9 ÷ 11,4	
100-250D	-	-	-	-	-	-	-	■	■	60 ÷ 192	19,6 ÷ 12,7	

TYPE	2 POLES						4 POLES					
	MN	MNG	MNGX	MA	MAT MAX MATX	Flow rate	Head	4MA 4MAT	4MAX 4MATX	Flow rate	Head	
						m <sup>3</sup> /h	m			m <sup>3</sup> /h	m	
100-250C	-	■	■	■	■	120 ÷ 300	73,2 ÷ 61	-	-	-	-	
100-250B	-	■	■	■	■	120 ÷ 330	83,7 ÷ 67,6	-	-	-	-	
100-250A	-	■	■	■	■	120 ÷ 360	93,9 ÷ 73,2	■	■	60 ÷ 204	22,3 ÷ 13,8	
100-315B	-	-	-	-	-	-	-	■	■	72 ÷ 216	31,4 ÷ 17,9	
100-315A	-	-	-	-	-	-	-	■	■	72 ÷ 216	36,5 ÷ 23,1	
100-400C	-	-	-	-	-	-	-	■	■	84 ÷ 228	40,6 ÷ 25,8	
100-400B	-	-	-	-	-	-	-	■	■	84 ÷ 240	48,7 ÷ 31,6	
100-400A	-	-	-	-	-	-	-	■	■	84 ÷ 252	56 ÷ 36,7	
125-250B	-	-	-	-	-	-	-	■	■	102 ÷ 252	20,2 ÷ 11,1	
125-250A	-	-	-	-	-	-	-	■	■	102 ÷ 276	24 ÷ 14,7	
125-315C	-	-	-	-	-	-	-	■	■	120 ÷ 348	25,8 ÷ 15,7	
125-315B	-	-	-	-	-	-	-	■	■	120 ÷ 372	33 ÷ 22,2	
125-315A	-	-	-	-	-	-	-	■	■	120 ÷ 372	39,6 ÷ 28,2	
125-400C	-	-	-	-	-	-	-	■	■	120 ÷ 372	47,6 ÷ 33,8	
125-400B	-	-	-	-	-	-	-	■	■	120 ÷ 396	54,5 ÷ 39,1	
125-400A	-	-	-	-	-	-	-	■	■	120 ÷ 396	59,5 ÷ 45	
150-315D	-	-	-	-	-	-	-	■	■	144 ÷ 444	28,3 ÷ 19,6	
150-315C	-	-	-	-	-	-	-	■	■	144 ÷ 492	32,2 ÷ 21,8	
150-315B	-	-	-	-	-	-	-	■	■	144 ÷ 540	36,3 ÷ 23,6	
150-315A	-	-	-	-	-	-	-	■	■	144 ÷ 564	41 ÷ 27,2	
150-400C	-	-	-	-	-	-	-	■	■	168 ÷ 564	47,8 ÷ 28,7	
150-400B	-	-	-	-	-	-	-	■	■	168 ÷ 588	54,4 ÷ 34,3	
150-400A	-	-	-	-	-	-	-	■	■	168 ÷ 612	60,3 ÷ 39,8	
<b>Not envisaged in the EN 733 standard</b>												
200-315D	-	-	-	-	-	-	-	■	■	200 ÷ 800	21,7 ÷ 12,5	
200-315C	-	-	-	-	-	-	-	■	■	200 ÷ 850	26,6 ÷ 14,6	
200-315B	-	-	-	-	-	-	-	■	■	200 ÷ 900	33,4 ÷ 16,7	
200-315A	-	-	-	-	-	-	-	■	■	200 ÷ 900	35,9 ÷ 19,8	
200-400C	-	-	-	-	-	-	-	■	■	200 ÷ 800	44,1 ÷ 31,5	
200-400B	-	-	-	-	-	-	-	■	■	200 ÷ 850	50,8 ÷ 36,6	
200-400A	-	-	-	-	-	-	-	■	■	200 ÷ 900	58,5 ÷ 44	
250-315C	-	-	-	-	-	-	-	■	■	250 ÷ 1100	25,5 ÷ 16,8	
250-315B	-	-	-	-	-	-	-	■	■	250 ÷ 1170	33 ÷ 19	
250-315A	-	-	-	-	-	-	-	■	■	250 ÷ 1200	35 ÷ 20	
250-400D	-	-	-	-	-	-	-	■	■	250 ÷ 1300	39,9 ÷ 24,3	
250-400C	-	-	-	-	-	-	-	■	■	250 ÷ 1400	45,8 ÷ 27,4	
250-400B	-	-	-	-	-	-	-	■	■	250 ÷ 1500	51,7 ÷ 30,3	
250-400A	-	-	-	-	-	-	-	■	■	250 ÷ 1600	57,4 ÷ 31,7	



# MN Series

## Models list and materials

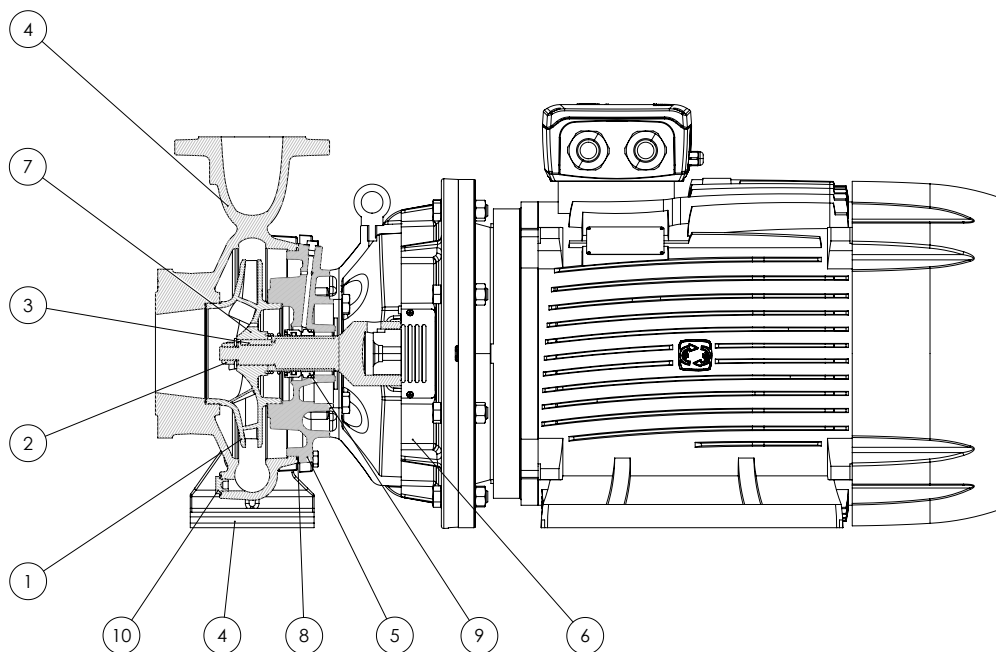


POS. N.	DENOMINATION	VERSION	MATERIAL	REFERENCE STANDARDS	
				EUROPE	USA
1	<b>Impeller</b>	Standard	Cast iron G20	GJL-200 (JL1030)	ASTM Class 30
		B	Bronze	CuSn10-C (CC480K)	UNS C90700
		X	Stainless steel	X5CrNiMo17-12-2/ 1.4401	AISI 316
2	<b>Impeller lock nut and washer</b>		Stainless steel	X5CrNiMo17-12-2/ 1.4401	AISI 316
3	<b>Impeller key</b>		Stainless steel	X5CrNiMo17-12-2/ 1.4401	AISI 316
4	<b>Volute casing</b>	Up to 80-200	Cast iron G20	GJL-200 (JL1030)	ASTM Class 30
		From 80-250	Cast iron G25	GJL-250 (JL1040)	ASTM Class 35
5	<b>Motor bracket</b>		Cast iron G20	GJL-200 (JL1030)	ASTM Class 30
6	<b>Shaft extension</b>		Stainless steel	X5CrNi18-10/ 1.4301	AISI 304
7	<b>O-ring</b>	Standard	NBR		
		E	EPDM		
		V	FKM		
8	<b>Mechanical seal</b>		(Search for the material in the mechanical seal table)		
9	<b>Fill and drain plugs</b>		Brass	CU ZN 40 PB2 UNI 5705/65	C37700



# MNG Series

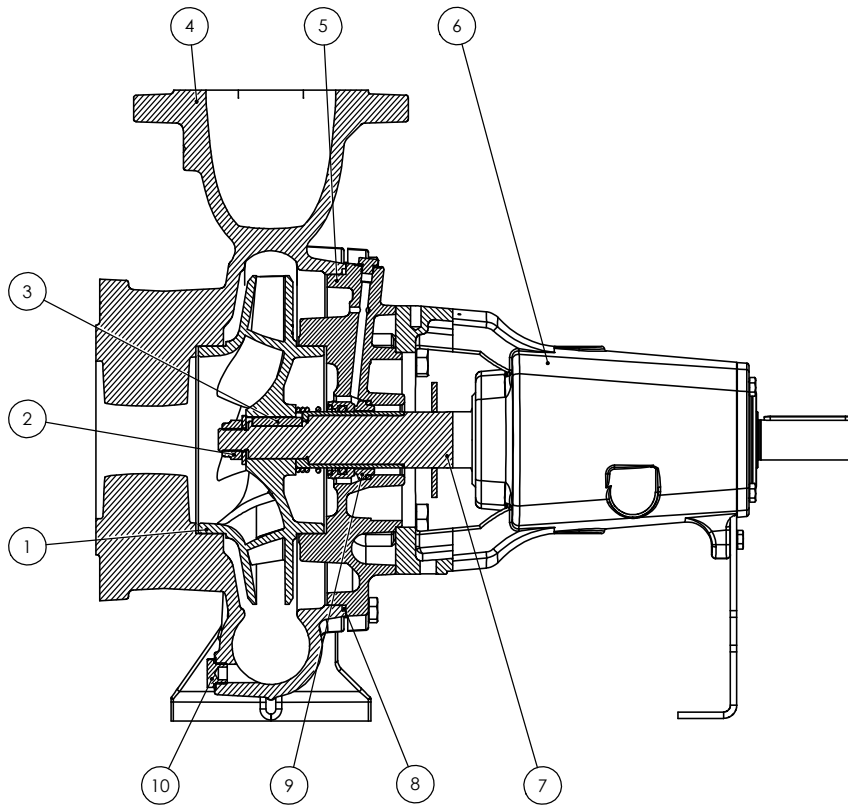
## Models list and materials



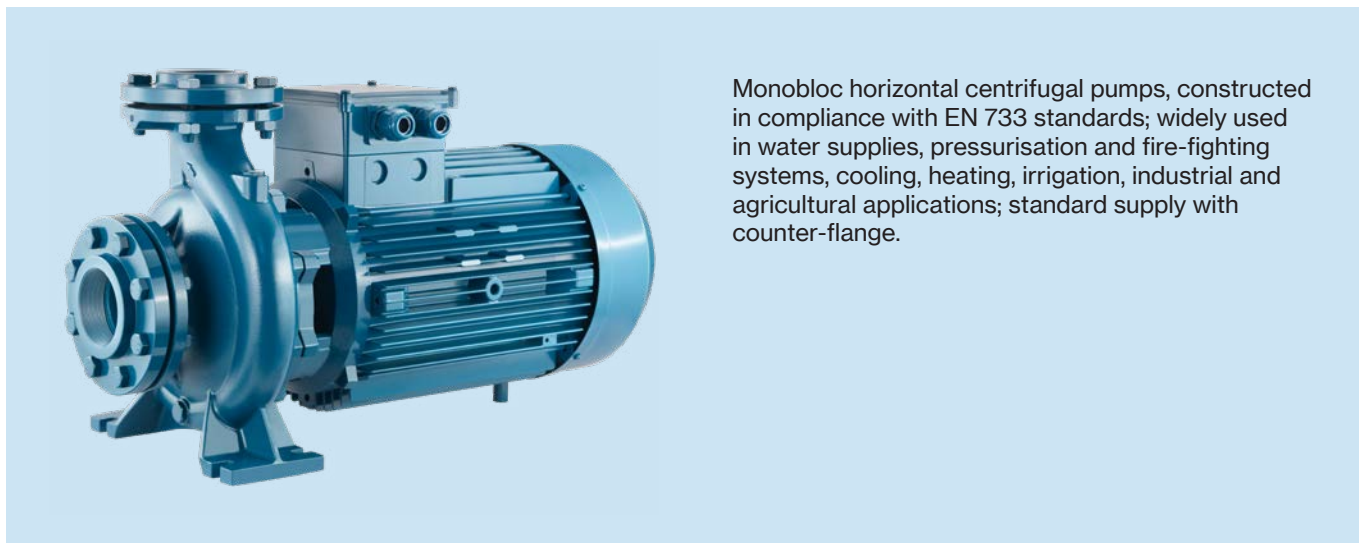
POS. N.	DENOMINATION	VERSION	MATERIAL	REFERENCE STANDARDS	
				EUROPE	USA
1	<b>Impeller</b>	Standard	Cast iron G20	GJL-200 (JL1030)	ASTM Class 30
		B	Bronze	CuSn10-C (CC480K)	UNS C90700
		X	Stainless steel	X5CrNiMo17-12-2/ 1.4401	AISI 316
2	<b>Impeller lock nut and washer</b>		Stainless steel	X5CrNiMo17-12-2/ 1.4401	AISI 316
3	<b>Impeller key</b>		Stainless steel	X5CrNiMo17-12-2/ 1.4401	AISI 316
4	<b>Volute casing</b>	Standard	Cast iron G25	GJL-250 (JL1040)	ASTM Class 35
		X	Stainless steel	X5CrNiMo17-12-2/ 1.4401	AISI 316
5	<b>Casing cover</b>	Standard	Cast iron G20	GJL-200 (JL1030)	ASTM Class 30
		X	Stainless steel	X5CrNiMo17-12-2/ 1.4401	AISI 316
6	<b>Motor bracket</b>		Cast iron G20	GJL-200 (JL1030)	ASTM Class 30
7	<b>Stub shaft</b>		Stainless steel	X5CrNiMo17-12-2/ 1.4401	AISI 316
8	<b>O-ring</b>	Standard	NBR		
		E	EPDM		
		V	FKM		
9	<b>Mechanical seal</b>		(Search for the material in the mechanical seal table)		
10	<b>Fill and drain plugs</b>	Fill and drain plugs	Brass	CU ZN 40 PB2 UNI 5705/65	C37700

# MA-4MA Series

## Models list and materials



POS. N.	DENOMINATION	VERSION	MATERIAL	REFERENCE STANDARDS	
				EUROPE	USA
1	<b>Impeller</b>	Standard	Cast iron G20	GJL-200 (JL1030)	ASTM Class 30
		B	Bronze	CuSn10-C (CC480K)	UNS C90700
		X	Stainless steel	X5CrNiMo17-12-2/ 1.4401	AISI 316
2	<b>Impeller lock nut and washer</b>		Stainless steel	X5CrNiMo17-12-2/ 1.4401	AISI 316
3	<b>Impeller key</b>		Stainless steel	X5CrNiMo17-12-2/ 1.4401	AISI 316
4	<b>Volute casing</b>	Up to 80-200	Cast iron G20	GJL-200 (JL1030)	ASTM Class 30
		From 80-250	Cast iron G25	GJL-250 (JL1040)	ASTM Class 35
		X	Stainless steel	X5CrNiMo17-12-2/ 1.4401	AISI 316
5	<b>Casing cover</b>	Standard	Cast iron G20	GJL-200 (JL1030)	ASTM Class 30
		X	Stainless steel	X5CrNiMo17-12-2/ 1.4401	AISI 316
6	<b>Bracket</b>		Cast iron G20	GJL-200 (JL1030)	ASTM Class 30
7	<b>Shaft</b>		Stainless steel	X5CrNiMo17-12-2/ 1.4401	AISI 316
8	<b>O-ring</b>	Standard	NBR		
		E	EPDM		
		V	FKM		
9	<b>Mechanical seal</b>		(Search for the material in the mechanical seal table)		
10	<b>Fill and drain plugs</b>	Standard	Brass	CU ZN 40 PB2 UNI 5705/65	C37700
		X	Stainless steel	X5CrNiMo17-12-2/ 1.4401	AISI 316



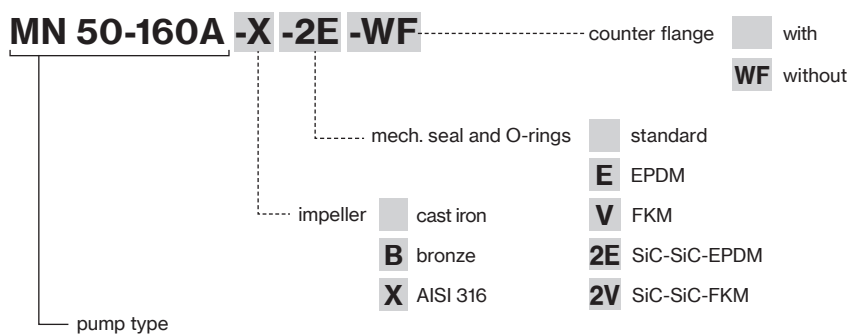
Monobloc horizontal centrifugal pumps, constructed in compliance with EN 733 standards; widely used in water supplies, pressurisation and fire-fighting systems, cooling, heating, irrigation, industrial and agricultural applications; standard supply with counter-flange.

### Construction features

<b>Pump body</b>	cast iron
<b>Motor bracket</b>	cast iron
<b>Impeller</b>	cast iron, bronze or stainless steel
<b>Seal type</b>	mechanical
<b>Pump shaft end</b>	stainless steel AISI 304
<b>Liquid temperature</b>	-10 ÷ +90 °C
<b>Operating pressure</b>	max 10 bar

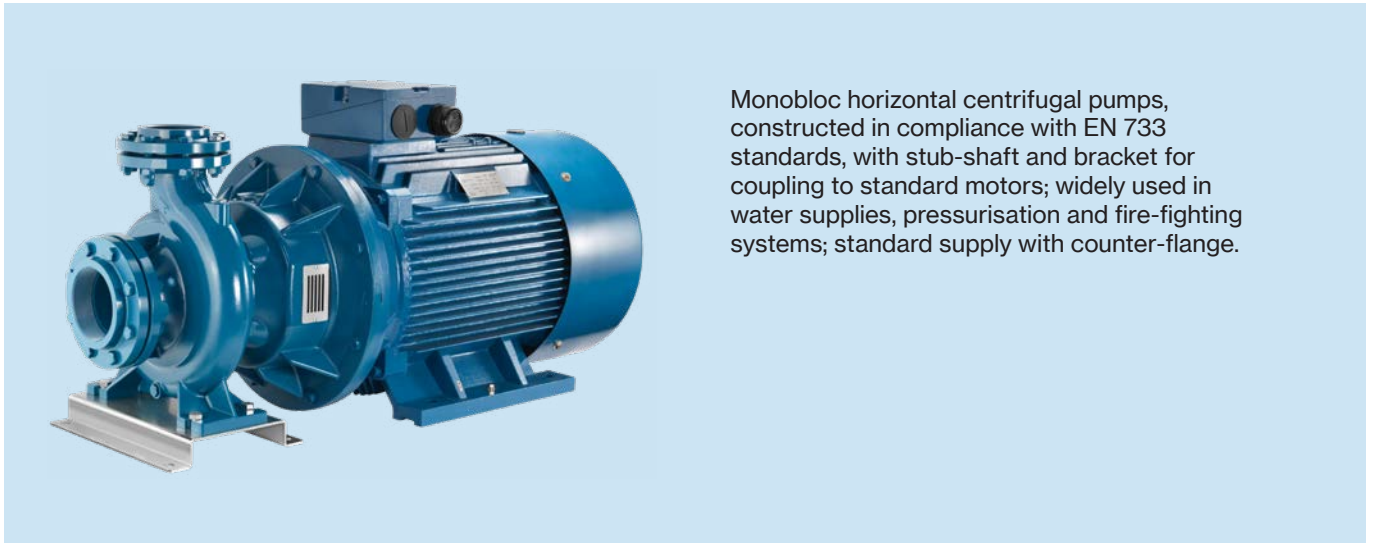
### Motor

	3~ 230/400V - 50Hz P ≤ 4kW
<b>2 Poles induction motor</b>	3~ 400/690V - 50Hz P > 4kW
	1~ 230V-50Hz
<b>Insulation class</b>	F
<b>Protection degree</b>	IPX5



# MNG-MNGX ~ 2900 rpm

Centrifugal Flanged  
EN 733



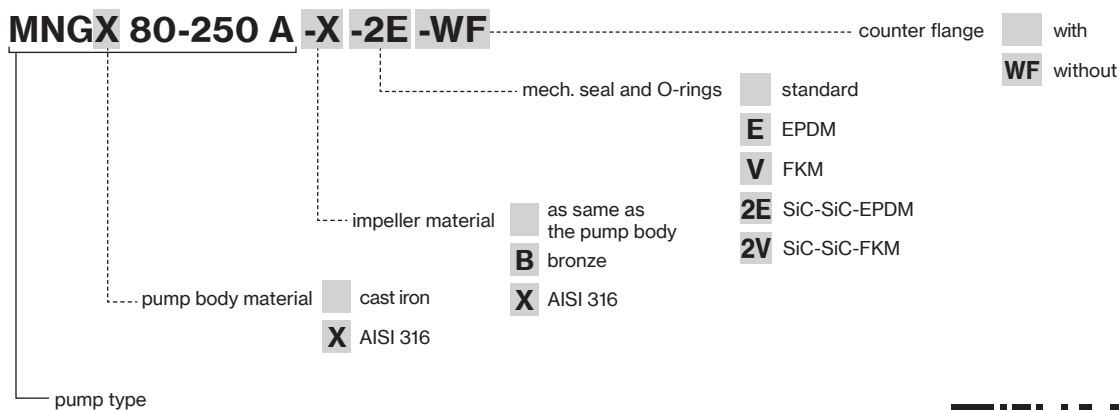
Monobloc horizontal centrifugal pumps, constructed in compliance with EN 733 standards, with stub-shaft and bracket for coupling to standard motors; widely used in water supplies, pressurisation and fire-fighting systems; standard supply with counter-flange.

## Construction features

<b>Pump body</b>	cast iron (MNG) stainless steel AISI 316 (MNGX)
<b>Motor bracket</b>	cast iron
<b>Impeller</b>	cast iron, bronze, steel (MNG), steel (MNGX)
<b>Seal type</b>	mechanical
<b>Pump shaft end</b>	stainless steel AISI 316
<b>Liquid temperature</b>	-10 ÷ +90 °C
<b>Operating pressure</b>	max 10 bar

## Motor

<b>2 Poles induction motor</b>	3- 400/690V - 50Hz
<b>Insulation class</b>	F
<b>Protection degree</b>	IPX5



# MA-MAX

~ 2900 rpm

# 4MA-4MAX

~ 1450 rpm



MA-4MA



MAX-4MAX



## Centrifugal Flanged EN 733

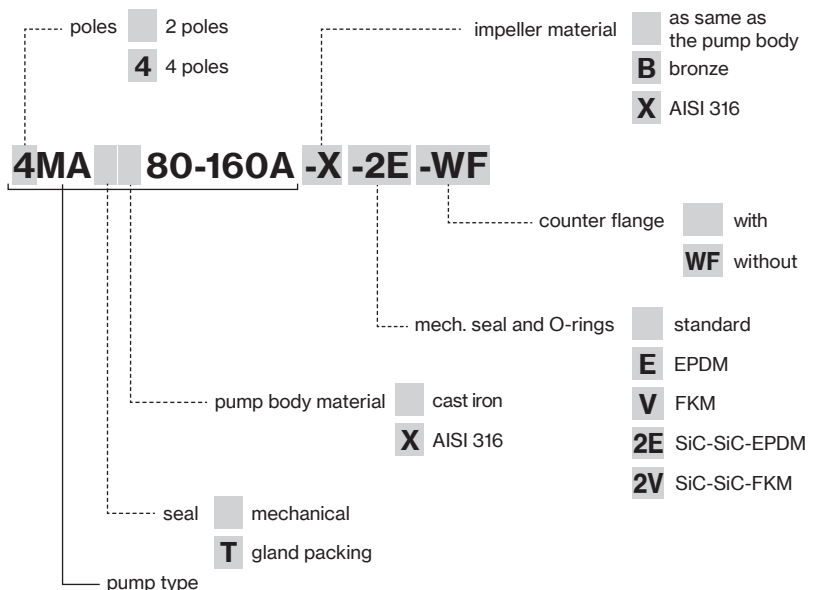
Bare shaft centrifugal pumps constructed in compliance with EN 733 standards; widely used in water supplies, pressurisation and fire-fighting systems. The pumps are supplied with counter-flanges.

### Construction features

<b>Pump body</b>	cast iron (MA) stainless steel AISI 316 (MAX)
<b>Motor bracket</b>	cast iron
<b>Impeller</b>	cast iron, bronze, steel (MA) stainless steel AISI 316 (MAX)
<b>Seal type</b>	mechanical (MA-MAX) or gland packing graphite impregnated (MAT-MATX)
<b>Pump shaft end</b>	stainless steel AISI 316
<b>Liquid temperature</b>	-10 ÷ +90 °C
<b>Operating pressure</b>	max 10 bar max 14 bar (... -315 ~ 2900 rpm)

### Motor

Available with IE3-IE4 efficiency class motor



# MA-MAX

~ 3500 rpm

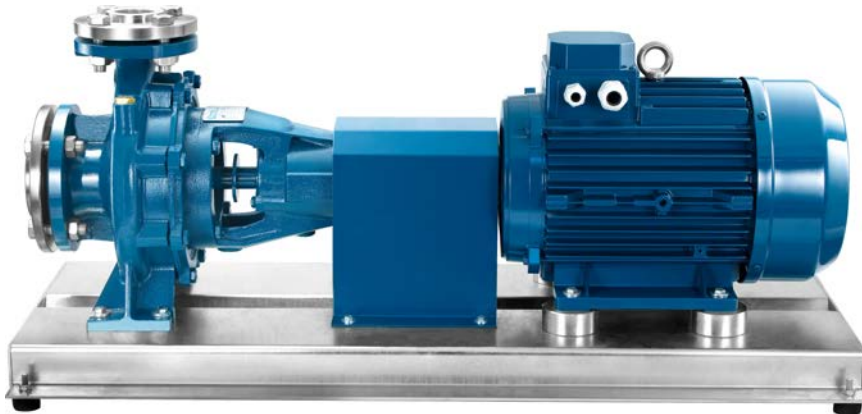
Centrifugal Flanged  
EN 733

# 4MA-4MAX

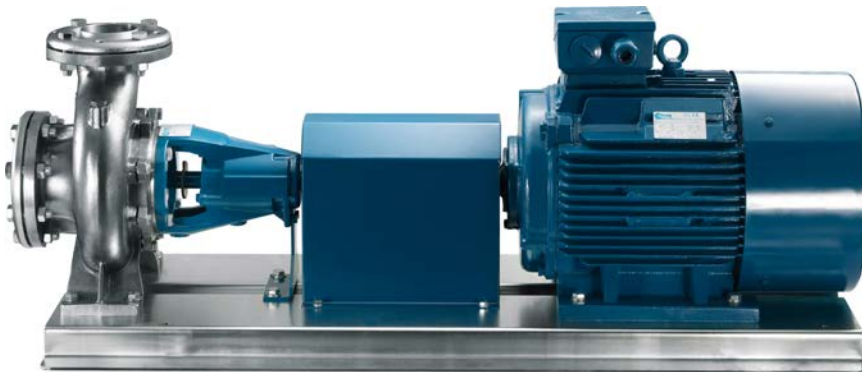
~ 1750 rpm

## Construction versions

The pumps can be fitted next to a motor on a common baseplate, with the pump shaft and the motor shaft connected by a flexible coupling.



**MA-4MA**  
with motor



**MAX-4MAX**  
with motor

## Shaft seals versions

The pumps can be provided on request with gland packing instead of mechanical seal.



**MA-MAX-4MA-4MAX**  
mechanical seal



**MAT-MATX-4MAT-4MATX**  
gland packing seal

TYPE - 50 Hz	P2		P1		CURRENT		Q (m <sup>3</sup> /h - l/min)												
			1~	3~	1~ 230V	3~ 400V	0	6	7,5	9	12	15	18	21	24	27	30	33	
	HP	kW	kW		A		H (m)												
							0	100	125	150	200	250	300	350	400	450	500	550	
32-160C	2	1,5	2,0	1,9	9,3	3,6	23,0	22,8	22,5	22,0	21,0	19,2	16,9	14,0					
32-160B	3	2,2	2,7	2,6	12,4	4,9	28,0	27,7	27,4	27,0	26,2	24,9	22,9	20,1	17,0				
32-160A	4	3	-	3,8	-	6,8	36,1	36,2	36,0	35,6	34,6	33,2	31,4	28,9	25,7	22,1			
32-200C	5,5	4	5,2	4,9	22,9	8,9	40,2	40,3	40,1	39,8	38,9	37,7	36,1	34,2	31,6	28,7			
32-200B1	7,5	5,5	-	6,4	-	11,3	48,3	48,0	47,9	47,6	46,7	45,5	44,2	42,6	40,5	37,9			
32-200B	7,5	5,5	-	6,7	-	11,1	48,3	48,0	47,9	47,6	46,7	45,5	44,2	42,6	40,5	37,9	35,4		
32-200A1	10	7,5	-	8,2	-	14,5	57,9	58,3	58,4	58,4	58,0	57,1	55,6	53,8	51,4	49,2	46,6		
32-200A	10	7,5	-	8,6	-	14,1	57,9	58,3	58,4	58,4	58,0	57,1	55,6	53,8	51,4	49,2	46,6	44,3	
32-250C	12,5	9,2	-	10,0	-	16,8	74,6		72,8	72,5	71,9	70,5	68,8	66,6	64,1	61,3			
32-250B	15	11	-	12,2	-	20,0	84,8		84,0	83,9	83,6	82,7	81,1	78,6	75,4	73,2			
32-250A1	20	15	-	13,5	-	23,2	93,5		93,6	93,7	93,7	93,4	92,3	90,4	87,7	85,3			
32-250A	20	15	-	13,5	-	23,2	93,5		93,6	93,7	93,7	93,4	92,3	90,4	87,7	85,3			

TYPE - 50 Hz	P2		P1		CURRENT		Q (m <sup>3</sup> /h - l/min)																	
			1~	3~	1~ 230V	3~ 400V	0	9	12	15	18	21	24	27	30	33	36	39	42	45	48	54	60	
	HP	kW	kW		A		H (m)																	
							0	150	200	250	300	350	400	450	500	550	600	650	700	750	800	900	1000	
40-125C	2	1,5	2,0	1,9	9,3	3,6	17,9	18,5	18,4	18,1	17,5	16,6	15,6	14,3	12,8	11,1	9,4							
40-125B	3	2,2	2,7	2,6	12,4	4,9	22,6	23,4	23,3	23,1	22,7	22,0	21,0	19,9	18,6	17,0	15,1	13,2						
40-125A	4	3	-	3,6	-	6,5	26,8	27,6	27,7	27,6	27,2	26,5	25,7	24,6	23,4	22,0	20,3	18,5	16,8					
40-160B	4	3	3,8	3,8	16,7	6,8	28,2	29,2	29,2	28,9	28,3	27,5	26,5	25,3	23,8	22,3	20,5							
40-160A	5,5	4	5,0	4,9	22,5	8,8	33,8	34,9	34,8	34,5	33,9	33,2	32,4	31,3	30,0	28,5	26,9	25,2	23,4					
40-160AP	7,5	5,5	-	6,1	-	11,0	38,6	39,8	39,9	39,8	39,4	38,7	37,9	37,0	35,8	34,4	32,9	31,1	29,3	27,4	25,3			
40-200B1	7,5	5,5	-	6,8	-	12,0	44,7	45,5	45,4	45,0	44,5	43,5	42,3	41,0	39,3	37,2	34,9	32,3						
40-200B	7,5	5,5	-	6,9	-	11,4	44,6	45,5	45,4	45,0	44,5	43,5	42,3	41,0	39,3	37,2	34,9	32,3	29,4					
40-200A1	10	7,5	-	9,0	-	15,5	56,2	56,5	56,5	56,3	55,9	55,1	54,1	52,8	51,2	49,3	47,0	44,4						
40-200A	10	7,5	-	9,3	-	15,1	56,2	56,5	56,5	56,3	55,9	55,1	54,1	52,8	51,2	49,3	47,0	44,4	41,6					
40-200AP	12,5	9,2	-	10,2	-	16,8	61,7	61,4	61,2	60,8	60,0	59,1	57,9	56,4	54,7	53,1	51,1	48,5	45,5	42,2				
40-250C	12,5	9,2	-	11,1	-	18,0	64,8	64,4	64,2	63,8	63,4	62,7	61,9	61,0	59,8	57,9	55,4							
40-250B	15	11	-	13,8	-	22,3	73,7	73,9	74,5	73,2	71,9	71,1	70,2	69,2	68,1	66,7	64,7	62,1						
40-250A1	20	15	-	16,5	-	27,2	82,6	84,6	84,8	84,7	84,3	83,4	82,4	81,3	80,0	78,5	76,9	75,4	72,8					
40-250A	20	15	-	17,5	-	29,1	82,6	84,6	84,8	84,7	84,3	83,4	82,4	81,3	80,0	78,5	76,9	75,4	72,8	69,0				
40-250BM max 14 bar	25	18,5	-	20,6	-	34,1	92,6	93,2	93,3	93,2	93,1	92,8	92,4	91,7	90,9	89,8	88,3	86,5	84,6	82,3	79,5	72,0		
40-250AM max 14 bar	30	22	-	24,4	-	40,3	101,7	103,0	102,8	102,3	102,2	102,0	101,7	101,2	100,4	99,4	98,1	96,5	94,8	93,1	90,9	85,0	77,5	

TYPE - 50 Hz	P2		P1		CURRENT		Q (m <sup>3</sup> /h - l/min)																		
			1~	3~	1~ 230V	3~ 400V	0	12	15	18	21	24	27	30	33	36	39	42	45	48	54	60	66	72	78
	HP	kW	kW		A		H (m)																		
							0	200	250	300	350	400	450	500	550	600	650	700	750	800	900	1000	1100	1200	1300
50-125B	4	3	3,6	3,8	16,1	6,8	20,0	20,6	20,6	20,4	20,3	20,1	19,9	19,6	19,2	18,7	18,2	17,6	17,0	16,4	15,0	13,2	11,3	9,2	
50-125A	5,5	4	5,0	4,8	22,5	8,8	23,7	24,3	24,3	24,2	24,1	23,9	23,7	23,3	23,0	22,6	22,1	21,7	21,2	20,7	19,6	18,2	16,4	14,2	
50-160B1	7,5	5,5	-	6,5	-	11,4	32,1				33,5	33,4	33,1	32,7	32,2	31,6	31,0	30,2	29,1	28,3	26,2	23,9	21,5		
50-160B	7,5	5,5	-	6,5	-	10,9	32,1				33,5	33,4	33,1	32,7	32,2	31,6	31,0	30,2	29,1	28,3	26,2	23,9	21,5	18,9	
50-160A1	10	7,5	-	8,6	-	15,1	38,1				39,8	39,8	39,7	39,5	39,2	38,8	38,3	37,7	36,7	36,0	34,2	32,2	29,7	27,4	
50-160A	10	7,5	-	8,8	-	14,4	38,1				39,8	39,8	39,7	39,5	39,2	38,8	38,3	37,7	36,7	36,0	34,2	32,2	29,7	27,4	
50-200C	12,5	9,2	-	10,4	-	17,2	48,2					49,7	49,2	48,5	47,7	46,9	45,9	44,9	43,7	42,6	40,0	36,0	32,3	28,9	
50-200B	15	11	-	11,9	-	19,5	53,1					54,6	54,1	53,5	52,9	52,2	51,4	50,4	49,3	48,1	45,5	42,7	38,8	35,0	
50-200A1	20	15	-	14,6	-	24,7	59,9					61,8	61,5	61,0	60,4	59,7	58,8	58,0	57,1	56,0	53,6	50,8	47,8	44,4	
50-200A	20	15	-	14,6	-	24,7	59,9					61,8	61,5	61,0	60,4	59,7	58,8	58,0	57,1	56,0	53,6	50,8	47,8	44,4	
50-250C1	20	15	-	16,1	-	26,6	69,2						68,2	67,7	67,0	66,3	65,6	64,7	63,8	62,8	59,9	56,2			
50-250C	20	15	-	17,2	-	28,6	69,2							68,2	67,7	67,0	66,3	65,6	64,7	63,8	62,8	59,9	56,2	52,1	
50-250B	25	18,5	-	20,7	-	34,3	78,8						78,4	78,0	77,6	77,0	76,1	75,1	74,0	72,9	70,3	66,9	62,9	58,5	
50-250A	30	22	-	24,8	-	40,9	88,5						88,3	88,1	87,7	87,2	86,6	85,8	84,8	83,8	81,4	78,5	75,0	70,2	



TYPE - 50 Hz	P2		P1	CUR.	Q (m³/h - l/min)																				
				3- 400V	0	30	33	36	39	42	45	48	54	60	66	72	78	84	96	108	120	132	138	144	150
	HP	kW	kW	A	H (m)																				
65-125B1	7,5	5,5	6,4	11,3	19,7	20,6	20,5	20,4	20,4	20,3	20,2	20,2	20,0	19,7	19,3	18,8	18,2	17,5	16,3	15,0					
65-125B	7,5	5,5	6,6	11,0	19,7	20,6	20,5	20,4	20,4	20,3	20,2	20,2	20,0	19,7	19,3	18,8	18,2	17,5	16,3	15,0	13,1				
65-125A1	10	7,5	8,6	15,1	24,6	25,2	25,2	25,1	25,1	25,0	24,8	24,9	24,7	24,5	24,2	23,9	23,5	23,0	22,0	20,6	18,8				
65-125A	10	7,5	8,8	14,4	24,6	25,2	25,2	25,1	25,1	25,0	24,9	24,9	24,7	24,5	24,2	23,9	23,5	23,0	22,0	20,6	18,8	16,8			
65-160C	12,5	9,2	10,1	16,8	28,9					30,6	30,5	30,3	30,0	29,6	29,1	28,5	27,9	27,2	25,3	22,9	20,2	17,5	16,0	13,9	
65-160B	15	11	12,7	20,6	33,2					35,1	35,0	34,9	34,6	34,3	33,8	33,3	32,8	32,1	30,4	28,2	25,5	22,5	21,4	20,4	
65-160A1	20	15	16,8	27,6	40,1					42,5	42,5	42,5	42,3	42,1	41,8	41,4	41,0	40,4	38,9	37,1	35,3	32,8	31,7		
65-160A	20	15	17,1	28,5	40,1					42,5	42,5	42,5	42,3	42,1	41,8	41,4	41,0	40,4	38,9	37,1	35,3	32,8	31,7	30,9	
65-200C1	20	15	16,8	27,6	44,4								46,1	45,4	44,7	44,0	43,2	42,4	40,3	37,5	33,7	28,9			
65-200C	20	15	17,0	28,3	44,4								46,1	45,4	44,7	44,0	43,2	42,4	40,3	37,5	33,7	28,9	26,8		
65-200B	25	18,5	21,2	34,8	51,7								53,9	53,4	52,7	52,0	51,3	50,4	48,6	45,9	43,0	39,4	37,1	34,6	
65-200A	30	22	25,4	41,7	60,3								61,8	61,4	61,0	60,4	59,8	59,1	57,1	54,6	51,6	48,3	46,5	44,4	
65-250B	40	30	30,8	55,3	80,6								80,6	79,5	78,4	77,1	75,7	74,1	70,4	66,1	61,0	54,7	51,0	47,3	
65-250A	50	37	37,0	69,2	91,6								91,6	90,8	89,8	88,6	87,4	85,9	82,5	77,8	72,8	67,4	64,3	60,8	57,9

TYPE - 50 Hz	P2		P1	CUR.	Q (m³/h - l/min)																			
				3- 400V	0	66	72	78	84	96	108	120	132	138	144	156	168	180	195	210	225	240		
	HP	kW	kW	A	H (m)																			
80-160E	12,5	9,2	9,8	16,3	21,5	22,9	22,5	22,1	21,6	20,8	19,9	18,9	17,7	17,2	16,6	15,3	13,7							
80-160D	15	11	12,2	20,0	25,4	27,3	27,0	26,6	26,3	25,4	24,5	23,5	22,4	21,8	21,2	19,9	18,3	16,4						
80-160C1	20	15	14,5	24,5	29,0	30,9	30,7	30,4	30,1	29,4	28,5	27,4	26,3	25,8	25,3	24,1	22,5	20,7	18,4					
80-160C	20	15	14,5	24,5	29,0	30,9	30,7	30,4	30,1	29,4	28,5	27,4	26,3	25,8	25,3	24,1	22,5	20,7	18,4					
80-160B	25	18,5	18,1	30,3	33,6	35,9	35,7	35,4	35,2	34,5	33,7	32,9	32,0	31,6	31,1	30,0	28,6	27,0	24,5	22,0				
80-160A	30	22	22	37	38	40,5	40,4	40,2	40,1	39,6	39,1	38,4	37,5	37,1	36,6	35,4	34,1	32,6	30,4	28,3	23,9			
80-200B	40	30	32,0	57,2	50,4				54,5	53,9	53,2	52,3	51,3	50,7	50,2	48,9	47,4	45,8	43,4	40,9	38,5			
80-200A	50	37	38,6	71,6	57,3				61,7	61,3	60,6	59,4	58,2	57,8	57,5	56,8	55,4	53,7	51,5	49,1	46,6	43,9		

TYPE - 50 Hz	P2		P1	CUR.	Q (m³/h - l/min)																			
				3- 400V	0	96	108	120	132	138	144	156	168	180	195	210	225	240	270	300	330			
	HP	kW	kW	A	H (m)																			
100-160B	40	30	31,9	57,1	41,7	40,7	40,8	40,7	40,4	40,3	40,1	39,6	39,1	38,5	37,8	37,0	36,1	35,0	32,3	29,2	25,7			
100-160A	50	37	37,5	70,2	46,0	45,1	45,2	45,1	44,9	44,8	44,7	44,3	43,9	43,3	42,7	42,0	41,1	40,2	37,9	35,0	31,9			

# MNG-MNGX ~ 2900 rpm

Centrifugal Flanged  
EN 733

TYPE - 50 Hz	P2	Motor Size	Q (m³/h - l/min)																			
			0	96	108	120	132	138	144	156	168	180	195	210	225	240	255	270	300	330	360	
			0	1600	1800	2000	2200	2300	2400	2600	2800	3000	3250	3500	3750	4000	4250	4500	5000	5500	6000	
		kW	H (m)																			
			<i>pump input power (kW)</i>																			
<b>80-250B</b>	45	225M	77,2	80,0	79,0	77,5	75,3	74,2	73,1	71,0	69,0	67,0	64,5	61,8	58,8							
			<u>14,01</u>	<u>30,93</u>	<u>32,60</u>	<u>34,34</u>	<u>36,13</u>	<u>37,02</u>	<u>37,86</u>	<u>39,38</u>	<u>40,78</u>	<u>42,10</u>	<u>43,60</u>	<u>44,94</u>	<u>46,15</u>							
<b>80-250A</b>	55	250M	90,0	92,8	91,1	89,3	87,4	86,4	85,4	83,1	80,7	78,5	75,7	72,4	68,8	65,2						
			<u>16,74</u>	<u>36,56</u>	<u>38,57</u>	<u>40,54</u>	<u>42,46</u>	<u>43,39</u>	<u>44,31</u>	<u>46,12</u>	<u>47,81</u>	<u>49,29</u>	<u>50,92</u>	<u>52,59</u>	<u>54,18</u>	<u>55,50</u>						
<b>100-200B</b>	45	225M	56,1		56,8	56,5	56,1	55,9	55,6	55,1	54,5	53,9	53,1	52,2	51,4	50,4	49,0	47,5	43,8	39,7		
			<u>21,75</u>		<u>28,84</u>	<u>29,78</u>	<u>30,74</u>	<u>31,24</u>	<u>31,75</u>	<u>32,81</u>	<u>33,89</u>	<u>35,04</u>	<u>36,50</u>	<u>37,82</u>	<u>38,89</u>	<u>39,85</u>	<u>40,77</u>	<u>41,60</u>	<u>42,92</u>	<u>43,82</u>		
<b>100-200A</b>	55	250M	61,1		62,2	61,8	61,5	61,2	61,0	60,5	59,9	59,5	58,9	58,3	57,4	56,4	55,2	53,8	50,6	46,8	42,5	
			<u>24,57</u>		<u>33,04</u>	<u>34,07</u>	<u>35,11</u>	<u>35,64</u>	<u>36,18</u>	<u>37,28</u>	<u>38,39</u>	<u>39,49</u>	<u>40,86</u>	<u>42,23</u>	<u>43,60</u>	<u>44,97</u>	<u>46,20</u>	<u>47,28</u>	<u>49,05</u>	<u>50,53</u>	<u>51,62</u>	
<b>100-250C</b>	55	250M	71,9			73,2	73,1	73,0	72,9	72,6	72,2	71,8	71,1	70,3	69,3	67,9	66,4	64,7	61,0			
	75	280S	<u>24,75</u>			<u>40,12</u>	<u>41,93</u>	<u>42,84</u>	<u>43,70</u>	<u>45,28</u>	<u>46,77</u>	<u>48,21</u>	<u>49,94</u>	<u>51,65</u>	<u>53,38</u>	<u>55,05</u>	<u>56,66</u>	<u>58,19</u>	<u>60,99</u>			
<b>100-250B</b>	75	280S	83,6			83,7	83,5	83,4	83,2	82,9	82,5	82,1	81,4	80,8	80,0	79,0	77,9	76,4	72,0	67,6		
			<u>29,69</u>			<u>47,10</u>	<u>49,06</u>	<u>50,04</u>	<u>51,01</u>	<u>52,92</u>	<u>54,76</u>	<u>56,47</u>	<u>58,46</u>	<u>60,26</u>	<u>61,86</u>	<u>63,49</u>	<u>65,17</u>	<u>66,93</u>	<u>70,91</u>	<u>73,78</u>		
<b>100-250A</b>	90	280M	93,5			93,9	93,7	93,5	93,4	92,9	92,4	91,8	90,9	89,9	88,8	87,4	85,7	84,0	80,4	75,8	73,2	
			<u>32,71</u>			<u>51,99</u>	<u>54,14</u>	<u>55,23</u>	<u>56,31</u>	<u>58,48</u>	<u>60,60</u>	<u>62,57</u>	<u>64,88</u>	<u>66,97</u>	<u>68,84</u>	<u>70,81</u>	<u>72,81</u>	<u>74,73</u>	<u>78,17</u>	<u>81,33</u>	<u>85,53</u>	

TYPE - 50 Hz	P2	Motor Size	Q (m³/h - l/min)													
			0	6	7,5	9	12	15	18	21	24	27	30	33		
	kW	0	100	125	150	200	250	300	350	400	450	500	550			
			H (m) <i>pump input power (kW)</i>													
<b>32-160C</b>	1,5	90S	23,0 <i>0,57</i>	22,8 <i>0,93</i>	22,5 <i>1,02</i>	22,0 <i>1,10</i>	21,0 <i>1,26</i>	19,2 <i>1,40</i>	16,9 <i>1,52</i>	14,0 <i>1,61</i>						
<b>32-160B</b>	2,2	90L	28,0 <i>0,83</i>	27,7 <i>1,24</i>	27,4 <i>1,35</i>	27,0 <i>1,45</i>	26,2 <i>1,65</i>	24,9 <i>1,83</i>	22,9 <i>1,99</i>	20,1 <i>2,13</i>	17,0 <i>2,25</i>					
<b>32-160A</b>	3	100L	36,1 <i>1,29</i>	36,2 <i>1,80</i>	36,0 <i>1,94</i>	35,6 <i>2,07</i>	34,6 <i>2,32</i>	33,2 <i>2,55</i>	31,4 <i>2,76</i>	28,9 <i>2,94</i>	25,7 <i>3,11</i>	22,1 <i>3,25</i>				
<b>32-200C</b>	4	112M	40,2 <i>1,61</i>	40,3 <i>2,27</i>	40,1 <i>2,45</i>	39,8 <i>2,63</i>	38,9 <i>2,96</i>	37,7 <i>3,27</i>	36,1 <i>3,56</i>	34,2 <i>3,82</i>	31,6 <i>4,08</i>	28,7 <i>4,31</i>				
<b>32-200B</b>	5,5	132S	48,3 <i>2,35</i>	48,0 <i>3,16</i>	47,9 <i>3,37</i>	47,6 <i>3,57</i>	46,7 <i>3,97</i>	45,5 <i>4,35</i>	44,2 <i>4,71</i>	42,6 <i>5,05</i>	40,5 <i>5,36</i>	37,9 <i>5,66</i>	35,4 <i>5,93</i>			
<b>32-200A</b>	7,5	132S	57,9 <i>3,06</i>	58,3 <i>4,03</i>	58,4 <i>4,28</i>	58,4 <i>4,53</i>	58,0 <i>5,02</i>	57,1 <i>5,50</i>	55,6 <i>5,92</i>	53,8 <i>6,34</i>	51,4 <i>6,72</i>	49,2 <i>7,08</i>	46,6 <i>7,42</i>	44,3 <i>7,72</i>		
<b>32-250C</b>	11	160M	74,6 <i>4,25</i>		72,8 <i>5,69</i>	72,5 <i>6,00</i>	71,9 <i>6,59</i>	70,5 <i>7,17</i>	68,8 <i>7,69</i>	66,6 <i>8,17</i>	64,1 <i>8,67</i>	61,3 <i>9,08</i>				
<b>32-250B</b>	11	160M	84,8 <i>5,16</i>		84,0 <i>6,93</i>	83,9 <i>7,29</i>	83,6 <i>7,99</i>	82,7 <i>8,66</i>	81,1 <i>9,28</i>	78,6 <i>9,87</i>	75,4 <i>10,44</i>	73,2 <i>11,05</i>				
<b>32-250A</b>	15	160M	93,5 <i>5,71</i>		93,6 <i>7,59</i>	93,7 <i>7,99</i>	93,7 <i>8,82</i>	93,4 <i>9,59</i>	92,3 <i>10,35</i>	90,4 <i>11,07</i>	87,7 <i>11,72</i>	85,3 <i>12,34</i>				

TYPE - 50 Hz	P2	Motor Size	Q (m³/h - l/min)																
			0	9	12	15	18	21	24	27	30	33	36	39	42	45	48	54	60
	kW	0	150	200	250	300	350	400	450	500	550	600	650	700	750	800	900	1000	
			H (m) <i>pump input power (kW)</i>																
<b>40-125C</b>	1,5	90S	17,9	18,5	18,4	18,1	17,5	16,6	15,6	14,3	12,8	11,1	9,4						
	2,2	90L	<i>0,56</i>	<i>0,96</i>	<i>1,09</i>	<i>1,21</i>	<i>1,31</i>	<i>1,41</i>	<i>1,48</i>	<i>1,53</i>	<i>1,57</i>	<i>1,59</i>	<i>1,60</i>						
<b>40-125B</b>	2,2	90L	22,6	23,4	23,3	23,1	22,7	22,0	21,0	19,9	18,6	17,0	15,1	13,2					
	3	100L	<i>0,82</i>	<i>1,30</i>	<i>1,48</i>	<i>1,63</i>	<i>1,76</i>	<i>1,89</i>	<i>2,00</i>	<i>2,09</i>	<i>2,16</i>	<i>2,22</i>	<i>2,27</i>	<i>2,30</i>					
<b>40-125A</b>	3	100L	26,8	27,6	27,7	27,6	27,2	26,5	25,7	24,6	23,4	22,0	20,3	18,5	16,8				
	3	100L	<i>1,10</i>	<i>1,64</i>	<i>1,83</i>	<i>2,03</i>	<i>2,20</i>	<i>2,37</i>	<i>2,52</i>	<i>2,65</i>	<i>2,76</i>	<i>2,86</i>	<i>2,95</i>	<i>3,02</i>	<i>3,08</i>				
<b>40-160B</b>	4	112M	28,2	29,2	29,2	28,9	28,3	27,5	26,5	25,3	23,8	22,3	20,5						
	4	112M	<i>1,26</i>	<i>1,92</i>	<i>2,13</i>	<i>2,33</i>	<i>2,51</i>	<i>2,67</i>	<i>2,82</i>	<i>2,96</i>	<i>3,08</i>	<i>3,17</i>	<i>3,25</i>						
<b>40-160A</b>	4	112M	33,8	34,9	34,8	34,5	33,9	33,2	32,4	31,3	30,0	28,5	26,9	25,2	23,4				
	5,5	132S	<i>1,62</i>	<i>2,33</i>	<i>2,58</i>	<i>2,81</i>	<i>3,04</i>	<i>3,25</i>	<i>3,44</i>	<i>3,62</i>	<i>3,78</i>	<i>3,93</i>	<i>4,06</i>	<i>4,16</i>	<i>4,25</i>				
<b>40-160AP</b>	5,5	132S	38,6	39,8	39,9	39,8	39,4	38,7	37,9	37,0	35,8	34,4	32,9	31,1	29,3	27,4	25,3		
	5,5	132S	<i>1,90</i>	<i>2,76</i>	<i>3,06</i>	<i>3,33</i>	<i>3,60</i>	<i>3,85</i>	<i>4,08</i>	<i>4,29</i>	<i>4,49</i>	<i>4,67</i>	<i>4,84</i>	<i>5,00</i>	<i>5,14</i>	<i>5,27</i>	<i>5,39</i>		
<b>40-200B</b>	5,5	132S	44,6	45,5	45,4	45,0	44,5	43,5	42,3	41,0	39,3	37,2	34,9	32,3	29,4				
	7,5	132S	<i>2,32</i>	<i>3,25</i>	<i>3,62</i>	<i>3,96</i>	<i>4,27</i>	<i>4,57</i>	<i>4,85</i>	<i>5,11</i>	<i>5,35</i>	<i>5,57</i>	<i>5,76</i>	<i>5,94</i>	<i>6,13</i>				
<b>40-200A</b>	7,5	132S	56,2	56,5	56,5	56,3	55,9	55,1	54,1	52,8	51,2	49,3	47,0	44,4	41,6				
	11	160M	<i>3,48</i>	<i>4,63</i>	<i>5,08</i>	<i>5,51</i>	<i>5,91</i>	<i>6,31</i>	<i>6,68</i>	<i>7,01</i>	<i>7,32</i>	<i>7,63</i>	<i>7,90</i>	<i>8,14</i>	<i>8,37</i>				
<b>40-200AP</b>	7,5	132S	61,7	61,4	61,2	60,8	60,0	59,1	57,9	56,4	54,7	53,1	51,1	48,5	45,5	42,2			
	11	160M	<i>3,50</i>	<i>4,81</i>	<i>5,30</i>	<i>5,74</i>	<i>6,16</i>	<i>6,56</i>	<i>6,95</i>	<i>7,31</i>	<i>7,65</i>	<i>7,96</i>	<i>8,25</i>	<i>8,51</i>	<i>8,73</i>	<i>8,93</i>			
<b>40-250C</b>	11	160M	64,8	64,4	64,2	63,8	63,4	62,7	61,9	61,0	59,8	57,9	55,4						
	11	160M	<i>4,23</i>	<i>5,50</i>	<i>6,02</i>	<i>6,56</i>	<i>7,11</i>	<i>7,65</i>	<i>8,14</i>	<i>8,63</i>	<i>9,12</i>	<i>9,57</i>	<i>10,01</i>						
<b>40-250B</b>	15	160M	73,7	73,9	74,5	73,2	71,9	71,1	70,2	69,2	68,1	66,7	64,7	62,1					
	15	160M	<i>5,33</i>	<i>6,74</i>	<i>7,38</i>	<i>7,96</i>	<i>8,53</i>	<i>9,10</i>	<i>9,69</i>	<i>10,28</i>	<i>10,87</i>	<i>11,43</i>	<i>11,91</i>	<i>12,39</i>					
<b>40-250A</b>	18,5	160L	82,6	84,6	84,8	84,7	84,3	83,4	82,4	81,3	80,0	78,5	76,9	75,4	72,8	69,0			
	18,5	160L	<i>6,57</i>	<i>8,36</i>	<i>9,03</i>	<i>9,74</i>	<i>10,45</i>	<i>11,11</i>	<i>11,76</i>	<i>12,44</i>	<i>13,08</i>	<i>13,66</i>	<i>14,23</i>	<i>14,80</i>	<i>15,37</i>	<i>15,93</i>			
<b>40-250BM</b> max 14 bar	18,5	160L	92,6	93,2	93,3	93,2	93,1	92,8	92,4	91,7	90,9	89,8	88,3	86,5	84,6	82,3	79,5	72,0	
	18,5	160L	<i>7,41</i>	<i>9,12</i>	<i>9,78</i>	<i>10,48</i>	<i>11,18</i>	<i>11,91</i>	<i>12,65</i>	<i>13,38</i>	<i>14,06</i>	<i>14,73</i>	<i>15,38</i>	<i>16,00</i>	<i>16,60</i>	<i>17,18</i>	<i>17,74</i>	<i>18,83</i>	
<b>40-250AM</b> max 14 bar	22	180M	101,7	103,0	102,8	102,3	102,2	102,0	101,7	101,2	100,4	99,4	98,1	96,5	94,8	93,1	90,9	85,0	77,5
	22	180M	<i>8,80</i>	<i>10,63</i>	<i>11,26</i>	<i>11,93</i>	<i>12,69</i>	<i>13,46</i>	<i>14,21</i>	<i>14,97</i>	<i>15,74</i>	<i>16,50</i>	<i>17,22</i>	<i>17,92</i>	<i>18,61</i>	<i>19,29</i>	<i>19,96</i>	<i>21,28</i>	<i>22,45</i>

# MA-MAX ~ EN 733

TYPE - 50 Hz	P2	Motor Size	Q (m³/h - l/min)																		
			0	12	15	18	21	24	27	30	33	36	39	42	45	48	54	60	66	72	78
			0	200	250	300	350	400	450	500	550	600	650	700	750	800	900	1000	1100	1200	1300
			H (m)																		
			<i>pump input power (kW)</i>																		
50-125B	3	100L	20,0 <i>1,15</i>	20,6 <i>1,65</i>	20,6 <i>1,79</i>	20,4 <i>1,93</i>	20,3 <i>2,07</i>	20,1 <i>2,19</i>	19,9 <i>2,28</i>	19,6 <i>2,37</i>	19,2 <i>2,49</i>	18,7 <i>2,63</i>	18,2 <i>2,75</i>	17,6 <i>2,84</i>	17,0 <i>2,92</i>	16,4 <i>3,00</i>	15,0 <i>3,13</i>	13,2 <i>3,21</i>	11,3 <i>3,28</i>	9,2 <i>3,31</i>	
50-125A	4	112M	23,7 <i>1,50</i>	24,3 <i>2,02</i>	24,3 <i>2,19</i>	24,2 <i>2,35</i>	24,1 <i>2,51</i>	23,9 <i>2,66</i>	23,7 <i>2,81</i>	23,3 <i>2,94</i>	23,0 <i>3,07</i>	22,6 <i>3,21</i>	22,1 <i>3,34</i>	21,7 <i>3,47</i>	21,2 <i>3,59</i>	20,7 <i>3,69</i>	19,6 <i>3,88</i>	18,2 <i>4,03</i>	16,4 <i>4,15</i>	14,2 <i>4,23</i>	
50-160B	5,5	132S	32,1 <i>1,92</i>				33,5 <i>3,60</i>	33,4 <i>3,84</i>	33,1 <i>4,06</i>	32,7 <i>4,28</i>	32,2 <i>4,48</i>	31,6 <i>4,67</i>	31,0 <i>4,84</i>	30,2 <i>4,99</i>	29,1 <i>5,12</i>	28,3 <i>5,24</i>	26,2 <i>5,45</i>	23,9 <i>5,60</i>	21,5 <i>5,70</i>	18,9 <i>5,75</i>	
50-160A	7,5	132S	38,1 <i>2,49</i>				39,8 <i>4,44</i>	39,8 <i>4,74</i>	39,7 <i>5,03</i>	39,5 <i>5,30</i>	39,2 <i>5,56</i>	38,8 <i>5,79</i>	38,3 <i>6,00</i>	37,7 <i>6,21</i>	36,9 <i>6,21</i>	36,0 <i>6,60</i>	34,2 <i>6,93</i>	32,2 <i>7,20</i>	29,7 <i>7,45</i>	27,4 <i>7,66</i>	25,4 <i>7,95</i>
50-200C	11	160M	48,2 <i>3,13</i>				49,7 <i>6,11</i>	49,2 <i>6,44</i>	48,5 <i>6,75</i>	47,7 <i>7,06</i>	46,9 <i>7,35</i>	46,9 <i>7,62</i>	45,9 <i>7,88</i>	44,9 <i>8,11</i>	43,7 <i>8,31</i>	42,6 <i>8,67</i>	40,0 <i>9,02</i>	36,0 <i>9,26</i>	32,3 <i>9,43</i>	28,9 <i>9,43</i>	
50-200B	11	160M	53,1 <i>3,44</i>				54,6 <i>6,75</i>	54,1 <i>7,14</i>	53,5 <i>7,52</i>	52,9 <i>7,86</i>	52,2 <i>8,17</i>	51,4 <i>8,47</i>	50,4 <i>8,78</i>	49,3 <i>9,09</i>	48,1 <i>9,34</i>	45,5 <i>9,76</i>	42,7 <i>10,15</i>	38,8 <i>10,47</i>	35,0 <i>10,73</i>		
50-200A	15	160M	59,9 <i>4,38</i>				61,8 <i>7,92</i>	61,5 <i>8,36</i>	61,0 <i>8,78</i>	60,4 <i>9,20</i>	59,7 <i>9,62</i>	58,8 <i>10,02</i>	58,0 <i>10,38</i>	57,1 <i>10,73</i>	56,0 <i>11,05</i>	53,6 <i>11,65</i>	50,8 <i>12,17</i>	47,8 <i>12,62</i>	44,4 <i>13,01</i>	39,8 <i>13,35</i>	
50-250C	15	160M	69,2 <i>5,27</i>				68,2 <i>10,08</i>	67,7 <i>10,60</i>	67,0 <i>11,11</i>	66,3 <i>11,60</i>	65,6 <i>12,07</i>	64,7 <i>12,52</i>	63,8 <i>12,94</i>	62,8 <i>13,33</i>	59,9 <i>14,14</i>	56,2 <i>14,94</i>	52,1 <i>15,59</i>				
50-250B	18,5	160L	78,8 <i>6,33</i>				78,4 <i>11,72</i>	78,0 <i>12,33</i>	77,6 <i>12,92</i>	77,0 <i>13,49</i>	76,1 <i>14,03</i>	75,1 <i>14,55</i>	74,0 <i>15,06</i>	72,9 <i>15,53</i>	70,3 <i>16,44</i>	66,9 <i>17,34</i>	62,9 <i>18,18</i>	58,5 <i>18,96</i>			
50-250A	22	180M	88,5 <i>7,43</i>				88,3 <i>13,20</i>	88,1 <i>13,87</i>	87,7 <i>14,55</i>	87,2 <i>15,22</i>	86,6 <i>15,88</i>	85,8 <i>16,51</i>	84,8 <i>17,13</i>	83,8 <i>17,74</i>	81,4 <i>18,90</i>	78,5 <i>19,99</i>	75,0 <i>21,00</i>	70,2 <i>21,94</i>	64,8 <i>22,82</i>		

TYPE - 50 Hz	P2	Motor Size	Q (m³/h - l/min)																	
			0	42	45	48	54	60	66	72	78	84	96	108	120	132	138	144		
			0	700	750	800	900	1000	1100	1200	1300	1400	1600	1800	2000	2200	2300	2400		
			H (m)																	
			<i>pump input power (kW)</i>																	
50-315DN <small>No EN 733; no CAT, CAX, CATX</small>	37	200L	87,8 <i>11,19</i>	90,4 <i>20,11</i>	90,3 <i>20,81</i>	90,2 <i>21,52</i>	89,9 <i>22,91</i>	89,2 <i>24,19</i>	88,2 <i>25,41</i>	87,1 <i>26,58</i>	86,0 <i>27,71</i>	84,8 <i>28,81</i>	82,4 <i>30,91</i>	79,9 <i>32,92</i>	76,9 <i>34,81</i>	73,4 <i>36,56</i>				
50-315CN <small>No EN 733; no CAT, CAX, CATX</small>	45	225M	101,8 <i>13,32</i>	105,0 <i>23,97</i>	104,9 <i>24,79</i>	104,8 <i>25,63</i>	104,3 <i>27,25</i>	103,7 <i>28,77</i>	102,7 <i>30,21</i>	101,5 <i>31,55</i>	100,3 <i>32,85</i>	99,1 <i>34,15</i>	96,7 <i>36,68</i>	94,1 <i>39,06</i>	91,3 <i>41,26</i>	88,7 <i>43,26</i>				
50-315BN <small>No EN 733; no CAT, CAX, CATX</small>	55	250M	122,3 <i>17,44</i>	124,3 <i>29,30</i>	124,4 <i>30,29</i>	124,5 <i>31,30</i>	124,7 <i>33,28</i>	124,4 <i>35,10</i>	123,6 <i>36,80</i>	122,5 <i>38,35</i>	121,3 <i>39,85</i>	119,9 <i>41,39</i>	116,6 <i>44,41</i>	113,3 <i>47,32</i>	110,1 <i>50,01</i>	107,1 <i>52,39</i>	105,4 <i>53,60</i>	103,5 <i>54,83</i>		
50-315AN <small>No EN 733; no CAT, CAX, CATX</small>	75	280S	146,1 <i>22,75</i>	146,9 <i>35,89</i>	147,1 <i>37,03</i>	147,3 <i>38,21</i>	147,4 <i>40,53</i>	147,3 <i>42,66</i>	146,9 <i>44,71</i>	146,3 <i>46,72</i>	145,3 <i>48,67</i>	144,1 <i>50,59</i>	141,2 <i>54,26</i>	137,9 <i>57,67</i>	134,1 <i>60,84</i>	130,0 <i>63,78</i>	127,9 <i>65,11</i>	125,8 <i>66,34</i>		

TYPE - 50 Hz	P2	Motor Size	Q (m³/h - l/min)																				
			0	30	33	36	39	42	45	48	54	60	66	72	78	84	96	108	120	132	138	144	150
			0	500	550	600	650	700	750	800	900	1000	1100	1200	1300	1400	1600	1800	2000	2200	2300	2400	2500
			H (m)																				
			<i>pump input power (kW)</i>																				
65-125B	5,5	132S	19,7 <i>2,07</i>	20,6 <i>3,36</i>	20,5 <i>3,49</i>	20,4 <i>3,62</i>	20,4 <i>3,75</i>	20,3 <i>3,87</i>	20,2 <i>3,99</i>	20,2 <i>4,11</i>	20,0 <i>4,34</i>	19,7 <i>4,54</i>	19,3 <i>4,71</i>	18,8 <i>4,87</i>	18,2 <i>5,03</i>	17,5 <i>5,17</i>	16,3 <i>5,45</i>	15,0 <i>5,67</i>	13,1 <i>5,84</i>				
65-125A	7,5	132S	24,6 <i>2,95</i>	25,2 <i>4,37</i>	25,2 <i>4,52</i>	25,1 <i>4,68</i>	25,1 <i>4,83</i>	25,0 <i>4,98</i>	24,9 <i>5,13</i>	24,9 <i>5,29</i>	24,7 <i>5,60</i>	24,5 <i>5,89</i>	24,2 <i>6,16</i>	23,9 <i>6,41</i>	23,5 <i>6,65</i>	23,0 <i>6,86</i>	22,0 <i>7,25</i>	20,6 <i>7,55</i>	18,8 <i>7,77</i>	16,8 <i>7,93</i>			
65-160C	11	160M	28,9 <i>2,67</i>				30,6 <i>5,52</i>	30,5 <i>5,71</i>	30,3 <i>5,90</i>	30,0 <i>6,26</i>	29,6 <i>6,60</i>	29,1 <i>6,93</i>	28,5 <i>7,23</i>	27,9 <i>7,51</i>	27,2 <i>7,77</i>	25,3 <i>8,26</i>	22,9 <i>8,64</i>	22,9 <i>8,92</i>	20,2 <i>9,11</i>	17,5 <i>9,17</i>	16,0 <i>9,19</i>		
65-160B	11	160M	33,2 <i>3,37</i>				35,1 <i>6,51</i>	35,0 <i>6,74</i>	34,9 <i>6,95</i>	34,6 <i>7,37</i>	34,3 <i>7,77</i>	33,8 <i>8,17</i>	33,3 <i>8,56</i>	32,8 <i>8,91</i>	32,1 <i>9,24</i>	30,4 <i>9,85</i>	28,2 <i>10,38</i>	25,5 <i>10,82</i>	22,5 <i>11,17</i>	21,4 <i>11,34</i>	20,4 <i>11,49</i>		
65-160A	15	160M	40,1 <i>4,54</i>				42,5 <i>8,31</i>	42,5 <i>8,59</i>	42,5 <i>8,86</i>	42,3 <i>9,37</i>	42,1 <i>9,86</i>	41,8 <i>10,35</i>	41,4 <i>10,85</i>	41,0 <i>11,32</i>	40,4 <i>11,77</i>	38,9 <i>12,65</i>	37,1 <i>13,46</i>	35,3 <i>14,14</i>	32,8 <i>14,79</i>	31,7 <i>15,14</i>	30,9 <i>15,52</i>		
65-200C	15	160M	44,4 <i>4,38</i>							46,1 <i>10,30</i>	45,4 <i>10,87</i>	44,7 <i>11,44</i>	44,0 <i>12,00</i>	43,2 <i>12,52</i>	42,4 <i>12,98</i>	40,3 <i>13,76</i>	37,5 <i>14,36</i>	33,7 <i>14,89</i>	28,9 <i>15,27</i>	26,8 <i>15,43</i>			
65-200B	18,5	160L	51,7 <i>5,71</i>							53,9 <i>12,58</i>	53,4 <i>13,25</i>	52,7 <i>13,89</i>	52,0 <i>14,51</i>	51,3 <i>15,12</i>	50,4 <i>15,66</i>	48,6 <i>16,56</i>	45,9 <i>17,56</i>	43,0 <i>18,37</i>	39,4 <i>18,96</i>	37,1 <i>19,20</i>	34,6 <i>19,42</i>		
65-200A	22	180M	60,3 <i>7,25</i>							61,8 <i>14,56</i>	61,4 <i>15,38</i>	61,0 <i>16,18</i>	60,4 <i>16,93</i>	59,8 <i>17,64</i>	59,1 <i>18,33</i>	57,1 <i>19,66</i>	54,6 <i>20,84</i>	51,6 <i>21,83</i>	48,3 <i>22,73</i>	46,5 <i>23,10</i>	44,4 <i>23,41</i>		
65-250B	30	200L	80,6 <i>9,16</i>							80,6 <i>19,79</i>	79,5 <i>20,77</i>	78,4 <i>21,74</i>	77,1 <i>22,72</i>	75,7 <i>23,63</i>	74,1 <i>24,37</i>	70,4 <i>25,59</i>	66,1 <i>26,73</i>	61,0 <i>27,55</i>	54,7 <i>28,09</i>	51,0 <i>28,27</i>	47,3 <i>28,38</i>		
65-250A	37	200L	91,6 <i>11,32</i>							91,6 <i>23,01</i>	90,8 <i>24,18</i>	89,8 <i>25,33</i>	88,6 <i>26,47</i>	87,4 <i>27,58</i>	85,9 <i>28,55</i>	82,5 <i>30,14</i>	77,8 <i>31,64</i>	72,8 <i>32,77</i>	67,4 <i>33,54</i>	64,3 <i>33,85</i>	60,8 <i>34,09</i>	57,9 <i>34,25</i>	



TYPE - 50 Hz	P2	Motor Size	Q (m³/h - l/min)																		
			0	54	60	66	72	78	84	96	108	120	132	138	144	150	156	168	180	195	210
			0	900	1000	1100	1200	1300	1400	1600	1800	2000	2200	2300	2400	2500	2600	2800	3000	3250	3500
		kW	H (m) pump input power (kW)																		
<b>65-315CN</b> No CAT, CAX, CATX	55	250M	93,9 <i>15,58</i>	96,5 <i>26,64</i>	96,4 <i>27,96</i>	96,3 <i>29,26</i>	96,0 <i>30,48</i>	95,6 <i>31,67</i>	95,1 <i>32,88</i>	93,8 <i>35,28</i>	92,3 <i>37,55</i>	90,7 <i>39,76</i>	89,1 <i>41,99</i>	88,3 <i>43,09</i>	87,5 <i>44,18</i>	86,5 <i>45,24</i>	85,5 <i>46,28</i>	83,2 <i>48,31</i>	80,8 <i>50,27</i>		
<b>65-315BN</b> No CAT, CAX, CATX	75	280S	116,5 <i>21,16</i>	117,9 <i>34,28</i>	117,8 <i>35,82</i>	117,7 <i>37,35</i>	117,4 <i>38,80</i>	117,0 <i>40,26</i>	116,4 <i>41,84</i>	114,9 <i>45,05</i>	113,3 <i>47,88</i>	111,4 <i>50,51</i>	109,4 <i>53,05</i>	108,3 <i>54,27</i>	107,2 <i>55,48</i>	106,0 <i>56,64</i>	104,9 <i>57,76</i>	102,5 <i>59,94</i>	99,9 <i>62,26</i>	96,3 <i>65,43</i>	
<b>65-315AN</b> No CAT, CAX, CATX	90	280M	138,2 <i>26,69</i>	138,8 <i>43,17</i>	138,5 <i>45,02</i>	138,1 <i>46,88</i>	137,6 <i>48,78</i>	137,0 <i>50,67</i>	136,4 <i>52,51</i>	135,0 <i>56,09</i>	133,5 <i>59,51</i>	131,7 <i>62,82</i>	129,5 <i>66,08</i>	128,3 <i>67,67</i>	127,0 <i>69,20</i>	125,8 <i>70,68</i>	124,5 <i>72,10</i>	121,8 <i>74,81</i>	118,8 <i>77,32</i>	110,4 <i>80,16</i> <i>83,11</i>	

TYPE - 50 Hz	P2	Motor Size	Q (m³/h - l/min)																	
			0	66	72	78	84	96	108	120	132	138	144	156	168	180	195	210	225	240
			0	1100	1200	1300	1400	1600	1800	2000	2200	2300	2400	2600	2800	3000	3250	3500	3750	4000
		kW	H (m) pump input power (kW)																	
<b>80-160E</b>	11	160M	21,5 <i>3,48</i>	22,9 <i>6,43</i>	22,5 <i>6,65</i>	22,1 <i>6,86</i>	21,6 <i>7,07</i>	20,8 <i>7,45</i>	19,9 <i>7,76</i>	18,9 <i>8,05</i>	17,7 <i>8,38</i>	17,2 <i>8,52</i>	16,6 <i>8,65</i>	15,3 <i>8,84</i>	13,7 <i>8,88</i>					
<b>80-160D</b>	11	160M	25,4 <i>4,16</i>	27,3 <i>7,74</i>	27,0 <i>8,01</i>	26,6 <i>8,27</i>	26,3 <i>8,53</i>	25,4 <i>9,03</i>	24,5 <i>9,46</i>	23,5 <i>9,79</i>	22,4 <i>10,14</i>	21,8 <i>10,32</i>	21,2 <i>10,49</i>	19,9 <i>10,76</i>	18,3 <i>10,95</i>	16,4 <i>11,07</i>				
<b>80-160C</b>	15	160M	29,0 <i>4,74</i>	30,9 <i>8,66</i>	30,7 <i>8,98</i>	30,4 <i>9,29</i>	30,1 <i>9,59</i>	29,4 <i>10,22</i>	28,5 <i>10,85</i>	27,4 <i>11,38</i>	26,3 <i>11,85</i>	25,8 <i>12,06</i>	25,3 <i>12,25</i>	24,1 <i>12,59</i>	22,5 <i>12,85</i>	20,7 <i>13,05</i>	18,4 <i>13,21</i>			
<b>80-160B</b>	18,5	160L	33,6 <i>6,28</i>	35,9 <i>10,61</i>	35,7 <i>10,94</i>	35,4 <i>11,25</i>	35,2 <i>11,57</i>	34,5 <i>12,25</i>	33,7 <i>12,99</i>	32,9 <i>13,69</i>	32,0 <i>14,33</i>	31,6 <i>14,62</i>	31,1 <i>14,90</i>	30,0 <i>15,38</i>	28,6 <i>15,75</i>	27,0 <i>16,04</i>	24,5 <i>16,35</i>	22,0 <i>16,57</i>		
<b>80-160A</b>	22,5	180M	38,0 <i>6,82</i>	40,5 <i>12,04</i>	40,4 <i>12,50</i>	40,2 <i>12,96</i>	40,1 <i>13,42</i>	39,6 <i>14,34</i>	39,1 <i>15,23</i>	38,4 <i>16,05</i>	37,5 <i>16,81</i>	37,1 <i>17,19</i>	36,6 <i>17,57</i>	35,4 <i>18,29</i>	34,1 <i>18,86</i>	32,6 <i>19,34</i>	30,4 <i>19,84</i>	28,3 <i>20,38</i>	23,9 <i>20,28</i>	
<b>80-200B</b>	30	200L	50,4 <i>8,89</i>				54,5 <i>18,00</i>	53,9 <i>19,22</i>	53,2 <i>20,56</i>	52,3 <i>22,05</i>	51,3 <i>23,32</i>	50,7 <i>24,21</i>	50,2 <i>25,06</i>	48,9 <i>26,03</i>	47,4 <i>26,97</i>	45,8 <i>27,97</i>	43,4 <i>29,27</i>	40,9 <i>28,81</i>	38,5 <i>29,48</i>	
<b>80-200A</b>	37	200L	57,3 <i>10,32</i>				61,7 <i>21,15</i>	61,3 <i>22,80</i>	60,6 <i>24,43</i>	59,4 <i>26,13</i>	58,2 <i>27,62</i>	57,8 <i>28,17</i>	57,5 <i>28,57</i>	56,8 <i>29,28</i>	55,4 <i>30,39</i>	53,7 <i>31,67</i>	51,5 <i>32,98</i>	49,1 <i>34,05</i>	46,6 <i>34,94</i>	43,9 <i>35,68</i>
<b>80-250B</b>	45	225M	77,2 <i>14,01</i>					80,0 <i>30,93</i>	79,0 <i>32,60</i>	77,5 <i>34,34</i>	75,3 <i>36,13</i>	74,2 <i>37,02</i>	73,1 <i>37,86</i>	71,0 <i>39,38</i>	69,0 <i>40,78</i>	67,0 <i>42,10</i>	64,5 <i>43,60</i>	61,8 <i>44,94</i>	58,8 <i>46,15</i>	
<b>80-250A</b>	55	250M	90,0 <i>16,74</i>					92,8 <i>36,56</i>	91,8 <i>38,57</i>	89,3 <i>40,54</i>	87,4 <i>42,46</i>	85,4 <i>43,39</i>	83,1 <i>44,31</i>	80,7 <i>46,12</i>	78,5 <i>47,81</i>	75,7 <i>49,29</i>	72,4 <i>50,92</i>	68,8 <i>52,59</i>	65,2 <i>54,18</i> <i>55,50</i>	

TYPE - 50 Hz	P2	Motor Size	Q (m³/h - l/min)																
			0	78	84	96	108	120	132	138	144	156	168	180	195	210	225	240	255
			0	1300	1400	1600	1800	2000	2200	2300	2400	2600	2800	3000	3250	3500	3750	4000	4250
		kW	H (m) pump input power (kW)																
<b>80-315BN</b> No CAT, CAX, CATX	90	280M	108,0 <i>21,85</i>	112,4 <i>42,35</i>	112,4 <i>44,06</i>	112,2 <i>47,49</i>	111,7 <i>50,86</i>	111,1 <i>54,13</i>	110,2 <i>57,25</i>	109,7 <i>58,76</i>	109,1 <i>60,24</i>	107,9 <i>63,14</i>	106,4 <i>65,95</i>	104,9 <i>68,72</i>	102,7 <i>72,14</i>	100,4 <i>75,60</i>	98,3 <i>78,97</i>	95,7 <i>82,15</i>	90,8 <i>85,17</i>
<b>80-315AN</b> No CAT, CAX, CATX	110	315S	140,5 <i>31,92</i>	141,4 <i>55,48</i>	141,1 <i>57,36</i>	140,2 <i>61,13</i>	139,2 <i>64,91</i>	138,1 <i>68,78</i>	136,9 <i>72,88</i>	136,2 <i>74,96</i>	135,5 <i>76,96</i>	134,1 <i>80,84</i>	132,5 <i>84,36</i>	131,0 <i>87,02</i>	128,7 <i>90,23</i>	125,8 <i>94,76</i>	122,5 <i>99,35</i>	121,7 <i>103,04</i>	118,5 <i>106,15</i>

TYPE - 50 Hz	P2	Motor Size	Q (m³/h - l/min)																	
			0	108	120	132	138	144	156	168	180	195	210	225	240	255	270	300	330	360
			0	1800	2000	2200	2300	2400	2600	2800	3000	3250	3500	3750	4000	4250	4500	5000	5500	6000
		kW	H (m) pump input power (kW)																	
<b>100-200D</b>	30	200L	44,1 <i>17,69</i>	43,3 <i>21,82</i>	42,9 <i>22,56</i>	42,3 <i>23,28</i>	42,0 <i>23,62</i>	41,6 <i>23,94</i>	40,8 <i>24,53</i>	39,9 <i>25,08</i>	39,0 <i>25,65</i>	37,9 <i>26,39</i>	36,8 <i>27,08</i>	35,4 <i>27,68</i>	33,8 <i>28,21</i>	32,3 <i>28,71</i>	30,6 <i>29,16</i>	26,3 <i>29,70</i>		
<b>100-200C</b>	37	200L	48,5 <i>19,89</i>	48,4 <i>24,72</i>	48,0 <i>25,53</i>	47,6 <i>26,31</i>	47,3 <i>26,70</i>	47,0 <i>27,09</i>	46,3 <i>27,87</i>	45,4 <i>28,66</i>	44,6 <i>29,43</i>	43,6 <i>30,38</i>	42,5 <i>31,30</i>	41,2 <i>32,12</i>	39,5 <i>32,85</i>	37,8 <i>33,51</i>	36,2 <i>34,11</i>	32,7 <i>35,06</i>	28,1 <i>35,64</i>	
<b>100-200B</b>	45	225M	56,1 <i>21,75</i>	56,8 <i>28,84</i>	56,5 <i>29,78</i>	56,1 <i>30,74</i>	55,9 <i>31,24</i>	55,6 <i>31,75</i>	55,1 <i>32,81</i>	54,5 <i>33,89</i>	53,9 <i>35,04</i>	53,1 <i>36,50</i>	52,2 <i>37,82</i>	51,4 <i>38,89</i>	50,4 <i>39,85</i>	49,0 <i>40,77</i>	47,5 <i>41,60</i>	43,8 <i>42,92</i>	39,7 <i>43,82</i>	
<b>100-200A</b>	55	250M	61,1 <i>24,57</i>	62,2 <i>33,04</i>	61,8 <i>34,07</i>	61,5 <i>35,11</i>	61,2 <i>35,64</i>	61,0 <i>36,18</i>	60,5 <i>37,28</i>	59,9 <i>38,39</i>	59,5 <i>39,49</i>	58,9 <i>40,86</i>	58,3 <i>42,23</i>	57,4 <i>43,60</i>	56,4 <i>44,97</i>	55,2 <i>46,20</i>	53,8 <i>47,28</i>	50,6 <i>49,05</i>	46,8 <i>50,53</i> <i>51,62</i>	
<b>100-250C</b>	75	280S	71,9 <i>24,75</i>		73,2 <i>40,12</i>	73,1 <i>41,93</i>	73,0 <i>42,84</i>	72,9 <i>43,70</i>	72,6 <i>45,28</i>	72,2 <i>46,77</i>	71,8 <i>48,21</i>	71,1 <i>49,94</i>	70,3 <i>51,65</i>	69,3 <i>53,38</i>	67,9 <i>55,05</i>	66,4 <i>56,66</i>	64,7 <i>58,19</i>	61,0 <i>60,99</i>		
<b>100-250B</b>	75	280S	83,6 <i>29,69</i>		83,7 <i>47,10</i>	83,5 <i>49,06</i>	83,4 <i>50,04</i>	83,2 <i>51,01</i>	82,9 <i>52,92</i>	82,5 <i>54,76</i>	82,1 <i>56,47</i>	81,4 <i>58,46</i>	80,8 <i>60,26</i>	80,0 <i>61,86</i>	79,0 <i>63,49</i>	77,9 <i>65,17</i>	76,4 <i>66,93</i>	72,0 <i>70,91</i>	67,6 <i>73,78</i>	
<b>100-250A</b>	90	280M	93,5 <i>32,71</i>		93,9 <i>51,99</i>	93,7 <i>54,14</i>	93,5 <i>55,23</i>	93,4 <i>56,31</i>	92,9 <i>58,48</i>	92,4 <i>60,60</i>	91,8 <i>62,57</i>	90,9 <i>64,88</i>	89,9 <i>66,97</i>	88,8 <i>68,84</i>	87,4 <i>70,81</i>	85,7 <i>72,81</i>	84,0 <i>74,73</i>	75,8 <i>78,17</i>	73,2 <i>81,33</i> <i>85,53</i>	



# 4MA-4MAX

## Centrifugal Flanged EN 733

TYPE - 50 Hz	P2	Motor Size	Q (m³/h - l/min)														
			0	1,5	3	4,5	6	7,5	9	10,5	12	15	18	21			
	kW	0	25	50	75	100	125	150	175	200	250	300	350				
			H (m)														
			pump input power (kW)														
32-160C	0,37	71B	5,9	5,9	5,8	5,5	5,3	4,8	4,3	3,5	2,6						
			<i>0,15</i>	<i>0,18</i>	<i>0,20</i>	<i>0,22</i>	<i>0,24</i>	<i>0,26</i>	<i>0,28</i>	<i>0,28</i>	<i>0,29</i>						
32-160B	0,37	71B	7,2	7,2	7,1	6,7	6,4	5,9	5,3	4,6	3,6						
			<i>0,18</i>	<i>0,21</i>	<i>0,24</i>	<i>0,27</i>	<i>0,29</i>	<i>0,31</i>	<i>0,33</i>	<i>0,34</i>	<i>0,36</i>						
32-160A	0,55	80A	8,8	8,8	8,7	8,5	8,2	7,9	7,4	6,9	6,1	4,0					
			<i>0,22</i>	<i>0,26</i>	<i>0,29</i>	<i>0,31</i>	<i>0,35</i>	<i>0,37</i>	<i>0,39</i>	<i>0,41</i>	<i>0,43</i>	<i>0,45</i>					
32-200C	0,75	80B	11,0		10,8	10,6	10,2	9,9	9,4	8,9	8,4	6,7	4,2				
			<i>0,26</i>		<i>0,39</i>	<i>0,43</i>	<i>0,47</i>	<i>0,51</i>	<i>0,54</i>	<i>0,57</i>	<i>0,59</i>	<i>0,66</i>	<i>0,71</i>				
32-200B	1,1	90S	13,0		12,7	12,5	12,2	11,7	11,2	10,6	10,1	8,7	6,3				
			<i>0,38</i>		<i>0,47</i>	<i>0,51</i>	<i>0,56</i>	<i>0,61</i>	<i>0,66</i>	<i>0,70</i>	<i>0,74</i>	<i>0,78</i>	<i>0,81</i>				
32-200A	1,1	90S	15,9		15,7	15,5	15,3	15,0	14,5	13,8	13,2	11,7	9,5	6,8			
			<i>0,44</i>		<i>0,53</i>	<i>0,57</i>	<i>0,66</i>	<i>0,71</i>	<i>0,77</i>	<i>0,82</i>	<i>0,88</i>	<i>0,98</i>	<i>1,04</i>	<i>1,10</i>			
32-250C	1,5	90L	17,5		17,2	16,9	16,6	16,2	15,7	15,1	14,4	12,5	10,0	6,5			
			<i>0,55</i>		<i>0,75</i>	<i>0,79</i>	<i>0,85</i>	<i>0,90</i>	<i>0,95</i>	<i>1,00</i>	<i>1,04</i>	<i>1,09</i>	<i>1,18</i>	<i>1,21</i>			
32-250B	1,5	90L	20,3		20,0	19,7	19,4	19,0	18,4	17,8	17,0	15,3	12,6	8,3			
			<i>0,75</i>		<i>0,87</i>	<i>0,93</i>	<i>1,00</i>	<i>1,06</i>	<i>1,14</i>	<i>1,19</i>	<i>1,24</i>	<i>1,33</i>	<i>1,39</i>	<i>1,42</i>			
32-250A	2,2	100L	22,6		22,2	21,9	21,6	21,3	20,7	20,0	18,9	17,2	14,8	9,1			
			<i>0,80</i>		<i>0,95</i>	<i>1,03</i>	<i>1,10</i>	<i>1,18</i>	<i>1,24</i>	<i>1,30</i>	<i>1,36</i>	<i>1,46</i>	<i>1,52</i>	<i>1,55</i>			

TYPE - 50 Hz	P2	Motor Size	Q (m³/h - l/min)															
			0	4,5	6	7,5	9	10,5	12	15	18	21	24	27	30	33		
	kW	0	75	100	125	150	175	200	250	300	350	400	450	500	550			
			H (m)															
			pump input power (kW)															
40-125C	0,37	71B	4,2	4,4	4,3	4,2	4,1	4,0	3,8	3,4	2,8	2,0						
			<i>0,15</i>	<i>0,18</i>	<i>0,19</i>	<i>0,21</i>	<i>0,23</i>	<i>0,23</i>	<i>0,25</i>	<i>0,26</i>	<i>0,27</i>	<i>0,29</i>						
40-125B	0,37	71B	5,4	5,5	5,5	5,4	5,3	5,2	5,0	4,6	4,0	3,3						
			<i>0,19</i>	<i>0,22</i>	<i>0,25</i>	<i>0,26</i>	<i>0,28</i>	<i>0,29</i>	<i>0,31</i>	<i>0,34</i>	<i>0,35</i>	<i>0,37</i>						
40-125A	0,55	80A	6,2	6,3	6,3	6,2	6,1	6,0	5,8	5,4	4,9	4,2	3,4					
			<i>0,23</i>	<i>0,28</i>	<i>0,30</i>	<i>0,32</i>	<i>0,34</i>	<i>0,36</i>	<i>0,38</i>	<i>0,40</i>	<i>0,43</i>	<i>0,44</i>	<i>0,46</i>					
40-160B	0,55	80A	7,4	7,5	7,6	7,4	7,2	7,0	6,8	6,1	4,9	3,7	2,5					
			<i>0,21</i>	<i>0,29</i>	<i>0,34</i>	<i>0,37</i>	<i>0,40</i>	<i>0,42</i>	<i>0,43</i>	<i>0,45</i>	<i>0,47</i>	<i>0,48</i>	<i>0,47</i>					
40-160A	0,75	80B	8,8	8,9	9,0	8,9	8,7	8,5	8,3	7,5	6,6	5,6	4,5					
			<i>0,23</i>	<i>0,34</i>	<i>0,38</i>	<i>0,41</i>	<i>0,45</i>	<i>0,47</i>	<i>0,49</i>	<i>0,53</i>	<i>0,57</i>	<i>0,59</i>	<i>0,60</i>					
40-160AP	0,75	80B	11,1	11,1	11,3	11,3	11,1	10,9	10,6	10,0	9,0	8,0	6,8					
	1,1	90S	<i>0,32</i>	<i>0,47</i>	<i>0,52</i>	<i>0,56</i>	<i>0,60</i>	<i>0,64</i>	<i>0,67</i>	<i>0,72</i>	<i>0,77</i>	<i>0,81</i>	<i>0,84</i>					
40-200B	1,1	90S	11,3		11,4	11,3	11,1	10,8	10,5	9,6	8,5	6,9	4,7					
			<i>0,36</i>		<i>0,52</i>	<i>0,56</i>	<i>0,60</i>	<i>0,64</i>	<i>0,68</i>	<i>0,75</i>	<i>0,78</i>	<i>0,81</i>	<i>0,84</i>					
40-200A	1,1	90S	13,8		13,9	13,8	13,6	13,4	13,2	12,3	11,3	10,0	8,3					
			<i>0,37</i>		<i>0,64</i>	<i>0,72</i>	<i>0,74</i>	<i>0,79</i>	<i>0,82</i>	<i>0,91</i>	<i>0,99</i>	<i>1,06</i>	<i>1,13</i>					
40-200AP	1,1	90S	14,8		14,9	14,8	14,6	14,4	14,2	13,3	12,3	11,0	9,4					
	1,5	90L	<i>0,41</i>		<i>0,69</i>	<i>0,79</i>	<i>0,81</i>	<i>0,86</i>	<i>0,90</i>	<i>0,99</i>	<i>1,08</i>	<i>1,16</i>	<i>1,23</i>					
40-250C	1,5	90L	15,7				15,2	15,0	14,7	14,0	12,8	11,1	9,1	6,6				
			<i>0,61</i>				<i>0,93</i>	<i>0,98</i>	<i>1,04</i>	<i>1,14</i>	<i>1,22</i>	<i>1,32</i>	<i>1,38</i>	<i>1,45</i>				
40-250B	2,2	100L	18,3				18,2	17,9	17,7	17,1	16,2	14,9	12,9	10,7	8,3			
			<i>0,73</i>				<i>1,13</i>	<i>1,19</i>	<i>1,24</i>	<i>1,39</i>	<i>1,51</i>	<i>1,62</i>	<i>1,73</i>	<i>1,82</i>	<i>1,89</i>			
40-250A	2,2	100L	20,9				20,8	20,6	20,4	19,8	19,0	17,9	16,3	14,1	11,5	8,4		
			<i>0,89</i>				<i>1,32</i>	<i>1,40</i>	<i>1,47</i>	<i>1,62</i>	<i>1,75</i>	<i>1,88</i>	<i>2,00</i>	<i>2,10</i>	<i>2,21</i>	<i>2,31</i>		

TYPE - 50 Hz	P2	Motor Size	Q (m³/h - l/min)																
			0	9	10,5	12	15	18	21	24	27	30	33	36	39	42	45	48	54
	kW	0	150	175	200	250	300	350	400	450	500	550	600	650	700	750	800	900	
			H (m)																
			pump input power (kW)																
50-125B	0,55	80A	5,3	5,5	5,5	5,4	5,3	5,1	4,9	4,7	4,4	4,1	3,6	3,1	2,6	2,1			
			<i>0,15</i>	<i>0,23</i>	<i>0,25</i>	<i>0,28</i>	<i>0,32</i>	<i>0,38</i>	<i>0,40</i>	<i>0,44</i>	<i>0,45</i>	<i>0,46</i>	<i>0,47</i>	<i>0,47</i>	<i>0,48</i>	<i>0,49</i>			
50-125A	0,75	80B	6,2	6,4	6,4	6,3	6,3	6,1	6,0	5,8	5,5	5,2	4,8	4,4	3,9	3,4	2,9		
			<i>0,23</i>	<i>0,38</i>	<i>0,39</i>	<i>0,41</i>	<i>0,44</i>	<i>0,48</i>	<i>0,51</i>	<i>0,55</i>	<i>0,59</i>	<i>0,62</i>	<i>0,63</i>	<i>0,64</i>	<i>0,64</i>	<i>0,64</i>	<i>0,63</i>		
50-160B	0,75	80B	7,9	8,0	7,9	7,8	7,7	7,3	6,9	6,4	5,9	5,3	4,7	4,0	3,2	2,3			
			<i>0,23</i>	<i>0,43</i>	<i>0,45</i>	<i>0,47</i>	<i>0,51</i>	<i>0,56</i>	<i>0,60</i>	<i>0,63</i>	<i>0,65</i>	<i>0,66</i>	<i>0,67</i>	<i>0,68</i>	<i>0,68</i>	<i>0,67</i>			
50-160A	1,1	90S	9,4	9,4	9,4	9,3	9,2	9,0	8,7	8,3	7,8	7,2	6,7	6,0	5,4	4,7	3,9	3,1	
			<i>0,34</i>	<i>0,55</i>	<i>0,57</i>	<i>0,59</i>	<i>0,65</i>	<i>0,72</i>	<i>0,77</i>	<i>0,80</i>	<i>0,82</i>	<i>0,84</i>	<i>0,86</i>	<i>0,87</i>	<i>0,88</i>	<i>0,88</i>	<i>0,89</i>	<i>0,88</i>	
50-200C	1,1	90S	12,0	12,0	11,8	11,7	11,2	10,7	10,0	9,3	8,2	7,2	6,0	4,6	3,2				
			<i>0,39</i>	<i>0,63</i>	<i>0,68</i>	<i>0,72</i>	<i>0,79</i>	<i>0,83</i>	<i>0,86</i>	<i>0,89</i>	<i>0,91</i>	<i>0,93</i>	<i>0,94</i>	<i>0,94</i>	<i>0,95</i>				
50-200B	1,5	90L	13,1		13,1	13,1	12,7	12,2	11,6	10,9	10,0	9,2	8,2	7,0	5,7	4,2			
			<i>0,48</i>		<i>0,77</i>	<i>0,83</i>	<i>0,92</i>	<i>1,02</i>	<i>1,09</i>	<i>1,14</i>	<i>1,18</i>	<i>1,22</i>	<i>1,24</i>	<i>1,27</i>	<i>1,27</i>	<i>1,27</i>			
50-200A	1,5	90L	14,8		14,7	14,5	14,4	13,9	13,4	12,7	11,9	11,0	10,0	8,9	7,6	6,3	4,6		
			<i>0,54</i>		<i>0,87</i>	<i>0,92</i>	<i>1,03</i>	<i>1,14</i>	<i>1,22</i>	<i>1,28</i>	<i>1,32</i>	<i>1,36</i>	<i>1,40</i>	<i>1,43</i>	<i>1,45</i>	<i>1,47</i>	<i>1,48</i>		
50-250C	2,2	100L	17,9			17,7	17,4	16,9	16,4	15,8	14,9	14,2	13,4	12,4	11,0	9,5	7,5		
			<i>0,58</i>			<i>1,24</i>	<i>1,32</i>	<i>1,47</i>	<i>1,59</i>	<i>1,71</i>	<i>1,80</i>	<i>1,89</i>	<i>1,97</i>	<i>2,04</i>	<i>2,10</i>	<i>2,16</i>	<i>2,22</i>		
50-250B	3	100L	19,9			20,0	19,6	19,1	18,8	18,2	17,5	16,7	15,7	14,6	13,6	12,0	10,4	8,2	
			<i>0,79</i>			<i>1,43</i>	<i>1,58</i>	<i>1,72</i>	<i>1,85</i>	<i>1,97</i>	<i>2,07</i>	<i>2,19</i>	<i>2,28</i>	<i>2,37</i>	<i>2,45</i>	<i>2,52</i>	<i>2,58</i>	<i>2,64</i>	
50-250A	4	112M	23,0			22,9	22,7	22,5	22,2	21,8	21,1	20,4	19,5	18,7	17,7	16,6	15,2	13,4	8,4
			<i>0,90</i>			<i>1,62</i>	<i>1,84</i>	<i>2,07</i>	<i>2,21</i>	<i>2,42</i>	<i>2,60</i>	<i>2,78</i>	<i>2,95</i>	<i>3,12</i>	<i>3,28</i>	<i>3,43</i>	<i>3,53</i>	<i>3,62</i>	<i>3,74</i>



TYPE - 50 Hz	P2	Motor Size	Q (m³/h - l/min)																			
			0	18	21	24	27	30	33	36	39	42	45	48	54	60	66	72	78	84	90	96
			0	300	350	400	450	500	550	600	650	700	750	800	900	1000	1100	1200	1300	1400	1500	1600
			H (m)																			
			pump input power (kW)																			
50-315C No EN 733	5,5	132M	24,4 <i>1,64</i>	24,7 <i>2,58</i>	24,7 <i>2,77</i>	24,6 <i>2,96</i>	24,5 <i>3,15</i>	24,3 <i>3,33</i>	24,0 <i>3,50</i>	23,7 <i>3,66</i>	23,4 <i>3,82</i>	23,1 <i>3,96</i>	22,8 <i>4,11</i>	22,5 <i>4,24</i>	21,9 <i>4,51</i>	21,1 <i>4,77</i>	20,2 <i>5,01</i>	19,2 <i>5,23</i>	18,1 <i>5,43</i>	16,8 <i>5,62</i>		
50-315B No EN 733	7,5	132M	31,3 <i>2,35</i>	31,4 <i>3,54</i>	31,4 <i>3,78</i>	31,3 <i>4,01</i>	31,3 <i>4,24</i>	31,2 <i>4,47</i>	30,9 <i>4,68</i>	30,6 <i>4,89</i>	30,3 <i>5,08</i>	29,9 <i>5,27</i>	29,5 <i>5,46</i>	29,1 <i>5,64</i>	28,2 <i>5,99</i>	27,3 <i>6,32</i>	26,5 <i>6,61</i>	25,5 <i>6,89</i>	24,4 <i>7,14</i>	23,1 <i>7,37</i>	21,6 <i>7,58</i>	
50-315A No EN 733	11	160M	37,5 <i>3,06</i>	37,2 <i>4,39</i>	37,2 <i>4,65</i>	37,1 <i>4,92</i>	37,0 <i>5,18</i>	36,9 <i>5,45</i>	36,7 <i>5,72</i>	36,5 <i>5,97</i>	36,3 <i>6,22</i>	36,0 <i>6,45</i>	35,6 <i>6,68</i>	35,2 <i>6,90</i>	34,3 <i>7,31</i>	33,3 <i>7,69</i>	32,1 <i>8,04</i>	30,9 <i>8,37</i>	29,7 <i>8,69</i>	28,4 <i>8,96</i>	26,9 <i>9,18</i>	25,1 <i>9,37</i>

TYPE - 50 Hz	P2	Motor Size	Q (m³/h - l/min)																			
			0	18	21	24	27	30	33	36	39	42	45	48	54	60	66	72	78	84	90	
			0	300	350	400	450	500	550	600	650	700	750	800	900	1000	1100	1200	1300	1400	1500	
			H (m)																			
			pump input power (kW)																			
65-125B	0,75	80M	4,9 <i>0,31</i>	5,1 <i>0,48</i>	5,1 <i>0,50</i>	5,0 <i>0,53</i>	5,0 <i>0,55</i>	4,9 <i>0,57</i>	4,7 <i>0,60</i>	4,6 <i>0,63</i>	4,5 <i>0,64</i>	4,3 <i>0,66</i>	4,0 <i>0,67</i>	3,8 <i>0,68</i>	3,3 <i>0,69</i>	2,8 <i>0,68</i>						
65-125A	1,1	90S	6,1 <i>0,40</i>	6,3 <i>0,60</i>	6,2 <i>0,63</i>	6,1 <i>0,66</i>	6,1 <i>0,69</i>	6,0 <i>0,73</i>	5,9 <i>0,76</i>	5,8 <i>0,79</i>	5,7 <i>0,80</i>	5,5 <i>0,82</i>	5,3 <i>0,83</i>	5,0 <i>0,85</i>	4,7 <i>0,87</i>	4,3 <i>0,88</i>	3,7 <i>0,88</i>	3,0 <i>0,88</i>				
65-160C	1,5	90L	7,3 <i>0,44</i>			7,6 <i>0,80</i>	7,5 <i>0,85</i>	7,3 <i>0,89</i>	7,2 <i>0,93</i>	7,0 <i>0,96</i>	6,8 <i>0,99</i>	6,7 <i>1,01</i>	6,4 <i>1,02</i>	6,2 <i>1,04</i>	5,7 <i>1,07</i>	5,1 <i>1,12</i>	4,4 <i>1,13</i>	3,6 <i>1,13</i>	2,9 <i>1,13</i>			
65-160B	1,5	90L	8,4 <i>0,47</i>			8,6 <i>0,86</i>	8,4 <i>0,90</i>	8,3 <i>0,95</i>	8,2 <i>1,01</i>	8,0 <i>1,06</i>	7,8 <i>1,11</i>	7,6 <i>1,14</i>	7,4 <i>1,17</i>	7,2 <i>1,19</i>	6,5 <i>1,25</i>	5,9 <i>1,28</i>	5,2 <i>1,31</i>	4,4 <i>1,33</i>	3,6 <i>1,34</i>			
65-160A	2,2	100L	9,8 <i>0,66</i>			9,9 <i>1,06</i>	9,9 <i>1,14</i>	9,8 <i>1,20</i>	9,6 <i>1,25</i>	9,5 <i>1,30</i>	9,3 <i>1,34</i>	9,1 <i>1,39</i>	8,9 <i>1,42</i>	8,7 <i>1,46</i>	8,2 <i>1,52</i>	7,6 <i>1,58</i>	6,8 <i>1,63</i>	6,1 <i>1,67</i>	5,3 <i>1,72</i>	4,6 <i>1,72</i>		
65-200C	2,2	100L	11,0 <i>0,48</i>			11,6 <i>1,26</i>	11,5 <i>1,35</i>	11,4 <i>1,44</i>	11,3 <i>1,53</i>	11,2 <i>1,60</i>	10,9 <i>1,66</i>	10,9 <i>1,72</i>	10,5 <i>1,79</i>	10,3 <i>1,90</i>	9,7 <i>1,96</i>	9,1 <i>2,01</i>	8,3 <i>2,06</i>	7,4 <i>2,11</i>	6,5 <i>2,11</i>	5,0 <i>2,14</i>		
65-200B	3	100L	12,3 <i>0,69</i>			13,1 <i>1,45</i>	13,0 <i>1,51</i>	12,8 <i>1,61</i>	12,7 <i>1,70</i>	12,5 <i>1,77</i>	12,3 <i>1,88</i>	12,1 <i>1,95</i>	11,9 <i>2,01</i>	11,3 <i>2,11</i>	10,6 <i>2,21</i>	10,0 <i>2,29</i>	9,0 <i>2,36</i>	8,0 <i>2,42</i>	7,0 <i>2,48</i>			
65-200A	3	100L	14,0 <i>1,12</i>			14,8 <i>1,74</i>	14,7 <i>1,82</i>	14,6 <i>1,92</i>	14,5 <i>2,02</i>	14,2 <i>2,10</i>	14,0 <i>2,18</i>	13,9 <i>2,26</i>	13,7 <i>2,34</i>	13,3 <i>2,48</i>	12,7 <i>2,59</i>	12,0 <i>2,70</i>	11,3 <i>2,81</i>	10,3 <i>2,91</i>	9,3 <i>3,00</i>			
65-250B	4	112M	20,6			21,0	20,8	20,4	20,1	19,8	19,3	18,8	18,4	17,3	16,0	14,5	12,9	11,2	8,7			
	5,5	132S	14,2 <i>1,58</i>			2,87	2,98	3,18	3,38	3,50	3,61	3,70	3,78	3,87	3,97	4,07	4,17	4,19	4,21			
65-250A	5,5	132S	22,8 <i>1,58</i>				22,9 <i>3,41</i>	22,5 <i>3,56</i>	22,1 <i>3,70</i>	21,7 <i>3,79</i>	21,4 <i>3,88</i>	20,9 <i>4,00</i>	20,4 <i>4,11</i>	19,2 <i>4,31</i>	17,6 <i>4,44</i>	16,9 <i>4,58</i>	15,4 <i>4,71</i>	13,6 <i>4,75</i>	11,5 <i>4,79</i>	8,8 <i>4,80</i>		

TYPE - 50 Hz	P2	Motor Size	Q (m³/h - l/min)																							
			0	27	30	33	36	39	42	45	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132	138
			0	450	500	550	600	650	700	750	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
			H (m)																							
			pump input power (kW)																							
65-315CM	7,5	132M	23,0 <i>2,05</i>	23,5 <i>3,38</i>	23,5 <i>3,55</i>	23,4 <i>3,70</i>	23,3 <i>3,86</i>	23,2 <i>4,01</i>	23,1 <i>4,16</i>	22,9 <i>4,32</i>	22,7 <i>4,47</i>	22,3 <i>4,77</i>	21,9 <i>5,05</i>	21,5 <i>5,33</i>	21,0 <i>5,59</i>	20,5 <i>5,84</i>	20,0 <i>6,08</i>	19,3 <i>6,32</i>	18,5 <i>6,56</i>	17,7 <i>6,77</i>	16,9 <i>6,97</i>	16,0 <i>7,16</i>	15,0 <i>7,35</i>	13,9 <i>7,52</i>		
65-315BM	11	160M	28,9 <i>2,72</i>	28,9 <i>4,33</i>	28,9 <i>4,52</i>	28,8 <i>4,70</i>	28,7 <i>4,89</i>	28,6 <i>5,07</i>	28,4 <i>5,24</i>	28,2 <i>5,42</i>	28,0 <i>5,61</i>	27,5 <i>5,98</i>	27,0 <i>6,33</i>	26,5 <i>6,65</i>	25,9 <i>6,95</i>	25,3 <i>7,24</i>	24,7 <i>7,53</i>	24,0 <i>7,80</i>	23,3 <i>8,06</i>	22,5 <i>8,30</i>	21,6 <i>8,52</i>	20,6 <i>8,72</i>	19,6 <i>8,91</i>	18,4 <i>9,10</i>	17,2 <i>9,29</i>	
65-315AM	11	160M	34,5 <i>3,44</i>	34,0 <i>5,43</i>	33,9 <i>5,66</i>	33,7 <i>5,88</i>	33,5 <i>6,10</i>	33,3 <i>6,32</i>	33,1 <i>6,54</i>	32,9 <i>6,75</i>	32,6 <i>6,96</i>	32,2 <i>7,35</i>	31,6 <i>7,73</i>	31,0 <i>8,10</i>	30,4 <i>8,45</i>	29,6 <i>8,78</i>	28,9 <i>9,08</i>	28,1 <i>9,35</i>	27,2 <i>9,61</i>	26,2 <i>9,84</i>	25,1 <i>10,05</i>	23,8 <i>10,24</i>	22,5 <i>10,40</i>	21,1 <i>10,55</i>	19,6 <i>10,68</i>	18,2 <i>10,78</i>

TYPE - 50 Hz	P2	Motor Size	Q (m³/h - l/min)																					
			0	24	27	30	33	36	42	48	60	72	84	96	102	108	120	132	144					
			0	400	450	500	550	600	700	800	1000	1200	1400	1600	1700	1800	2000	2200	2400					
			H (m)																					
			pump input power (kW)																					
80-160E	1,1	90S	5,5 <i>0,35</i>	5,7 <i>0,71</i>	5,7 <i>0,74</i>	5,7 <i>0,74</i>	5,6 <i>0,78</i>	5,4 <i>0,81</i>	5,1 <i>0,88</i>	4,9 <i>0,90</i>	4,2 <i>0,97</i>	3,8 <i>1,02</i>	2,8 <i>1,02</i>	2,2 <i>1,00</i>										
80-160D	1,5	90L	6,3 <i>0,61</i>		6,8 <i>0,89</i>	6,7 <i>0,91</i>	6,6 <i>0,95</i>	6,5 <i>0,98</i>	6,3 <i>1,04</i>	6,1 <i>1,10</i>	5,5 <i>1,19</i>	4,8 <i>1,25</i>	4 <i>1,28</i>	3,1 <i>1,30</i>	2,6 <i>1,29</i>									
80-160C	1,5	90L	7,0 <i>0,67</i>			7,4 <i>1,04</i>	7,3 <i>1,08</i>	7,3 <i>1,12</i>	7,1 <i>1,18</i>	6,8 <i>1,25</i>	6,4 <i>1,35</i>	5,7 <i>1,42</i>	4,9 <i>1,47</i>	4 <i>1,48</i>	3,5 <i>1,48</i>	3,1 <i>1,48</i>								
80-160B	2,2	100L	8,5 <i>0,62</i>			8,9 <i>1,29</i>	8,9 <i>1,35</i>	8,7 <i>1,43</i>	8,5 <i>1,51</i>	8,0 <i>1,72</i>	7,5 <i>1,87</i>	6,8 <i>1,95</i>	5,7 <i>2,01</i>	5,2 <i>2,02</i>	4,7 <i>2,04</i>	3,5 <i>2,04</i>								
80-160A	3	100L	9,3 <i>1,09</i>				9,8 <i>1,60</i>	9,7 <i>1,71</i>	9,5 <i>1,81</i>	9,1 <i>2,01</i>	8,6 <i>2,14</i>	7,9 <i>2,27</i>	7,1 <i>2,34</i>	6,6 <i>2,37</i>	6,2 <i>2,39</i>	5,0 <i>2,42</i>	3,8 <i>2,43</i>							
80-200B	4	112M	12,3 <i>1,25</i>					13,1 <i>2,32</i>	13,0 <i>2,48</i>	12,6 <i>2,79</i>	12,1 <i>3,03</i>	11,4 <i>3,26</i>	10,5 <i>3,45</i>	10,1 <i>3,52</i>	9,6 <i>3,58</i>	8,4 <i>3,69</i>	7,1 <i>3,75</i>							
80-200A	5,5	132S	13,8 <i>1,40</i>					14,7 <i>2,64</i>	14,6 <i>2,81</i>	14,2 <i>3,14</i>	13,7 <i>3,43</i>	13,1 <i>3,66</i>	12,3 <i>3,87</i>	11,7 <i>3,99</i>	11,2 <i>4,09</i>	10,1 <i>4,21</i>	8,8 <i>4,30</i>	7,5 <i>4,35</i>						
80-250B	5,5	132S	18,9 <i>1,79</i>					19,2 <i>3,52</i>	19,0 <i>3,75</i>	18,1 <i>4,14</i>	17,0 <i>4,48</i>	15,9 <i>4,78</i>	14,8 <i>5,05</i>	14,2 <i>5,16</i>	13,6 <i>5,24</i>	12,4 <i>5,41</i>	11,1 <i>5,54</i>							
80-250A	7,5	132M	22,4 <i>2,22</i>					22,9 <i>4,28</i>	22,6 <i>4,56</i>	21,8 <i>5,05</i>	20,7 <i>5,46</i>	19,6 <i>5,85</i>	18,3 <i>6,21</i>	17,7 <i>6,37</i>	17,0 <i>6,52</i>	15,6 <i>6,77</i>	14,2 <i>6,96</i>	12,6 <i>7,10</i>						



# 4MA-4MAX ~ EN 733

TYPE - 50 Hz	P2	Motor Size	Q (m³/h - l/min)															
			0	42	48	60	72	84	96	102	108	120	132	144	150	156	168	
	kW	0	700	800	1000	1200	1400	1600	1700	1800	2000	2200	2400	2500	2600	2800		
			H (m) pump input power (kW)															
80-315B	11	160M	27,7 2,99	28,3 5,48	28,2 5,88	27,9 6,67	27,2 7,42	26,4 8,09	25,4 8,67	24,9 8,95	24,4 9,21	23,3 9,74	21,9 10,28	20,5 10,66	19,9 10,85			
80-315A	15	160L	34,5 4,29	35,0 7,30	34,9 7,78	34,6 8,75	34,0 9,66	33,3 10,53	32,4 11,37	31,9 11,77	31,3 12,17	30,1 12,91	28,8 13,50	27,3 14,05	26,4 14,31	25,5 14,56	23,7 15,04	

TYPE - 50 Hz	P2	Motor Size	Q (m³/h - l/min)																	
			0	48	60	72	84	96	102	108	120	132	144	150	156	168	180	192	204	
	kW	0	800	1000	1200	1400	1600	1700	1800	2000	2200	2400	2500	2600	2800	3000	3200	3400		
			H (m) pump input power (kW)																	
100-200D	4	112M	10,9 2,28	10,8 2,69	10,6 2,88	10,3 3,05	9,9 3,19	9,5 3,34	9,2 3,41	9,0 3,48	8,5 3,58	7,8 3,66	6,9 3,71	6,4 3,72	5,9 3,73	4,8 3,71				
100-200C	5,5	132S	12,0 2,46	12,0 2,99	11,8 3,20	11,5 3,40	11,2 3,57	10,8 3,76	10,6 3,85	10,3 3,94	9,8 4,06	9,1 4,17	8,3 4,26	7,8 4,28	7,4 4,30	6,3 4,33				
100-200B	5,5	132S	13,5 2,79	13,6 3,48	13,4 3,70	13,1 3,93	12,8 4,15	12,5 4,38	12,3 4,49	12,1 4,59	11,6 4,77	11,0 4,93	10,3 5,05	9,9 5,09	9,5 5,13	8,7 5,19	7,8 5,23			
100-200A	7,5	132M	15,2 3,12	15,4 3,96	15,3 4,22	15,0 4,48	14,8 4,74	14,5 5,03	14,4 5,17	14,2 5,31	13,8 5,58	13,2 5,80	12,5 5,99	12,2 6,07	11,8 6,13	11,0 6,23	10,1 6,33	9,1 6,40		
100-250E	7,5	132M	16,7 3,06		16,9 4,71	16,8 5,06	16,6 5,42	16,3 5,75	16,2 5,91	16,0 6,07	15,5 6,39	14,8 6,69	14,0 6,96	13,6 7,08	13,2 7,19	12,4 7,38	11,4 7,53			
100-250D	7,5 11	132M 160M	19,6 3,39		19,6 5,44	19,4 5,88	19,2 6,29	18,9 6,66	18,7 6,82	18,5 6,98	18,0 7,30	17,4 7,60	16,6 7,90	16,2 8,05	15,7 8,19	14,8 8,41	13,7 8,60	12,7 8,75		
100-250A	11	160M	22,6 3,96		22,3 6,17	22,1 6,67	21,8 7,15	21,4 7,59	21,2 7,80	21,0 8,00	20,5 8,37	19,9 8,71	19,1 9,04	18,7 9,20	18,3 9,36	17,3 9,63	16,1 9,85	15,0 10,04	13,8 10,19	

TYPE - 50 Hz	P2	Motor Size	Q (m³/h - l/min)															
			0	72	84	96	102	108	120	132	144	150	156	168	180	192	204	216
	kW	0	1200	1400	1600	1700	1800	2000	2200	2400	2500	2600	2800	3000	3200	3400	3600	
			H (m) pump input power (kW)															
100-315B	15	160L	31,8 4,74	31,4 9,27	30,6 10,05	29,8 9,67	29,4 10,05	29,0 11,42	28,2 11,10	27,3 12,54	26,3 12,27	25,8 12,54	25,3 13,54	24,2 13,06	23,0 14,31	21,4 13,54	19,7 14,92	17,9 15,14
100-315A	18,5	180M	37,1 5,63	36,5 11,03	35,7 11,94	34,9 12,80	34,4 13,21	34,0 13,60	33,1 14,33	32,2 15,01	31,2 15,69	30,7 16,02	30,2 16,32	29,1 16,86	27,9 17,32	26,3 17,76	24,7 18,15	23,1 18,49

TYPE - 50 Hz	P2	Motor Size	Q (m³/h - l/min)																	
			0	84	96	102	108	120	132	144	150	156	168	180	192	204	216	228	240	252
	kW	0	1400	1600	1700	1800	2000	2200	2400	2500	2600	2800	3000	3200	3400	3600	3800	4000	4200	4600
			H (m) pump input power (kW)																	
100-400C	22	180L	42,4 6,93	40,6 14,36	39,8 15,34	39,3 15,81	38,8 16,27	37,8 17,14	36,7 17,98	35,5 18,83	34,9 19,25	34,3 19,64	32,8 20,30	31,4 20,95	30,3 21,50	29,1 21,91	27,7 22,31	25,8 22,70		
100-400B	30	200L	50,3 9,32	48,7 18,20	47,9 19,51	47,5 20,14	47,0 20,75	44,9 21,93	43,8 23,04	43,2 24,07	42,6 24,56	41,3 25,03	39,8 25,95	38,2 26,80	36,5 27,61	34,7 28,36	33,1 29,01	31,6 29,56	30,0 30,00	
100-400A	37	225S	58,3 11,46	56,0 21,50	55,2 23,05	54,8 23,80	54,3 24,54	53,4 25,95	52,4 27,31	51,3 28,63	50,7 29,27	50,1 29,89	48,7 31,07	47,3 32,15	45,8 33,12	44,3 34,00	42,7 34,77	40,9 35,48	38,8 36,11	36,7 36,69

TYPE - 50 Hz	P2	Motor Size	Q (m³/h - l/min)																
			0	102	108	120	132	144	150	156	168	180	192	204	216	228	240	252	276
	kW	0	1700	1800	2000	2200	2400	2500	2600	2800	3000	3200	3400	3600	3800	4000	4200	4600	
			H (m) pump input power (kW)																
125-250B	11	160M	19,6 5,41	20,2 8,04	20,0 8,22	19,7 8,56	19,2 8,80	18,8 9,30	18,5 9,50	18,2 9,66	17,6 9,99	16,9 10,23	16,1 10,44	15,2 10,67	14,3 10,88	13,3 11,02	12,2 11,12	11,1 11,18	
125-250A	15	160L	23,2 6,18	24,0 9,71	23,8 9,92	23,5 10,36	23,2 10,80	22,8 11,24	22,6 11,47	22,4 11,70	21,9 12,16	21,3 12,60	20,7 13,02	20,0 13,42	19,3 13,77	18,5 14,08	17,6 14,34	16,6 14,57	14,7 14,94



TYPE - 50 Hz	P2	Motor Size	Q (m³/h - l/min)																		
			0	120	132	144	150	156	168	180	192	204	216	228	240	252	276	348	372	396	
			0	2000	2200	2400	2500	2600	2800	3000	3200	3400	3600	3800	4000	4200	4600	5800	6200	6600	
H (m)																					
pump input power (kW)																					
125-315C	22	180L	24,1 <i>7,23</i>	25,8 <i>12,72</i>	25,7 <i>13,39</i>	25,5 <i>14,05</i>	25,4 <i>14,38</i>	25,3 <i>14,70</i>	25,0 <i>15,34</i>	24,7 <i>15,95</i>	24,4 <i>16,49</i>	24,1 <i>16,99</i>	23,7 <i>17,48</i>	23,3 <i>17,98</i>	22,8 <i>18,49</i>	22,2 <i>18,99</i>	21,0 <i>19,96</i>	15,7 <i>22,32</i>			
125-315B	30	200L	31,5 <i>9,52</i>	33,0 <i>16,73</i>	33,0 <i>17,53</i>	32,9 <i>18,36</i>	32,8 <i>18,77</i>	32,7 <i>19,15</i>	32,4 <i>19,84</i>	32,1 <i>20,43</i>	31,7 <i>21,01</i>	31,3 <i>21,67</i>	31,0 <i>22,39</i>	30,6 <i>23,13</i>	30,1 <i>23,83</i>	29,6 <i>24,48</i>	28,3 <i>25,71</i>	24,2 <i>29,14</i>	22,2 <i>30,13</i>		
125-315A	37	225S	38,6 <i>11,88</i>	39,6 <i>20,51</i>	39,5 <i>21,40</i>	39,2 <i>22,29</i>	39,0 <i>22,73</i>	38,8 <i>23,17</i>	38,4 <i>24,03</i>	38,1 <i>24,84</i>	37,9 <i>25,60</i>	37,6 <i>26,36</i>	37,3 <i>27,14</i>	37,0 <i>27,97</i>	36,6 <i>28,82</i>	36,2 <i>29,66</i>	35,2 <i>31,26</i>	29,6 <i>35,58</i>	28,2 <i>36,82</i>		
125-400C	45	225M	46,2 <i>13,91</i>	47,6 <i>24,65</i>	47,5 <i>25,83</i>	47,2 <i>27,03</i>	47,0 <i>27,62</i>	46,9 <i>28,20</i>	46,5 <i>29,31</i>	46,1 <i>30,30</i>	45,7 <i>31,22</i>	45,2 <i>32,17</i>	44,7 <i>33,24</i>	44,2 <i>34,42</i>	43,7 <i>35,62</i>	43,2 <i>36,73</i>	42,4 <i>38,53</i>	36,5 <i>43,95</i>	33,8 <i>45,52</i>		
125-400B	55	250M	53,4 <i>16,79</i>	54,5 <i>28,74</i>	54,3 <i>30,15</i>	54,1 <i>31,55</i>	54,0 <i>32,25</i>	53,9 <i>32,94</i>	53,5 <i>34,30</i>	53,2 <i>35,60</i>	52,7 <i>36,85</i>	52,3 <i>38,07</i>	51,7 <i>39,30</i>	51,2 <i>40,56</i>	50,6 <i>41,82</i>	50,0 <i>43,06</i>	48,8 <i>45,43</i>	44,6 <i>51,75</i>	42,0 <i>53,55</i>	39,1 <i>55,27</i>	
125-400A	75	280S	58,6 <i>18,95</i>	59,5 <i>31,66</i>	59,4 <i>33,20</i>	59,2 <i>34,74</i>	59,1 <i>35,52</i>	59,0 <i>36,29</i>	58,7 <i>37,81</i>	58,3 <i>39,30</i>	57,8 <i>40,77</i>	57,4 <i>42,22</i>	56,8 <i>43,66</i>	56,3 <i>45,09</i>	55,7 <i>46,50</i>	55,1 <i>47,87</i>	53,9 <i>50,49</i>	49,9 <i>57,63</i>	47,2 <i>59,76</i>	45,0 <i>61,83</i>	

TYPE - 50 Hz	P2	Motor Size	Q (m³/h - l/min)																			
			0	144	150	156	168	180	192	204	216	228	240	252	276	348	372	396	444	492	540	564
			0	2400	2500	2600	2800	3000	3200	3400	3600	3800	4000	4200	4600	5800	6200	6600	7400	8200	9000	9400
H (m)																						
pump input power (kW)																						
150-315D	30	200L	25,7 <i>12,22</i>	28,3 <i>18,44</i>	28,3 <i>18,74</i>	28,3 <i>19,04</i>	28,2 <i>19,63</i>	28,1 <i>20,19</i>	27,9 <i>20,71</i>	27,7 <i>21,22</i>	27,5 <i>21,72</i>	27,2 <i>22,23</i>	26,8 <i>22,73</i>	26,5 <i>23,25</i>	25,8 <i>24,37</i>	24,7 <i>27,81</i>	23,8 <i>28,75</i>	22,7 <i>29,56</i>	19,6 <i>30,78</i>			
150-315C	37	225S	29,6 <i>14,01</i>	32,2 <i>21,16</i>	32,2 <i>21,49</i>	32,3 <i>21,84</i>	32,2 <i>22,52</i>	32,1 <i>23,20</i>	31,9 <i>23,85</i>	31,6 <i>24,45</i>	31,3 <i>25,02</i>	31,0 <i>25,58</i>	30,7 <i>26,14</i>	30,2 <i>26,73</i>	28,6 <i>28,01</i>	27,9 <i>31,79</i>	27,0 <i>32,95</i>	24,7 <i>34,00</i>	21,8 <i>35,84</i>			
150-315B	45	225M	34,0 <i>16,47</i>	36,3 <i>24,33</i>	36,2 <i>24,72</i>	36,2 <i>25,12</i>	36,1 <i>25,92</i>	36,0 <i>26,72</i>	35,7 <i>27,47</i>	35,5 <i>28,17</i>	35,4 <i>28,85</i>	35,2 <i>29,51</i>	34,9 <i>30,15</i>	34,5 <i>30,83</i>	32,8 <i>32,25</i>	32,2 <i>36,29</i>	31,3 <i>37,54</i>	29,3 <i>38,77</i>	26,9 <i>41,13</i>	23,6 <i>43,09</i>		
150-315A	55	250M	39,4 <i>18,39</i>	41,0 <i>27,78</i>	41,0 <i>28,22</i>	40,8 <i>28,66</i>	40,8 <i>29,55</i>	40,8 <i>30,43</i>	40,6 <i>31,31</i>	40,6 <i>32,18</i>	40,3 <i>33,05</i>	40,0 <i>33,92</i>	39,7 <i>34,77</i>	39,5 <i>35,59</i>	39,2 <i>37,10</i>	37,6 <i>41,75</i>	36,6 <i>43,40</i>	35,8 <i>45,02</i>	34,1 <i>48,12</i>	28,9 <i>50,36</i>	27,2 <i>53,65</i>	

TYPE - 50 Hz	P2	Motor Size	Q (m³/h - l/min)																		
			0	168	180	192	204	216	228	240	252	276	348	372	396	444	492	540	564	588	612
			0	2800	3000	3200	3400	3600	3800	4000	4200	4600	5800	6200	6600	7400	8200	9000	9400	9800	10200
H (m)																					
pump input power (kW)																					
150-400C	75	280S	45,6 <i>20,78</i>	47,8 <i>35,35</i>	47,7 <i>36,41</i>	47,6 <i>37,46</i>	47,4 <i>38,54</i>	47,2 <i>39,58</i>	47,0 <i>40,43</i>	46,7 <i>41,65</i>	46,5 <i>42,62</i>	45,8 <i>44,48</i>	43,9 <i>50,44</i>	43,1 <i>52,51</i>	42,0 <i>54,34</i>	39,2 <i>57,61</i>	35,8 <i>60,59</i>	31,5 <i>63,18</i>	28,7 <i>64,43</i>		
150-400B	75	280S	52,8 <i>26,57</i>	54,4 <i>41,90</i>	54,2 <i>43,10</i>	53,9 <i>44,29</i>	53,5 <i>45,48</i>	53,2 <i>46,65</i>	52,9 <i>47,81</i>	52,6 <i>48,96</i>	51,8 <i>50,10</i>	50,3 <i>52,35</i>	49,8 <i>58,79</i>	49,8 <i>60,86</i>	48,9 <i>62,94</i>	46,1 <i>66,80</i>	42,9 <i>70,20</i>	39,1 <i>73,30</i>	36,7 <i>74,72</i>	34,3 <i>76,14</i>	
150-400A	90	280M	59,0 <i>29,82</i>	60,3 <i>47,01</i>	60,2 <i>48,30</i>	60,0 <i>49,59</i>	59,8 <i>50,88</i>	59,9 <i>52,18</i>	59,4 <i>53,48</i>	59,1 <i>54,78</i>	58,8 <i>56,10</i>	58,1 <i>58,76</i>	56,4 <i>66,15</i>	56,0 <i>68,45</i>	55,3 <i>70,93</i>	53,3 <i>75,79</i>	50,6 <i>79,82</i>	46,7 <i>83,73</i>	44,5 <i>85,61</i>	42,2 <i>87,41</i>	39,8 <i>89,16</i>

# 4MA-4MAX

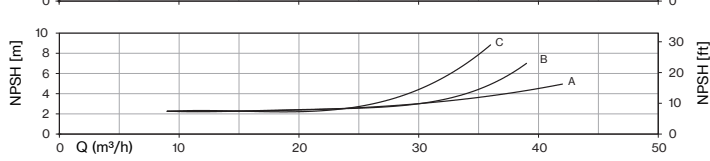
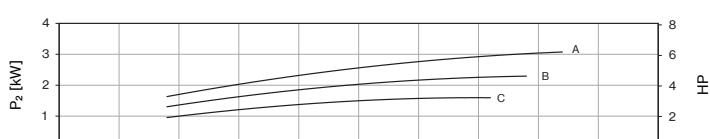
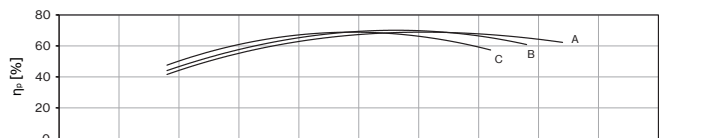
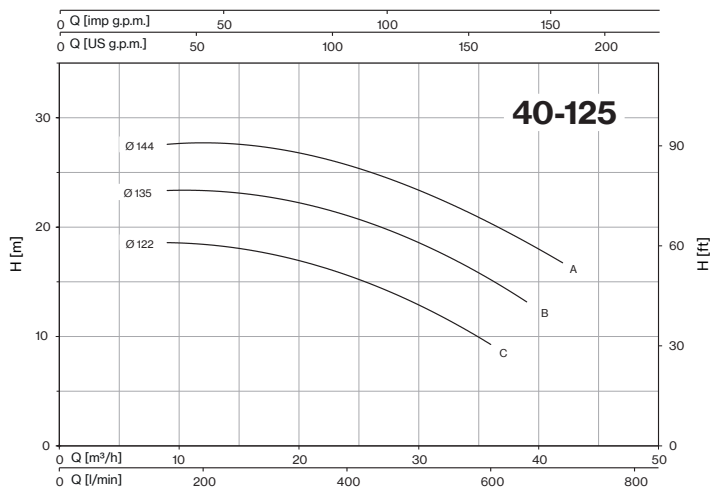
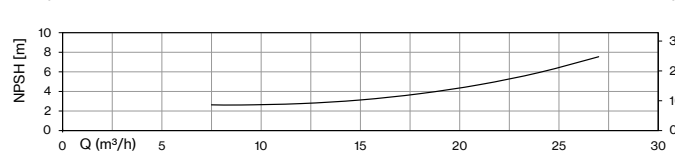
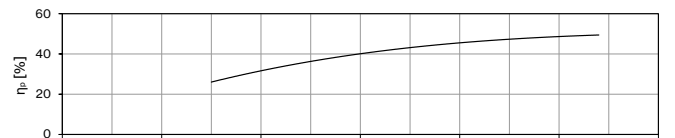
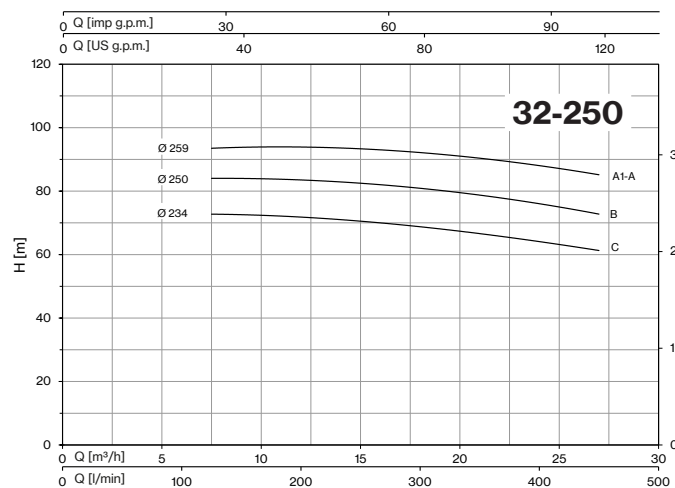
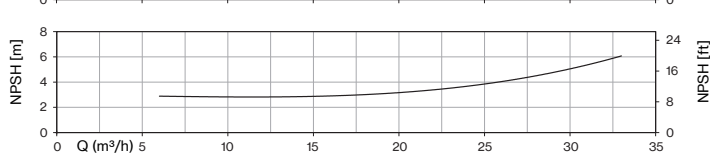
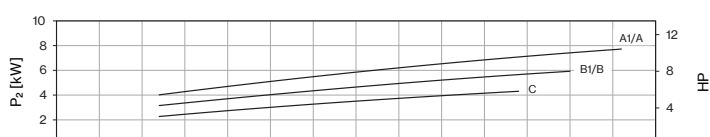
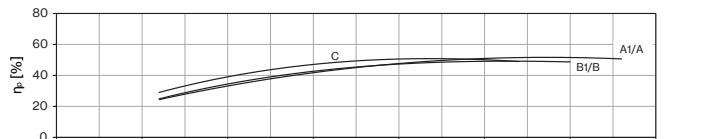
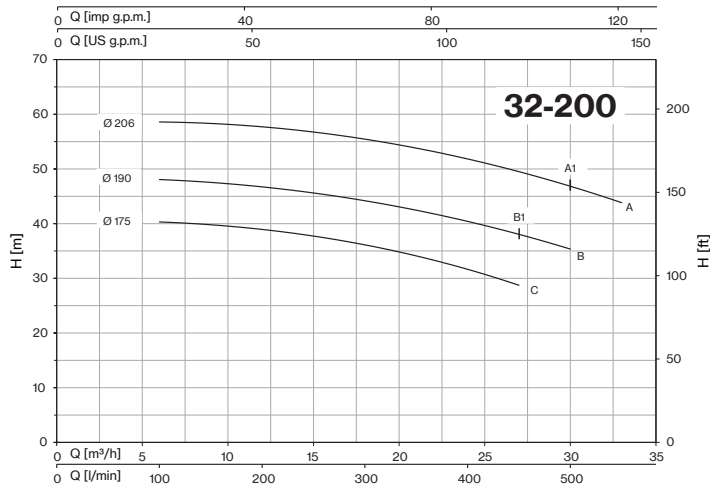
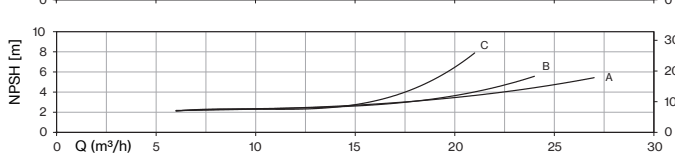
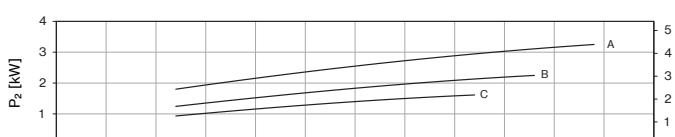
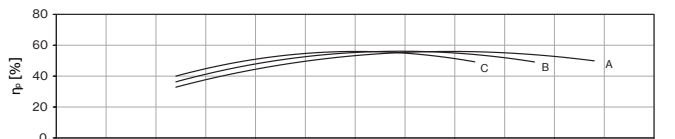
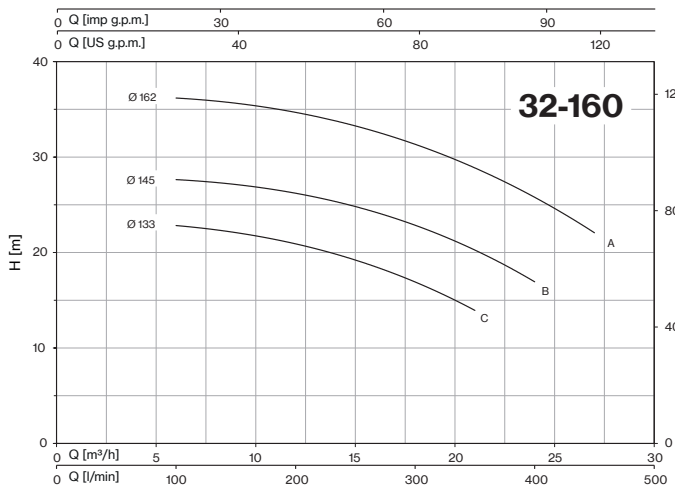
## 4MA-4MAX ~ 1450 rpm

Machines complementing the existing range, not envisaged in the EN 733 standard

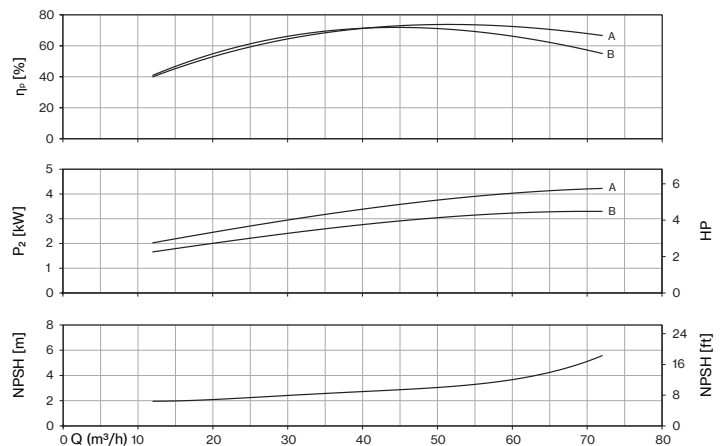
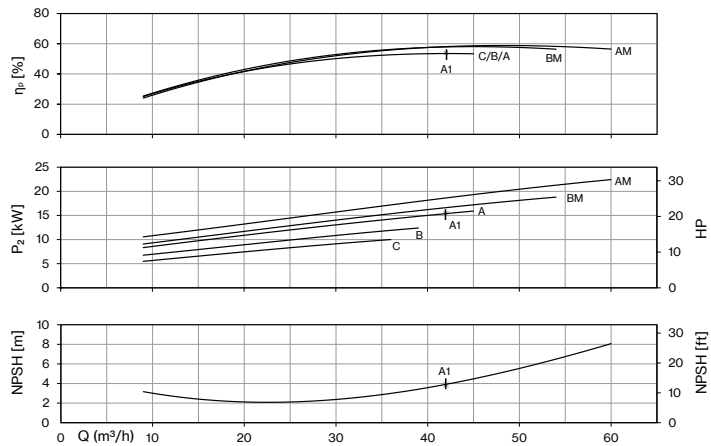
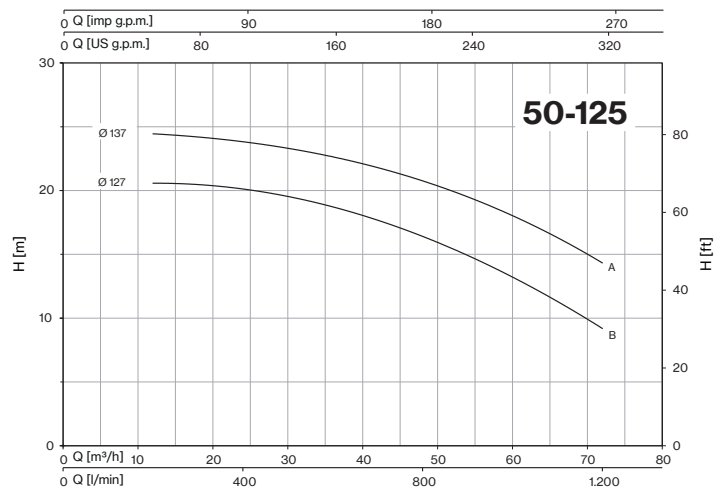
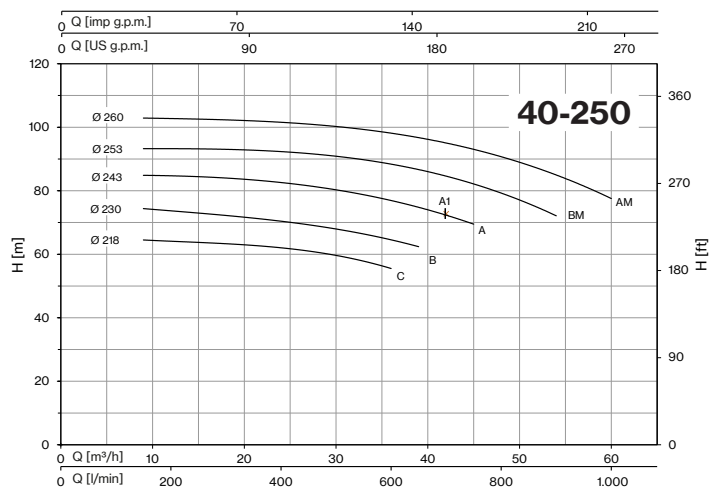
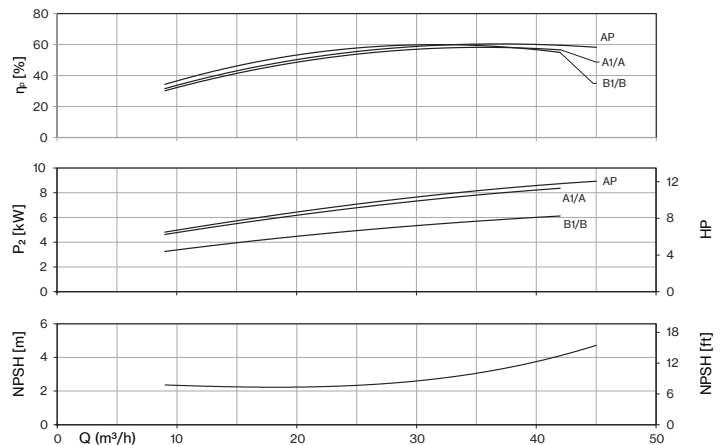
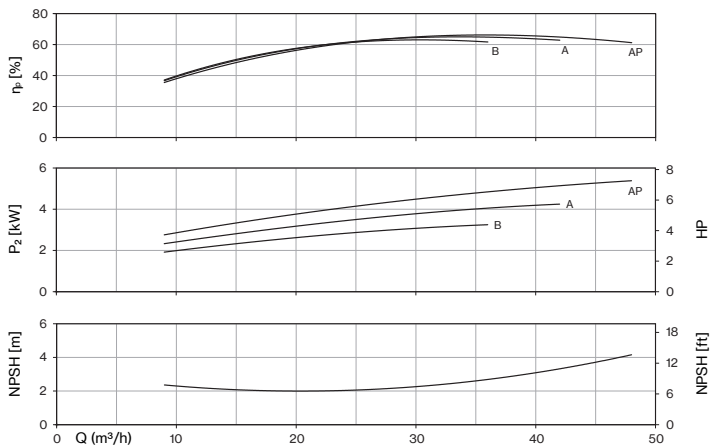
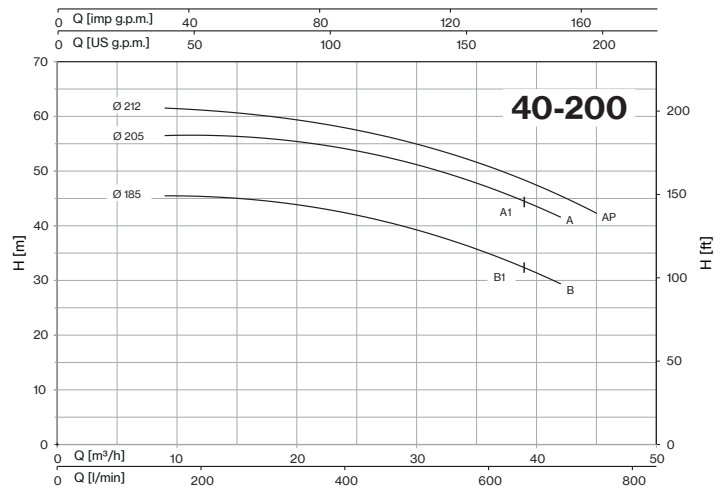
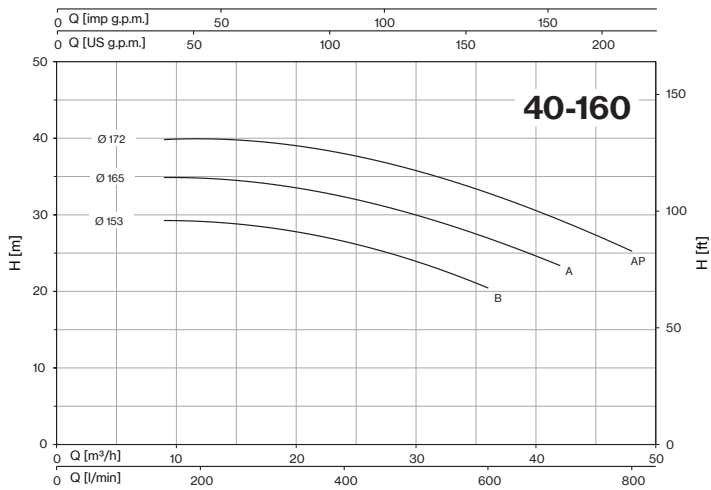
TYPE - 50 Hz	P2	Motor Size	Q (m³/h - l/min)							
			0	200	250	400	600	800	850	900
	kW	H (m) <i>pump input power (kW)</i>								
200-315D	37	225S	21,2 <i>18,00</i>	21,7 <i>24,31</i>	21,8 <i>26,11</i>	21,2 <i>31,21</i>	18,3 <i>36,07</i>	12,5 <i>37,00</i>		
200-315C	45	225M	26,6 <i>21,54</i>	26,6 <i>29,42</i>	26,4 <i>31,44</i>	25,9 <i>37,61</i>	23,1 <i>43,07</i>	16,9 <i>45,42</i>	14,6 <i>45,55</i>	
200-315B	55	250M	33,4 <i>25,04</i>	33,4 <i>36,30</i>	33,2 <i>38,91</i>	32,2 <i>46,32</i>	28,6 <i>52,72</i>	21,7 <i>55,67</i>	19,4 <i>55,62</i>	16,7 <i>55,25</i>
200-315A	75	280S	36,3 <i>27,90</i>	35,9 <i>39,49</i>	35,8 <i>42,13</i>	35,0 <i>50,07</i>	31,8 <i>58,82</i>	24,9 <i>62,36</i>	22,5 <i>62,45</i>	19,8 <i>62,15</i>
200-400C	90	280M	43,0 <i>31,27</i>	44,1 <i>45,90</i>	44,1 <i>50,14</i>	43,6 <i>62,49</i>	39,9 <i>77,58</i>	31,5 <i>89,60</i>		
200-400B	110	315S	49,5 <i>40,00</i>	50,8 <i>54,29</i>	51,0 <i>58,92</i>	50,6 <i>73,89</i>	47,2 <i>91,32</i>	39,5 <i>105,65</i>	36,6 <i>108,43</i>	
200-400A	132	315M	57,2 <i>49,00</i>	58,5 <i>65,01</i>	58,6 <i>70,26</i>	58,2 <i>87,26</i>	55,2 <i>107,05</i>	48,2 <i>124,54</i>	45,6 <i>128,46</i>	44,0 <i>132,15</i>

TYPE - 50 Hz	P2	Motor Size	Q (m³/h - l/min)													
			0	250	400	600	800	850	900	1100	1170	1200	1300	1400	1500	1600
	kW	H (m) <i>pump input power (kW)</i>														
250-315C	55	280M	26,1	25,5	25,3	24,1	22,3	21,7	21,0	16,8						
	75	280S	<i>28,00</i>	<i>37,82</i>	<i>44,23</i>	<i>51,71</i>	<i>57,65</i>	<i>58,82</i>	<i>59,57</i>	<i>59,89</i>						
250-315B	75	280S	33,2 <i>43,46</i>	33,0 <i>54,77</i>	32,7 <i>61,20</i>	31,8 <i>68,72</i>	29,6 <i>74,57</i>	28,6 <i>75,26</i>	27,5 <i>75,64</i>	21,7 <i>74,47</i>	19,0 <i>73,35</i>					
	90	280M	35,8 <i>46,41</i>	35,0 <i>57,61</i>	34,4 <i>64,50</i>	33,3 <i>73,28</i>	31,3 <i>78,44</i>	30,4 <i>79,01</i>	29,3 <i>79,32</i>	23,0 <i>78,27</i>	20,7 <i>77,03</i>	20,0 <i>76,36</i>				
250-400D	110	315S	38,3	39,9	39,9	39,0	36,9	36,1	35,2	30,6	28,6	27,7	24,3			
	132	315M	<i>48,00</i>	<i>61,74</i>	<i>71,25</i>	<i>84,15</i>	<i>95,73</i>	<i>98,36</i>	<i>100,80</i>	<i>108,97</i>	<i>111,27</i>	<i>112,17</i>	<i>114,78</i>			
250-400C	132	315M	44,0	45,8	45,9	44,9	42,7	42,0	41,2	37,2	35,4	34,5	31,3	27,4		
	160	315L	<i>53,83</i>	<i>71,89</i>	<i>83,20</i>	<i>98,11</i>	<i>112,06</i>	<i>115,25</i>	<i>118,20</i>	<i>128,07</i>	<i>130,85</i>	<i>131,93</i>	<i>135,08</i>	<i>137,50</i>		
250-400B	160	315L	50,0	51,7	51,8	51,0	49,0	48,4	47,6	43,9	42,3	41,5	38,5	34,8	30,3	
	200	315L	<i>64,57</i>	<i>84,18</i>	<i>97,49</i>	<i>115,36</i>	<i>131,10</i>	<i>134,76</i>	<i>138,27</i>	<i>151,48</i>	<i>155,58</i>	<i>157,12</i>	<i>161,60</i>	<i>164,88</i>	<i>167,09</i>	
250-400A	200	315L	55,7 <i>70,94</i>	57,4 <i>91,89</i>	57,5 <i>106,81</i>	56,5 <i>127,19</i>	54,5 <i>145,00</i>	53,8 <i>149,18</i>	53,0 <i>153,24</i>	49,4 <i>168,92</i>	47,9 <i>173,94</i>	47,1 <i>175,86</i>	44,3 <i>181,62</i>	40,8 <i>186,11</i>	36,6 <i>189,07</i>	31,7 <i>190,57</i>

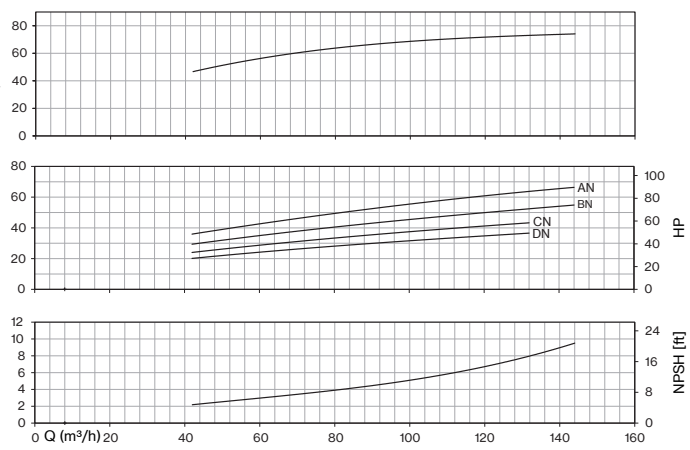
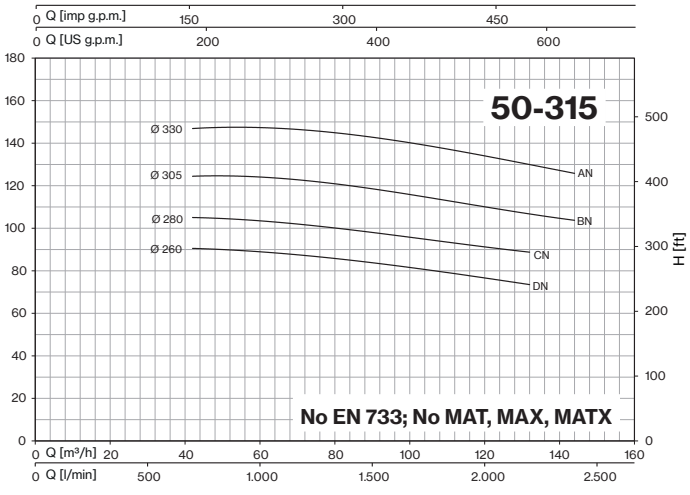
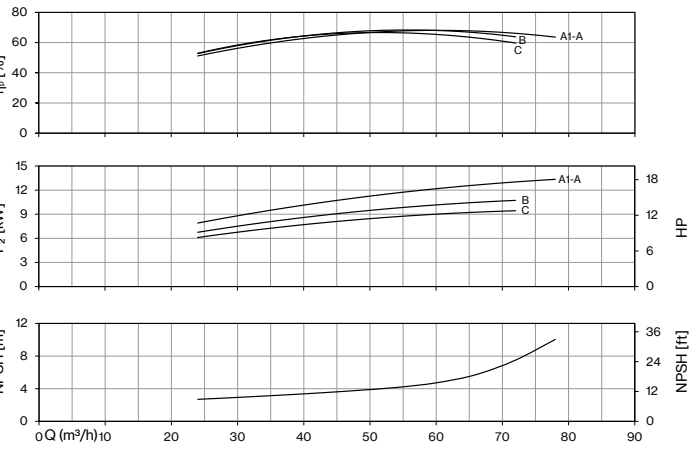
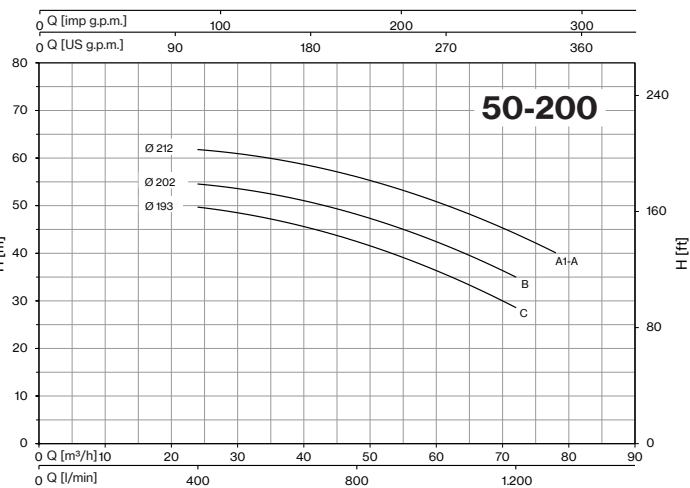
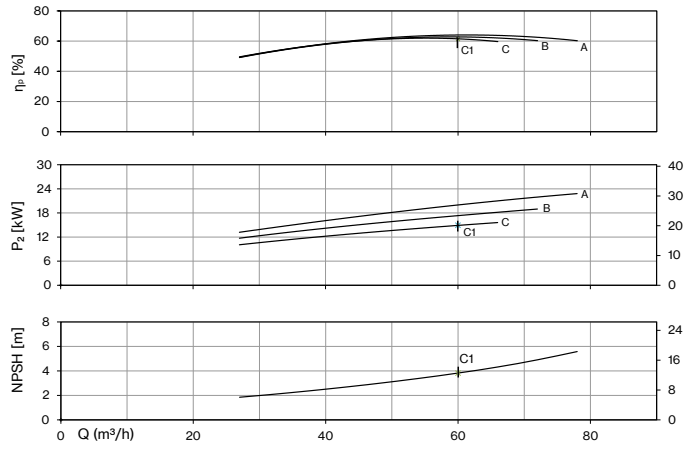
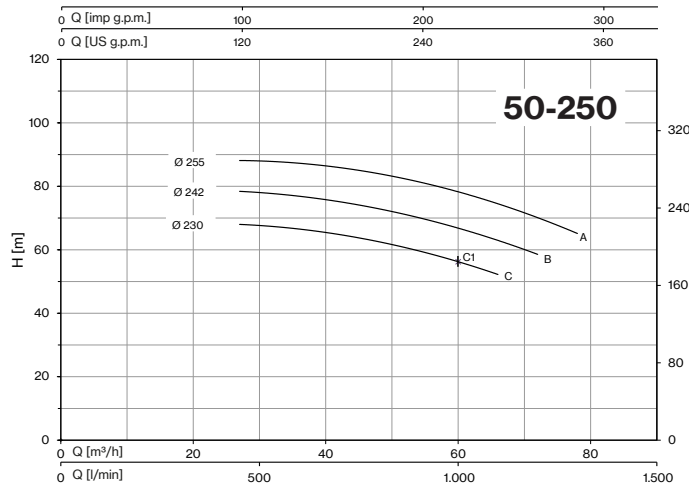
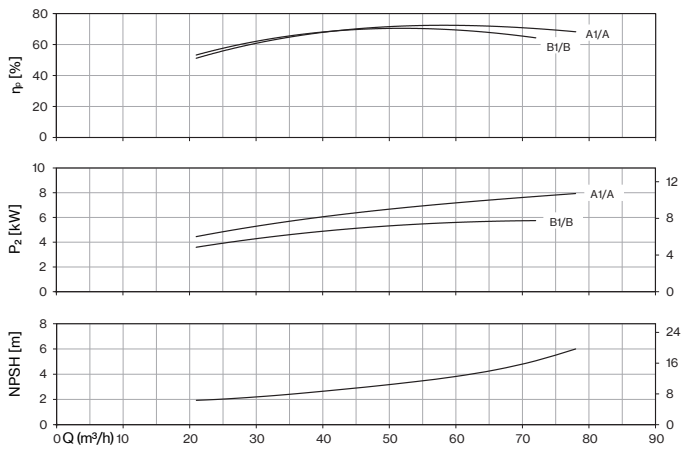
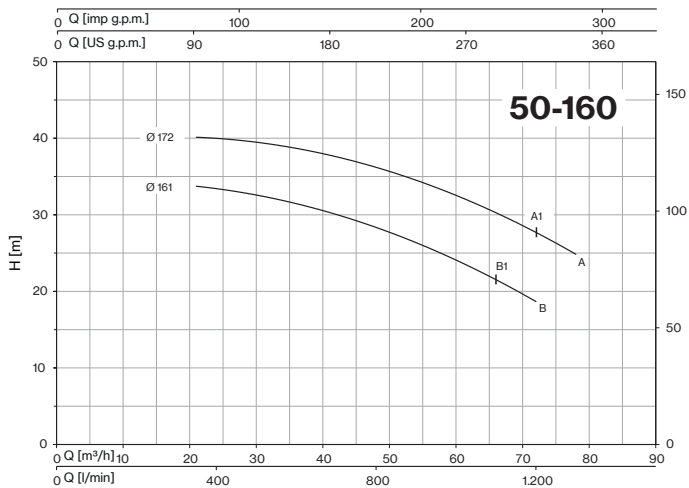
# MN-MNG-MNGX-MA-MAX ~ EN 733



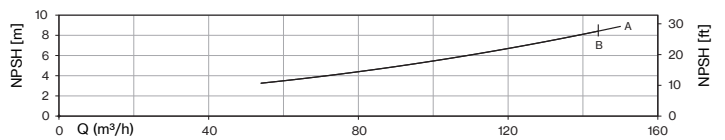
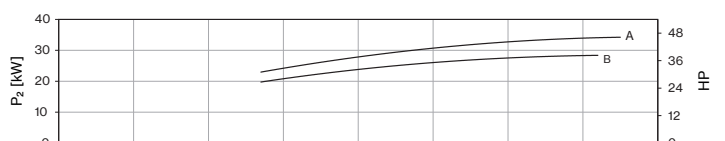
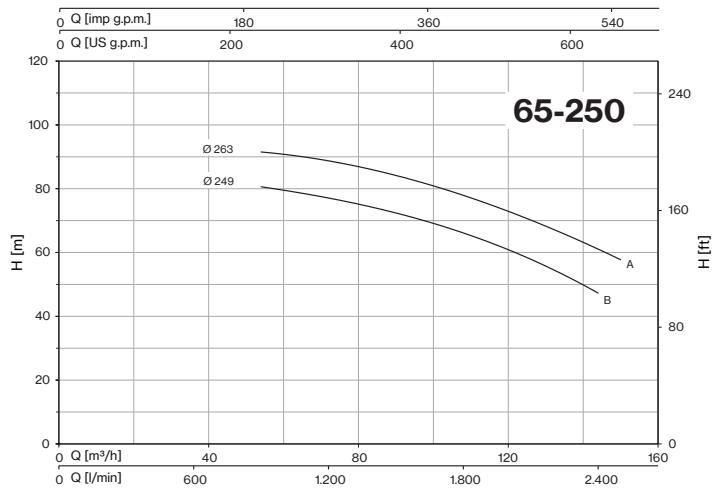
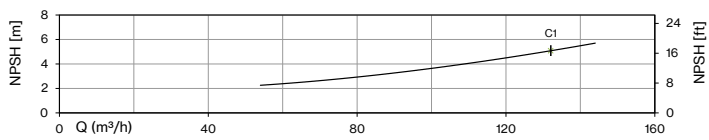
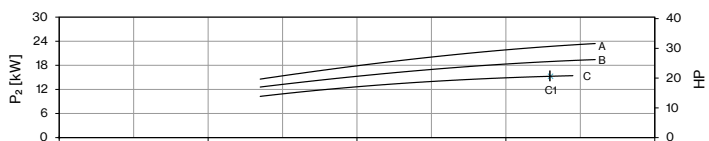
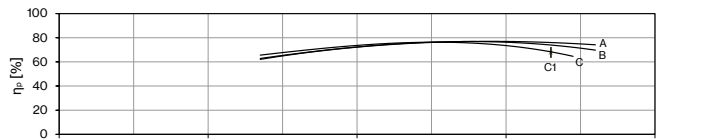
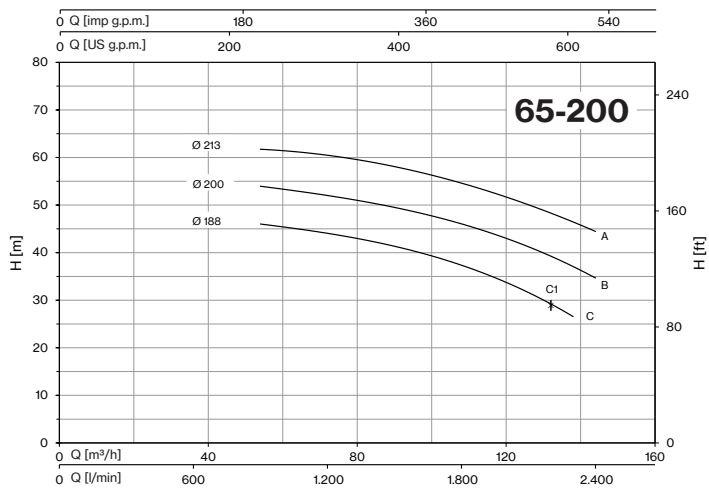
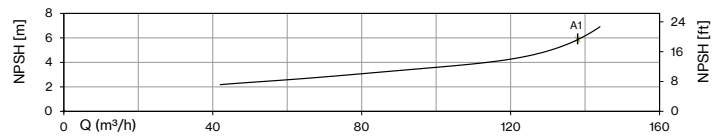
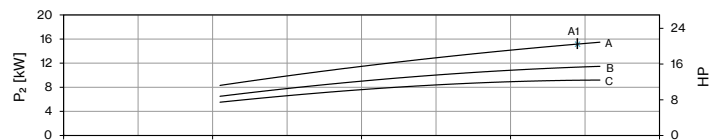
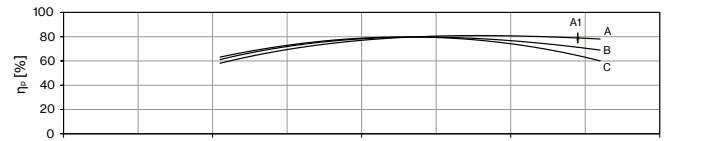
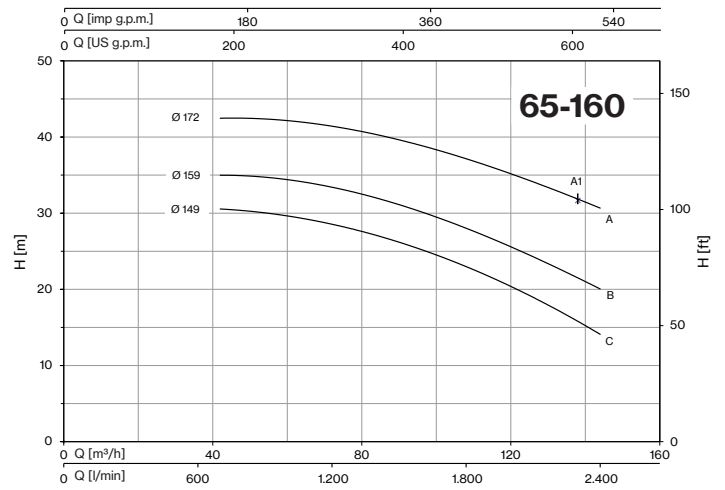
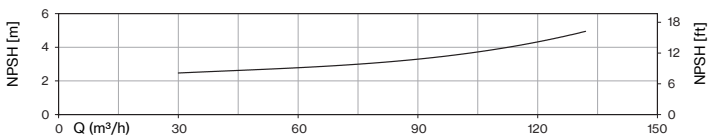
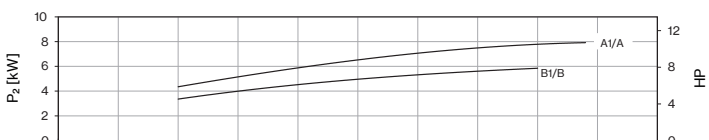
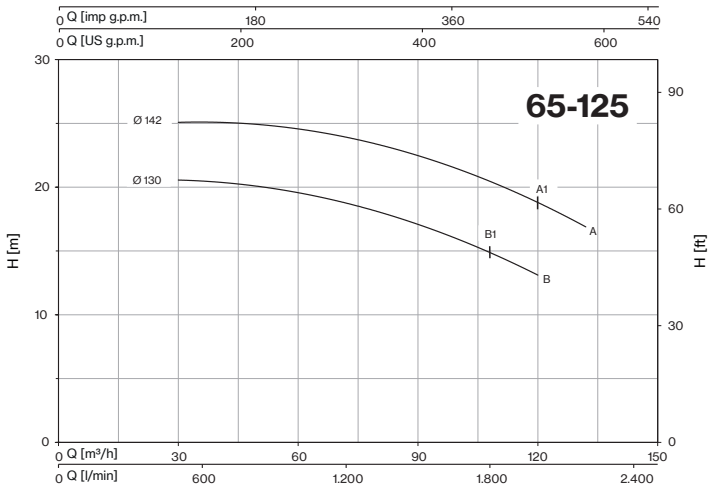
# MN-MNG-MNGX-MA-MAX ~ EN 733



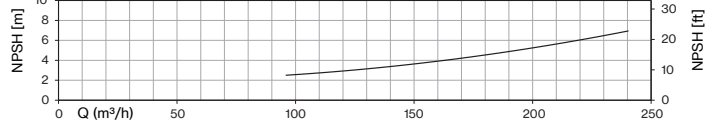
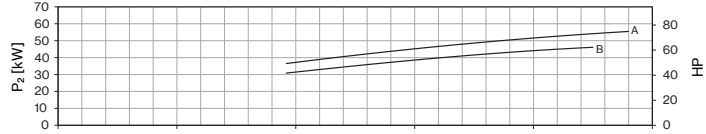
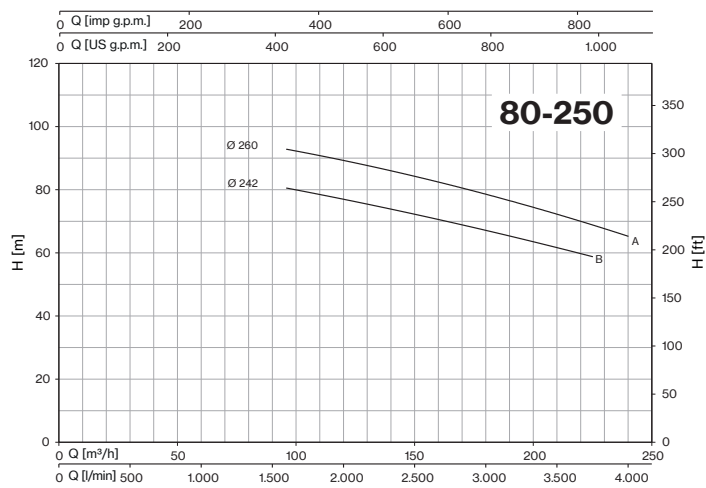
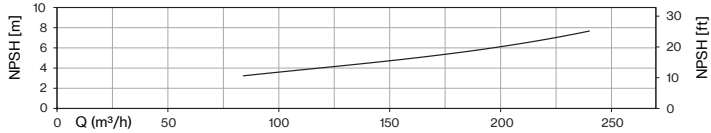
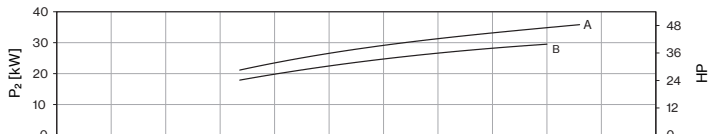
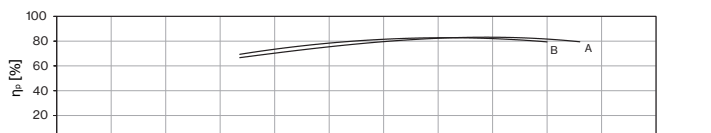
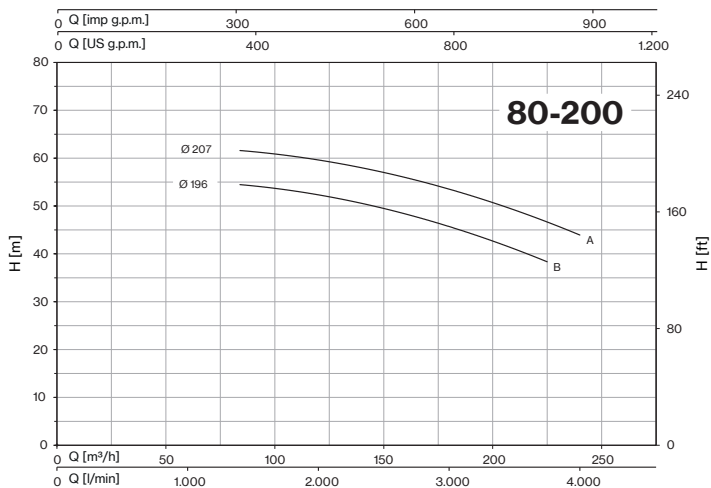
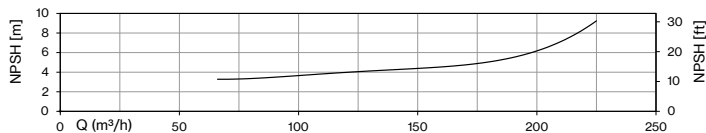
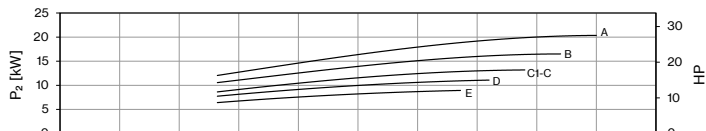
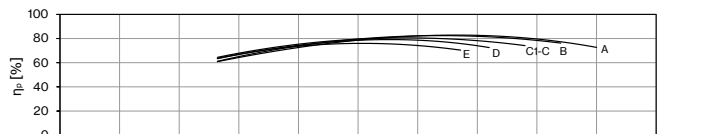
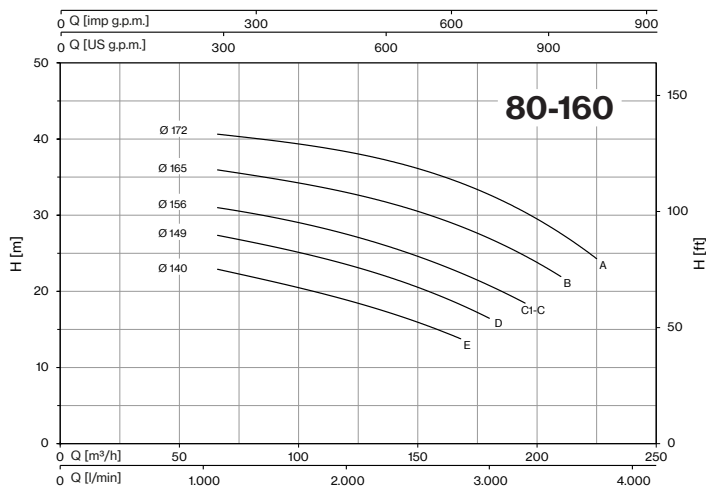
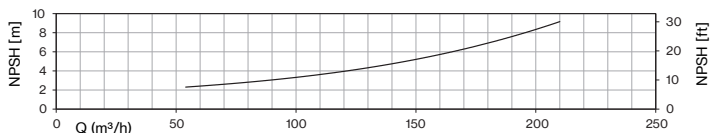
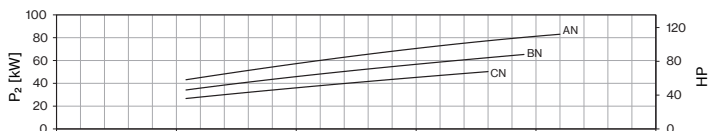
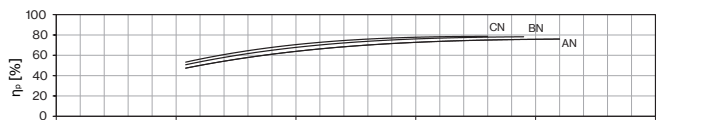
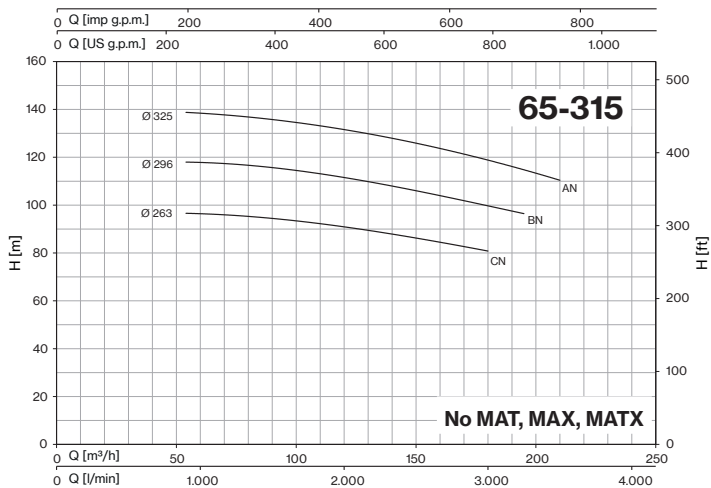
# MN-MNG-MNGX-MA-MAX ~ EN 733



# MN-MNG-MNGX-MA-MAX ~ EN 733

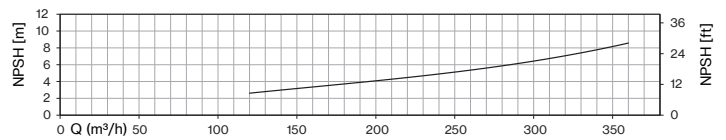
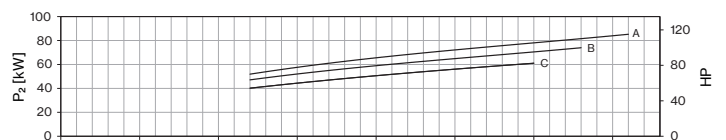
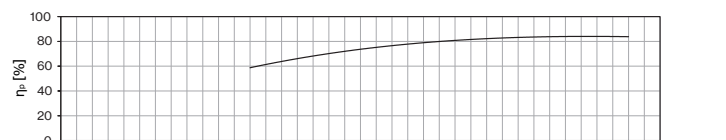
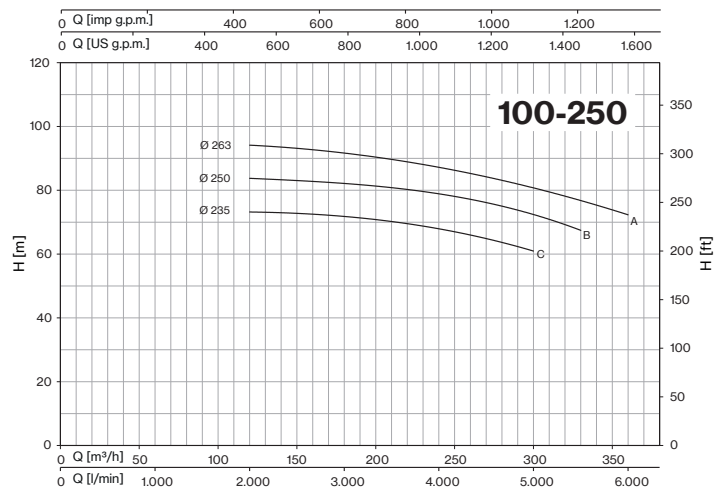
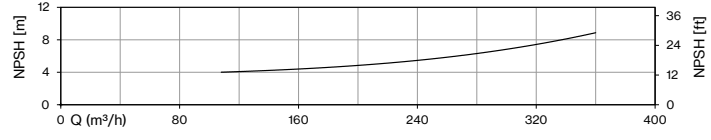
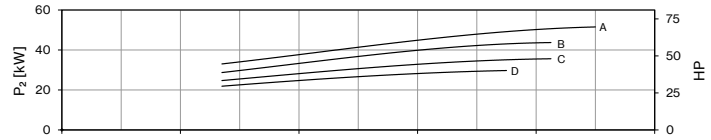
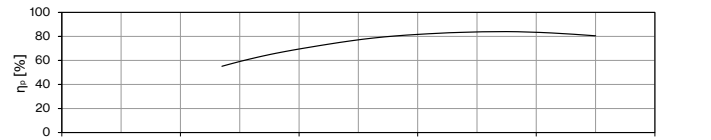
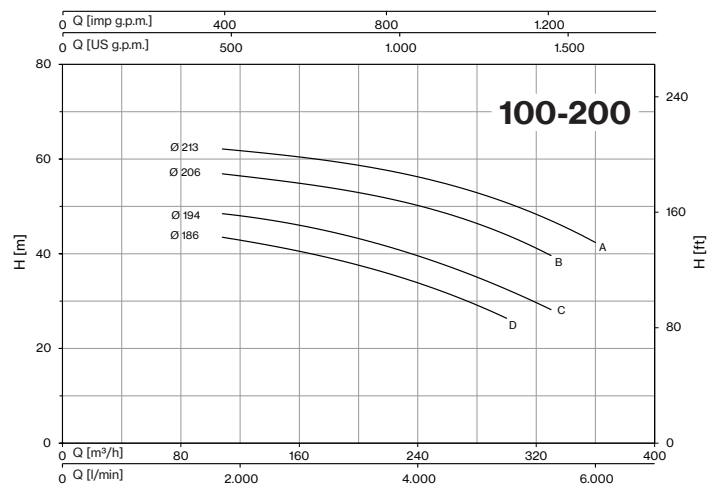
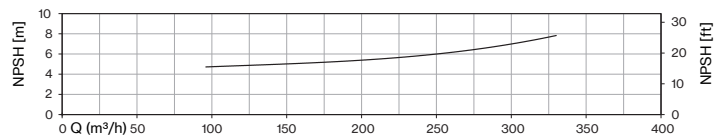
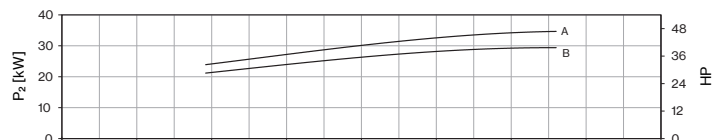
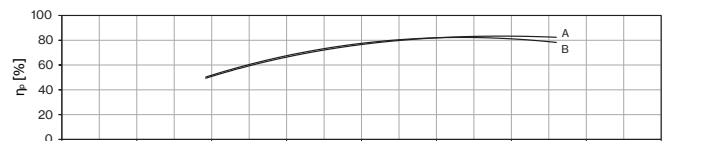
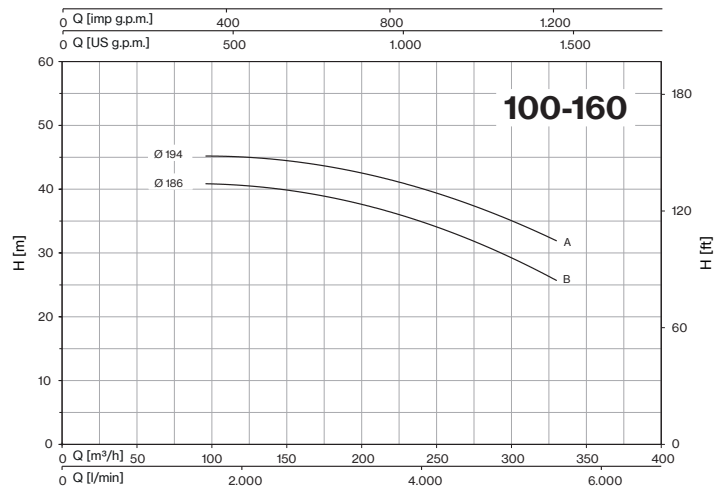
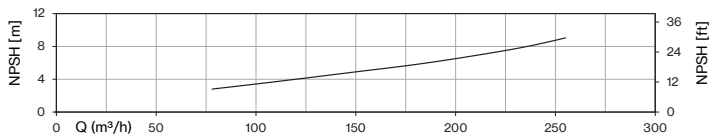
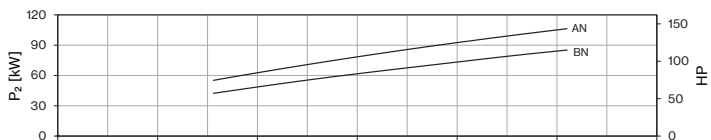
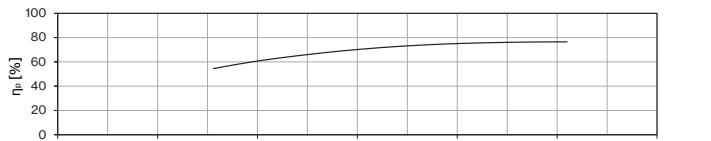
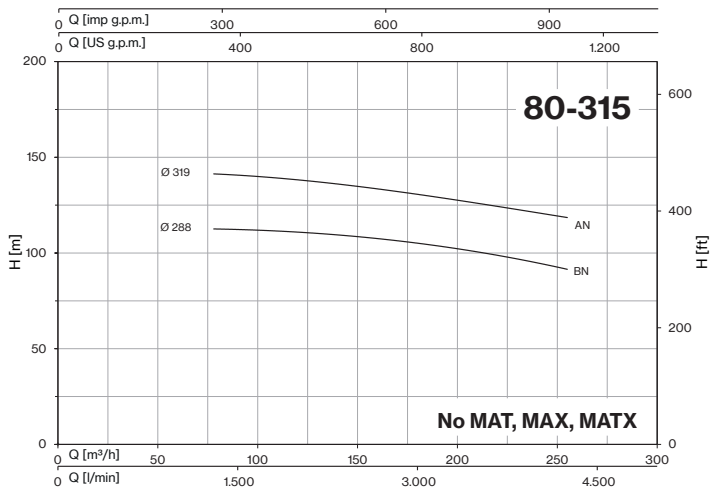


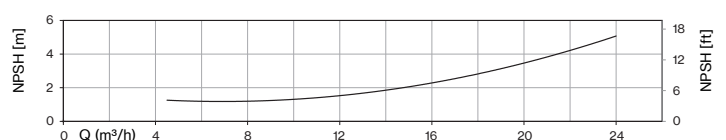
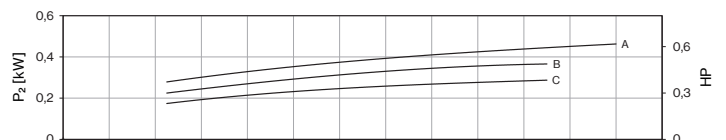
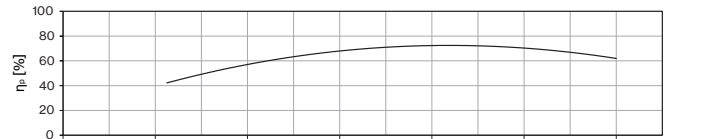
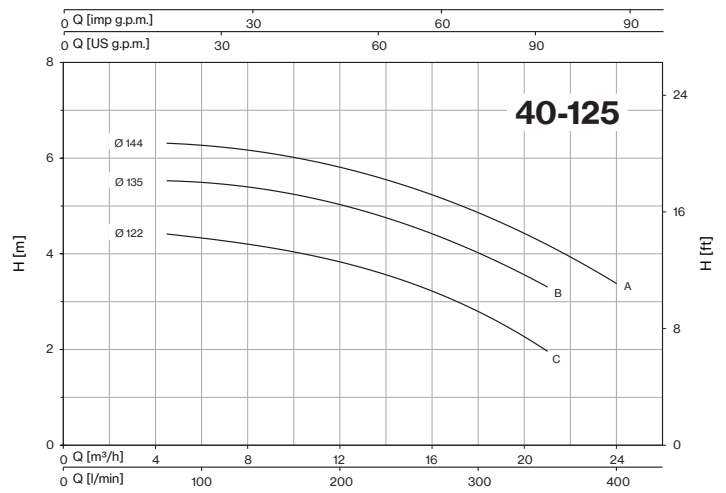
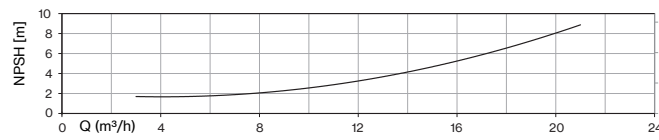
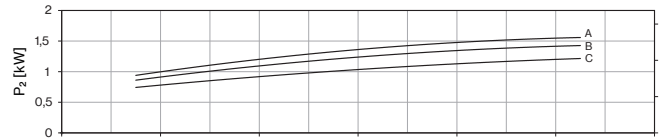
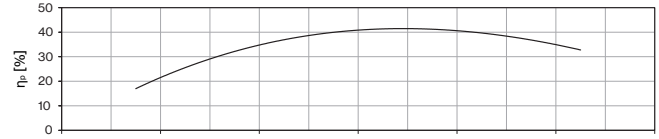
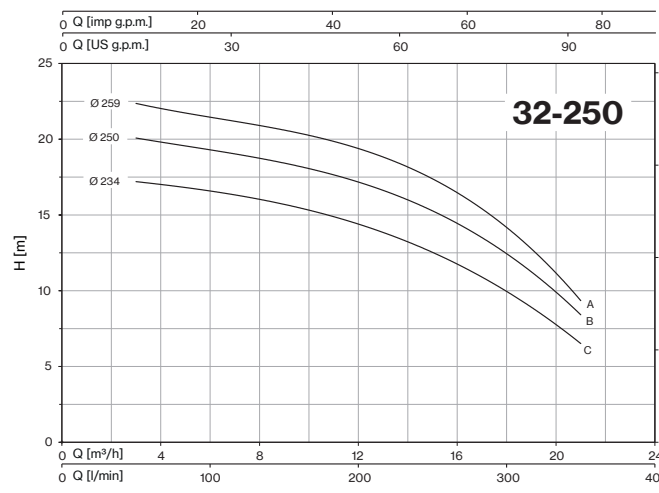
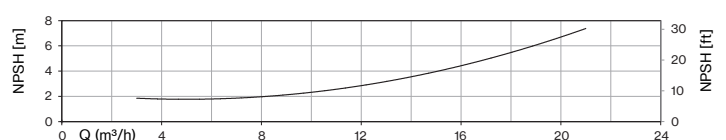
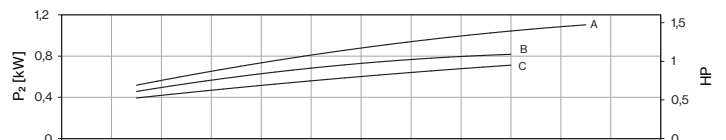
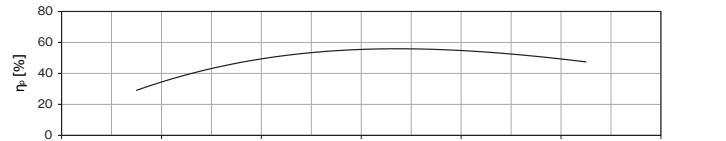
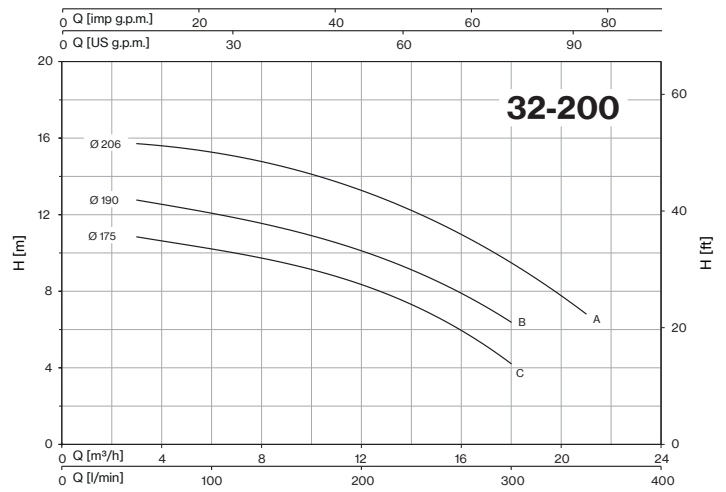
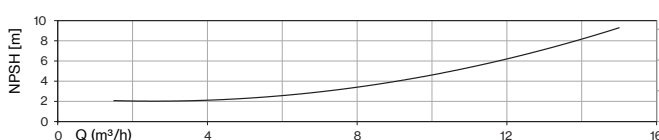
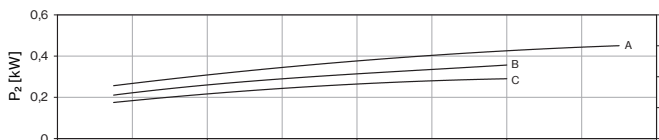
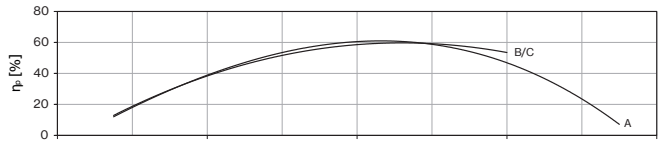
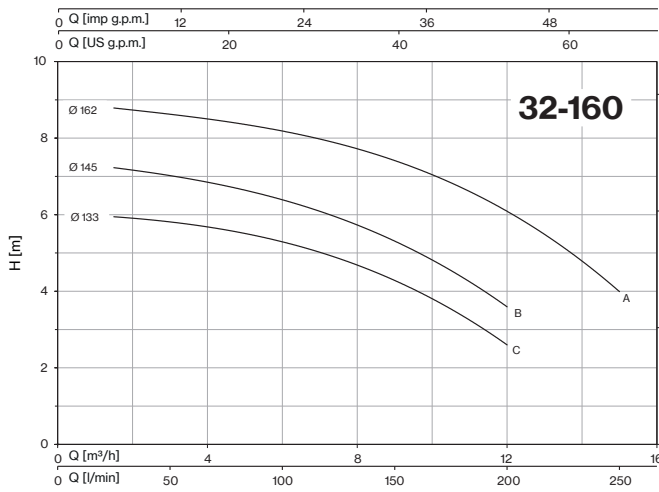
# MN-MNG-MNGX-MA-MAX ~ EN 733



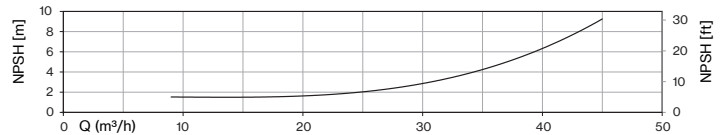
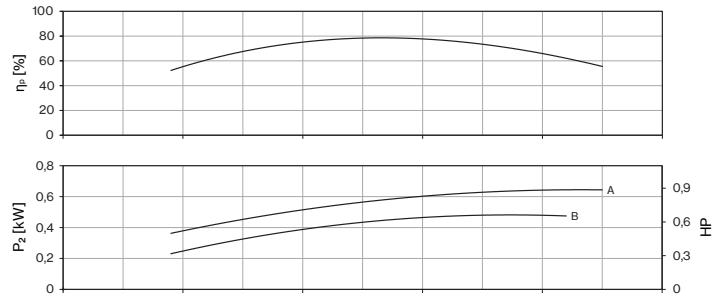
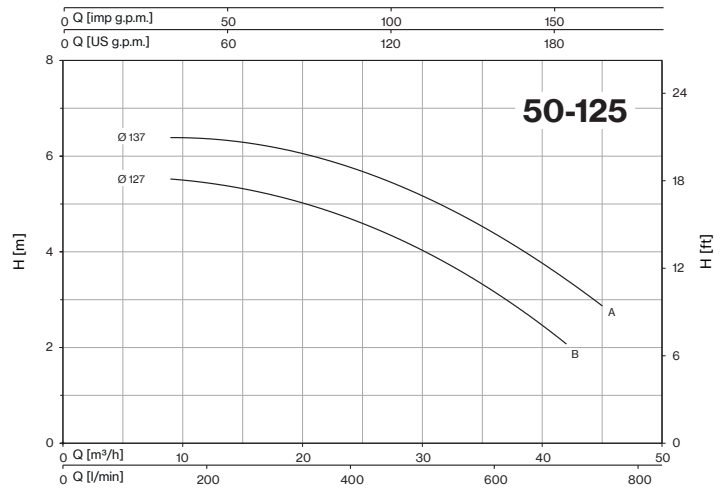
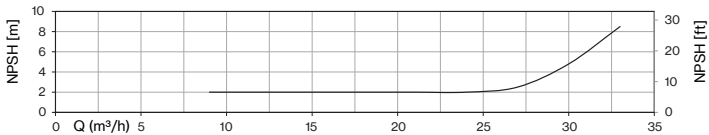
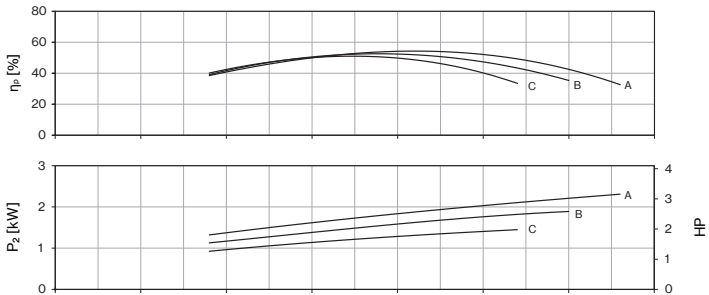
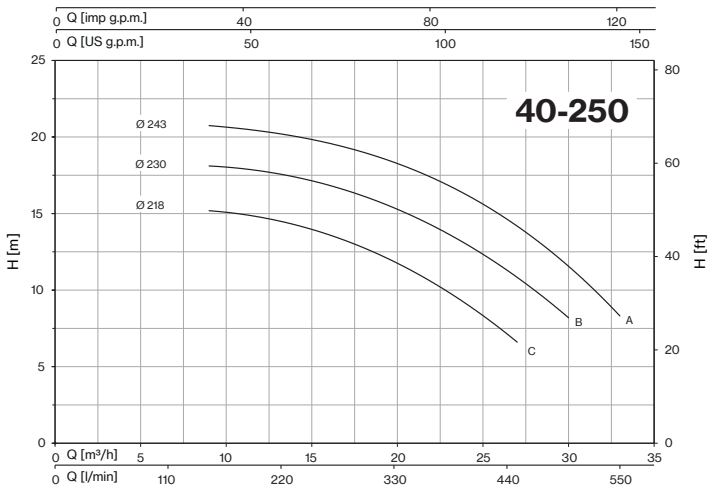
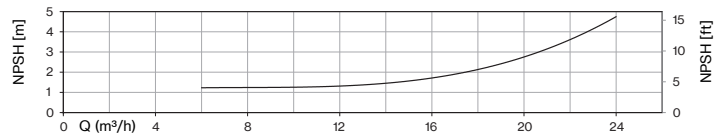
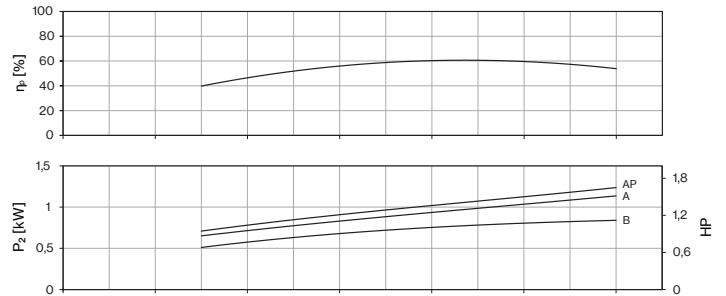
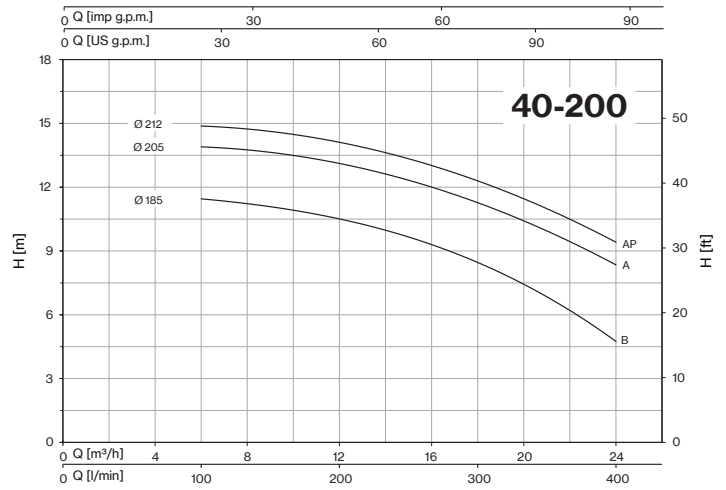
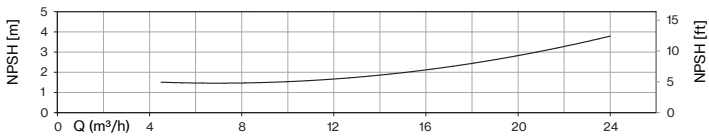
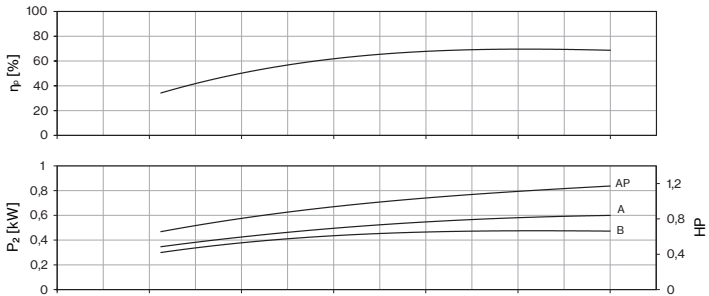
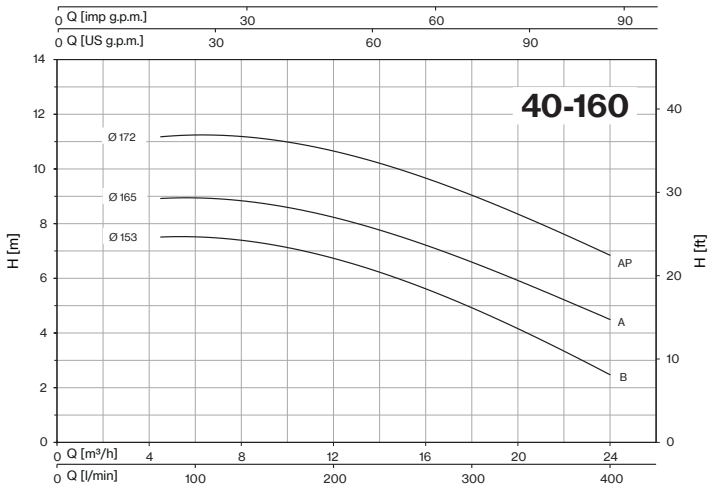


# MN-MNG-MNGX-MA-MAX ~ EN 733

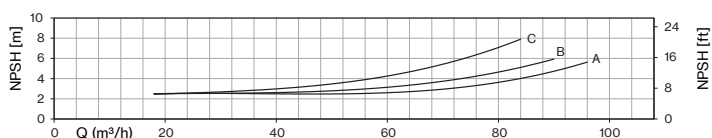
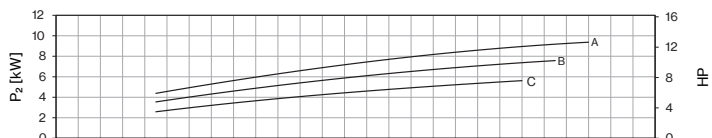
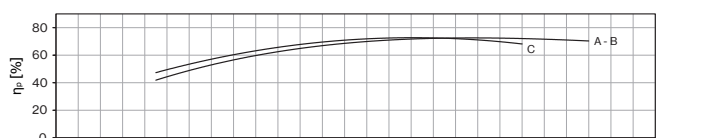
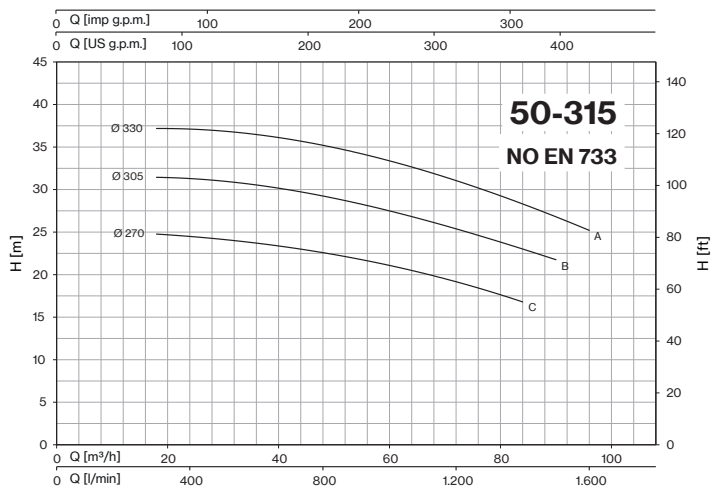
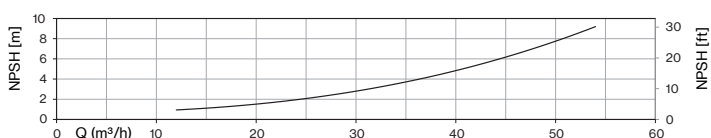
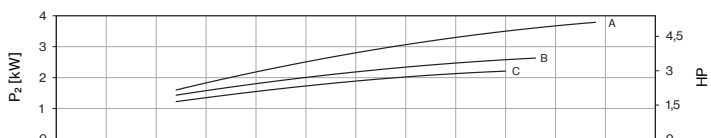
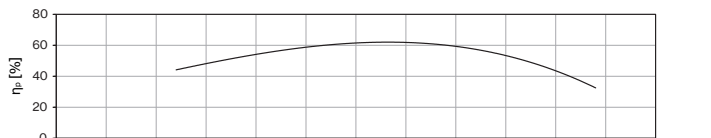
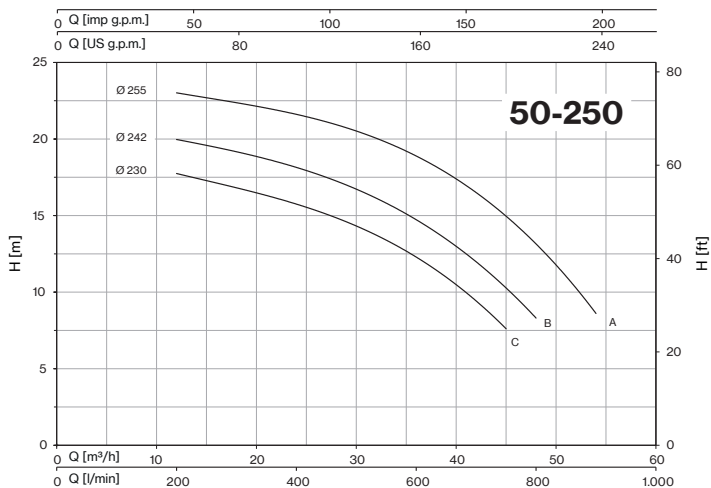
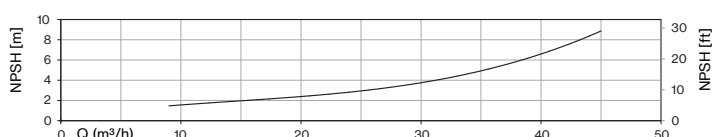
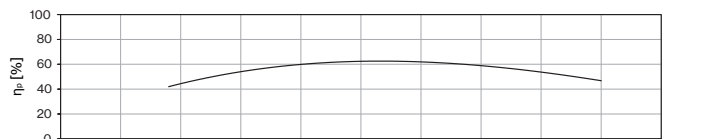
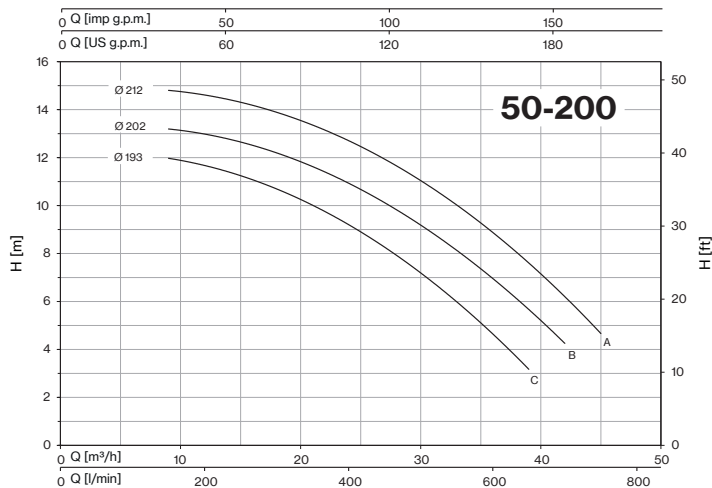
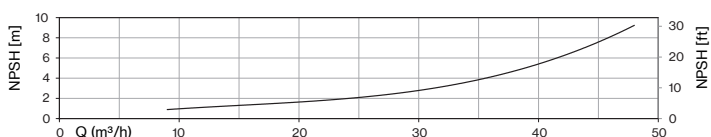
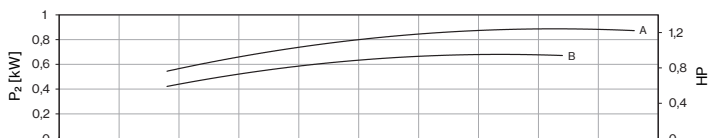
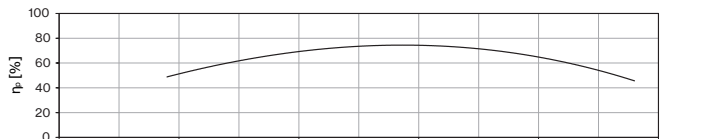
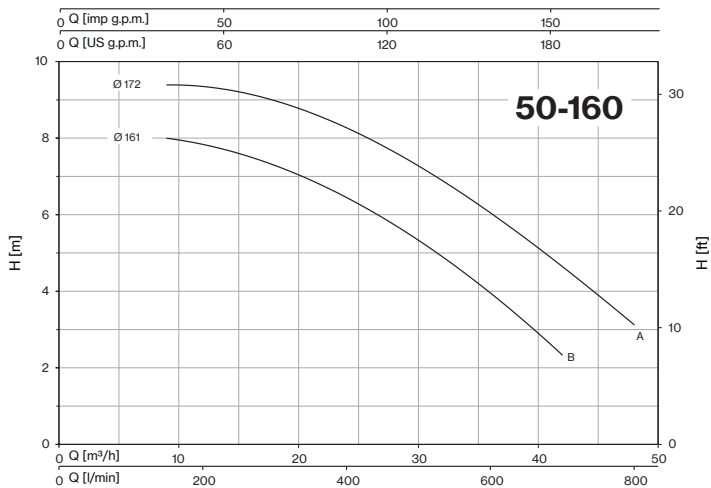




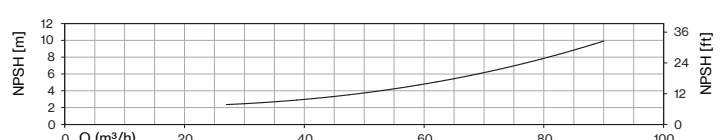
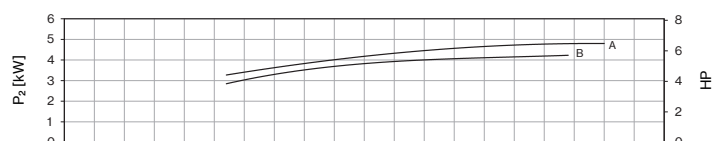
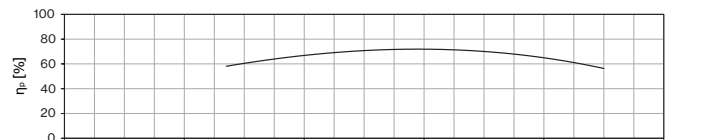
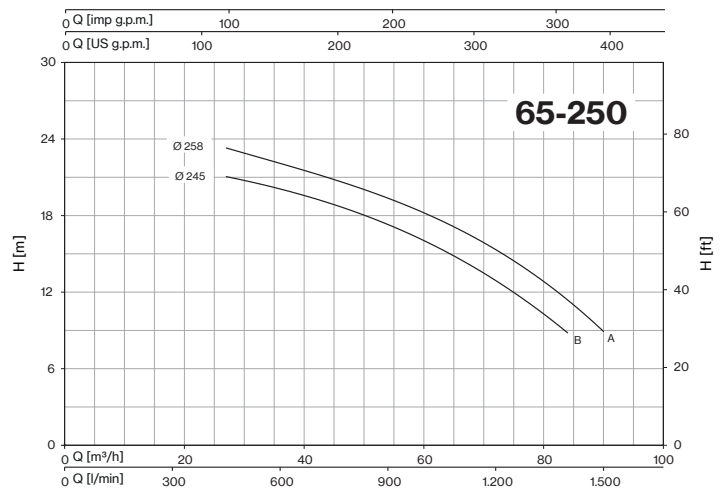
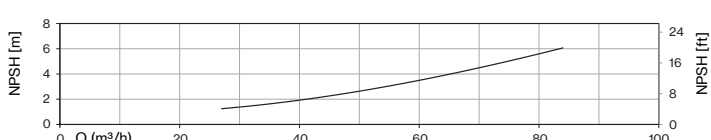
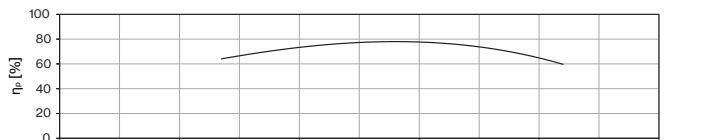
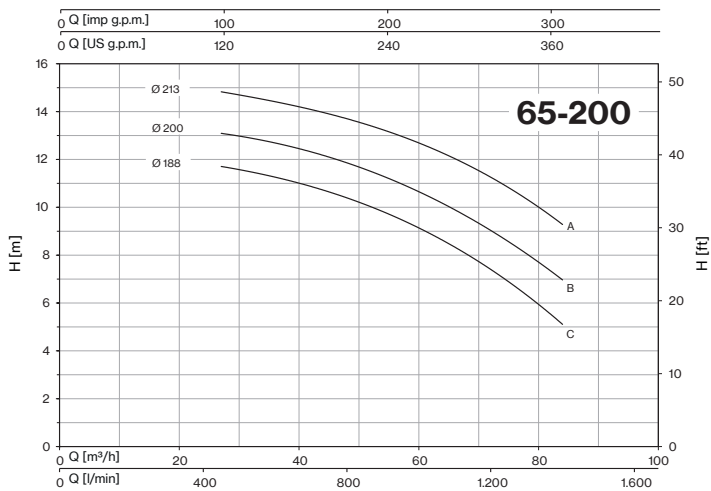
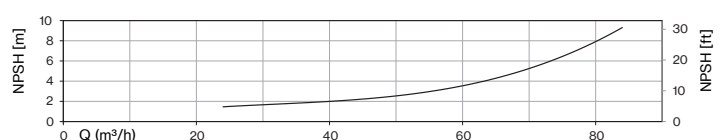
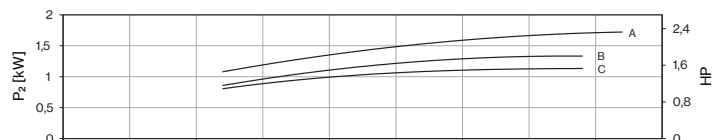
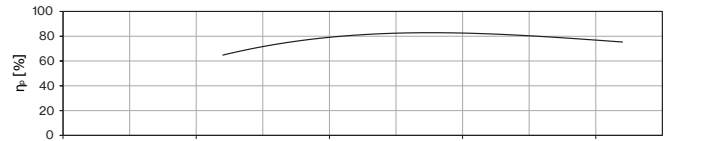
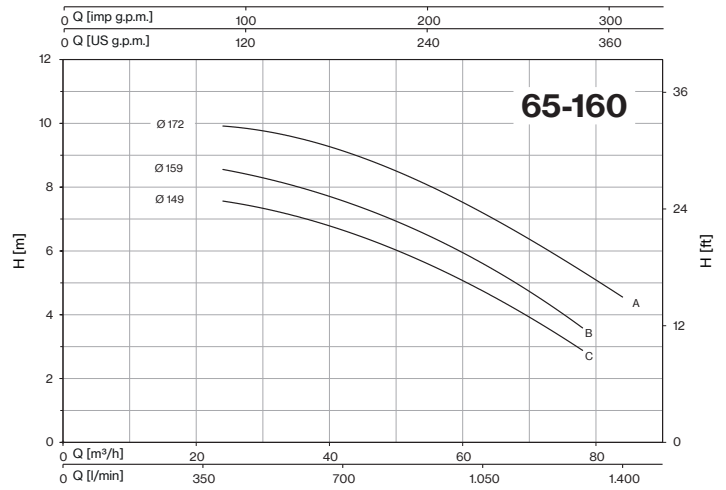
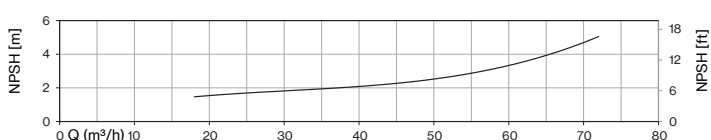
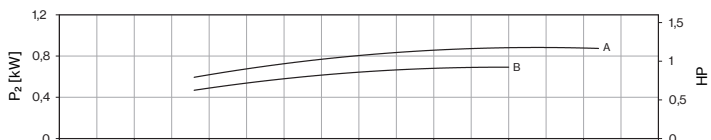
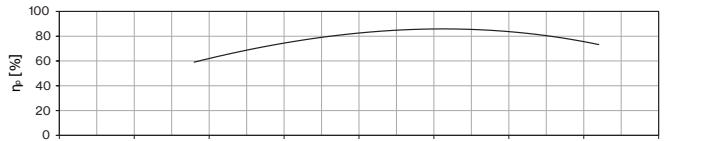
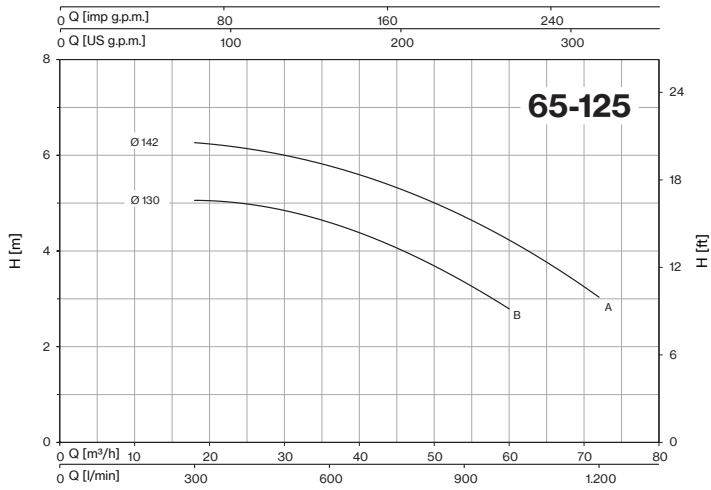
# 4MA-4MAX ~ EN 733



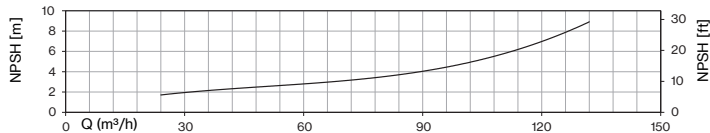
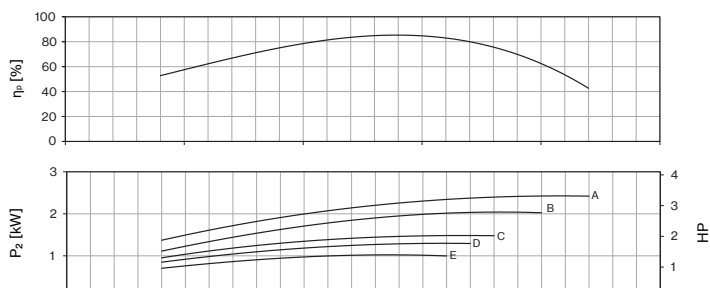
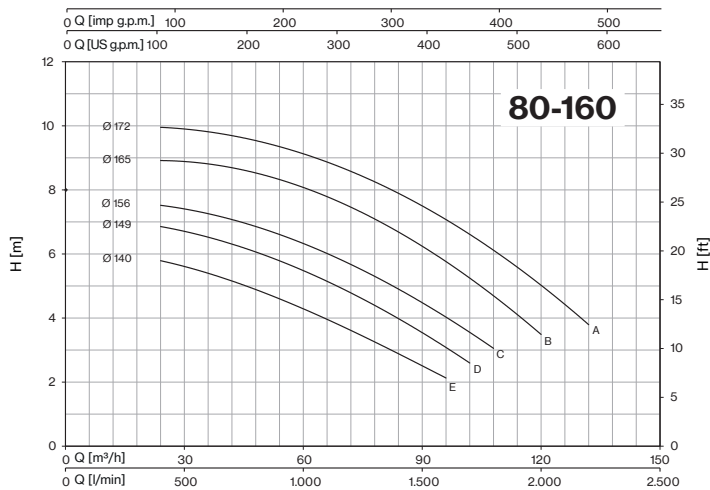
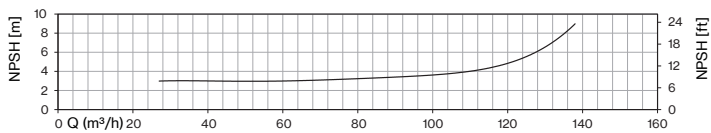
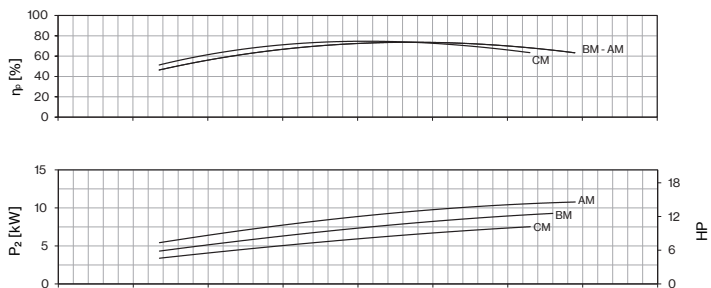
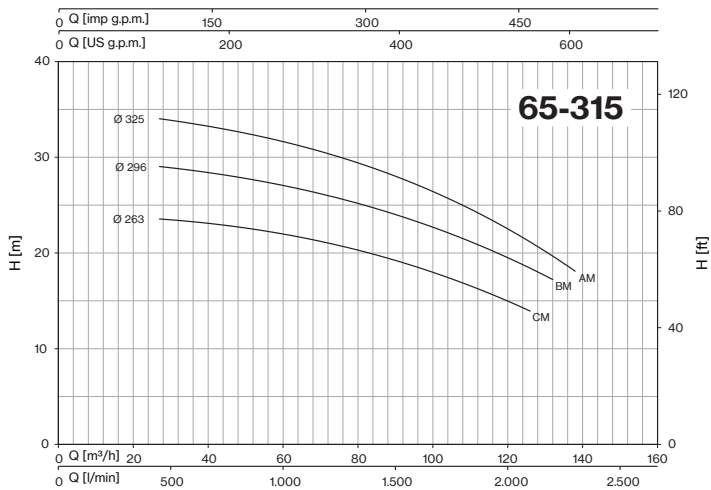
# 4MA-4MAX ~ EN 733



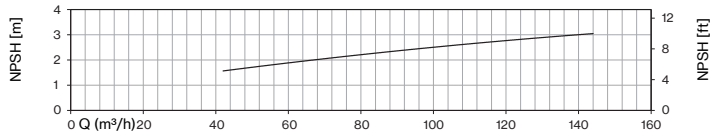
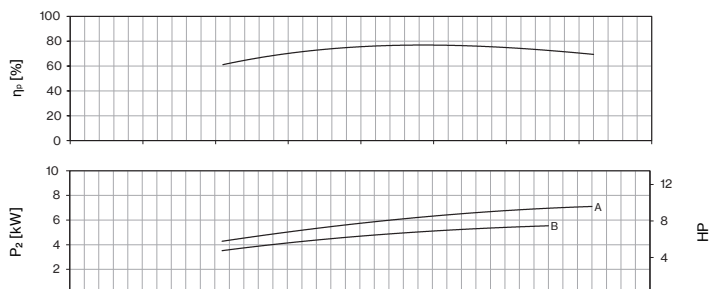
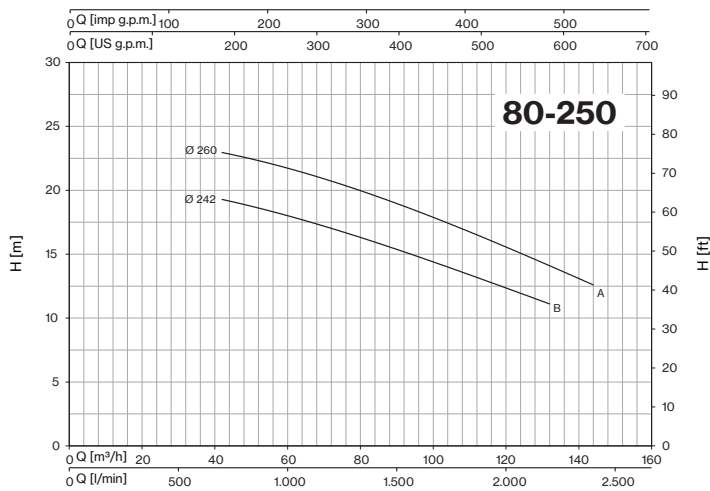
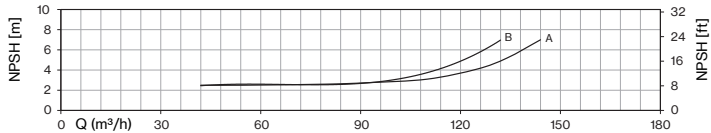
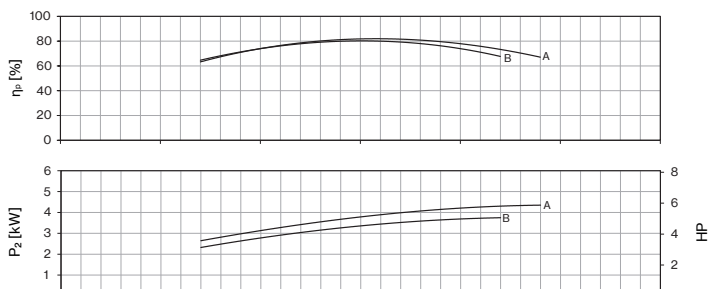
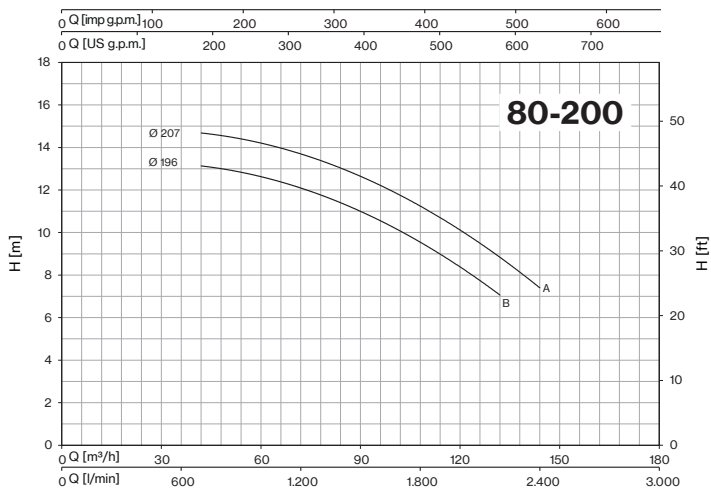
# 4MA-4MAX ~ EN 733



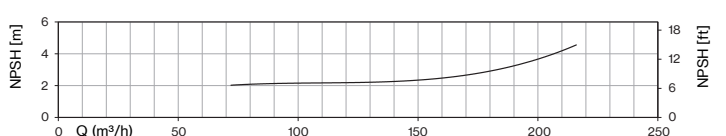
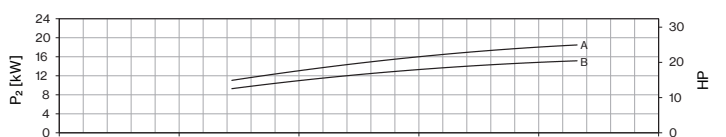
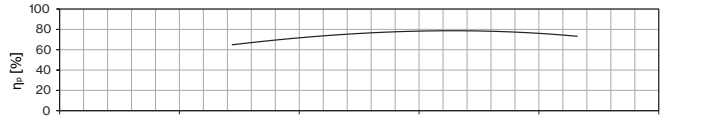
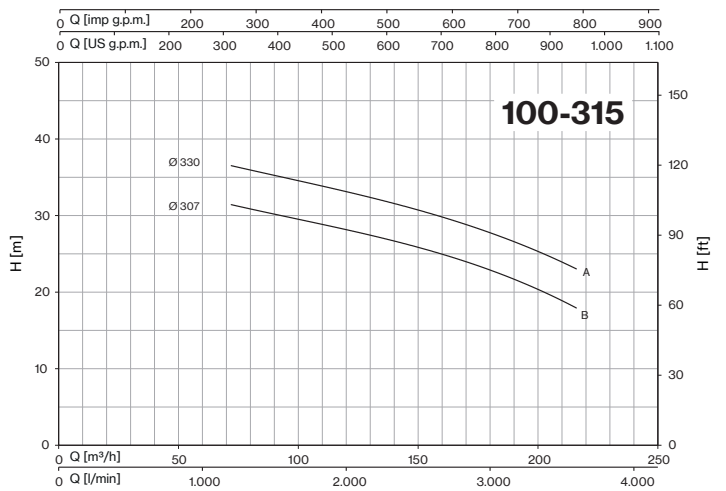
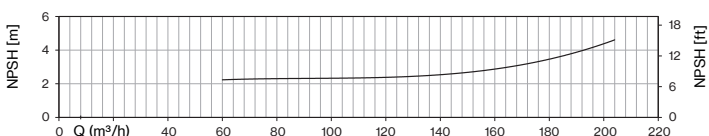
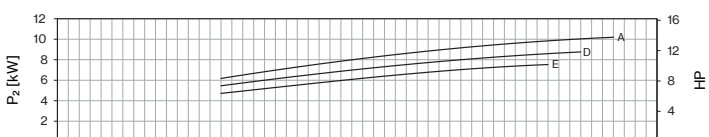
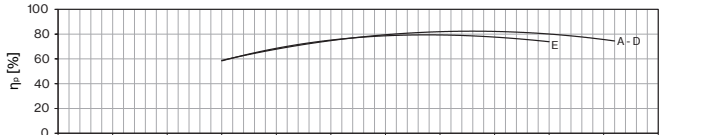
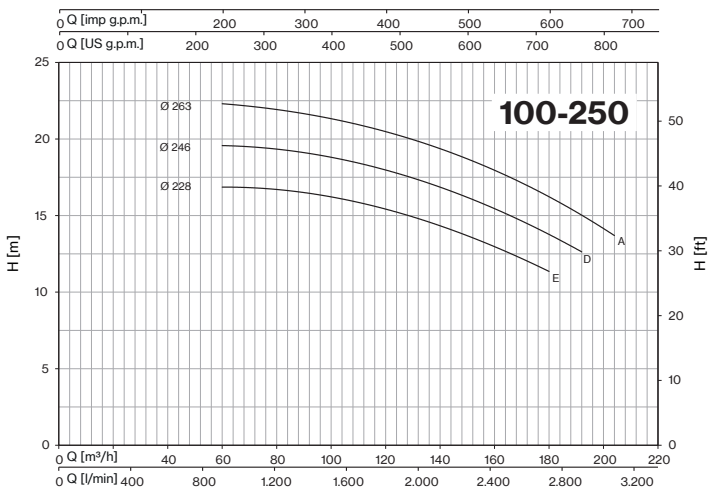
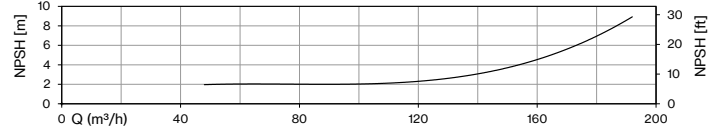
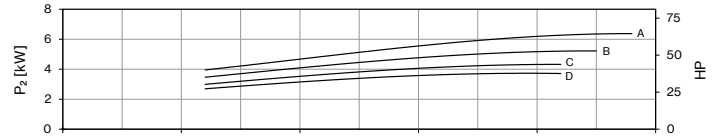
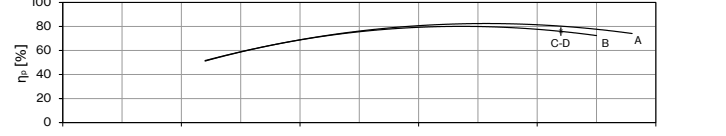
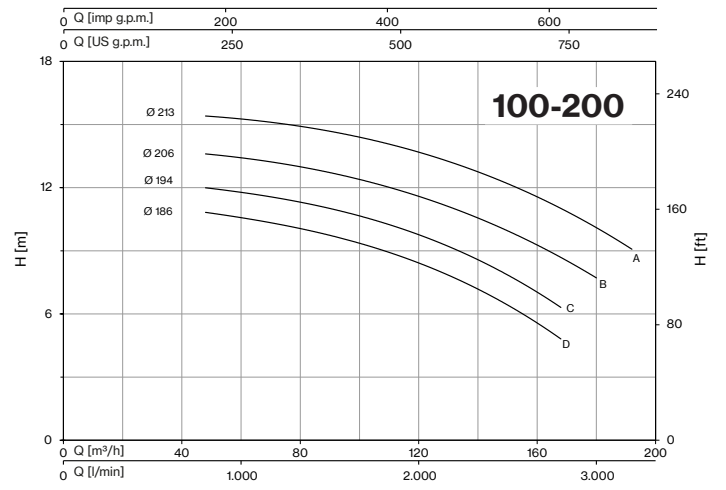
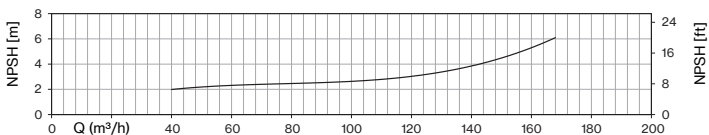
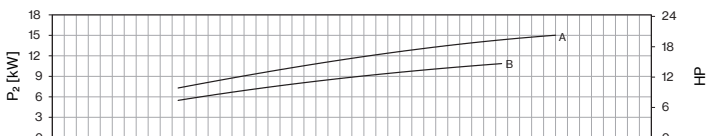
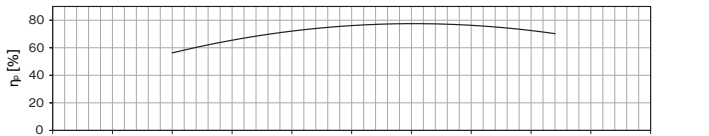
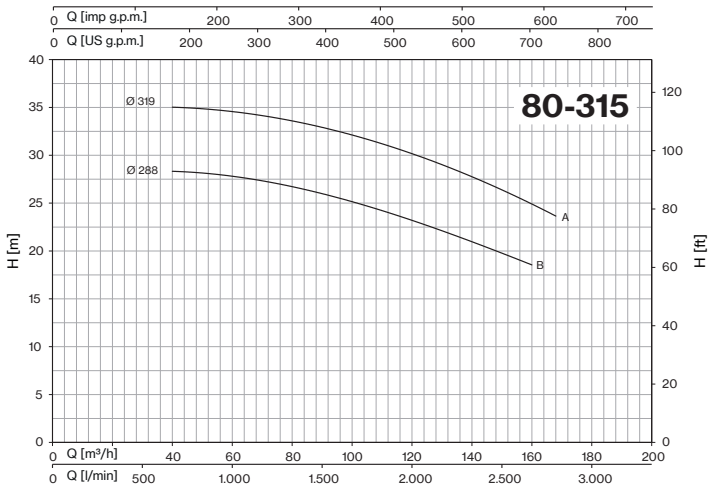
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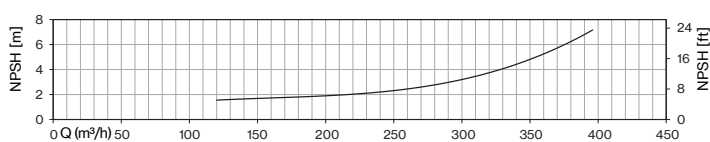
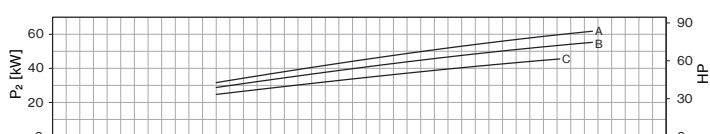
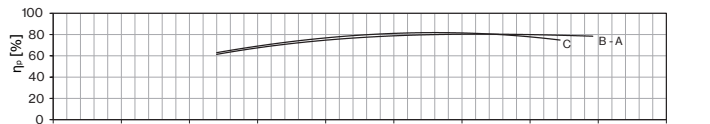
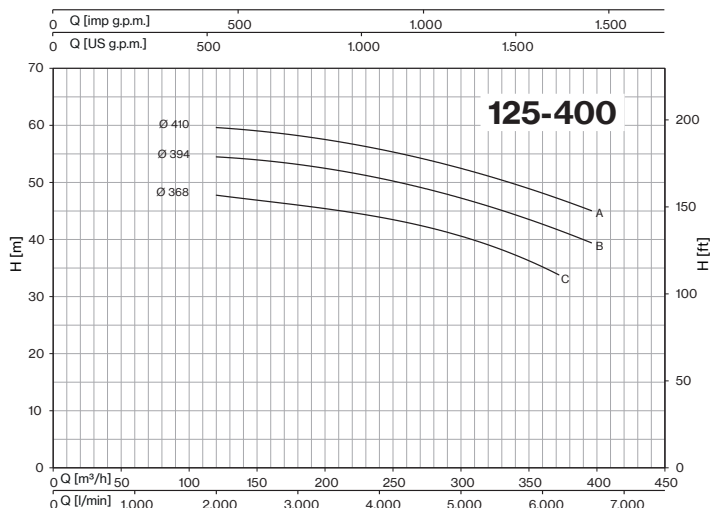
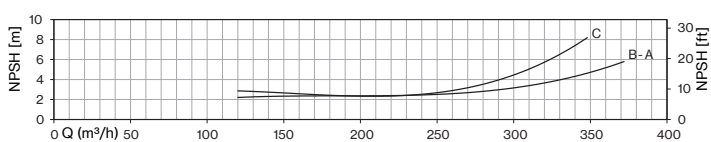
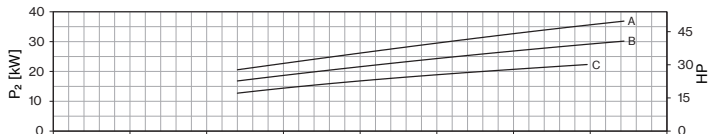
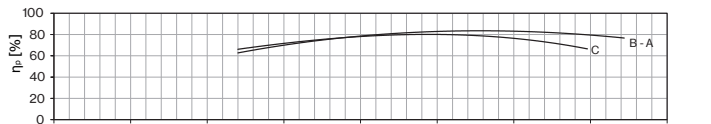
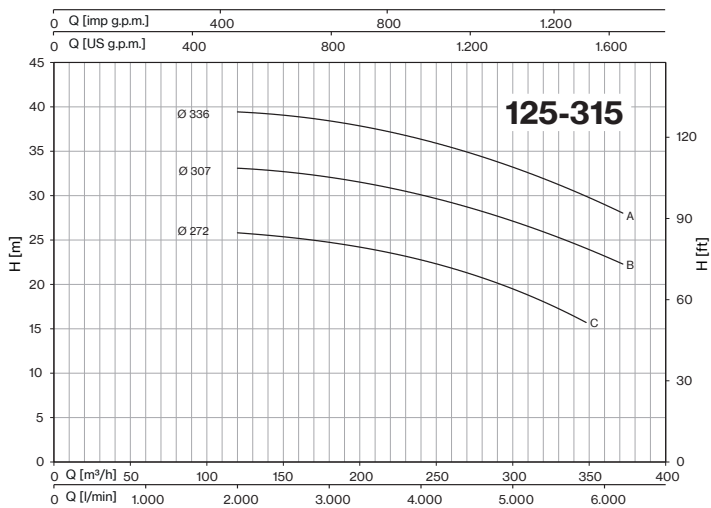
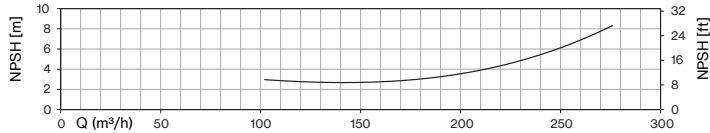
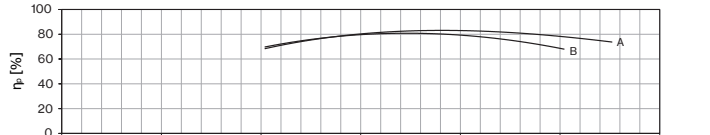
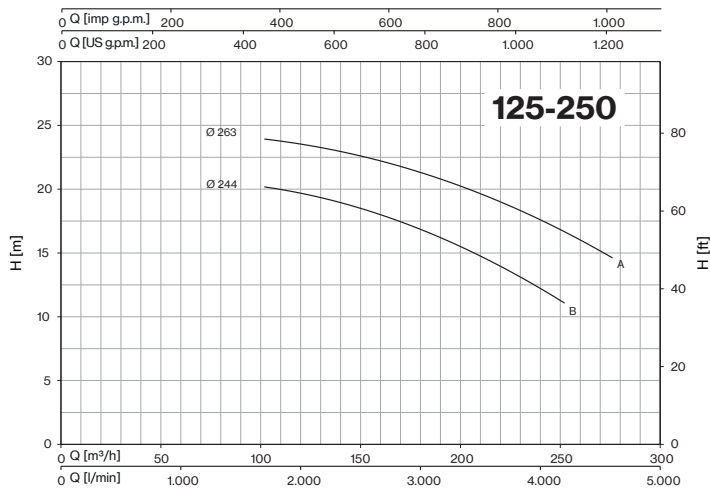
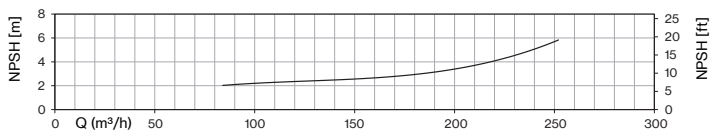
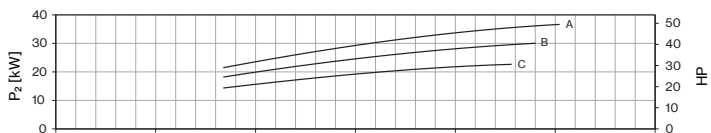
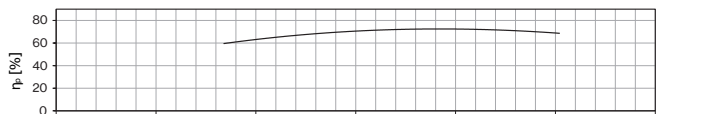
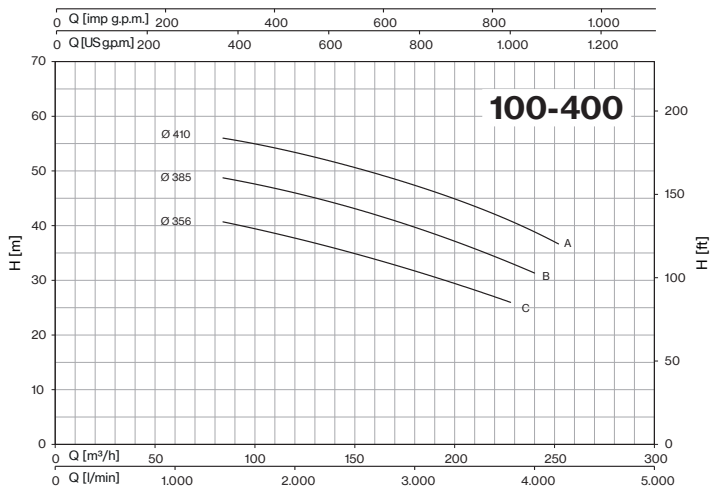


## 4MA-4MAX ~ EN 733



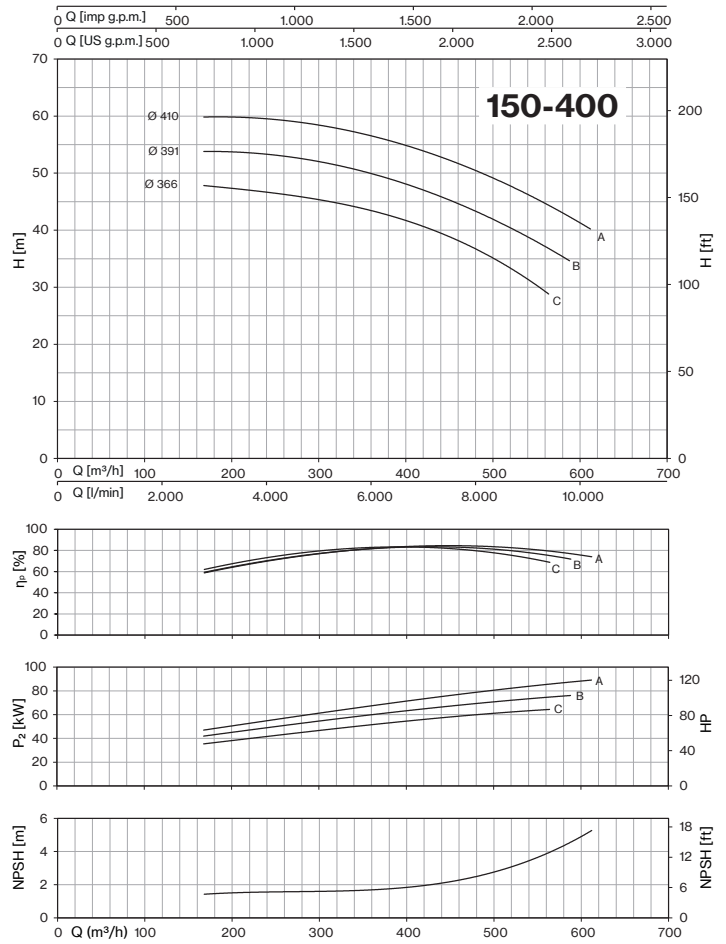
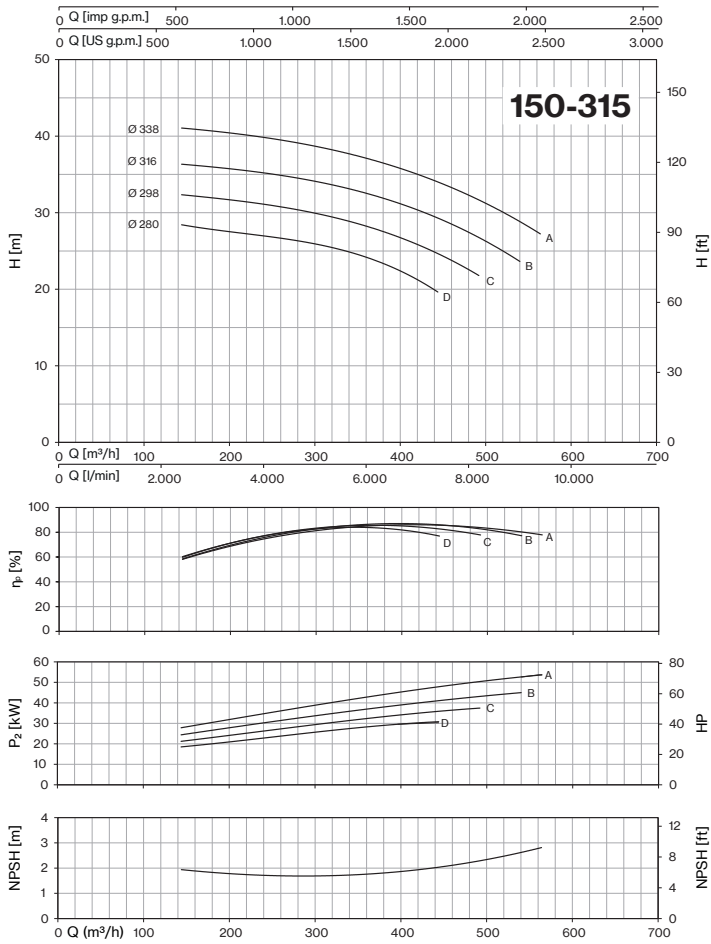
# 4MA-4MAX ~ EN 733



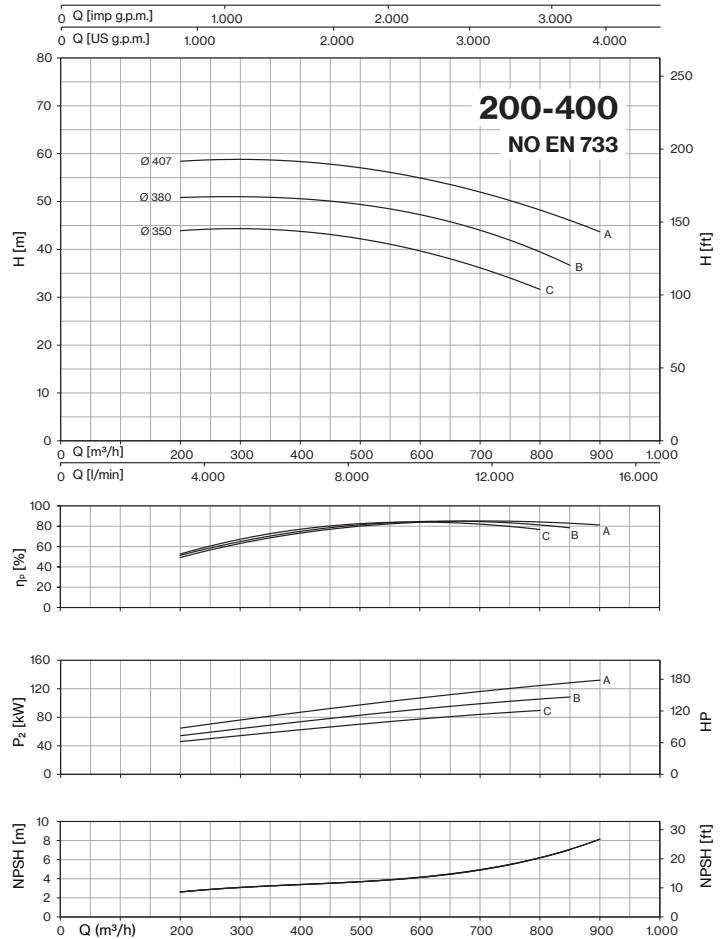
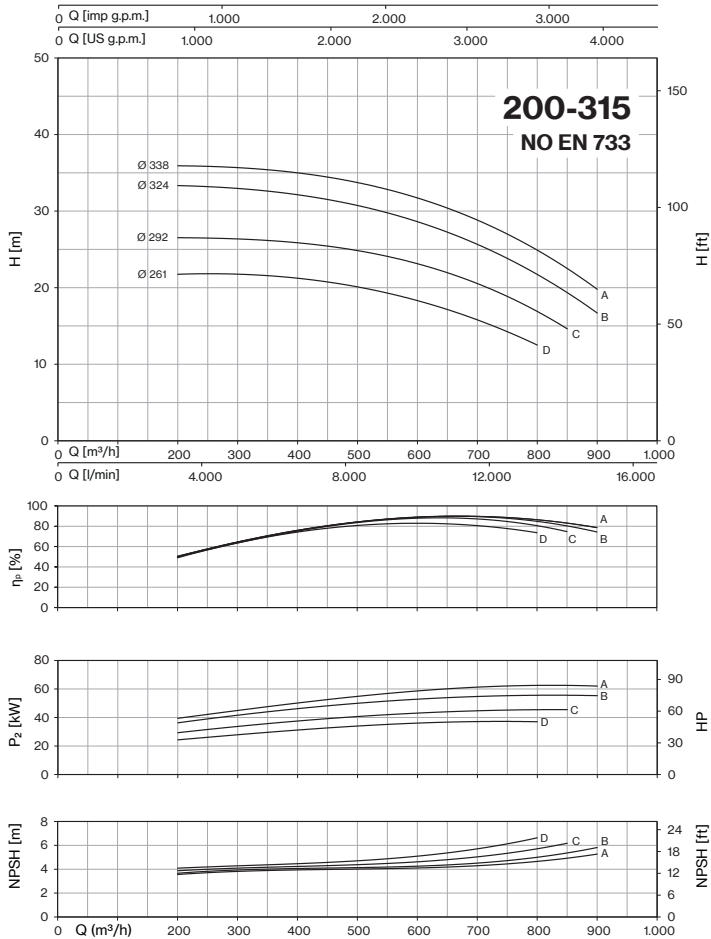


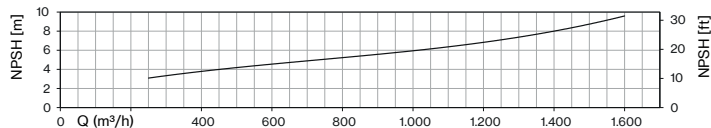
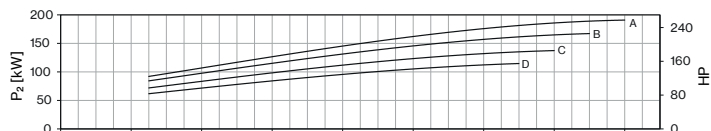
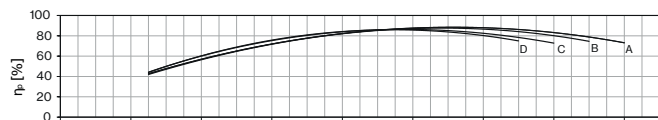
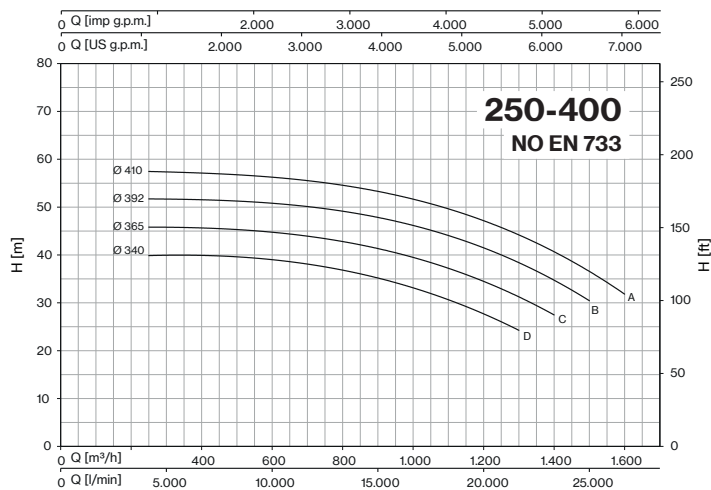
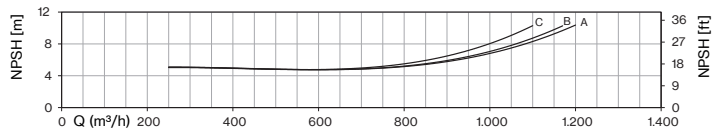
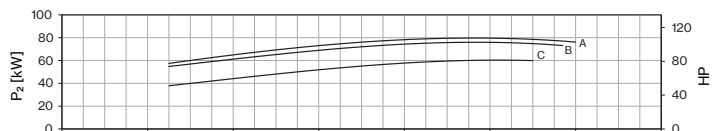
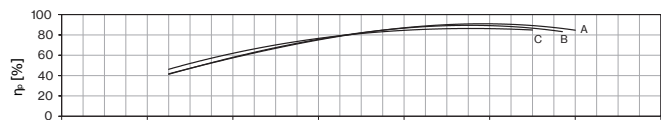
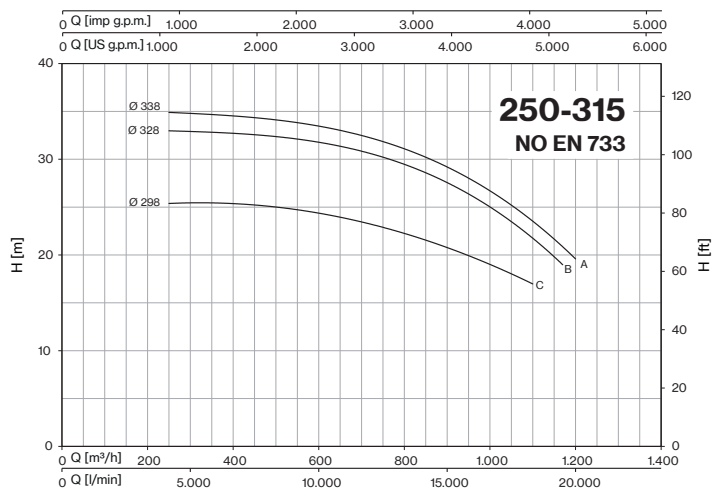


# 4MA-4MAX ~ EN 733

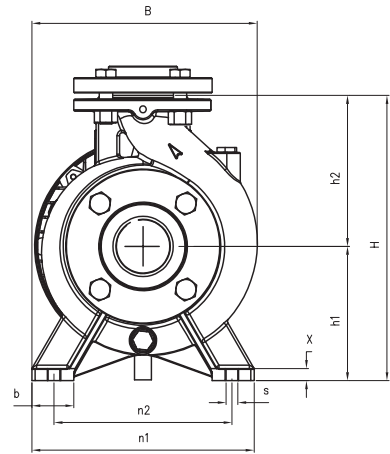
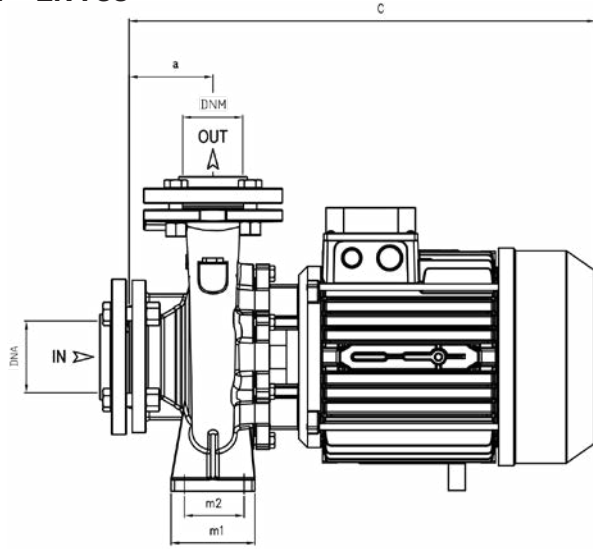


# 4MA-4MAX (No EN 733) ~ 1450 rpm





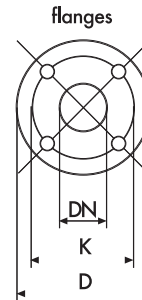
**MN ~ EN 733**



TYPE		MEC	DIMENSIONS (mm)													M			Kg			
1-	3-		a	h1	h2	m1	m2	n1	n2	b	x	s	C	B	H	DNA	DNM	I	L	M	1-	3-
32-160 C	32-160 C	90	80	132	160	100	70	240	190	50	12	14	530	240	292	50	32	551	250	341	41	41
32-160 B	32-160 B	90	80	132	160	100	70	240	190	50	12	14	530	240	292			551	250	341	44	44
-	32-160 A	90	80	132	160	100	70	240	190	50	12	14	530	240	292			551	250	341	-	47
32-200 C	-	112	80	160	180	100	70	240	190	50	12	14	574	268	340			602	263	395	65,5	-
-	32-200 C	100	80	160	180	100	70	240	190	50	12	14	540	268	340			602	263	395	-	56,5
-	32-200 B1	112	80	160	180	100	70	240	190	50	12	14	520	268	340			627	287	408	-	65,5
-	32-200 B	132	80	160	180	100	70	240	190	50	12	14	565	268	340			627	287	408	-	72
-	32-200 A1	112	80	160	180	100	70	240	190	50	12	14	520	268	340			627	287	408	-	72
-	32-200 A	132	80	160	180	100	70	240	190	50	12	14	565	268	340			627	287	408	-	79
-	32-250 C	132	100	180	225	125	95	320	250	65	12	14	625	305	405			666	346	471	-	101,5
-	32-250 B	132	100	180	225	125	95	320	250	65	14	14	625	305	405			666	346	471	-	105,5
-	32-250 A1	132	100	180	225	125	95	320	250	65	14	14	670	305	405			810	354	480	-	110
-	32-250 A	160	100	180	225	125	95	320	250	65	14	14	695	305	405	810	354	480	-	135,5		
40-125 C	40-125 C	90	80	112	140	100	70	210	160	50	12	14	535	220	252	65	40	551	250	341	41,5	41,5
40-125 B	40-125 B	90	80	112	140	100	70	210	160	50	12	14	535	220	252			551	250	341	44	44
-	40-125 A	90	80	112	140	100	70	210	160	50	12	14	535	220	252			551	250	341	-	47,5
40-160 B	-	100	80	132	160	100	70	240	190	50	12	14	535	245	292			551	250	341	56	-
-	40-160 B	100	80	132	160	100	70	240	190	50	12	14	535	245	292			551	250	341	-	52
40-160 A	-	112	80	132	160	100	70	240	190	50	15	14	579	245	292			602	263	395	64,5	-
-	40-160 A	100	80	132	160	100	70	240	190	50	15	14	535	245	292			602	263	395	-	56,5
-	40-160 AP	112	80	132	160	100	70	240	190	50	15	14	579	245	292			627	287	408	-	63
-	40-200 B1	112	100	160	180	100	70	265	212	50	15	14	597	273	340			627	287	408	-	68
-	40-200 B	132	100	160	180	100	70	265	212	50	15	14	590	273	340			627	287	408	-	74,5
-	40-200 A1	112	100	160	180	100	70	265	212	50	15	14	597	273	340			627	287	408	-	74
-	40-200 A	132	100	160	180	100	70	265	212	50	15	14	590	273	340			627	287	408	-	81
-	40-200 AP	132	100	160	180	100	70	265	212	50	15	14	628	273	340	666	346	471	-	93,5		
-	40-250 C	132	100	180	225	125	95	320	250	65	15	14	630	322	405	666	346	471	-	100,5		
-	40-250 B	132	100	180	225	125	95	320	250	65	15	14	630	322	405	666	346	471	-	105		
-	40-250 A1	132	100	180	225	125	95	320	250	65	15	14	675	322	405	810	354	480	-	109,5		
-	40-250 A	160	100	180	225	125	95	320	250	65	15	14	700	322	405	810	354	480	-	135		
-	40-250 BM	132	100	180	225	125	95	320	250	65	15	14	750	332	405	810	354	480	-	150		
-	40-250 AM	160	100	180	225	125	95	320	250	65	15	14	750	332	405	810	354	480	-	160,5		
50-125 B	-	100	100	132	160	100	70	240	190	50	12	14	525	250	292	65	50	602	263	395	57,5	-
-	50-125 B	100	100	132	160	100	70	240	190	50	12	14	560	250	292			602	263	395	-	53,5
50-125 A	-	112	100	132	160	100	70	240	190	50	12	14	610	250	292			602	263	395	65,5	-
-	50-125 A	100	100	132	160	100	70	240	190	50	12	14	560	250	292			602	263	395	-	57,5
-	50-160 B1	112	100	160	180	100	70	265	212	50	12	14	597	270	340			627	287	408	-	68,5
-	50-160 B	132	100	160	180	100	70	265	212	50	12	14	590	270	340			627	287	408	-	74,5
-	50-160 A1	112	100	160	180	100	70	265	212	50	12	14	597	270	340			627	287	408	-	74,5
-	50-160 A	132	100	160	180	100	70	265	212	50	12	14	590	270	340			627	287	408	-	81
-	50-200 C	132	100	160	200	100	70	265	215	50	12	14	635	290	360			666	346	471	-	98
-	50-200 B	132	100	160	200	100	70	265	215	50	12	14	635	290	360			666	346	471	-	102,5
-	50-200 A1	132	100	160	200	100	70	265	215	50	12	14	680	290	360			810	354	480	-	107
-	50-200 A	160	100	160	200	100	70	265	215	50	12	14	705	290	360			810	354	480	-	132,5

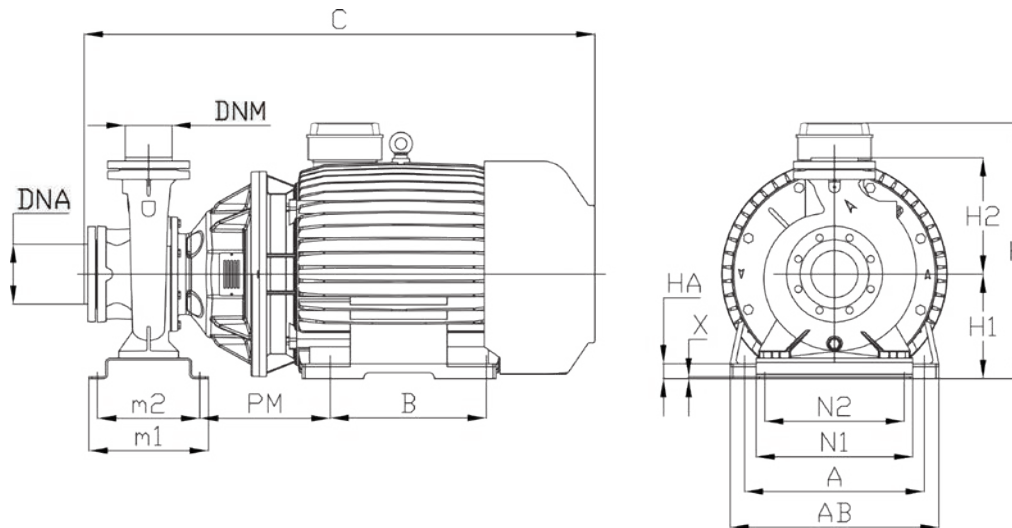
TYPE		MEC	DIMENSIONS (mm)																			
1-	3-		a	h1	h2	m1	m2	n1	n2	b	x	s	C	B	H	DNA	DNM	I	L	M	1-	3-
-	<b>50-250 C1</b>	132	100	180	225	125	95	320	250	65	14	14	680	332	405	65	50	810	354	480	-	113,5
-	<b>50-250 C</b>	160	100	180	225	125	95	320	250	65	14	14	705	332	405			810	354	480	-	139
-	<b>50-250 B</b>	160	100	180	225	125	95	320	250	65	14	14	750	332	405			810	354	480	-	154
-	<b>50-250 A</b>	160	100	180	225	125	95	320	250	65	14	14	750	332	405			810	354	480	-	164
-	<b>65-125 B1</b>	112	100	160	180	125	95	280	212	65	14	14	612	280	340	80	65	627	287	408	-	70
-	<b>65-125 B</b>	132	100	160	180	125	95	280	212	65	14	14	605	280	340			627	287	408	-	76,5
-	<b>65-125 A1</b>	112	100	160	180	125	95	280	212	65	14	14	612	280	340			627	287	408	-	76,5
-	<b>65-125 A</b>	132	100	160	180	125	95	280	212	65	14	14	605	280	340			627	287	408	-	83
-	<b>65-160 C</b>	132	100	160	200	125	95	280	212	65	14	14	635	290	360			666	346	471	-	99,5
-	<b>65-160 B</b>	132	100	160	200	125	95	280	212	65	14	14	635	290	360			666	346	471	-	103,5
-	<b>65-160 A1</b>	132	100	160	200	125	95	280	212	65	14	14	680	290	360			810	354	480	-	107,5
-	<b>65-160 A</b>	160	100	160	200	125	95	280	212	65	14	14	705	290	360			810	354	480	-	135
-	<b>65-200 C1</b>	132	100	180	225	125	95	320	250	65	14	14	680	330	405			810	354	480	-	113
-	<b>65-200 C</b>	160	100	180	225	125	95	320	250	65	14	14	705	330	405			810	354	480	-	138,5
-	<b>65-200 B</b>	160	100	180	225	125	95	320	250	65	14	14	750	330	405			810	354	480	-	153
-	<b>65-200 A</b>	160	100	180	225	125	95	320	250	65	14	14	750	330	405			810	354	480	-	163,5
-	<b>65-250 B</b>	180	100	200	250	160	120	360	280	80	16	19	820	370	450	920	420	625	-	203,5		
-	<b>65-250 A</b>	180	100	200	250	160	120	360	280	80	16	19	860	370	450	920	420	625	-	226		
-	<b>80-160 E</b>	132	125	180	225	125	95	320	250	65	14	14	665	330	405	100	80	810	354	480	-	110
-	<b>80-160 D</b>	132	125	180	225	125	95	320	250	65	14	14	665	330	405			810	354	480	-	114
-	<b>80-160 C1</b>	132	125	180	225	125	95	320	250	65	14	14	710	330	405			810	354	480	-	118
-	<b>80-160 C</b>	160	125	180	225	125	95	320	250	65	14	14	735	330	405			810	354	480	-	143
-	<b>80-160 B</b>	160	125	180	225	125	95	320	250	65	14	14	780	330	405			810	354	480	-	157,5
-	<b>80-160 A</b>	160	125	180	225	125	95	320	250	65	14	14	780	330	405			810	354	480	-	168
-	<b>80-200 B</b>	180	125	180	250	125	95	345	280	65	16	14	840	355	430			920	420	625	-	200
-	<b>80-200 A</b>	180	125	180	250	125	95	345	280	65	16	14	880	355	430			920	420	625	-	222
-	<b>100-160 B</b>	180	125	200	280	160	120	360	280	80	18	18	842	390	480	125	100	920	420	625	-	208
-	<b>100-160 A</b>	180	125	200	280	160	120	360	280	80	18	18	882	390	480	920	420	625	-	230,5		

DIMENSIONS (mm)				
DN	D	K	holes	
			n°	Ø
32	140	100	4	18
40	150	110	4	18
50	165	125	4	18
65	185	145	4	18
80	200	160	8	18
100	220	180	8	18
125	250	210	8	18



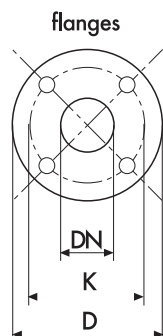
TYPE	LOTS			
	TRUCK		CONTAINER	
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
<b>32-160</b>	80×120×155	24	80×120×190	30
<b>32-200 (C)</b>	80×120×155	24	80×120×180	24
<b>32-200 (A) (A1) (B) (B1)</b>	100×120×140	18	100×120×185	24
<b>32-250 (A)</b>	85×110×120	6	85×110×170	9
<b>32-250 (B) (C)</b>	80×120×120	6	80×120×170	9
<b>40-125</b>	80×120×155	24	80×120×190	30
<b>40-160</b>	80×120×155	24	80×120×190	30
<b>40-200</b>	100×120×140	18	100×120×185	24
<b>40-250 (A)</b>	85×110×120	6	85×110×170	9
<b>40-250 (B) (BM) (C)</b>	80×120×120	6	80×120×170	9
<b>50-125</b>	80×120×120	24	80×120×180	24
<b>50-160</b>	100×120×140	18	100×120×185	24
<b>50-200 (A)</b>	85×110×120	6	85×110×170	9
<b>50-200 (B) (C)</b>	80×120×120	6	80×120×170	9
<b>50-250</b>	80×120×120	6	80×120×170	9
<b>65-125</b>	100×120×140	18	100×120×185	24
<b>65-160</b>	85×110×120	6	85×110×170	9
<b>65-200</b>	85×110×120	6	85×110×170	9
<b>65-250</b>	85×110×130	4	85×110×190	6
<b>80-160</b>	85×110×120	6	85×110×170	9
<b>80-200</b>	85×110×130	4	85×110×190	6
<b>100-160</b>	85×110×130	4	85×110×190	6

# MNG-MNGX ~ EN 733

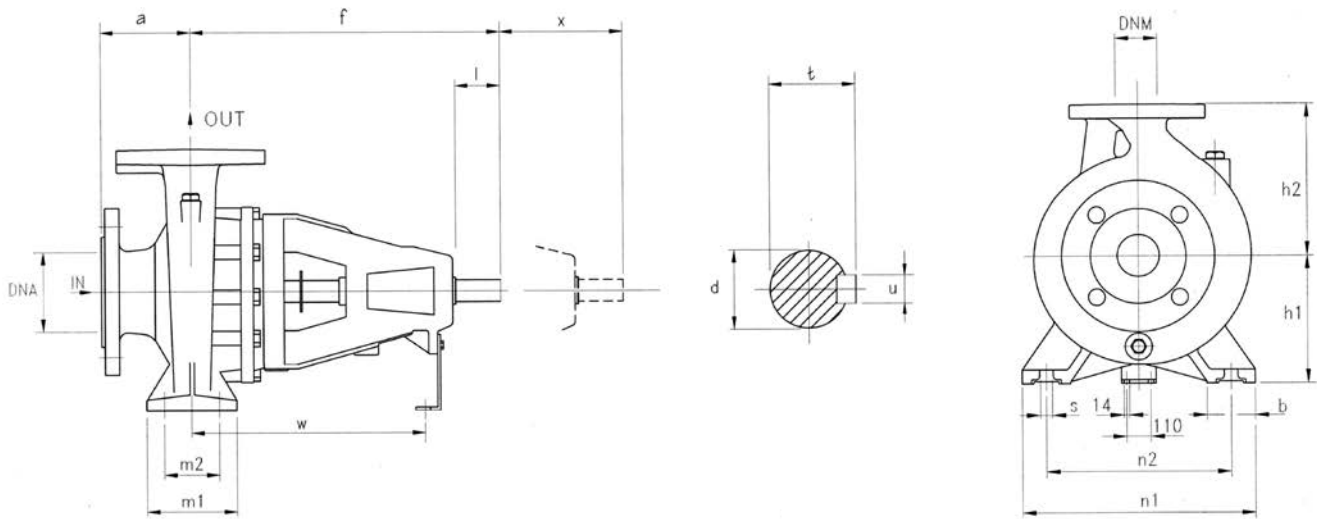


TYPE	DIMENSIONS (mm)															Kg
	m1	m2	N2	N1	H1	H2	H	A	AB	B	PM	C	HA	DNA	DNM	
<b>80-250B</b>	200	120	315	406	225	317	550	356	435	311	356	1130	28	100	80	418
<b>80-250A</b>	320	280	360	420	280	317	650	406	485	349	325	1240	58			505
<b>100-200B</b>	200	120	280	360	225	321	550	356	435	311	356	1130	28	125	100	417
<b>100-200A</b>	320	280	360	420	280	321	650	406	485	349	325	1240	60			505
<b>100-250C</b>	320	280	360	420	280	321	675	406	485	349	325	1315	60			516
<b>100-250B</b>	320	280	360	420	280	321	675	457	545	368	347	1315	35			645
<b>100-250A</b>	320	280	360	420	280	321	675	457	545	419	347	1370	35			680

DIMENSIONS (mm)				
DN	D	K	holes	
			n°	∅
80	200	160	8	18
100	220	180	8	18
125	250	210	8	18

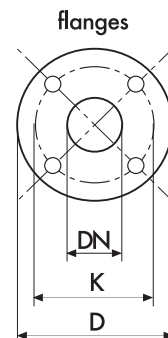


**MA-MAX EN 733 ~ 2900 rpm**  
**4MA-4MAX EN 733 ~ 1450 rpm**

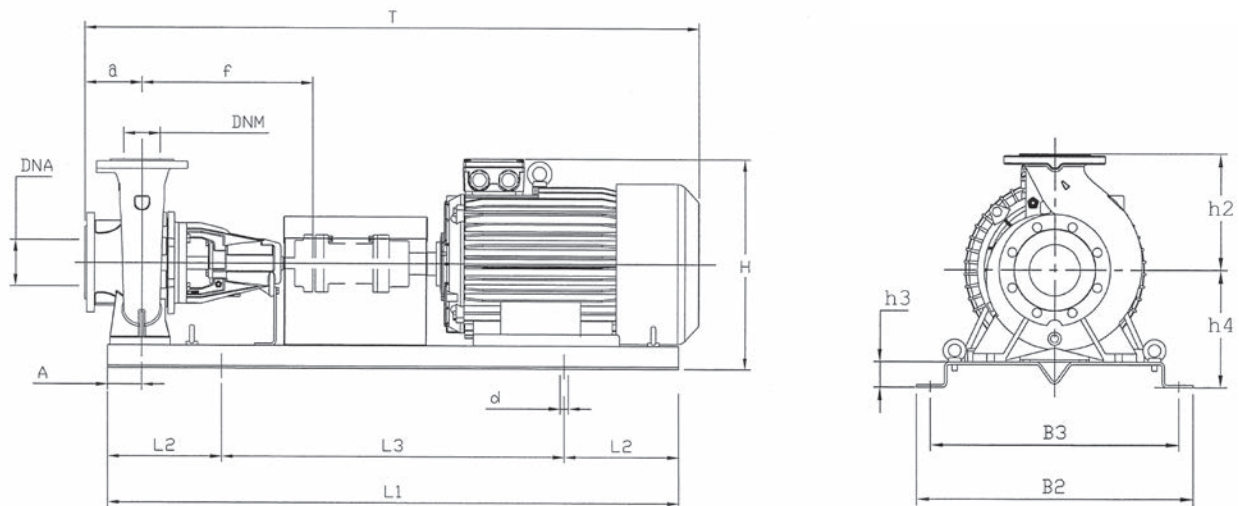


TYPE	DIMENSIONS (mm)																				Kg	
	a	f	h1	h2	m1	m2	n1	n2	s	b	l	d1	t	u	x	w	DNa	DNM	I	L		M
32-160	80	360	132	160	100	70	240	190	14	50	50	24	27	8	100	260			535	320	445	38
32-200	80	360	160	180	100	70	240	190	14	50	50	24	27	8	100	260	50	32	535	320	445	41
32-250	100	360	180	225	125	95	320	250	14	65	65	24	27	8	100	260			545	405	545	49
40-125	80	360	112	140	100	70	210	160	14	50	50	24	27	8	100	260			535	320	445	37
40-160	80	360	132	160	100	70	240	190	14	50	50	24	27	8	100	260	65	40	535	320	445	40
40-200	100	360	160	180	100	70	265	212	14	50	50	24	27	8	100	260			535	320	445	44
40-250	100	360	180	225	125	95	320	250	14	65	50	24	27	8	100	260			545	405	545	49,5
50-125	100	360	132	160	100	70	240	190	14	50	50	24	27	8	100	260			535	320	445	39,5
50-160	100	360	160	180	100	70	265	212	14	50	50	24	27	8	100	260	65	50	535	320	445	44
50-200	100	360	160	200	100	70	265	215	14	50	50	24	27	8	100	260			535	320	445	47
50-250	100	360	180	225	125	95	320	250	14	65	50	24	27	8	100	260			545	405	545	53
50-315	125	470	225	280	125	95	345	280	14	65	80	32	35,3	10	100	340	80		655	465	620	94,5
65-125	100	360	160	180	125	95	280	212	14	65	65	24	27	8	100	260			535	320	445	44,5
65-160	100	360	160	200	125	95	280	212	14	65	65	24	27	8	100	260			535	320	445	49
65-200	100	360	180	225	125	95	320	250	14	65	65	24	27	8	140	260	80	65	545	405	545	54
65-250	100	470	200	250	160	120	360	280	19	80	80	32	35	10	140	340			545	405	545	76,5
65-315	125	470	225	280	160	120	400	315	19	80	80	32	35	10	140	340			655	465	620	96
80-160	125	360	180	225	125	95	320	250	14	65	50	24	27	8	140	260			545	405	545	58
80-200	125	470	180	250	125	95	345	280	14	65	80	32	35	10	140	340	100	80	680	405	545	74
80-250	125	470	200	280	160	120	400	315	18	80	80	32	35,3	10	140	340			655	465	585	91
80-315	125	470	250	315	160	120	400	315	18	80	80	32	35,3	10	140	340			655	465	620	106
100-200	125	470	200	280	160	120	360	280	18	80	80	32	35,3	10	140	340			655	465	620	95
100-250	140	470	225	280	160	120	400	315	18	80	80	32	35,3	10	140	340	125	100	655	465	620	103
100-315	140	470	250	315	160	120	400	315	18	80	80	32	35,3	10	140	340			655	465	620	122
100-400	140	530	280	355	200	150	500	400	22	100	110	42	45,3	12	140	370			720	775	855	183,5
125-250	140	470	315	355	200	150	400	315	22	100	110	32	45,3	12	140	370			655	465	620	132
125-315	140	530	280	355	200	150	500	400	22	100	110	42	45,3	12	140	370	150	125	720	775	855	176
125-400	140	530	315	400	200	150	500	400	22	100	110	42	45,3	12	140	370			720	775	855	198
150-315	160	530	280	400	200	150	550	450	22	100	110	42	45,3	12	140	370			655	465	620	191
150-400	160	530	315	450	200	150	550	450	22	100	110	42	45,3	12	140	370	200	150	720	775	855	218,5
200-315	180	706	355	450	250	190	634	500	28	134	110	55	58,3	16	208	523			800	1200	1150	345
200-400	180	706	355	500	250	190	634	500	28	134	110	55	58,3	16	214	523	250	200	800	1200	1150	346
250-315	225	711	400	500	250	200	694	560	28	134	110	55	58,3	16	214	528			800	1200	1070	401,5
250-400	225	706	400	550	250	200	694	560	28	134	110	55	58,3	16	220	523	300	250	800	1200	1120	393

DIMENSIONS (mm)				
DN	D	K	holes	
			n°	Ø
32	140	100	4	18
40	150	110	4	18
50	165	125	4	18
65	185	145	4	18
80	200	160	8	18
100	220	180	8	18
125	250	210	8	18
150	285	240	8	23
200	340	295	8	23
250	395	350	12	23
300	445	400	12	23



# MA-MAX EN 733 ~ 2900 rpm



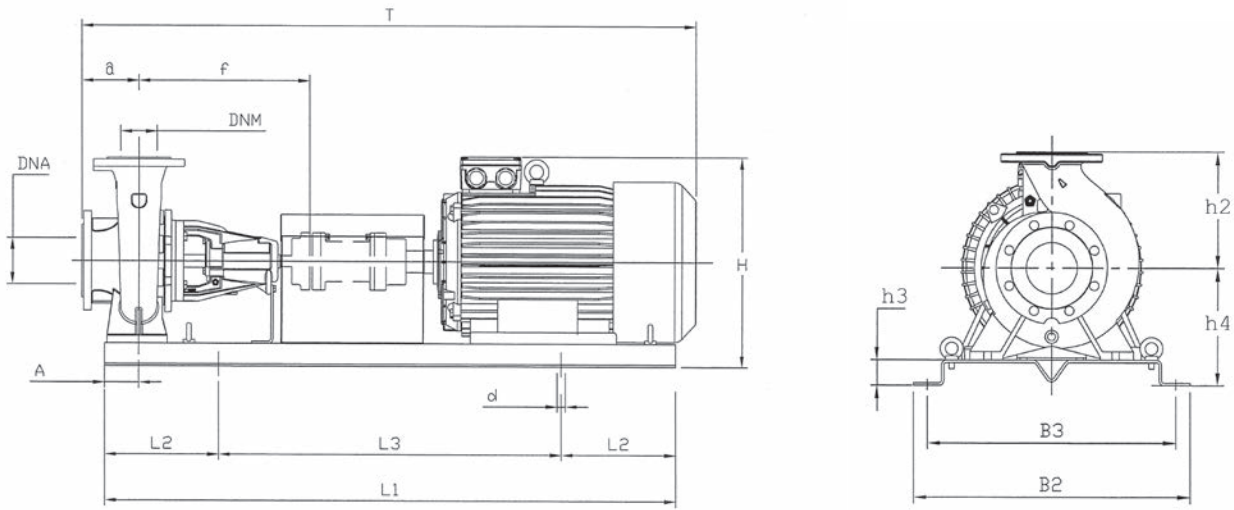
TYPE	kW	Motor Size	DIMENSIONS (mm)															Kg	
			a	f	h4	h2	h3	L1	L2	L3	B2	B3	A	d	T	H	DNA		DNM
32-160C	1,5	90S	80	360	182	160	50	900	150	600	390	350	60	18	855	342	50	32	82,1
32-160B	2,2	90L	80	360	182	160	50	900	150	600	390	350	60	18	920	342			87,7
32-160A	3	100L	80	360	182	160	50	900	150	600	390	350	60	18	920	362			96,7
32-160A	4	112M	80	360	182	160	50	900	150	600	390	350	60	18	940	375			104,7
32-200C	4	112M	80	360	210	180	50	900	150	600	390	350	60	18	940	403			108,7
32-200C	5,5	132S	80	360	210	180	50	1000	170	660	450	400	60	22	1020	433			116,1
32-200B	5,5	132S	80	360	210	180	50	1000	170	660	450	400	60	22	1020	433			116,1
32-200B	7,5	132S	80	360	210	180	50	1000	170	660	450	400	60	22	1020	433			144,3
32-200A	7,5	132S	80	360	210	180	50	1000	170	660	450	400	60	22	1020	433			144,3
32-250C	11	160M	100	360	230	225	50	1250	205	840	540	490	75	22	1275	495			207,3
32-250B	11	160M	100	360	230	225	50	1250	205	840	540	490	75	22	1275	495	207,3		
32-250A	15	160M	100	360	230	225	50	1250	205	840	540	490	75	22	1275	495	219,3		
40-125C	1,5	90S	80	360	162	140	50	900	150	600	390	350	60	18	855	317	65	40	82,2
40-125C	2,2	90L	80	360	162	140	50	900	150	600	390	350	60	18	920	317			87,8
40-125B	2,2	90L	80	360	162	140	50	900	150	600	390	350	60	18	920	317			87,8
40-125B	3	100L	80	360	162	140	50	900	150	600	390	350	60	18	920	342			96,8
40-125A	3	100L	80	360	162	140	50	900	150	600	390	350	60	18	920	342			96,8
40-160B	3	100L	80	360	182	160	50	900	150	600	390	350	60	18	920	362			99,8
40-160B	4	112M	80	360	182	160	50	900	150	600	390	350	60	18	940	375			107,8
40-160A	4	112M	80	360	182	160	50	900	150	600	390	350	60	18	940	375			107,8
40-160A	5,5	132S	80	360	182	160	50	1000	170	660	450	400	60	22	1020	405			115,2
40-160AP	5,5	132S	80	360	182	160	50	1000	170	660	450	400	60	22	1020	405			115,2
40-200B	5,5	132S	100	360	210	180	50	1000	170	660	450	400	60	22	1040	433	119,2		
40-200B	7,5	132S	100	360	210	180	50	1000	170	660	450	400	60	22	1040	433	147,4		
40-200A	7,5	132S	100	360	210	180	50	1000	170	660	450	400	60	22	1040	433	147,4		
40-200A	11	160M	100	360	210	180	50	1120	190	740	490	440	60	22	1168	475	198,4		
40-200 AP	7,5	132S	100	360	210	180	50	1000	170	660	450	400	60	22	1040	433	147,4		
40-200 AP	11	160M	100	360	210	180	50	1120	190	740	490	440	60	22	1168	475	198,4		
40-250C	11	160M	100	360	230	225	50	1250	205	840	540	490	75	22	1275	495	208,9		
40-250B	11	160M	100	360	230	225	50	1250	205	840	540	490	75	22	1275	495	208,9		
40-250B	15	160M	100	360	230	225	50	1250	205	840	540	490	75	22	1275	495	220,9		
40-250A	15	160M	100	360	230	225	50	1250	205	840	540	490	75	22	1275	495	220,9		
40-250A	18,5	160L	100	360	230	225	50	1250	205	840	540	490	75	22	1275	495	238,9		
40-250BM	18,5	160L	100	360	230	225	50	1250	205	840	540	490	75	22	1275	495	238,9		
40-250AM	22	180M	100	360	230	225	50	1250	205	840	540	490	75	22	1275	510	297,3		
50-125B	3	100L	100	360	182	160	50	900	150	600	390	350	60	18	940	362	65	50	99,7
50-125A	4	112M	100	360	182	160	50	900	150	600	390	350	60	18	960	375			107,7
50-160B	5,5	132S	100	360	210	180	50	1000	170	660	450	400	60	22	1040	433			119,6
50-160A	7,5	132S	100	360	210	180	50	1000	170	660	450	400	60	22	1040	433			147,8
50-200C	11	160M	100	360	210	200	50	1120	190	740	490	440	60	22	1168	475			201,8
50-200B	11	160M	100	360	210	200	50	1120	190	740	490	440	60	22	1168	475			201,8
50-200A	15	160M	100	360	210	200	50	1120	190	740	490	440	60	22	1168	475			213,8
50-250C	15	160M	100	360	230	225	50	1250	205	840	540	490	75	22	1275	495			224,8
50-250B	18,5	160L	100	360	230	225	50	1250	205	840	540	490	75	22	1275	495			242,8
50-250A	22	180M	100	360	230	225	50	1250	205	840	540	490	75	22	1275	510			301,2
50-315DN	37	200L	125	470	275	280	50	1400	230	940	610	550	75	26	1455	585	80	50	415,0
50-315CN	45	225M	125	470	275	280	50	1400	230	940	610	550	75	26	1500	605			465,8
50-315BN	55	250M	125	470	310	280	85	1600	270	1060	660	600	75	26	1650	710			611,8
50-315AN	75	280S	125	470	310	280	85	1800	300	1200	730	670	75	26	1850	770	762,6		



TYPE	kW	Motor Size	DIMENSIONS (mm)															Kg	
			a	f	h4	h2	h3	L1	L2	L3	B2	B3	A	d	T	H	DNA		DNM
65-125B	5,5	132S	100	360	210	180	50	1000	170	660	450	400	60	22	1040	433	80	65	121,4
65-125A	7,5	132S	100	360	210	180	50	1000	170	660	450	400	60	22	1040	433			149,6
65-160C	11	160M	100	360	210	200	50	1120	190	740	490	440	60	22	1168	475			205,1
65-160B	11	160M	100	360	210	200	50	1120	190	740	490	440	60	22	1168	475			205,1
65-160A	15	160M	100	360	210	200	50	1120	190	740	490	440	60	22	1168	475			217,1
65-200C	15	160M	100	360	230	225	50	1250	205	840	540	490	75	22	1275	495			227,5
65-200B	18,5	160L	100	360	230	225	50	1250	205	840	540	490	75	22	1275	495			245,5
65-200A	22	180M	100	360	230	225	50	1250	205	840	540	490	75	22	1290	510			303,3
65-250B	30	200L	100	470	250	250	50	1400	230	940	610	550	90	26	1470	560			377,8
65-250A	37	200L	100	470	250	250	50	1400	230	940	610	550	90	26	1470	560			397,8
65-315CN	55	250M	125	470	310	280	85	1600	270	1060	660	600	90	26	1645	710	614,2		
65-315BN	75	280S	125	470	310	280	85	1800	300	1200	730	670	90	26	1835	770	765,0		
65-315AN	90	280M	125	470	310	280	85	1800	300	1200	730	670	90	26	1835	770	839,2		
80-160E	11	160M	125	360	230	225	50	1250	205	840	540	490	75	22	1300	495	100	80	220,8
80-160D	11	160M	125	360	230	225	50	1250	205	840	540	490	75	22	1300	495			220,8
80-160C	15	160M	125	360	230	225	50	1250	205	840	540	490	75	22	1300	495			232,8
80-160B	18,5	160L	125	360	230	225	50	1250	205	840	540	490	75	22	1300	495			250,8
80-160A	22	180M	125	360	230	225	50	1250	205	840	540	490	75	22	1315	510			308,7
80-200B	30	200L	125	470	230	250	50	1400	230	940	610	550	75	26	1495	560			376,7
80-200A	37	200L	125	470	230	250	50	1400	230	940	610	550	75	26	1495	560			396,7
80-250B	45	225M	125	470	250	280	50	1400	230	940	610	550	90	26	1540	605			464,5
80-250A	55	250M	125	470	285	280	85	1600	270	1060	660	600	90	26	1645	710			610,5
80-315BN	90	280M	125	470	335	315	85	1800	300	1200	730	670	90	26	1835	770			850,5
80-315AN	110	315S	125	470	405	315	120	2000	300	1400	790	750	90	22	2020	925	1233		
100-200D	30	200L	125	470	250	280	50	1400	230	940	610	550	90	26	1500	560	125	100	374
100-200C	37	200L	125	470	250	280	50	1400	230	940	610	550	90	26	1500	560			428
100-200B	45	225M	125	470	250	280	50	1400	230	940	610	550	90	26	1540	605			471,5
100-200A	55	250M	125	470	285	280	85	1600	270	1060	660	600	90	26	1645	710			617,5
100-250C	55	250M	140	470	310	280	85	1600	270	1060	660	600	90	26	1660	710			625,5
100-250C	75	280S	140	470	310	280	85	1800	300	1200	730	670	90	26	1850	770			776,3
100-250B	75	280S	140	470	310	280	85	1800	300	1200	730	670	90	26	1850	770			776,3
100-250A	90	280M	140	470	310	280	85	1800	300	1200	730	670	90	26	1850	770			850,5



# 4MA-4MAX EN 733 ~ 1450 rpm





TYPE	kW	Motor Size	DIMENSIONS (mm)															Kg	
			a	f	h4	h2	h3	L1	L2	L3	B2	B3	A	d	T	H	DNA		DNM
32-160C	0,37	71M	80	360	182	160	50	800	130	540	360	320	60	18	820	342	50	32	59,4
32-160B	0,37	71M	80	360	182	160	50	800	130	540	360	320	60	18	820	342			59,4
32-160A	0,55	80M	80	360	182	160	50	800	130	540	360	320	60	18	820	342	50	32	59,1
32-200C	0,75	80M	80	360	210	180	50	800	130	540	360	320	60	18	820	390			75,1
32-200B	1,1	90S	80	360	210	180	50	800	130	540	360	320	60	18	855	390	50	32	88,1
32-200A	1,1	90S	80	360	210	180	50	800	130	540	360	320	60	18	855	390			88,1
32-250C	1,5	90S	100	360	230	225	50	1000	170	660	450	400	75	22	1025	455	50	32	106,7
32-250B	1,5	90S	100	360	230	225	50	1000	170	660	450	400	75	22	1025	455			106,7
32-250A	2,2	100L	100	360	230	225	50	1000	170	660	450	400	75	22	1025	455	50	32	112,7
40-125C	0,37	71M	80	360	162	140	50	800	130	540	360	320	60	18	820	302			65
40-125B	0,37	71M	80	360	162	140	50	800	130	540	360	320	60	18	820	302	59,5		
40-125A	0,55	80M	80	360	162	140	50	800	130	540	360	320	60	18	820	307	65	40	59,2
40-160B	0,55	80M	80	360	182	160	50	800	130	540	360	320	60	18	820	342			62,2
40-160A	0,75	80M	80	360	182	160	50	800	130	540	360	320	60	18	820	342	65	40	74,2
40-160AP	0,75	80M	80	360	182	160	50	800	130	540	360	320	60	18	820	342			74,2
40-160AP	1,1	90S	80	360	182	160	50	800	130	540	360	320	60	18	855	342	65	40	87,2
40-200B	1,1	90S	100	360	210	180	50	900	150	600	390	350	60	18	940	390			93,8
40-200A	1,1	90S	100	360	210	180	50	900	150	600	390	350	60	18	940	390	65	40	93,8
40-200A	1,5	90S	100	360	210	180	50	900	150	600	390	350	60	18	940	390			98,8
40-200AP	1,1	90S	100	360	210	180	50	900	150	600	390	350	60	18	940	390	65	40	93,8
40-200AP	1,5	90S	100	360	210	180	50	900	150	600	390	350	60	18	940	390			98,8
40-250C	1,5	90S	100	360	230	225	50	1000	170	660	450	400	75	22	1025	455	65	40	108,3
40-250B	2,2	100L	100	360	230	225	50	1000	170	660	450	400	75	22	1025	455			114,3
40-250A	2,2	100L	100	360	230	225	50	1000	170	660	450	400	75	22	1025	455	65	40	114,3
50-125B	0,55	80M	100	360	182	160	50	800	130	540	360	320	60	18	840	342			65
50-125A	0,75	80M	100	360	182	160	50	800	130	540	360	320	60	18	840	342	74,1		
50-160B	0,75	80M	100	360	210	180	50	800	130	540	360	320	60	18	840	390	65	50	78,6
50-160A	1,1	90S	100	360	210	180	50	800	130	540	360	320	60	18	875	390			91,6
50-200C	1,1	90S	100	360	210	200	50	900	150	600	390	350	60	18	940	410	65	50	97,2
50-200B	1,5	90S	100	360	210	200	50	900	150	600	390	350	60	18	940	410			102,2
50-200A	1,5	90S	100	360	210	200	50	900	150	600	390	350	60	18	940	410	65	50	102,2
50-250C	2,2	100L	100	360	230	225	50	1000	170	660	450	400	75	22	1025	455			118,2
50-250B	3	100L	100	360	230	225	50	1000	170	660	450	400	75	22	1025	455	65	50	122,2
50-250A	4	112M	100	360	230	225	50	1000	170	660	450	400	75	22	1025	455			128,2
50-315C	5,5	132S	125	470	275	280	50	1120	190	740	490	440	75	22	1170	555	80	50	200,1
50-315B	7,5	132M	125	470	275	280	50	1120	190	740	490	440	75	22	1200	555			186,6
50-315A	11	160M	125	470	275	280	50	1250	205	840	540	490	75	22	1303	555			260,1




TYPE	kW	Motor Size	DIMENSIONS (mm)															Kg	
			a	f	h4	h2	h3	L1	L2	L3	B2	B3	A	d	T	H	DNA		DNM
65-125B	0,75	80M	100	360	210	180	50	800	130	540	360	320	60	18	840	390	80	65	80,4
65-125A	1,1	90S	100	360	210	180	50	800	130	540	360	320	60	18	875	390			93,4
65-160C	1,5	90S	100	360	210	200	50	900	150	600	390	350	60	18	940	410			105,5
65-160B	1,5	90S	100	360	210	200	50	900	150	600	390	350	60	18	940	410			105,5
65-160A	2,2	100L	100	360	210	200	50	900	150	600	390	350	60	18	940	410			111,5
65-200C	2,2	100L	100	360	230	225	50	1120	190	740	490	440	75	22	1145	455			124,8
65-200B	3	100L	100	360	230	225	50	1120	190	740	490	440	75	22	1145	455			128,8
65-200A	3	100L	100	360	230	225	50	1120	190	740	490	440	75	22	1145	455			128,8
65-250B	4	112M	100	470	250	250	50	1120	190	740	490	440	90	22	1130	500			159,0
65-250B	5,5	132S	100	470	250	250	50	1120	190	740	490	440	90	22	1175	500			183,0
65-250A	5,5	132S	100	470	250	250	50	1120	190	740	490	440	90	22	1175	500			183,0
65-315CM	7,5	132M	125	470	275	280	50	1250	205	840	540	490	90	22	1285	555			194,0
65-315BM	11	160M	125	470	275	280	50	1250	205	840	540	490	90	22	1343	555			262,5
65-315AM	11	160M	125	470	275	280	50	1250	205	840	540	490	90	22	1343	555			262,5
80-160E	1,1	90S	125	360	230	225	50	1000	170	660	450	400	75	22	1050	455	100	80	115,1
80-160D	1,5	90S	125	360	230	225	50	1000	170	660	450	400	75	22	1050	455			120,1
80-160C	1,5	90S	125	360	230	225	50	1000	170	660	450	400	75	22	1050	455			120,1
80-160B	2,2	100L	125	360	230	225	50	1000	170	660	450	400	75	22	1050	455			126,1
80-160A	3	100L	125	360	230	225	50	1000	170	660	450	400	75	22	1050	455			130,1
80-200B	4	112M	125	470	230	250	50	1120	190	740	490	440	75	22	1170	480			157,8
80-200A	5,5	132S	125	470	230	250	50	1120	190	740	490	440	75	22	1200	480			181,8
80-250B	5,5	132S	125	470	250	280	50	1250	205	840	540	490	90	22	1285	530			203,8
80-250A	7,5	132M	125	470	250	280	50	1250	205	840	540	490	90	22	1285	530			190,3
80-315B	11	160M	125	470	300	315	50	1250	205	840	540	490	90	22	1343	615			273,8
80-315A	15	160L	125	470	300	315	50	1400	230	940	610	550	90	26	1435	615			305,8
100-200D	4	112M	125	470	250	280	50	1120	190	740	490	440	90	22	1130	480			161,0
100-200C	5,5	132S	125	470	250	280	50	1120	190	740	490	440	90	22	1200	530			185,0
100-200B	5,5	132S	125	470	250	280	50	1120	190	740	490	440	90	22	1200	530			186,0
100-200A	7,5	132M	125	470	250	280	50	1120	190	740	490	440	90	22	1240	530	198,0		
100-250E	7,5	132M	140	470	275	280	50	1250	205	840	540	490	90	22	1300	555	205,3		
100-250D	7,5	132M	140	470	275	280	50	1250	205	840	540	490	90	22	1300	555	205,3		
100-250C	11	160M	140	470	275	280	50	1250	205	840	540	490	90	22	1358	555	273,8		
100-250A	11	160M	140	470	275	280	50	1250	205	840	540	490	90	22	1358	555	273,8		
100-315B	15	160L	140	470	300	315	50	1400	230	940	610	550	90	26	1450	615	327,7		
100-315A	18,5	180M	140	470	300	315	50	1400	230	940	610	550	90	26	1450	615	348,3		
100-400C	22	180L	140	530	365	355	85	1600	270	1060	660	600	110	26	1630	720	469,5		
100-400B	30	200L	140	530	365	355	85	1600	270	1060	660	600	110	26	1630	720	540,8		
100-400A	37	225S	140	530	365	355	85	1600	270	1060	660	600	110	26	1630	720	554,3		
125-250B	11	160M	140	470	300	355	50	1250	205	840	540	490	90	22	1358	655	308,1		
125-250A	15	160L	140	470	300	355	50	1400	230	940	610	550	90	26	1450	655	340,1		
125-315C	22	180L	140	530	365	355	85	1600	270	1060	660	600	110	26	1630	720	464,4		
125-315B	30	200L	140	530	365	355	85	1600	270	1060	660	600	110	26	1630	720	535,8		
125-315A	37	225S	140	530	365	355	85	1600	270	1060	660	600	110	26	1630	720	549,3		
125-400C	45	225M	140	530	400	400	85	1600	270	1060	660	600	110	26	1630	800	659,2		
125-400B	55	250M	140	530	400	400	85	1600	270	1060	660	600	110	26	1630	800	756,0		
125-400A	75	280S	140	530	400	400	85	1800	300	1200	730	670	110	26	1830	805	939,4		
150-315D	30	200L	160	530	365	400	85	1800	300	1200	730	670	110	26	1850	765	570,7		
150-315C	37	225S	160	530	365	400	85	1800	300	1200	730	670	110	26	1850	765	584,2		
150-315B	45	225M	160	530	365	400	85	1800	300	1200	730	670	110	26	1850	765	672,1		
150-315A	55	250M	160	530	365	400	85	1800	300	1200	730	670	110	26	1850	765	768,9		
150-400C	75	280S	160	530	400	450	85	1800	300	1200	730	670	110	26	1850	850	951,4		
150-400B	75	280S	160	530	400	450	85	1800	300	1200	730	670	110	26	1850	850	962,8		
150-400A	90	280M	160	530	400	450	85	1800	300	1200	730	670	110	26	1850	850	1057,8		


# MN Serie-Mechanical seal and bearings

MECHANICAL SEAL	PUMP MODEL	SHAFT Ø		STANDARD MATERIAL	OPTIONAL			
					E	V	2E	2V
	32-160, 40-125	20mm	<i>Rotating face</i> <i>Stationary face</i> <i>Elastomer</i>	Ceramic Graphite NBR	Ceramic Graphite EPDM	- - -	SiC SiC EPDM	SiC SiC FKM
	40-250M	28mm	<i>Rotating face</i> <i>Stationary face</i> <i>Elastomer</i>	Ceramic Graphite EPDM	- - -	- - -	SiC SiC EPDM	SiC SiC FKM
	32-200, 32-250, 40-160, 40-160P, 40-200, 40-200P, 40-250, 50-125, 50-160, 50-200, 50-250, 65-125, 65-160, 65-200, 80-160	28mm	<i>Rotating face</i> <i>Stationary face</i> <i>Elastomer</i>	Ceramic Graphite NBR	Ceramic Graphite EPDM	Ceramic Graphite FKM	SiC SiC EPDM	SiC SiC FKM
	65-250, 80-200, 100-160	40mm	<i>Rotating face</i> <i>Stationary face</i> <i>Elastomer</i>	CrNi-steel Graphite NBR	CrNi-steel Graphite EPDM	CrNi-steel Graphite FKM	SiC SiC EPDM	SiC SiC FKM


BEARINGS	PUMP MODEL	TYPE	
	32-200C, 40-160B, 40-160A, 50-125B, 50-125A	6204-ZZ	6206-ZZ C3
	32-160C, 32-160B, 32-160A, 40-125C, 40-125B, 40-125A	6205-ZZ C3	6203-ZZ
	1- 32-200C, 32-200B1, 32-200B, 32-200A1, 32-200A, 32-250C, 32-250B, 1- 40-160A, 40-160AP, 40-200B1, 40-200B, 40-200A1, 40-200A, 40-200AP, 40-250C, 40-250B, 1- 50-125A, 50-160B1, 50-160B, 50-160A1, 50-160A, 50-200C, 50-200B, 65-125B1, 65-125B, 65-125A1, 65-125A, 65-160C, 65-160B, 80-160E, 80-160D	6206-ZZ C3	6306-ZZ C3
	32-250A1, 40-250A1, 50-200A1, 50-200C1, 65-160A1, 65-200C1, 80-160C1	6308-ZZ C3	6306-ZZ C3
	32-250A, 40-250A, 40-250BM, 40-250AM, 50-200A, 50-250C, 50-250B, 50-250A, 65-160A, 65-200C, 65-200B, 65-200A, 80-160C, 80-160B, 80-160A	6308-ZZ C3	6309-ZZ C3
	65-250B, 65-250A, 80-200B, 80-200A, 100-160B, 100-160A	6309-ZZ C3	6310-ZZ C3


# MNG Serie-Mechanical seal and bearings

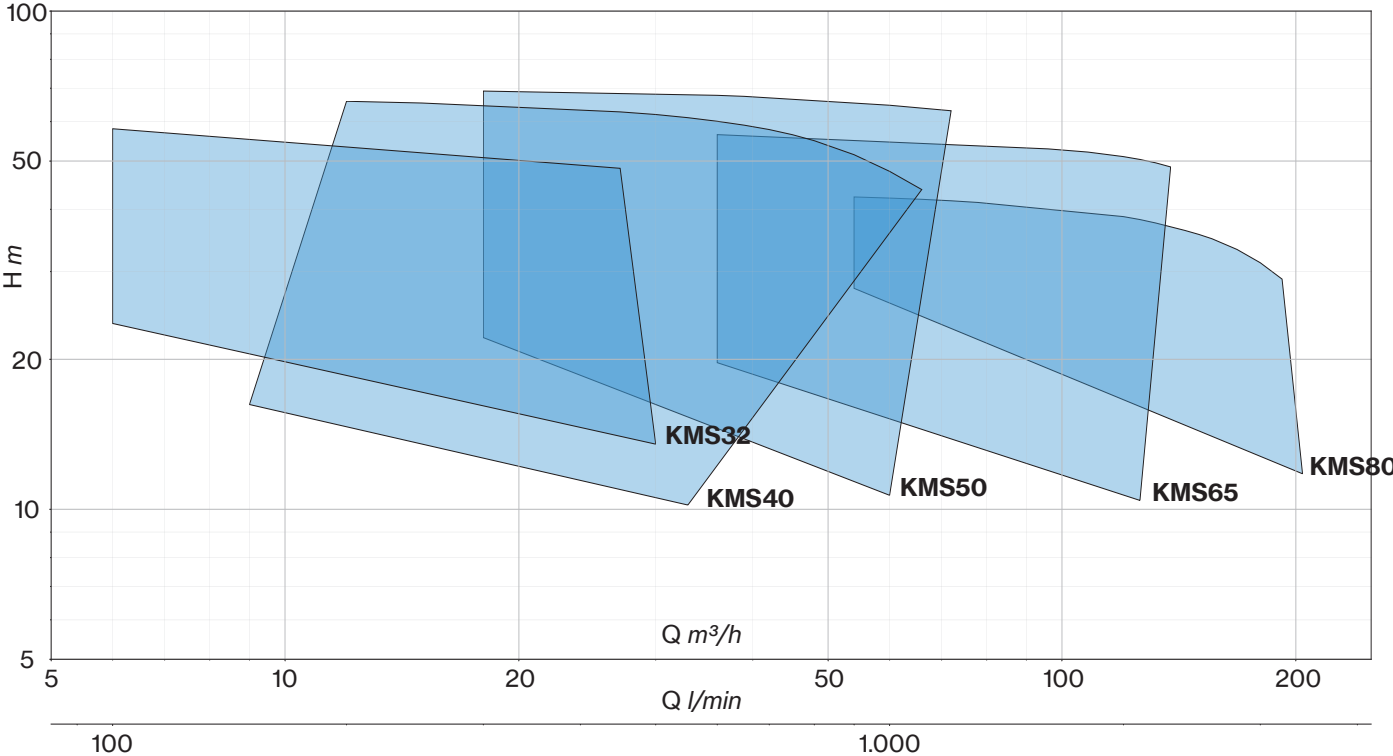
MECHANICAL SEAL	PUMP MODEL	SHAFT Ø		STANDARD MATERIAL	OPTIONAL			
					E	V	2E	2V
	80-250, 100-200, 100-250	45mm	<b>Rotating face</b> <b>Stationary face</b> <b>Elastomer</b>	CrNi-steel Graphite NBR	CrNi-steel Graphite EPDM	CrNi-steel Graphite FKM	SiC SiC EPDM	SiC SiC FKM

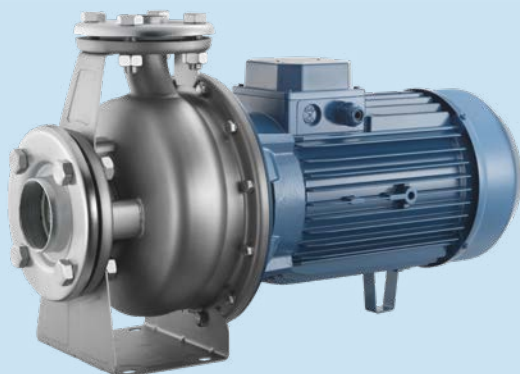
MOTOR BEARINGS	PUMP MODEL	TYPE	
	80-250, 100-200	6313-ZZ C3	6313-ZZ C3
	80-250, 100-200, 100-250	6314-ZZ C3	6314-ZZ C3

# MA-4MA Serie-Mechanical seal and bearings

MECHANICAL SEAL	PUMP MODEL	SHAFT Ø		STANDARD MATERIAL	OPTIONAL			
					E	V	2E	2V
	32-160, 40-125	20mm	<b>Rotating face</b> <b>Stationary face</b> <b>Elastomer</b>	Ceramic Graphite NBR	Ceramic Graphite EPDM	- - -	SiC SiC EPDM	SiC SiC FKM
	40-250M	28mm	<b>Rotating face</b> <b>Stationary face</b> <b>Elastomer</b>	Ceramic Graphite EPDM	- - -	- - -	SiC SiC EPDM	SiC SiC FKM
	32-200, 32-250, 40-160, 40-200, 40-250, 50-125, 50-160, 50-200, 50-250, 65-125A, 65-160, 65-200, 80-160	28mm	<b>Rotating face</b> <b>Stationary face</b> <b>Elastomer</b>	Ceramic Graphite NBR	Ceramic Graphite EPDM	Ceramic Graphite FKM	SiC SiC EPDM	SiC SiC FKM
	50-315, 65-250, 65-315M, 80-200, 80-315, 100-315	40mm	<b>Rotating face</b> <b>Stationary face</b> <b>Elastomer</b>	CrNi-steel Graphite NBR	CrNi-steel Graphite EPDM	CrNi-steel Graphite FKM	SiC SiC EPDM	SiC SiC FKM
	50-315N, 65-315N, 80-315N	40mm	<b>Rotating face</b> <b>Stationary face</b> <b>Elastomer</b>	Graphite SiC FKM	Graphite SiC EPDM	- - -	- - -	- - -
	80-250, 100-200, 100-250, 100-250, 125-250	45mm	<b>Rotating face</b> <b>Stationary face</b> <b>Elastomer</b>	CrNi-steel Graphite NBR	CrNi-steel Graphite EPDM	CrNi-steel Graphite FKM	SiC SiC EPDM	SiC SiC FKM
	100-400, 125-315, 125-400, 150-315, 150-400	55mm	<b>Rotating face</b> <b>Stationary face</b> <b>Elastomer</b>	Graphite SiC FKM	- - -	- - -	SiC SiC EPDM	SiC SiC FKM
	200-315, 200-400, 250-315, 250-400	70mm	<b>Rotating face</b> <b>Stationary face</b> <b>Elastomer</b>	Graphite SiC FKM	- - -	- - -	SiC SiC EPDM	SiC SiC FKM

PUMP BEARINGS	PUMP MODEL	TYPE	
	32-160, 32-200, 32-250, 40-125, 40-160, 40-200, 40-250, 40-250M, 50-125, 50-160, 50-200, 50-250, 65-125, 65-160, 65-200, 80-160	6306-ZZ C3	6306-ZZ C3
	50-315, 65-250, 65-315, 80-200, 80-315, 100-315	3208-ZZ C3	3208-ZZ C3
	50-315N, 65-315N, 80-250, 80-315N, 100-200, 100-250, 100-250, 125-250	6209-ZZ C3	6309-ZZ C3
	100-400, 125-315, 125-400, 150-315, 150-400	6211-ZZ C3	6311-ZZ C3
	200-315, 200-400, 250-315, 250-400, 250-400	6313-ZZ C3	6313-ZZ C3





Monobloc horizontal centrifugal pumps made of stainless steel. Widely used in water supplies, pressurization, cooling, and industrial applications. The pumps guarantee small change in pressure for large flow variation.

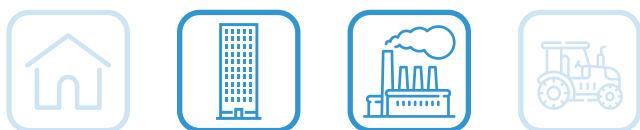
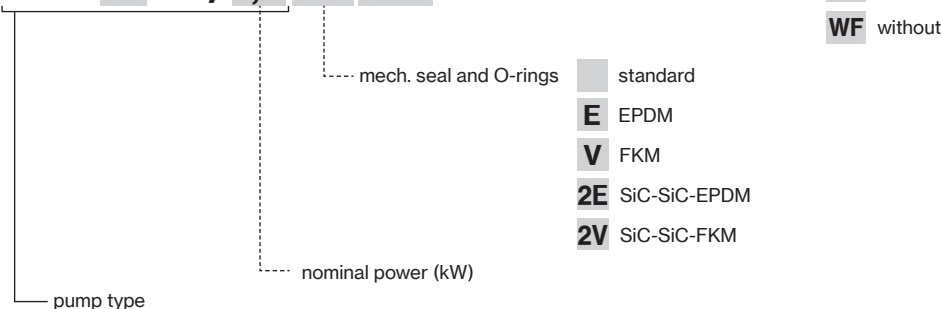
### Construction features

<b>Pump body</b>	stainless steel AISI 304
<b>Motor bracket</b>	cast iron
<b>Impeller</b>	stainless steel AISI 304
<b>Mechanical seal</b>	ceramic-graphite-NBR
<b>Mechanical seal housing</b>	stainless steel AISI 304
<b>Pump shaft end</b>	stainless steel AISI 304
<b>Liquid temperature</b>	-10 ÷ +90 °C
<b>Operating pressure</b>	max 10 bar

### Motor

<b>2 poles induction motor</b>	3- 230/400V - 50Hz P ≤ 4kW
	3- 400/690V - 50Hz P > 4kW
	1- 230V-50Hz
<b>Insulation class</b>	F
<b>Protection degree</b>	IPX5
<b>Motor efficiency</b>	IE3

**KMS 32 BE / 1,5 -2E -WF**



TYPE - 50 Hz	P2		P1		CURRENT		Q (m³/h - l/min)									
			1-	3-	1- 230V	3- 400V	0	6	9	12	15	18	21	24	27	30
							0	100	150	200	250	300	350	400	450	500
	HP	kW	kW		A		H (m)									
32BE/1,5	2	1,5	2,0	9,2	1,9	3,6	23,9	23,6	23,3	22,7	21,7	20,4	18,8	17,1	15,4	13,5
32BE/2,2	3	2,2	2,4	11,0	2,3	4,5	29,5	28,9	28,2	27,4	26,4	24,9	22,9	20,9	18,7	16,4
32CE/3	4	3	-	-	3,4	6,3	36,9	34,8	33,9	33,0	31,9	30,7	29,3	27,8	26,1	24,3
32CE/4	5,5	4	4,9	22,2	4,8	8,8	49,7	46,6	45,0	43,9	42,8	41,6	40,5	39,3	37,7	
32CE/5,5	7,5	5,5	-	-	6,6	11,7	63,9	58,0	56,3	55,0	53,6	52,1	50,7	49,5	48,3	

TYPE - 50 Hz	P2		P1		CURRENT		Q (m³/h - l/min)																				
			1-	3-	1- 230V	3- 400V	0	9	12	15	18	21	24	27	30	33	36	39	42	45	48	54	60	66			
							0	150	200	250	300	350	400	450	500	550	600	650	700	750	800	900	1000	1100			
	HP	kW	kW		A		H (m)																				
40BE/1,5	2	1,5	1,8	8,5	1,7	3,3	16,4	16,2	15,9	15,6	14,9	14,2	13,4	12,5	11,4	10,2											
40BE/2,2	3	2,2	2,5	11,6	2,4	4,7	21,5	21,6	21,5	21,2	20,7	20,0	19,1	18,1	17,0	15,8	14,6	13,4									
40BE/3	4	3	-	-	3,4	6,3	27,1		26,9	26,6	26,2	25,6	24,8	23,8	22,7	21,5	20,3	19,0	17,7	16,3							
40BE/4	5,5	4	4,3	19,7	4,1	7,8	36,6		34,8	34,4	33,6	32,4	31,0	29,5	27,8	25,8	23,7	21,5	19,3	17,0							
40CE/5,5	7,5	5,5	-	-	5,5	10,2	44,4		42,6	42,1	41,4	40,4	39,4	38,2	36,8	35,2	33,4	31,5	29,5	27,5	25,4	21,0					
40CE/7,5	10	7,5	-	-	7,4	13,5	54,0		52,4	51,5	50,2	49,0	47,8	46,6	45,3	43,9	42,2	40,3	38,3	36,2	34,0	29,1	24,5				
40CE/11	15	11	-	-	12,2	20,0	68,5		65,9	65,4	64,7	64,0	63,4	62,8	62,0	61,1	60,1	59,0	57,8	56,5	54,9	51,5	47,7	43,8			

TYPE - 50 Hz	P2		P1		CURRENT		Q (m³/h - l/min)																			
			1-	3-	1- 230V	3- 400V	0	18	21	24	27	30	33	36	39	42	45	48	54	60	66	72	78			
							0	300	350	400	450	500	550	600	650	700	750	800	900	1000	1100	1200	1300			
	HP	kW	kW		A		H (m)																			
50AE/3	4	3	-	-	2,9	5,7	22,3	22,1	21,7	21,2	20,7	20,2	19,7	19,0	18,2	17,2	16,2	15,1	12,9	10,7						
50AE/4	5,5	4	4,4	20,0	4,2	8,0	26,0	25,8	25,6	25,3	25,1	24,9	24,6	24,2	23,6	22,9	22,2	21,4	19,8	18,1	16,4					
50BE/5,5	7,5	5,5	-	-	6,4	11,5	34,9	34,6	34,3	33,9	33,5	33,3	33,0	32,6	32,1	31,4	30,7	30,0	28,4	26,7	24,8	22,7				
50CE/7,5	10	7,5	-	-	8,2	14,6	39,8	39,5	39,1	38,5	37,9	37,5	37,4	37,3	37,2	36,9	36,5	36,0	34,7	33,1	31,4	29,7	27,9			
50CE/11	15	11	-	-	12,4	20,3	55,8	55,4	55,0	54,5	53,9	53,4	52,9	52,4	51,8	51,1	50,4	49,8	48,7	47,3	45,7	43,9	41,9			
50CE1/15	20	15	-	-	15,0	25,1	65,9	63,1	62,7	62,7	62,4	62,2	61,8	61,3	60,7	60,0	59,4	58,8	57,6	56,4	55,0	53,4				
50CE/15	20	15	-	-	15,2	25,6	65,9	63,1	62,7	62,7	62,4	62,2	61,8	61,3	60,7	60,0	59,4	58,8	57,6	56,4	55,0	53,4				
50CE/18,5	25	18,5	-	-	18,2	30,6	69,6	69,1	68,5	68,3	68,2	68,1	67,9	67,7	67,4	66,9	66,3	65,9	65,4	64,7	63,8	63,1				

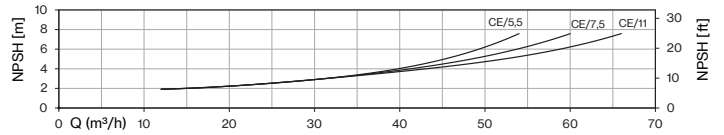
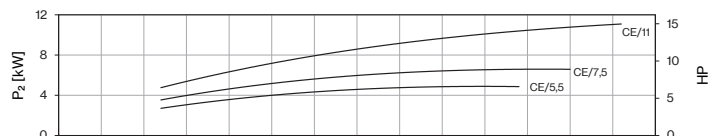
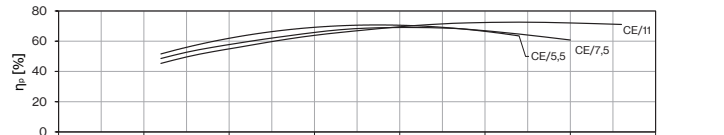
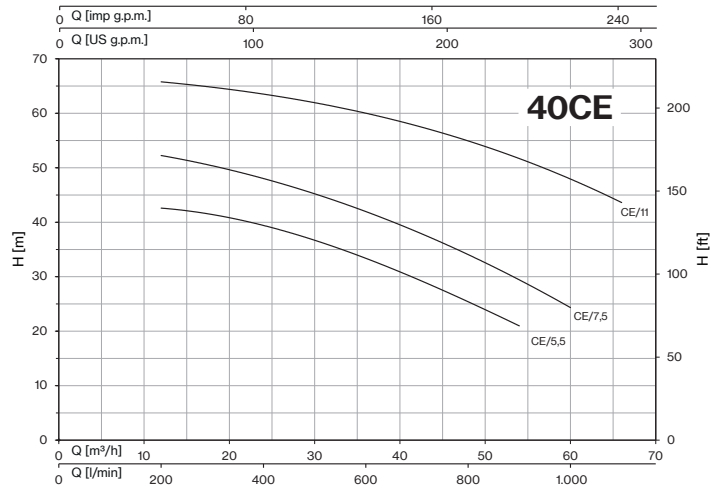
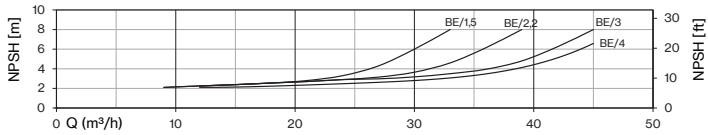
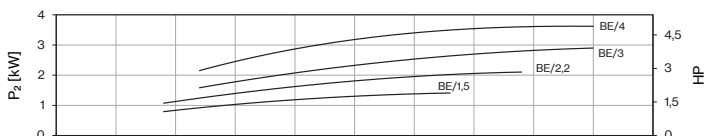
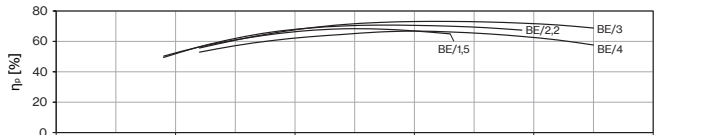
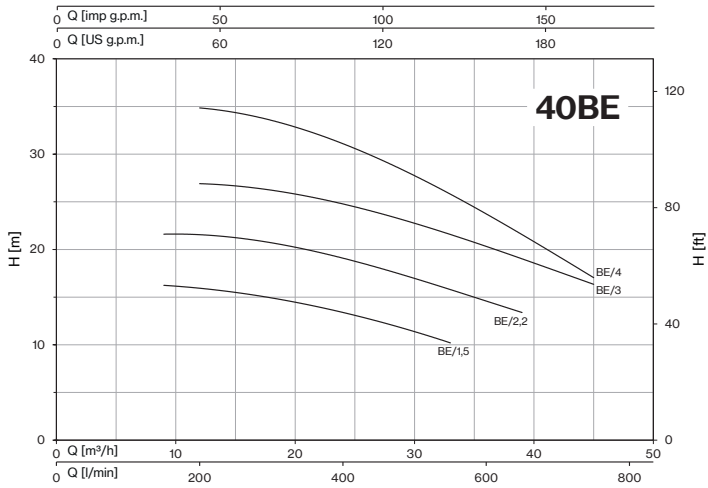
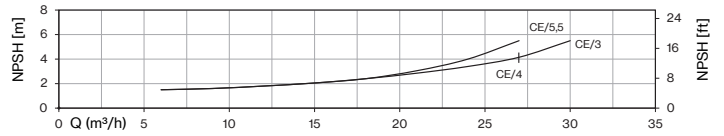
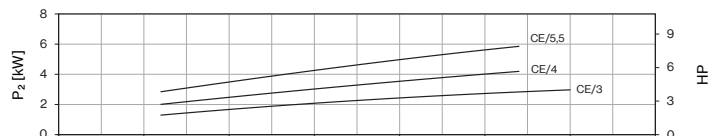
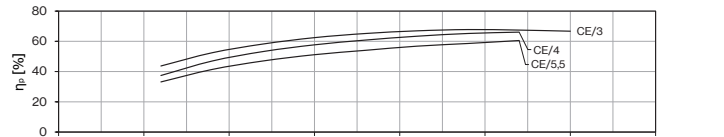
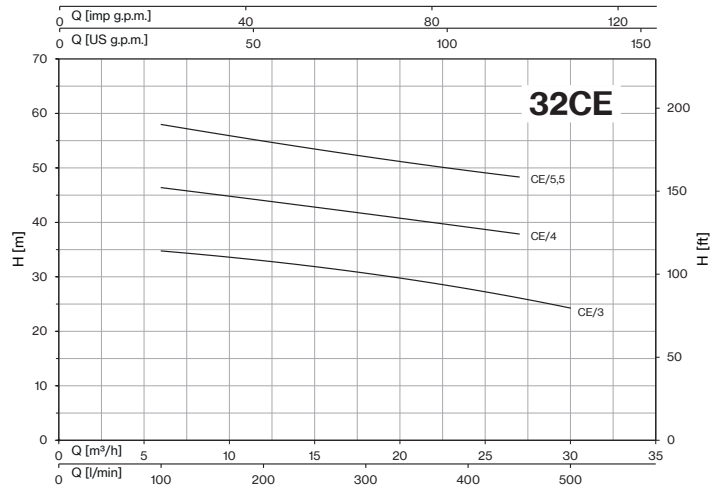
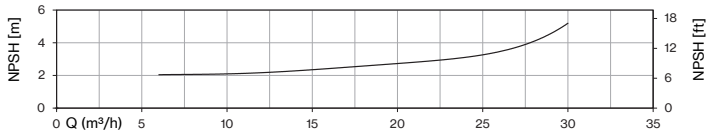
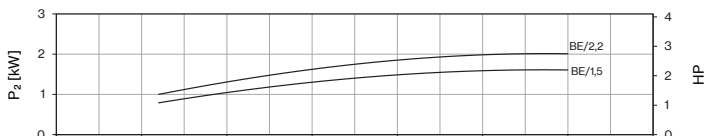
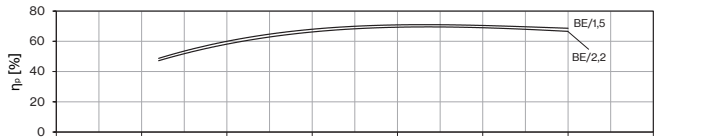
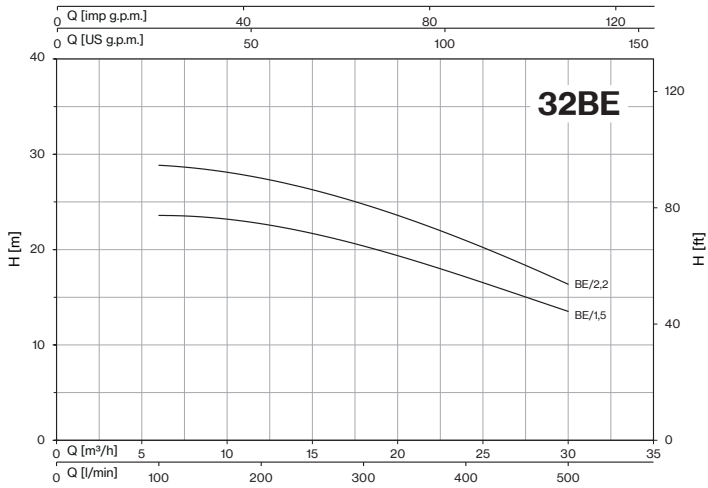
TYPE - 50 Hz	P2		P1	CUR. 3- 400V	Q (m³/h - l/min)																				
					0	36	39	42	45	48	54	60	66	72	78	84	90	96	108	120	126	132	138		
					0	600	650	700	750	800	900	1000	1100	1200	1300	1400	1500	1600	1800	2000	2100	2200	2300		
	HP	kW	kW	A	H (m)																				
65AE/5,5	7,5	5,5	6,2	11,2	20,3	19,7	19,6	19,5	19,4	19,3	19,1	18,7	18,3	17,7	17,1	16,4	15,8	15,1	13,7	11,6	10,4				
65AE/7,5	10	7,5	8,4	15,0	25,1	24,2	24,0	23,9	23,8	23,6	23,5	23,3	23,1	22,5	21,9	21,2	20,4	18,9	17,2	16,2	15,0				
65BE/11	15	11	11,5	19,0	34,8	34,0	33,9	33,7	33,4	33,0	32,7	32,3	32,0	31,9	31,6	31,1	30,4	29,6	27,9	26,2	25,6				
65BE1/15	20	15	15,1	25,3	41,9	41,3	41,2	41,0	40,8	40,5	39,9	39,5	39,1	38,8	38,7	38,6	38,3	37,9	37,0	36,0	35,8				
65BE/15	20	15	15,5	26,1	41,9	41,3	41,2	41,0	40,8	40,5	39,9	39,5	39,1	38,8	38,7	38,6	38,3	37,9	37,0	36,0	35,8				
65CE/18,5	25	18,5	18,8	31,6	49,7	49,0	48,7	48,4	48,2	48,0	47,6	47,3	47,2	47,1	46,9	46,6	46,2	45,9	45,0	43,5	42,5				
65CE/22	30	22	23,3	39,6	58,1	56,5	56,2	55,9	55,7	55,4	54,9	54,3	53,9	53,7	53,5	53,4	53,2	52,9	52,1	51,0	50,4	49,6	48,7		

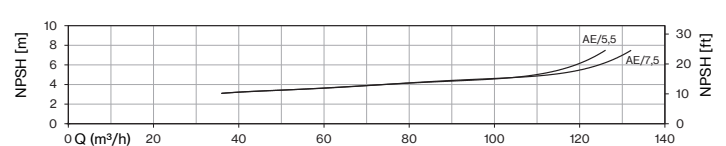
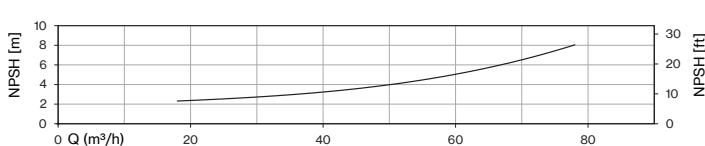
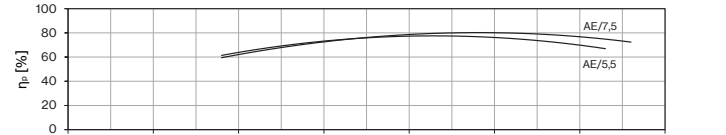
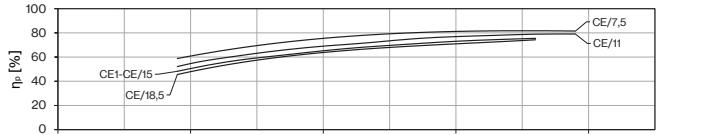
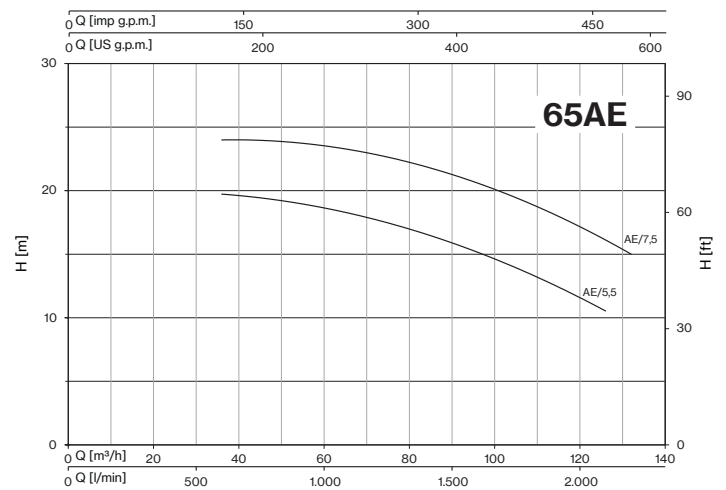
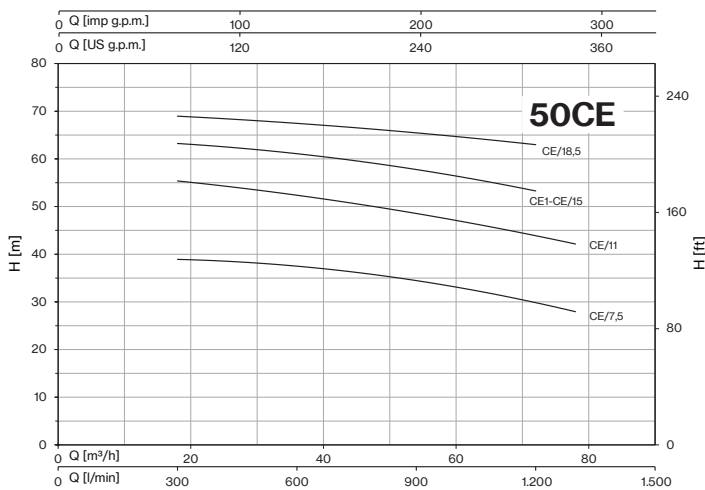
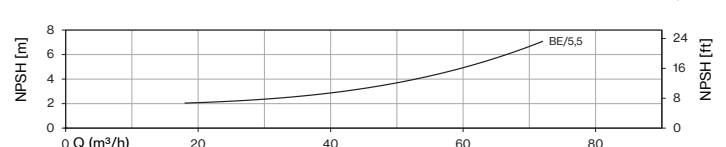
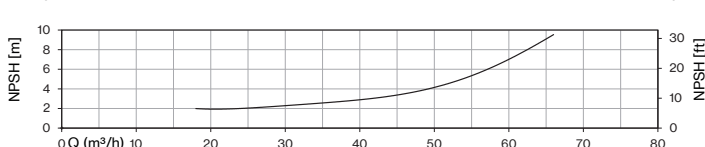
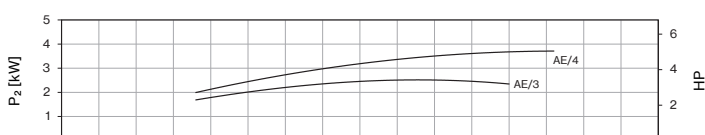
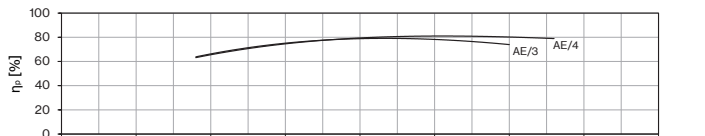
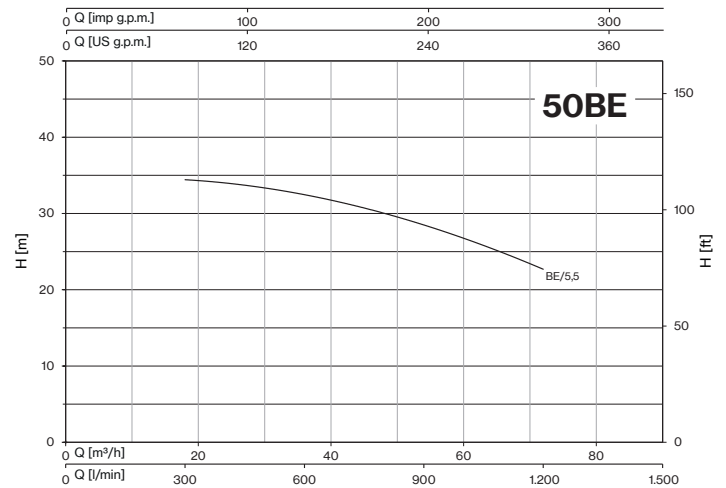
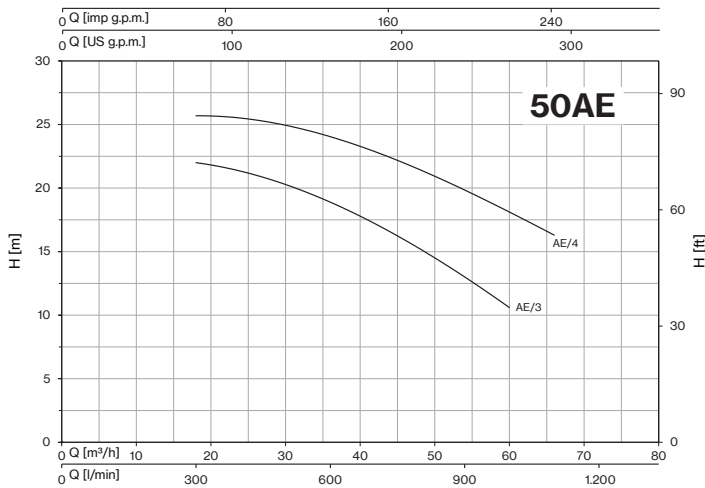
TYPE - 50 Hz	P2		P1	CUR. 3- 400V	Q (m³/h - l/min)																					
					0	54	60	66	72	78	84	90	96	108	120	126	132	138	144	150	156	168	180	192	204	216
					0	900	1000	1100	1200	1300	1400	1500	1600	1800	2000	2100	2200	2300	2400	2500	2600	2800	3000	3200	3400	3600
	HP	kW	kW	A	H (m)																					
80BE/11	15	11	12,1	19,9	27,3	27,8	27,6	27,3	26,9	26,4	25,9	25,3	24,6	23,3	22,0	21,4	20,9	20,3	19,7	19,2	18,6	17,3	15,7	13,9	11,8	
80BE1/15	20	15	14,9	25,0	32,2	32,8	32,6	32,3	32,0	31,6	31,1	30,6	30,1	28,9	27,7	27,0	26,3	25,7	25,1	24,5	23,9	22,5	20,9	19,3	17,8	
80BE/15	20	15	15,0	25,5	32,2	32,8	32,6	32,3	32,0	31,6	31,1	30,6	30,1	28,9	27,7	27,0	26,3	25,7	25,1	24,5	23,9	22,5	20,9	19,3	17,8	
80BE/18,5	25	18,5	20,0	33,2	38,4	38,7	38,5	38,2	37,9	37,5	37,1	36,7	36,3	35,6	34,6	33,9	33,2	32,5	31,9	31,3	30,7	29,4	28,1	26,7	25,1	23,3
80CE/22	30	22	21,7	36,4	41,9	42,4	42,1	41,9	41,6	41,3	40,9	40,5	40,0	39,4	38,7	38,2	37,6	36,9	36,3	35,6	34,9	33,2	31,2	29,0		



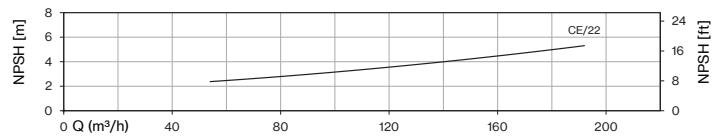
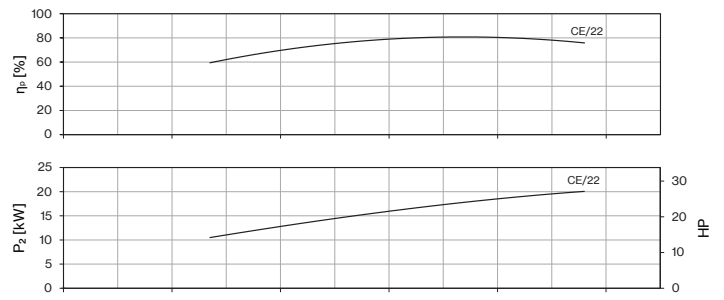
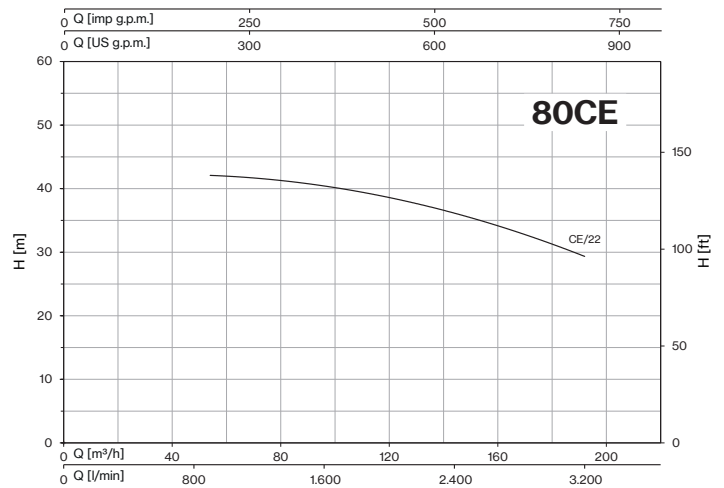
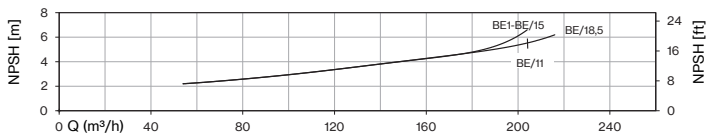
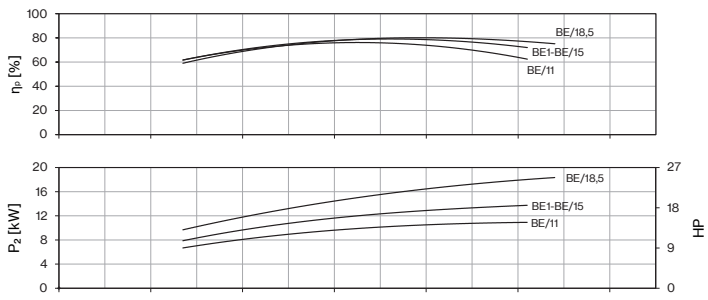
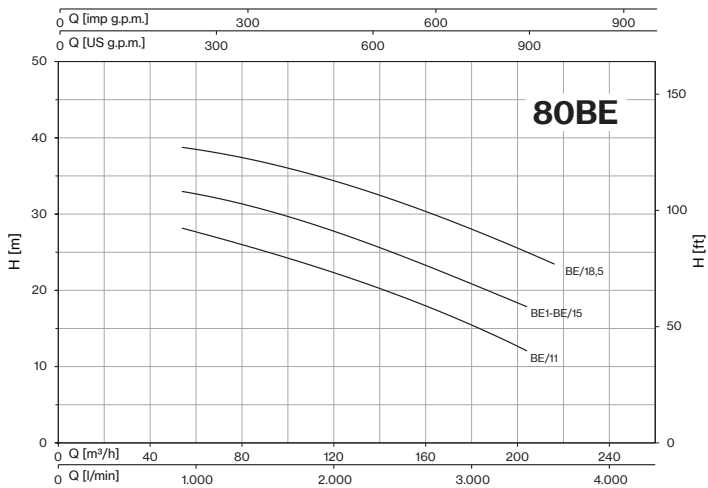
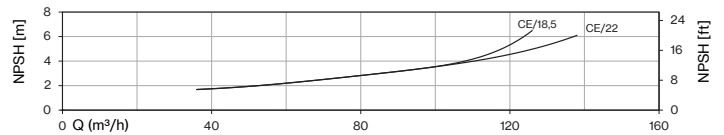
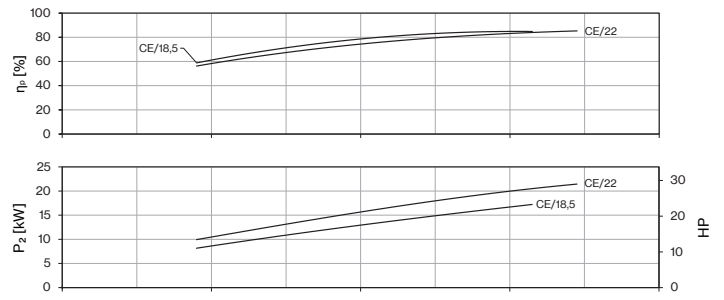
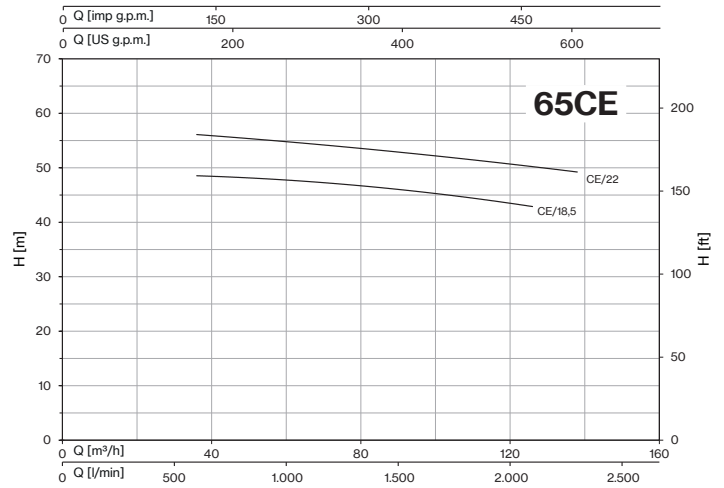
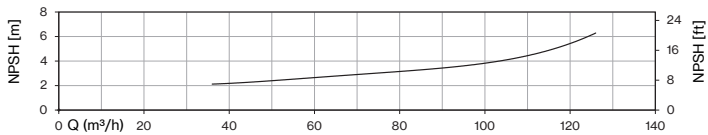
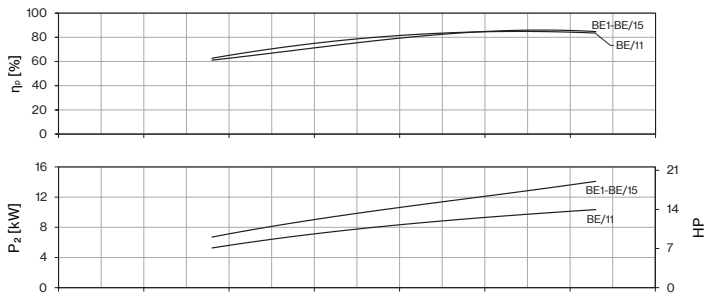
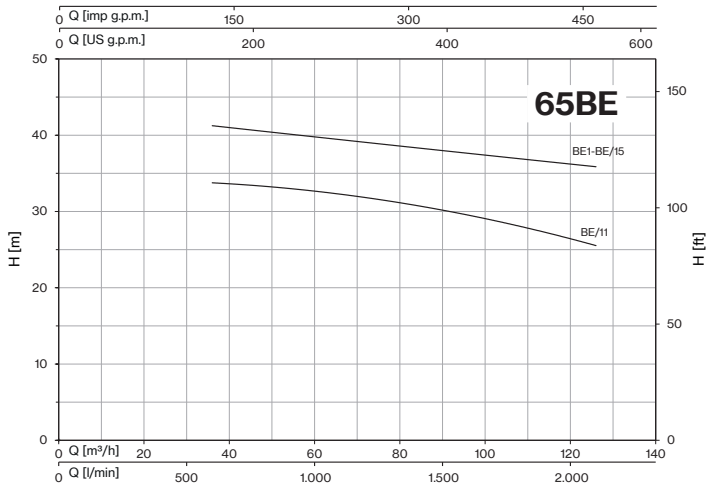


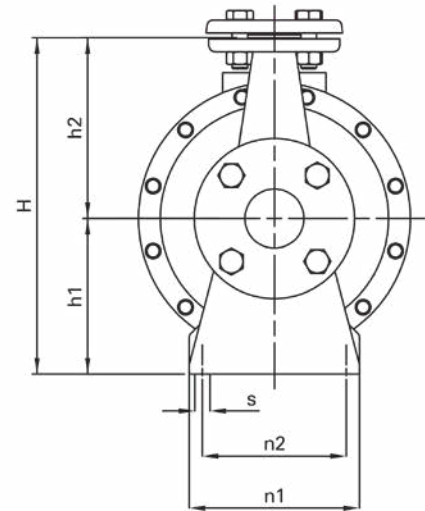
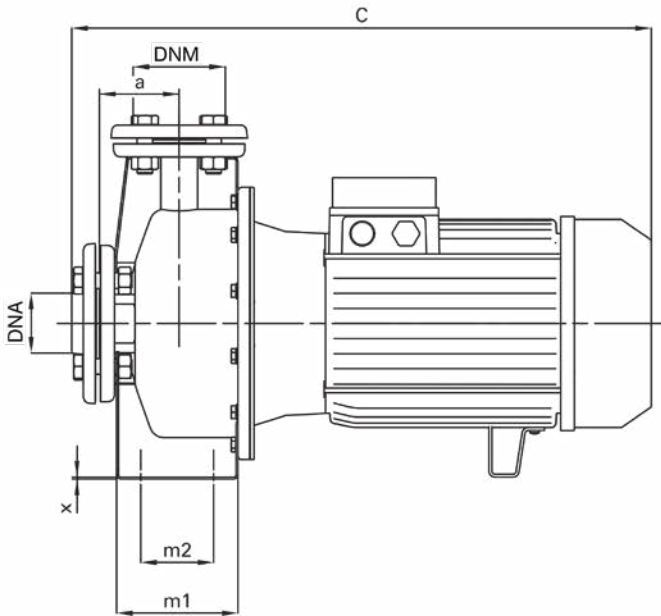
# KMS






# KMS




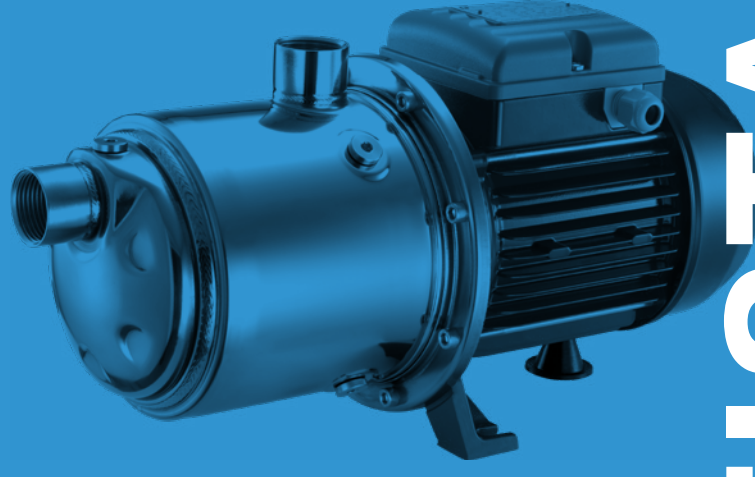
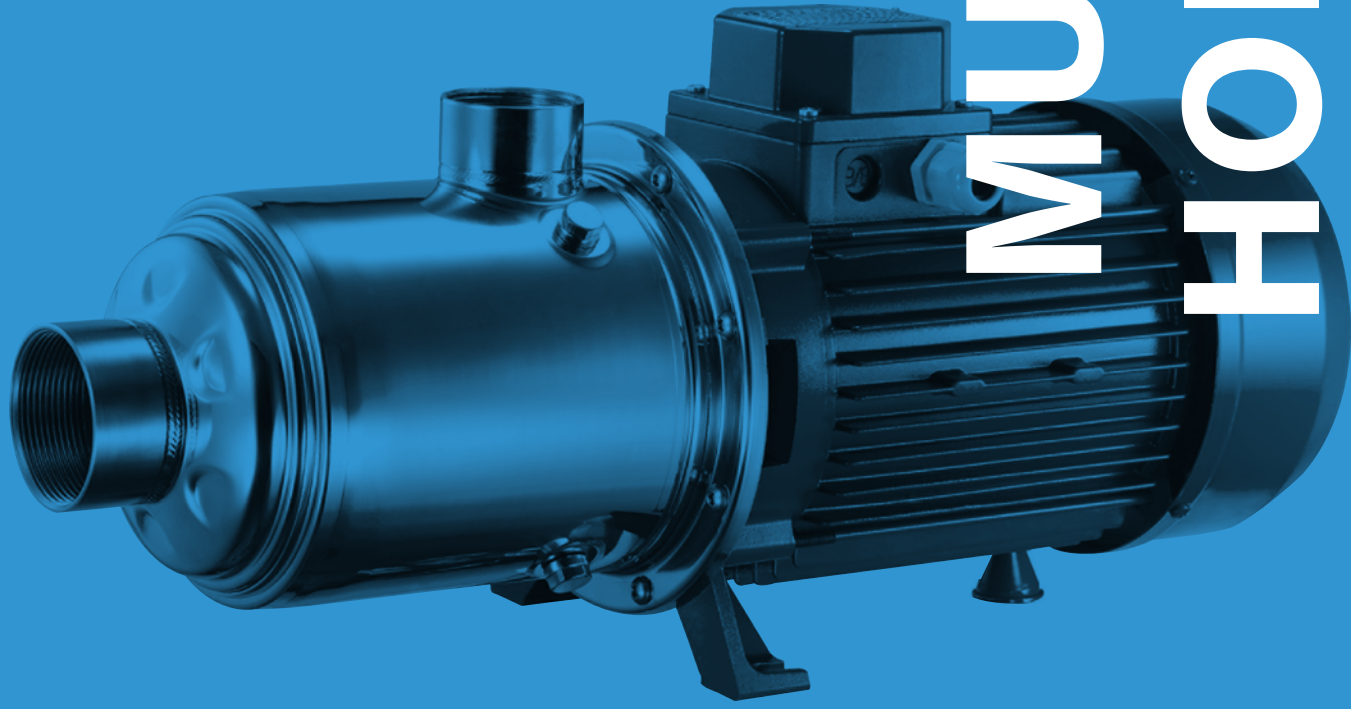


TYPE	DIMENSIONS (mm)																Kg		
	a	h1	h2	m1	m2	n1	n2	x	s	C (1-)	C (3-)	H	DNA	DNM	I	L	M	1-	3-
32BE/1,5	80	132	140	125	75	175	148	2	10	530	530	272	50	32	555	255	345	30,5	29
32BE/2,2	80	132	140	125	75	175	148	2	10	530	530	272			555	255	345	35	31,5
32CE/3	80	160	180	125	75	175	148	2	10	-	535	340			625	310	430	-	37
32CE/4	80	160	180	125	75	175	148	2	10	600	555	340			625	310	430	53	44,5
32CE/5,5	80	160	180	125	75	175	148	2	10	-	600	340	625	310	430	-	53,5		
40BE/1,5	80	132	160	125	75	175	148	2	10	535	535	292	65	40	555	255	345	31	29,5
40BE/2,2	80	132	160	125	75	175	148	2	10	535	535	292			555	255	345	35,5	32
40BE/3	80	132	160	125	75	175	148	2	10	-	535	292			555	255	345	-	35,5
40BE/4	80	132	160	125	75	175	148	2	10	595	550	292			555	255	345	51,5	43,5
40CE/5,5	100	160	180	140	93	175	148	2	10	-	615	340	625	310	430	-	54		
40CE/7,5	100	160	180	140	93	175	148	2	10	-	615	340	625	310	430	-	60		
40CE/11	100	160	180	140	93	175	148	2	10	-	645	340	670	350	525	-	83,5		
50AE/3	100	132	160	125	75	175	148	2	10	-	535	292	65	50	555	255	345	-	36
50AE/4	100	132	160	125	75	175	148	2	10	600	555	292			555	255	345	52	43,5
50BE/5,5	100	160	180	140	93	175	148	2	10	-	615	340			625	310	430	-	54
50CE/7,5	100	160	200	140	93	175	148	2	10	-	615	360			625	310	430	-	60
50CE/11	100	160	200	140	93	175	148	2	10	-	645	360	670	350	525	-	83,5		
50CE1/15	100	160	200	140	93	175	148	2	10	-	690	360	820	360	525	-	88		
50CE/15	100	160	200	140	93	175	148	2	10	-	725	360	820	360	525	-	115		
50CE/18,5	100	160	200	140	93	175	148	2	10	-	770	360	820	360	525	-	129		
65AE/5,5	100	160	180	140	93	175	148	2	10	-	615	340	80	65	625	310	430	-	53,5
65AE/7,5	100	160	180	140	93	175	148	2	10	-	615	340			625	310	430	-	59,5
65BE/11	100	160	200	140	93	175	148	2	10	-	645	360			670	350	525	-	85
65BE1/15	100	160	200	140	93	175	148	2	10	-	690	360			820	360	525	-	89
65BE/15	100	160	200	140	93	175	148	2	10	-	725	360	820	360	525	-	116		
65CE/18,5	100	180	225	140	93	175	148	2	10	-	770	405	820	360	525	-	130,5		
65CE/22	100	180	225	140	93	175	148	2	10	-	770	405	820	360	525	-	141		
80BE/11	125	180	225	167	93	175	148	2	10	-	685	405	100	80	820	360	525	-	87
80BE1/15	125	180	225	167	93	175	148	2	10	-	730	405			820	360	525	-	91
80BE/15	125	180	225	167	93	175	148	2	10	-	765	405			820	360	525	-	118
80BE/18,5	125	180	225	167	93	175	148	2	10	-	810	405			870	400	570	-	132,5
80CE/22	125	180	250	167	93	175	148	2	10	-	810	430	870	400	570	-	143		

# KMS Serie-Mechanical seal and bearings

MECHANICAL SEAL	PUMP MODEL	SHAFT Ø		STANDARD MATERIAL	OPTIONAL			
					E	V	2E	2V
	32BE/1,5 - 32BE/2,2 - 32CE/3 - 40BE/1,5 - 40BE/2,2 - 40BE/3 - 50AE/3	20mm	<b>Rotating face</b> <b>Stationary face</b> <b>Elastomer</b>	Ceramic Graphite NBR	Ceramic Graphite EPDM	- - -	SiC SiC EPDM	SiC SiC FKM
	32CE/4 - 32CE/5,5 - 40BE/4 - 40CE/5,5 - 40CE/7,5 - 40CE/11 - 50AE/4 - 50BE/5,5 - 50CE/7,5 - 50CE/11 - 50CE/15 - 50CE/1/15 - 50CE/18,5 - 65AE/5,5 - 65AE/7,5 - 65BE/11 - 65BE/1/15 - 65BE/15 - 65CE/18,5 - 65CE/22 - 80BE/11 - 80BE/1/15 - 80BE/15 - 80BE/18,5 - 80CE/22	28mm	<b>Rotating face</b> <b>Stationary face</b> <b>Elastomer</b>	Ceramic Graphite NBR	Ceramic Graphite EPDM	Ceramic Graphite FKM	SiC SiC EPDM	SiC SiC FKM

BEARINGS	PUMP MODEL	TYPE	
	32CE/4 - 40BE/4 - 50AE/4	6204-ZZ	6206-ZZ C3
	32BE/1,5 - 32BE/2,2 - 32CE/3 - 40BE/1,5 - 40BE/2,2 - 40BE/3 - 50AE/3	6205-ZZ C3	6203-ZZ
	1- 32CE/4 - 32CE/5,5 - 1- 40BE/4 - 40CE/5,5 - 40CE/7,5 - 1- 50AE/4 - 50BE/5,5 - 50CE/7,5 - 65AE/5,5 - 65AE/7,5	6206-ZZ C3	6306-ZZ C3
	40CE/11 - 50CE/11 - 65BE/11 - 80BE/11	6206-ZZ C3	6308-ZZ C3
	65BE/1/15 - 50CE/1/15 - 80BE/1/15	6308-ZZ C3	6306-ZZ C3
	50CE/15 - 50CE/18,5 - 65BE/15 - 65CE/18,5 - 65CE/22 - 80BE/15 - 80BE/18,5 - 80CE/22	6308-ZZ C3	6309-ZZ C3



# MULTISTAGE HORIZONTAL

# MULTISTAGE HORIZONTAL PUMPS

PLUS 3/PLUS 3S



PLUS 5/PLUS 5S



PLUS 7/PLUS 7S



PLUS 9/PLUS 9S

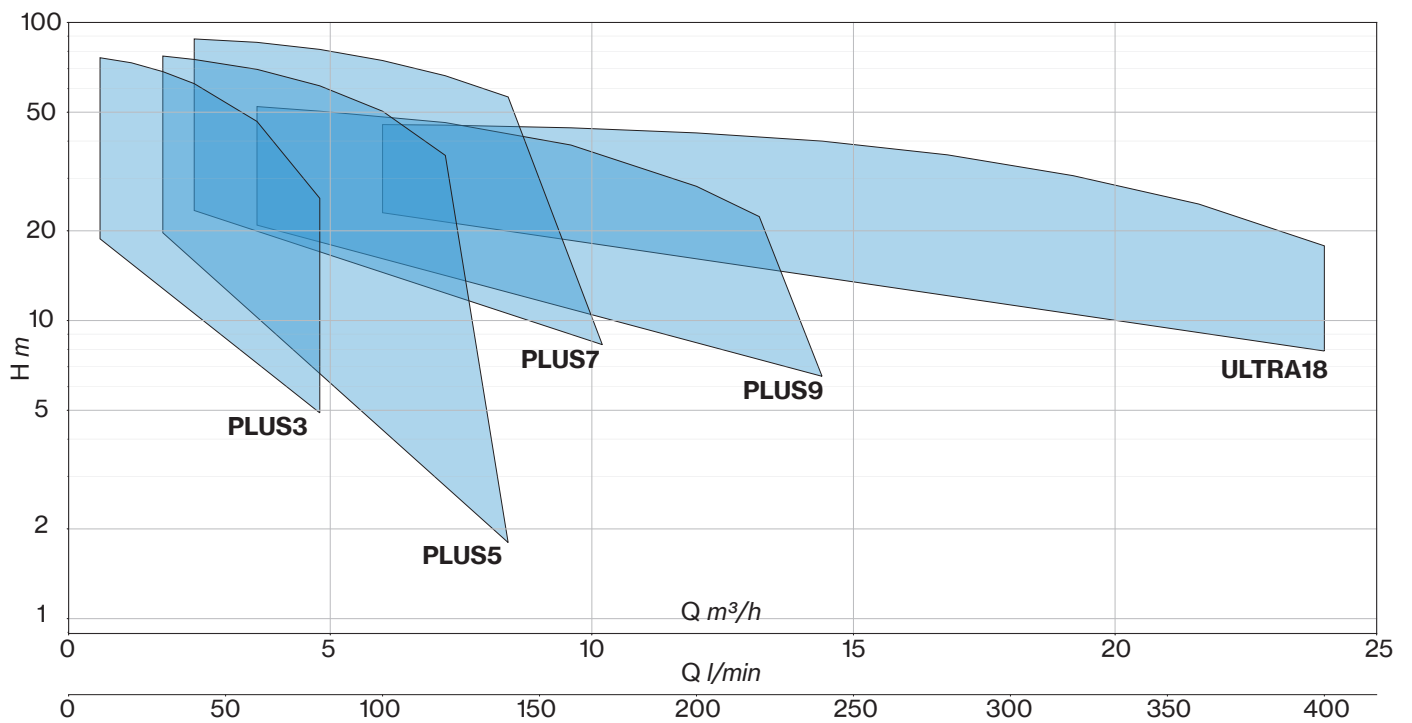
PLUS 18/PLUS 18S

Range of horizontal multistage pumps, not self-priming, with axial suction and radial delivery threads, pump body in AISI 304 and hydraulic part in Noryl (PLUS) and in AISI 304 (PLUS S).

## Applications:

- Handling of uncharged liquids
- For pressurization systems
- Irrigation
- Drinking water treatment
- Food industry
- Heating and conditioning
- Industrial washing systems

# MULTISTAGE





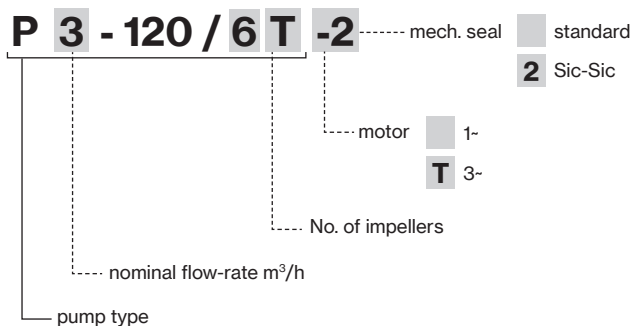
Stainless steel multistage horizontal pumps. Pumping of clean non-loaded fluids, pressurizing system, irrigation, drinking and glycol water, water treatment, heating and air conditioning, washing system.

### Construction features

<b>Pump body, mechanical seal housing</b>	stainless steel AISI 304
<b>Motor bracket</b>	aluminum
<b>Impellers, diffusers</b>	Noryl®
<b>Mechanical seal</b>	ceramic-graphite-EPDM ≤ 6 impellers graphite-silicon carbide-EPDM ≥ 7 impellers
<b>Motor shaft</b>	stainless steel AISI 303
<b>Liquid temperature</b>	-5 ÷ +35 °C
<b>Operating pressure</b>	max 8,5 bar

### Motor

	3~ 230/400V - 50Hz
<b>2 poles induction motor</b>	1~ 230V - 50Hz (with thermal protection up to 1,85 kW)
<b>Insulation class</b>	F
<b>Protection degree</b>	IPX4



PLUS 3



PLUS 5



PLUS 7



PLUS 9



PLUS 18



TYPE - 50 Hz		P2		P1		CURRENT		Q (m³/h - l/min)						
1-	3-			1-	3-	1- 230V	3- 400V	0	0,6	1,2	1,8	2,4	3,6	4,8
								0	10	20	30	40	60	80
		HP	kW	kW		A		H (m)						
P 3-50/2	P 3-50/2T	0,5	0,37	0,45	0,46	2	0,9	20,2	18,8	17,3	15,3	13,7	9,5	4,9
P 3-70/3	P 3-70/3T	0,7	0,51	0,65	0,63	2,9	1,2	30,0	27,9	25,4	23,0	20,3	14,0	6,7
P 3-90/4	P 3-90/4T	0,9	0,66	0,9	0,88	4	1,8	40,8	38,3	35,1	31,8	27,9	19,8	10,4
P 3-100/5	P 3-100/5T	1	0,75	1,06	1,01	4,8	1,9	52,2	48,9	45,1	40,8	36,0	25,4	14,0
P 3-120/6	P 3-120/6T	1,2	0,9	1,23	1,23	5,6	2,6	62,8	58,7	54,5	49,6	43,9	32,1	18,3
P 3-150/7	P 3-150/7T	1,5	1,1	1,3	1,2	6,1	3,0	77,1	76,1	73,2	68,4	62,3	46,5	25,7

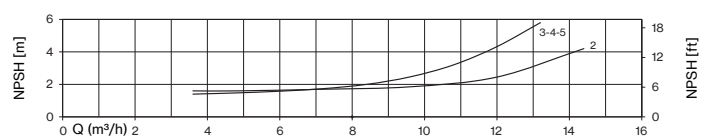
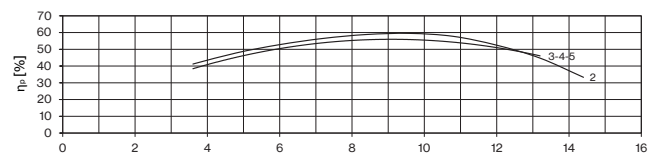
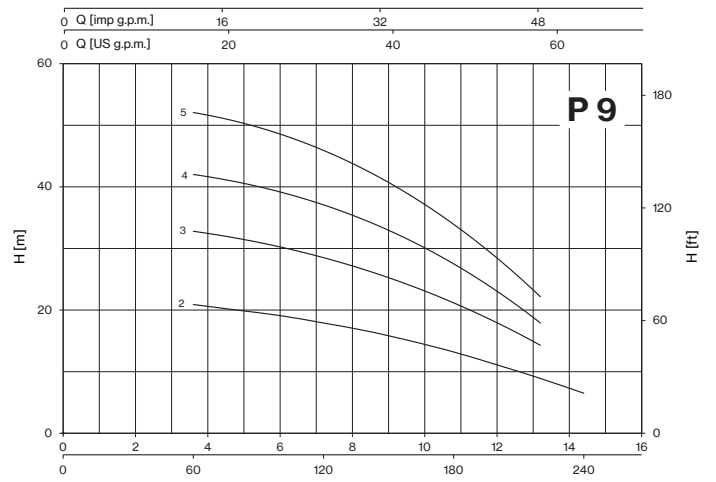
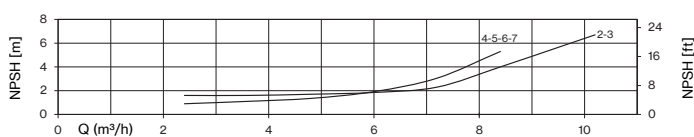
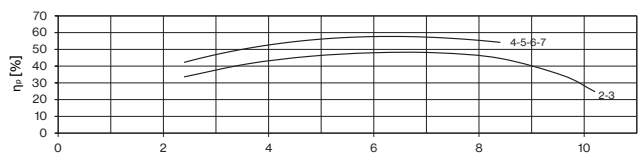
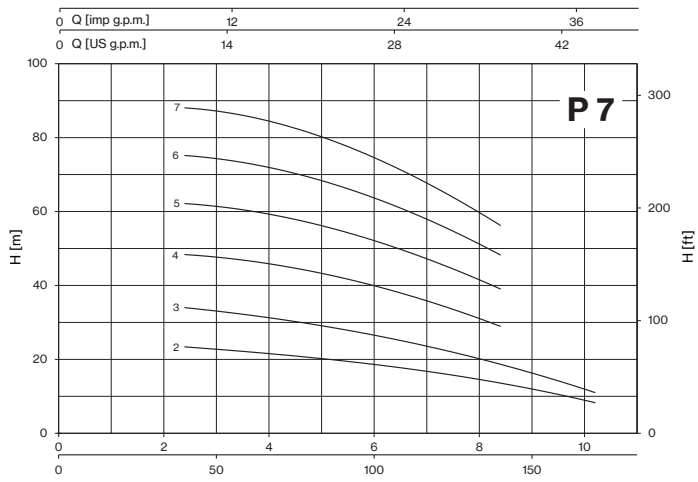
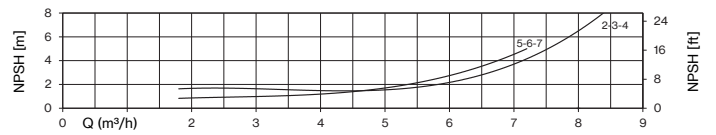
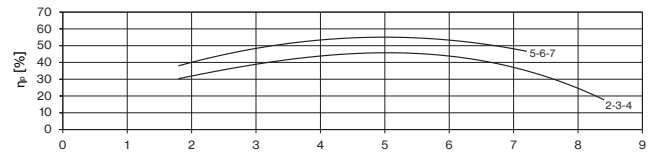
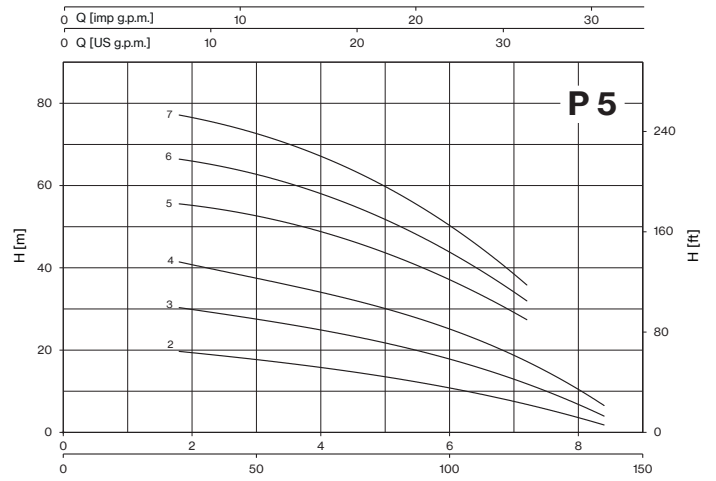
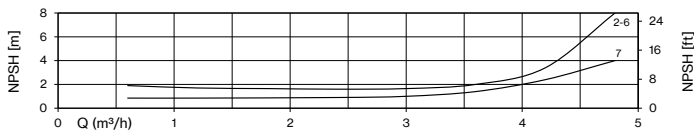
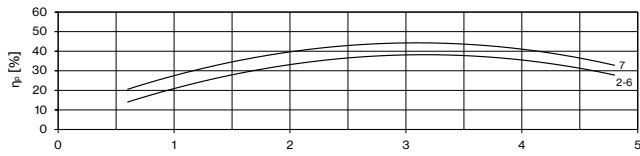
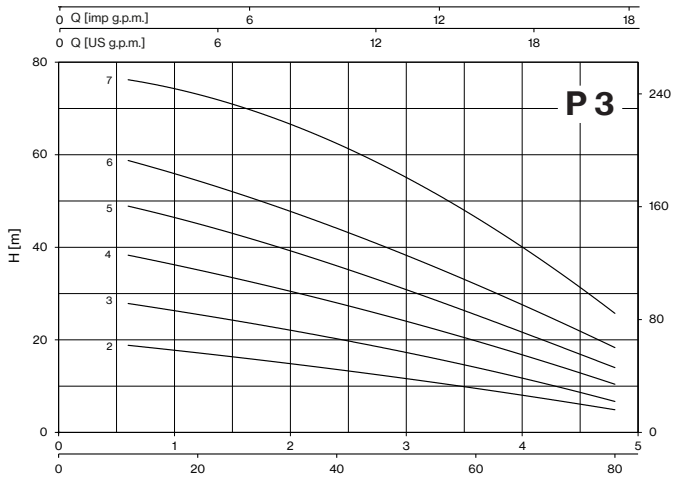
TYPE - 50 Hz		P2		P1		CURRENT		Q (m³/h - l/min)							
1-	3-			1-	3-	1- 230V	3- 400V	0	1,8	2,4	3,6	4,8	6	7,2	8,4
								0	30	40	60	80	100	120	140
		HP	kW	kW		A		H (m)							
P 5-70/2	P 5-70/2T	0,7	0,51	0,61	0,58	2,7	1,1	22,0	19,7	18,7	16,6	14,0	10,8	6,8	1,8
P 5-80/3	P 5-80/3T	0,8	0,6	0,86	0,79	3,9	1,5	33,4	30,3	29,0	26,0	22,5	17,6	12,0	3,9
P 5-120/4	P 5-120/4T	1,2	0,9	1,13	1,13	5,2	2,5	45,3	41,3	39,6	35,6	30,8	24,9	17,6	6,4
P 5-150/5	P 5-150/5T	1,5	1,1	1,4	1,4	6,6	3,1	57,6	55,6	54,2	50,5	45,0	37,0	27,4	
P 5-180/6	P 5-180/6T	2	1,5	1,6	1,6	7,4	3,3	69,1	66,5	64,8	60,1	53,2	43,8	32,0	
P 5-200/7	P 5-200/7T	2	1,5	1,9	1,8	8,6	3,6	80,6	77,1	75,1	69,6	61,3	50,4	35,8	

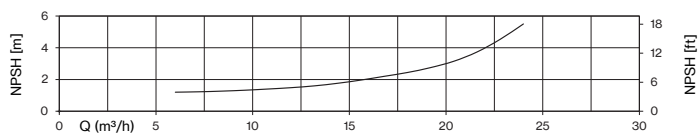
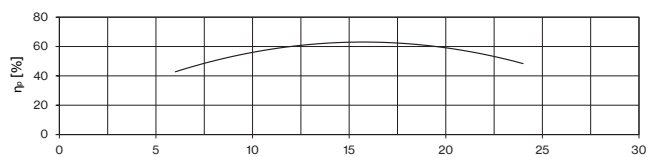
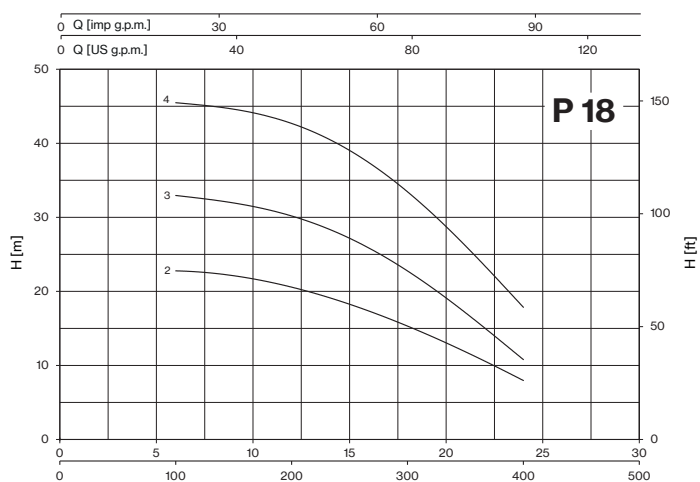
TYPE - 50 Hz		P2		P1		CURRENT		Q (m³/h - l/min)									
1-	3-			1-	3-	1- 230V	3- 400V	0	2,4	3,6	4,8	6	7,2	8,4	9,6	10,2	
								0	40	60	80	100	120	140	160	170	
		HP	kW	kW		A		H (m)									
P 7-100/2	P 7-100/2T	1	0,75	0,97	0,9	4,4	1,7	24,8	23,4	22,0	20,5	18,7	16,3	13,6	10,2	8,3	
P 7-120/3	P 7-120/3T	1,2	0,9	1,32	1,3	5,9	2,6	36,7	34,0	32,0	29,6	26,5	23,0	18,6	13,8	11,0	
P 7-180/4	P 7-180/4T	2	1,5	1,7	1,6	7,9	3,3	49,6	48,4	46,7	43,8	39,9	34,9	28,9			
P 7-250/5	P 7-250/5T	2,5	1,85	2,2	2,0	9,9	4,0	63,2	62,1	60,3	56,9	52,1	46,2	39,0			
P 7-300/6	P 7-300/6T	3	2,2	2,5	2,4	11,5	4,7	76,0	75,1	73,1	69,2	63,6	56,8	48,2			
-	P 7-350/7T	3,5	2,57	-	2,8	-	5,1	89,0	88,0	85,8	81,2	74,5	66,3	56,2			

TYPE - 50 Hz		P2		P1		CURRENT		Q (m³/h - l/min)							
1-	3-			1-	3-	1- 230V	3- 400V	0	3,6	4,8	7,2	9,6	12	13,2	14,4
								0	60	80	120	160	200	220	240
		HP	kW	kW		A		H (m)							
P 9-100/2	P 9-100/2T	1	0,75	0,98	0,92	4,4	1,7	23,0	20,9	20,0	17,9	15,0	11,1	8,9	6,5
P 9-150/3	P 9-150/3T	1,5	1,1	1,4	1,4	6,6	3,1	35,0	32,8	31,7	28,5	24,1	17,9	14,3	
P 9-200/4	P 9-200/4T	2	1,5	1,8	1,7	8,3	3,5	45,8	42,1	40,7	37,3	31,3	23,0	17,9	
P 9-250/5	P 9-250/5T	2,5	1,85	2,3	2,1	10,4	4,1	56,9	52,2	50,4	46,1	38,8	28,2	22,3	

TYPE - 50 Hz		P2		P1	CURRENT 3- 400V	Q (m³/h - l/min)										
3-	HP					kW	kW	A	0	6	7,2	9,6	12	14,4	16,8	19,2
				0	100				120	160	200	240	280	320	360	400
		H (m)														
P 18-180/2T	2	1,5	1,6	3,3	23,6	23,0	22,4	21,9	20,6	18,6	17,0	13,8	11,2	7,9		
P 18-250/3T	2,5	1,85	2,2	4,2	34,7	32,9	32,6	31,6	30,1	28,0	24,7	20,6	15,9	10,7		
P 18-400/4T	4	3	3,0	5,8	47,1	45,4	45,2	44,3	42,6	40,0	36,0	30,6	24,6	17,8		

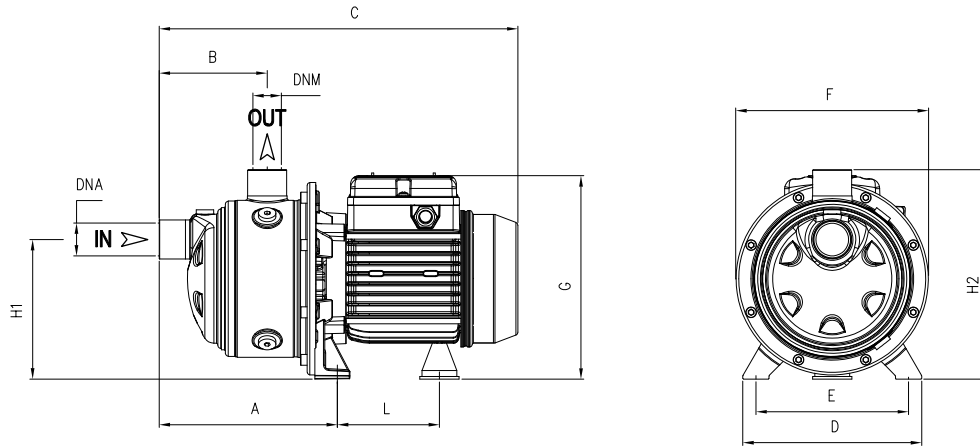
# PLUS



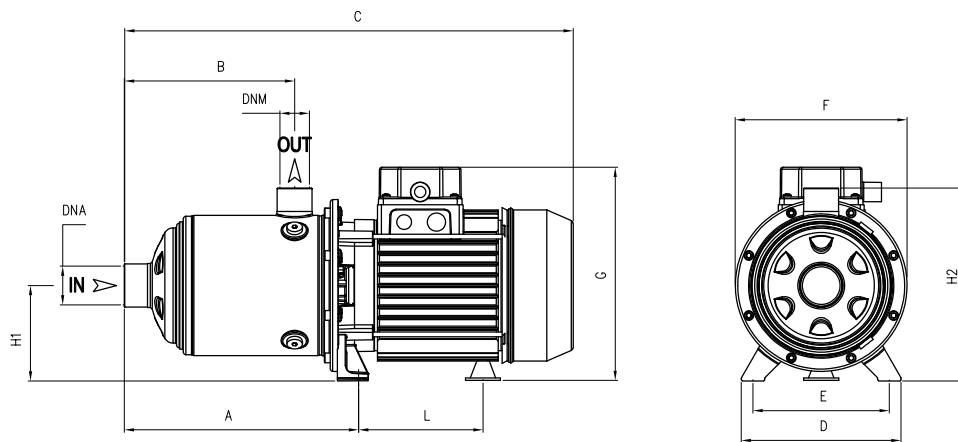


LOTS				
TYPE	TRUCK		CONTAINER	
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
P 3-50/2-90/4	80×120×150	84	80×120×175	96
P 3-100/5-120/6	85×110×160	70	85×110×185	80
P 3-150/7	80×120×150	42	80×120×175	49
P 5-70/2	80×120×150	84	80×120×175	96
P 5-80/3-120/4	85×110×160	70	85×110×185	80
P 5-150/5	90×110×150	54	90×110×170	63
P 5-180/6-200/7	80×120×150	42	80×120×175	49
P 7-100/2-120/3	85×110×160	70	85×110×185	80
P 7-180/4-250/5	90×110×150	54	90×110×170	63
P 7-300/6T	80×120×150	42	80×120×175	49
P 7-300/6 M-350/7T	80×120×145	35	80×120×170	42
P 9-100/2	85×110×160	70	85×110×185	80
P 9-150/3-200/4	90×110×150	54	90×110×170	63
P 9-250/5	80×120×150	42	80×120×175	49
P 18-180/2-250/3	90×110×150	54	90×110×170	63
P 18-400/4	80×120×145	35	80×120×170	42

# PLUS



TYPE		DIMENSIONS (mm)												Kg	
-1	-3	A	B	C	D	E	F	G	L	H1	H2	DNA	DNM	-1	-3
P 3-50/2	P 3-50/2T	166,8	103	333	164	140	178	190	93,7	128	192	1" G	1" G	6,5	6
P 3-70/3	P 3-70/3T	166,8	103	333	164	140	178	190	93,7	128	192			7	7
P 3-90/4	P 3-90/4T	190,8	127	357	164	140	178	190	93,7	128	192			8,5	8,5
P 3-100/5	P 3-100/5T	214,8	151	404	164	140	178	203	104,7	128	192			10,5	10,5
P 3-120/6	P 3-120/6T	238,8	175	428	164	140	178	203	104,7	128	192			11,5	11,5
P 3-150/7	P 3-150/7T	262,8	199	513	164	140	201	211	128,2	134	198			14,5	14
P 5-70/2	P 5-70/2T	166,8	103	333	164	140	178	195	93,7	128	192			7	7
P 5-80/3	P 5-80/3T	166,8	103	357	164	140	178	203	93,7	128	192			9,5	10,5
P 5-120/4	P 5-120/4T	190,8	127	380	164	140	178	203	104,7	128	192			11	11
P 5-150/5	P 5-150/5T	214,8	151	466	164	140	201	211	128,2	134	198			17,5	17,5
P 5-180/6	P 5-180/6T	238,8	175	489	164	140	201	211	128,2	134	198	17,5	18		
P 5-200/7	P 5-200/7T	262,8	199	513	164	140	201	211	128,2	134	198	17	18		



TYPE		DIMENSIONS (mm)												Kg	
-1	-3	A	B	C	D	E	F	G	L	H1	H2	DNA	DNM	-1	-3
P 7-100/2	P 7-100/2T	166,8	103	356	164	140	178	203	104,7	92	192	1" ¼ G	1" G	10	10
P 7-120/3	P 7-120/3T	166,8	103	356	164	140	178	203	104,7	92	192			10,5	10,5
P 7-180/4	P 7-180/4T	190,8	127	441	164	140	201	211	128,2	98	198			16	17
P 7-250/5	P 7-250/5T	214,8	151	466	164	140	201	211	128,2	98	198			17,5	16,5
P 7-300/6	P 7-300/6T	238,8	175	543 T 489	164	140	201	229 T 211	148,2 T 128,2	103 T 98	203 T 198	1" ½ G	1" ¼ G	24,5	18
-	P 7-350/7T	262,8	199	567	164	140	201	229	148,2	103	203			-	22
P 9-100/2	P 9-100/2T	185,8	118	375	164	140	178	203	104,7	98	192	1" ½ G	1" ¼ G	10	10
P 9-150/3	P 9-150/3T	185,8	118	405	164	140	201	211	128,2	98	198			17	17
P 9-200/4	P 9-200/4T	215,8	148	466	164	140	201	211	128,2	98	198			16	17,5
P 9-250/5	P 9-250/5T	245,8	178	494	164	140	201	211	128,2	98	198			17,5	16,5
-	P 18-180/2T	201	141	462	164	140	201	211	128,2	98	198	2" G	1" ½ G	-	14
-	P 18-250/3T	238,5	141	462	164	140	201	211	128,2	98	198			-	16
-	P 18-400/4T	276	178,5	554	164	140	201	229	148,2	103	203			-	24

# PLUS S

## Multistage Horizontal

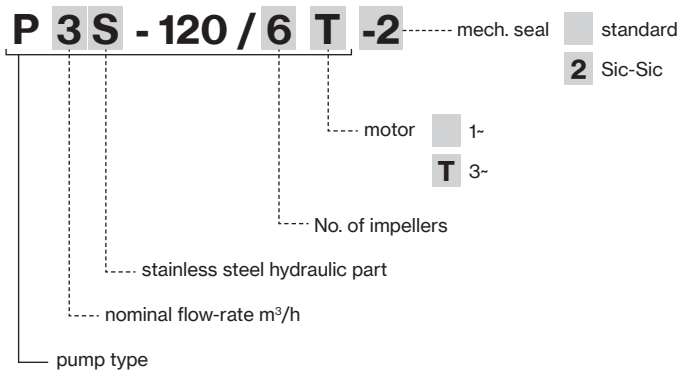
Stainless steel multistage horizontal pumps. Pumping of clean non-loaded fluids, pressurizing system, irrigation, drinking and glycol water, water treatment, heating and air conditioning, washing system.

### Construction features

<b>Pump body, mechanical seal housing</b>	stainless steel AISI 304
<b>Motor bracket</b>	aluminum
<b>Impellers, diffusers</b>	stainless steel AISI 304
<b>Mechanical seal</b>	ceramic-graphite-EPDM ≤ 6 impellers graphite-silicon carbide-EPDM ≥ 7 impellers
<b>Motor shaft</b>	stainless steel AISI 303
<b>Liquid temperature</b>	-15 ÷ +110 °C
<b>Operating pressure</b>	max 8,5 bar

### Motor

	3- 230/400V - 50Hz
<b>2 poles induction motor</b>	1- 230V - 50Hz (with thermal protection up to 1,85 kW)
<b>Insulation class</b>	F
<b>Protection degree</b>	IPX4



PLUS 3S



PLUS 5S



PLUS 7S



PLUS 9S



PLUS 18S



# PLUS S

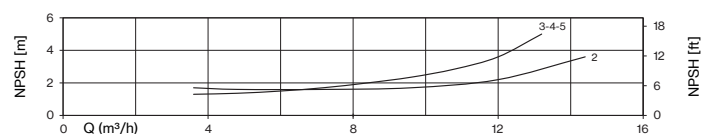
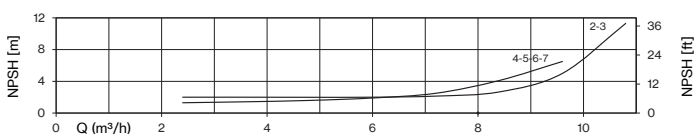
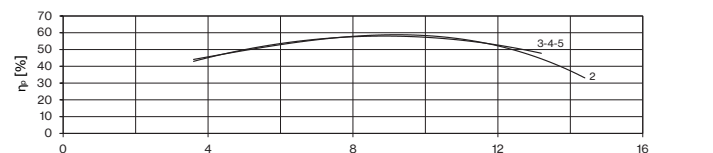
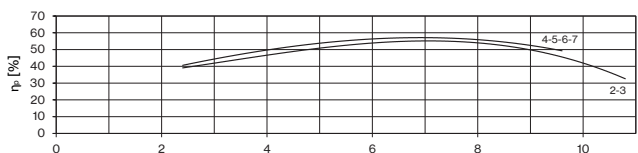
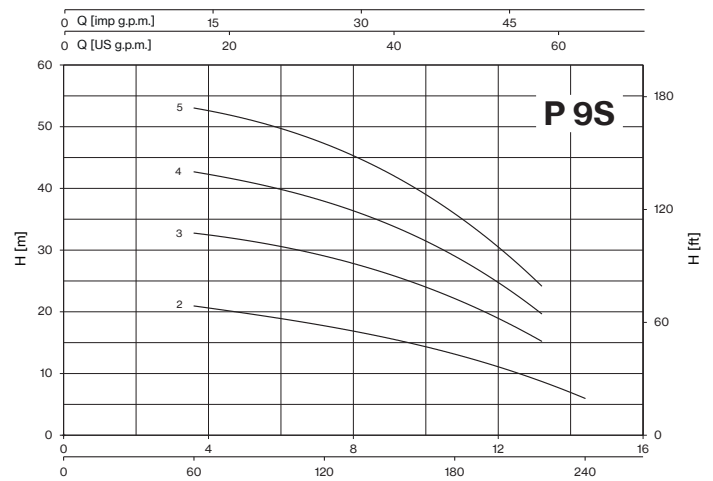
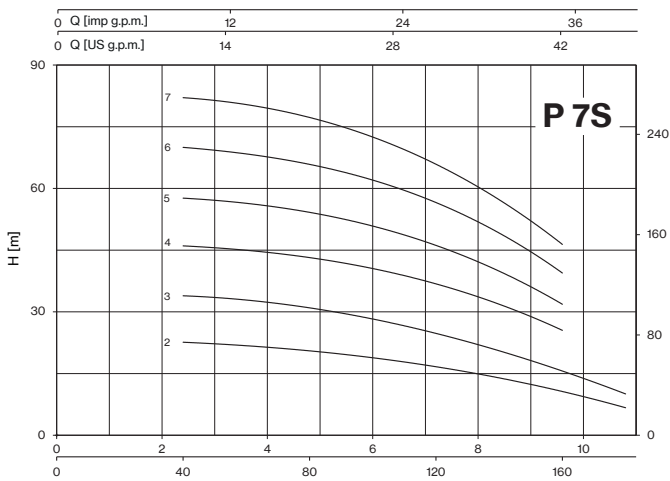
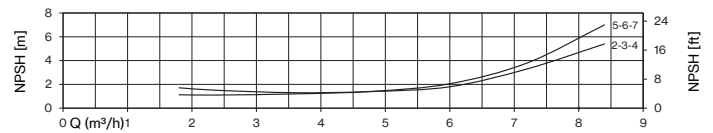
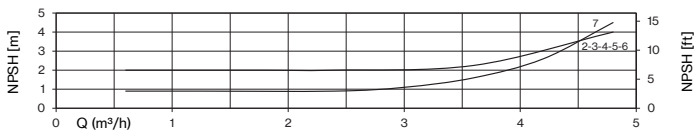
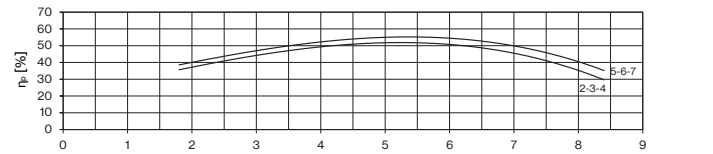
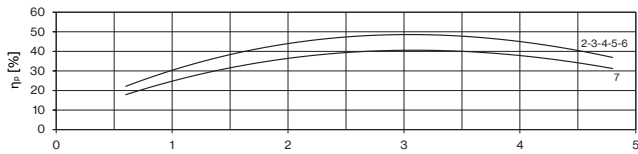
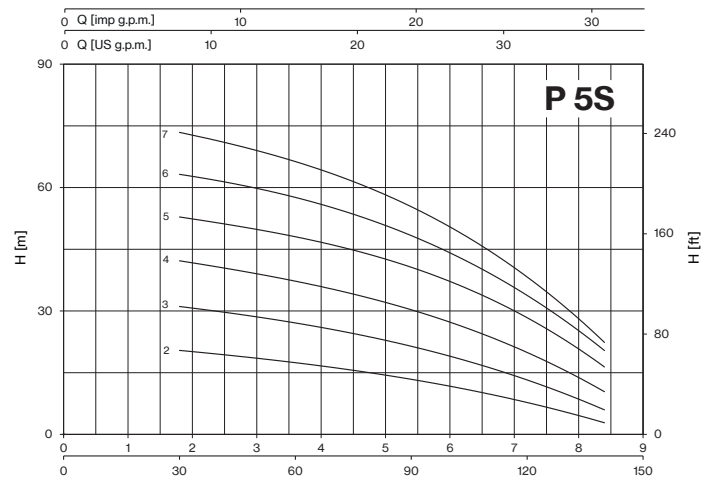
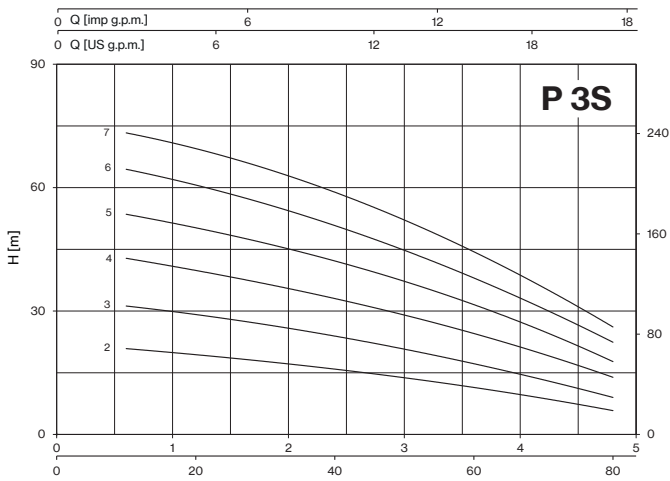
TYPE - 50 Hz		P2		P1		CURRENT		Q (m³/h - l/min)						
1-	3-			1-	3-	1- 230V	3- 400V	0	0,6	1,2	1,8	2,4	3,6	4,8
								0	10	20	30	40	60	80
		HP	kW	kW		A		H (m)						
P 3S-50/2	P 3S-50/2T	0,5	0,37	0,41	0,41	1,8	0,9	21,7	20,9	19,3	17,8	15,9	11,4	5,8
P 3S-70/3	P 3S-70/3T	0,7	0,51	0,61	0,58	2,7	1,1	32,7	31,2	29,2	26,7	23,9	17,2	9,0
P 3S-90/4	P 3S-90/4T	0,9	0,66	0,83	0,8	3,6	1,7	44,3	42,8	40,0	36,4	33,2	24,5	13,9
P 3S-100/5	P 3S-100/5T	1	0,75	0,99	0,92	4,4	1,7	55,3	53,5	50,3	46,5	42,1	31,6	17,7
P 3S-120/6	P 3S-120/6T	1,2	0,9	1,11	1,11	5,1	2,5	66,6	64,4	60,8	56,0	50,7	38,1	22,4
P 3S-150/7	P 3S-150/7T	1,5	1,1	1,4	1,4	6,6	3,1	75,6	73,3	69,4	64,8	58,9	44,4	26,1

TYPE - 50 Hz		P2		P1		CURRENT		Q (m³/h - l/min)							
1-	3-			1-	3-	1- 230V	3- 400V	0	1,8	2,4	3,6	4,8	6	7,2	8,4
								0	30	40	60	80	100	120	140
		HP	kW	kW		A		H (m)							
P 5S-70/2	P 5S-70/2T	0,7	0,51	0,6	0,58	2,6	1,1	22,3	20,4	19,5	17,5	14,8	11,7	7,8	2,8
P 5S-80/3	P 5S-80/3T	0,8	0,6	0,8	0,75	3,8	1,4	34,0	31,1	29,9	27,0	23,6	19,1	13,1	6,0
P 5S-120/4	P 5S-120/4T	1,2	0,9	1,09	1,08	4,9	2,4	45,5	42,2	40,7	37,2	32,9	27,4	19,8	10,4
P 5S-150/5	P 5S-150/5T	1,5	1,1	1,4	1,3	6,6	3,1	55,9	52,8	51,4	48,1	43,4	37,3	28,3	16,4
P 5S-180/6	P 5S-180/6T	2	1,5	1,6	1,6	7,4	3,3	67,0	63,3	61,6	57,6	51,9	44,2	33,6	20,4
P 5S-200/7	P 5S-200/7T	2	1,5	1,9	1,8	8,6	3,6	77,8	73,5	71,3	66,3	59,6	50,7	38,0	22,4

TYPE - 50 Hz		P2		P1		CURRENT		Q (m³/h - l/min)							
1-	3-			1-	3-	1- 230V	3- 400V	0	2,4	3,6	4,8	6	7,2	9,6	10,8
								0	40	60	80	100	120	160	180
		HP	kW	kW		A		H (m)							
P 7S-100/2	P 7S100/2T	1	0,75	0,91	0,84	4,1	1,6	23,6	22,6	21,8	20,5	18,8	16,7	10,6	6,7
P 7S-120/3	P 7S-120/3T	1,2	0,9	1,23	1,22	5,6	2,5	35,6	33,9	32,8	31,2	28,1	24,7	15,7	10,0
P 7S-180/4	P 7S-180/4T	2	1,5	1,8	1,7	8,3	3,5	46,7	46,0	45,2	43,1	40,3	36,9	25,5	
P 7S-250/5	P 7S-250/5T	2,5	1,85	2,2	2,1	9,9	4,0	58,5	57,6	56,6	54,1	50,8	46,1	31,8	
P 7S-300/6	P 7S-300/6T	3	2,2	2,6	2,5	12,1	4,8	70,6	69,9	68,7	65,8	61,8	56,6	39,3	
-	P 7S-350/7T	3,5	2,57	-	2,9	-	5,3	82,8	82,0	80,6	77,2	72,3	66,0	46,4	

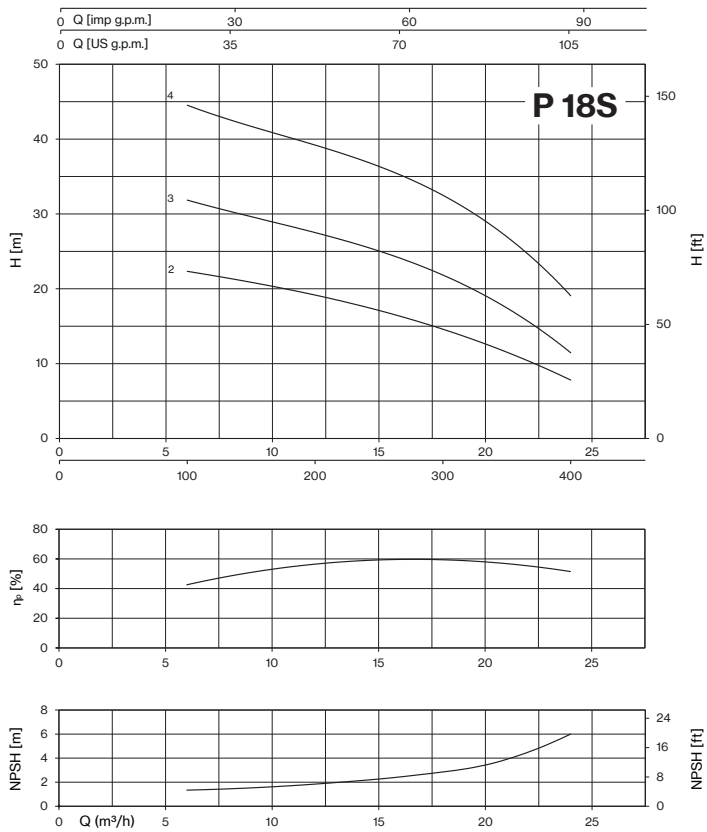
TYPE - 50 Hz		P2		P1		CURRENT		Q (m³/h - l/min)								
1-	3-			1-	3-	1- 230V	3- 400V	0	3,6	4,8	6	7,2	9,6	12	13,2	14,4
								0	60	80	100	120	160	200	220	240
		HP	kW	kW		A		H (m)								
P 9S-100/2	P 9S-100/2T	1	0,75	0,99	0,95	4,5	1,6	23,9	21,0	20,0	18,8	17,7	15,0	11,0	8,7	6,0
P 9S-150/3	P 9S-150/3T	1,5	1,1	1,5	1,4	7,0	3,1	35,1	32,8	31,8	30,6	29,0	24,9	18,9	15,2	
P 9S-200/4	P 9S-200/4T	2	1,5	1,8	1,8	8,3	3,6	45,8	42,7	41,5	39,7	37,8	32,7	24,6	19,8	
P 9S-250/5	P 9S-250/5T	2,5	1,85	2,3	2,2	10,4	4,2	57,1	53,1	51,6	49,5	47,2	40,6	30,2	24,4	

TYPE - 50 Hz		P2		P1	CURRENT		Q (m³/h - l/min)							
3-	3-				3- 400V	0	6	7,2	9,6	12	14,4	16,8	19,2	21,6
				0		100	120	160	200	240	280	320	360	400
		HP	kW	kW	A		H (m)							
P 18S-180/2T	2	1,5	1,6	3,3	23,8	22,3	21,8	20,6	19,1	17,5	15,7	13,5	10,9	7,8
P 18S-250/3T	2,5	1,85	2,3	4,3	33,8	31,6	31,0	29,4	27,4	25,4	23,2	20,4	16,3	11,5
P 18S-400/4T	4	3	3,1	5,9	46,3	44,2	43,4	41,4	39,1	36,7	34,1	30,8	25,6	19,0

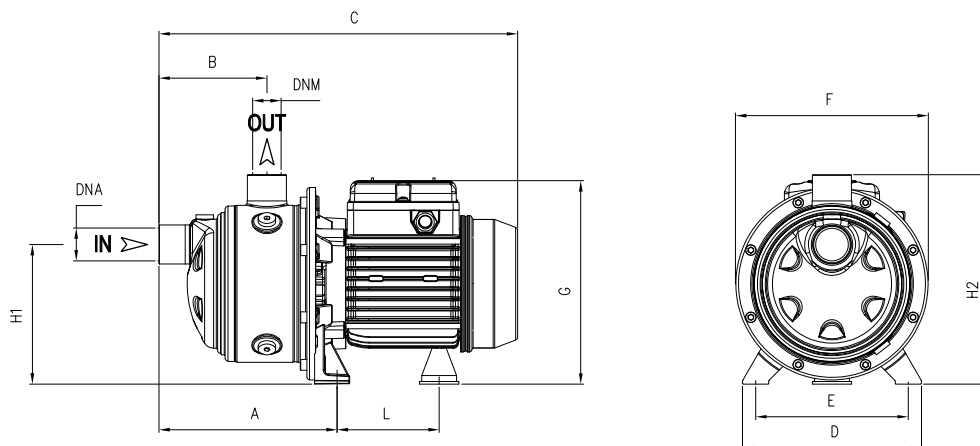




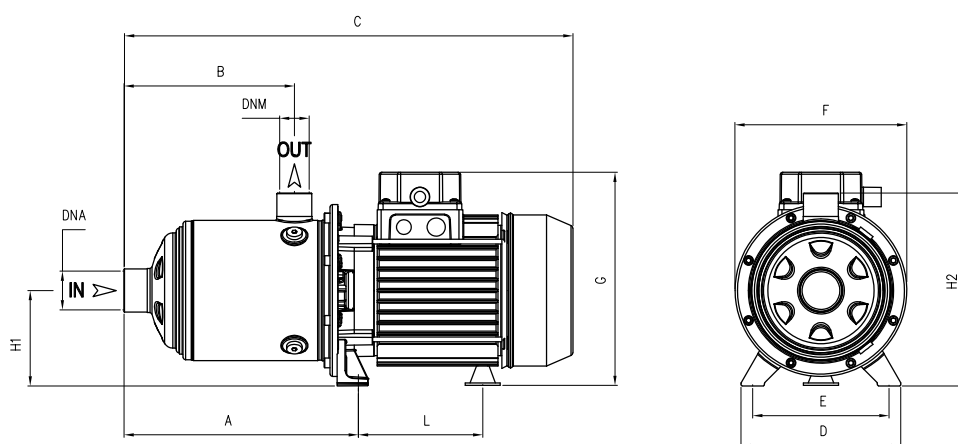
# PLUS S



LOTS				
TYPE	TRUCK		CONTAINER	
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
P 3S-50/2-90/4	80×120×150	84	80×120×175	96
P 3S-100/5-120/6	85×110×160	70	85×110×185	80
P 3S-150/7	80×120×150	42	80×120×175	49
P 5S-70/2	80×120×150	84	80×120×175	96
P 5S-80/3-120/4	85×110×160	70	85×110×185	80
P 5S-150/5	90×110×150	54	90×110×170	63
P 5S-180/6-200/7	80×120×150	42	80×120×175	49
P 7S-100/2-120/3	85×110×160	70	85×110×185	80
P 7S-180/4-250/5	90×110×150	54	90×110×170	63
P 7S-300/6 T	80×120×150	42	80×120×175	49
P 7S-300/6 -350/7T	80×120×145	35	80×120×170	42
P 9S-100/2	85×110×160	70	85×110×185	80
P 9S-150/3-200/4	90×110×150	54	90×110×170	63
P 9S-250/5	80×120×150	42	80×120×175	49
P 18S-180/2-250/3	90×110×150	54	90×110×170	63
P 18S-400/4	80×120×145	35	80×120×170	42





TYPE		DIMENSIONS (mm)											Kg		
-1	-3	A	B	C	D	E	F	G	L	H1	H2	DNA	DNM	-1	-3
P 3S-50/2	P 3S-50/2T	166,8	103	333	164	140	178	190	93,7	128	192	1" G	1" G	7	7
P 3S-70/3	P 3S-70/3T	166,8	103	333	164	140	178	190	93,7	128	192			8	8
P 3S-90/4	P 3S-90/4T	190,8	127	357	164	140	178	190	93,7	128	192			9,5	9,5
P 3S-100/5	P 3S-100/5T	214,8	151	404	164	140	178	203	104,7	128	192			12	12
P 3S-120/6	P 3S-120/6T	238,8	175	428	164	140	178	203	104,7	128	192			13	13
P 3S-150/7	P 3S-150/7T	262,8	199	513	164	140	201	211	128,2	134	198			19,5	20
P 5S-70/2	P 5S-70/2T	166,8	103	333	164	140	178	195	93,7	128	192			7,5	7,5
P 5S-80/3	P 5S-80/3T	166,8	103	357	164	140	178	203	93,7	128	192			10	10
P 5S-120/4	P 5S-120/4T	190,8	127	380	164	140	178	203	104,7	128	192			12	12
P 5S-150/5	P 5S-150/5T	214,8	151	466	164	140	201	211	128,2	134	198			18,5	19
P 5S-180/6	P 5S-180/6T	238,8	175	489	164	140	201	211	128,2	134	198	19	19,5		
P 5S-200/7	P 5S-200/7T	262,8	199	513	164	140	201	211	128,2	134	198	18,5	20		



TYPE		DIMENSIONS (mm)											Kg		
-1	-3	A	B	C	D	E	F	G	L	H1	H2	DNA	DNM	-1	-3
P 7S-100/2	P 7S100/2T	166,8	103	356	164	140	178	203	104,7	92	192	1" 1/4 G	1" G	10,5	10,5
P 7S-120/3	P 7S-120/3T	166,8	103	356	164	140	178	203	104,7	92	192			11,5	11,5
P 7S-180/4	P 7S-180/4T	190,8	127	441	164	140	201	211	128,2	98	198			17	18
P 7S-250/5	P 7S-250/5T	214,8	151	466	164	140	201	211	128,2	98	198			18,5	17,5
P 7S-300/6	P 7S-300/6T	238,8	175	543 T 489	164	140	201	229 T 211	148,2 T 128,2	103 T 98	203 T 198	1" 1/2 G	1" 1/4 G	26	19,5
-	P 7S-350/7T	262,8	199	567	164	140	201	229	148,2	103	203			-	23,5
P 9S-100/2	P 9S-100/2T	185,8	118	375	164	140	178	203	104,7	98	192	1" 1/2 G	1" 1/4 G	10,5	10,5
P 9S-150/3	P 9S-150/3T	185,8	118	405	164	140	201	211	128,2	98	198			18	18
P 9S-200/4	P 9S-200/4T	215,8	148	466	164	140	201	211	128,2	98	198			17,5	18,5
P 9S-250/5	P 9S-250/5T	245,8	178	494	164	140	201	211	128,2	98	198			19	18
-	P 18S-180/2T	201	141	462	164	140	201	211	128,2	98	198	2" G	1" 1/2 G	-	15
-	P 18S-250/3T	238,5	141	462	164	140	201	211	128,2	98	198			-	17,5
-	P 18S-400/4T	276	178,5	554	164	140	201	229	148,2	103	203			-	26

# PLUS (S) Serie-Mechanical seal and bearings

MECHANICAL SEAL	PUMP MODEL	SHAFT		STANDARD MATERIAL	OPTIONAL
					2
	P3-50/2, P3-70/3, P3-90/4, P3-100/5, P3-120/6, P5-70/2, P5-80/3, P5-120/4, P5-150/5, P5-180/6, P7-100/2, P7-120/3, P7-180/4, P7-250/5, P7-300/6, P9-100/2, P9-150/3, P9-200/4, P9-250/5, P18-180/2, P18-250/3, P18-400/4	14mm / S	<b>Rotating face</b> <b>Stationary face</b> <b>Elastomer</b>	Graphite Ceramic EPDM	SiC SiC EPDM
	P3-150/7, P5-200/7, P7-350/7	14mm	<b>Rotating face</b> <b>Stationary face</b> <b>Elastomer</b>	Graphite SiC EPDM	SiC SiC EPDM

BEARINGS	PUMP MODEL	TYPE	
	P3-50/2, P3-70/3, P3-90/4, P5-70/2	6201-ZZ	6202-ZZ
	P3-100/5, P3-120/6, P5-80/3, P5-120/4, P7-100/2, P7-120/3, P9-100/2	6202-ZZ	6302-ZZ C3
	P3-150/7, P5-150/5, P5-180/6, P5-200/7, P7-180/4, P7-250/5, 3- P7-300/6, P9-150/3, P9-200/4, P9-250/5, P18-180/2, P18-250/3	6203-ZZ	6304-ZZ C3
	1- P7-300/6, P7-350/7, P18-400/4	6203-ZZ	6305-ZZ C3

# PLUS + VSD

Horizontal booster pump with variable speed drive



## DESCRIPTION

Horizontal pump of PLUS series provided with single-phase variable speed drive EPIC or three-phase EPIC-A. This booster pump assures a desired pressure regardless of changes on flow demand making it suitable for low or missing pressure in domestic systems. A membrane tank downstream the system is required.

## FEATURES

- EPIC or EPIC-A variable speed drive provided on board
- Three-phase horizontal pump of PLUS series
- Pressure sensor
- Cable with plug

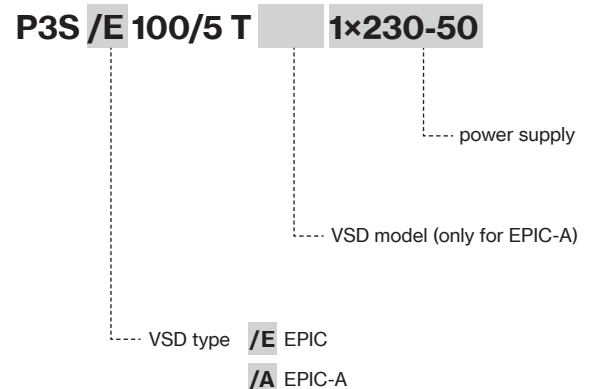
## FUNCTIONING

If the pressure in the network drops the pump will start and gradually speeds up to provide with the set pressure. When the water demand decreases, the pressure will rise causing the pump speed to slow down and eventually to stop the pump if demand ceases. The pump will remain on standby waiting to start at the next water demand.

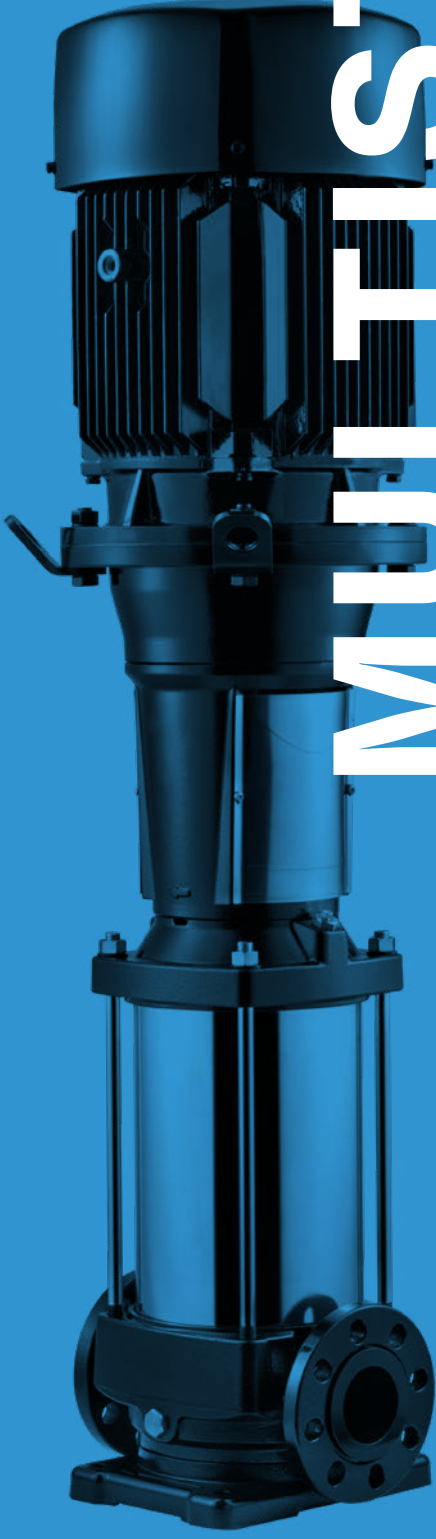
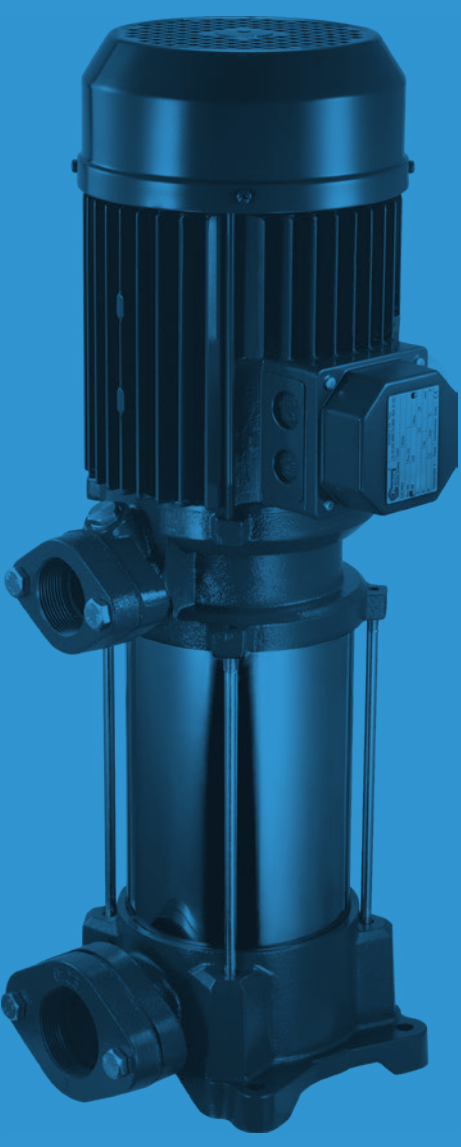
## SELECTION

The table below shows the horizontal PLUS pump models available for the assembly with EPIC or EPIC-A. Consult the catalog at the PLUS series for pump specifics and characteristic curves.

3- PUMP TYPE		VSD TYPE			
PLUS	PLUS S	Power supply			
		1- 230V	3- 400V		
P 3-50/2T	P 3S-50/2T	EPIC	EPIC-A 304		
P 3-70/3T	P 3S-70/3T				
P 3-90/4T	P 3S-90/4T				
P 3-100/5T	P 3S-100/5T				
P 3-120/6T	P 3S-120/6T				
P 3-150/7T	P 3S-150/7T				
P 5-70/2T	P 5S-70/2T				
P 5-80/3T	P 5S-80/3T				
P 5-120/4T	P 5S-120/4T				
P 5-150/5T	P 5S-150/5T				
P 5-180/6T	P 5S-180/6T				
P 5-200/7T	P 5S-200/7T				
P 7-100/2T	P 7S-100/2T				
P 7-120/3T	P 7S-120/3T				
P 7-180/4T	P 7S-180/4T				
P 7-250/5T	P 7S-250/5T				
P 7-300/6T	P 7S-300/6T			-	EPIC-A 306
P 7-350/7T	P 7S-350/7T			-	EPIC-A 306
P 9-100/2T	P 9S-100/2T	EPIC	EPIC-A 304		
P 9-150/3T	P 9S-150/3T	-	EPIC-A 306		
P 9-200/4T	P 9S-200/4T	-	EPIC-A 306		
P 9-250/5T	P 9S-250/5T	-	EPIC-A 306		
P 18-180/2T	P 18S-180/2T	EPIC	EPIC-A 304		
P 18-250/3T	P 18S-250/3T	-	EPIC-A 306		
P 18-400/4T	P 18S-400/4T	-	EPIC-A 309		

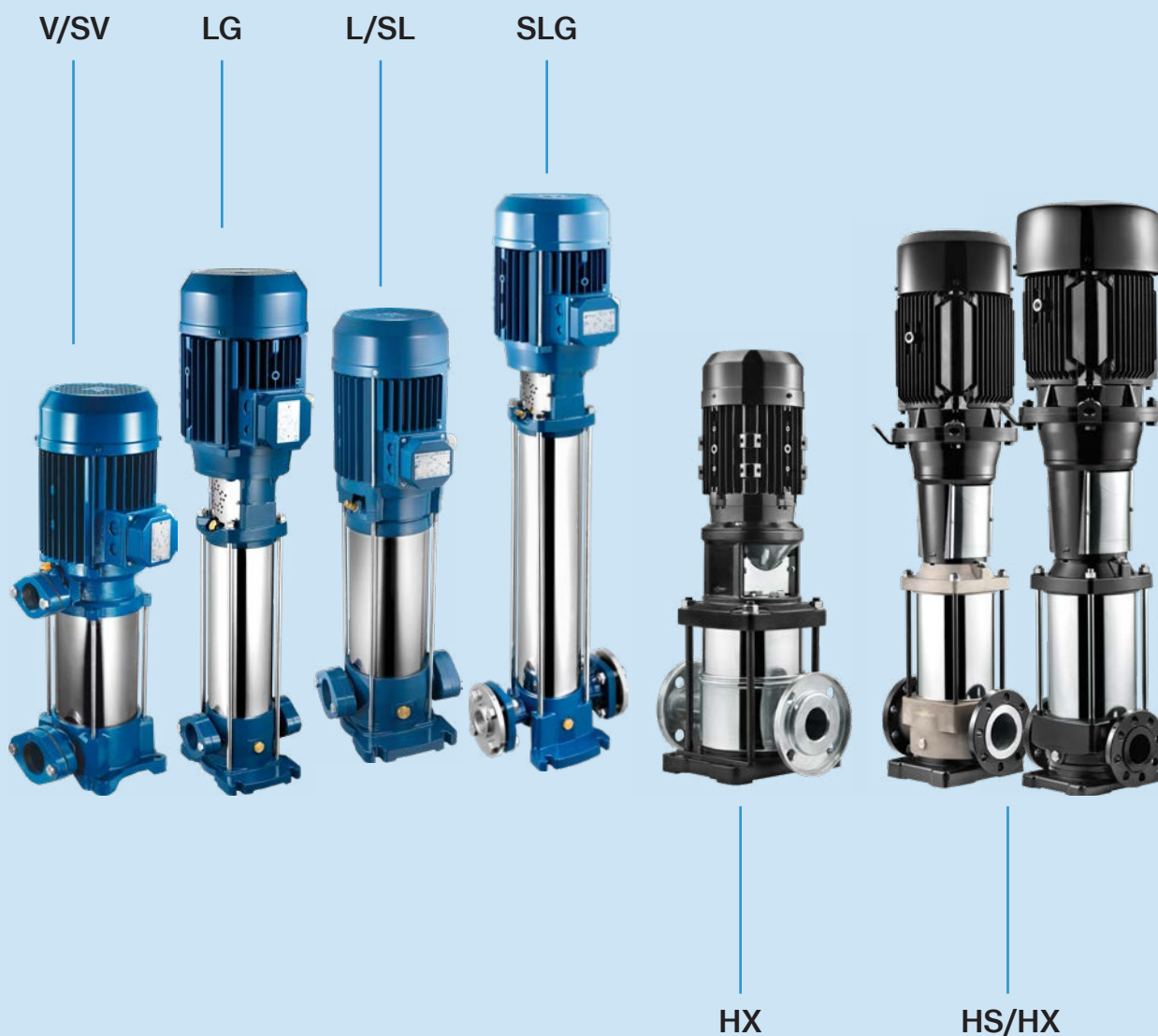






# MULTISTAGE VERTICAL

# MULTISTAGE VERTICAL PUMPS

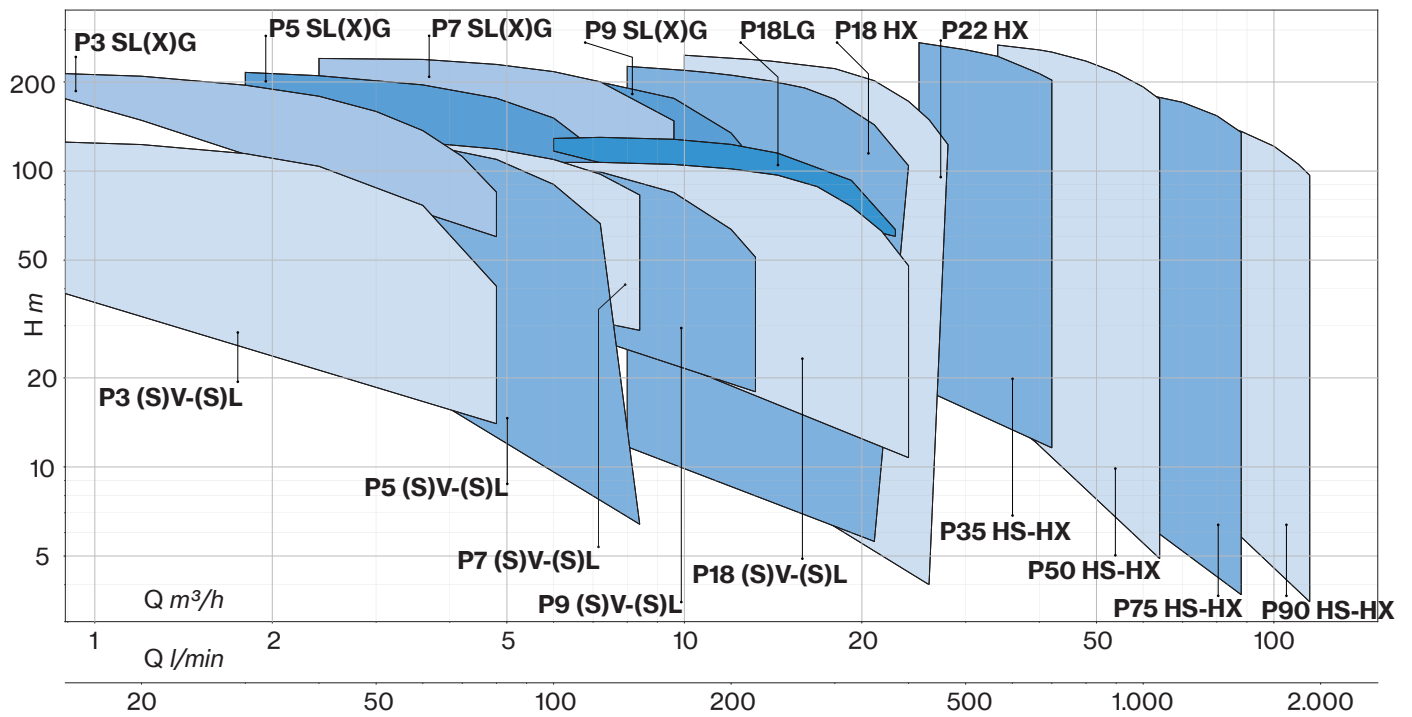


Family of vertical multistage monobloc pumps (V/L) with impellers in Noryl® or (SV/SL) in AISI 304; coupled pumps (LG) with impellers in Noryl® or (SLG) in AISI 304; coupled pumps (HS) with impellers in AISI 304 or (HX) in AISI 316.

## Applications:

- Handling unloaded liquids
- Pressurization systems
- Residential and industrial irrigation and drinking water systems
- Washing systems

# MULTISTAGE





# PLUS V/L

## Multistage Vertical

Stainless steel multistage vertical pumps. Pumping of clean non-loaded fluids, pressurizing system, irrigation, drinking and glycol water, water treatment, food industry, heating and air conditioning, washing system.



PLUS V



PLUS 3-5-7 L

PLUS 9-18 L

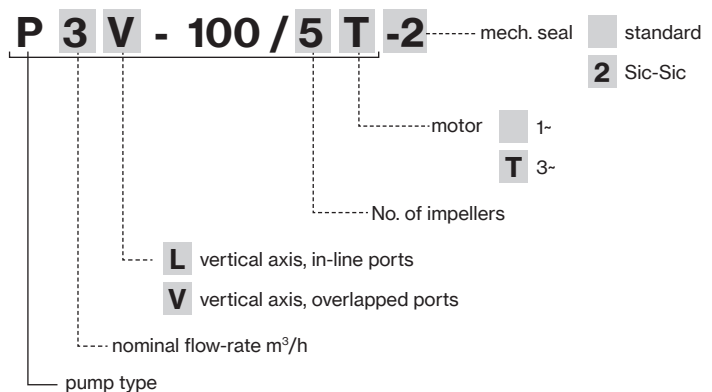


### Construction features

<b>Pump body</b>	cast iron
<b>Motor bracket</b>	cast iron
<b>Impellers, diffusers</b>	Noryl®
<b>Shell, motor shaft</b>	stainless steel AISI 304
<b>Mechanical seal</b>	ceramic-graphite-EPDM graphite-silicon carbide-EPDM
<b>Intermediate shaft guiding stage bush</b>	ceramic-tungsten carbide
<b>Ambient temperature</b>	max 40 °C
<b>Liquid temperature</b>	+5 ÷ +35 °C
<b>Max operating pressure</b>	8 bar ≤ 6 impellers; 14 bar ≥ 7 impellers
<b>Pump body gasket</b>	EPDM

### Motor

<b>2 pole induction motor</b>	3~ 230/400V - 50Hz P ≤ 4kW
	3~ 400/690V - 50Hz P > 4kW
	1~ 230V - 50Hz (with thermal protection up to 1,85 kW)
<b>Insulation class</b>	F
<b>Protection degree</b>	IPX4 IPX5 ≥ 4,5 HP



# PLUS LG

## Multistage Vertical

Stainless steel multistage vertical pumps. Pumping of clean non-loaded fluids, pressurizing system, irrigation, drinking and glycol water, water treatment, food industry, heating and air conditioning, washing system.

### Construction features

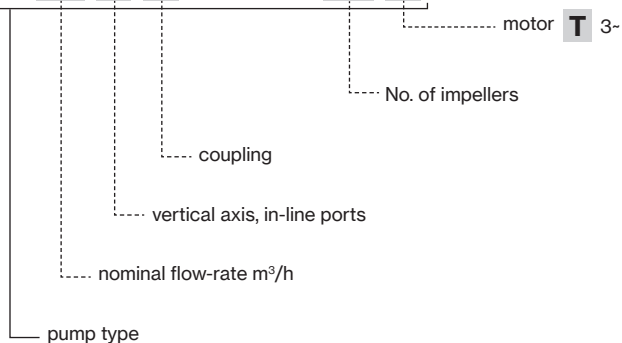
<b>Pump body</b>	cast iron
<b>Motor bracket</b>	cast iron
<b>Impellers, diffusers</b>	Noryl®
<b>Shell, motor shaft</b>	stainless steel AISI 304
<b>Mechanical seal</b>	ceramic-graphite-EPDM graphite-silicon carbide-EPDM
<b>Intermediate shaft guiding stage bush</b>	ceramic-tungsten carbide
<b>Ambient temperature</b>	max 40 °C
<b>Liquid temperature</b>	+5 ÷ +35 °C
<b>Max operating pressure</b>	14 bar
<b>Pump body gasket</b>	EPDM

### Motor

<b>2 pole induction motor</b>	3- 400/690V - 50Hz P > 4kW
<b>Insulation class</b>	F
<b>Protection degree</b>	IPX5



**P 18 L G - 920 / 10 T**



# PLUS V/L

TYPE - 50 Hz		P2		P1		CURRENT		Q (m³/h - l/min)						
1-	3-			1-	3-	1- 230V	3- 400V	0	0,6	1,2	1,8	2,4	3,6	4,8
		0	10					20	30	40	60	80		
		HP	kW	kW		A								
P 3...-100/5	P 3...-100/5T	1	0,75	1,1	1	4,8	1,9	52,2	48,9	45,1	40,8	36,0	25,4	14,0
P 3...-120/6	P 3...-120/6T	1,2	0,9	1,2	1,2	5,6	2,6	62,8	58,7	54,5	49,6	43,9	32,1	18,3
P 3...-150/7	P 3...-150/7T	1,5	1,1	1,3	1,2	6,1	3,0	77,1	76,1	73,2	68,4	62,3	46,5	25,7
P 3...-180/8	P 3...-180/8T	2	1,5	1,5	1,4	7,0	3,1	88,1	87,2	83,5	77,6	70,2	51,3	26,0
P 3...-200/9	P 3...-200/9T	2	1,5	1,6	1,5	7,4	3,2	98,8	97,2	93,7	87,3	79,4	60,0	32,2
P 3...-250/10	P 3...-250/10T	2	1,5	1,7	1,7	7,9	3,5	109,3	108,2	103,6	96,3	87,5	65,3	34,5
P 3...-280/11	P 3...-280/11T	2,5	1,85	2,0	1,8	9,4	3,8	120,4	118,7	113,8	106,1	96,4	71,6	38,3
P 3...-300/12	P 3...-300/12T	2,5	1,85	2,1	2,0	9,8	4,0	130,3	128,5	122,9	114,6	103,8	76,6	40,8

TYPE - 50 Hz		P2		P1		CURRENT		Q (m³/h - l/min)							
1-	3-			1-	3-	1- 230V	3- 400V	0	1,8	2,4	3,6	4,8	6	7,2	8,4
		0	30					40	60	80	100	120	140		
		HP	kW	kW		A									
P 5...-120/4	P 5...-120/4T	1,2	0,9	1,13	1,13	5,2	2,5	45,3	41,3	39,6	35,6	30,8	24,9	17,6	6,4
P 5...-150/5	P 5...-150/5T	1,5	1,1	1,4	1,4	6,6	3,1	57,6	55,6	54,2	50,5	45,0	37,0	27,4	
P 5...-180/6	P 5...-180/6T	2	1,5	1,6	1,6	7,4	3,3	69,1	66,5	64,8	60,1	53,2	43,8	32,0	
P 5...-200/7	P 5...-200/7T	2	1,5	1,9	1,8	8,6	3,6	80,6	77,1	75,1	69,6	61,3	50,4	35,8	
P 5...-250/8	P 5...-250/8T	2,5	1,85	2,2	2,1	9,9	4,1	92,0	88,2	85,8	79,2	70,1	57,2	41,1	
P 5...-280/9	P 5...-280/9T	2,5	1,85	2,4	2,3	10,9	4,3	103,3	98,9	96,2	88,8	78,4	64,1	45,3	
P 5...-300/10	P 5...-300/10T	3	2,2	2,7	2,6	12,5	4,9	115,1	110,6	107,6	99,5	87,6	72,1	50,7	
P 5...-350/11	P 5...-350/11T	3,5	2,57	3,0	2,9	13,7	5,3	127,6	122,5	119,4	110,8	98,0	80,8	57,4	
-	P 5...-380/12T	4	3	-	3,2	-	6,0	140,3	135,4	132,1	123,2	109,5	90,1	66,5	

TYPE - 50 Hz		P2		P1		CURRENT		Q (m³/h - l/min)						
1-	3-			1-	3-	1- 230V	3- 400V	0	2,4	3,6	4,8	6	7,2	8,4
		0	40					60	80	100	120	140		
		HP	kW	kW		A								
P 7...-180/4	P 7...-180/4T	2	1,5	1,7	1,6	7,9	3,3	49,6	48,4	46,7	43,8	39,9	34,9	28,9
P 7...-250/5	P 7...-250/5T	2,5	1,85	2,2	2,0	9,9	4,0	63,2	62,1	60,3	56,9	52,1	46,2	39,0
P 7...-300/6	P 7...-300/6T	3	2,2	2,5	2,4	11,5	4,7	76,0	75,1	73,1	69,2	63,6	56,8	48,2
-	P 7...-350/7T	3,5	2,57	-	2,8	-	5,1	89,0	88,0	85,8	81,2	74,5	66,3	56,2
-	P 7...-400/8T	4	3	-	3,1	-	5,9	102,3	101,0	98,2	92,4	84,4	74,6	62,4
-	P 7...-450/9T	4,5	3,37	-	3,6	-	6,5	115,2	114,4	111,4	105,6	97,1	86,3	73,1
-	P 7...-550/10T	5,5	4	-	4,0	-	7,7	128,1	128,0	124,9	118,7	109,4	97,6	83,0

TYPE - 50 Hz		P2		P1		CURRENT		Q (m³/h - l/min)						
1-	3-			1-	3-	1- 230V	3- 400V	0	3,6	4,8	7,2	9,6	12	13,2
		0	60					80	120	160	200	220		
		HP	kW	kW		A								
P 9...-200/4	P 9...-200/4T	2	1,5	1,8	1,7	8,3	3,5	45,8	42,1	40,7	37,3	31,3	23,0	17,9
P 9...-250/5	P 9...-250/5T	2,5	1,85	2,3	2,1	10,4	4,1	56,9	52,2	50,4	46,1	38,8	28,2	22,3
P 9...-300/6	P 9...-300/6T	3	2,2	2,8	2,6	12,8	5,0	69,8	64,5	62,5	57,5	48,8	36,4	29,6
-	P 9...-400/7T	4	3	-	3,0	-	5,8	83,3	77,8	75,7	68,9	58,5	43,6	34,7
-	P 9...-450/8T	4,5	3,37	-	3,5	-	6,4	96,7	90,7	88,2	80,6	69,2	52,2	42,1
-	P 9...-500/9T	4,5	3,37	-	3,9	-	6,9	107,1	99,5	96,4	88,3	75,2	56,4	45,2
-	P 9...-550/10T	5,5	4	-	4,3	-	8,1	119,5	111,6	108,2	99,3	84,6	63,5	51,2

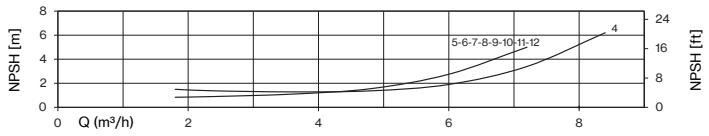
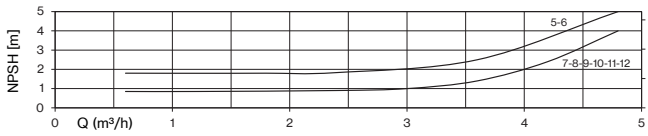
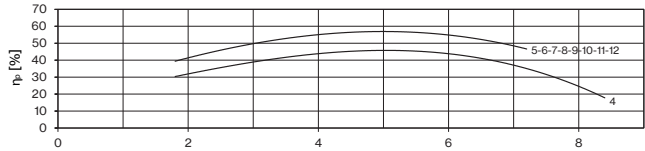
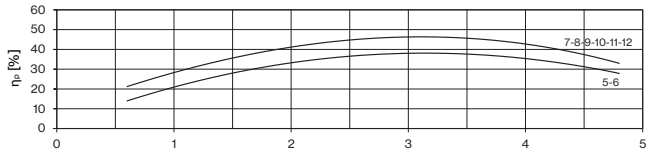
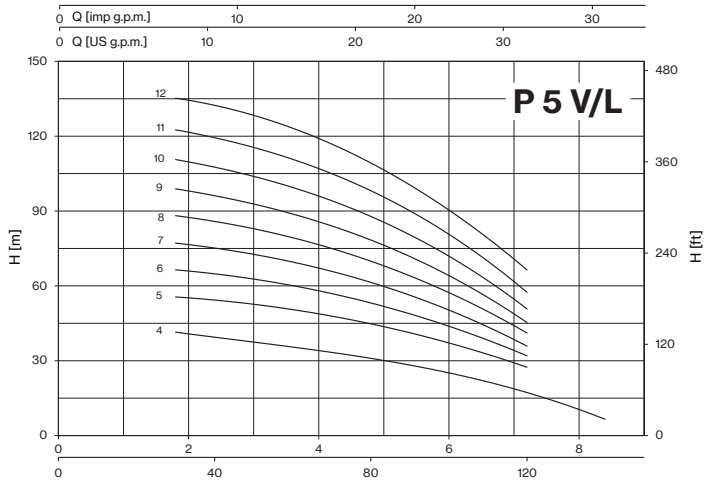
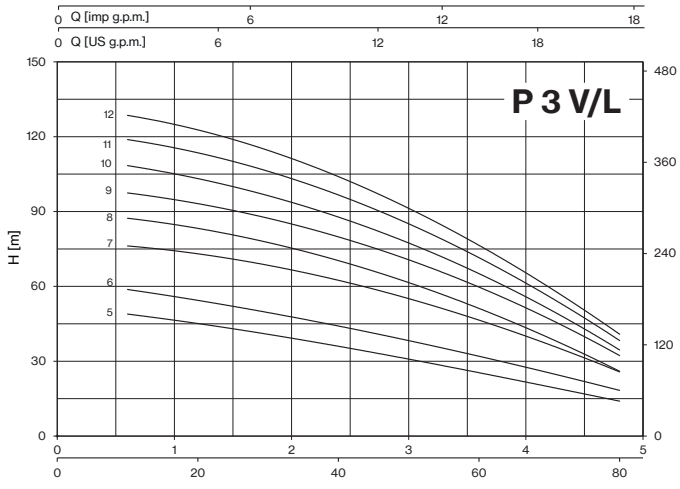
# PLUS V/L

TYPE - 50 Hz	P2		P1	CURRENT 3- 400V	Q (m³/h - l/min)									
					0	6	7,2	9,6	12	14,4	16,8	19,2	21,6	24
					0	100	120	160	200	240	280	320	360	400
3-	HP	kW	kW	A										
P 18...-250/3T	2,5	1,85	2,2	4,2	34,7	32,9	32,6	31,6	30,1	28,0	24,7	20,6	15,9	10,7
P 18...-400/4T	4	3	3,0	5,8	47,1	45,4	45,2	44,3	42,6	40,0	36,0	30,6	24,6	17,8
P 18...-450/5T	4,5	3,37	3,9	6,9	59,2	57,6	57,4	56,4	54,5	51,6	46,7	40,1	33,3	25,3
P 18...-550/6T	5,5	4	4,6	8,4	71,4	69,7	69,6	68,2	65,7	62,2	56,3	48,0	39,4	29,4
P 18...-750/8T	7,5	5,5	6,2	11,2	96,1	94,2	94,1	92,4	89,1	84,5	77,0	66,1	54,2	41,1
P 18...-900/9T	10	7,5	6,9	12,8	108,5	106,9	107,0	105,3	101,7	96,8	88,6	75,9	62,6	47,8

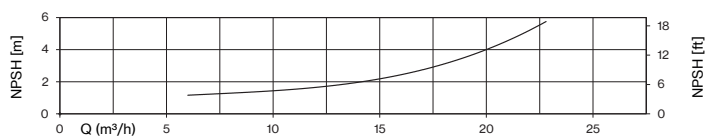
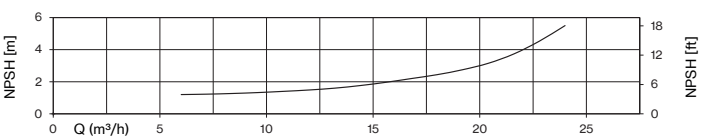
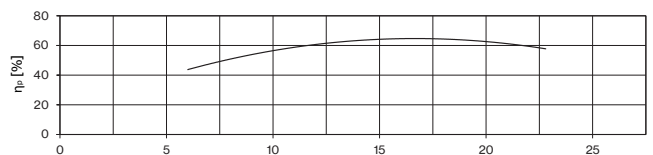
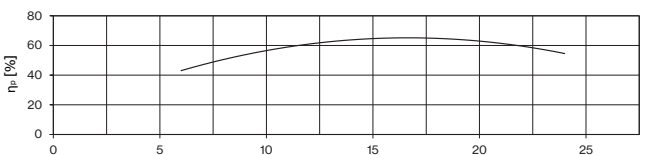
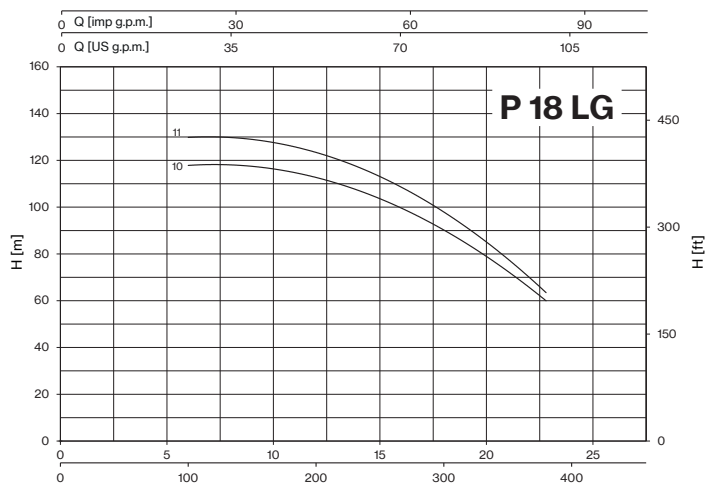
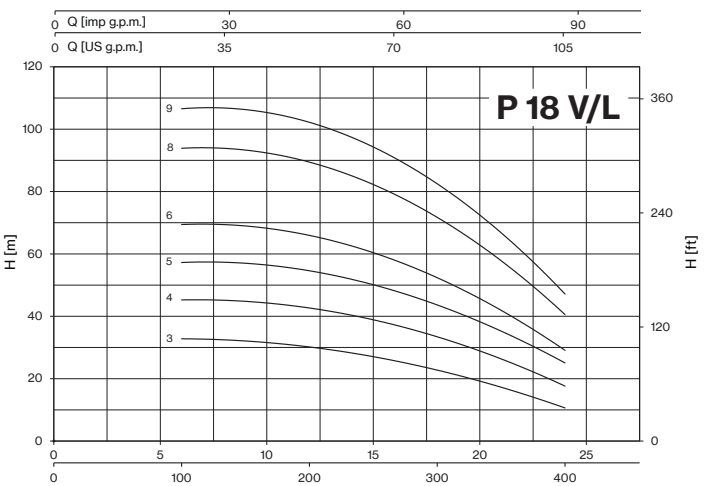
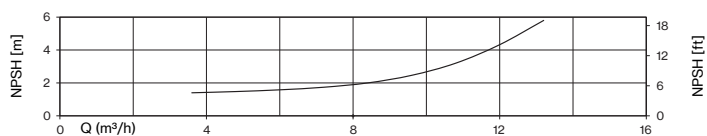
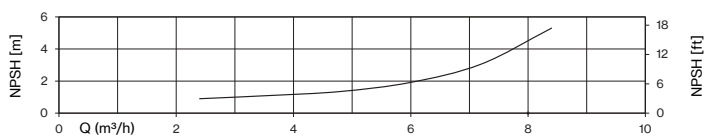
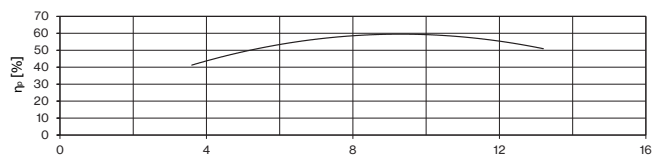
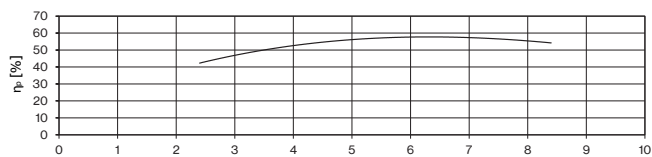
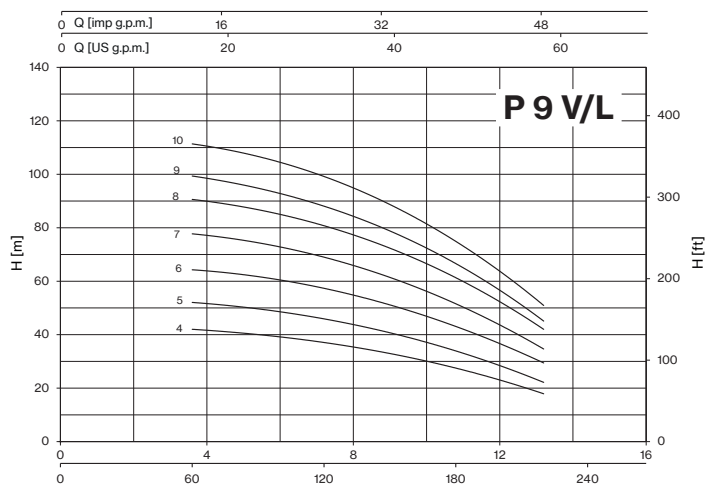
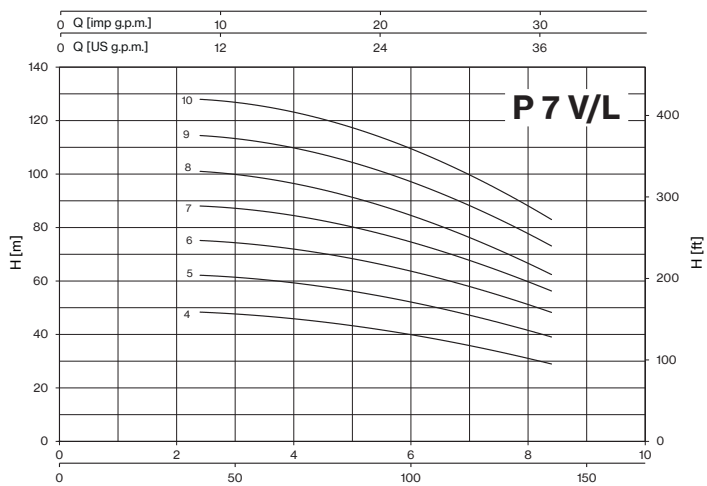
# PLUS LG

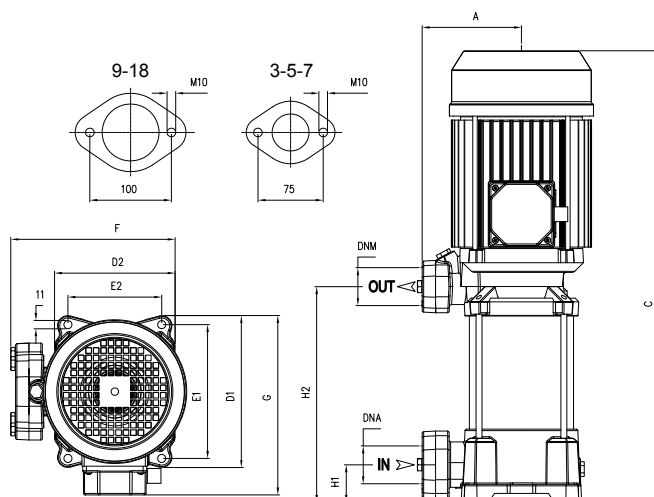
TYPE - 50 Hz	P2		P1	CURRENT 3- 400V	Q (m³/h - l/min)									
					0	6	7,2	9,6	12	14,4	16,8	19,2	21,6	22,8
					0	100	120	160	200	240	280	320	360	380
3-	HP	kW	kW	A										
P 18LG-920/10T	10	7,5	7,7	14,0	120,4	116,8	118,3	116,6	112,6	104,4	96,3	85,8	67,8	60,1
P 18LG-1000/11T	10	7,5	8,3	13,6	132,4	128,9	130,0	128,0	123,0	115,0	103,9	93,0	72,6	63,4

# PLUS V/L



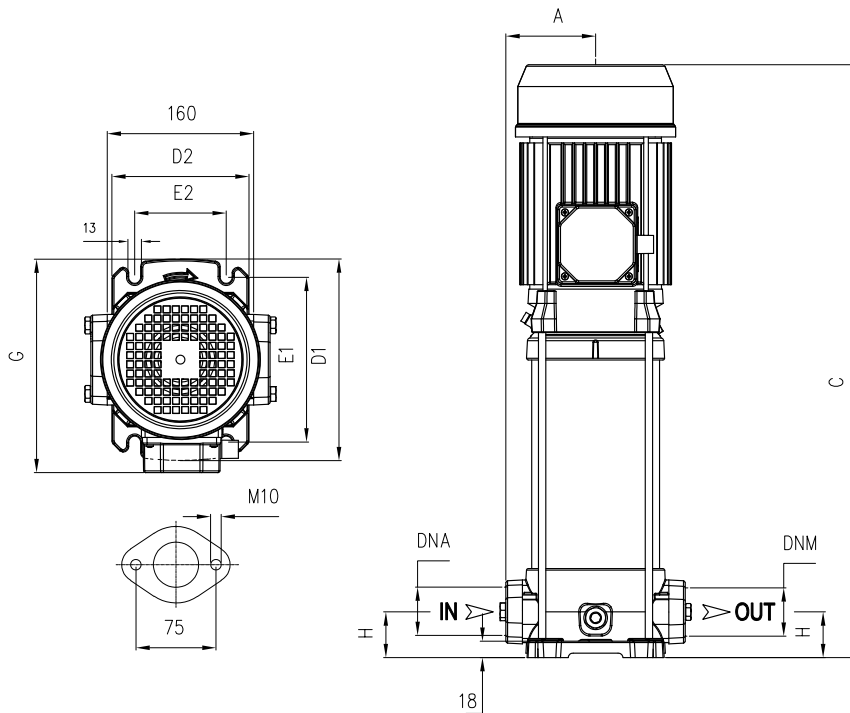
# PLUS V/L-LG



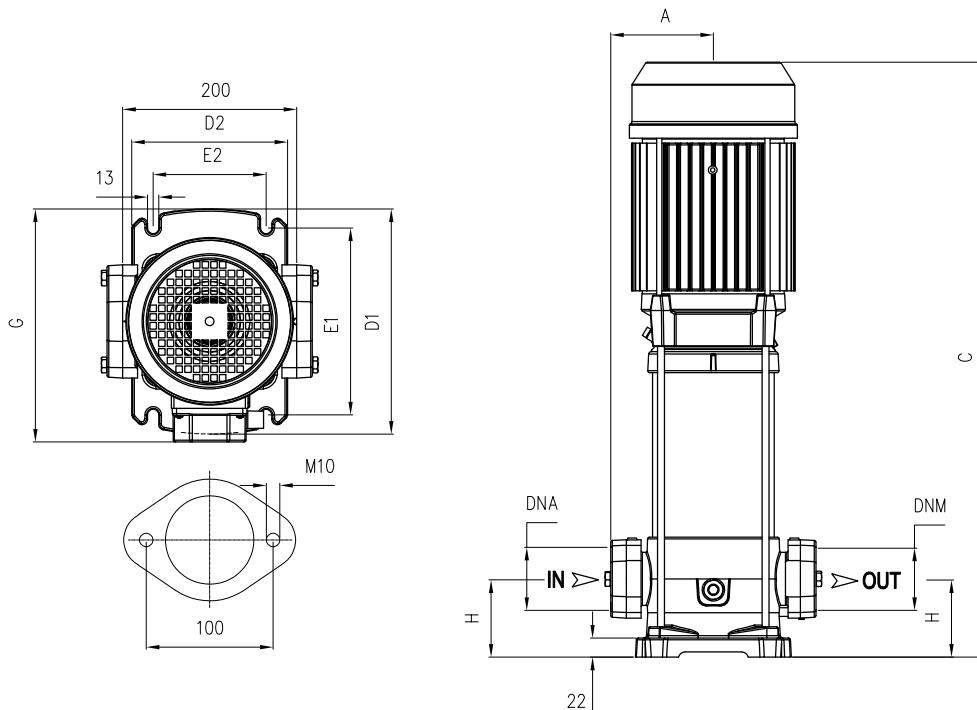


TYPE		DIMENSIONS (mm)												Kg	
-1	-3	A	C	D1	D2	E1	E2	F	G	H1	H2	DNA	DNM	-1	-3
P 3V-100/5	P 3V-100/5T	135	413	204	162	178,5	125	229	213	40	178	1" ¼ G	1" ¼ G	17,5	17,5
P 3V-120/6	P 3V-120/6T	135	437	204	162	178,5	125	229	213	40	202			18	18
P 3V-150/7	P 3V-150/7T	135	521	204	162	178,5	125	229	220	40	226			24,5	25
P 3V-180/8	P 3V-180/8T	135	545	204	162	178,5	125	229	220	40	250			24,5	24,5
P 3V-200/9	P 3V-200/9T	135	569	204	162	178,5	125	229	220	40	274			25	25,5
P 3V-250/10	P 3V-250/10T	135	593	204	162	178,5	125	229	220	40	298			27,5	27,5
P 3V-280/11	P 3V-280/11T	135	672 T 617	204	162	178,5	125	229	228 T 220	40	322			29,5	28
P 3V-300/12	P 3V-300/12T	135	696 T 641	204	162	178,5	125	229	228 T 220	40	346			29,5	25
P 5V-120/4	P 5V-120/4T	135	389	204	162	178,5	125	229	213	40	178	1" ¼ G	1" ¼ G	17,5	17,5
P 5V-150/5	P 5V-150/5T	135	473	204	162	178,5	125	229	220	40	202			24	24
P 5V-180/6	P 5V-180/6T	135	497	204	162	178,5	125	229	220	40	226			24,5	24,5
P 5V-200/7	P 5V-200/7T	135	521	204	162	178,5	125	229	220	40	250			23,5	24,5
P 5V-250/8	P 5V-250/8T	135	545	204	162	178,5	125	229	220	40	274			25	24
P 5V-280/9	P 5V-280/9T	135	624 T 569	204	162	178,5	125	229	228 T 220	40	298			29	24
P 5V-300/10	P 5V-300/10T	135	648 T 593	204	162	178,5	125	229	228 T 220	40	322			33	25,5
P 5V-350/11	P 5V-350/11T	135	672	204	162	178,5	125	229	228	40	346			33,5	30,5
-	P 5V-380/12T	135	696	204	162	178,5	125	229	228	40	370	32,5	32,5		
P 7V-180/4	P 7V-180/4T	135	422	204	162	178,5	125	229	220	40	178	1" ¼ G	1" ¼ G	22,5	24
P 7V-250/5	P 7V-250/5T	135	473	204	162	178,5	125	229	220	40	202			24	23
P 7V-300/6	P 7V-300/6T	135	552 T 497	204	162	178,5	125	229	228 T 220	40	226			30,5	24,5
-	P 7V-350/7T	135	575	204	162	178,5	125	229	228	40	250			-	28,5
-	P 7V-400/8T	135	600	204	162	178,5	125	229	228	40	274			-	31,5
-	P 7V-450/9T	135	653	204	162	178,5	125	235	243	40	301			-	36,5
-	P 7V-550/10T	135	676	204	162	178,5	125	235	243	40	325			-	41,5
P 9V-200/4	P 9V-200/4T	135	473	204	162	178,5	125	229	220	40	202			1" ½ G	1" ¼ G
P 9V-250/5	P 9V-250/5T	135	503	204	162	178,5	125	229	220	40	232	24	23		
P 9V-300/6	P 9V-300/6T	135	588 T 533	204	162	178,5	125	229	228 T 220	40	262	31	24,5		
-	P 9V-400/7T	135	617	204	162	178,5	125	229	228	40	292	-	31,5		
-	P 9V-450/8T	135	677	204	162	178,5	125	235	243	40	325	-	35,5		
-	P 9V-500/9T	135	707	204	162	178,5	125	235	243	40	355	-	37		
-	P 9V-550/10T	135	737	204	162	178,5	125	235	243	40	385	-	42		
-	P 18V-250/3T	135	481	204	162	178,5	125	229	220	50	211	2" G	1" ½ G		
-	P 18V-400/4T	135	573	204	162	178,5	125	229	228	50	248			-	32
-	P 18V-450/5T	135	640	204	162	178,5	125	235	243	50	289			-	37
-	P 18V-550/6T	135	678	204	162	178,5	125	235	243	50	326			-	42
-	P 18V-750/8T	135	815	204	162	178,5	125	255	253	50	401			-	52
-	P 18V-900/9T	135	852	204	162	178,5	125	255	253	50	439			-	58

# PLUS L



TYPE		DIMENSIONS (mm)										Kg			
-1	-3	A	C	D1	D2	E1	E2	G	H	DNA	DNM	-1	-3		
P 3L-100/5	P 3L-100/5T	98	429	220	150	180	100	228	50	1" ¼ G	1" ¼ G	19	19		
P 3L-120/6	P 3L-120/6T	98	453	220	150	180	100	228	50			20	20		
P 3L-150/7	P 3L-150/7T	98	537	220	150	180	100	228	50			26,5	27		
P 3L-180/8	P 3L-180/8T	98	561	220	150	180	100	228	50			26,5	26,5		
P 3L-200/9	P 3L-200/9T	98	585	220	150	180	100	228	50			28	28,5		
P 3L-250/10	P 3L-250/10T	98	609	220	150	180	100	228	50			27,5	27,5		
P 3L-280/11	P 3L-280/11T	98	688 T 633	220	150	180	100	236 T 228	50			32,5	28		
P 3L-300/12	P 3L-300/12T	98	712 T 657	220	150	180	100	236 T 228	50			33	28,5		
P 5L-120/4	P 5L-120/4T	98	405	220	150	180	100	221	50			1" ¼ G	1" ¼ G	19,5	19
P 5L-150/5	P 5L-150/5T	98	489	220	150	180	100	228	50					26,5	26,5
P 5L-180/6	P 5L-180/6T	98	513	220	150	180	100	228	50	26,5	26,5				
P 5L-200/7	P 5L-200/7T	98	537	220	150	180	100	228	50	25,5	27				
P 5L-250/8	P 5L-250/8T	98	561	220	150	180	100	228	50	27	26				
P 5L-280/9	P 5L-280/9T	98	640 T 585	220	150	180	100	236 T 228	50	31,5	27				
P 5L-300/10	P 5L-300/10T	98	664 T 609	220	150	180	100	236 T 228	50	35	28,5				
P 5L-350/11	P 5L-350/11T	98	687	220	150	180	100	236	50	35,5	32,5				
-	P 5L-380/12T	98	711	220	150	180	100	236	50	-	35,5				
P 7L-180/4	P 7L-180/4T	98	465	220	150	180	100	228	50	1" ¼ G	1" ¼ G			25	26
P 7L-250/5	P 7L-250/5T	98	489	220	150	180	100	228	50			26	25		
P 7L-300/6	P 7L-300/6T	98	568 T 513	220	150	180	100	236 T 228	50			33,5	26,5		
-	P 7L-350/7T	98	590	220	150	180	100	236	50			-	31		
-	P 7L-400/8T	98	614	220	150	180	100	236	50			-	34,5		
-	P 7L-450/9T	98	668	220	150	180	100	251	50			-	38,5		
-	P 7L-550/10T	98	692	220	150	180	100	251	50			-	43,5		



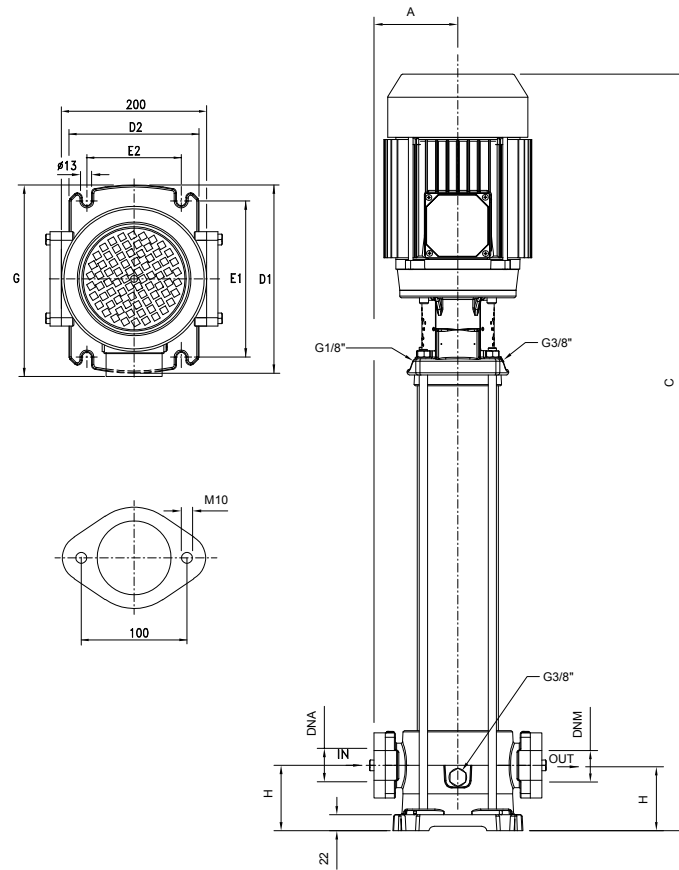
TYPE		DIMENSIONS (mm)										Kg	
-1	-3	A	C	D1	D2	E1	E2	G	H	DNA	DNM	-1	-3
P 9L-200/4	P 9L-200/4T	118	520	260	180	215	130	248	80	1" 1/2 G	1" 1/2 G	28,5	30
P 9L-250/5	P 9L-250/5T	118	550	260	180	215	130	248	80			30,5	29,5
P 9L-300/6	P 9L-300/6T	118	635 T 580	260	180	215	130	256 T 248	80			37,5	31
-	P 9L-400/7T	118	663	260	180	215	130	256	80			-	38
-	P 9L-450/8T	118	723	260	180	215	130	271	80			-	42,5
-	P 9L-500/9T	118	763	260	180	215	130	271	80			-	43
-	P 18L-250/3T	118	482	260	180	215	130	251	90	2" G	2" G	-	29,5
-	P 18L-400/4T	118	603	260	180	215	130	257	90			-	37,5
-	P 18L-450/5T	118	680	260	180	215	130	271	90			-	42
-	P 18L-550/6T	118	718	260	180	215	130	271	90			-	47
-	P 18L-750/8T	118	855	260	180	215	130	280	90			-	56,5
-	P 18L-900/9T	118	893	260	180	215	130	280	90			-	63

MODEL	LOTS			
	TRUCK		CONTAINER	
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
P 3V-100/5-200/9	80x120x150	42	80x120x175	49
P 3V-250/10-300/12	80x120x155	30	80x120x180	35
P 3V-300/12T	80x120x150	42	80x120x175	49
P 5V-120/4-250/8	80x120x150	42	80x120x175	49
P 5V-280/9T-300/10T	80x120x150	42	80x120x175	49
P 5V-280/9-300/10	80x120x155	30	80x120x180	35
P 5V-350/11-380/12T	80x120x155	30	80x120x180	35
P 7V-180/4-350/7T	80x120x15	42	80x120x175	49
P 7V-400/8T	80x120x155	30	80x120x180	35
P 7V-450/9T-550/10T	85x110x125	20	85x110x150	24
P 9V-200/4	80x120x150	42	80x120x175	49
P 9V-250/5-300/6T	80x120x150	42	80x120x175	49
P 9V-300/6 -400/7T	80x120x155	30	80x120x180	35
P 9V-450/8T-550/10T	85x110x125	20	85x110x150	24
P 18V-250/3T-400/4T	80x120x150	42	80x120x175	49
P 18V-450/5T-550/6T	85x110x125	20	85x110x150	24
P 18V-750/8T-900/9T	100x120x150	12	100x120x150	12

MODEL	LOTS			
	TRUCK		CONTAINER	
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
P 3L-100/5-180/8	85x110x150	36	85x110x170	42
P 3L-200/9-300/12	80x120x150	30	80x120x170	35
P 5L-120/4-250/8	85x110x150	36	85x110x170	42
P 5L-280/9-380/12T	80x120x150	30	80x120x170	35
P 7L-180/4-300/6T	85x110x150	36	85x110x170	42
P 7L-300/6-400/8T	80x120x150	30	80x120x170	35
P 7L-450/9T-550/10T	80x120x150	30	80x120x170	35
P 9L-200/4-400/7T	80x120x155	25	80x120x185	30
P 9L-450/8T-550/10T	85x110x150	20	85x110x150	20
P 18L-250/3T-400/4T	80x120x155	25	80x120x185	30
P 18L-450/5T-550/6T	85x110x150	20	85x110x150	20
P 18L-750/8T-900/6T	85x110x150	20	85x110x150	20



# PLUS LG



TYPE	DIMENSIONS (mm)										Kg	
	A	C	D1	D2	E1	E2	G	H	DNA	DNM		
-3												
P 18LG-920/10T	118	1019	260	180	215	130	307	90				68
P 18LG-1000/11T	118	1057	260	180	215	130	307	90	2" G	2" G		76

LOTS				
MODEL	TRUCK		CONTAINER	
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
P 18LG-920/10T - 1000/11T	100×120×150	12	100×120×150	12

# PLUS SV/SL/SLX

## Multistage Vertical

Stainless steel multistage vertical pumps. Pumping of clean non-loaded fluids, pressurizing system, irrigation, drinking and glycol water, water treatment, food industry, heating and air conditioning, washing system.

### Construction features

<b>Pump body</b>	cast iron (SV/SL); stainless steel AISI 304 (SLX)
<b>Motor bracket</b>	cast iron
<b>Impellers, diffusers, shell, motor shaft</b>	stainless steel AISI 304
<b>Mechanical seal</b>	ceramic-graphite-EPDM graphite-silicon carbide-EPDM
<b>Intermediate shaft guiding stage bush</b>	ceramic-tungsten carbide
<b>Ambient temperature</b>	max 40 °C
<b>Liquid temperature</b>	+5 ÷ 90 °C (SV) -15 ÷ 110 °C (SL/SLX)
<b>Max operating pressure</b>	8 bar ≤ 6 impellers 14 bar ≥ 7 impellers
<b>Pump body gasket</b>	EPDM

### Motor

<b>2 pole induction motor</b>	3~ 230/400V - 50Hz P ≤ 4kW 3~ 400/690V - 50Hz P > 4kW 1- 230V-50Hz (with thermal protection up to 1,85 kW)
<b>Insulation class</b>	F
<b>Protection degree</b>	IPX4 IPX5 ≥ 4,5 HP



PLUS SV



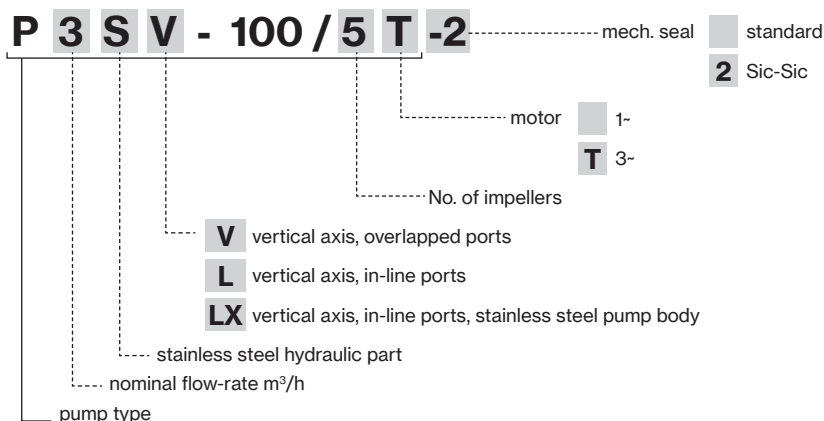
PLUS 3-5-7 SL



PLUS 9-18 SL



PLUS SLX



# PLUS SV/SL/SLX

TYPE - 50 Hz		P2		P1		CURRENT		Q (m³/h - l/min)						
1-	3-			1-	3-	1- 230V	3- 400V	0	0,6	1,2	1,8	2,4	3,6	4,8
								0	10	20	30	40	60	80
		HP	kW	kW		A								
P 3...-100/5	P 3...-100/5T	1	0,75	1	0,9	4,4	1,7	55,3	53,5	50,3	46,5	42,1	31,6	17,7
P 3...-120/6	P 3...-120/6T	1,2	0,9	1,1	1,1	5,1	2,5	66,6	64,4	60,8	56,0	50,7	38,1	22,4
P 3...-150/7	P 3...-150/7T	1,5	1,1	1,4	1,4	6,6	3,1	75,6	73,3	69,4	64,8	58,9	44,4	26,1
P 3...-180/8	P 3...-180/8T	2	1,5	1,5	1,5	7,0	3,2	86,7	83,9	79,3	73,9	67,3	51,0	29,9
P 3...-200/9	P 3...-200/9T	2	1,5	1,7	1,6	7,6	3,3	97,0	93,8	88,5	82,5	74,7	56,4	32,9
P 3...-250/10	P 3...-250/10T	2	1,5	1,9	1,7	8,6	3,5	107,2	103,4	97,3	90,5	82,0	61,5	35,6
P 3...-280/11	P 3...-280/11T	2,5	1,85	2,1	1,9	9,8	3,9	117,2	112,8	106,6	98,8	89,8	66,8	37,3
P 3...-300/12	P 3...-300/12T	2,5	1,85	2,2	2,1	10,2	4,1	126,4	121,3	114,5	106,1	95,9	71,7	40,0

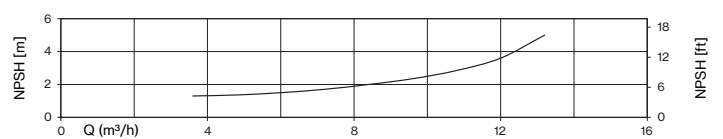
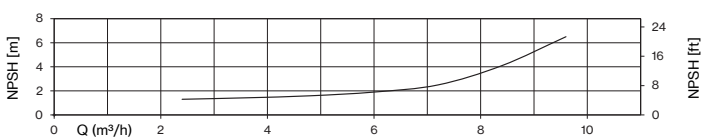
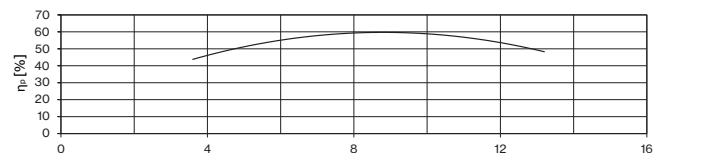
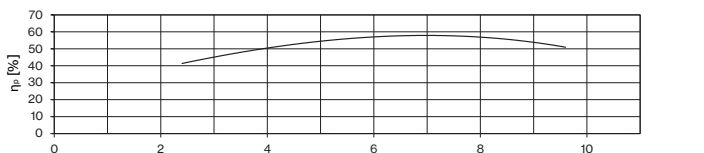
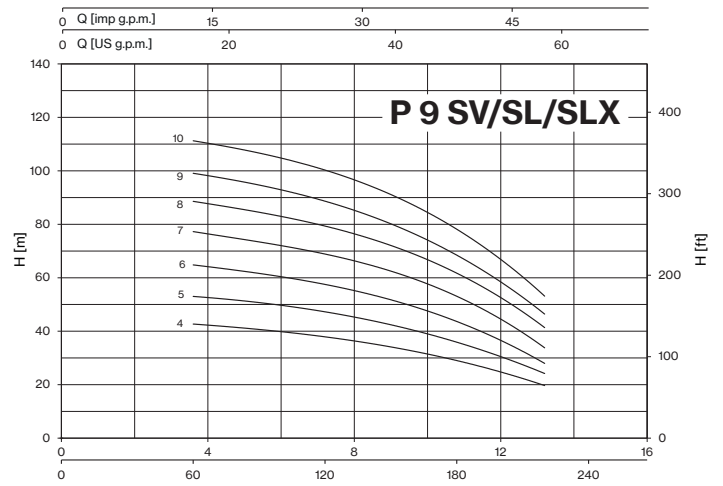
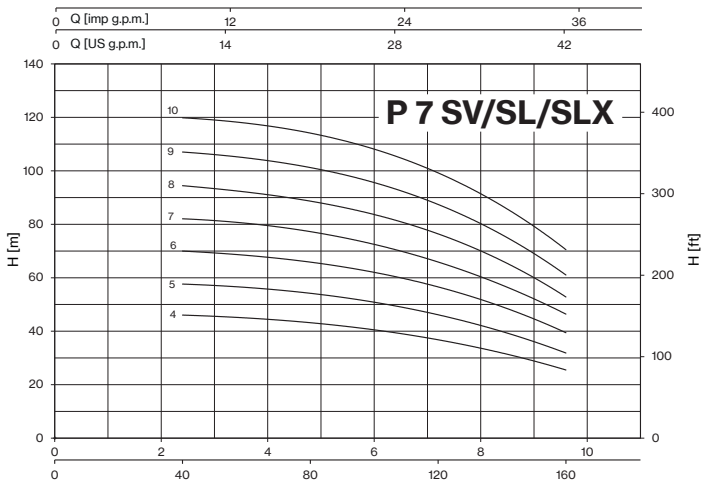
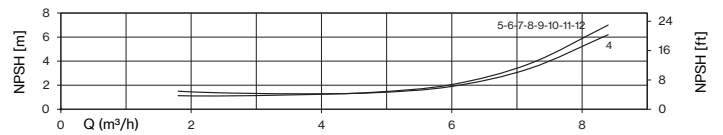
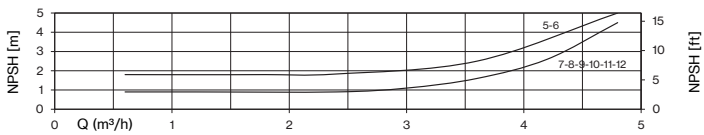
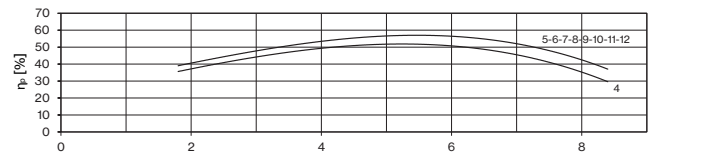
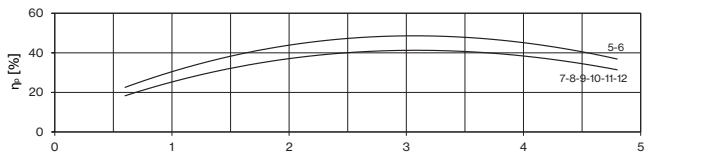
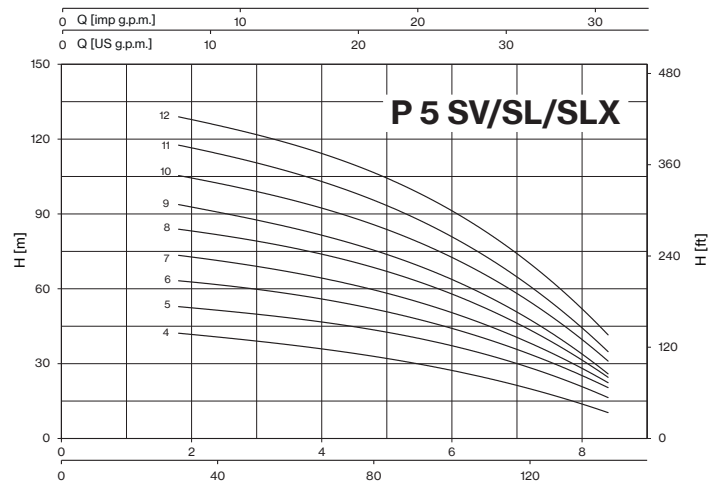
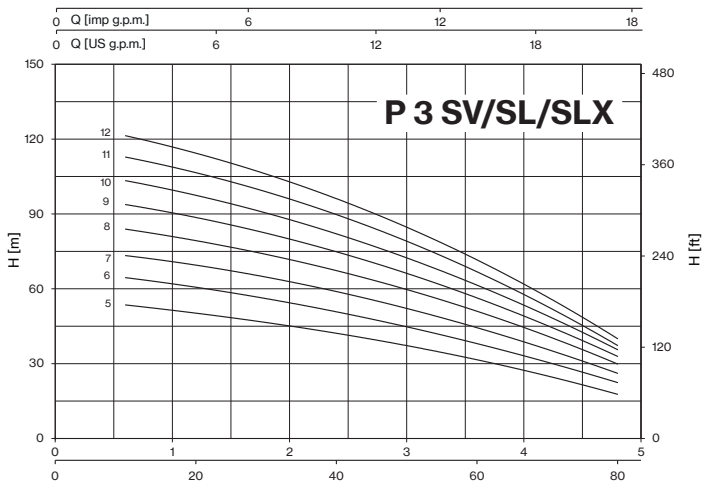
TYPE - 50 Hz		P2		P1		CURRENT		Q (m³/h - l/min)							
1-	3-			1-	3-	1- 230V	3- 400V	0	1,8	2,4	3,6	4,8	6	7,2	8,4
								0	30	40	60	80	100	120	140
		HP	kW	kW		A									
P 5...-120/4	P 5...-120/4T	1,2	0,9	1,09	1,09	4,9	2,4	45,5	42,2	40,7	37,2	32,9	27,4	19,8	10,4
P 5...-150/5	P 5...-150/5T	1,5	1,1	1,4	1,3	6,6	3,1	55,9	52,8	51,4	48,1	43,4	37,3	28,3	16,4
P 5...-180/6	P 5...-180/6T	2	1,5	1,6	1,6	7,4	3,3	67,0	63,3	61,6	57,6	51,9	44,2	33,6	20,4
P 5...-200/7	P 5...-200/7T	2	1,5	1,9	1,8	8,6	3,6	77,8	73,5	71,3	66,3	59,6	50,7	38,0	22,4
P 5...-250/8	P 5...-250/8T	2,5	1,85	2,2	2,1	9,9	4,1	89,2	83,9	81,6	76,2	68,4	58,3	43,2	24,6
P 5...-280/9	P 5...-280/9T	2,5	1,85	2,4	2,3	10,9	4,3	99,7	93,7	90,9	84,1	75,2	64,1	47,4	25,9
P 5...-300/10	P 5...-300/10T	3	2,2	2,7	2,6	12,5	4,9	112,2	105,4	102,4	95,3	85,6	72,6	54,8	31,0
P 5...-350/11	P 5...-350/11T	3,5	2,57	3,0	2,9	13,7	5,3	125,1	117,6	114,3	106,1	95,5	80,9	60,9	34,8
-	P 5...-380/12T	4	3	-	3,2	-	6,0	135,7	128,9	125,6	117,7	106,3	91,3	70,2	41,5

TYPE - 50 Hz		P2		P1		CURRENT		Q (m³/h - l/min)						
1-	3-			1-	3-	1- 230V	3- 400V	0	2,4	3,6	4,8	6	7,2	9,6
								0	40	60	80	100	120	160
		HP	kW	kW		A								
P 7...-180/4	P 7...-180/4T	2	1,5	1,8	1,7	8,3	3,5	46,7	46,0	45,2	43,1	40,3	36,9	25,5
P 7...-250/5	P 7...-250/5T	2,5	1,85	2,2	2,1	9,9	4,0	58,5	57,6	56,6	54,1	50,8	46,1	31,8
P 7...-300/6	P 7...-300/6T	3	2,2	2,6	2,5	12,1	4,8	70,6	69,9	68,7	65,8	61,8	56,6	39,3
-	P 7...-350/7T	3,5	2,57	-	2,9	-	5,3	82,8	82,0	80,6	77,2	72,3	66,0	46,4
-	P 7...-400/8T	4	3	-	3,3	-	6,1	94,8	94,3	92,5	88,6	83,2	76,4	52,6
-	P 7...-450/9T	4,5	3,37	-	3,7	-	6,7	107,4	106,9	105,2	101,1	95,3	87,7	61,0
-	P 7...-550/10T	5,5	4	-	4,1	-	7,9	119,8	119,6	118,4	113,9	107,7	99,4	70,4

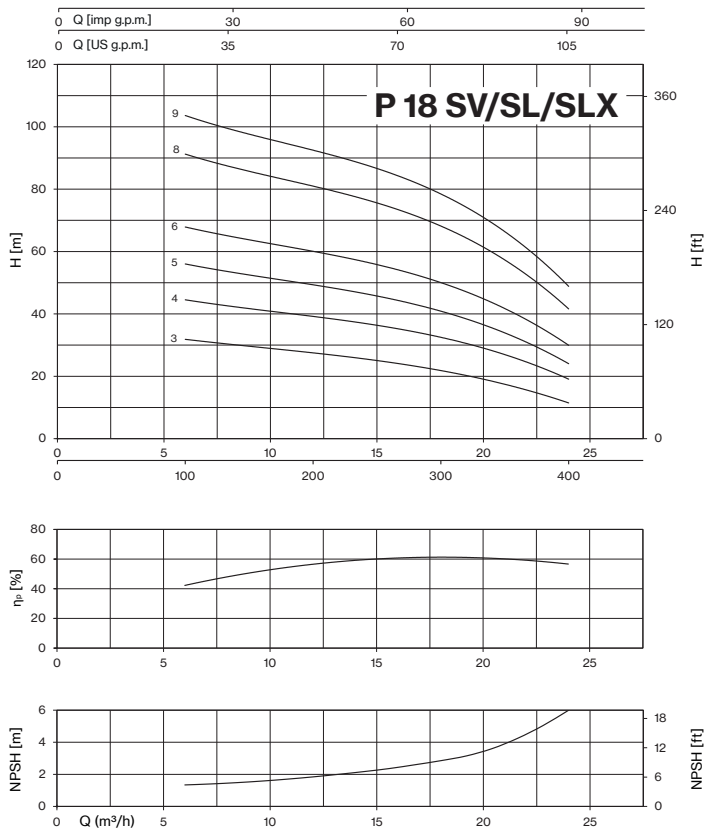
TYPE - 50 Hz		P2		P1		CURRENT		Q (m³/h - l/min)							
1-	3-			1-	3-	1- 230V	3- 400V	0	3,6	4,8	6	7,2	9,6	12	13,2
								0	60	80	100	120	160	200	220
		HP	kW	kW		A									
P 9...-200/4	P 9...-200/4T	2	1,5	1,8	1,8	8,3	3,6	45,8	42,7	41,5	39,7	37,8	32,7	24,6	19,8
P 9...-250/5	P 9...-250/5T	2,5	1,85	2,3	2,2	10,4	4,2	57,1	53,1	51,6	49,5	47,2	40,6	30,2	24,4
P 9...-300/6	P 9...-300/6T	3	2,2	2,8	2,6	12,8	5,0	69,4	64,7	63,0	60,3	57,3	49,8	36,2	28,1
-	P 9...-400/7T	4	3	-	3,1	-	5,9	82,0	77,2	74,9	72,0	68,7	59,9	44,2	33,9
-	P 9...-450/8T	4,5	3,37	-	3,6	-	6,5	93,5	88,5	86,3	82,6	79,0	69,5	52,0	41,7
-	P 9...-500/9T	4,5	3,37	-	4	-	7	105,4	99,1	96,5	92,5	88,3	77,3	57,5	46,9
-	P 9...-550/10T	5,5	4	-	4,4	-	8,2	117,6	111,2	108,7	104,5	99,9	87,8	66,2	53,4

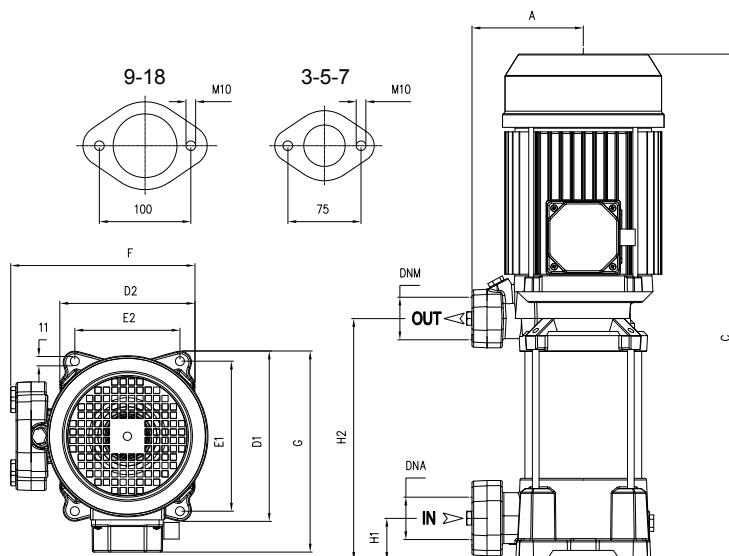
TYPE - 50 Hz		P2		P1	CURRENT				Q (m³/h - l/min)							
3-	3-				3- 400V	0	6	7,2	9,6	12	14,4	16,8	19,2	21,6	24	
						0	100	120	160	200	240	280	320	360	400	
		HP	kW	kW	A											
P 18...-250/3T	2,5	1,85	2,3	4,3	33,8	31,6	31,0	29,4	27,4	25,4	23,2	20,4	16,3	11,5		
P 18...-400/4T	4	3	3,1	5,9	46,3	44,2	43,4	41,4	39,1	36,7	34,1	30,8	25,6	19,0		
P 18...-450/5T	4,5	3,37	3,9	6,9	58,1	55,7	54,6	52,1	49,3	46,3	42,9	38,7	32,2	24,0		
P 18...-550/6T	5,5	4	4,7	8,5	70,1	67,4	66,3	63,4	60,0	56,4	52,4	47,6	39,6	29,9		
P 18...-750/8T	7,5	5,5	6,2	11,2	94,2	90,6	89,1	85,3	80,9	76,2	71,1	65,0	54,6	41,4		
P 18...-900/9T	10	7,5	7	12,9	106,4	102,8	101,3	97,2	92,4	87,3	81,6	75,0	63,5	48,5		

# PLUS SV/SL/SLX



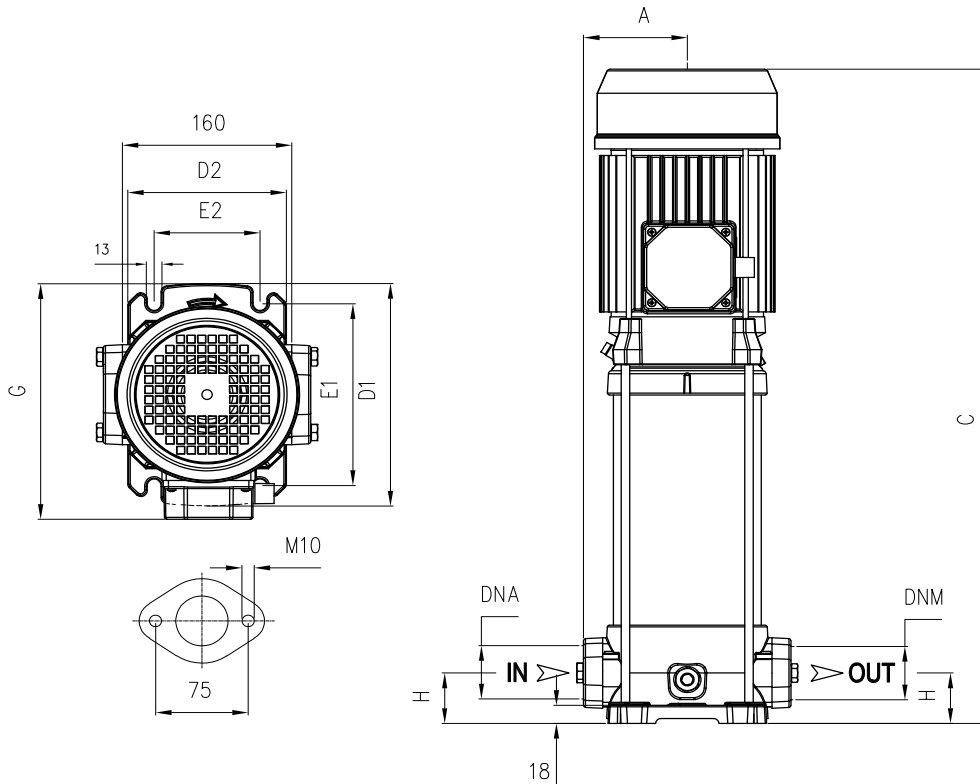
# PLUS SV/SL/SLX



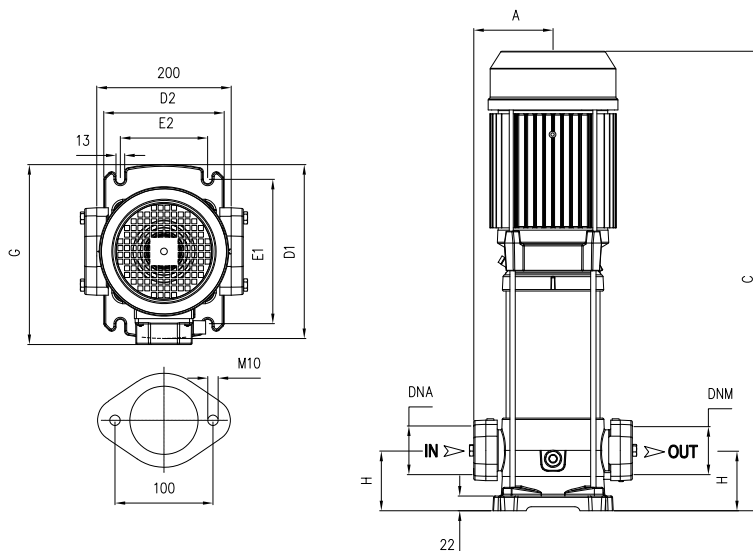


TYPE		DIMENSIONS (mm)											Kg		
-1	-3	A	C	D1	D2	E1	E2	F	G	H1	H2	DNA	DNM	-1	-3
P 3SV-100/5	P 3SV-100/5T	135	413	204	162	178,5	125	229	213	40	178	1" ¼ G	1" ¼ G	18,5	18,5
P 3SV-120/6	P 3SV-120/6T	135	437	204	162	178,5	125	229	213	40	202			19,5	19,5
P 3SV-150/7	P 3SV-150/7T	135	521	204	162	178,5	125	229	220	40	226			26,5	26,5
P 3SV-180/8	P 3SV-180/8T	135	545	204	162	178,5	125	229	220	40	250			26,5	26,5
P 3SV-200/9	P 3SV-200/9T	135	569	204	162	178,5	125	229	220	40	274			27,5	27,5
P 3SV-250/10	P 3SV-250/10T	135	593	204	162	178,5	125	229	220	40	298			28,5	28,5
P 3SV-280/11	P 3SV-280/11T	135	672 T 617	204	162	178,5	125	229	228 T 220	40	322	1" ¼ G	1" ¼ G	32	29
P 3SV-300/12	P 3SV-300/12T	135	696 T 641	204	162	178,5	125	229	228 T 220	40	346			32,5	28
P 5SV-120/4	P 5SV-120/4T	135	389	204	162	178,5	125	229	213	40	178			1" ¼ G	1" ¼ G
P 5SV-150/5	P 5SV-150/5T	135	473	204	162	178,5	125	229	220	40	202	25,5	25,5		
P 5SV-180/6	P 5SV-180/6T	135	497	204	162	178,5	125	229	220	40	226	26	26		
P 5SV-200/7	P 5SV-200/7T	135	521	204	162	178,5	125	229	220	40	250	25,5	26,5		
P 5SV-250/8	P 5SV-250/8T	135	545	204	162	178,5	125	229	220	40	274	27	26		
P 5SV-280/9	P 5SV-280/9T	135	624 T 569	204	162	178,5	125	229	228 T 220	40	298	31	26,5		
P 5SV-300/10	P 5SV-300/10T	135	648 T 593	204	162	178,5	125	229	228 T 220	40	322	35,5	28		
P 5SV-350/11	P 5SV-350/11T	135	672	204	162	178,5	125	229	228	40	346	36	33		
-	P 5SV-380/12T	135	696	204	162	178,5	125	229	228	40	370	-	35,5		
P 7SV-180/4	P 7SV-180/4T	135	422	204	162	178,5	125	229	220	40	178	1" ¼ G	1" ¼ G	23,5	25
P 7SV-250/5	P 7SV-250/5T	135	473	204	162	178,5	125	229	220	40	202			25	24
P 7SV-300/6	P 7SV-300/6T	135	552 T 497	204	162	178,5	125	229	228 T 220	40	226			32,5	26
-	P 7SV-350/7T	135	575	204	162	178,5	125	229	228	40	250			-	30
-	P 7SV-400/8T	135	600	204	162	178,5	125	229	228	40	274			-	33,5
-	P 7SV-450/9T	135	653	204	162	178,5	125	235	243	40	301			-	39
-	P 7SV-550/10T	135	676	204	162	178,5	125	235	243	40	325	-	44		
P 9SV-200/4	P 9SV-200/4T	135	473	204	162	178,5	125	229	220	40	202	1" ½ G	1" ¼ G	24	25
P 9SV-250/5	P 9SV-250/5T	135	503	204	162	178,5	125	229	220	40	232			25,5	24,5
P 9SV-300/6	P 9SV-300/6T	135	588 T 533	204	162	178,5	125	229	228 T 220	40	262			33	26,5
-	P 9SV-400/7T	135	617	204	162	178,5	125	229	228	40	292			-	33,5
-	P 9SV-450/8T	135	677	204	162	178,5	125	235	243	40	325			-	39
-	P 9SV-500/9T	135	707	204	162	178,5	125	235	243	40	355			-	39,5
-	P 9SV-550/10T	135	737	204	162	178,5	125	235	243	40	385	-	45		
-	P 18SV-250/3T	135	481	204	162	178,5	125	229	220	50	211	2" G	1" ½ G	-	25
-	P 18SV-400/4T	135	573	204	162	178,5	125	229	228	50	248			-	33,5
-	P 18SV-450/5T	135	640	204	162	178,5	125	235	243	50	289			-	39,5
-	P 18SV-550/6T	135	678	204	162	178,5	125	235	243	50	326			-	44,5
-	P 18SV-750/8T	135	815	204	162	178,5	125	255	253	50	401			-	55,5
-	P 18SV-900/9T	135	852	204	162	178,5	125	255	253	50	439			-	62

# PLUS SL/SLX



TYPE		DIMENSIONS (mm)										Kg			
												SL		SLX	
-1	-3	A	C	D1	D2	E1	E2	G	H	DNA	DNM	-1	-3	-1	-3
P 3...-100/5	P 3...-100/5T	98	429	220	150	180	100	228	50	1" ¼ G	1" ¼ G	19	19	19	19
P 3...-120/6	P 3...-120/6T	98	453	220	150	180	100	228	50			21,5	21,5	20	20
P 3...-150/7	P 3...-150/7T	98	537	220	150	180	100	228	50			28,5	28,5	27,5	27,5
P 3...-180/8	P 3...-180/8T	98	561	220	150	180	100	228	50			28,5	28,5	27,5	27,5
P 3...-200/9	P 3...-200/9T	98	585	220	150	180	100	228	50			30,5	30,5	29	29,5
P 3...-250/10	P 3...-250/10T	98	609	220	150	180	100	228	50			31,5	31,5	30,5	30,5
P 3...-280/11	P 3...-280/11T	98	688 T 633	220	150	180	100	236 T 228	50	1" ¼ G	1" ¼ G	35,5	32,5	34	31
P 3...-300/12T	P 3...-300/12T	98	712 T 657	220	150	180	100	236 T 228	50			36	31,5	34,5	30
P 5...-120/4	P 5...-120/4T	98	405	220	150	180	100	221	50			1" ¼ G	1" ¼ G	20	20
P 5...-150/5	P 5...-150/5T	98	489	220	150	180	100	228	50	27,5	27,5			26,5	26,5
P 5...-180/6	P 5...-180/6T	98	513	220	150	180	100	228	50	28	28			26,5	27
P 5...-200/7	P 5...-200/7T	98	537	220	150	180	100	228	50	27,5	28,5			26	27,5
P 5...-250/8	P 5...-250/8T	98	561	220	150	180	100	228	50	29	28			28	27
P 5...-280/9	P 5...-280/9T	98	640 T 585	220	150	180	100	236 T 228	50	34	29,5			33	28,5
P 5...-300/10	P 5...-300/10T	98	664 T 609	220	150	180	100	236 T 228	50	1" ¼ G	1" ¼ G	37,5	31	36,5	30
P 5...-350/11	P 5...-350/11T	98	687	220	150	180	100	236	50			38,5	35,5	37	34
-	P 5...-380/12T	98	711	220	150	180	100	236	50			-	39	-	37,5
P 7...-180/4	P 7...-180/4T	98	465	220	150	180	100	228	50	1" ¼ G	1" ¼ G	26	27	24,5	6
P 7...-250/5	P 7...-250/5T	98	489	220	150	180	100	228	50			27,5	26,5	26	25
P 7...-300/6	P 7...-300/6T	98	568 T 513	220	150	180	100	236 T 228	50			35	28	34	27
-	P 7...-350/7T	98	590	220	150	180	100	236	50			-	33	-	32
-	P 7...-400/8T	98	614	220	150	180	100	236	50			-	36,5	-	35,5
-	P 7...-450/9T	98	668	220	150	180	100	251	50			-	41	-	40
-	P 7...-550/10T	98	692	220	150	180	100	251	50	-	46,5	-	45		



TYPE		DIMENSIONS (mm)										Kg			
												SL		SLX	
-1	-3	A	C	D1	D2	E1	E2	G	H	DNA	DNM	-1	-3	-1	-3
P 9...-200/4	P 9...-200/4T	118	520	260	180	215	130	248	80	1" 1/2 G	1" 1/2 G	30	31	28,5	29,5
P 9...-250/5	P 9...-250/5T	118	550	260	180	215	130	248	80			32	31	30,5	29,5
P 9...-300/6	P 9...-300/6T	118	635 T 580	260	180	215	130	256 T 248	80			39,5	33	38	31,5
-	P 9...-400/7T	118	663	260	180	215	130	256	80			-	40	-	38,5
-	P 9...-450/8T	118	723	260	180	215	130	271	80			-	45	-	43,5
-	P 9...-500/9T	118	763	260	180	215	130	271	80			-	45,5	-	44
-	P 9...-550/10T	118	783	260	180	215	130	271	80	-	51	-	49		
-	P 18...-250/3T	118	482	260	180	215	130	251	90	2" G	2" G	-	30,5	-	29,5
-	P 18...-400/4T	118	603	260	180	215	130	257	90			-	39	-	37,5
-	P 18...-450/5T	118	680	260	180	215	130	271	90			-	44,5	-	43
-	P 18...-550/6T	118	718	260	180	215	130	271	90			-	49,5	-	48
-	P 18...-750/8T	118	855	260	180	215	130	280	90			-	60	-	58,5
-	P 18...-900/9T	118	893	260	180	215	130	280	90			-	66,5	-	65

MODEL	LOTS			
	TRUCK		CONTAINER	
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
P 3SV-100/5-200/9	80x120x150	42	80x120x175	49
P 3SV-250/10-300/12	80x120x155	30	80x120x180	35
P 3SV-300/12T	80x120x150	42	80x120x175	49
P 5SV-120/4-250/8	80x120x150	42	80x120x175	49
P 5SV-280/9T-300/10T	80x120x150	42	80x120x175	49
P 5SV-280/9-300/10	80x120x155	30	80x120x180	35
P 5SV-350/11-380/12T	80x120x155	30	80x120x180	35
P 7SV-180/4-350/7T	80x120x150	42	80x120x175	49
P 7SV-400/8T	80x120x155	30	80x120x180	35
P 7SV-450/9T-550/10T	85x110x125	20	85x110x150	24
P 9SV-200/4	80x120x150	42	80x120x175	49
P 9SV-250/5-300/6T	80x120x150	42	80x120x175	49
P 9SV-300/6-400/7T	80x120x155	30	80x120x180	35
P 9SV-450/8T-550/10T	85x110x125	20	85x110x150	24
P 18SV-250/3T-400/4T	80x120x150	42	80x120x175	49
P 18SV-450/5T-550/6T	85x110x125	20	85x110x150	24
P 18SV-750/8T-900/9T	100x120x150	12	100x120x150	12

MODEL	LOTS			
	TRUCK		CONTAINER	
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
P 3SL/SLX-100/5-180/8	85x110x150	36	85x110x170	42
P 3SL/SLX-200/9-300/12	80x120x150	30	80x120x170	35
P 5SL/SLX-120/4-250/8	85x110x150	36	85x110x170	42
P 5SL/SLX-280/9-380/12T	80x120x150	30	80x120x170	35
P 7SL/SLX-180/4-300/6T	85x110x150	36	85x110x170	42
P 7SL/SLX-300/6-400/8T	80x120x150	30	80x120x170	35
P 7SL/SLX-450/9T-550/10T	80x120x150	30	80x120x170	35
P 9SL/SLX-200/4-400/7T	80x120x155	25	80x120x185	30
P 9SL/SLX-450/8T-550/10T	85x110x150	20	85x110x150	20
P 18SL/SLX-250/3T-400/4T	80x120x155	25	80x120x185	30
P 18SL/SLX-450/5T-550/6T	85x110x150	20	85x110x150	20
P 18SL/SLX-750/8T-900/6T	85x110x150	20	85x110x150	20



# PLUS SLG/SLXG

Multistage Vertical

Stainless steel multistage vertical pumps. For non-loaded clean fluids, pressurizing system, irrigation, drinking and glycol water, water treatment, food industry, heating and air conditioning, washing system.



PLUS 3-5-7-9 SLG



PLUS 3-5-7 SLXG



PLUS 9 SLXG



## Construction features

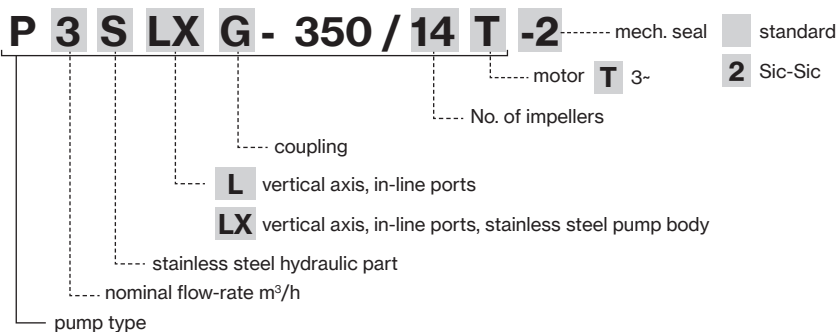
<b>Pump body</b>	cast iron (SLG); stainless steel AISI 304 (SLXG)
<b>Motor bracket</b>	cast iron
<b>Impellers, diffusers, shell, motor shaft</b>	stainless steel AISI 304
<b>Mechanical seal</b>	ceramic-graphite-EPDM graphite-silicon carbide-EPDM
<b>Intermediate shaft guiding stage bush</b>	ceramic-tungsten carbide
<b>Ambient temperature</b>	max 40 °C
<b>Liquid temperature</b>	-15 ÷ +110 °C
<b>Max operating pressure</b>	max 25 bar
<b>Pump body gasket</b>	EPDM

## Motor

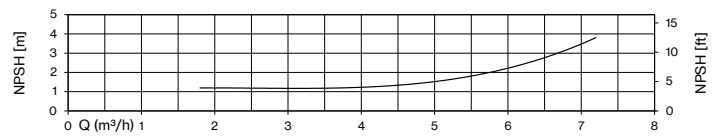
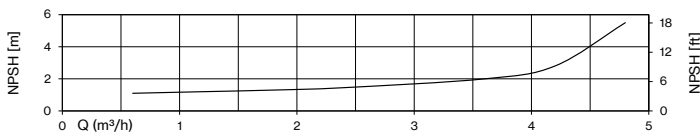
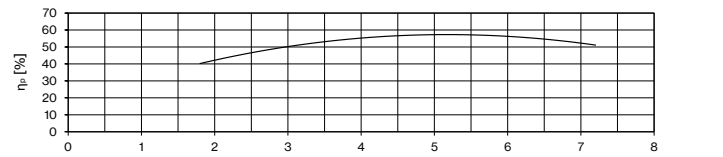
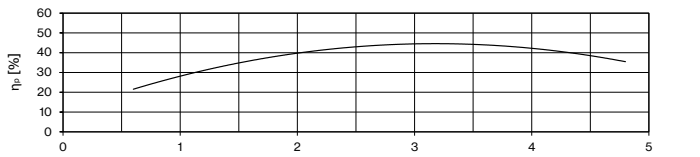
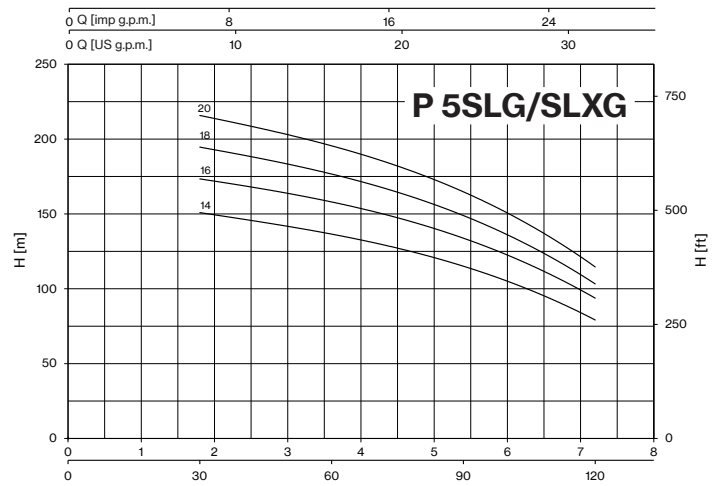
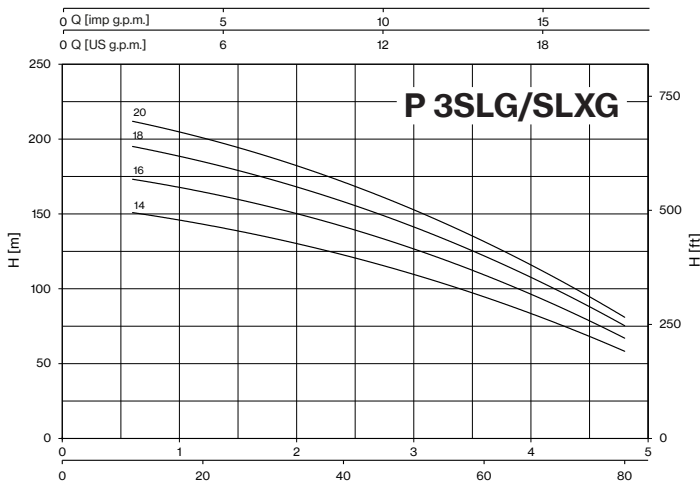
<b>2 pole induction motor</b>	3~ 230/400V - 50Hz P ≤ 4kW 3~ 400/690V - 50Hz P > 4kW
<b>Insulation class</b>	F
<b>Protection degree</b>	IPX5



MODEL	LOTS			
	TRUCK		CONTAINER	
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
P 3SLG/SLXG-350/14T-380/16T	100×120×150	12	100×120×150	12
P 3SLG/SLXG-400/18T-450/20T	100×135×150	12	100×135×150	12
P 5SLG/SLXG-400/14T-450/16T	100×120×150	12	100×120×150	12
P 5SLG/SLXG-550/18T-600/20T	100×135×150	12	100×135×150	12
P 7SLG/SLXG-750/12T-800/14T	100×120×150	12	100×120×150	12
P 7SLG/SLXG-900/16T-1000/20T	100×135×150	12	100×135×150	12
P 9SLG/SLXG-750/12T-800/14T	100×120×150	12	100×120×150	12
P 9SLG/SLXG-900/16T-1000/20T	100×135×150	12	100×135×150	12



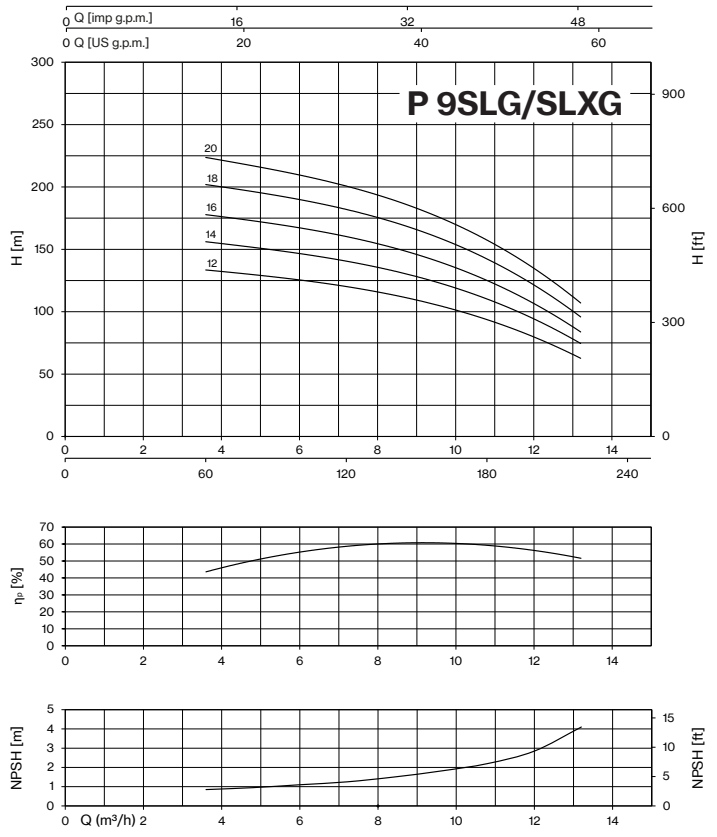
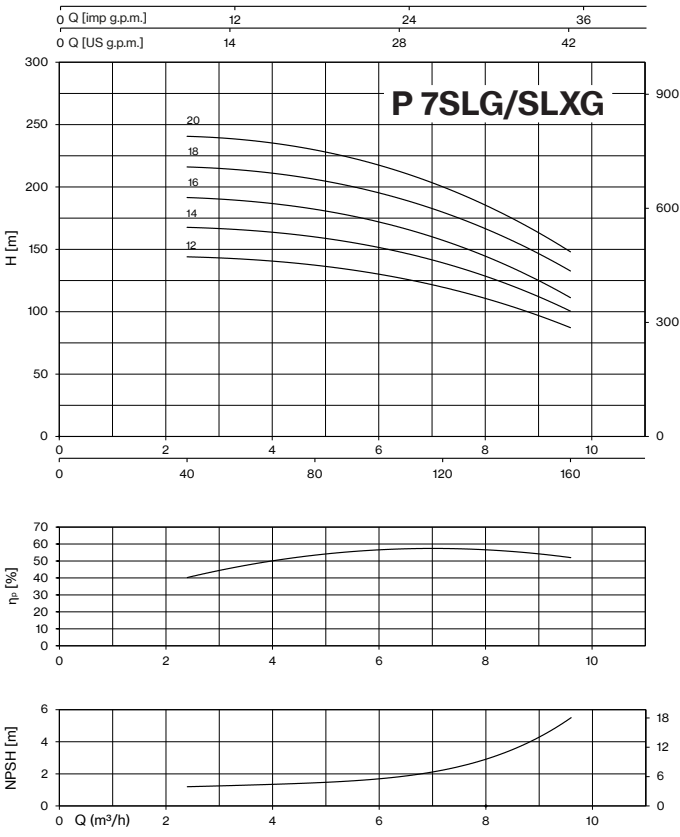
# PLUS SLG/SLXG



TYPE - 50 Hz	P2		P1	CURRENT 3- 400V	Q (m³/h - l/min)							
					0	0,6	1,2	1,8	2,4	3,6	4,8	
					0	10	20	30	40	60	80	
3-	HP	kW	kW	A	H (m)							
P 3...-350/14T	3	2,2	2,5	4,7	154,8	150,9	143,2	133,7	122,5	94,7	58,2	
P 3...-380/16T	4	3	2,9	5,5	177,5	173,2	164,6	154,5	141,3	109,4	67,0	
P 3...-400/18T	4	3	3,2	6,0	200,3	195,1	184,9	172,8	158,0	122,1	75,3	
P 3...-450/20T	4	3	3,6	6,5	218,3	211,9	200,6	187,4	171,4	131,5	81,0	

TYPE - 50 Hz	P2		P1	CURRENT 3- 400V	Q (m³/h - l/min)						
					0	1,8	2,4	3,6	4,8	6	7,2
					0	30	40	60	80	100	120
3-	HP	kW	kW	A	H (m)						
P 5...-400/14T	4	3	3,5	6,3	159,2	150,7	146,7	136,6	122,9	105,5	79,0
P 5...-450/16T	5,5	4	4,1	7,9	182,0	173,2	169,1	158,0	142,9	122,9	93,6
P 5...-550/18T	5,5	4	4,5	8,3	204,4	194,4	189,5	176,5	159,6	136,3	103,2
P 5...-600/20T	5,5	4	5,0	8,9	226,7	215,5	210,0	195,5	176,3	151,1	114,5

# PLUS SLG/SLXG

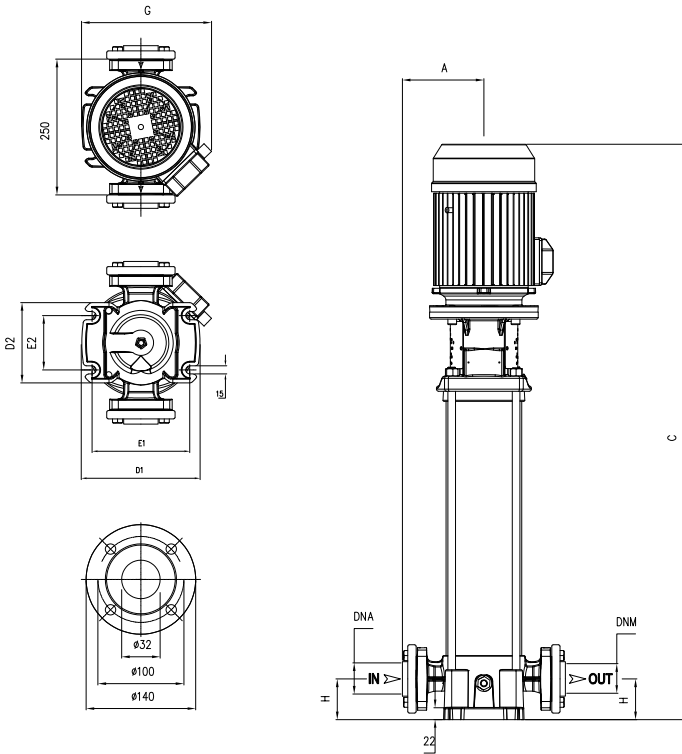


TYPE	P2		P1 (kW)	A	Q (m³/h - l/min)						
					0	2,4	3,6	4,8	6	7,2	9,6
	3~	HP	kW	3~	3-400V 50 Hz	0	40	60	80	100	120
					H (m)						
P 7...-750/12T	7,5	5,5	5,1	9,9	143,7	143,7	142,6	137,0	129,6	119,8	87,0
P 7...-800/14T	7,5	5,5	5,9	10,9	167,6	167,3	165,9	159,6	151,0	139,5	100,3
P 7...-900/16T	7,5	5,5	6,7	12,0	191,5	191,2	189,3	181,7	171,5	157,7	111,1
P 7...-950/18T	10	7,5	7,4	12,4	215,5	215,7	213,9	205,8	194,7	179,8	132,3
P 7...-1000/20T	10	7,5	8,2	13,5	240,3	240,2	238,4	229,3	216,8	200,3	147,7

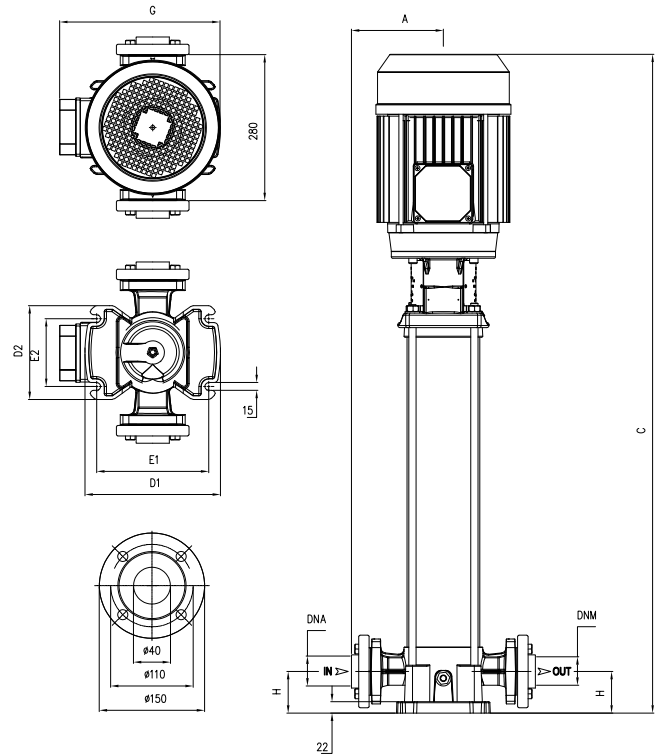
TYPE	P2		P1 (kW)	A	Q (m³/h - l/min)							
					0	3,6	4,8	6	7,2	9,6	12	13,2
	3~	HP	kW	3~	3-400V 50 Hz	0	60	80	100	120	160	200
					H (m)							
P 9...-750/12T	7,5	5,5	5,3	10,1	141,3	133,2	130,4	125,4	119,7	105,1	79,6	62,7
P 9...-800/14T	7,5	5,5	6,1	11,1	165,5	155,7	152,6	146,5	139,9	123,4	94,0	74,6
P 9...-900/16T	10	7,5	6,9	12,8	188,7	177,6	173,6	167,1	159,7	140,4	106,2	83,9
P 9...-950/18T	10	7,5	7,6	12,7	213,8	201,6	197,3	189,6	181,2	159,9	121,0	96,0
P 9...-1000/20T	10	7,5	8,5	13,9	236,7	223,1	218,3	209,3	199,8	176,1	134,5	107,0



### P 3-5-7 SLG/SLXG





### P 9 SLG/SLXG



TYPE	DIMENSIONS (mm)										Kg	
	A	C	D1	D2	E1	E2	G	H	DNA	DNM	SLG	SLXG
<b>P 3SLG-350/14T</b>	155	932	220	150	180	100	236	75	1" ¼ G	1" ¼ G	54	
<b>P 3SLG-380/16T</b>	155	977	220	150	180	100	236	75			58,5	
<b>P 3SLG-400/18T</b>	155	1025	220	150	180	100	236	75			60,5	
<b>P 3SLG-450/20T</b>	155	1098	220	150	180	100	251	75	1" ¼ G	1" ¼ G	65,5	
<b>P 3SLXG-350/14T</b>	155	932	260	180	215	130	236	75			53,5	
<b>P 3SLXG-380/16T</b>	155	977	260	180	215	130	236	75			58	
<b>P 3SLXG-400/18T</b>	155	1025	260	180	215	130	236	75	1" ¼ G	1" ¼ G	60,5	
<b>P 3SLXG-450/20T</b>	155	1098	260	180	215	130	251	75			64,5	
<b>P 5SLG-400/14T</b>	155	932	220	150	180	100	251	75			1" ¼ G	1" ¼ G
<b>P 5SLG-450/16T</b>	155	1000	220	150	180	100	251	75	66			
<b>P 5SLG-550/18T</b>	155	1048	220	150	180	100	251	75	68			
<b>P 5SLG-600/20T</b>	155	1098	220	150	180	100	260	75	1" ¼ G	1" ¼ G	70	
<b>P 5SLXG-400/14T</b>	155	932	260	180	215	130	251	75			56,5	
<b>P 5SLXG-450/16T</b>	155	1000	260	180	215	130	251	75			65,5	
<b>P 5SLXG-550/18T</b>	155	1048	260	180	215	130	251	75	1" ¼ G	1" ¼ G	68	
<b>P 5SLXG-600/20T</b>	155	1098	260	180	215	130	260	75			69	
<b>P 7SLG-750/12T</b>	155	940	220	150	180	100	260	75			1" ¼ G	1" ¼ G
<b>P 7SLG-800/14T</b>	155	988	220	150	180	100	260	75	71,5			
<b>P 7SLG-900/16T</b>	155	1036	220	150	180	100	260	75	74			
<b>P 7SLG-950/18T</b>	155	1081	220	150	180	100	288	75	1" ¼ G	1" ¼ G	87,5	
<b>P 7SLG-1000/20T</b>	155	1128	220	150	180	100	288	75			87,5	
<b>P 7SLXG-750/12T</b>	155	940	260	180	215	130	260	75			1" ¼ G	1" ¼ G
<b>P 7SLXG-800/14T</b>	155	988	260	180	215	130	260	75	71,5			
<b>P 7SLXG-900/16T</b>	155	1036	260	180	215	130	260	75	73,5			
<b>P 7SLXG-950/18T</b>	155	1081	260	180	215	130	288	75	1" ¼ G	1" ¼ G	87,5	
<b>P 7SLXG-1000/20T</b>	155	1128	260	180	215	130	288	75			88,5	
<b>P 9...-750/12T</b>	170	1027	260	180	215	130	280	80			1" ½ G	1" ½ G
<b>P 9...-800/14T</b>	170	1088	260	180	215	130	280	80	76,5	75		
<b>P 9...-900/16T</b>	170	1147	260	180	215	130	280	80	83	82		
<b>P 9...-950/18T</b>	170	1205	260	180	215	130	308	80	1" ½ G	1" ½ G	91,5	91
<b>P 9...-1000/20T</b>	170	1263	260	180	215	130	308	80			93,5	93

# PLUS V-SV-L-SL-LG-SLG Serie-Mechanical seal and bearings

MECHANICAL SEAL	PUMP MODEL	SHAFT		STANDARD MATERIAL	OPTIONAL
					2
	P3-100/5, P3-120/6, P5-120/4, P5-150/5, P5-180/6, P7-180/4, P7-250/5, P7-300/6, P9-200/4, P9-250/5, P18-250/3, P18-400/4	14mm / S	<b>Rotating face</b> <b>Stationary face</b> <b>Elastomer</b>	Graphite Ceramic EPDM	SiC SiC EPDM
	P3-150/7, P3-180/8, P3-200/9, P3-250/10, P3-280/11, P3-300/12, P5-200/7, P5-250/8, P5-280/9, P5-300/10, P5-350/11, P5-380/12, P7-350/7, P7-400/8, P7-450/9, P7-550/10, P9-300/6, P9-400/7, P9-450/8, P9-500/9, P9-550/10	14mm	<b>Rotating face</b> <b>Stationary face</b> <b>Elastomer</b>	Graphite SiC EPDM	SiC SiC EPDM
	P18-450/5, P18-550/6, P18-750/8, P18-900/9, P18-920/10, P18-1000/11	14mm / L	<b>Rotating face</b> <b>Stationary face</b> <b>Elastomer</b>	Graphite SiC EPDM	SiC SiC EPDM
	P3-350/14, P3-380/16, P3-400/18, P3-450/20, P5-400/14, P5-450/16, P5-550/18, P5-600/20, P7-750/12, P7-800/14, P7-900/16, P7-950/18, P7-1000/20, P9-750/12, P9-800/14, P9-900/16, P9-950/18, P9-1000/20	14mm / Balanced seal	<b>Rotating face</b> <b>Stationary face</b> <b>Elastomer</b>	Tungsten carbide Graphite EPDM	- - -

BEARINGS	PUMP MODEL	TYPE	
	P3-100/5, P3-120/6, P5-120/4	6202-ZZ	6302-ZZ C3
	P3-150/7, P3-180/8, P3-200/9, P3-250/10, 3- P3-280/11, 3- P3-300/12, P5-150/5, P5-180/6, P5-200/7, P5-250/8, 3- P5-280/9, 3- P5-300/10, P7-180/4, P7-250/5, 3- P7-300/6, P9-200/4, P9-250/5, 3- P9-300/6, P18-250/3	6203-ZZ	6304-ZZ C3
	1- P3-280/11, 1- P3-300/12, 1- P5-280/9, 1- P5-300/10, P5-350/11, P5-380/12, 1- P7-300/6, P7-350/7, P7-400/8, 1- P9-300/6, P9-400/7, P18-400/4, P3-350/14, P3-380/16, P3-400/18, P5-400/14	6203-ZZ	6305-ZZ C3
	P7-450/9, P7-550/10, P9-450/8, P9-500/9, P9-550/10, P18-450/5, P18-550/6	6204-ZZ	6306-ZZ-C3
	P3-450/20, P5-450/16, P5-550/18, P5-600/20	6204-ZZ	3206-ZZ C3
	P7-750/12, P7-800/14, P7-900/16, P9-750/12, P9-800/14, P9-900/16, P18-750/8, P18-900/9, P18-920/10	6206-ZZ C3	3306-ZZ C3
	P7-950/18, P7-1000/20, P9-950/18, P9-1000/20, P18-1000/11	6206-ZZ C3	3308-ZZ C3

Stainless steel multistage vertical pumps. Suitable for clean non-loaded fluids, pressurizing system, irrigation, drinking and glycol water, water treatment, food industry, heating and air conditioning, washing system.



### Construction features

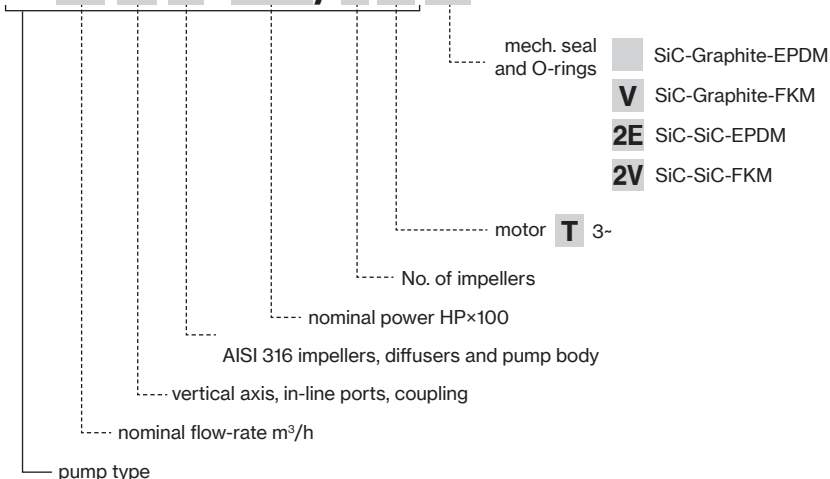
<b>Pump body</b>	EN 1.4401 / AISI 316
<b>Motor bracket</b>	cast iron
<b>Impellers, diffusers, shell, pump shaft</b>	EN 1.4401 / AISI 316
<b>Mechanical seal</b>	silicon carbide-graphite-EPDM
<b>Intermediate bush</b>	tungsten carbide
<b>Ambient temperature</b>	max 40 °C
<b>Liquid temperature</b>	-15 ÷ +120 °C (Max 85° for domestic use)
<b>Max operating pressure</b>	max 26 bar
<b>Pump body gasket</b>	EPDM

### Motor

<b>2 pole induction motor</b>	3- 230/400V - 50Hz P ≤ 4kW, size B14 V1 3- 400/690V - 50Hz P > 4kW, size B5 V1 IE3 efficiency class
<b>Insulation class</b>	F
<b>Protection degree</b>	IP55



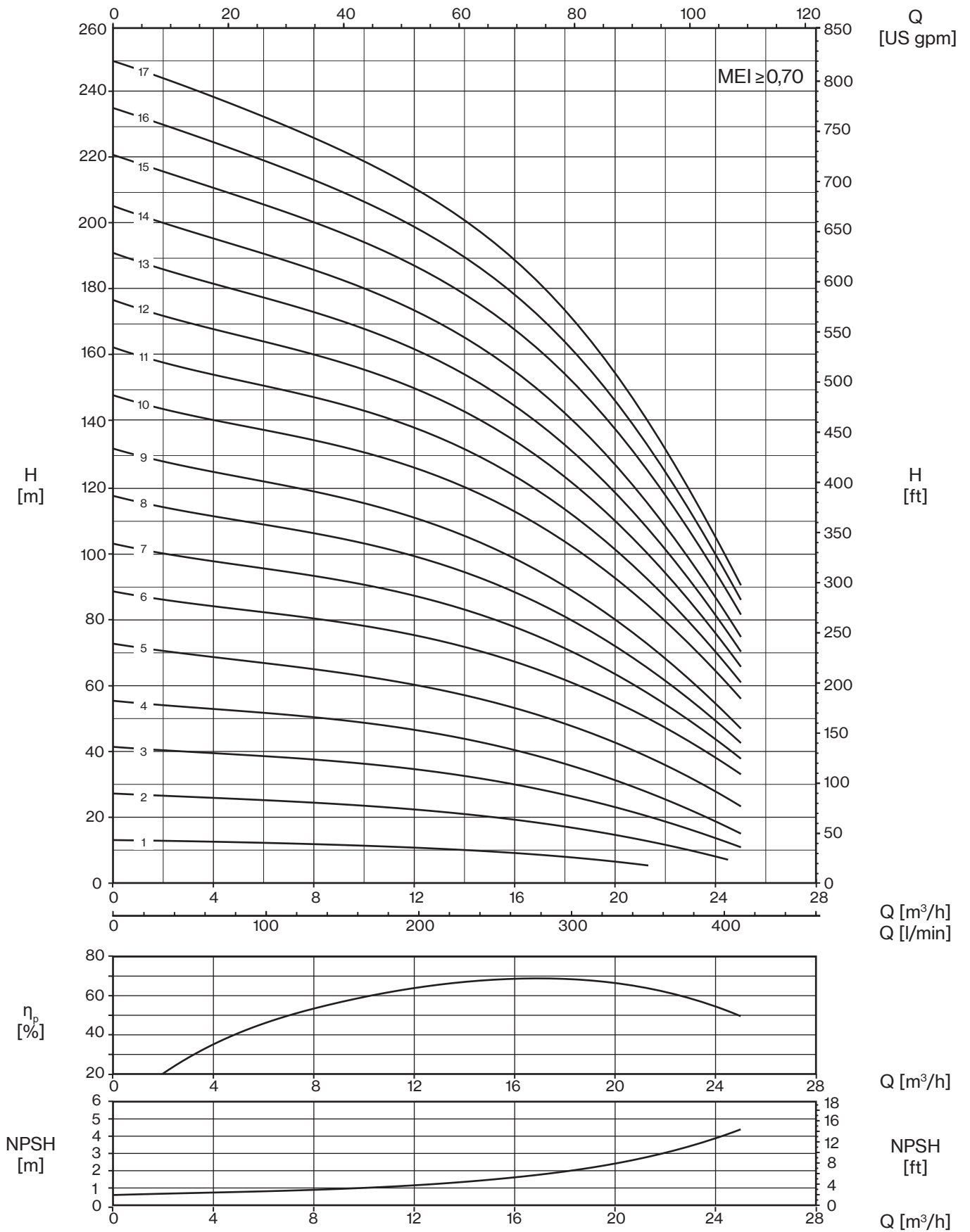
**P 18 H X - 100 / 1 T -2**



# PLUS 18-22

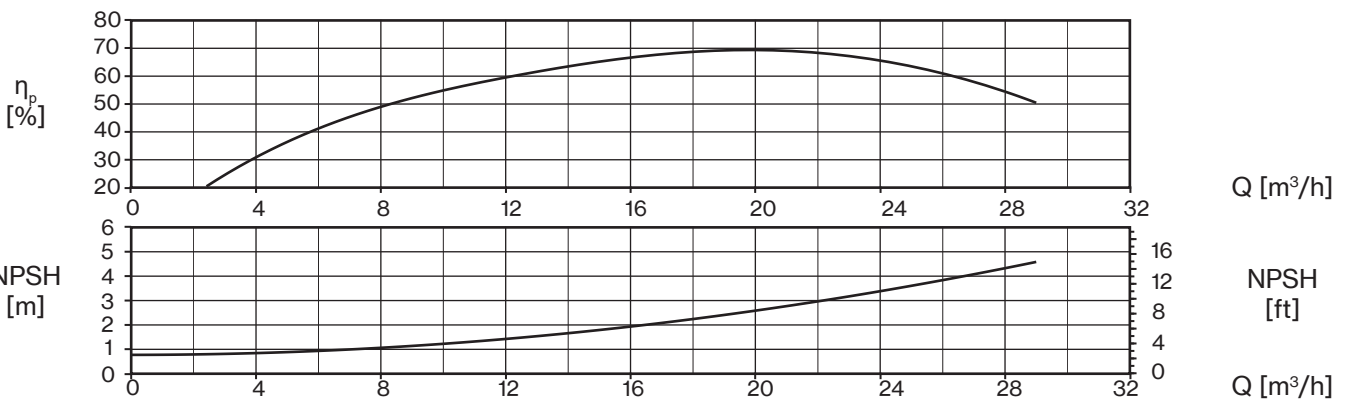
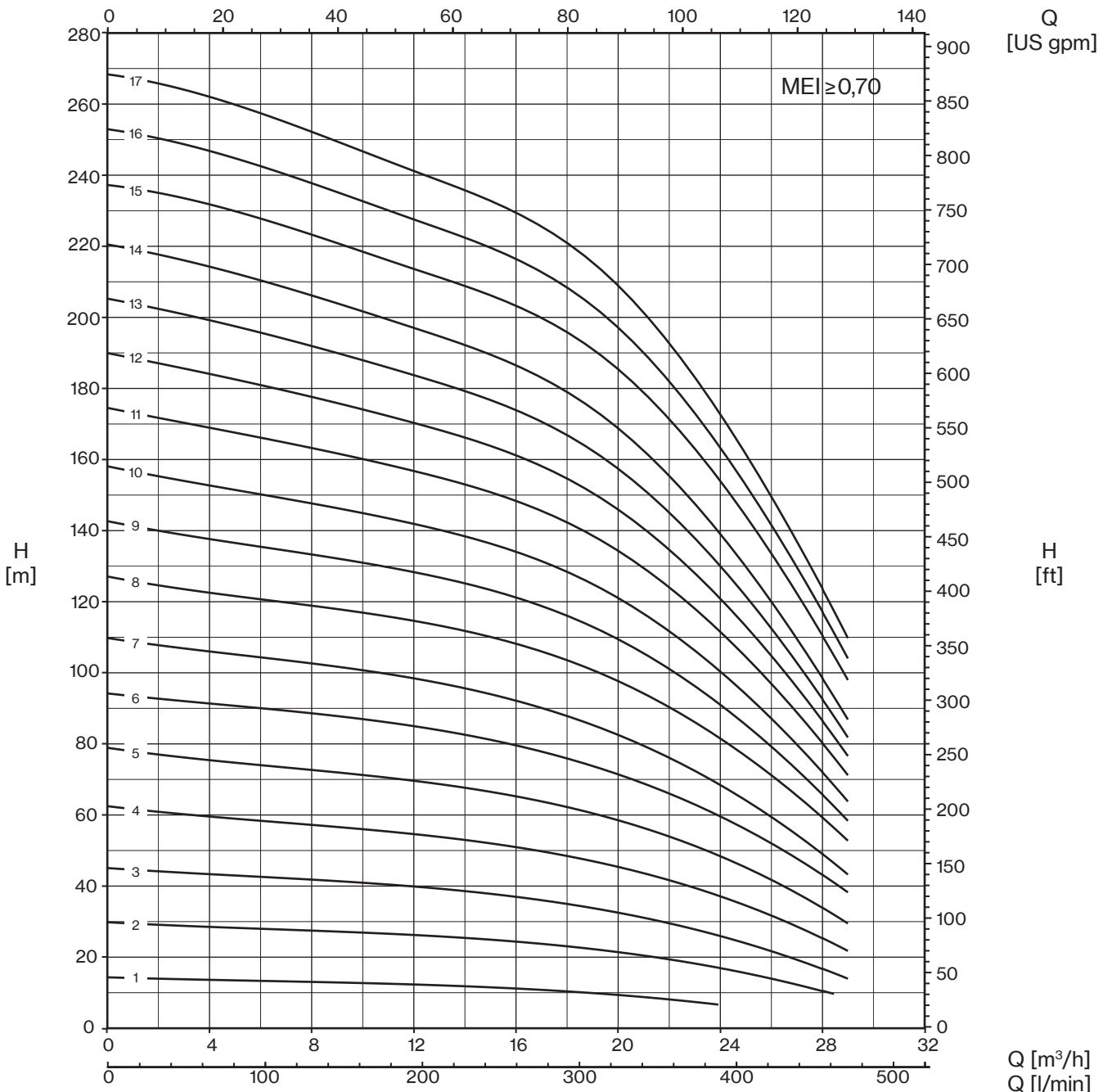
TYPE - 50 Hz		Q (l/min - m <sup>3</sup> /h - US gpm)												
3-	P2		0	133,3	150	166,7	183,3	200	216,7	233,3	266,7	300	350	400
			0	8	9	10	11	12	13	14	16	18	21	24
			0	35,2	39,6	44,0	48,4	52,8	57,2	61,6	70,3	79,1	92,3	105,5
HP	kW	H (m)												
P 18HX-100/1T	1	0,75	13,0	11,7	11,6	11,4	11,1	10,8	10,4	10,1	9,1	7,9	5,6	
P 18HX-200/2T	2	1,5	27,1	24,3	23,9	23,5	22,9	22,3	21,7	21,1	19,3	17,2	13,1	8,0
P 18HX-300/3T	3	2,2	41,2	37,4	36,7	36,1	35,3	34,4	33,6	32,7	30,1	27,1	20,8	13,5
P 18HX-400/4T	4	3	55,1	50,2	49,3	48,5	47,5	46,3	45,2	44,0	40,6	36,6	28,2	18,5
P 18HX-550/5T	5,5	4	72,3	64,7	63,7	62,6	61,5	60,1	58,5	57,2	53,6	48,7	38,9	27,6
P 18HX-750/6T	7,5	5,5	88,0	80,1	78,9	77,7	76,4	74,9	73,3	71,7	68,0	62,4	51,3	37,5
P 18HX-750/7T	7,5	5,5	102,5	93,0	91,5	90,1	88,6	86,8	84,9	83,0	78,6	72,0	59,1	43,0
P 18HX-1000/8T	10	7,5	116,9	105,9	104,2	102,6	100,8	98,8	96,5	94,4	89,3	81,7	66,9	48,5
P 18HX-1000/9T	10	7,5	131,2	118,5	116,6	114,8	112,7	110,4	107,9	105,5	99,7	91,1	74,3	53,6
P 18HX-1500/10T	15	11	147,3	134,1	132,1	130,1	127,9	125,5	122,8	120,2	114,1	104,8	86,3	63,4
P 18HX-1500/11T	15	11	161,7	147,1	144,9	142,7	140,3	137,6	134,6	131,7	125,0	114,7	94,4	69,2
P 18HX-1500/12T	15	11	176,2	160,0	157,6	155,2	152,6	149,6	146,3	143,2	135,7	124,5	102,3	74,8
P 18HX-1500/13T	15	11	190,6	172,9	170,3	167,7	164,8	161,6	158,0	154,6	146,4	134,2	110,1	80,3
P 18HX-2000/14T	15	11	204,9	185,7	182,9	180,0	176,9	173,4	169,5	165,9	157,0	143,8	117,8	85,7
P 18HX-2500/15T	20	15	220,7	200,2	197,2	194,2	190,8	187,1	183,0	179,0	169,7	155,7	127,8	93,4
P 18HX-2000/16T	20	15	235,1	213,1	209,8	206,6	203,0	199,0	194,6	190,4	180,3	165,3	135,6	98,9
P 18HX-2000/17T	20	15	249,4	225,9	222,4	219,0	215,1	210,9	206,1	201,6	190,9	174,8	143,3	104,2

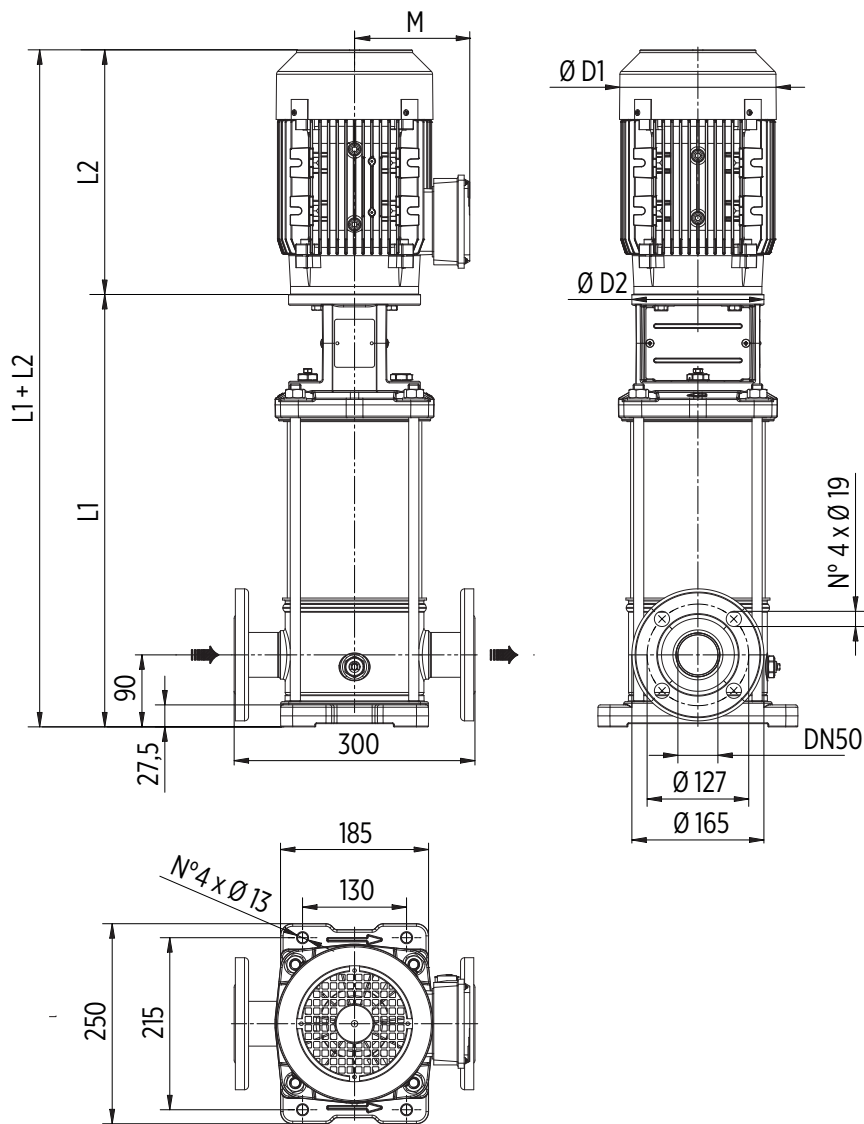
TYPE - 50 Hz		Q (l/min - m <sup>3</sup> /h - US gpm)												
3-	P2		0	166,7	183,3	200	216,7	233,3	266,7	300	350	400	433,3	466,7
			0	10	11	12	13	14	16	18	21	24	26	28
			0	44,0	48,4	52,8	57,2	61,6	70,3	79,1	92,3	105,5	114,3	123,1
HP	kW	H (m)												
P 22HX-200/1T	2	1,1	14,3	12,9	12,8	12,5	12,2	11,9	11,4	10,5	9,0	6,7	4,0	
P 22HX-300/2T	3	2,2	29,7	26,9	26,6	26,3	26,0	25,5	24,5	23,3	20,7	17,1	13,9	10,6
P 22HX-400/3T	4	3	45,0	40,9	40,4	39,9	39,2	38,5	37,2	35,5	31,6	25,8	21,5	16,6
P 22HX-550/4T	5,5	4	62,2	55,7	54,9	54,2	53,7	52,8	50,9	49,0	44,0	36,8	31,1	25,2
P 22HX-750/5T	7,5	5,5	78,6	70,8	69,9	69,0	68,5	67,4	65,1	62,8	56,9	47,9	41,0	33,5
P 22HX-1000/6T	10	7,5	94,2	86,2	85,1	84,1	83,2	82,2	79,7	77,3	70,0	59,4	51,3	42,0
P 22HX-1000/7T	10	7,5	109,5	99,8	98,5	97,4	96,3	95,1	92,2	89,2	80,6	68,2	58,7	47,9
P 22HX-1500/8T	15	11	126,5	116,1	114,7	113,5	112,3	111,0	107,9	104,8	95,4	81,4	70,7	58,3
P 22HX-1500/9T	15	11	142,0	130,2	128,6	127,2	125,9	124,4	120,8	117,3	106,7	90,8	78,7	64,8
P 22HX-1500/10T	15	11	157,5	144,2	142,4	140,8	139,3	137,7	133,6	129,6	117,7	100,1	86,6	71,1
P 22HX-2000/11T	20	15	174,0	159,4	157,4	155,7	154,1	152,3	147,9	143,5	130,5	111,2	96,4	79,3
P 22HX-2000/12T	20	15	189,5	173,4	171,2	169,3	167,6	165,5	160,7	155,8	141,6	120,4	104,2	85,6
P 22HX-2000/13T	20	15	204,9	187,3	184,9	182,8	180,9	178,7	173,4	168,1	152,5	129,5	111,9	91,7
P 22HX-2000/14T	20	15	220,3	201,1	198,5	196,2	194,1	191,7	186,0	180,2	163,2	138,4	119,4	97,7
P 22HX-2500/15T	25	18,5	237,4	218,1	215,4	213,1	211,0	208,6	202,6	196,8	179,4	153,1	133,0	109,7
P 22HX-2500/16T	25	18,5	252,9	232,2	229,4	226,9	224,6	222,0	215,6	209,4	190,7	162,7	141,1	116,3
P 22HX-2500/17T	25	18,5	268,5	246,3	243,3	240,6	238,2	235,4	228,6	221,9	202,0	172,1	149,2	122,8





# 22 HX

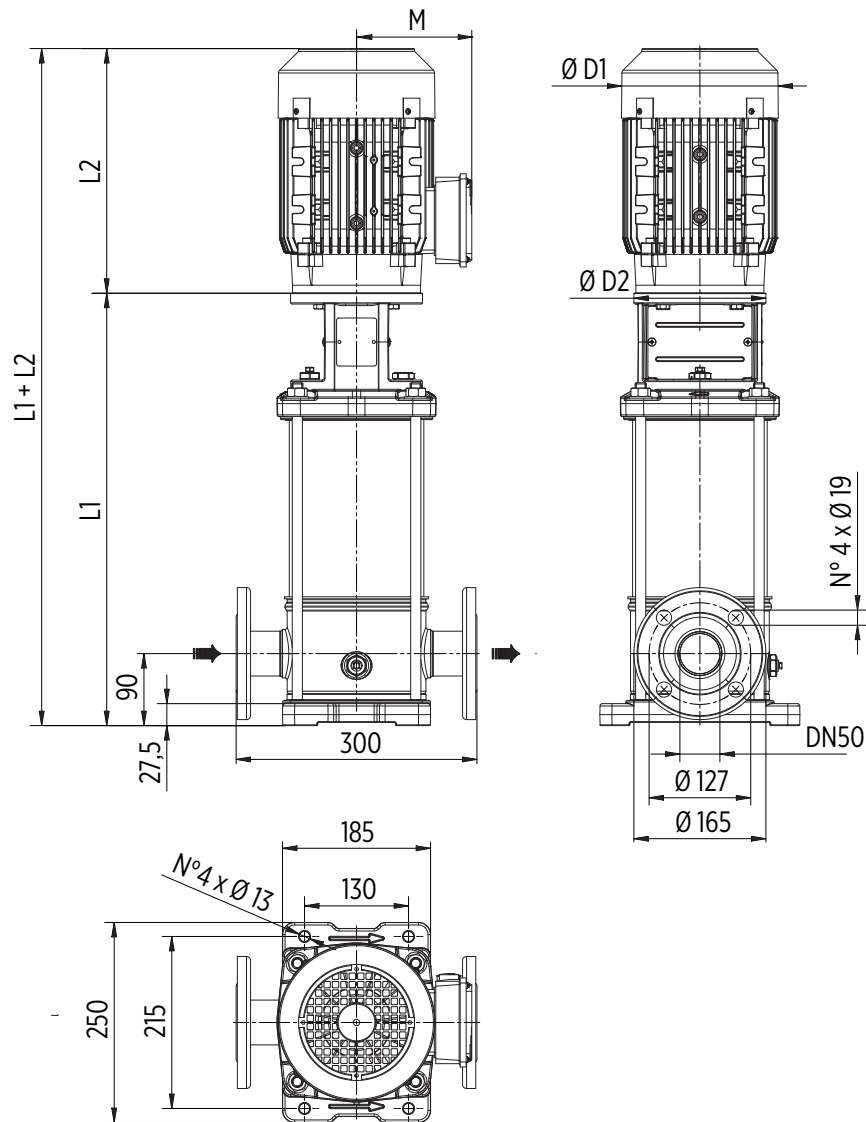




Round flanges on body type PN25/40: the pump is supplied without counterflanges (optional accessories, including bolts and joints)

TYPE	MOTOR		DIMENSIONS (mm)						Kg		
	kW	Dim	L1	L2	M	D1	D2	L1+L2	Pump	Motor	Electric Pump
P 18HX-100/1T	0,75	80	396	243	130	157	170	639	19	17	36
P 18HX-200/2T	1,5	90	396	280	145	177	170	676	20	23	43
P 18HX-300/3T	2,2	90	444	308	145	177	170	752	21,5	26	47,5
P 18HX-400/4T	3	100	492	333	157	205	170	825	22,5	35	57,5
P 18HX-550/5T	4	112	540	350	177	220	170	890	24	43	67
P 18HX-750/6T	5,5	132	800	400	197	256	300	1200	45,5	66	111,5
P 18HX-750/7T	5,5	132	848	400	197	256	300	1248	46,5	66	112,5
P 18HX-1000/8T	7,5	132	896	400	197	256	300	1296	48	73	121
P 18HX-1000/9T	7,5	132	944	400	197	256	300	1344	49,5	73	122,5
P 18HX-1500/10T	11	160	1012	503	255	315	350	1515	54	120	174
P 18HX-1500/11T	11	160	1060	503	255	315	350	1563	55,5	120	175,5
P 18HX-1500/12T	11	160	1108	503	255	315	350	1611	57	120	177
P 18HX-1500/13T	11	160	1156	503	255	315	350	1659	58,5	120	178,5
P 18HX-1500/14T	11	160	1204	503	255	315	350	1707	60	120	180
P 18HX-2000/15T	15	160	1252	503	255	315	350	1755	61	132	193
P 18HX-2000/16T	15	160	1300	503	255	315	350	1803	62,5	132	194,5
P 18HX-2000/17T	15	160	1348	503	255	315	350	1851	64	132	196

## 22 HX



Round flanges on body type PN25/40: the pump is supplied without counterflanges (optional accessories, including bolts and joints)

TYPE	MOTOR		DIMENSIONS (mm)						Kg		
	kW	Dim	L1	L2	M	D1	D2	L1+L2	Pump	Motor	Electric Pump
P 22HX-200/1T	1,1	80	396	243	130	157	170	639	19	18	37
P 22HX-300/2T	2,2	90	396	308	145	177	170	704	20	26	46
P 22HX-400/3T	3	100	444	333	157	205	170	777	21,5	35	56,5
P 22HX-550/4T	4	112	492	350	177	220	170	842	22,5	43	65,5
P 22HX-750/5T	5,5	132	752	400	197	256	300	1152	44	66	110
P 22HX-1000/6T	7,5	132	800	400	197	256	300	1200	45,5	73	118,5
P 22HX-1000/7T	7,5	132	848	400	197	256	300	1248	46,5	73	119,5
P 22HX-1500/8T	11	160	916	503	255	315	350	1419	51,5	120	171,5
P 22HX-1500/9T	11	160	964	503	255	315	350	1467	53	120	173
P 22HX-1500/10T	11	160	1012	503	255	315	350	1515	54,5	120	174,5
P 22HX-2000/11T	15	160	1060	503	255	315	350	1563	55,5	132	187,5
P 22HX-2000/12T	15	160	1108	503	255	315	350	1611	57	132	189
P 22HX-2000/13T	15	160	1156	503	255	315	350	1659	58,5	132	190,5
P 22HX-2000/14T	15	160	1204	503	255	315	350	1707	60	132	192
P 22HX-2500/15T	18,5	160	1252	598	252	315	350	1850	61,5	150	211,5
P 22HX-2500/16T	18,5	160	1300	598	252	315	350	1898	62,5	150	212,5
P 22HX-2500/17T	18,5	160	1348	598	252	315	350	1946	64	150	214

# PLUS HS/HX

## Multistage Vertical

Stainless steel multistage vertical pumps. Suitable for clean non-loaded fluids, pressurizing system, irrigation, drinking and glycol water, water treatment, food industry, heating and air conditioning, washing system.

### Construction features

<b>Pump body</b>	HS: cast iron GJL-250 HX: EN 1.4401 / AISI 316
<b>Motor bracket</b>	cast iron
<b>Seal plate housing</b>	HS: EN 1.4301 / AISI 304 HX: EN 1.4401 / AISI 316
<b>Impellers, diffusers, shell</b>	HS: EN 1.4301 / AISI 304 HX: EN 1.4401 / AISI 316
<b>Pump shaft</b>	HS: EN 1.4057 / AISI 431 HX: EN 1.4460 / AISI 329
<b>Mechanical seal</b>	silicon carbide-graphite-EPDM
<b>Intermediate bush</b>	tungsten carbide
<b>Ambient temperature</b>	max 40 °C
<b>Liquid temperature</b>	-15 ÷ +120 °C (Max 85° for domestic use)
<b>Max operating pressure</b>	32 bar (P 35-50) 25 bar (P 75-90)
<b>Pump body gasket</b>	EPDM

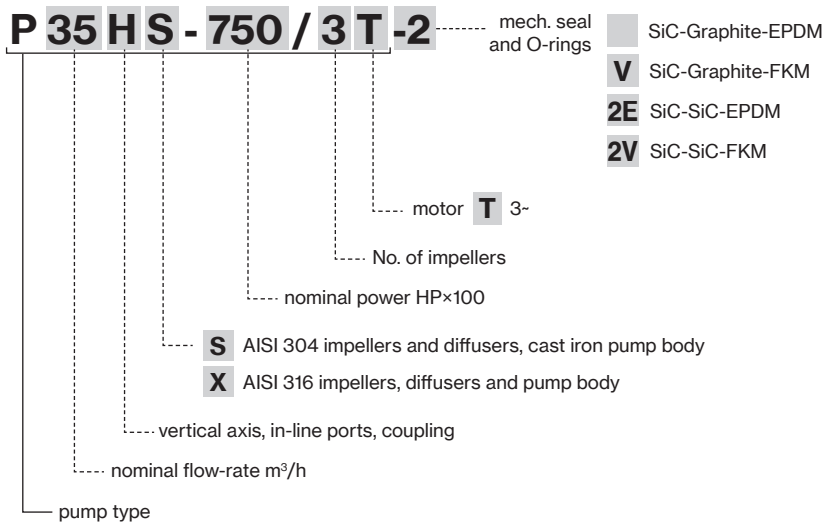
### Motor

<b>2 pole induction motor</b>	3~ 230/400V - 50Hz P ≤ 4kW, size B14 V1 3~ 400/690V - 50Hz P > 4kW, size B5 V1 IE3 efficiency class
<b>Insulation class</b>	F
<b>Protection degree</b>	IP55



PLUS HS

PLUS HX



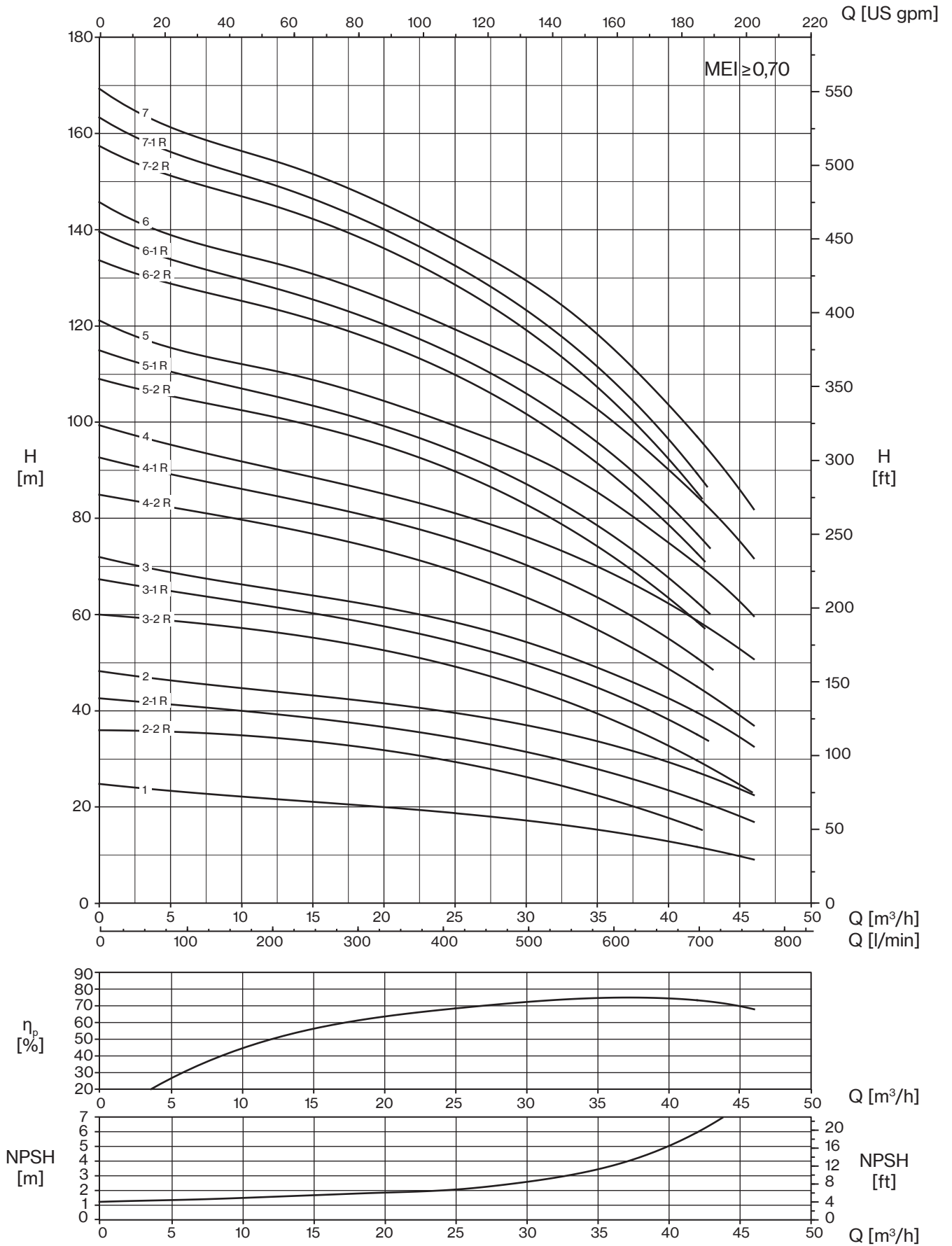
# PLUS 35-50

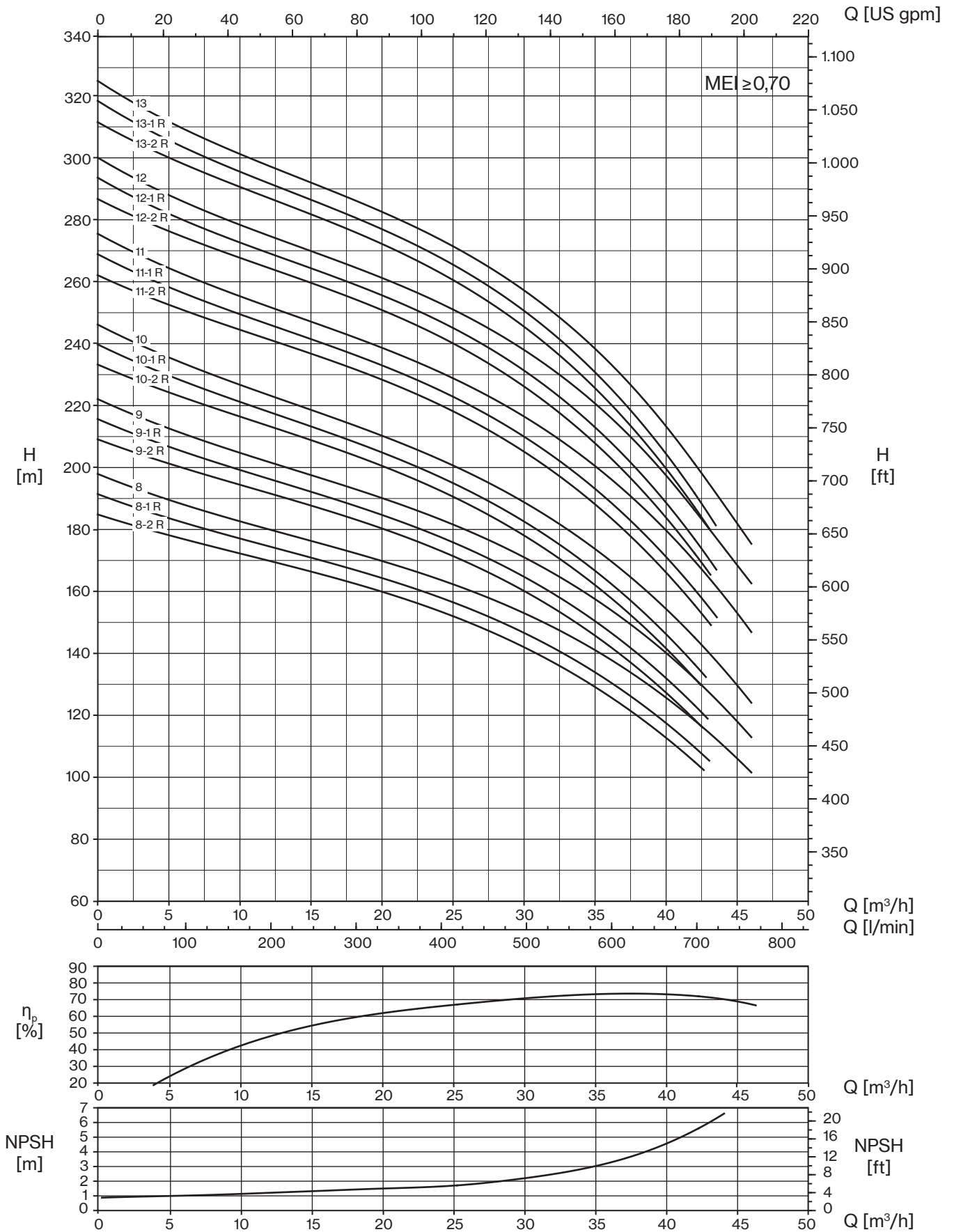
TYPE - 50 Hz	P2		Q (l/min - m³/h - US gpm)									
			0	417	500	566,7	666,7	700	800	900	1000	1066,7
			0	25	30	34	40	42	48	54	60	64
			0	109,9	131,9	149,5	175,9	184,7	211,0	237,4	263,8	281,4
3-	HP	kW	H (m)									
P 35...-300/1T	3	2,2	24,8	18,6	17,2	15,8	12,7	11,6				
P 35...-550/2-2RT	5,5	4	36,2	29,3	26,3	23,1	17,8	15,7				
P 35...-550/2-1RT	5,5	4	42,8	34,3	31,6	28,8	23,4	21,3				
P 35...-750/2T	7,5	5,5	48,5	39,6	36,9	34,4	29,1	27,2				
P 35...-750/3-2RT	7,5	5,5	60,3	49,0	44,9	40,6	32,7	29,6				
P 35...-1000/3-1RT	10	7,5	67,5	54,1	50,1	46,1	38,0	35,0				
P 35...-1000/3T	10	7,5	72,2	58,2	54,2	50,3	42,4	39,5				
P 35...-1000/4-2RT	10	7,5	85,1	68,6	63,9	58,4	48,8	44,7				
P 35...-1500/4-1RT	15	11	92,8	75,3	70,2	65,2	54,8	50,8				
P 35...-1500/4T	15	11	99,4	81,0	76,3	71,8	62,2	58,5				
P 35...-1500/5-2RT	15	11	109,2	89,5	82,9	76,2	63,5	58,5				
P 35...-1500/5-1RT	15	11	115,1	93,6	87,0	80,6	67,5	62,4				
P 35...-2000/5T	20	15	121,1	99,3	93,1	87,4	74,9	70,0				
P 35...-2000/6-2RT	20	15	133,8	109,6	101,7	93,9	78,7	72,7				
P 35...-2000/6-1RT	20	15	139,7	113,7	105,8	98,3	82,7	76,6				
P 35...-2000/6T	20	15	145,6	119,3	111,9	105,0	90,1	84,2				
P 35...-2000/7-2RT	20	15	157,5	128,3	119,1	110,1	92,3	85,3				
P 35...-2000/7-1RT	20	15	163,3	132,3	123,2	114,4	96,2	89,1				
P 35...-2500/7T	25	18,5	169,2	137,9	129,1	121,0	103,5	96,6				
P 35...-2500/8-2RT	25	18,5	185,5	152,0	142,0	132,5	112,8	105,1				
P 35...-2500/8-1RT	25	18,5	191,9	156,4	146,6	137,4	117,4	109,6				
P 35...-2500/8T	25	18,5	198,4	162,5	153,0	144,6	125,4	117,8				
P 35...-3000/9-2RT	30	22	209,8	171,4	160,2	149,5	127,4	118,7				
P 35...-3000/9-1RT	30	22	216,2	175,8	164,7	154,4	131,9	123,1				
P 35...-3000/9T	30	22	222,7	181,8	171,1	161,5	139,8	131,3				
P 35...-3000/10-2RT	30	22	234,0	190,6	178,1	166,3	141,7	132,1				
P 35...-3000/10-1RT	30	22	240,3	194,9	182,6	171,1	146,1	136,4				
P 35...-4000/10T	40	30	246,8	200,9	188,9	178,2	154,0	144,5				
P 35...-4000/11-2RT	40	30	262,9	218,3	205,1	192,7	166,3	155,8				
P 35...-4000/11-1RT	40	30	269,5	222,9	209,9	197,8	171,2	160,5				
P 35...-4000/11T	40	30	276,2	229,2	216,5	205,3	179,4	169,1				
P 35...-4000/12-2RT	40	30	288,1	240,0	226,0	213,0	184,4	173,3				
P 35...-4000/12-1RT	40	30	294,7	244,8	230,9	218,4	189,7	178,6				
P 35...-4000/12T	40	30	301,4	251,1	237,8	226,0	197,6	188,0				
P 35...-4000/13-2RT	40	30	313,0	260,4	245,3	231,3	200,3	188,3				
P 35...-4000/13-1RT	40	30	319,6	265,2	250,2	236,6	205,6	193,6				
P 35...-4000/13T	40	30	326,3	271,5	257,0	244,2	213,5	202,9				
P 50...-400/1-1RT	4	3	19,6			16,0	14,6	14,0	12,1	9,7	7,0	4,9
P 50...-550/1T	5,5	4	25,1			20,4	19,0	18,5	16,8	14,8	12,5	10,4
P 50...-750/2-2RT	7,5	5,5	38,4			33,9	31,5	30,5	27,4	23,7	19,3	16,0
P 50...-1000/2T	10	7,5	49,0			42,0	39,8	38,8	35,5	31,8	27,5	24,1
P 50...-1500/3-2RT	15	11	63,0			55,9	52,7	51,4	46,8	41,5	35,1	30,3
P 50...-1500/3T	15	11	74,2			65,0	62,1	60,9	56,5	51,3	45,5	41,0
P 50...-2000/4-2RT	20	15	87,5			77,4	73,3	71,6	65,5	58,4	50,1	43,8
P 50...-2000/4T	20	15	97,5			86,4	82,8	81,3	75,4	68,5	60,8	54,7
P 50...-2500/5-2RT	25	18,5	112,1			99,9	95,0	92,9	85,5	76,7	66,6	58,8
P 50...-2500/5T	25	18,5	122,3			109,1	104,7	102,9	95,6	87,1	77,5	70,0
P 50...-3000/6-2RT	30	22	136,0			120,7	114,9	112,4	103,4	92,9	80,8	71,5
P 50...-3000/6T	30	22	146,0			129,8	124,5	122,2	113,3	103,0	91,6	82,5
P 50...-4000/7-2RT	40	30	162,6			146,4	140,1	137,3	127,2	115,2	101,3	90,8
P 50...-4000/7T	40	30	173,0			155,9	150,1	147,7	137,7	126,0	112,7	102,5
P 50...-4000/8-2RT	40	30	187,2			168,3	161,1	158,0	146,4	132,7	116,8	104,8
P 50...-4000/8T	40	30	197,5			177,7	171,1	168,2	156,8	143,4	128,2	116,5
P 50...-5000/9-2RT	50	37	211,7			190,2	182,2	178,7	165,7	150,3	132,6	119,1
P 50...-5000/9T	50	37	222,0			199,7	192,2	188,9	176,1	161,0	143,9	130,7
P 50...-5000/10-2RT	50	37	236,1			211,9	203,0	199,1	184,6	167,5	147,9	132,9
P 50...-5000/10T	50	37	246,4			221,3	212,9	209,3	195,0	178,1	159,1	144,4
P 50...-6000/11-2RT	60	45	261,5			235,3	225,7	221,5	205,7	187,0	165,5	149,1
P 50...-6000/11T	60	45	271,8			244,8	235,7	231,8	216,2	197,7	176,9	160,9
P 50...-6000/12-2RT	60	45	286,0			257,2	246,7	242,1	224,8	204,5	181,0	163,2
P 50...-6000/12T	60	45	296,3			266,6	256,7	252,4	235,3	215,2	192,4	174,9

TYPE - 50 Hz			Q (l/min - m <sup>3</sup> /h - US gpm)									
3-	P2		0	500	666,7	750	833,3	1000	1166,7	1333,3	1466,7	
			0	30	40	45	50	60	70	80	88	
			0	131,9	175,9	197,9	219,8	263,8	307,8	351,7	386,9	
	HP	kW	H (m)									
P 75...-550/1-1RT	5,5	4	21,3	18,2	17,0	16,3	15,5	13,3	10,3	6,8	3,7	
P 75...-750/1T	7,5	5,5	30,2	24,8	23,0	22,3	21,7	20,3	18,3	15,4	12,2	
P 75...-1000/2-2RT	10	7,5	38,9	37,2	35,8	34,8	33,8	30,5	25,8	20,3	14,6	
P 75...-1500/2-1RT	15	11	47,8	44,3	42,6	41,6	40,6	38,0	34,2	29,3	24,0	
P 75...-2000/2T	15	11	59,3	51,2	48,0	46,8	45,5	43,2	39,9	35,3	30,8	
P 75...-2000/3-2RT	20	15	67,3	63,0	60,6	59,1	57,6	53,4	47,2	39,5	31,4	
P 75...-2000/3-1RT	20	15	75,5	69,2	66,3	64,8	63,2	59,5	54,1	46,9	38,7	
P 75...-2500/3T	25	18,5	89,6	77,6	72,8	70,9	69,0	65,7	60,7	53,9	47,2	
P 75...-2500/4-2RT	25	18,5	95,5	88,6	85,1	83,2	81,1	76,0	68,3	58,5	47,9	
P 75...-3000/4-1RT	30	22	103,7	94,7	90,9	88,8	86,7	82,1	75,2	65,9	55,3	
P 75...-3000/4T	30	22	111,8	100,8	96,7	94,5	92,4	88,4	82,3	73,3	62,9	
P 75...-4000/5-2RT	40	30	125,3	116,2	111,8	109,5	107,0	101,1	92,1	80,4	68,0	
P 75...-4000/5-1RT	40	30	133,9	122,7	117,9	115,5	113,0	107,6	99,5	88,4	76,2	
P 75...-4000/5T	40	30	142,4	129,2	124,0	121,5	119,0	114,1	106,9	96,3	84,6	
P 75...-4000/6-2RT	40	30	153,5	141,6	136,2	133,3	130,3	123,4	112,9	99,0	84,1	
P 75...-5000/6-1RT	50	37	162,1	148,2	142,4	139,4	136,4	130,0	120,4	107,1	92,5	
P 75...-5000/6T	50	37	170,6	154,7	148,5	145,4	142,3	136,5	127,8	115,0	100,9	
P 75...-5000/7-2RT	50	37	181,7	167,0	160,6	157,2	153,6	145,7	133,7	117,7	100,3	
P 75...-5000/7-1RT	50	37	190,1	173,5	166,6	163,1	159,5	152,1	141,0	125,5	108,3	
P 75...-6000/7T	60	45	199,5	181,1	173,8	170,3	166,7	160,0	149,9	135,1	118,9	
P 75...-6000/8-2RT	60	45	210,6	193,5	186,0	182,2	178,1	169,3	156,0	137,9	118,4	
P 75...-6000/8-1RT	60	45	219,2	200,0	192,1	188,2	184,1	175,8	163,4	145,9	126,6	
P 75...-6000/8T	60	45	227,7	206,5	198,2	194,1	190,1	182,3	170,7	153,8	135,1	

TYPE - 50 Hz			Q (l/min - m <sup>3</sup> /h - US gpm)									
3-	P2		0	750	833,3	1000	1166,7	1333,3	1466,7	1666,7	1833,3	1916,7
			0	45	50	60	70	80	88	100	110	115
			0	197,9	219,8	263,8	307,8	351,7	386,9	439,7	483,6	505,6
	HP	kW	H (m)									
P 90...-750/1-1RT	7,5	5,5	26,4	20,5	19,9	18,7	17,3	15,5	13,2	9,5	5,7	3,5
P 90...-1000/1T	10	7,5	35,6	27,0	25,6	23,2	21,9	20,4	18,8	15,7	12,4	10,5
P 90...-1500/2-2RT	15	11	49,6	42,4	41,3	39,0	36,6	33,2	29,4	22,7	15,7	11,7
P 90...-2000/2T	20	15	69,2	56,6	54,5	50,5	47,3	44,3	41,6	36,3	30,5	27,3
P 90...-2500/3-2RT	25	18,5	80,4	70,8	69,1	65,6	62,2	57,7	53,0	44,3	34,9	30,4
P 90...-3000/3T	30	22	92,4	82,6	80,6	76,7	73,2	69,4	65,5	57,8	49,7	45,2
P 90...-4000/4-2RT	40	30	113,1	100,6	98,2	93,5	89,0	83,5	77,5	66,5	54,6	48,5
P 90...-4000/4T	40	30	125,6	113,0	110,4	105,2	100,6	95,7	90,7	80,8	70,2	64,4
P 90...-5000/5-2RT	50	37	144,1	128,4	125,4	119,3	113,7	106,9	99,7	86,1	71,6	64,1
P 90...-5000/5T	50	37	156,6	140,7	137,4	130,9	125,2	119,1	112,8	100,3	87,1	79,8
P 90...-6000/6-2RT	60	45	175,9	157,0	153,4	146,1	139,3	131,4	122,9	107,0	89,8	80,8
P 90...-6000/6T	60	45	188,4	169,5	165,6	157,8	150,9	143,6	136,2	121,3	105,5	96,7

# 35 HS/HX



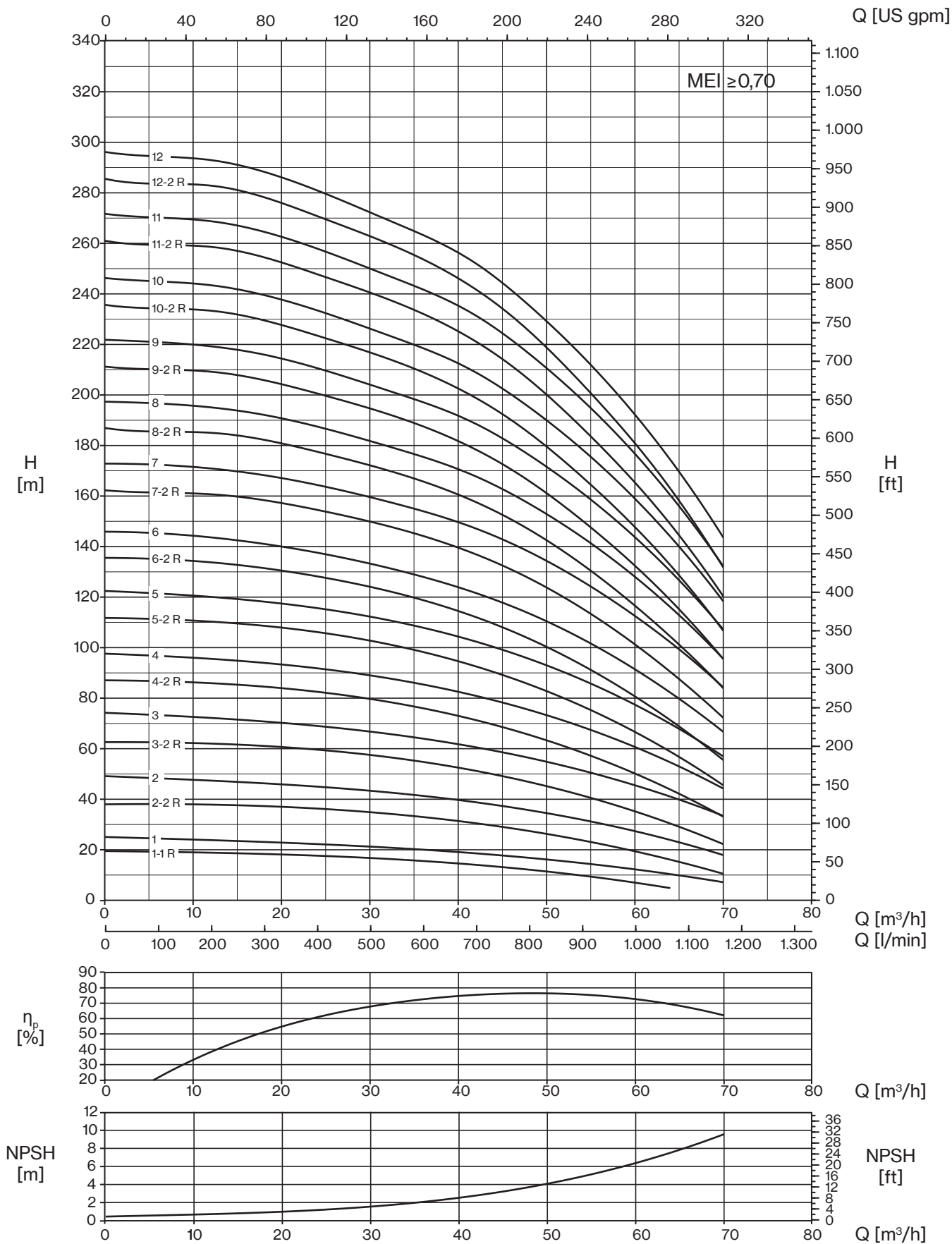


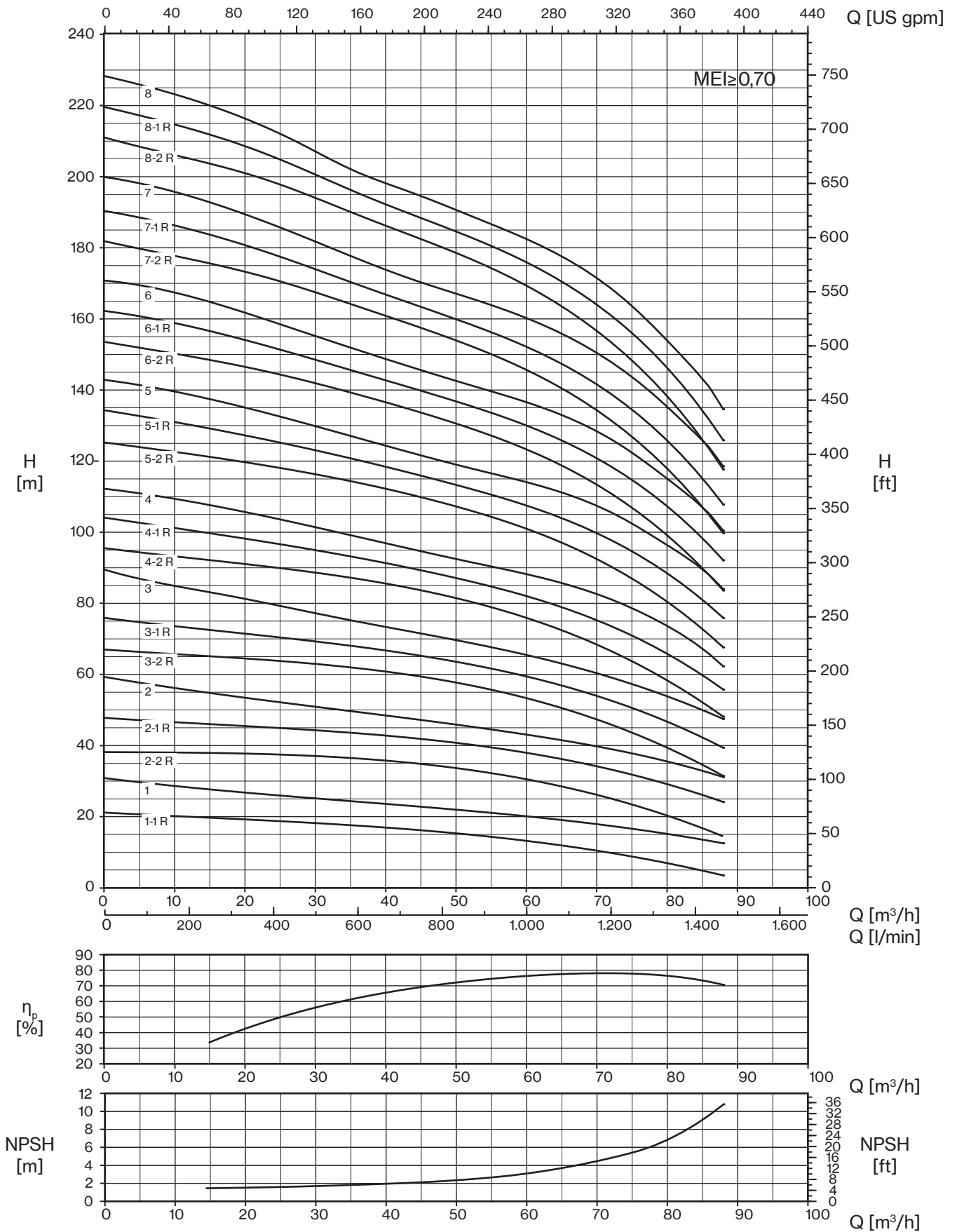
The hydraulic characteristics are guaranteed, according to ISO Standard 9906:2012, grade 3B



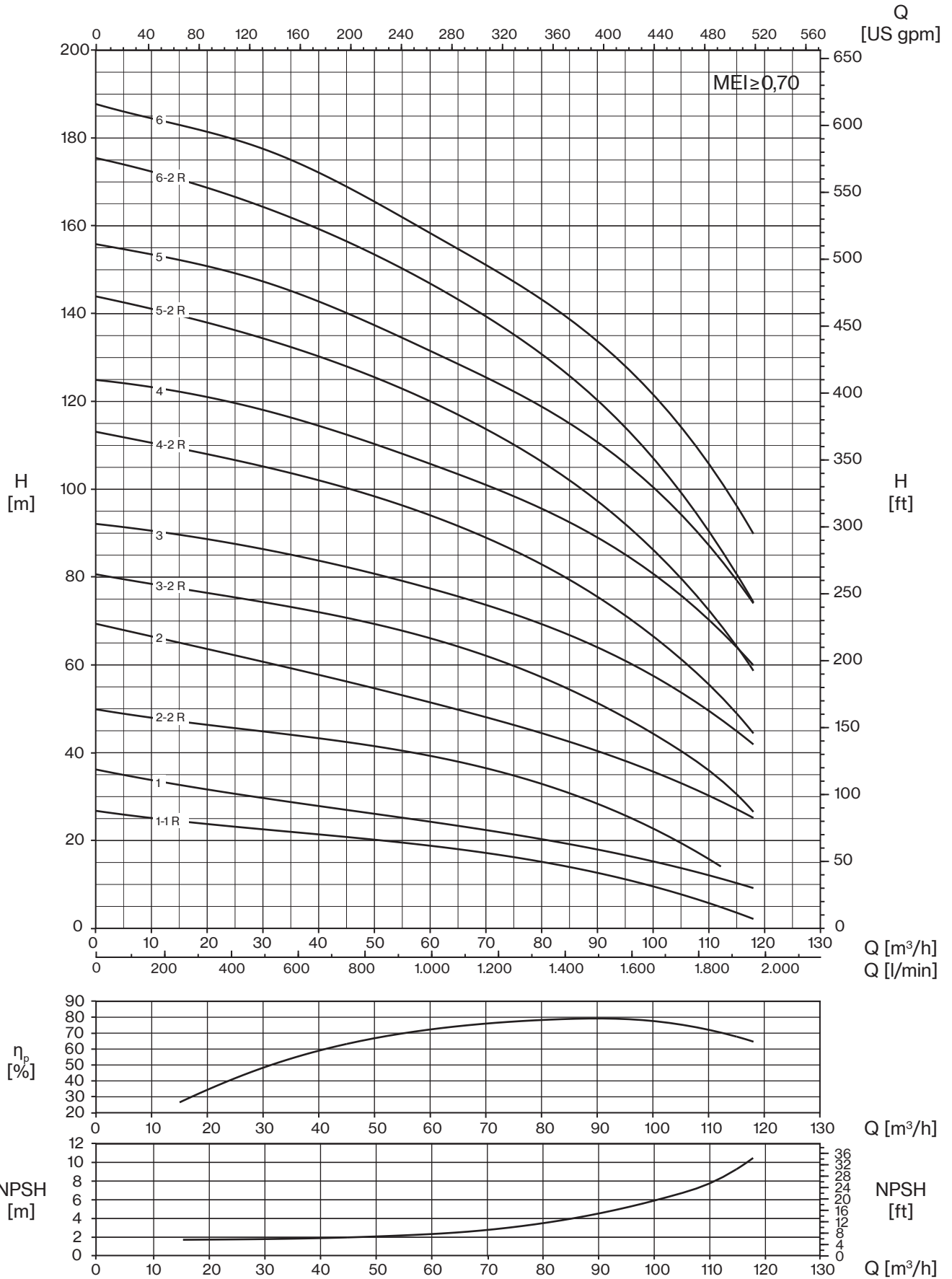


# 50 HS/HX

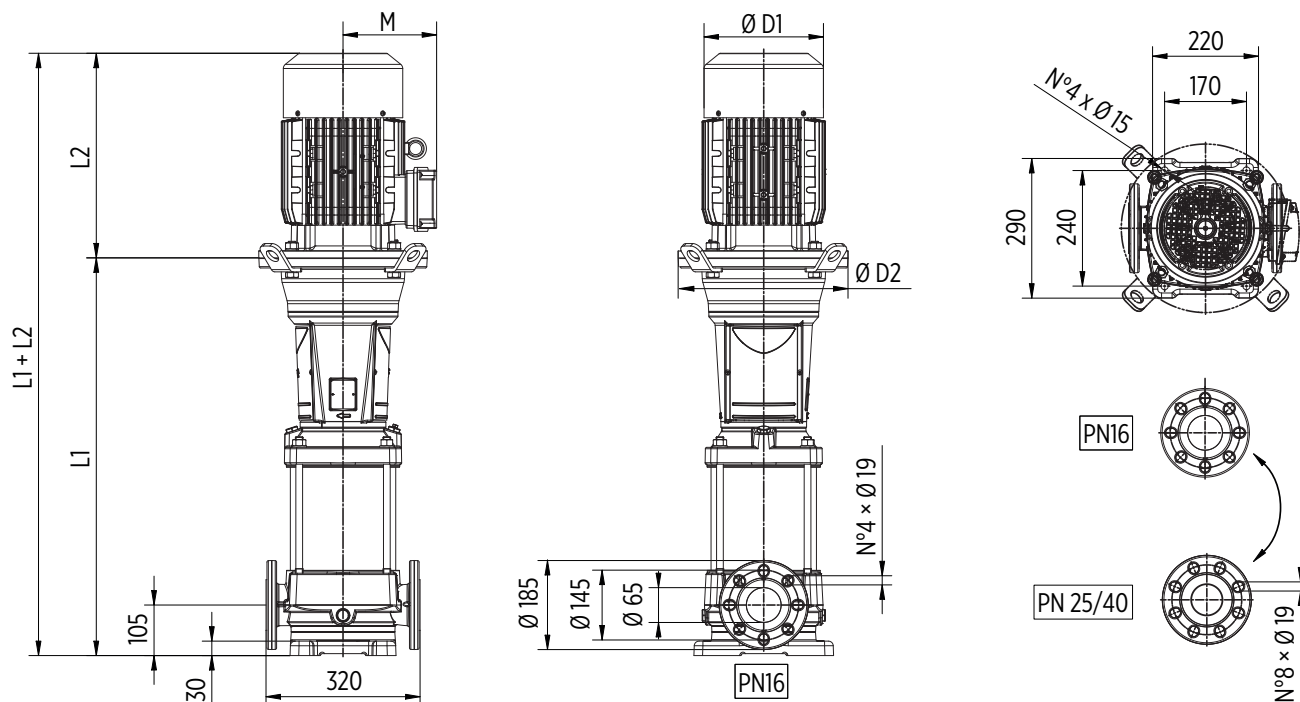




# 90 HS/HX



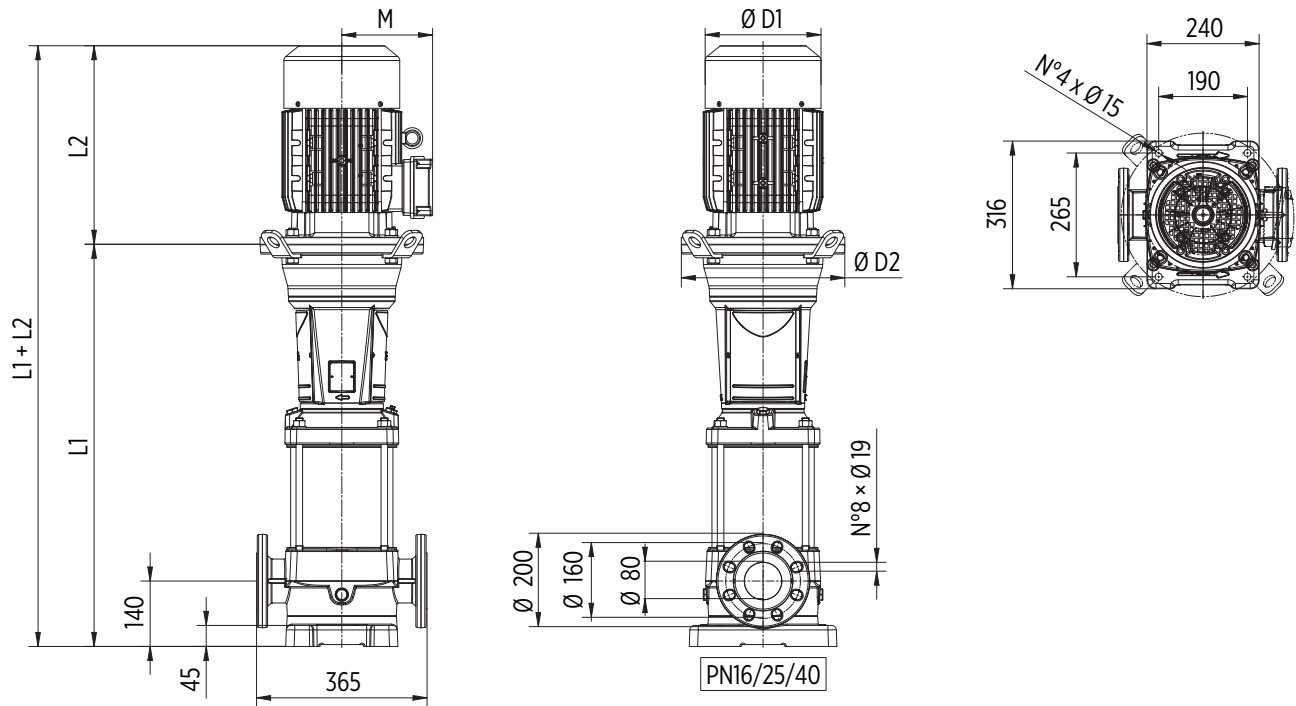
# 35 HS/HX



Round flanges on body type PN25/40: the pump is supplied without counterflanges (optional accessories, including bolts and joints)

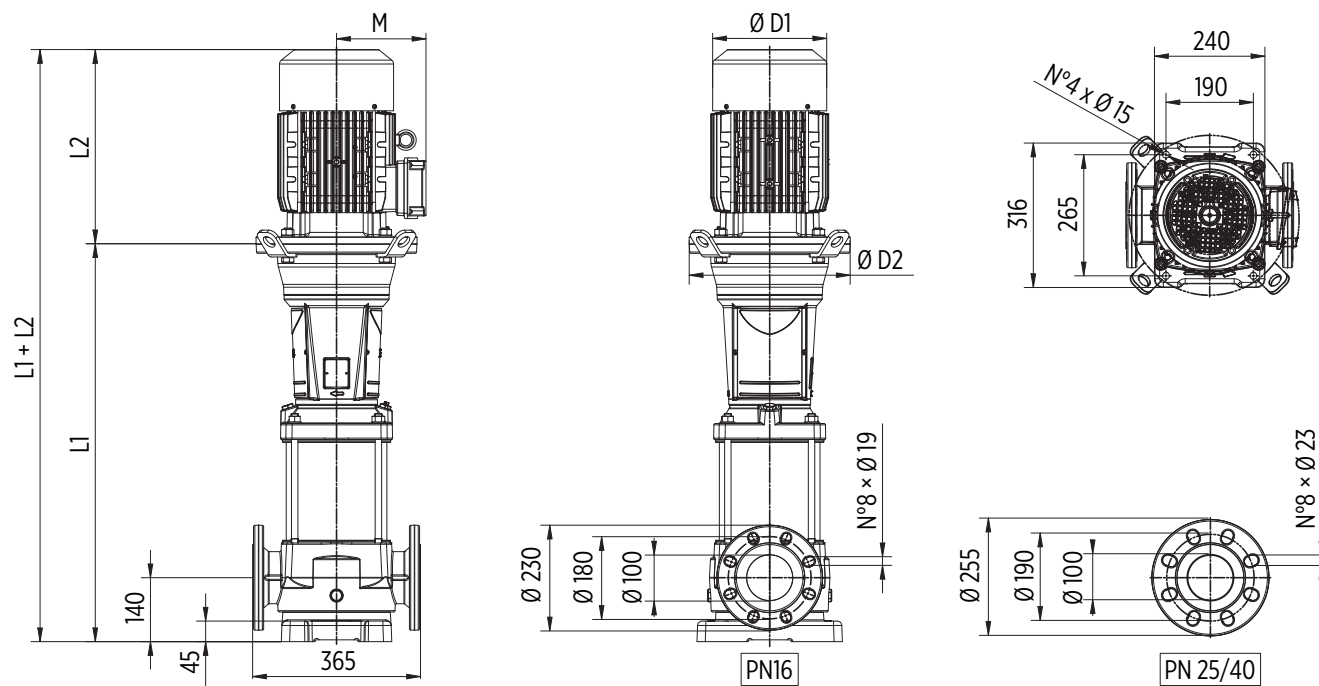
TYPE	MOTOR		DIMENSIONS (mm)						Kg		
	kW	Dim	L1	L2	M	D1	D2	L1+L2	Pump	Motor	Electric Pump
P 35...-300/1T	2,2	90	431	308	145	177	170	739	48,5	26	74,5
P 35...-550/2-2RT	4	112	513	350	177	220	170	863	52	43	95
P 35...-550/2-1RT	4	112	513	350	177	220	170	863	52	43	95
P 35...-750/2T	5,5	132	724	400	197	256	300	1124	72,5	66	138,5
P 35...-750/3-2RT	5,5	132	806	400	197	256	300	1206	76,5	66	142,5
P 35...-1000/3-1RT	7,5	132	806	400	197	256	300	1206	76,5	73	149,5
P 35...-1000/3T	7,5	132	806	400	197	256	300	1206	76,5	73	149,5
P 35...-1000/4-2RT	7,5	132	888	400	197	256	300	1288	80,5	73	153,5
P 35...-1500/4-1RT	11	160	908	503	255	315	350	1411	84	120	204
P 35...-1500/4T	11	160	908	503	255	315	350	1411	84	120	204
P 35...-1500/5-2RT	11	160	991	503	255	315	350	1494	88	120	208
P 35...-1500/5-1RT	11	160	991	503	255	315	350	1494	88	120	208
P 35...-2000/5T	15	160	991	503	255	315	350	1494	88	132	220
P 35...-2000/6-2RT	15	160	1073	503	255	315	350	1576	92	132	224
P 35...-2000/6-1RT	15	160	1073	503	255	315	350	1576	92	132	224
P 35...-2000/6T	15	160	1073	503	255	315	350	1576	92	132	224
P 35...-2000/7-2RT	15	160	1155	503	255	315	350	1658	96	132	228
P 35...-2000/7-1RT	15	160	1155	503	255	315	350	1658	96	132	228
P 35...-2500/7T	18,5	160	1155	598	252	315	350	1753	96	150	246
P 35...-2500/8-2RT	18,5	160	1237	598	252	315	350	1835	100	150	250
P 35...-2500/8-1RT	18,5	160	1237	598	252	315	350	1835	100	150	250
P 35...-2500/8T	18,5	160	1237	598	252	315	350	1835	100	150	250
P 35...-3000/9-2RT	22	180	1319	620	270	360	350	1939	103,5	205	308,5
P 35...-3000/9-1RT	22	180	1319	620	270	360	350	1939	103,5	205	308,5
P 35...-3000/9T	22	180	1319	620	270	360	350	1939	103,5	205	308,5
P 35...-3000/10-2RT	22	180	1401	620	270	360	350	2021	107,5	205	312,5
P 35...-3000/10-1RT	22	180	1401	620	270	360	350	2021	107,5	205	312,5
P 35...-4000/10T	30	200	1406	661	303	400	400	2067	111	250	361
P 35...-4000/11-2RT	30	200	1488	661	303	400	400	2149	115	250	365
P 35...-4000/11-1RT	30	200	1488	661	303	400	400	2149	115	250	365
P 35...-4000/11T	30	200	1488	661	303	400	400	2149	115	250	365
P 35...-4000/12-2RT	30	200	1570	661	303	400	400	2231	119	250	369
P 35...-4000/12-1RT	30	200	1570	661	303	400	400	2231	119	250	369
P 35...-4000/12T	30	200	1570	661	303	400	400	2231	119	250	369
P 35...-4000/13-2RT	30	200	1652	661	303	400	400	2313	122,5	250	372,5
P 35...-4000/13-1RT	30	200	1652	661	303	400	400	2313	122,5	250	372,5
P 35...-4000/13T	30	200	1652	661	303	400	400	2313	122,5	250	372,5

# 50 HS/HX



Round flanges on body type PN25/40: the pump is supplied without counterflanges (optional accessories, including bolts and joints)

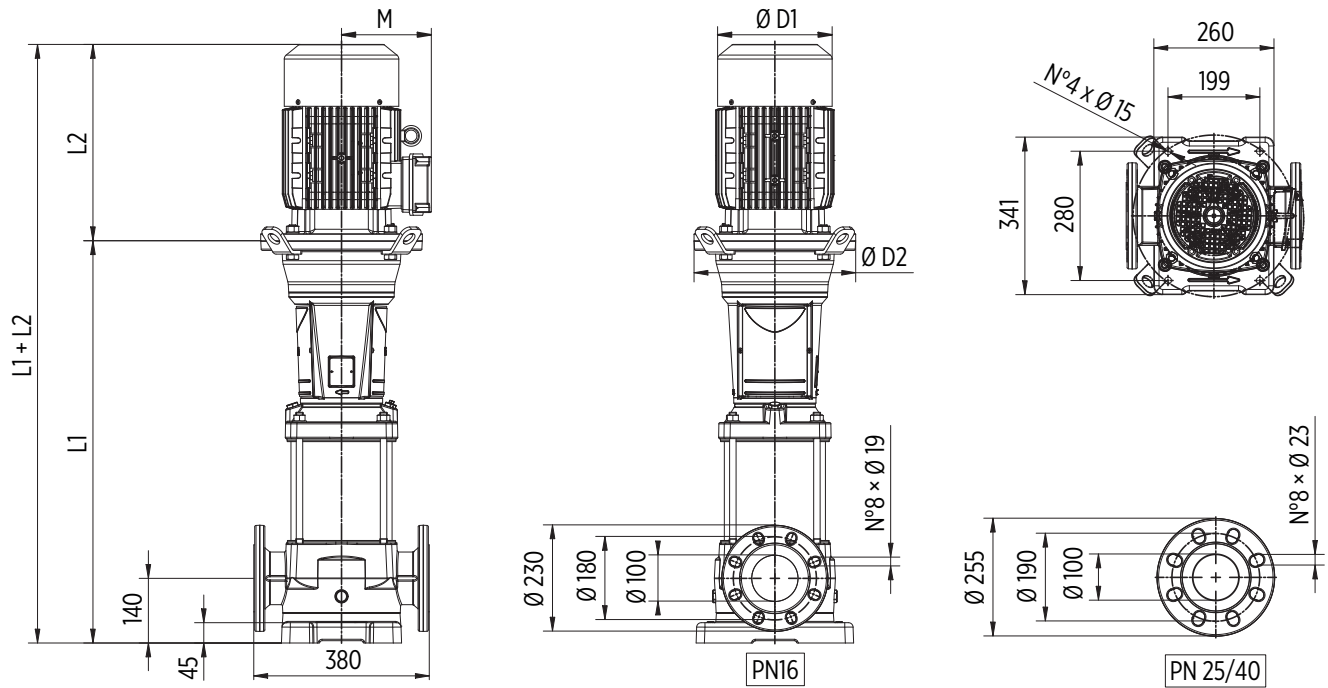
TYPE	MOTOR		DIMENSIONS (mm)						Kg		
	kW	Dim	L1	L2	M	D1	D2	L1+L2	Pump	Motor	Electric Pump
P 50...-400/1-1RT	3	100	466	333	157	205	170	799	54	35	89
P 50...-550/1T	4	112	466	350	177	220	170	816	54	43	97
P 50...-750/2-2RT	5,5	132	759	400	197	256	300	1159	78,5	66	144,5
P 50...-1000/2T	7,5	132	759	400	197	256	300	1159	78,5	73	151,5
P 50...-1500/3-2RT	11	160	861	503	255	315	350	1364	85,5	120	205,5
P 50...-1500/3T	11	160	861	503	255	315	350	1364	85,5	120	205,5
P 50...-2000/4-2RT	15	160	943	503	255	315	350	1446	89,5	132	221,5
P 50...-2000/4T	15	160	943	503	255	315	350	1446	89,5	132	221,5
P 50...-2500/5-2RT	18,5	160	1026	598	252	315	350	1624	93,5	150	243,5
P 50...-2500/5T	18,5	160	1026	598	252	315	350	1624	93,5	150	243,5
P 50...-3000/6-2RT	22	180	1108	620	270	360	350	1728	97,5	205	302,5
P 50...-3000/6T	22	180	1108	620	270	360	350	1728	97,5	205	302,5
P 50...-4000/7-2RT	30	200	1195	661	303	400	400	1856	104,5	250	354,5
P 50...-4000/7T	30	200	1195	661	303	400	400	1856	104,5	250	354,5
P 50...-4000/8-2RT	30	200	1277	661	303	400	400	1938	108,5	250	358,5
P 50...-4000/8T	30	200	1277	661	303	400	400	1938	108,5	250	358,5
P 50...-5000/9-2RT	37	200	1359	661	303	400	400	2020	112,5	270	382,5
P 50...-5000/9T	37	200	1359	661	303	400	400	2020	112,5	270	382,5
P 50...-5000/10-2RT	37	200	1441	661	303	400	400	2102	116,5	270	386,5
P 50...-5000/10T	37	200	1441	661	303	400	400	2102	116,5	270	386,5
P 50...-6000/11-2RT	45	225	1523	710	312	450	450	2233	122,5	315	437,5
P 50...-6000/11T	45	225	1523	710	312	450	450	2233	122,5	315	437,5
P 50...-6000/12-2RT	45	225	1605	710	312	450	450	2315	126,5	315	441,5
P 50...-6000/12T	45	225	1605	710	312	450	450	2315	126,5	315	441,5



Round flanges on body type PN25/40: the pump is supplied without counterflanges (optional accessories, including bolts and joints)

TYPE	MOTOR		DIMENSIONS (mm)						Kg		
	kW	Dim	L1	L2	M	D1	D2	L1+L2	Pump	Motor	Electric Pump
P 75...-550/1-1RT	4	112	526	350	177	220	170	876	60	43	103
P 75...-750/1T	5,5	132	737	400	197	256	300	1137	80,5	66	146,5
P 75...-1000/2-2RT	7,5	132	829	400	197	256	300	1229	85	73	158
P 75...-1500/2-1RT	11	160	849	503	255	315	350	1352	88,5	120	208,5
P 75...-1500/2T	11	160	849	503	255	315	350	1352	88,5	120	208,5
P 75...-2000/3-2RT	15	160	941	503	255	315	350	1444	93	132	225
P 75...-2000/3-1RT	15	160	941	503	255	315	350	1444	93	132	225
P 75...-2500/3T	18,5	160	941	598	252	315	350	1539	93	150	243
P 75...-2500/4-2RT	18,5	160	1033	598	252	315	350	1631	97,5	150	247,5
P 75...-3000/4-1RT	22	180	1033	620	270	360	350	1653	97	205	302
P 75...-3000/4T	22	180	1033	620	270	360	350	1653	97	205	302
P 75...-4000/5-2RT	30	200	1131	661	303	400	400	1792	105	250	355
P 75...-4000/5-1RT	30	200	1131	661	303	400	400	1792	105	250	355
P 75...-4000/5T	30	200	1131	661	303	400	400	1792	105	250	355
P 75...-4000/6-2RT	30	200	1223	661	303	400	400	1884	109,5	250	359,5
P 75...-5000/6-1RT	37	200	1223	661	303	400	400	1884	109,5	270	379,5
P 75...-5000/6T	37	200	1223	661	303	400	400	1884	109,5	270	379,5
P 75...-5000/7-2RT	37	200	1315	661	303	400	400	1976	113,5	270	383,5
P 75...-5000/7-1RT	37	200	1315	661	303	400	400	1976	113,5	270	383,5
P 75...-6000/7T	45	225	1315	710	312	450	450	2025	116	315	431
P 75...-6000/8-2RT	45	225	1407	710	312	450	450	2117	120,5	315	435,5
P 75...-6000/8-1RT	45	225	1407	710	312	450	450	2117	120,5	315	435,5
P 75...-6000/8T	45	225	1407	710	312	450	450	2117	120,5	315	435,5

# 90 HS/HX





Round flanges on body type PN25/40: the pump is supplied without counterflanges (optional accessories, including bolts and joints)

TYPE	MOTOR		DIMENSIONS (mm)						Kg		
	kW	Dim	L1	L2	M	D1	D2	L1+L2	Pump	Motor	Electric Pump
P 90...-750/1-1RT	5,5	132	737	400	197	256	300	1137	82	66	148
P 90...-1000/1T	7,5	132	737	400	197	256	300	1137	82	73	155
P 90...-1500/2-2RT	11	160	849	503	255	315	350	1352	89	120	209
P 90...-2000/2T	15	160	849	503	255	315	350	1352	89	132	221
P 90...-2500/3-2RT	18,5	160	941	598	252	315	350	1539	93	150	243
P 90...-3000/3T	22	180	941	620	270	360	350	1561	92,5	205	297,5
P 90...-4000/4-2RT	30	200	1038	661	303	400	400	1699	99,5	250	349,5
P 90...-4000/4T	30	200	1038	661	303	400	400	1699	99,5	250	349,5
P 90...-5000/5-2RT	37	200	1131	661	303	400	400	1792	103	270	373
P 90...-5000/5T	37	200	1131	661	303	400	400	1792	103	270	373
P 90...-6000/6-2RT	45	225	1223	710	312	450	450	1933	109	315	424
P 90...-6000/6T	45	225	1223	710	312	450	450	1933	109	315	424



# PLUS HS-HX Serie-Mechanical seal and bearings

CARTRIDGE MECHANICAL SEAL	PUMP MODEL	SHAFT		STANDARD MATERIAL	OPTIONAL		
					V	2	2V
	P18-100/1T, P18-200/2T, P18-300/3T, P18-400/4T, P18-550/5T, P18-750/6T, P18-750/7T, P18-1000/8T, P18-1000/9T, P18-1500/10T, P18-1500/11T, P18-1500/12T, P18-1500/13T, P18-1500/14T, P18-2000/15T, P18-2000/16T, P18-2000/17T, P22-150/1T, P22-300/2T, P22-400/3T, P22-550/4T, P22-750/5T, P22-1000/6T, P22-1000/7T, P22-1500/8T, P22-1500/9T, P22-1500/10T, P22-2000/11T, P22-2000/12T, P22-2000/13T	16mm	Rotating face Stationary face Elastomer	SiC Graphite EPDM	SiC Graphite FKM	SiC SiC EPDM	SiC SiC FKM
	P35-300/1T, P35-550/2-2RT, P35-550/2-1RT, P35-750/2T, P35-750/3-2RT, P35-1000/3-1RT, P35-1000/3T, P35-1000/4-2RT, P35-1500/4-1RT, P35-1500/4T, P35-1500/5-2RT, P35-1500/5-1RT, P35-2000/5T, P35-2000/6-2RT, P35-2000/6-1RT, P35-2000/6T, P35-2000/7-2RT, P35-2000/7-1RT, P35-2500/7T, P35-2500/8-2RT, P35-2500/8-1RT, P35-2500/8T, P35-3000/9-2RT, P35-3000/9-1RT, P35-3000/9T, P35-3000/10-2RT, P35-3000/10-1RT, P35-4000/10T, P35-4000/11-2RT, P35-4000/11-1RT, P35-4000/11T, P35-4000/12-2RT, P35-4000/12-1RT, P35-4000/12T, P35-4000/13-2RT, P35-4000/13-1RT, P35-4000/13T, P50-400/1-1RT, P50-550/1T, P50-750/2-2RT, P50-1000/2T, P50-1500/3-2RT, P50-1500/3T, P50-2000/4-2RT, P50-2000/4T, P50-2500/5-2RT, P50-2500/5T, P50-3000/6-2RT, P50-3000/6T, P50-4000/7-2RT, P50-4000/7T, P50-4000/8-2RT, P50-4000/8T, P50-5000/9-2RT, P50-5000/9T, P50-5000/10-2RT, P50-5000/10T, P50-6000/11-2RT, P50-6000/11T, P50-6000/12-2RT, P50-6000/12T, P75-550/1-1RT, P75-750/1T, P75-1000/2-2RT, P75-1500/2-1RT, P75-1500/2T, P75-2000/3-2RT, P75-2000/3-1RT, P75-2500/3T, P75-2500/4-2RT, P75-3000/4-1RT, P75-3000/4T, P75-4000/5-2RT, P75-4000/5-1RT, P75-4000/5T, P75-4000/6-2RT, P75-5000/6-1RT, P75-5000/6T, P75-5000/7-2RT, P75-5000/7-1RT, P75-6000/7T, P75-6000/8-2RT, P75-6000/8-1RT, P75-6000/8T, P90-750/1-1RT, P90-1000/1T, P90-1500/2-2RT, P90-2000/2T, P90-2500/3-2RT, P90-3000/3T, P90-4000/4-2RT, P90-4000/4T, P90-5000/5-2RT, P90-5000/5T, P90-6000/6-2RT, P90-6000/6T	22mm / Balanced seal	Rotating face Stationary face Elastomer	SiC Graphite EPDM	SiC Graphite FKM	SiC SiC EPDM	SiC SiC FKM

BEARINGS	PUMP MODEL	PUMP THRUST BEARING		MOTOR BEARING	
	P18-100/1T, P22-150/1T	-	-	6204-ZZ C3	6204-ZZ C3
	P18-200/2T, P18-300/3T, P22-300/2T, P35-300/1T	-	-	6205-ZZ C3	6205-ZZ C3
	P18-400/4T, P18-550/5T, P22-400/3T, P22-550/4T, P35-550/2-2RT, P35-550/2-1RT, P50-400/1-1RT, P50-550/1T, P75-550/1-1RT	-	-	6206-ZZ C3	6206-ZZ C3
	P18-750/6T, P18-750/7T, P18-1000/8T, P18-1000/9T, P22-750/5T, P22-1000/6T, P22-1000/7T, P35-750/2T, P35-750/3-2RT, P35-1000/3-1RT, P35-1000/3T, P35-1000/4-2RT, P50-750/2-2RT, P50-1000/2T, P75-750/1T, P75-1000/2-2RT, P90-750/1-1RT, P90-1000/1T			6208-ZZ C3	6208-ZZ C3
	P18-1500/10T, P18-1500/11T, P18-1500/12T, P18-1500/13T, P18-1500/14T, P18-2000/15T, P18-2000/16T, P18-2000/17T, P22-1500/8T, P22-1500/9T, P22-1500/10T, P22-2000/11T, P22-2000/12T, P22-2000/13T, P22-2000/14T, P22-2500/15T, P22-2500/16T, P22-2500/17T, P35-1500/4-1RT, P35-1500/4T, P35-1500/5-2RT, P35-1500/5-1RT, P50-1500/3-2RT, P50-1500/3T, P75-1500/2-1RT, P75-1500/2T, P90-1500/2-2RT	6212 ZZ	-		
	P35-2000/5T, P35-2000/6-2RT, P35-2000/6-1RT, P35-2000/6T, P35-2000/7-2RT, P35-2000/7-1RT, P35-2500/7T, P35-2500/8-2RT, P35-2500/8-1RT, P35-2500/8T, P50-2000/4-2RT, P50-2000/4T, P50-2500/5-2RT, P50-2500/5T, P75-2000/3-2RT, P75-2000/3-1RT, P75-2500/3T, P75-2500/4-2RT, P90-2000/2T, P90-2500/3-2RT	6212 ZZ	7212 BEP		
	P35-3000/9-2RT, P35-3000/9-1RT, P35-3000/9T, P35-3000/10-2RT, P35-3000/10-1RT, P50-3000/6-2RT, P50-3000/6T, P75-3000/4-1RT, P75-3000/4T, P90-3000/3T			6311-ZZ C3	6311-ZZ C3
	P35-4000/10T, P35-4000/11-2RT, P35-4000/11-1RT, P35-4000/11T, P35-4000/12-2RT, P35-4000/12-1RT, P35-4000/12T, P35-4000/13-2RT, P35-4000/13-1RT, P35-4000/13T, P50-4000/7-2RT, P50-4000/7T, P50-4000/8-2RT, P50-4000/8T, P50-5000/9-2RT, P50-5000/9T, P50-5000/10-2RT, P50-5000/10T, P75-4000/5-2RT, P75-4000/5-1RT, P75-4000/5T, P75-4000/6-2RT, P75-5000/6-1RT, P75-5000/6T, P75-5000/7-2RT, P75-5000/7-1RT, P90-4000/4-2RT, P90-4000/4T, P90-5000/5-2RT, P90-5000/5T	6214 ZZ	7214 BEP	6312-ZZ C3	6312-ZZ C3
P50-6000/11-2RT, P50-6000/11T, P50-6000/12-2RT, P50-6000/12T, P75-6000/7T, P75-6000/8-2RT, P75-6000/8-1RT, P75-6000/8T, P90-6000/6-2RT, P90-6000/6T			6313-ZZ C3	6313-ZZ C3	



# PLUS V/L/H + VSD

Vertical booster pump with variable speed drive

## PLUS V



EPIC / EPIC-A

IPFC

## PLUS L



EPIC / EPIC-A

IPFC

## PLUS H



EPIC / EPIC-A

IPFC

### DESCRIPTION

Vertical pump of PLUS series provided with variable speed drive EPIC, EPIC-A or IPFC. This booster pump assures a desired pressure regardless of changes on flow demand making it suitable for low or missing pressure in residential systems and industrial applications. It is required the installation of a membrane tank downstream the system.

### FEATURES

- EPIC, EPIC-A or IPFC variable speed drive
- Three-phase vertical pump of PLUS series
- Pressure sensor wired to the vsd
- Cable with plug for EPIC vsd only

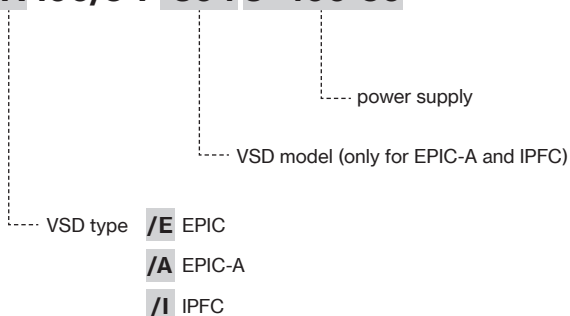
### FUNCTIONING

If the pressure in the network drops the pump will start and gradually speeds up to provide with the set pressure. When the water demand decreases, the pressure will rise causing the pump speed to slow down and eventually to stop the pump if demand ceases. The pump will remain on standby waiting to start at the next water demand.

### SELECTION

The next table shows the vertical PLUS pump models available for the assembly with EPIC, EPIC-A or IPFC. For pumps longer than 1.4m, IPFC is not assembled onto the motor fan cover but is supplied with a wall-mounting kit. Consult the catalog at the PLUS series for pump specifics and characteristic curves.

**P3SL /A 100/5 T -304 3x400-50**



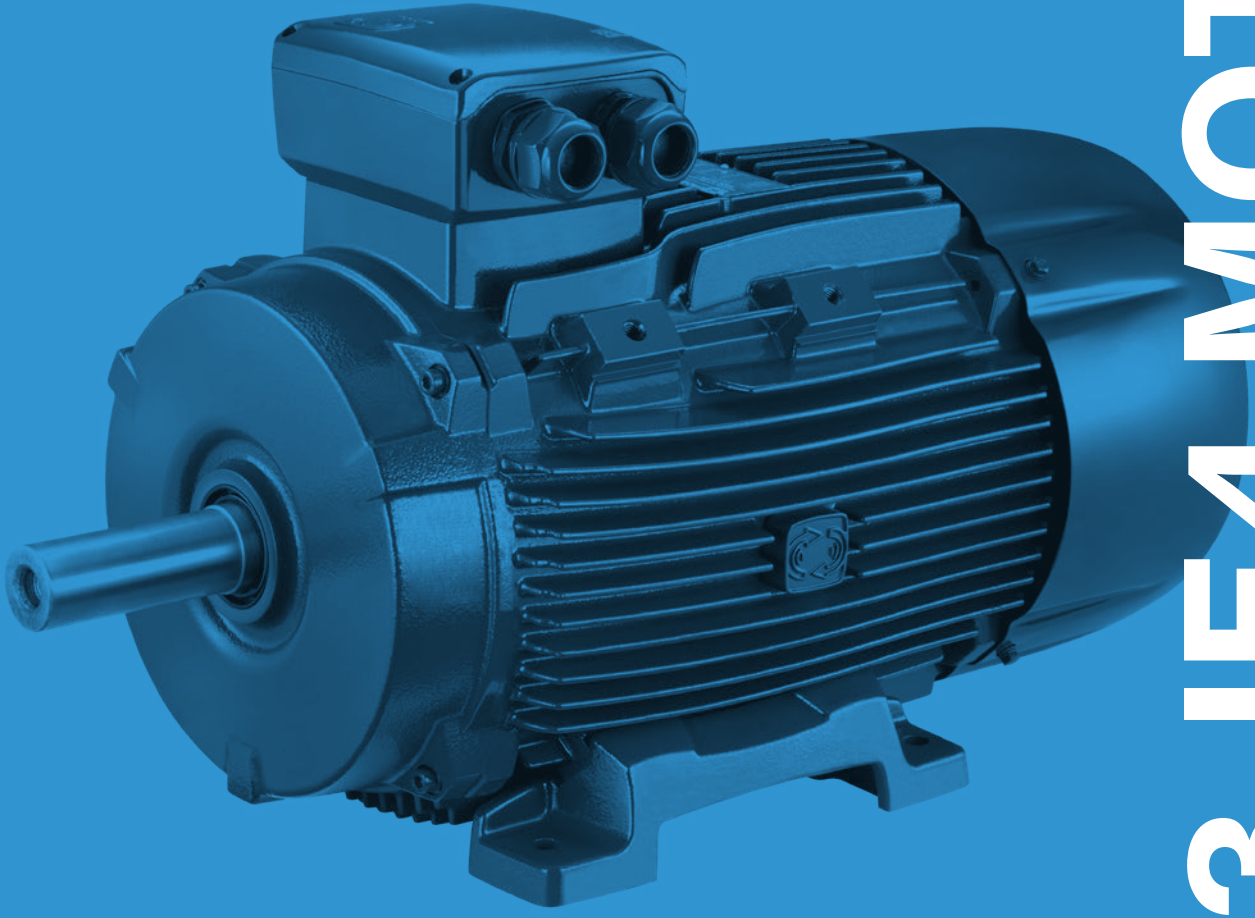
3- PUMP								VSD TYPE			
TYPE		VERSION						Power supply			
		V	SV	L	SL/SLX	LG	SLG/SLGX	1-230V		3-400V	
P 3	100/5T	■	■	■	■	-	-	EPIC	IPFC 109	EPIC-A 304	IPFC 306
	120/6T	■	■	■	■	-	-				
	150/7T	■	■	■	■	-	-				
	180/8T	■	■	■	■	-	-				
	200/9T	■	■	■	■	-	-				
	250/10T	■	■	■	■	-	-				
	280/11T	■	■	■	■	-	-				
	300/12T	■	■	■	■	-	-				
	350/14T	-	-	-	-	-	■				
	380/16T	-	-	-	-	-	■				
	400/18T	-	-	-	-	-	■				
450/20T	-	-	-	-	-	■					
P 5	120/4T	■	■	■	■	-	-	EPIC	IPFC 109	EPIC-A 304	IPFC 306
	150/5T	■	■	■	■	-	-				
	180/6T	■	■	■	■	-	-				
	200/7T	■	■	■	■	-	-				
	250/8T	■	■	■	■	-	-				
	280/9T	■	■	■	■	-	-				
	300/10T	■	■	■	■	-	-				
	350/11T	■	■	■	■	-	-				
	380/12T	■	■	■	■	-	-				
	400/14T	-	-	-	-	-	■				
	450/16T	-	-	-	-	-	■				
	550/18T	-	-	-	-	-	■				
	600/20T	-	-	-	-	-	■				
P 7	180/4T	■	■	■	■	-	-	EPIC	IPFC 109	EPIC-A 304	IPFC 306
	250/5T	■	■	■	■	-	-				
	300/6T	■	■	■	■	-	-				
	350/7T	■	■	■	■	-	-				
	400/8T	■	■	■	■	-	-				
	450/9T	■	■	■	■	-	-				
	550/10T	■	■	■	■	-	-				
	750/12T	-	-	-	-	-	■				
	800/14T	-	-	-	-	-	■				
	900/16T	-	-	-	-	-	■				
	950/18T	-	-	-	-	-	■				
	1000/20T	-	-	-	-	-	■				
P 9	200/4T	■	■	■	■	-	-	EPIC	IPFC 109	EPIC-A 304	IPFC 306
	250/5T	■	■	■	■	-	-				
	300/6T	■	■	■	■	-	-				
	400/7T	■	■	■	■	-	-				
	450/8T	■	■	■	■	-	-				
	500/9T	■	■	■	■	-	-				
	550/10T	■	-	■	-	-	-				
	750/12T	-	-	-	-	-	■				
	800/14T	-	-	-	-	-	■				
	900/16T	-	-	-	-	-	■				
	950/18T	-	-	-	-	-	■				
	1000/20T	-	-	-	-	-	■				

# PLUS+VSD

		3- PUMP							VSD TYPE		
TYPE		VERSION							Power supply		
		V	SV	L	SL/SLX	LG	HS	HX	1-230V	3~400V	
P 18	100/1T	-	-	-	-	-	-	■	IPFC 109	EPIC-A 304	IPFC 306
	200/2T	-	-	-	-	-	-	■			
	300/3T	-	-	-	-	-	-	■			
	250/3T	■	■	■	■	-	-	-	IPFC 114	EPIC-A 306	
	400/4T	-	-	-	-	-	-	■			
	450/5T	■	■	■	■	-	-	-	-	-	
	550/5T	-	-	-	-	-	-	■			
	550/6T	■	■	■	■	-	-	-			
	750/6T	-	-	-	-	-	-	■			IPFC 311
	750/7T	-	-	-	-	-	-	■			
	750/8T	■	■	■	■	-	-	-			IPFC 314
	1000/8T	-	-	-	-	-	-	■			
	1000/9T	-	-	-	-	-	-	■			IPFC 318
	900/9T	■	■	■	■	-	-	-			
	920/10T	-	-	-	-	■	-	-			
	1000/11T	-	-	-	-	■	-	-			
	1500/10T	-	-	-	-	-	-	■			
	1500/11T	-	-	-	-	-	-	■			
	1500/12T	-	-	-	-	-	-	■			
	1500/13T	-	-	-	-	-	-	■			
1500/14T	-	-	-	-	-	-	■				
2000/15T	-	-	-	-	-	-	■				
2000/16T	-	-	-	-	-	-	■				
2000/17T	-	-	-	-	-	-	■	IPFC 325			
P 22	200/1T	-	-	-	-	-	-	■	IPFC 109	-	IPFC 306
	300/2T	-	-	-	-	-	-	■			
	400/3T	-	-	-	-	-	-	■	IPFC 114		IPFC 309
	550/4T	-	-	-	-	-	-	■			
	750/5T	-	-	-	-	-	-	■	IPFC 311		
	1000/6T	-	-	-	-	-	-	■			
	1000/7T	-	-	-	-	-	-	■	IPFC 314		
	1500/8T	-	-	-	-	-	-	■			
	1500/9T	-	-	-	-	-	-	■	IPFC 318		
	1500/10T	-	-	-	-	-	-	■			
	2000/11T	-	-	-	-	-	-	■	IPFC 325		
	2000/12T	-	-	-	-	-	-	■			
	2000/13T	-	-	-	-	-	-	■			
	2000/14T	-	-	-	-	-	-	■			
								IPFC 330			

		3- PUMP							VSD TYPE		
TYPE		VERSION							Power supply		
		V	SV	L	SL/SLX	LG	HS	HX	1-230V	3-400V	
P 35	300/1T	-	-	-	-	-	■	■	-	IPFC 114	IPFC 306
	550/2-2RT	-	-	-	-	-	■	■		IPFC 309	
	550/2-1RT	-	-	-	-	-	■	■		IPFC 311	
	750/2T	-	-	-	-	-	■	■		IPFC 314	
	750/3-2RT	-	-	-	-	-	■	■		IPFC 318	
	1000/3-1RT	-	-	-	-	-	■	■		IPFC 325	
	1000/3T	-	-	-	-	-	■	■			
	1000/4-2RT	-	-	-	-	-	■	■		IPFC 330	
	1500/4-1RT	-	-	-	-	-	■	■			
	1500/4T	-	-	-	-	-	■	■			
	1500/5-2RT	-	-	-	-	-	■	■			
	1500/5-1RT	-	-	-	-	-	■	■			
	2000/5T	-	-	-	-	-	■	■			
	2000/6-2RT	-	-	-	-	-	■	■			
	2000/6-1RT	-	-	-	-	-	■	■			
	2000/6T	-	-	-	-	-	■	■			
2000/7-2RT	-	-	-	-	-	■	■				
2000/7-1RT	-	-	-	-	-	■	■				
P 50	400/1-1RT	-	-	-	-	-	■	■	-	IPFC 114	IPFC 306
	550/1T	-	-	-	-	-	■	■		IPFC 309	
	750/2-2RT	-	-	-	-	-	■	■		IPFC 311	
	1000/2T	-	-	-	-	-	■	■		IPFC 318	
	1500/3-2RT	-	-	-	-	-	■	■		IPFC 325	
	1500/3T	-	-	-	-	-	■	■		IPFC 330	
	2000/4-2RT	-	-	-	-	-	■	■			
	2000/4T	-	-	-	-	-	■	■			
	2500/5-2RT	-	-	-	-	-	■	■			
	2500/5T	-	-	-	-	-	■	■			
	3000/6-2RT	-	-	-	-	-	■	■			
	3000/6T	-	-	-	-	-	■	■			
	4000/7-2RT	-	-	-	-	-	■	■			
P 75	550/1-1RT	-	-	-	-	-	■	■	-		IPFC 309
	750/1T	-	-	-	-	-	■	■		IPFC 311	
	1000/2-2RT	-	-	-	-	-	■	■		IPFC 318	
	1500/2-1RT	-	-	-	-	-	■	■		IPFC 325	
	1500/2T	-	-	-	-	-	■	■		IPFC 330	
	2000/3-2RT	-	-	-	-	-	■	■			
	2000/3-1RT	-	-	-	-	-	■	■			
	2500/3T	-	-	-	-	-	■	■			
	2500/4-2RT	-	-	-	-	-	■	■			
	3000/4-1RT	-	-	-	-	-	■	■			
	3000/4T	-	-	-	-	-	■	■			
4000/5-2RT	-	-	-	-	-	■	■				
P 90	750/1-1RT	-	-	-	-	-	■	■	-		IPFC 311
	1000/1T	-	-	-	-	-	■	■		IPFC 318	
	1500/2-2RT	-	-	-	-	-	■	■		IPFC 325	
	2000/2T	-	-	-	-	-	■	■		IPFC 330	





# IE3-IE4 MOTORS

# 80-132 (0,75 kW-7,5 kW)





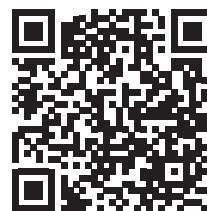
Construction features	
<b>Frame</b>	aluminum alloy
<b>Multiple voltage/ Multi-frequency</b>	50/60 Hz
<b>Duty service</b>	S1 continuous
<b>Winding</b>	tropicalized suitable for inverter power supply
<b>ATEX (dust and gas)</b>	version available: II 3G Ex nA IIB T4 Gc II 3D Ex tc IIIB T125°C Dc

Motor	
<b>Motor</b>	closed and externally ventilated
<b>Insulation class</b>	F (on request H)
<b>Protection degree</b>	IPX5 (on request IP56, IP66, IP67)
<b>Efficiency class</b>	IE3-IE4, IEC60034-30-1

## VOLTAGES AND FREQUENCIES TOLERANCE

Data at 400V - 50Hz

SIZE	Hz	V	
			
80-112	50 ±5%	230	400
		220	380
		240	415



# 160-355 (11 kW-315 kW)



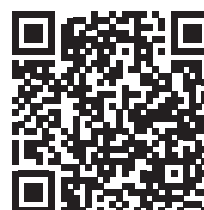
Construction features	
<b>Frame</b>	cast iron
<b>Multiple voltage/ Multi-frequency</b>	50/60 Hz
<b>Duty service</b>	S1 continuous
<b>Winding</b>	tropicalized and reinforced insulation for inverter power supply ( $P > 110\text{kW}$ we recommend to order the motor with insulated bearings option). Windings with PTC (n° 3) thermistor as standard.
<b>ATEX (dust and gas)</b>	version available: II 3G Ex nA IIB T4 Gc II 3D Ex tc IIIB T125°C Dc

Motor	
<b>Motor</b>	closed and externally ventilated
<b>Insulation class</b>	F (on request H)
<b>Protection degree</b>	IPX5 (on request IP56, IP66, IP67)
<b>Efficiency class</b>	IE3-IE4, IEC60034-30-1

## VOLTAGES AND FREQUENCIES TOLERANCE

Data at 400V - 50Hz

SIZE	Hz	V	
132-355	50 ±5%	400	690
		380	660
		415	720





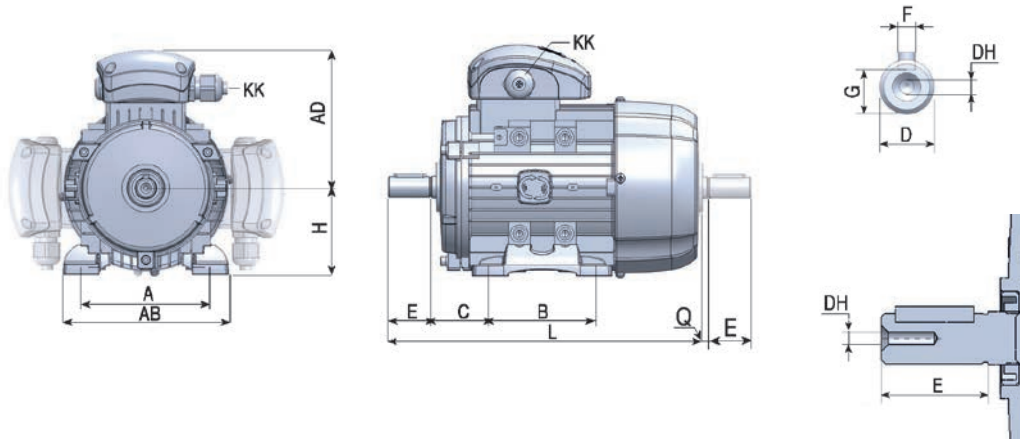
TYPE	kW	HP	rpm	In (A)	Is (A)	Is In	Cn (Nm)	Cs (Nm)	Cs Cn	Cmax (Nm)	Cmax Cn
80A-2	0,75	1	2892	1,74	11,84	6,8	2,48	8,60	3,5	9,18	3,7
80B-2	1,1	1,5	2885	2,26	16,74	7,4	3,64	10,90	3,0	12,74	3,5
90S-2	1,5	2	2902	3,26	25,07	7,7	4,93	19,12	3,9	18,74	3,8
90L-2	2,2	3	2918	5,02	38,59	7,7	7,35	30,97	4,2	30,44	4,1
100L-2	3	4	2903	6,09	48,24	7,9	9,87	35,19	3,6	40,74	4,1
112M-2	4	5,5	2943	7,56	74,38	9,8	12,97	45,92	3,5	61,86	4,8
132SA-2	5,5	7,5	2940	10,14	70,59	7,0	17,87	37,70	2,1	35,79	2,0
132SB-2	7,5	10	2925	13,35	95,00	7,1	24,49	53,50	2,2	78,50	3,2
160MA-2	11	15	2937	19,72	123,05	6,2	35,77	73,32	2,1	100,15	2,8
160MB-2	15	20	2938	26,29	150,23	5,7	48,76	95,08	2,0	121,89	2,5
160L-2	18,5	25	2942	32,15	192,92	6,0	60,05	124,31	2,1	179,00	2,1
180M-2	22	30	2950	37,53	304,03	8,1	71,22	163,81	2,3	220,80	3,1
200LA-2	30	40	2940	51,51	386,34	7,5	97,45	224,13	2,3	223,37	2,3
200LB-2	37	50	2960	63,26	474,46	7,5	119,38	274,56	2,3	275,49	2,3
225M-2	45	60	2960	76,69	582,87	7,6	145,19	333,93	2,3	332,80	2,3
250M-2	55	75	2970	94,39	707,92	7,5	176,85	406,76	2,3	406,76	2,3
280S-2	75	100	2970	125,82	868,14	6,9	241,16	530,56	2,2	554,67	2,3
280M-2	90	125	2970	150,67	1069,73	7,1	289,39	636,67	2,2	665,61	2,3
315S-2	110	150	2970	183,76	1304,72	7,1	353,70	707,41	2,0	778,15	2,2
315MA-2	132	180	2970	220,06	1562,41	7,1	424,44	848,89	2,0	933,78	2,2
315LA-2	160	215	2970	263,53	1871,07	7,1	514,48	1028,96	2,0	1131,85	2,2
315LB-2	200	270	2970	328,73	2333,99	7,1	643,10	1286,20	2,0	1414,81	2,2
355M-2	250	335	2980	410,91	2917,49	7,1	801,17	1602,35	2,0	1762,58	2,2
355L-2	315	423	2980	517,75	3676,03	7,1	1009,48	2018,96	2,0	2220,86	2,2

TYPE	η%				Fatt. pot. cos φ			ΔT (°C)	LwA (dB)	J Kgm2	Kg
	100%	IE	75%	50%	100%	75%	50%				
80A-2	80,9	IE3	79,6	76,4	0,770	0,700	0,566	35	65	0,00158	17
80B-2	84,5	IE3	84,7	82,8	0,830	0,770	0,652	41	65	0,00185	18
90S-2	85,3	IE3	83,4	81,3	0,786	0,726	0,582	43	71	0,00383	23
90L-2	86,2	IE3	87,0	84,9	0,730	0,675	0,498	48	71	0,00726	26
100L-2	87,1	IE3	87,3	84,9	0,812	0,766	0,618	49	75	0,01439	35
112M-2	89,6	IE3	89,8	88,9	0,856	0,805	0,665	44	77	0,01663	43
132SA-2	91,0	IE3	89,7	87,4	0,860	0,840	0,761	48	78	0,03300	44,8
132SB-2	91,6	IE3	92,4	92,9	0,885	0,850	0,760	60	78	0,03960	73
160MA-2	91,4	IE3	91,2	89,7	0,881	0,864	0,812	49	81	0,04976	120
160MB-2	92,0	IE3	92,6	91,8	0,895	0,877	0,841	61	81	0,06587	132
160L-2	93,0	IE3	93,7	93,0	0,893	0,875	0,827	58	81	0,07260	150
180M-2	94,0	IE3	93,9	93,0	0,900	0,880	0,870	41	83	0,09900	205
200LA-2	93,4	IE3	94,4	90,7	0,900	0,881	0,820	65	84	0,16368	250
200LB-2	93,8	IE3	93,6	90,2	0,900	0,887	0,840	65	84	0,18348	270
225M-2	94,1	IE3	93,9	90,7	0,900	0,878	0,816	65	86	0,30756	315
250M-2	94,5	IE3	92,6	88,5	0,890	0,872	0,825	65	89	0,41184	420
280S-2	95,6	IE4	93,7	89,5	0,900	0,896	0,875	55	91	0,76428	550,8
280M-2	95,8	IE4	95,7	93,7	0,900	0,894	0,857	65	91	0,89100	625
315S-2	96,0	IE4	95,9	93,9	0,900	0,894	0,857	65	92	1,55760	968
315MA-2	96,2	IE4	96,2	94,2	0,900	0,894	0,857	65	92	2,40240	1100
315LA-2	96,3	IE4	96,2	94,2	0,910	0,904	0,867	65	92	2,74560	1160,5
315LB-2	96,5	IE4	96,5	94,5	0,910	0,904	0,867	65	92	3,14160	1221
355M-2	96,5	IE4	96,5	94,5	0,910	0,904	0,867	65	100	3,96000	2090
355L-2	96,5	IE4	96,5	94,5	0,910	0,904	0,867	65	100	4,62000	2530

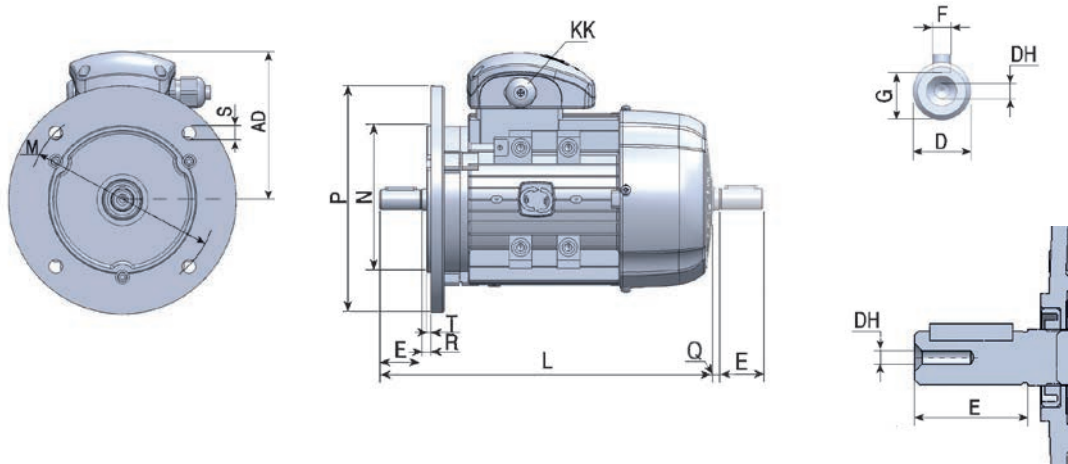
TYPE	kW	HP	rpm	In (A)	Is (A)	Is In	Cn (Nm)	Cs (Nm)	Cs Cn	Cmax (Nm)	Cmax Cn
80B-4	0,75	1	1426	1,87	11,24	6,0	5,01	15,52	3,1	15,41	3,1
90S-4	1,1	1,5	1436	2,61	16,60	6,4	7,36	24,26	3,3	24,70	3,4
90L-4	1,5	2	1427	3,59	24,34	6,8	10,03	41,06	4,1	38,49	3,8
100LA-4	2,2	3	1438	4,77	33,83	7,1	14,74	52,18	3,5	54,71	3,7
100LB-4	3	4	1447	6,48	49,52	7,6	19,76	69,03	3,5	77,85	3,9
112M-4	4	5,5	1460	8,79	62,51	7,1	26,17	83,57	3,2	108,56	4,1
132S-4	5,5	7,5	1454	10,64	68,01	6,4	36,12	75,86	2,1	101,15	2,8
132M-4	7,5	10	1460	14,39	94,37	6,6	49,06	91,80	1,9	132,46	2,7
160M-4	11	15	1468	20,76	121,31	5,8	71,56	121,50	1,7	193,21	2,7
160L-4	15	20	1460	28,19	140,97	5,0	98,12	166,60	1,7	255,10	2,6
180M-4	18,5	25	1477	33,53	206,45	6,2	120,94	202,50	1,7	384,23	3,2
180L-4	22	30	1470	39,62	261,96	6,6	142,93	235,19	1,6	401,22	2,8
200L-4	30	40	1480	53,48	385,07	7,2	193,58	425,88	2,2	445,24	2,3
225S-4	37	50	1480	65,37	490,30	7,5	238,75	525,25	2,2	549,13	2,3
225M-4	45	60	1480	77,39	588,17	7,6	290,37	638,82	2,2	667,85	2,3
250M-4	55	75	1480	93,89	713,58	7,6	354,90	780,78	2,2	816,27	2,3
280S-4	75	100	1480	126,70	874,24	6,9	483,95	1064,70	2,2	1113,09	2,3
280M-4	90	120	1485	153,61	1075,26	7,0	578,79	1273,33	2,2	1331,21	2,3
315S-4	110	150	1480	187,35	1292,74	6,9	709,80	1561,55	2,2	1632,53	2,3
315M-4	132	180	1480	224,59	1549,68	6,9	851,76	1873,86	2,2	1959,04	2,3
315LA-4	160	220	1480	271,67	1874,51	6,9	1032,43	2271,35	2,2	2374,59	2,3
315LB-4	200	270	1480	339,23	2340,72	6,9	1290,54	2839,19	2,2	2968,24	2,3
355M-4	250	335	1490	414,62	2860,88	6,9	1602,35	3525,17	2,2	3685,40	2,3
355L-4	315	423	1490	522,42	3604,71	6,9	2018,96	4441,71	2,2	4643,61	2,3

TYPE	η %				Fatt. pot. cos φ			ΔT (°C)	LwA (dB)	J Kgm2	Kg
	100%	IE	75%	50%	100%	75%	50%				
80B-4	83,1	IE3	82,6	81,6	0,690	0,619	0,531	46	56	0,00277	12
90S-4	84,8	IE3	84,9	79,3	0,723	0,609	0,510	36	61	0,00304	25
90L-4	85,3	IE3	85,1	83,0	0,708	0,592	0,483	41	61	0,00356	30
100LA-4	86,7	IE3	87,8	85,8	0,771	0,663	0,543	41	64	0,00713	36
100LB-4	89,0	IE3	89,4	86,8	0,745	0,648	0,519	46	64	0,00893	40
112M-4	89,1	IE3	89,2	87,2	0,736	0,674	0,505	46	77	0,01663	43
132S-4	89,9	IE3	92,1	92,4	0,830	0,770	0,675	61	71	0,02853	70
132M-4	90,5	IE3	90,8	89,9	0,831	0,790	0,699	46	71	0,03946	56,5
160M-4	91,8	IE3	91,7	90,4	0,833	0,790	0,675	52	73	0,08133	125
160L-4	92,3	IE3	93,1	92,3	0,832	0,780	0,680	61	75	0,12239	150
180M-4	92,6	IE3	92,1	90,2	0,870	0,817	0,724	40	76	0,18531	170,6
180L-4	93,2	IE3	91,7	91,0	0,860	0,832	0,761	59	76	0,21065	189,3
200L-4	93,6	IE3	93,8	92,8	0,865	0,818	0,767	80	79	0,34930	254,8
225S-4	93,9	IE3	92,7	92,0	0,870	0,839	0,776	75	81	0,54128	268,3
225M-4	94,3	IE3	93,3	92,8	0,890	0,872	0,807	80	81	0,62527	353
250M-4	95,0	IE3	94,2	93,5	0,890	0,862	0,800	75	83	0,87991	450
280S-4	96,0	IE4	94,5	92,0	0,890	0,863	0,843	70	86	1,71600	605
280M-4	96,1	IE4	94,4	92,9	0,880	0,872	0,838	65	86	1,96680	700
315S-4	96,3	IE4	94,7	93,2	0,880	0,872	0,838	65	87	4,13160	925
315M-4	96,4	IE4	94,8	93,3	0,880	0,872	0,838	55	87	4,81800	1180
315LA-4	96,6	IE4	95,0	93,5	0,880	0,872	0,838	75	87	5,42784	1160,5
315LB-4	96,7	IE4	95,0	93,4	0,880	0,872	0,838	70	87	6,34920	1240,8
355M-4	96,7	IE4	95,1	93,5	0,900	0,892	0,857	75	94	8,61960	1870
355L-4	96,7	IE4	95,0	93,4	0,900	0,892	0,857	70	94	10,87680	2090

# B3

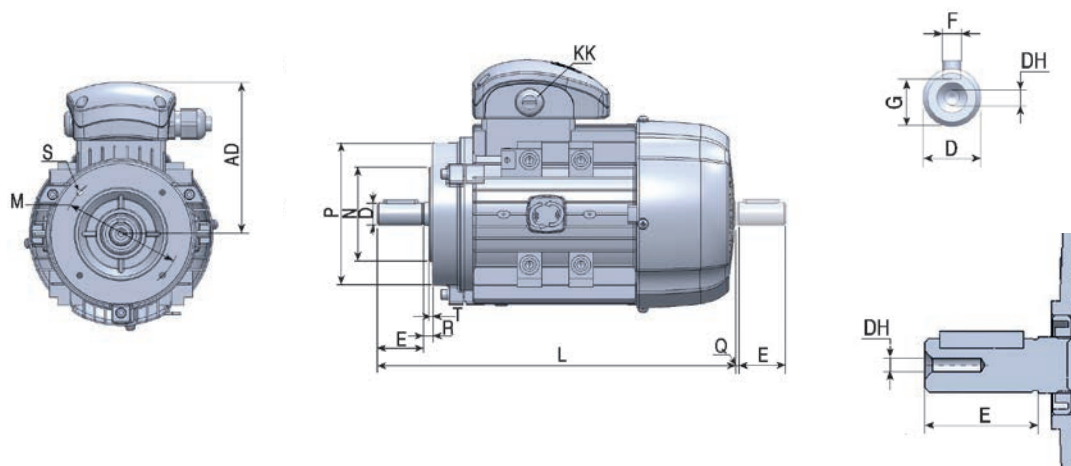


DIMENSIONS (mm)																
TYPE	POLES	AD	H	KK	L	D	DH	E	Q	F	G	B3				
												A	AB	B	C	K
80	2-8	130	80	M20	283	19	M6×16	40	3	6	15,5	125	157	100	50	10
90S	2-8	145	90	M20	330	24	M8×19	50	5	8	20	140	173	100	56	10
90L	2-8	145	90	M20	358	24	M8×19	50	5	8	20	140	173	125	56	10
100	2-8	157	100	M20	393	28	M10×22	60	5	8	24	160	196	140	63	12
112M	2-8	177	112	M25	410	28	M10×22	60	5	8	24	190	227	140	70	12
132S	2-8	197	132	M32	480	38	M12×28	80	5	10	33	216	262	140	89	12
132M	2-8	197	132	M32	516	38	M12×28	80	5	10	33	216	262	178	89	12
160M	2-8	255	160	2×M40	613	42	M16×36	110	5	12	37	254	320	210	108	15
160L	2-8	252	160	2×M40	708	42	M16×36	110	5	12	37	254	320	254	108	15
180M	2-8	270	180	2×M40	730	48	M16×36	110	8	14	42,5	279	355	241	121	15
180L	2-8	270	180	2×M40	780	48	M16×36	110	8	14	42,5	279	355	279	121	15
200L	2-8	303	200	2×M50	771	55	M20×42	110	12	16	49	318	395	305	133	19
225S	2-8	312	225	2×M50	815	60	M20×42	140	12	18	53	356	435	286	149	19
225M	2	312	225	2×M50	820	55	M20×42	110	12	16	49	356	435	286/311	149	19
225M	4-8	312	225	2×M50	850	60	M20×42	140	12	18	53	356	435	286/311	149	19
250M	2	355	250	2×M63	910	60	M20×42	140	12	18	53	406	490	349	168	24
250M	4-8	355	250	2×M63	910	65	M20×42	140	12	18	58	406	490	349	168	24
280S	2	398	280	2×M63	985	65	M20×42	140	12	18	58	457	550	368	190	24
280S	4-8	398	280	2×M63	985	75	M20×42	140	12	20	67,5	457	550	368	190	24
280M	2	398	280	2×M63	1035	65	M20×42	140	12	18	58	457	550	368/419	190	24
280M	4-8	398	280	2×M63	1035	75	M20×42	140	12	20	67,5	457	550	368/419	190	24
315S	2	540	315	2×M63	1160	65	M20×42	140	15	18	58	508	630	406	216	28
315S	4-8	540	315	2×M63	1270	80	M20×42	170	15	22	71	508	630	406	216	28
315M	2	540	315	2×M63	1290	65	M20×42	140	15	18	58	508	630	457	216	28
315M	4-8	540	315	2×M63	1325	80	M20×42	170	15	22	71	508	630	457	216	28
315L	2	540	315	2×M63	1320	65	M20×42	140	15	18	58	508	630	508	216	28
315L	4-8	540	315	2×M63	1350	80	M20×42	170	15	22	71	508	630	508	216	28
355M	2	655	355	2×M63	1500	75	M20×42	140	15	20	67,5	610	730	560/630	254	28
355M	4-8	655	355	2×M63	1530	95	M20×42	170	15	25	86	610	730	560/630	254	28
355L	2	655	355	2×M63	1500	75	M20×42	140	15	20	67,5	610	730	560/630	254	28
355L	4-8	655	355	2×M63	1530	95	M20×42	170	15	25	86	610	730	560/630	254	28



DIMENSIONS (mm)																
TYPE	POLES	AD	H	KK	L	D	DH	E	Q	F	G	B5				
												M	N	P	S	T
80	2-8	130	80	M20	283	19	M6×16	40	3	6	15,5	165	130	200	12x4	3,5
90S	2-8	145	90	M20	330	24	M8×19	50	5	8	20	165	130	200	12x4	3,5
90L	2-8	145	90	M20	358	24	M8×19	50	5	8	20	165	130	200	12x4	3,5
100	2-8	157	100	M20	393	28	M10×22	60	5	8	24	215	180	250	15x4	4
112M	2-8	177	112	M25	410	28	M10×22	60	5	8	24	215	180	250	15x4	4
132S	2-8	197	132	M32	480	38	M12×28	80	5	10	33	265	230	300	15x4	4
132M	2-8	197	132	M32	516	38	M12×28	80	5	10	33	265	230	300	15x4	4
160M	2-8	255	160	2×M40	613	42	M16×36	110	5	12	37	300	250	350	19x4	5
160L	2-8	252	160	2×M40	708	42	M16×36	110	5	12	37	300	250	350	19x4	5
180M	2-8	270	180	2×M40	730	48	M16×36	110	8	14	42,5	300	250	350	19x4	5
180L	2-8	270	180	2×M40	780	48	M16×36	110	8	14	42,5	300	250	350	19x4	5
200L	2-8	303	200	2×M50	771	55	M20×42	110	12	16	49	350	300	400	19x4	5
225S	2-8	312	225	2×M50	815	60	M20×42	140	12	18	53	400	350	450	19x8	5
225M	2	312	225	2×M50	820	55	M20×42	110	12	16	49	400	350	450	19x8	5
225M	4-8	312	225	2×M50	850	60	M20×42	140	12	18	53	400	350	450	19x8	5
250M	2	355	250	2×M63	910	60	M20×42	140	12	18	53	500	450	550	19x8	5
250M	4-8	355	250	2×M63	910	65	M20×42	140	12	18	58	500	450	550	19x8	5
280S	2	398	280	2×M63	985	65	M20×42	140	12	18	58	500	450	550	19x8	5
280S	4-8	398	280	2×M63	985	75	M20×42	140	12	20	67,5	500	450	550	19x8	5
280M	2	398	280	2×M63	1035	65	M20×42	140	12	18	58	500	450	550	19x8	5
280M	4-8	398	280	2×M63	1035	75	M20×42	140	12	20	67,5	500	450	550	19x8	5
315S	2	540	315	2×M63	1160	65	M20×42	140	15	18	58	600	550	660	24x8	6
315S	4-8	540	315	2×M63	1270	80	M20×42	170	15	22	71	600	550	660	24x8	6
315M	2	540	315	2×M63	1290	65	M20×42	140	15	18	58	600	550	660	24x8	6
315M	4-8	540	315	2×M63	1325	80	M20×42	170	15	22	71	600	550	660	24x8	6
315L	2	540	315	2×M63	1320	65	M20×42	140	15	18	58	600	550	660	24x8	6
315L	4-8	540	315	2×M63	1350	80	M20×42	170	15	22	71	600	550	660	24x8	6
355M	2	655	355	2×M63	1500	75	M20×42	140	15	20	67,5	740	680	800	24x8	6
355M	4-8	655	355	2×M63	1530	95	M20×42	170	15	25	86	740	680	800	24x8	6
355L	2	655	355	2×M63	1500	75	M20×42	140	15	20	67,5	740	680	800	24x8	6
355L	4-8	655	355	2×M63	1530	95	M20×42	170	15	25	86	740	680	800	24x8	6

## B5R/B14

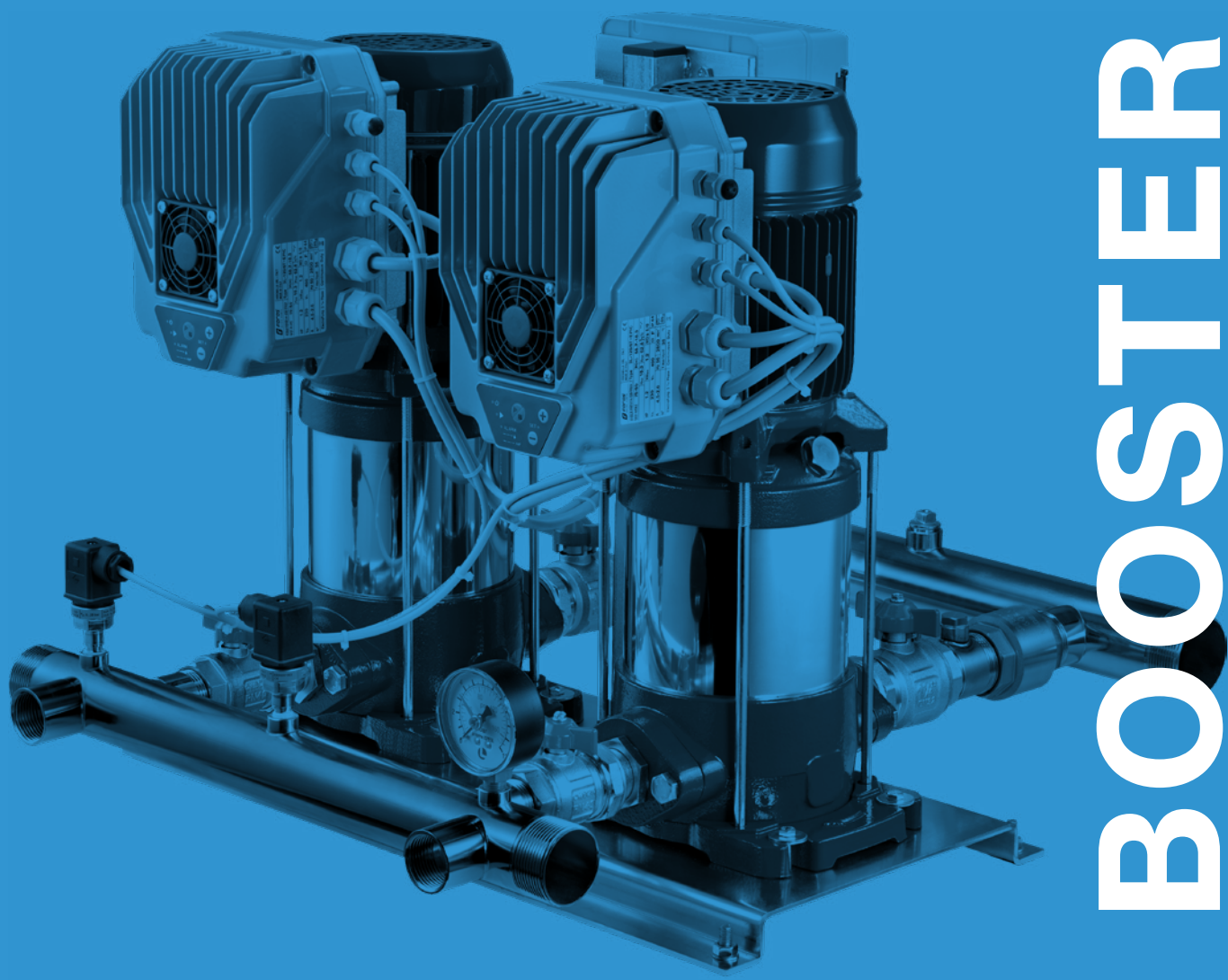


## B14

DIMENSIONS (mm)																
TYPE	POLES	AD	H	KK	L	D	DH	E	Q	F	G	B14				
												M	N	P	S	T
80	2-8	130	80	M20	283	19	M6×16	40	3	6	15,5	100	80	120	M6	3
90S	2-8	145	90	M20	330	24	M8×19	50	5	8	20	115	95	140	M8	3
90L	2-8	145	90	M20	358	24	M8×19	50	5	8	20	115	95	140	M8	3
100	2-8	157	100	M20	393	28	M10×22	60	5	8	24	130	110	160	M8	3,5
112M	2-8	177	112	M25	410	28	M10×22	60	5	8	24	130	110	160	M8	3,5
132S	2-8	197	132	M32	480	38	M12×28	80	5	10	33	165	130	200	M10	3,5
132M	2-8	197	132	M32	516	38	M12×28	80	5	10	33	165	130	200	M10	3,5
160M	2-8	255	160	2×M40	613	42	M16×36	110	5	12	37	215	180	250	M12	4
160L	2-8	252	160	2×M40	708	42	M16×36	110	5	12	37	215	180	250	M12	4

## B5R/B14

DIMENSIONS (mm)																
TYPE	POLES	AD	H	KK	L	D	DH	E	Q	F	G	B5R / B14B				
												M	N	P	S	T
80	2-8	130	80	M20	283	19	M6×16	40	3	6	15,5	130	110	160	M8	3,5
90S	2-8	145	90	M20	330	24	M8×19	50	5	8	20	130	110	160	M8	3,5
90L	2-8	145	90	M20	358	24	M8×19	50	5	8	20	130	110	160	M8	3,5
100	2-8	157	100	M20	393	28	M10×22	60	5	8	24	165	130	200	M10	3,5
112M	2-8	177	112	M25	410	28	M10×22	60	5	8	24	165	130	200	M10	3,5
132S	2-8	197	132	M32	480	38	M12×28	80	5	10	33	215	180	250	M10	4
132M	2-8	197	132	M32	516	38	M12×28	80	5	10	33	215	180	250	M10	4
160M	2-8	255	160	2×M40	613	42	M16×36	110	5	12	37	265	230	300	14×4	5
160L	2-8	252	160	2×M40	708	42	M16×36	110	5	12	37	265	230	300	14×4	5



# BOOSTER SET



# AQUADOMUS

Booster set

Aquadomus is an integrated 'Plug&Play' system to manage water pressurization for domestic and residential applications. The electronic control (E-IPFC) manages the operation of the system in order to maintain the pressure constant even if the conditions of use change. It can be driven and monitored by a dedicated app "UnyConnect". It consists of a multistage pump, a permanent magnet synchronous motor, an electronic inverter control, an expansion tank, a no return valve, a pressure sensor, a cable with plug.

## Construction features

<b>Pump body</b>	stainless steel AISI 304
<b>Motor bracket</b>	aluminum
<b>Impellers, diffusers</b>	Noryl®
<b>Mechanical seal</b>	ceramic-graphite-EPDM
<b>Motor shaft</b>	stainless steel AISI 303
<b>Liquid temperature</b>	-5 ÷ +35 °C
<b>Rated pressure</b>	max 7 bar
<b>4 poles synchronous motor with permanent magnet</b>	4200 rpm
<b>Input voltage</b>	1~ 230V - 50Hz 1~ 220V - 60Hz 1~ 115V - 50/60Hz
<b>Insulation class</b>	F
<b>Protection degree</b>	IPX4
<b>Max rated current</b>	3,7 A
<b>Max absorbed power P1</b>	820W
<b>Cable</b>	H07 RNF 1,5 m



Constant pressure even if the conditions of use change

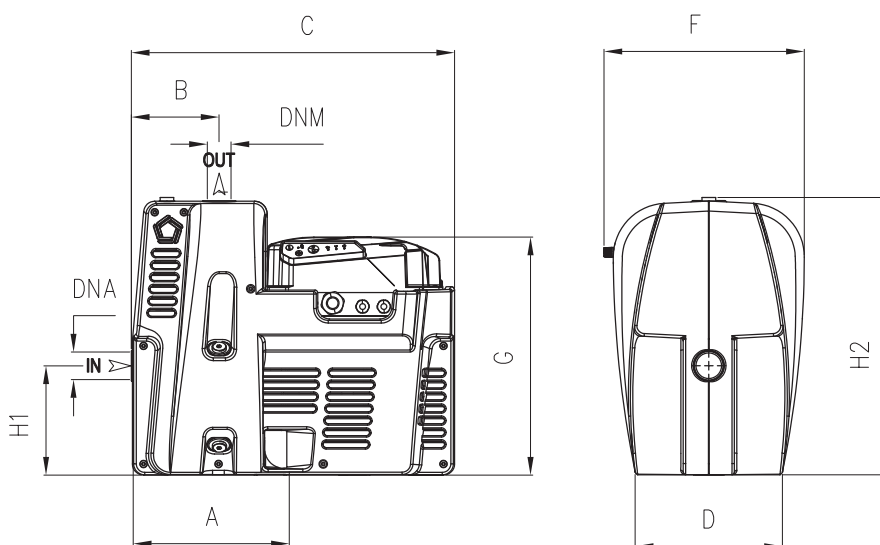
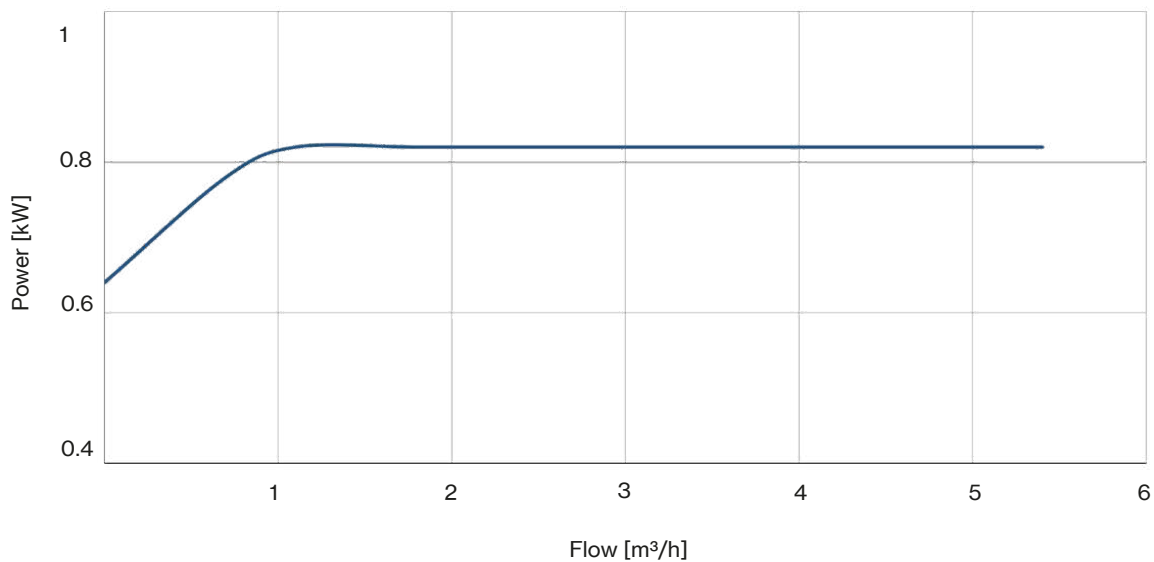
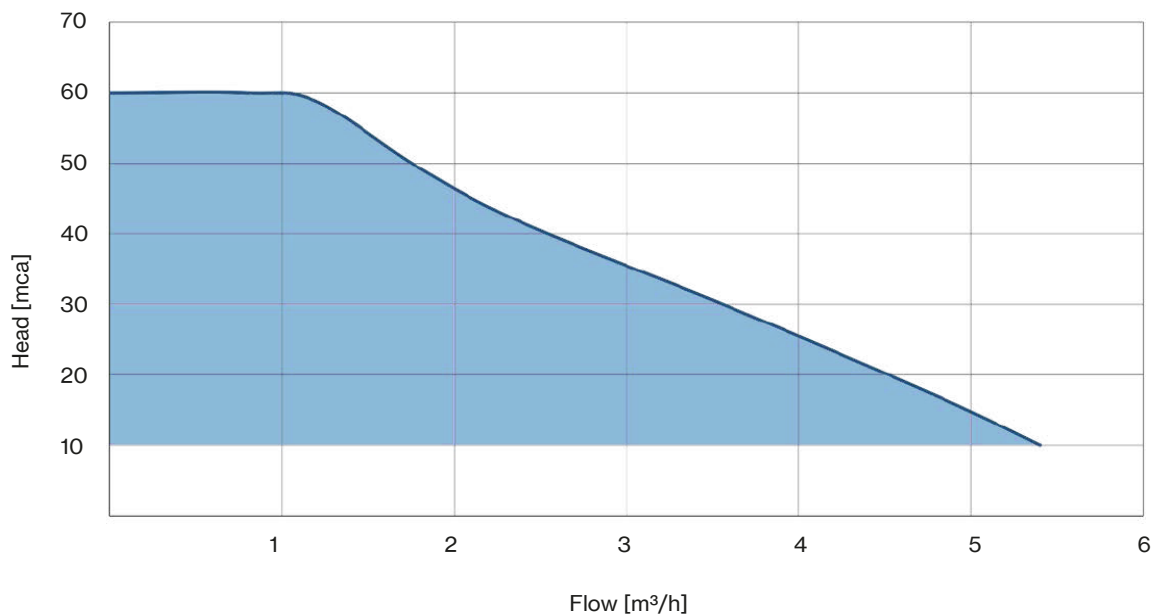


Dedicated UnyConnect App for programming and monitoring (compatible with iOS and Android)



Bluetooth smart pump





TYPE - 50 Hz	DIMENSIONS (mm)										Kg
	A	B	C	D	F	G	H1	H2	DNA	DNM	
Aquadomus	166,8	103	377	173	235	280	128	325	1" G	1" G	11





### Fixed speed booster sets with one pump and membrane tank

#### DESCRIPTION

Compact, built-in, fully automatic pressurization units consisting of a single pump, membrane tank, pressure switch, pressure gauge, connectors and cable with plug. They are ready for installation and suitable for pressure boosting in water systems for domestic use and industrial applications.

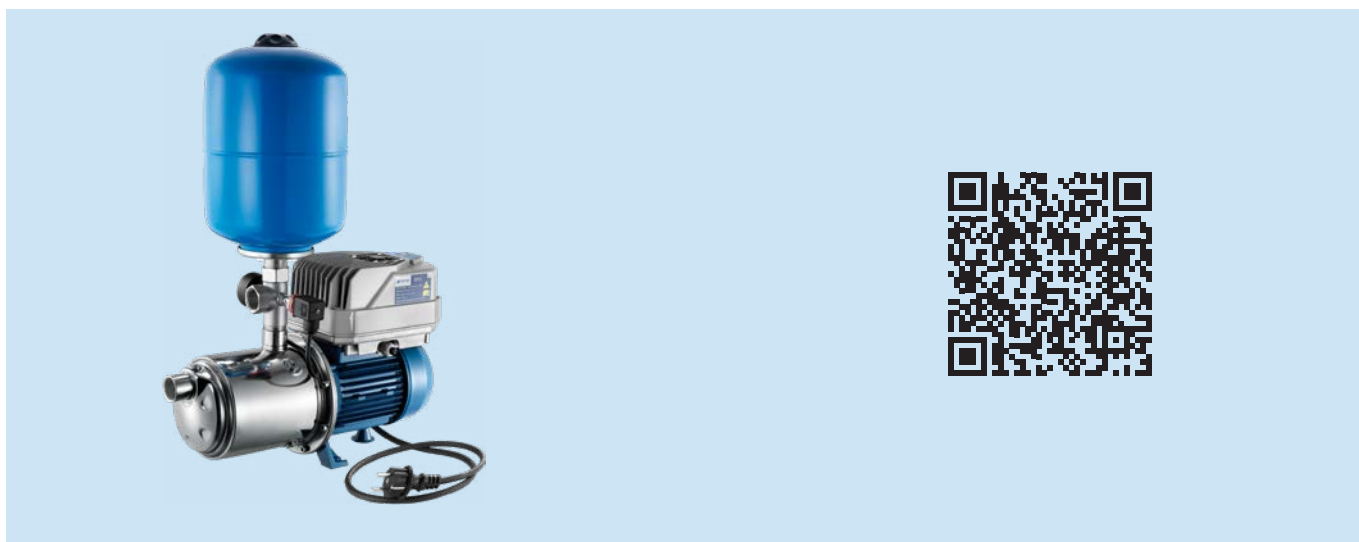
#### FUNCTIONING

The pump switches on automatically when the pressure drops below the minimum set value. When water demand ends, the pump will fill up the tank and then it turns off when the pressure reaches the maximum set value.

TYPE - 50 Hz		P2		P1 (kW)		Pipe		Tank capacity					
1-	3-	HP	kW	1-	3-	Suction ("G)	Delivery ("G)	8 L		20-24 L		50 L	100 L
								cylindrical	spherical	cylindrical	inox	cylindrical	cylindrical
PL 50	-	0,5	0,37	0,5	-	1	1	■	■	-	-	-	-
PL 100	-	1	0,74	1,11	-	1	1	■	■	-	-	-	-
PE 50	-	0,5	0,37	0,5	-	1	1	■	■	-	-	-	-
PE 100	-	1	0,74	1,1	-	1	1	■	■	-	-	-	-
JA 60	-	0,6	0,44	0,7	-	1	1	■	-	■	-	-	-
JA 86	-	0,8	0,59	0,82	-	1	1	■	-	■	-	■	-
JA 106N	-	1	0,74	1,04	-	1	1	-	■	■	-	■	-
JA 126	-	1,2	0,88	1,14	-	1	1	-	■	■	-	■	-
JA 146	-	1,5	1,1	1,3	-	1	1	-	■	■	-	■	-
JAM 150	JAM 150T	2	1,5	1,9	1,8	1½	1¼	-	-	-	-	-	■
JAM 200	JAM 200T	2,5	1,85	2,3	2,2	1½	1¼	-	-	-	-	-	■
JAM 300	JAM 300T	3	2,2	2,7	2,6	1½	1¼	-	-	-	-	-	■
JXF 106N	-	1	0,74	1,04	-	1	1	-	-	■	■	■	-
JXF 126	-	1,2	0,88	1,14	-	1	1	-	-	■	■	■	-
JXF 146	-	1,5	1,1	1,3	-	1	1	-	-	■	■	■	-
JA 150	JA 150T	2	1,5	1,8	1,7	1½	1	-	-	■	-	■	-
JA 200	JA 200T	2,5	1,85	2,2	2,1	1½	1	-	-	-	-	■	■
JA 300	JA 300T	3	2,2	2,8	2,6	1½	1	-	-	-	-	-	■
PA 80	-	0,8	0,59	0,8	-	1¼	1	-	-	-	-	-	-
PA 100	-	1	0,74	1,02	-	1¼	1	-	-	■	-	-	-
PA 150	PA 150T	1,5	1,1	1,65	1,65	1¼	1	-	-	■	-	■	-
PA 200	PA 200T	2	1,5	2,22	2,22	1¼	1	-	-	-	-	■	-
JXM 105	-	1	0,74	1,07	-	1	1	-	-	■	■	-	-
JXM 125	-	1,2	0,88	1,27	-	1	1	-	-	■	■	-	-
P 3A-90/4	P 3A-90/4T	0,9	0,66	0,9	0,88	1	1	-	-	■	■	■	■
P 3A-100/5	P 3A-100/5T	1	0,75	1,06	1,01	1	1	-	-	■	■	■	■
P 5A-120/4	P 5A-120/4T	1,2	0,9	1,13	1,13	1	1	-	-	■	■	■	■
P 5A-150/5	P 5A-150/5T	1,5	1,1	1,47	1,39	1	1	-	-	■	■	■	■
P 3SA-90/4	P 3SA-90/4T	0,9	0,66	0,83	0,8	1	1	-	-	■	■	■	■
P 3SA-100/5	P 3SA-100/5T	1	0,75	0,99	0,92	1	1	-	-	■	■	■	■
P 5SA-120/4	P 5SA-120/4T	1,2	0,9	1,09	1,08	1	1	-	-	■	■	■	■
P 5SA-150/5	P 5SA-150/5T	1,5	1,1	1,39	1,31	1	1	-	-	■	■	■	■

# AQUASET+VSD

Booster set



## Variable speed booster sets with one pump and membrane tank

### DESCRIPTION

AQUASET+VSD are single-phase automatic booster sets consisting of a horizontal pump operated and controlled by EPIC variable speed drive. They provide constant pressure regardless of changes on flow demand, making them suitable for low or missing pressure in domestic systems and small industrial applications.

### FEATURES

- Variable speed drive EPIC (1~ 230V-in, 3~ 230V-out)
- Three-phase horizontal pump
- Stainless steel 5-way connector with built-in non return valve
- Pressure sensor
- Pressure gauge
- 8 liters membrane tank
- Cable with plug

### FUNCTIONING

If the pressure in the network drops the pump will start and gradually speeds up to provide with the set pressure. When the water demand decreases, the pressure will rise causing the pump speed to slow down and eventually to stop the pump if demand ceases. The pump will remain on standby waiting to start at the next water demand.

### SELECTION

The table below shows the pump series available as AQUASET+VSD. Consult the catalog at the relative pump series for specifics and characteristic curves.

VSD	HORIZONTAL 3- PUMP TYPE	max P2	
		HP	kW
EPIC	JA-JAM	2	1,5
	JA 150-300	2	1,5
	JXF	1,5	1,1
	JXM	1,2	0,88
	KM	2	1,5
	KB	2	1,5
	SC	1,5	1,1
	KBJ	2	1,5
	P 3, P 3S	1,5	1,1
	P 5, P 5S	2	1,5
	P 7, P 7S	2,5	1,85
	P 9, P 9S	2	1,5
	P 18, P 18S	2	1,5



### Fixed speed and variable speed booster sets with two self-priming pumps

#### DESCRIPTION

Pressurisation units with 2 self-priming horizontal axis pumps fitted on a single skid and connected in parallel by suction and delivery manifolds. These systems are specifically designed for domestic use as well as small civil or industrial applications. They can be equipped with EPIC inverters, which ensures that they can meet the constant pressure demands for modern systems. The key characteristics of these systems are their reliability, user-friendly operation, and low maintenance needs. To ensure proper operation of the booster set, pressure tanks of adequate capacity are required depending on constant or variable speed, pumps type, and applications.

#### FEATURES

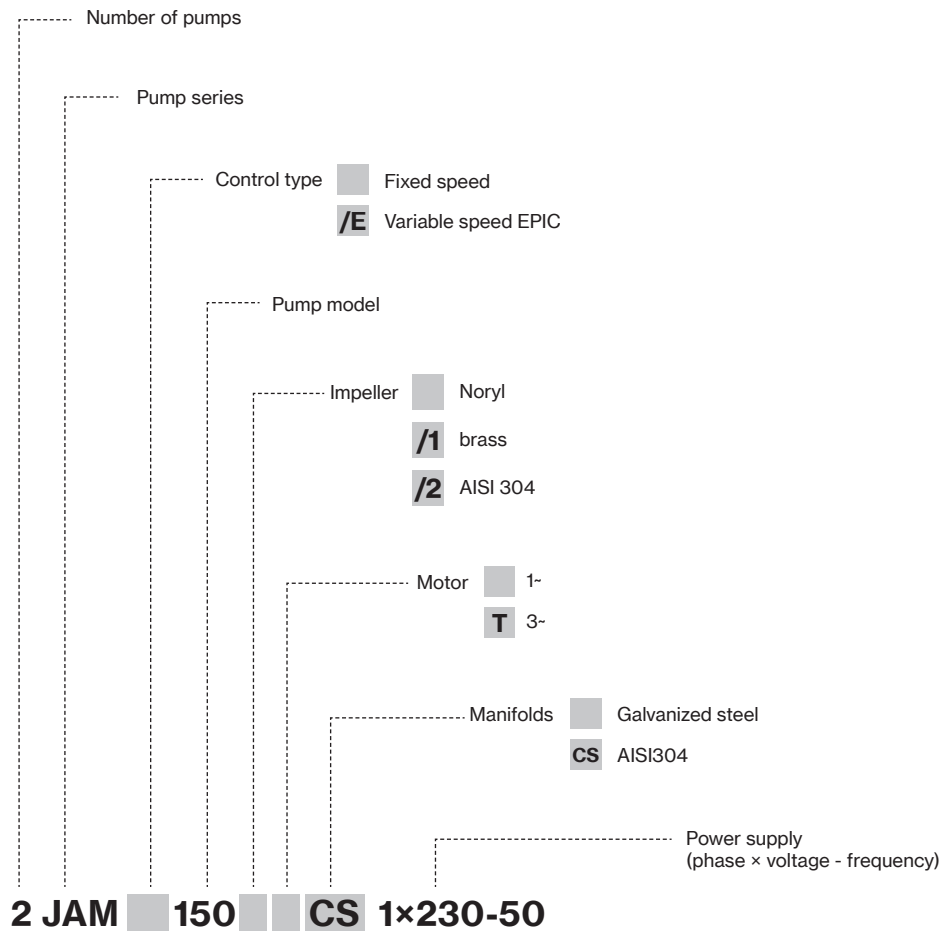
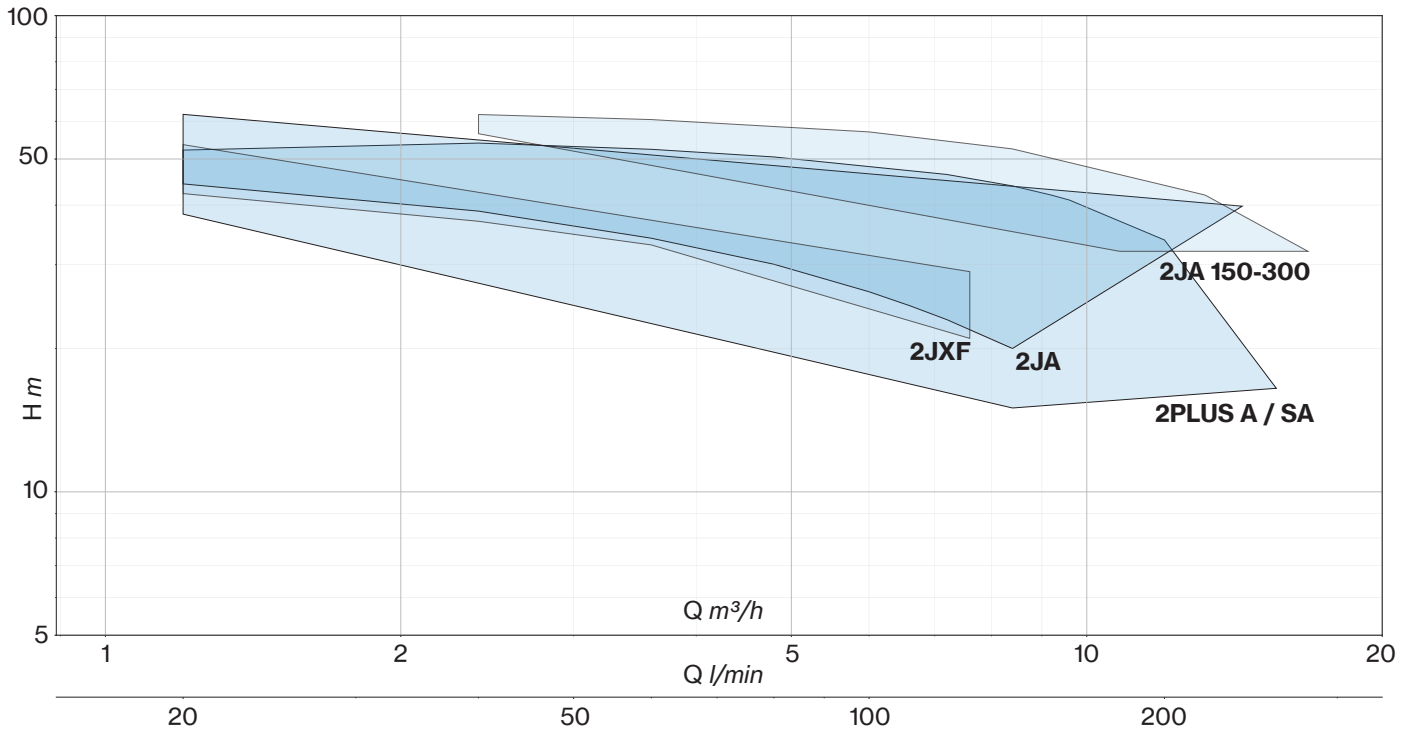
- Two self-priming horizontal axis pumps
- Cast iron pump body for JA/JAM and JA 150-300 pumps series
- Stainless steel pump body for JXF, PLUS A, PLUS SA series
- Suction manifold in galvanized steel with non-return and isolation valves
- Delivery manifold in galvanized steel with pressure gauge and isolation valves
- Base frame in galvanized steel
- Electronic control panel EQ2SM(T) and two pressure switches for fixed speed version
- Inverter EPIC on each pump and two pressure sensors for the variable speed version
- Pressure tanks available on request, as accessory

#### FUNCTIONING

In the fixed speed version as soon as pressure drops below the minimum set value on the pressure switch the first pump starts automatically. If water demand further increases, the second pump will run until the pressure rises above the maximum set value. When demand ends, the last pump turns off. All the pumps follow cycling changeover for equal work distribution. In case of one pump failure, the other pumps would continue to operate.

In the variable speed version when the system pressure drops below the desired level, the sensors detect it giving an input to the inverter to start the first pump at controlled speed. If the flow rate is not sufficient, the pressure continues to drop causing the second pump to start. As soon as the flow demand decreases, the pressure rises again and the second pump stop. The first pump continues to modulate its speed in order to regulate and maintain the set pressure until it turns off when the flow demand ends. Based on working hours, the inverters will alternate the starting order of pumps to ensure better wear distribution. Continuity of operation is ensured in the event of one pump or one inverter failure.

# SELF-PRIMING BOOSTER SETS



## SELF-PRIMING BOOSTER SETS

TARGET 2P		TYPE - 50 Hz			P2 (x2)		Q (m³/h - l/min)												
		FIXED SPEED		VARIABLE SPEED			0	1,2	2,4	3,6	4,8	7,2	8,4	9,2	9,6	12,0	14	15,6	
		1- 230V	3- 400V	1- 230V-in 3- 230V-out			0	20	40	60	80	120	140	153,4	160	200	233	260	
l/min	bar				HP	kW	H (m)												
80	3	2P3A-90/4	2P3A-90/4T	2P3A/E-90/4T	0,9	0,66	40,8	38,3	35,1	31,8	29,9	19,8	15,0						
		2P3SA-90/4	2P3SA-90/4T	2P3SA/E-90/4T			43,0	41,0	38,3	35,0	31,3	22,3	17,2	13,5					
100		2P3A-100/5	2P3A-100/5T	2P3A/E-100/5T	1	0,75	52,2	48,9	45,1	40,8	36,0	25,4	19,8	15,0					
		2P3SA-100/5	2P3SA-100/5T	2P3SA/E-100/5T			54,0	52,1	48,8	44,9	40,2	29,0	22,0	16,8					
160		2P5A-120/4	2P5A-120/4T	2P5A/E-120/4T	1,2	0,9	45,3	44,2	42,8	41,3	39,6	35,6	33,4	31,7	30,8	24,0	15,0		
		2P5SA-120/4	2P5SA-120/4T	2P5SA/E-120/4T			44,5	43,3	42,1	41,0	40,0	36,4	34,3	32,8	32,0	26,2	18,5	13,5	
200	2P5A-150/5	2P5A-150/5T	2P5A/E-150/5T	1,5	1,1	56,8	55,9	54,6	53,0	51,0	46,1	43,2	41,2	40,1	33,0	24,0	15,0		
	2P5SA-150/5	2P5SA-150/5T	2P5SA/E-150/5T			56,0	52,2	54,0	52,4	50,5	46,4	43,9	42,0	41,0	33,8	23,8	16,5		

TARGET 2JA-JAM		TYPE - 50 Hz			P2 (x2)		Q (m³/h - l/min)												
		FIXED SPEED		VARIABLE SPEED			0	1,2	2,4	3,6	4,8	6	6,6	7,2	8,4	9,6	12	14,4	
		1- 230V	3- 400V	1- 230V-in 3- 230V-out			0	20	40	60	80	100	110	120	140	160	200	240	
l/min	bar				HP	kW	H (m)												
80	3	2JA106N	2JA106NT	2JA/E106NT	1	0,74	50,9	44,3	38,9	34,1	30,1	26,3	24,6	23,0	20,0				
100	3	2JA126	2JA126T	2JA/E126T	1,2	0,88	55,1	48,5	42,6	37,8	33,5	29,7	27,9	26,2	23,0				
120	3	2JA146	2JA146T	2JA/E146T	1,5	1,1	62,5	55,7	49,4	44,2	39,5	35,5	33,5	31,6	28,1				
140	3,5	2JAM150	2JAM150T	2JAM/E150T	2	1,5	54,8	51,8	48,9	46,2	43,6	41,1	40,0	38,8	36,6	34,5	30,6	26,8	
160	4	2JAM200	2JAM200T	2JAM/E200T	2,5	1,85	62,7	59,7	56,8	54,0	51,5	49,1	47,9	46,8	44,6	42,4	38,4	34,8	
180	4,5	-	2JAM300T	-	3	2,2	70,0	66,9	63,9	61,0	58,3	55,8	54,6	53,5	51,3	49,2	45,1	41,6	

TARGET 2JXF		TYPE - 50 Hz			P2 (x2)		Q (m³/h - l/min)											
		FIXED SPEED		VARIABLE SPEED			0	1,2	2,4	3,6	4,8	6	7,2	7,6				
		1- 230V	3- 400V	1- 230V-in 3- 230V-out			0	20	40	60	80	100	120	126,6				
l/min	bar				HP	kW	H (m)											
80	3	2JXF106N	2JXF106NT	2JXF/E106NT	1	0,74	48,0	42,3	37,0	33,0	29,6	26,2	22,7	21,0				
100		2JXF126	2JXF126T	2JXF/E126T	1,2	0,88	53,4	47,4	41,9	37,5	33,7	29,9	26,0	24,3				
120		2JXF146	2JXF146T	2JXF/E146T	1,5	1,1	60,2	53,6	47,8	42,4	38,0	34,4	30,5	29,0				

TARGET 2JA150-300		TYPE - 50 Hz			P2 (x2)		Q (m³/h - l/min)											
		FIXED SPEED		VARIABLE SPEED			0	2,4	3,6	6,0	8,4	10,8	13,2	15,6				
		1- 230V	3- 400V	1- 230V-in 3- 230V-out			0	40	60	100	140	180	220	260,0				
l/min	bar				HP	kW	H (m)											
140	4	2JA150	2JA150T	2JA/E150T	2	1,5	61,5	57,2	54,7	48,5	40,9	30,8	-	-				
180		2JA200	2JA200T	2JA/E200T	2,5	1,5	62,8	60,0	58,5	54,7	50,1	44,5	38,7	-				
220		2JA300	2JA300T	-	3	2,2	68,4	65,6	64,0	60,7	56,5	51,7	46,4	40,2				



### Fixed speed and variable speed booster sets with two threaded centrifugal pumps

#### DESCRIPTION

Pressurisation units with 2 horizontal centrifugal pumps fitted on a single skid and connected in parallel by suction and delivery manifolds. These systems are extremely silent and designed for water supply, pressurization, heating and air conditioning and liquid transfer. They can be equipped with EPIC and EPIC-A inverters, which ensures that they can meet the constant pressure demands for modern systems. The key characteristics of these systems are their reliability, user-friendly operation, and low maintenance needs. To ensure proper operation of the booster set, pressure tanks of adequate capacity are required depending on constant or variable speed, pumps type, and applications.

#### FEATURES

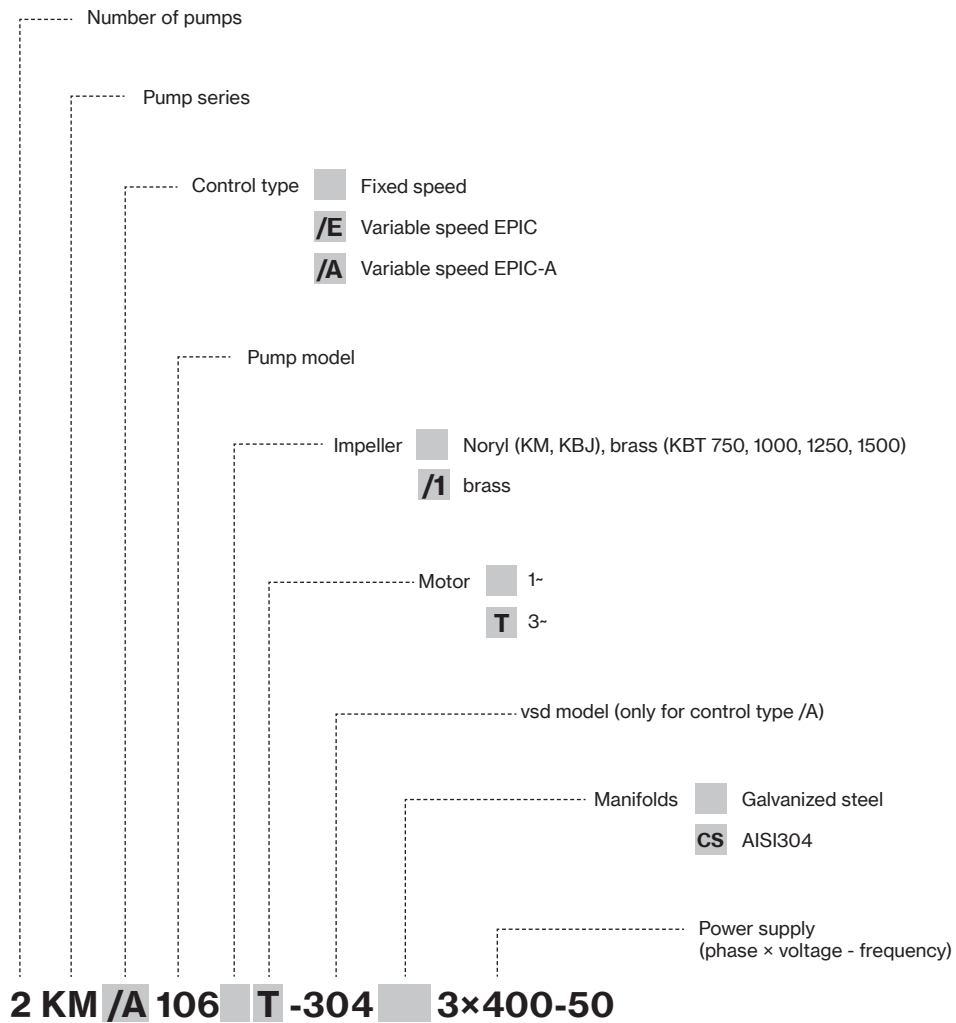
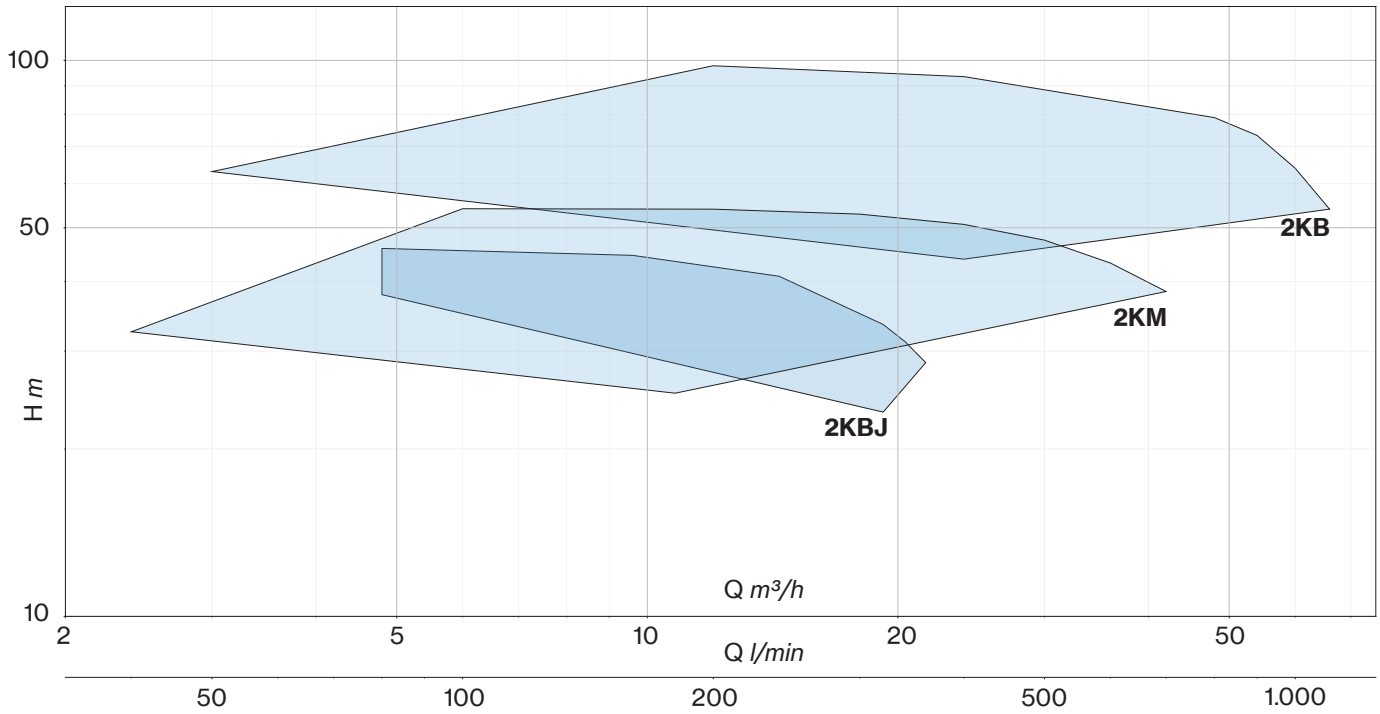
- Two horizontal axis pumps with single or double impeller
- Cast iron pump body
- Suction manifold in galvanized steel with non-return and isolation valves
- Delivery manifold in galvanized steel with pressure gauge and isolation valves
- Base frame in galvanized steel
- Electronic control panel EQ2SM(T) and two pressure switches for fixed speed version
- Inverter EPIC or EPIC-A on each pump and two pressure sensors for the variable speed version
- Pressure tanks available on request, as accessory

#### FUNCTIONING

In the fixed speed version as soon as pressure drops below the minimum set value on the pressure switch the first pump starts automatically. If water demand further increases, the second pump will run until the pressure rises above the maximum set value. When demand ends, the last pump turns off. All the pumps follow cycling changeover for equal work distribution. In case of one pump failure, the other pumps would continue to operate.

In the variable speed version when the system pressure drops below the desired level, the sensors detect it giving an input to the inverter to start the first pump at controlled speed. If the flow rate is not sufficient, the pressure continues to drop causing the second pump to start. As soon as the flow demand decreases, the pressure rises again and the second pump stop. The first pump continues to modulate its speed in order to regulate and maintain the set pressure until it turns off when the flow demand ends. Based on working hours, the inverters will alternate the starting order of pumps to ensure better wear distribution. Continuity of operation is ensured in the event of one pump or one inverter failure.

# THREADED CENTRIFUGAL BOOSTER SETS



# THREADED CENTRIFUGAL BOOSTER SETS

TARGET 2KM		TYPE - 50 Hz				P2 (x2)		Q (m³/h - l/min)												
		FIXED SPEED		VARIABLE SPEED				0 2,4 4,8 7,2 9,6 10,8 13,2 14,4 15,6												
		1- 230V	3- 400V	EPIC	EPIC-A			0 40 80 120 160 180 220 240 260												
1- 230V-in 3- 230V-out	3- 400V-in 3- 400V-out			HP	kW	H (m)														
100	3	-	-	2KM/E106T	2KM/A106T-304	1	0,74	33,0	32,5	31,5	29,6	26,8	25,2							
150	3,5	2KM164	2KM164T	2KM/E164T	2KM/A164T-304	2	1,5	39,4	39,1	38,6	37,2	35,2	33,8	27,2						
200	4	2KM214	2KM214T	-	2KM/A214T-306	2,5	1,85	46,3	45,9	45,5	44,1	42,1	41,1	38,2	35,5					
200	4,5	2KM314	2KM314T	-	2KM/A314T-306	3	2,2	53,2	52,7	52,1	50,8	48,8	47,6	45,0	42,9	39,2				

TARGET 2KM		TYPE - 50 Hz				P2 (x2)		Q (m³/h - l/min)												
		FIXED SPEED		VARIABLE SPEED				0 6 12 18 24 30 36 42												
		1- 230V	3- 400V	EPIC	EPIC-A			0 100 200 300 400 500 600 700												
1- 230V-in 3- 230V-out	3- 400V-in 3- 400V-out			HP	kW	H (m)														
400	4	-	2KM400T	-	2KM/A400T-309	4	3	45,1	45,2	44,9	43,4	40,9	37,4	32,5						
500	4,5	-	2KM550T	-	2KM/A550T-314	5,5	4	54,1	54,1	54,0	52,9	50,7	47,5	43,2	38,4					

TARGET 2KBJ		TYPE - 50 Hz				P2 (x2)		Q (m³/h - l/min)											
		FIXED SPEED		VARIABLE SPEED				0 4,8 9,6 14,4 19,2 21,6 24,0											
		1- 230V	3- 400V	EPIC	EPIC-A			0 80 160 240 320 360 400											
1- 230V-in 3- 230V-out	3- 400V-in 3- 400V-out			HP	kW	H (m)													
160	3,5	2KBJ150	2KBJ150T	2KBJ/E150T	2KBJ/A150T-304	2	1,5	39,2	40,2	39,5	35,7	28,7	23,9	18,0					
240		2KBJ200	2KBJ200T	2KBJ/E200T	2KBJ/A200T-304	2,5	1,85	44,9	45,6	44,8	41,7	35,2	30,8	25,8					
300		2KBJ300	2KBJ300T	-	2KBJ/A300T-306	3	2,2	49,5	49,4	48,3	45,8	39,8	35,8	31,1					

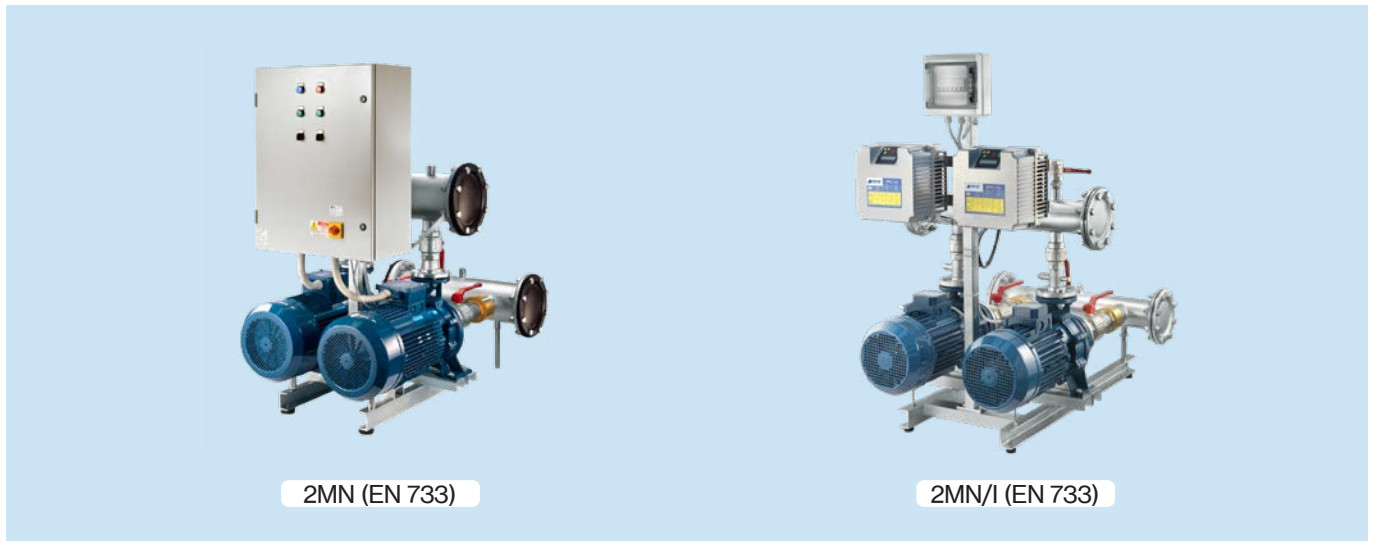
TARGET 2KB		TYPE - 50 Hz				P2 (x2)		Q (m³/h - l/min)												
		FIXED SPEED		VARIABLE SPEED				0 1,2 2,4 3,6 4,8 7,2 9,6 12,0 14,4 16,8 18												
		1- 230V	3- 400V	EPIC	EPIC-A			0 20 40 60 80 120 160 200 240 280 300												
1- 230V-in 3- 230V-out	3- 400V-in 3- 400V-out			HP	kW	H (m)														
60	3,5	2KB100	2KB100T	2KB/E100T	2KB/A100T-304	1	0,74	42,0	40,8	39,4	37,4	34,7	29,2	21,0						
180	4	2KB160	2KB160T	2KB/E160T	2KB/A160T-306	2	1,5	48,3	47,7	47,1	46,5	45,7	43,5	40,1	36,2	31,1				
220	4	2KB210	2KB210T	-	2KB/A210T-306	2,5	1,85	54,9	54,4	53,8	53,0	52,3	50,5	47,1	43,1	38,3	32,4			
220	4,5	2KB310	2KB310T	-	2KB/A310T-306	3	2,2	61,4	60,9	60,3	59,8	59,2	57,1	53,6	49,3	44,2	38,3	35,2		

TARGET 2KB		TYPE - 50 Hz				P2 (x2)		Q (m³/h - l/min)												
		FIXED SPEED		VARIABLE SPEED				0 3 6 9 12 15 18 21 24 27 30 33												
		1- 230V	3- 400V	EPIC	EPIC-A			0 50 100 150 200 250 300 350 400 450 500 550												
1- 230V-in 3- 230V-out	3- 400V-in 3- 400V-out			HP	kW	H (m)														
250	5,5	-	2KB400T	-	2KB/A400T-309	4	3	63,6	63,1	62,0	60,3	58,2	55,5	52,3	48,4	43,9				
300	6,5	-	2KB550T	-	2KB/A550T-314	5,5	4	76,9	76,4	75,4	73,8	71,7	69,0	65,9	62,1	58,0	53,4			
350	7,5	-	2KB751RT	-	2KB/A751RT-314	7,5	5,5	90,7	90,0	88,9	87,3	85,3	82,9	80,1	76,8	73,1	68,8	63,7		
350	8	-	2KB900T	-	2KB/A900T-318	10	7,5	97,5	96,6	95,4	93,7	91,7	89,2	86,5	83,3	79,8	75,2	71,2	66,4	

TARGET 2KM		TYPE - 50 Hz				P2 (x2)		Q (m³/h - l/min)											
		FIXED SPEED		VARIABLE SPEED				0 12 24 36 48 54 60 66											
		1- 230V	3- 400V	EPIC	EPIC-A			0 200 400 600 800 900 1000 1100											
1- 230V-in 3- 230V-out	3- 400V-in 3- 400V-out			HP	kW	H (m)													
600	5	-	2KB750T	-	2KB/A750T-314	7,5	5,5	70,0	68,5	63,9	57,1	45,3	38,2						
800	5,5	-	2KB1000T	-	2KB/A1000T-318	10	7,5	80,7	80,4	75,0	68,5	59,7	52,6	43,7					
900	6	-	2KB1250T	-	2KB/A1250T-318	12,5	9,2	89,5	88,8	84,1	77,7	69,7	63,0	54,2	45,1				
900	7	-	2KB1500T	-	2KB/A1500T-325	15	11	98,3	97,8	93,5	85,7	78,9	73,3	64,0	54,0				







2MN (EN 733)

2MN/I (EN 733)

### Fixed speed and variable speed booster sets with two monobloc centrifugal flanged pumps

#### DESCRIPTION

Booster units with 2 monobloc horizontal centrifugal pumps of MN (EN 733) series, set on a single skid and connected in parallel by suction and delivery manifolds. These systems are widely used in water supplies, pressurization and fire-fighting systems, cooling, heating, irrigation, industrial and agricultural applications. To ensure a constant pressure to the system these booster sets can be equipped with EPIC-A or IPFC inverters.

To ensure proper operation of the booster set, pressure tanks of adequate capacity are required depending on constant or variable speed, pumps type, and applications.

#### FEATURES

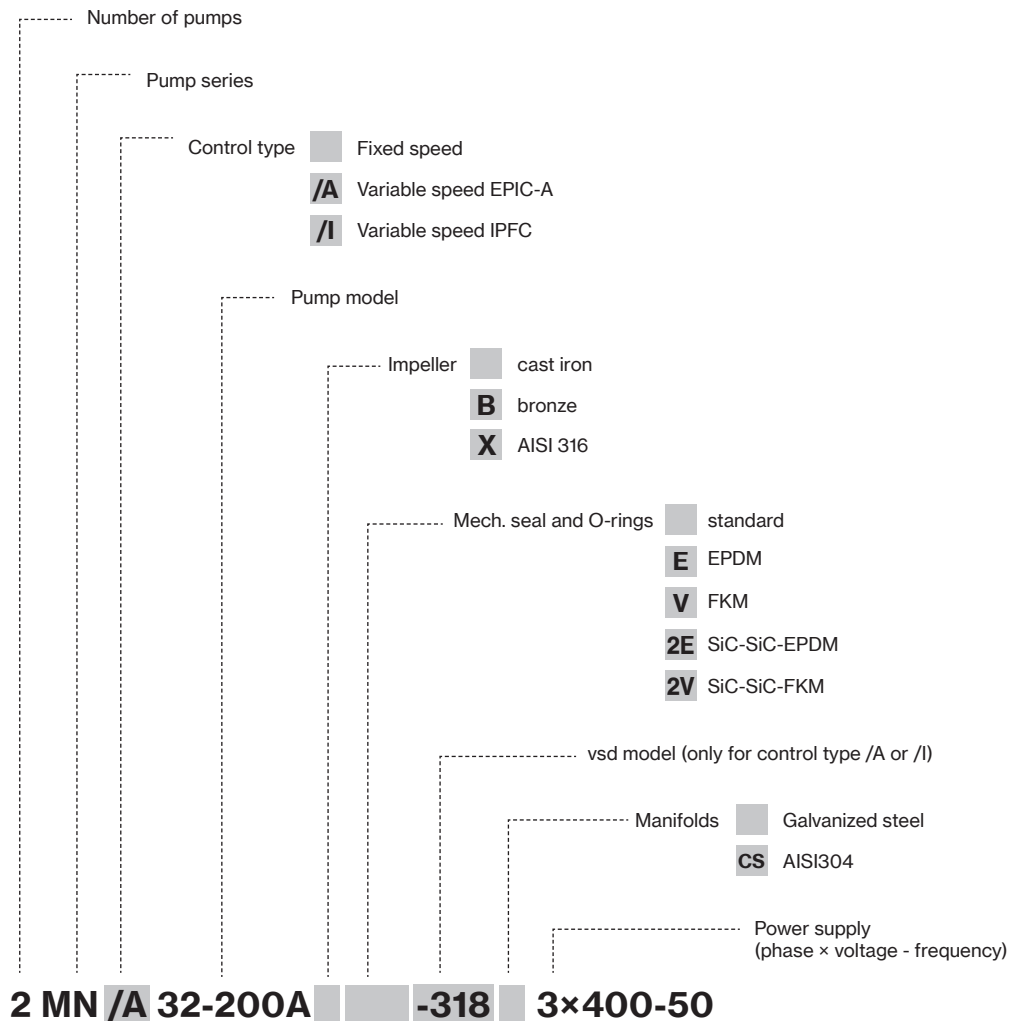
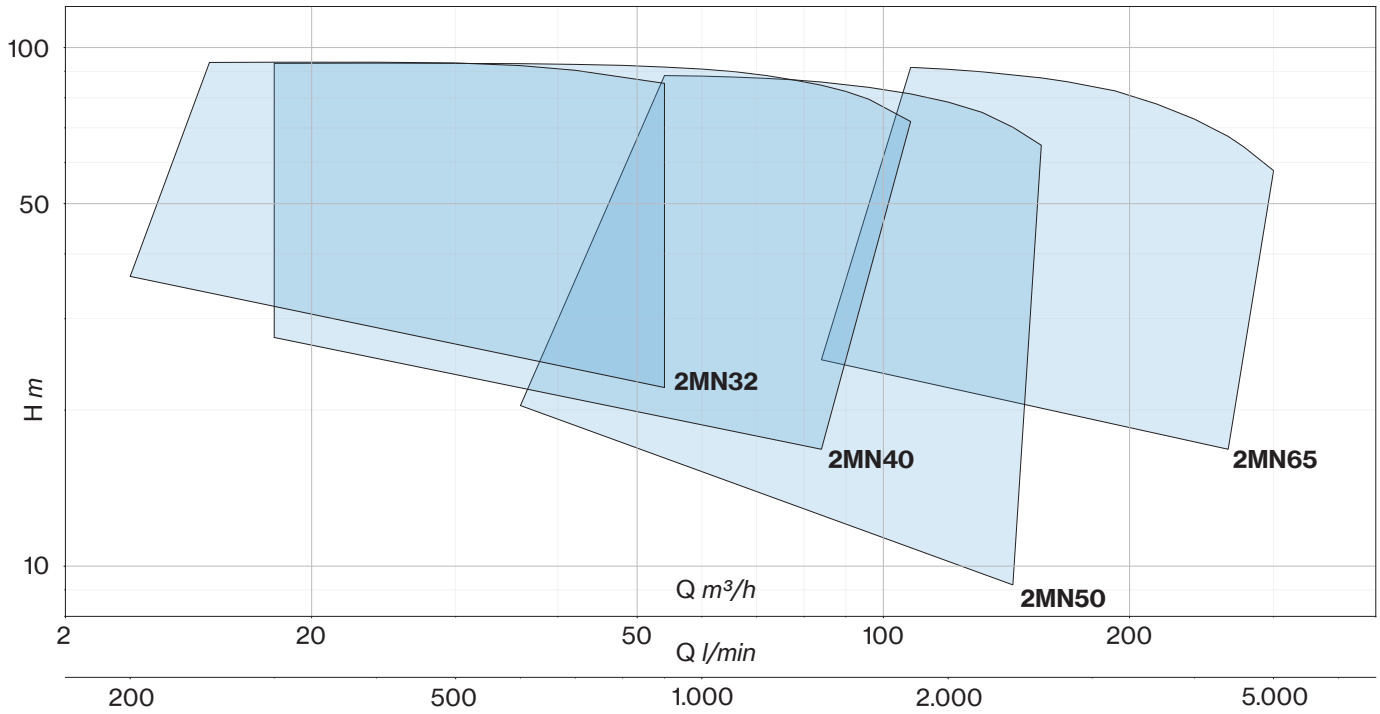
- Two monobloc horizontal centrifugal flanged pumps of MN (EN 733) series
- Cast iron pump body
- Suction manifold in galvanized steel with non-return and isolation valves
- Delivery manifold in galvanized steel with pressure gauge and isolation valves
- Base frame in galvanized steel
- EQ2SM(T) electronic or Q2ST electromechanical control panel with pressure switches for fixed speed version
- Inverter EPIC-A or IPFC, connected on each pump with pressure sensors, for variable speed version
- Pressure tanks, available on request, as accessory

#### FUNCTIONING

In the fixed speed version as soon as pressure drops below the minimum set value on the pressure switch the first pump starts automatically. If water demand further increases, the second pump will run until the pressure rises above the maximum set value. When demand ends, the last pump turns off. All the pumps follow cycling changeover for equal work distribution. In case of one pump failure, the other pumps would continue to operate.

In the variable speed version when the system pressure drops below the desired level, the sensors detect it giving an input to the inverter to start the first pump at controlled speed. If the flow rate is not sufficient, the pressure continues to drop causing the second pump to start. As soon as the flow demand decreases, the pressure rises again and the second pump stop. The first pump continues to modulate its speed in order to regulate and maintain the set pressure until it turns off when the flow demand ends. Based on working hours, the inverters will alternate the starting order of pumps to ensure better wear distribution. Continuity of operation is ensured in the event of one pump or one inverter failure.

# CENTRIFUGAL FLANGED BOOSTER SETS



# CENTRIFUGAL FLANGED BOOSTER SETS

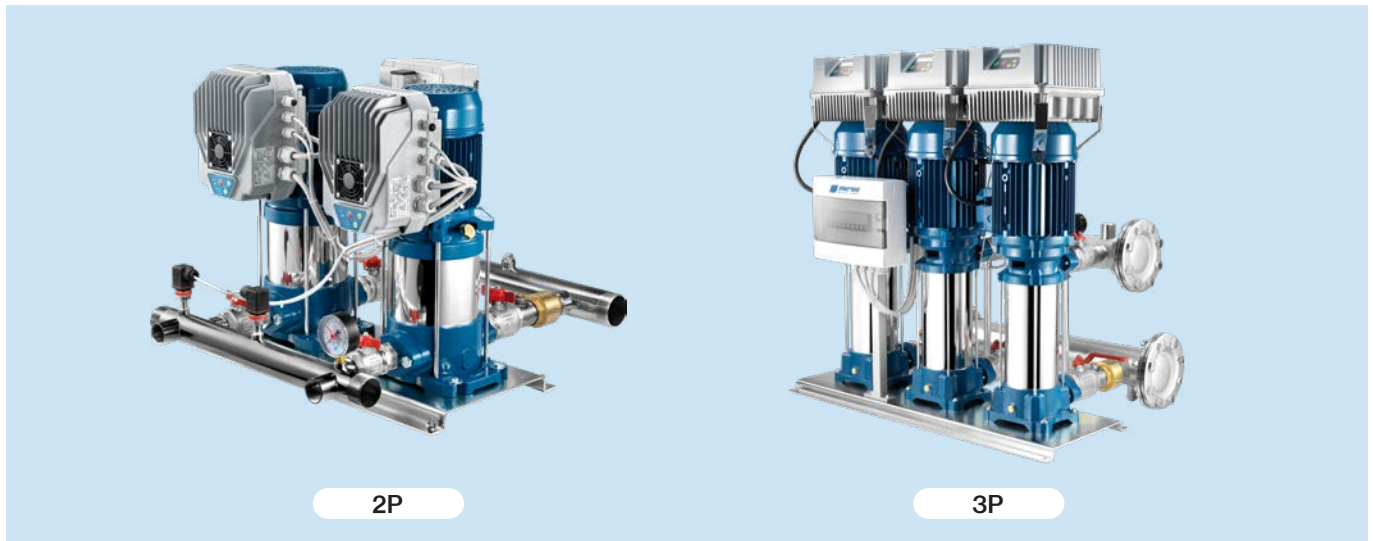
TARGET 2MN		TYPE - 50 Hz			P2 (x2)		Q (m³/h - l/min)												
		FIXED SPEED	VARIABLE SPEED				0	12	15	18	24	30	36	42	48	54	60	66	
		3-400V	EPIC-A	IPFC			0	200	250	300	400	500	600	700	800	900	1000	1100	
m³/h	bar		3-400V-in 3-400V-out		HP	kW	H (m)												
36	3	2MN32-160A	2MN/A32-160A-309	2MN/I 32-160A-309	4	3	36,1	36,2	36,0	35,6	34,6	33,2	31,4	28,9	25,7	22,1			
	3,5	2MN32-200C	2MN/A32-200C-314	2MN/I 32-200C-311	5,5	4	40,2	40,3	40,1	39,8	38,9	37,7	36,1	34,2	31,6	28,7			
42	4	2MN32-200B	2MN/A32-200B-314	2MN/I 32-200B-314	7,5	5,5	48,3	48,0	47,9	47,6	46,7	45,5	44,2	42,6	40,5	37,9	35,4		
	5	2MN32-200A	2MN/A32-200A-318	2MN/I 32-200A-318	10	7,5	57,9	58,3	58,4	58,4	58,0	57,1	55,6	53,8	51,4	49,2	46,6	44,3	
	6,5	2MN32-250C	2MN/A32-250C-318	2MN/I 32-250C-318	12,5	9,2	74,6		72,8	72,5	71,9	70,5	68,8	66,6	64,1	61,3			
	7,5	2MN32-250B	2MN/A32-250B-325	2MN/I 32-250B-325	15	11	84,8		84,0	83,9	83,6	82,7	81,1	78,6	75,4	73,2			
	8,5	2MN32-250A	2MN/A32-250A-330	2MN/I 32-250A-330	20	15	93,5		93,6	93,7	93,7	93,4	92,3	90,4	87,7	85,3			

TARGET 2MN		TYPE - 50 Hz			P2 (x2)		Q (m³/h - l/min)													
		FIXED SPEED	VARIABLE SPEED				0	18	36	42	48	54	60	66	72	78	84	90	96	108
		3-400V	EPIC-A	IPFC			0	300	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1800
m³/h	bar		3-400V-in 3-400V-out		HP	kW	H (m)													
54	2	2MN40-125A	2MN/A40-125A-309	2MN/I 40-125A-309	4	3	26,8	27,6	27,2	26,5	25,7	24,6	23,4	22,0	20,3	18,5	16,8			
	3	2MN40-160A	2MN/A40-160A-314	2MN/I 40-160A-311	5,5	4	38,8	34,9	33,9	33,2	32,4	31,3	30,0	28,5	26,9	25,2	23,4			
	4	2MN40-200B	2MN/A40-200B-314	2MN/I 40-200B-314	7,5	5,5	44,6	45,5	44,5	43,5	42,3	41,0	39,3	37,2	34,9	32,3	29,4			
	5	2MN40-200A	2MN/A40-200A-318	2MN/I 40-200A-318	10	7,5	56,2	56,5	55,9	55,1	54,1	52,8	51,2	49,3	47,0	44,4	41,6			
66	5	2MN40-200AP	2MN/A40-200AP-318	2MN/I 40-200AP-318	12,5	9,2	61,7	61,4	60,0	59,1	57,9	56,4	54,7	53,1	51,1	48,5	45,5	42,2		
	6,5	2MN40-250B	2MN/A40-250B-325	2MN/I 40-250B-325	15	11	73,7	73,9	71,9	71,1	70,2	69,2	68,1	66,7	64,7	62,1				
72	7,5	2MN40-250A	2MN/A40-250A-330	2MN/I 40-250A-330	20	15	82,6	84,6	84,3	83,4	82,4	81,3	80,0	78,5	76,9	75,4	72,8	69,0		
84	8,5	2MN40-250BM	2MN/A40-250BM-338	2MN/I 40-250BM-338	25	18,5	92,6	93,2	93,1	92,8	92,4	91,7	90,9	89,8	88,3	86,5	84,6	82,3	79,5	72,0

TARGET 2MN		TYPE - 50 Hz			P2 (x2)		Q (m³/h - l/min)													
		FIXED SPEED	VARIABLE SPEED				0	36	42	48	54	60	72	84	96	108	120	132	144	156
		3-400V	EPIC-A	IPFC			0	600	700	800	900	1000	1200	1400	1600	1800	2000	2200	2400	2600
m³/h	bar		3-400V-in 3-400V-out		HP	kW	H (m)													
96	1,5	2MN50-125B	2MN/A50-125B-309	2MN/I 50-125B-309	4	3	20,0	20,4	20,3	20,1	19,9	19,6	18,7	17,6	16,4	15,0	13,2	11,3	9,2	
	2	2MN50-125A	2MN/A50-125A-314	2MN/I 50-125A-311	5,5	4	23,7	24,2	24,1	23,9	23,7	23,3	22,6	21,7	20,7	19,6	18,2	16,4	14,2	
108	2,5	2MN50-160B	2MN/A50-160B-314	2MN/I 50-160B-314	7,5	5,5	32,1		33,5	33,4	33,1	32,7	31,6	30,2	28,3	26,2	23,9	21,5	18,9	
120	3	2MN50-160A	2MN/A50-160A-318	2MN/I 50-160A-318	10	7,5	38,1		39,8	39,8	39,8	39,6	38,8	37,7	36,1	34,1	32,1	29,9	27,6	25,4
	3,5	2MN50-200C	2MN/A50-200C-325	2MN/I 50-200C-325	12,5	9,2	48,2		49,7	49,2	48,5	46,9	44,9	42,6	40,0	36,0	32,3	28,9		
	4	2MN50-200B	2MN/A50-200B-325	2MN/I 50-200B-325	15	11	53,1		54,6	54,1	53,5	52,2	50,4	48,1	45,5	42,7	38,8	35,0		
	5	2MN50-200A	2MN/A50-200A-330	2MN/I 50-200A-330	20	15	59,9		61,8	61,5	61,0	59,7	58,0	56,0	53,6	50,8	47,8	44,4	39,8	
	6,5	2MN50-250B	2MN/A50-250B-338	2MN/I 50-250B-338	25	18,5	78,8		78,4	78,0	77,0	75,1	72,9	70,3	66,9	62,9	58,5			
	7,5	2MN50-250A	2MN/A50-250A-344	2MN/I 50-250A-348	30	22	88,5				88,3	88,1	87,2	85,8	83,8	81,4	78,5	75,0	70,2	64,8

TARGET 2MN		TYPE - 50 Hz			P2 (x2)		Q (m³/h - l/min)													
		FIXED SPEED	VARIABLE SPEED				0	84	90	108	132	156	168	192	216	240	264	276	288	300
		3-400V	EPIC-A	IPFC			0	1400	1500	1800	2200	2600	2800	3200	3600	4000	4400	4600	4800	5000
m³/h	bar		3-400V-in 3-400V-out		HP	kW	H (m)													
192	2	2MN65-125A	2MN/A65-125A-318	2MN/I 65-125A-318	10	7,5	24,6	25,0	24,9	24,7	24,2	23,5	23,0	22,0	20,6	18,8	16,8			
	2,5	2MN65-160C	2MN/A65-160C-318	2MN/I 65-160C-318	12,5	9,2	28,9	30,6	30,5	30,0	29,1	27,9	27,2	25,3	22,9	20,2	17,5	16,0	13,9	
	3	2MN65-160B	2MN/A65-160B-325	2MN/I 65-160B-325	15	11	33,2	35,1	35,0	34,6	33,8	32,8	32,1	30,4	28,2	25,5	22,5	21,4	20,4	
	3,5	2MN65-160A	2MN/A65-160A-338	2MN/I 65-160A-338	20	15	40,1	42,5	42,5	42,3	41,8	41,0	40,4	38,9	37,1	35,3	32,8	31,7	30,9	
240	3	2MN65-200C	2MN/A65-200C-338	2MN/I 65-200C-338	20	15	44,4		46,1	44,7	43,2	42,4	40,3	37,5	33,7	28,9	26,8			
	4	2MN65-200B	2MN/A65-200B-338	2MN/I 65-200B-338	25	18,5	51,7		53,9	52,7	51,3	50,4	48,6	45,9	43,0	39,4	37,1	34,6		
	5	2MN65-200A	2MN/A65-200A-344	2MN/I 65-200A-348	30	22	60,3		61,8	61,0	59,8	59,1	57,1	54,6	51,6	48,3	46,5	44,4		
	6	2MN65-250B	-	2MN/I 65-250B-365	40	30	80,6		80,6	78,4	75,7	74,1	70,4	66,1	61,0	54,7	51,0	47,3		
	7	2MN65-250A	-	2MN/I 65-250A-375	50	37	91,6		91,6	89,8	87,4	85,9	82,5	77,8	72,8	67,4	64,3	60,8	57,9	





### Fixed speed and variable speed booster sets with two or three multistage pumps

#### DESCRIPTION

Fully automatic booster units with two (2P) or three (3P) multistage pumps of PLUS series, set on a single skid and connected in parallel by suction and delivery manifolds. To ensure a constant pressure and deliver the highest comfort level they can be equipped with EPIC, EPIC-A or IPFC inverters.

These pressure boosting systems are suitable for water network supply in housing complexes, offices, hotels, shopping centers, industrial plants and for irrigation. It is required the installation of a pressure tank.

#### FEATURES

- Horizontal or vertical multistage pumps of PLUS series
- Inlet and outlet galvanized steel manifolds (stainless stees as option)
- Base frame in galvanized steel
- Non-return valves on suction side, one per pump
- Isolating valves, two per pump
- Pressure gauge
- Variable speed drive, one per pump
- Outlet-pressure sensors, one per pump
- Breaker box
- EQ2SM(T) electronic or Q2ST star-delta electromechanical control panel with pressure switches for fixed speed version
- Inverter EPIC, EPIC-A or IPFC, connected on each pump with pressure sensors, for variable speed version
- Pressure tanks, available on request, as accessory

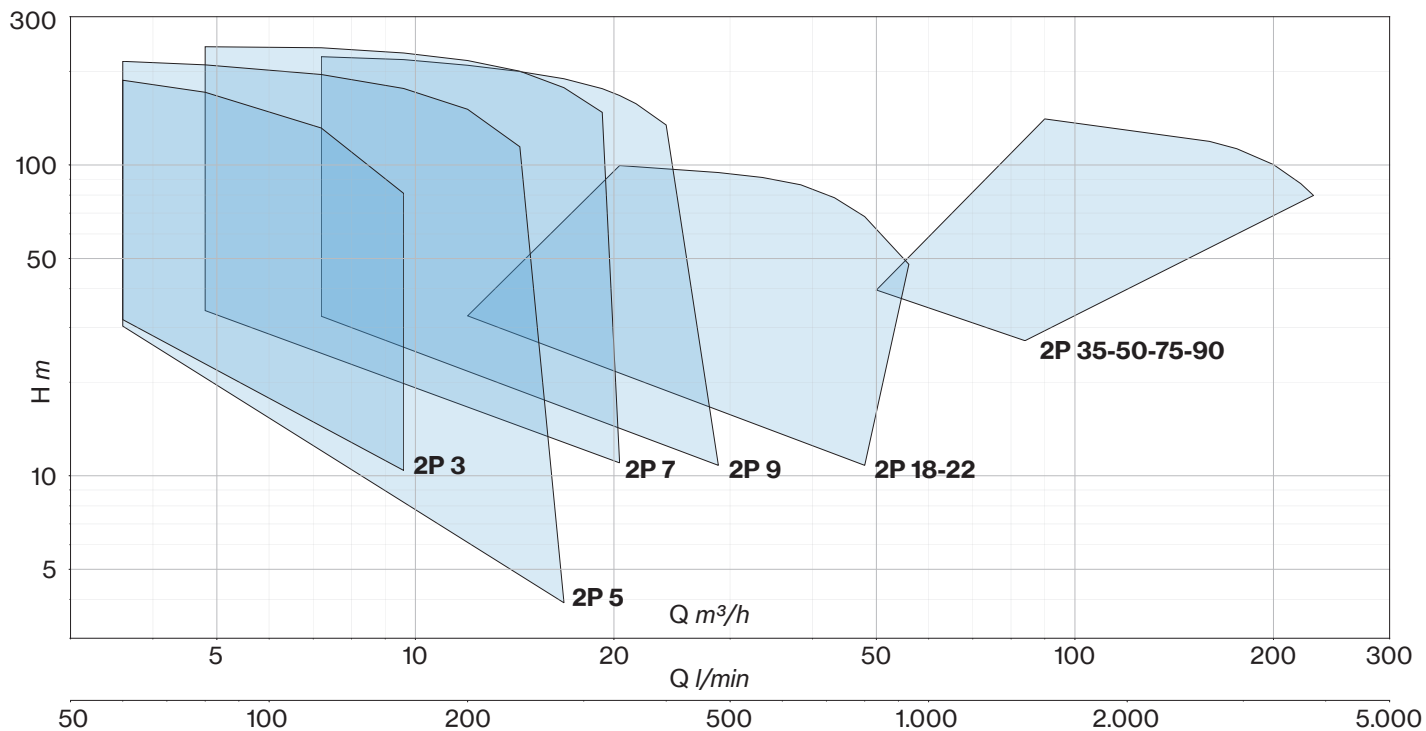
#### FUNCTIONING

In the fixed speed version as soon as pressure drops below the minimum set value on the pressure switch the first pump starts automatically. If water demand further increases, the second pump will run until the pressure rises above the maximum set value. When demand ends, the last pump turns off. All the pumps follow cycling changeover for equal work distribution. In case of one pump failure, the other pumps would continue to operate.

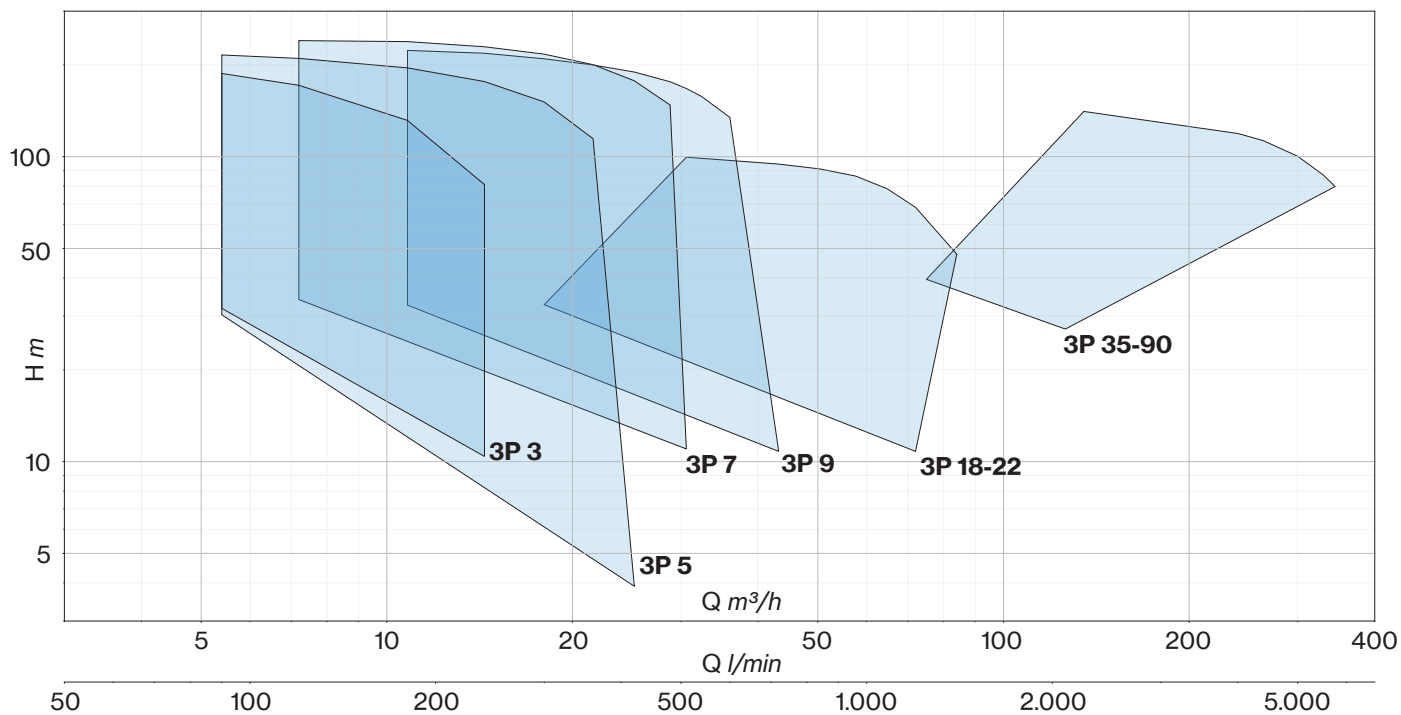
In the variable speed version when the system pressure drops below the desired level, the sensors detect it giving an input to the inverter to start the first pump at controlled speed. If the flow rate is not sufficient, the pressure continues to drop causing the second pump to start. As soon as the flow demand decreases, the pressure rises again and the second pump stop. The first pump continues to modulate its speed in order to regulate and maintain the set pressure until it turns off when the flow demand ends. Based on working hours, the inverters will alternate the starting order of pumps to ensure better wear distribution. Continuity of operation is ensured in the event of one pump or one inverter failure.

# MULTISTAGE BOOSTER SET

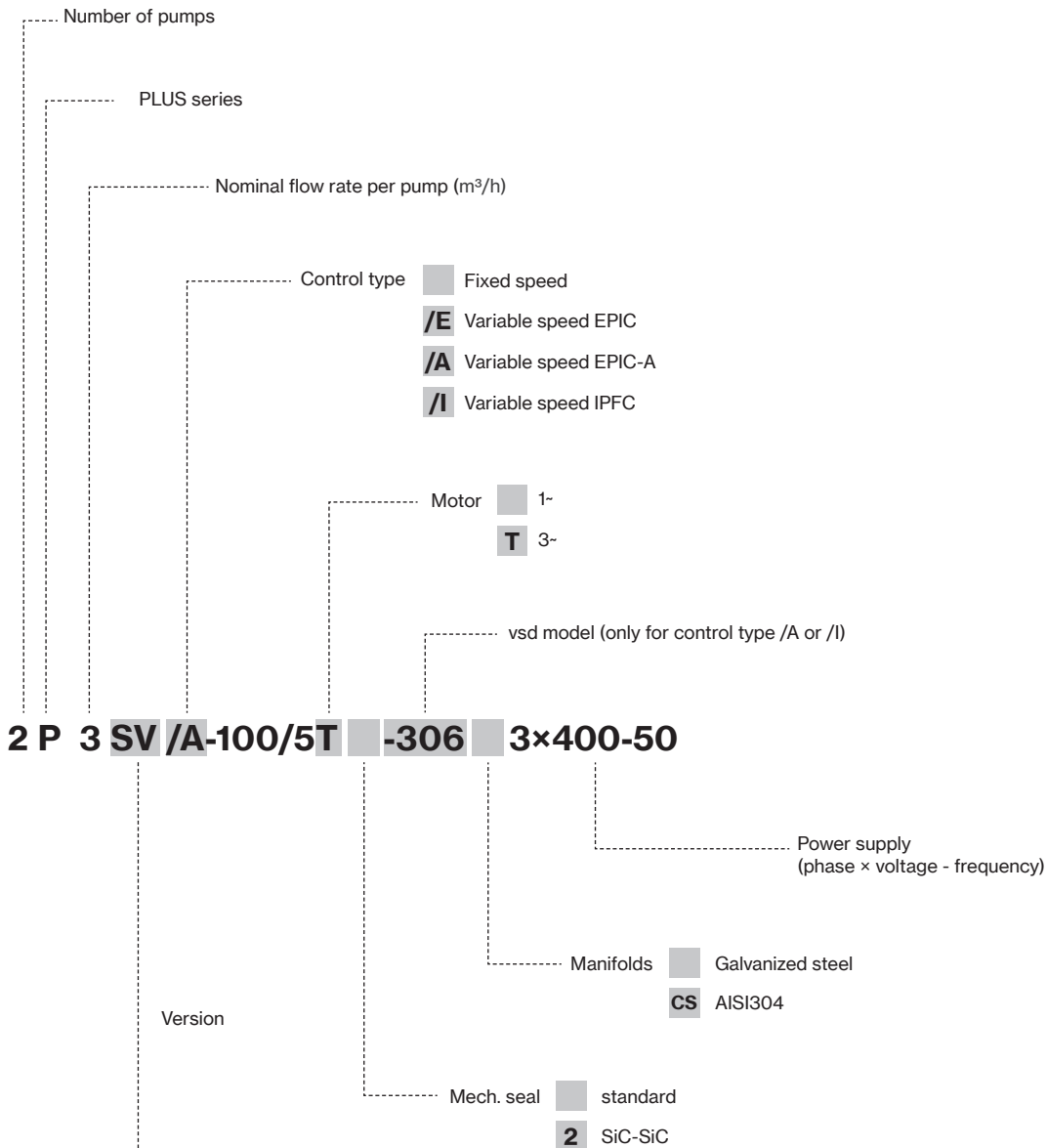
## 2 PLUS



## 3 PLUS



# MULTISTAGE BOOSTER SETS



	PUMP TYPE	MAX LIQUID TEMPERATURE	IMPELLERS MATERIAL	PUMP SHELL AND BODY MATERIAL	PUMP AND MOTOR SHAFT	
<b>S</b>	Horizontal multistage	35° C	Noryl®	AISI 304	monoblock	
		110° C	AISI 304	AISI 304		
<b>V</b>	Vertical multistage, overlapped ports	35° C	Noryl®	AISI 304 / cast iron		
		90° C	AISI 304	AISI 304 / cast iron		
<b>SV</b>	Vertical multistage, inline ports	35° C	Noryl®	AISI 304 / cast iron		with coupling
<b>L</b>		35° C	Noryl®	AISI 304 / cast iron		monoblock
<b>LG</b>		110° C	AISI 304	AISI 304 / cast iron		with coupling
<b>SL</b>		110° C	AISI 304	AISI 304		
<b>SLX</b>		110° C	AISI 304	AISI 304 / cast iron		
<b>SLG</b>		110° C	AISI 304	AISI 304		
<b>SLXG</b>		120° C	AISI 304	AISI 304 / cast iron	with coupling	
<b>HS</b>		120° C	AISI 316	AISI 316		
<b>HX</b>						





# PERFORMANCE 2P/3P VERTICAL

TARGET		TYPE - 50 Hz						P2		2P - Q (m³/h - l/min)								
		VERTICAL PUMPS						2P (x2) 3P (x3)	0	3,6	4,8	7,2	9,6	12	14,4	16,8		
		FIXED SPEED		VARIABLE SPEED													3P - Q (m³/h - l/min)	
		2P/3P		2P EPIC	2P/3P EPIC-A		2P/3P IPFC		0	5,4	7,2	10,8	14,4	18	21,6	25,2		
m³/h	bar	1- 230V	3- 400V	1- 230V-in 3- 400V-out	3- 400V-in 3- 400V-out	1- 230V-in 3- 230V-out	3- 400V-in 3- 400V-out	HP	kW	H (m)								
(2P) 6 (3P) 9	3	3V-100/5	3V-100/5T	3V/E-100/5T	3V/A-100/5T-304	3V/I-100/5T-109	3V/I-100/5T-306	1	0,75	52,2	40,8	36	25,4	14				
		3L-100/5	3L-100/5T	3L/E-100/5T	3L/A-100/5T-304	3L/I-100/5T-109	3L/I-100/5T-306			55,3	46,5	42,1	31,6	17,7				
		3SV-100/5	3SV-100/5T	3SV/E-100/5T	3SV/A-100/5T-304	3SV/I-100/5T-109	3SV/I-100/5T-306											
	4	3V-120/6	3V-120/6T	3V/E-120/6T	3V/A-120/6T-304	3V/I-120/6T-109	3V/I-120/6T-306	1,2	0,9	62,8	49,6	43,9	32,1	18,3				
		3L-120/6	3L-120/6T	3L/E-120/6T	3L/A-120/6T-304	3L/I-120/6T-109	3L/I-120/6T-306			66,6	56	50,7	38,1	22,4				
		3SV-120/6	3SV-120/6T	3SV/E-120/6T	3SV/A-120/6T-304	3SV/I-120/6T-109	3SV/I-120/6T-306											
	5	3V-150/7	3V-150/7T	3V/E-150/7T	3V/A-150/7T-304	3V/I-150/7T-109	3V/I-150/7T-306	1,5	1,1	77,1	68,4	62,3	46,5	25,7				
		3L-150/7	3L-150/7T	3L/E-150/7T	3L/A-150/7T-304	3L/I-150/7T-109	3L/I-150/7T-306			75,6	64,8	58,9	44,4	26,1				
		3SV-150/7	3SV-150/7T	3SV/E-150/7T	3SV/A-150/7T-304	3SV/I-150/7T-109	3SV/I-150/7T-306											
	6	3V-180/8	3V-180/8T	3V/E-180/8T	3V/A-180/8T-304	3V/I-180/8T-109	3V/I-180/8T-306	2	1,5	88,1	77,6	70,2	51,3	26				
		3L-180/8	3L-180/8T	3L/E-180/8T	3L/A-180/8T-304	3L/I-180/8T-109	3L/I-180/8T-306			86,7	73,9	67,3	51	29,9				
		3SV-180/8	3SV-180/8T	3SV/E-180/8T	3SV/A-180/8T-304	3SV/I-180/8T-109	3SV/I-180/8T-306											
	7	3V-200/9	3V-200/9T	3V/E-200/9T	3V/A-200/9T-304	3V/I-200/9T-109	3V/I-200/9T-306	2	15	98,8	87,3	79,4	60	32,2				
		3L-200/9	3L-200/9T	3L/E-200/9T	3L/A-200/9T-304	3L/I-200/9T-109	3L/I-200/9T-306			97	82,5	74,7	56,4	32,9				
		3SV-200/9	3SV-200/9T	3SV/E-200/9T	3SV/A-200/9T-304	3SV/I-200/9T-109	3SV/I-200/9T-306											
	8	3V-250/10	3V-250/10T	3V/E-250/10T	3V/A-250/10T-306	3V/I-250/10T-114	3V/I-250/10T-306	2	15	109,3	96,3	87,5	65,3	34,5				
3L-250/10		3L-250/10T	3L/E-250/10T	3L/A-250/10T-306	3L/I-250/10T-114	3L/I-250/10T-306	107,2			90,5	82	61,5	35,6					
3SV-250/10		3SV-250/10T	3SV/E-250/10T	3SV/A-250/10T-306	3SV/I-250/10T-114	3SV/I-250/10T-306												
9	3V-280/11	3V-280/11T	3V/E-280/11T	3V/A-280/11T-306	3V/I-280/11T-114	3V/I-280/11T-306	2,5	1,85	120,4	106,1	96,4	71,6	38,3					
	3L-280/11	3L-280/11T	3L/E-280/11T	3L/A-280/11T-306	3L/I-280/11T-114	3L/I-280/11T-306			117,2	98,8	89,8	66,8	37,3					
	3SV-280/11	3SV-280/11T	3SV/E-280/11T	3SV/A-280/11T-306	3SV/I-280/11T-114	3SV/I-280/11T-306												
10	3V-300/12	3V-300/12T	-	3V/A-300/12T-306	3V/I-300/12T-114	3V/I-300/12T-306	2,5	1,85	130,3	114,6	103,8	76,6	40,8					
	3L-300/12	3L-300/12T	-	3L/A-300/12T-306	3L/I-300/12T-114	3L/I-300/12T-306			126,4	106,1	95,9	71,7	40					
	3SV-300/12	3SV-300/12T	-	3SV/A-300/12T-306	3SV/I-300/12T-114	3SV/I-300/12T-306												
12	-	3SLG-350/14T	-	3SLG/A-350/14T-306	3SLG/I-350/14T-114	3SLG/I-350/14T-306	3	2,2	154,8	133,7	122,5	97,4	58,2					
14	-	3SLG-380/16T	-	3SLG/A-380/16T-309	3SLG/I-380/16T-114	3SLG/I-380/16T-309	4	3	177,5	154,5	141,3	109,4	67					
15	-	3SLG-400/18T	-	3SLG/A-400/18T-309	-	3SLG/I-400/18T-309	4	3	195,1	172,8	158	122,1	75,3					
16	-	3SLG-450/20T	-	3SLG/A-450/20T-309	-	3SLG/I-450/20T-309	4	3	218,3	187,4	171,4	131,5	81					
(2P) 10 (3P) 15	3	5V-120/4	5V-120/4T	5V/E-120/4T	5V/A-120/4T-304	5V/I-120/4T-109	5V/I-120/4T-306	1,2	0,9	45,3	41,3	39,6	35,6	30,8	24,9	17,6	6,4	
		5L-120/4	5L-120/4T	5L/E-120/4T	5L/A-120/4T-304	5L/I-120/4T-109	5L/I-120/4T-306			45,5	42,2	40,7	37,2	32,9	27,4	19,8	10,4	
		5SV-120/4	5SV-120/4T	5SV/E-120/4T	5SV/A-120/4T-304	5SV/I-120/4T-109	5SV/I-120/4T-306											
	4	5V-150/5	5V-150/5T	5V/E-150/5T	5V/A-150/5T-304	5V/I-150/5T-109	5V/I-150/5T-306	1,5	1,1	57,6	55,6	54,2	50,5	45,0	37,0	27,4		
		5L-150/5	5L-150/5T	5L/E-150/5T	5L/A-150/5T-304	5L/I-150/5T-109	5L/I-150/5T-306			55,9	52,8	51,4	48,1	43,4	37,3	28,3	16,4	
		5SV-150/5	5SV-150/5T	5SV/E-150/5T	5SV/A-150/5T-304	5SV/I-150/5T-109	5SV/I-150/5T-306											
	5	5V-180/6	5V-180/6T	5V/E-180/6T	5V/A-180/6T-304	5V/I-180/6T-109	5V/I-180/6T-306	2	1,5	69,1	66,5	64,8	60,1	53,2	43,8	32,0		
		5L-180/6	5L-180/6T	5L/E-180/6T	5L/A-180/6T-304	5L/I-180/6T-109	5L/I-180/6T-306			67	63,3	61,6	57,6	51,9	44,2	33,6	20,4	
		5SV-180/6	5SV-180/6T	5SV/E-180/6T	5SV/A-180/6T-304	5SV/I-180/6T-109	5SV/I-180/6T-306											
	5,5	5V-200/7	5V-200/7T	5V/E-200/7T	5V/A-200/7T-304	5V/I-200/7T-109	5V/I-200/7T-306	2	15	80,6	77,1	75,1	69,6	61,3	50,4	35,8		
		5L-200/7	5L-200/7T	5L/E-200/7T	5L/A-200/7T-304	5L/I-200/7T-109	5L/I-200/7T-306			77,8	73,5	71,3	66,3	59,6	50,7	38,0	22,4	
		5SV-200/7	5SV-200/7T	5SV/E-200/7T	5SV/A-200/7T-304	5SV/I-200/7T-109	5SV/I-200/7T-306											
6,5	5V-250/8	5V-250/8T	5V/E-250/8T	5V/A-250/8T-306	5V/I-250/8T-114	5V/I-250/8T-306	2,5	1,85	92	88,2	85,8	79,2	70,1	57,2	41,1			
	5L-250/8	5L-250/8T	5L/E-250/8T	5L/A-250/8T-306	5L/I-250/8T-114	5L/I-250/8T-306			89,2	83,9	81,6	76,2	68,4	58,3	43,2	24,6		
	5SV-250/8	5SV-250/8T	5SV/E-250/8T	5SV/A-250/8T-306	5SV/I-250/8T-114	5SV/I-250/8T-306												



# PERFORMANCE 2P/3P VERTICAL

TARGET		TYPE - 50 Hz						P2		2P - Q (m³/h - l/min)									
		VERTICAL PUMPS						2P (x2)	3P (x3)	0	3,6	4,8	7,2	9,6	12	14,4	16,8	19,2	
		FIXED SPEED			VARIABLE SPEED					0	60	80	120	160	200	240	280	320	
		2P/3P		2P EPIC	2P/3P EPIC-A		2U/3U IPFC		3P - Q (m³/h - l/min)										
m³/h	bar	1- 230V	3- 400V	1- 230V-in 3- 400V-out	3- 400V-in 3- 400V-out	1- 230V-in 3- 230V-out	3- 400V-in 3- 400V-out	HP	kW	H (m)									
(2P) 10 (3P) 15	7	5V-280/9	5V-280/9T	-	5V/A-280/9T-306	5V/I-280/9T-114	5V/I-280/9T-306	2,5	1,85	103,3	98,9	96,2	88,8	78,4	64,1	45,3			
		5L-280/9	5L-280/9T	-	5L/A-280/9T-306	5L/I-280/9T-114	5L/I-280/9T-306			99,7	93,7	90,9	84,1	75,2	61,1	47,4	25,9		
		5SV-280/9	5SV-280/9T	-	5SV/A-280/9T-306	5SV/I-280/9T-114	5SV/I-280/9T-306												
		5SL-280/9	5SL-280/9T	-	5SL/A-280/9T-306	5SL/I-280/9T-114	5SL/I-280/9T-306												
	8	5V-300/10	5V-300/10T	-	5V/A-300/10T-306	5V/I-300/10T-114	5V/I-300/10T-306	3	2,2	115,1	110,6	107,6	99,5	87,6	72,1	50,7			
		5L-300/10	5L-300/10T	-	5L/A-300/10T-306	5L/I-300/10T-114	5L/I-300/10T-306			112,2	105,4	102,4	95,3	85,6	72,6	54,8	31,0		
		5SV-300/10	5SV-300/10T	-	5SV/A-300/10T-306	5SV/I-300/10T-114	5SV/I-300/10T-306												
		5SL-300/10	5SL-300/10T	-	5SL/A-300/10T-306	5SL/I-300/10T-114	5SL/I-300/10T-306												
	9	-	5V-350/11T	-	5V/A-350/11T-306	5V/I-350/11T-114	5V/I-350/11T-306	3,5	2,57	127,6	122,5	119,4	110,8	98,0	80,8	57,4			
		-	5L-350/11T	-	5L/A-350/11T-306	5L/I-350/11T-114	5L/I-350/11T-306			125,1	117,6	114,3	106,1	95,5	80,9	60,9	34,8		
		-	5SV-350/11T	-	5SV/A-350/11T-306	5SV/I-350/11T-114	5SV/I-350/11T-306												
		-	5SL-350/11T	-	5SL/A-350/11T-306	5SL/I-350/11T-114	5SL/I-350/11T-306												
	10	-	5V-380/12T	-	5V/A-380/12T-309	-	5V/I-380/12T-309	4	3	140,3	135,4	132,1	123,2	109,5	90,1	66,5			
		-	5L-380/12T	-	5L/A-380/12T-309	-	5L/I-380/12T-309			135,7	128,9	125,6	117,7	106,3	91,3	70,2	41,5		
		-	5SV-380/12T	-	5SV/A-380/12T-309	-	5SV/I-380/12T-309												
		-	5SL-380/12T	-	5SL/A-380/12T-309	-	5SL/I-380/12T-309												
	12	-	5SLG-400/14T	-	5SLG/A-400/14T-309	-	5SLG/I-400/14T-309	4	3	159,2	150,7	146,7	136,6	122,9	105,5	79,0			
	14	-	5SLG-450/16T	-	5SLG/A-450/16T-309	-	5SLG/I-450/16T-309	5,5	4	182,0	173,2	169,1	158,0	142,9	122,9	93,6			
16	-	5SLG-550/18T	-	5SLG/A-550/18T-314	-	5SLG/I-550/18T-311	5,5	4	204,4	194,4	189,5	176,5	159,6	136,3	103,2				
18	-	5SLG-600/20T	-	5SLG/A-600/20T-314	-	5SLG/I-600/20T-311	5,5	4	226,7	215,5	210,0	195,5	176,3	151,1	114,5				
(2P) 14 (3P) 21	3	7V-180/4	7V-180/4T	7V/E-180/4T	7V/A-180/4T-304	7V/I-180/4T-109	7V/I-180/4T-306	2	1,5	49,6		48,4	46,7	43,8	39,9	34,9	28,9		
		7L-180/4	7L-180/4T	7L/E-180/4T	7L/A-180/4T-304	7L/I-180/4T-109	7L/I-180/4T-306			46,7		46,0	45,2	43,1	40,3	36,9	32,3	25,5	
		7SV-180/4	7SV-180/4T	7SV/E-180/4T	7SV/A-180/4T-304	7SV/I-180/4T-109	7SV/I-180/4T-306												
		7SL-180/4	7SL-180/4T	7SL/E-180/4T	7SL/A-180/4T-304	7SL/I-180/4T-109	7SL/I-180/4T-306												
	4	7V-250/5	7V-250/5T	7V/E-250/5T	7V/A-250/5T-306	7V/I-250/5T-114	7V/I-250/5T-306	2,5	1,85	63,2		62,1	60,3	56,9	52,1	46,2	39,0		
		7L-250/5	7L-250/5T	7L/E-250/5T	7L/A-250/5T-306	7L/I-250/5T-114	7L/I-250/5T-306			58,5		57,6	56,6	54,1	50,8	46,1	40,3	31,8	
		7SV-250/5	7SV-250/5T	7SV/E-250/5T	7SV/A-250/5T-306	7SV/I-250/5T-114	7SV/I-250/5T-306												
		7SL-250/5	7SL-250/5T	7SL/E-250/5T	7SL/A-250/5T-306	7SL/I-250/5T-114	7SL/I-250/5T-306												
	5	7V-300/6	7V-300/6T	-	7V/A-300/6T-306	7V/I-300/6T-114	7V/I-300/6T-306	3	2,2	76,0		75,1	73,1	69,2	63,6	56,8	48,2		
		7L-300/6	7L-300/6T	-	7L/A-300/6T-306	7L/I-300/6T-114	7L/I-300/6T-306			70,6		69,9	68,7	65,8	61,8	56,6	49,7	39,3	
		7SV-300/6	7SV-300/6T	-	7SV/A-300/6T-306	7SV/I-300/6T-114	7SV/I-300/6T-306												
		7SL-300/6	7SL-300/6T	-	7SL/A-300/6T-306	7SL/I-300/6T-114	7SL/I-300/6T-306												
	6	-	7V-350/7T	-	7V/A-350/7T-306	7V/I-350/7T-114	7V/I-350/7T-306	3,5	2,57	89,0		88,0	85,8	81,2	74,5	66,3	56,2		
		-	7L-350/7T	-	7L/A-350/7T-306	7L/I-350/7T-114	7L/I-350/7T-306			82,8		82,0	80,6	77,2	72,3	66,0	57,4	46,4	
		-	7SV-350/7T	-	7SV/A-350/7T-306	7SV/I-350/7T-114	7SV/I-350/7T-306												
		-	7SL-350/7T	-	7SL/A-350/7T-306	7SL/I-350/7T-114	7SL/I-350/7T-306												
	7	-	7V-400/8T	-	7V/A-400/8T-309	-	7V/I-400/8T-309	4	3	102,3		101,0	98,2	92,4	84,4	74,6	62,4		
		-	7L-400/8T	-	7L/A-400/8T-309	-	7L/I-400/8T-309			94,8		94,3	92,5	88,6	83,2	76,4	66,2	52,6	
		-	7SV-400/8T	-	7SV/A-400/8T-309	-	7SV/I-400/8T-309												
		-	7SL-400/8T	-	7SL/A-400/8T-309	-	7SL/I-400/8T-309												
8	-	7V-450/9T	-	7V/A-450/9T-309	-	7V/I-450/9T-309	4,5	3,37	115,2		114,4	111,4	105,6	97,1	86,3	73,1			
	-	7L-450/9T	-	7L/A-450/9T-309	-	7L/I-450/9T-309			107,4		106,9	105,2	101,1	95,3	87,7	76,3	61,0		
	-	7SV-450/9T	-	7SV/A-450/9T-309	-	7SV/I-450/9T-309													
	-	7SL-450/9T	-	7SL/A-450/9T-309	-	7SL/I-450/9T-309													
9	-	7V-550/10T	-	7V/A-550/10T-309	-	7V/I-550/10T-309	5,5	4	128,1		128,0	124,9	118,7	109,4	97,6	83,0			
	-	7L-550/10T	-	7L/A-550/10T-309	-	7L/I-550/10T-309			119,8		119,6	118,4	113,9	107,7	99,4	87,0	70,4		
	-	7SV-550/10T	-	7SV/A-550/10T-309	-	7SV/I-550/10T-309													
	-	7SL-550/10T	-	7SL/A-550/10T-309	-	7SL/I-550/10T-309													
11	-	7SLG-750/12T	-	7SLG/A-750/12T-314	-	7SLG/I-750/12T-311	7,5	5,5	143,7		143,7	142,6	137,0	129,6	119,8	105,6	87,0		
13	-	7SLG-800/14T	-	7SLG/A-800/14T-314	-	7SLG/I-800/14T-314	7,5	5,5	167,6		167,3	165,9	159,6	151,0	139,5	122,6	100,3		
15	-	7SLG-900/16T	-	7SLG/A-900/16T-314	-	7SLG/I-900/16T-314	7,5	5,5	191,5		191,2	189,3	181,7	171,5	157,7	137,6	111,1		
17	-	7SLG-950/18T	-	7SLG/A-950/18T-314	-	7SLG/I-950/18T-314	10	7,5	215,5		215,7	213,9	205,8	194,7	179,8	159,0	132,3		
19	-	7SLG-1000/20T	-	7SLG/A-1000/20T-318	-	7SLG/I-1000/20T-318	10	7,5	240,3		240,2	238,4	229,3	216,8	200,3	177,3	147,7		



# PERFORMANCE 2P/3P VERTICAL

TARGET		TYPE - 50 Hz						P2		2P - Q (m³/h - l/min)										
		VERTICAL PUMPS						2P (x2)	3P (x3)	0	12	14,4	16,8	19,2	20,4	21,6	24	28,8		
		FIXED SPEED			VARIABLE SPEED					0	200	240	280	320	340	360	400	480		
		2P/3P		2P EPIC	2P/3P EPIC-A		2P/3P IPFC		3P - Q (m³/h - l/min)											
m³/h	bar	1- 230V	3- 400V	1- 230V-in 3- 400V-out	3- 400V-in 3- 400V-out	1- 230V-in 3- 230V-out	3- 400V-in 3- 400V-out	HP	kW	H (m)										
(2P) 18 (3P) 27	3	9V-200/4	9V-200/4T	9V/E-200/4T	9V/A-200/4T-304	9V/I-200/4T-109	9V/I-200/4T-306	2	1,5	45,8	39,2	37,3	34,6	31,3	29,4	27,4	23,0	17,9		
		9L-200/4	9L-200/4T	9L/E-200/4T	9L/A-200/4T-304	9L/I-200/4T-109	9L/I-200/4T-306			45,8	39,7	37,8	35,6	32,7	30,9	29,0	24,6	19,8		
		9SV-200/4	9SV-200/4T	9SV/E-200/4T	9SV/A-200/4T-304	9SV/I-200/4T-109	9SV/I-200/4T-306													
		9SL-200/4	9SL-200/4T	9SL/E-200/4T	9SL/A-200/4T-304	9SL/I-200/4T-109	9SL/I-200/4T-306													
	3,5	9V-250/5	9V-250/5T	-	9V/A-250/5T-306	9V/I-250/5T-114	9V/I-250/5T-306	2,5	1,85	56,9	48,5	46,1	42,9	38,8	36,4	33,8	28,2	22,3		
		9L-250/5	9L-250/5T	-	9L/A-250/5T-306	9L/I-250/5T-114	9L/I-250/5T-306			57,1	49,5	47,2	44,3	40,6	38,4	35,8	30,2	24,4		
		9SV-250/5	9SV-250/5T	-	9SV/A-250/5T-306	9SV/I-250/5T-114	9SV/I-250/5T-306													
		9SL-250/5	9SL-250/5T	-	9SL/A-250/5T-306	9SL/I-250/5T-114	9SL/I-250/5T-306													
	4	9V-300/6	9V-300/6T	-	9V/A-300/6T-306	9V/I-300/6T-114	9V/I-300/6T-306	3	2,2	69,8	60,3	57,5	53,6	48,8	46,0	42,9	36,4	29,6		
		9L-300/6	9L-300/6T	-	9L/A-300/6T-306	9L/I-300/6T-114	9L/I-300/6T-306			69,4	60,3	57,3	54,0	49,8	46,9	43,6	36,2	28,1		
		9SV-300/6	9SV-300/6T	-	9SV/A-300/6T-306	9SV/I-300/6T-114	9SV/I-300/6T-306													
		9SL-300/6	9SL-300/6T	-	9SL/A-300/6T-306	9SL/I-300/6T-114	9SL/I-300/6T-306													
	5,5	-	9V-400/7T	-	9V/A-400/7T-309	-	9V/I-400/7T-309	4	3	83,3	72,7	68,9	64,2	58,5	55,2	51,6	43,6	34,7		
		-	9L-400/7T	-	9L/A-400/7T-309	-	9L/I-400/7T-309			82,0	72,0	68,7	64,9	59,9	56,6	52,9	44,2	33,9		
		-	9SV-400/7T	-	9SV/A-400/7T-309	-	9SV/I-400/7T-309													
		-	9SL-400/7T	-	9SL/A-400/7T-309	-	9SL/I-400/7T-309													
	6,5	-	9V-450/8T	-	9V/A-450/8T-309	-	9V/I-450/8T-309	4,5	3,37	96,7	84,8	80,6	75,5	69,2	65,4	61,3	52,2	42,1		
-		9L-450/8T	-	9L/A-450/8T-309	-	9L/I-450/8T-309	93,5			82,6	79,0	74,9	69,5	65,8	61,5	52,0	41,7			
-		9SV-450/8T	-	9SV/A-450/8T-309	-	9SV/I-450/8T-309														
-		9SL-450/8T	-	9SL/A-450/8T-309	-	9SL/I-450/8T-309														
7	-	9V-500/9T	-	9V/A-500/9T-309	-	9V/I-500/9T-309	4,5	3,37	107,1	92,8	88,3	82,4	75,2	71,0	66,4	56,4	45,2			
	-	9L-500/9T	-	9L/A-500/9T-309	-	9L/I-500/9T-309			105,4	92,5	88,3	83,5	77,3	73,0	68,1	57,5	46,9			
	-	9SV-500/9T	-	9SV/A-500/9T-309	-	9SV/I-500/9T-309														
	-	9SL-500/9T	-	9SL/A-500/9T-309	-	9SL/I-500/9T-309														
8	-	9V-550/10T	-	9V/A-550/10T-309	-	9V/I-550/10T-311	5,5	4	119,5	104,3	99,3	92,7	84,6	79,9	74,8	63,5	51,2			
	-	9L-550/10T	-	9L/A-550/10T-309	-	9L/I-550/10T-309			117,6	104,5	99,9	94,7	87,8	83,2	77,9	66,2	53,4			
	-	9SV-550/10T	-	9SV/A-550/10T-314	-	9SV/I-550/10T-311														
	-	9SL-550/10T	-	9SL/A-550/10T-314	-	9SL/I-550/10T-311														
10	-	9SLG-750/12T	-	9SLG/A-750/12T-314	-	9SLG/I-750/12T-314	7,5	5,5	141,3	125,4	119,7	113,4	105,1	99,7	93,7	79,6				
12	-	9SLG-800/14T	-	9SLG/A-800/14T-314	-	9SLG/I-800/14T-314	7,5	5,5	165,5	146,5	139,9	132,7	123,4	117,3	110,3	94,0				
13	-	9SLG-900/16T	-	9SLG/A-900/16T-39	-	9SLG/I-900/16T-39	10	7,5	188,7	167,1	159,7	151,4	140,4	133,3	125,1	106,2				
15	-	9SLG-950/9T	-	9SLG/A-950/9T-39	-	9SLG/I-950/9T-39	10	7,5	213,8	189,6	181,2	172,0	159,9	151,8	142,5	121,0				
17	-	9SLG-1000/20T	-	9SLG/A-1000/20T-39	-	9SLG/I-1000/20T-39	10	7,5	236,7	209,3	199,8	189,5	176,1	167,3	157,5	134,5				

TARGET		TYPE - 50 Hz				P2		2P - Q (m³/h - l/min)														
		VERTICAL PUMPS				2P (x2)	3P (x3)	0	12	14,4	16,8	19,2	20,4	21,6	24	28,8	33,6	38,4	43,2	48		
		FIXED SPEED		VARIABLE SPEED				0	200	240	280	320	340	360	400	480	560	640	720	800		
		2P/3P		2P/3P EPIC-A		2P/3P IPFC		3P - Q (m³/h - l/min)														
m³/h	bar	3- 400V	3- 400V-in 3- 400V-out	1- 230V-in 3- 230V-out	3- 400V-in 3- 400V-out	HP	kW	H (m)														
(2P) 36 (3P) 54	2	18V-250/3T	18V/A-250/3T-306	18V/I-250/3T-114	18V/I-250/3T-306	2,5	1,85	34,7	32,9	32,6	32,2	31,6	31,3	31,0	30,1	28,0	24,7	20,6	15,9	10,7		
		18L-250/3T	18L/A-250/3T-306	18L/I-250/3T-114	18L/I-250/3T-306			33,8	31,6	31,0	30,2	29,4	28,9	28,4	27,4	25,4	23,2	20,4	16,3	11,5		
		18SV-250/3T	18SV/A-250/3T-306	18SV/I-250/3T-114	18SV/I-250/3T-306																	
		18SL-250/3T	18SL/A-250/3T-306	18SL/I-250/3T-114	18SL/I-250/3T-306																	
	2,5	18HX-300/3T	18HX/A-300/3T-306	18HX/I-300/3T-114	18HX/I-300/3T-306	3	2,2	41,2			37,1	36,3	35,9	35,5	34,4	32,3	28,9	24,8	19,4	13,5		
		18V-400/4T	18V/A-400/4T-309	-	18V/I-400/4T-309	4	3	47,1	45,4	45,2	44,9	44,3	44,0	43,6	42,6	40,0	36,0	30,6	24,6	17,8		
		18L-400/4T	18L/A-400/4T-309	-	18L/I-400/4T-309			46,3	44,2	43,4	42,5	41,4	40,9	40,3	39,1	36,7	34,1	30,8	25,6	19,0		
		18SV-400/4T	18SV/A-400/4T-309	-	18SV/I-400/4T-309																	
	18SL-400/4T	18SL/A-400/4T-309	-	18SL/I-400/4T-309																		
	3,5	18HX-400/4T	18HX/A-400/4T-306	18HX/I-400/4T-114	18HX/I-400/4T-306	4	3	55,1			49,9	48,8	48,3	47,7	46,3	43,5	39,1	33,5	26,4	18,5		
		18V-450/5T	18V/A-450/5T-309	-	18V/I-450/5T-309	4,5	3,37	59,2	57,6	57,4	57,0	56,4	56,0	55,6	54,5	51,6	46,7	40,1	33,3	25,3		
		18L-450/5T	18L/A-450/5T-309	-	18L/I-450/5T-309			58,1	55,7	54,6	53,4	52,1	51,4	50,7	49,3	46,3	42,9	38,7	32,2	24,0		
18SV-450/5T		18SV/A-450/5T-309	-	18SV/I-450/5T-309																		
18SL-450/5T	18SL/A-450/5T-309	-	18SL/I-450/5T-309																			
4,5	18HX-550/5T	18HX/A-550/5T-309	-	18HX/I-550/5T-309	5,5	4	72,3			64,3	63,1	62,4	61,7	60,1	56,6	51,8	45,1	36,8	27,6			

# PERFORMANCE 2P/3P VERTICAL

TARGET		TYPE - 50 Hz				P2		2P - Q (m³/h - l/min)														
		VERTICAL PUMPS				2P (x2)	3P (x3)	0	12	14,4	16,8	19,2	20,4	21,6	24	28,8	33,6	38,4	43,2	48	56	
		FIXED SPEED	VARIABLE SPEED					0	200	240	280	320	340	360	400	480	560	640	720	800	933	
		2P/3P	2P/3P EPIC-A	2P/3P IPFC		0	18	21,6	25,2	28,8	30,6	32,4	36	43,2	50,4	57,6	64,8	72	84			
m³/h	bar	3- 400V	3- 400V-in 3- 400V-out	1- 230V-in 3- 230V-out	3- 400V-in 3- 400V-out	HP	kW	H (m)														
(2P) 36 (3P) 54	5	18V-550/6T	18V/A-550/6T-314	-	18V/I-550/6T-311	5,5	4	71,4	69,7	69,6	69,0	68,2	67,7	67,1	65,7	62,2	56,3	48,0	39,4	29,4		
		18L-550/6T	18L/A-550/6T-314	-	18L/I-550/6T-311			70,1	67,4	66,3	64,9	63,4	62,6	61,7	60,0	56,4	52,4	47,6	39,6	29,9		
		18SV-550/6T	18SV/A-550/6T-314	-	18SV/I-550/6T-311																	
		18SL-550/6T	18SL/A-550/6T-314	-	18SL/I-550/6T-311																	
	6	18HX-750/6T	18HX/A-750/6T-314	-	18HX/I-750/6T-311	7,5	5,5	88,0			79,6	78,2	77,4	76,7	74,9	71,0	66,0	58,3	48,8	37,5		
		18V-750/8T	18V/A-750/8T-314	-	18V/I-750/8T-314	7,5	5,5	96,1	94,2	94,1	93,5	92,4	91,7	90,9	89,1	84,5	77,0	66,1	54,2	41,1		
	18L-750/8T	18L/A-750/8T-314	-	18L/I-750/8T-314	94,2			90,6	89,1	87,3	85,3	84,2	83,1	80,9	76,2	71,1	65,0	54,6	41,4			
	18SV-750/8T	18SV/A-750/8T-314	-	18SV/I-750/8T-314																		
	18SL-750/8T	18SL/A-750/8T-314	-	18SL/I-750/8T-314																		
	(2P) 44 (3P) 66	7	18HX-750/7T	18HX/A-750/7T-314	-	18HX/I-750/7T-311	7,5	5,5	102,5			92,4	90,7	89,8	88,9	86,8	82,3	76,2	67,3	56,1	43,0	
18V-900/9T			18V/A-900/9T-318	-	18V/I-900/9T-318	10	7,5	108,5	106,9	107,0	106,4	105,3	104,5	103,7	101,7	96,8	88,6	75,9	62,6	47,8		
18L-900/9T		18L/A-900/9T-318	-	18L/I-900/9T-318	106,4			102,8	101,3	99,3	97,2	96,1	94,9	92,4	87,3	81,6	75,0	63,5	48,5			
18SV-900/9T		18SV/A-900/9T-318	-	18SV/I-900/9T-318																		
18SL-900/9T		18SL/A-900/9T-318	-	18SL/I-900/9T-318																		
8		18HX-1000/8T	18HX/A-1000/8T-314	-	18HX/I-1000/8T-314	10	7,5	117,0			105,2	103,2	102,3	101,2	98,8	93,5	86,5	76,2	63,5	48,5		
		18HX-1000/9T	18HX/A-1000/9T-314	-	18HX/I-1000/9T-314	10	7,5	131,2			117,8	115,5	114,4	113,1	110,4	104,5	96,5	84,9	70,5	53,6		
9,5		18LG-920/10T	18LG/A-920/10T-318	-	18LG/I-920/10T-318	10	7,5	120,4	116,8	118,3	118,0	116,6	115,9	115,0	112,6	104,4	96,3	85,8	67,8			
		18LG-1000/11T	18LG/A-1000/11T-318	-	18LG/I-1000/11T-318	10	7,5	132,4	128,9	130,0	129,6	128,0	127,1	125,9	123,0	115,0	103,9	93,0	72,6			
(2P) 44 (3P) 66		3	22HX-400/3T	22HX/A-400/3T-306	22HX/I-400/3T-114	22HX/I-400/3T-306	4	3	45,0						40,8	40,5	39,9	38,3	36,6	34,2	30,5	25,8
	22HX-550/4T		22HX/A-550/4T-309	-	22HX/I-550/4T-309	5,5	4	62,2						55,5	55,1	54,2	52,4	50,2	47,3	42,7	36,8	25,2
	5	22HX-750/5T	22HX/A-750/5T-314	-	22HX/I-750/5T-311	7,5	5,5	78,6						70,6	70,1	69,0	67,0	64,2	60,8	55,3	47,9	33,5
		22HX-1000/6T	22HX/A-1000/6T-314	-	22HX/I-1000/6T-314	10	7,5	94,2						86,0	85,3	84,1	81,7	79,2	76,8	63,6	52,8	42,0
	7,5	22HX-1000/7T	22HX/A-1000/7T-318	-	22HX/I-1000/7T-318	10	7,5	109,5						99,6	98,8	97,4	94,6	91,2	86,3	78,4	68,2	47,9

TARGET		TYPE - 50 Hz				P2		2P - Q (m³/h - l/min)															
		VERTICAL PUMPS				2P (x2)	3P (x3)	0	50	60	68	84	90	100	120	128	140	160	176	200	230		
		FIXED SPEED	VARIABLE SPEED					0	833	1000	1133	1400	1500	1667	2000	2133	2333	2667	2933	3333	3833		
		2P/3P	2P/3P EPIC-A	2P/3P IPFC		0	75	90	102	126	135	150	180	192	210	240	264	300	345				
m³/h	bar	3- 400V	3- 400V-in 3- 400V-out	3- 400V-in 3- 400V-out	HP	kW	H (m)																
(2P) 70 (3P) 105	3	35HS-750/2T	35HS/A-750/2T-314	35HS/I-750/2T-311	7,5	5,5	48,5	39,6	36,9	34,4	27,2												
		4,5	35HS-1000/3T	35HS/A-1000/3T-314	35HS/I-1000/3T-314	10	7,5	72,2	58,2	54,2	50,3	39,5											
	5	35HS-1000/4-2RT	35HS/A-1000/4-2RT-318	35HS/I-1000/4-2RT-318	10	7,5	85,1	68,6	63,9	58,4	44,7												
		6	35HS-1500/4-1RT	35HS/A-1500/4-1RT-318	35HS/I-1500/4-1RT-318	15	11	92,8	75,3	70,2	65,2	50,8											
	7	35HS-1500/4T	35HS/A-1500/4T-325	35HS/I-1500/4T-325	15	11	99,4	81,0	76,3	71,8	58,5												
		8,5	35HS-2000/5T	35HS/A-2000/5T-325	35HS/I-2000/5T-325	20	15	121,1	99,3	93,1	87,4	70,0											
	10	35HS-2000/6T	35HS/A-2000/6T-330	35HS/I-2000/6T-330	20	15	145,6	119,3	111,9	105,0	84,2												
		11	35HS-2000/7-1RT	35HS/A-2000/7-1RT-330	35HS/I-2000/7-1RT-330	20	15	163,3	132,3	123,2	114,0	89,1											
(2P) 100 (3P) 150	3	50HS-1000/2T	50HS/A-1000/2T-318	50HS/I-1000/2T-318	10	7,5	49,0			42,0	38,8	37,2	34,3	27,5	24,1								
		5	50HS-1500/3T	50HS/A-1500/3T-325	50HS/I-1500/3T-325	15	11	74,2			65,0	60,9	58,8	54,8	45,5	41,0							
	7	50HS-2000/4T	50HS/A-2000/4T-330	50HS/I-2000/4T-330	20	15	97,5			86,4	81,3	78,5	73,2	60,8	54,7								
		9	50HS-2500/5T	50HS/A-2500/5T-338	-	25	18,5	122,3			109,1	102,9	99,5	92,9	77,5	70,0							
	11	50HS-3000/6T	50HS/A-3000/6T-344	-	30	22	146,0			129,8	122,2	118,0	110,0	91,6	82,5								
(2P) 150 (3P) 225	3,5	75HS-1500/2T	75HS/A-1500/2T-325	75HS/I-1500/2T-325	15	11	59,3			51,2	49,9	47,5	46,8	45,5	43,2	42,0	39,9	35,3	30,8				
		6	75HS-2500/3T	75HS/A-2500/3T-338	-	25	18,5	89,6			77,6	75,6	72,0	70,9	69,0	65,7	63,9	60,7	53,9	47,2			
	8	75HS-3000/4T	75HS/A-3000/4T-344	-	30	22	111,8			100,8	99,2	95,8	94,5	92,4	88,4	86,3	82,3	73,3	62,9				
		10	75HS-4000/5T	-	-	40	30	142,4			129,2	127,1	123,0	121,5	119,0	114,1	111,5	106,9	96,3	84,6			
	11	75HS-4000/6-2RT	-	-	40	30	153,5			141,6	139,5	135,1	133,3	130,3	123,4	119,6	112,9	99,0	84,1				
(2P) 180 (3P) 270	2,5	90HS-1500/2-2RT	90HS/A-1500/2-2RT-325	90HS/I-1500/2-2RT-325	15	11	49,6						42,4	41,3	39,0	38,1	36,6	33,2	29,4	22,7	11,7		
		4	90HS-2000/2T	90HS/A-2000/2T-330	90HS/I-2000/2T-330	20	15	69,2						56,6	54,5	50,5	49,2	47,3	44,3	41,6	36,3	27,3	
	6,5	90HS-3000/3T	90HS/A-3000/3T-344	-	30	22	92,4							82,6	80,6	76,7	75,3	73,2	69,4	65,5	57,8	45,2	
		9	90HS-4000/4T	-	-	40	30	125,6						113,0	110,4	105,2	103,3	100,6	95,7	90,7	80,8	64,4	
	11	90HS-5000/5T	-	-	50	37	156,6							140,7	137,4	130,9	128,6	125,2	119,1	112,8	100,3	79,8	



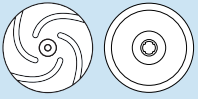


# DRAINAGE AND SEWAGE



# DRAINAGE AND SEWAGE PUMPS

## Plastic



SP    SPV    SPM



## High Head



DR



FC



## Single-channel



DB



FM

FM4

## Grinder



FTR



FTR 101

## Vortex



DC

DS



FV

FV4



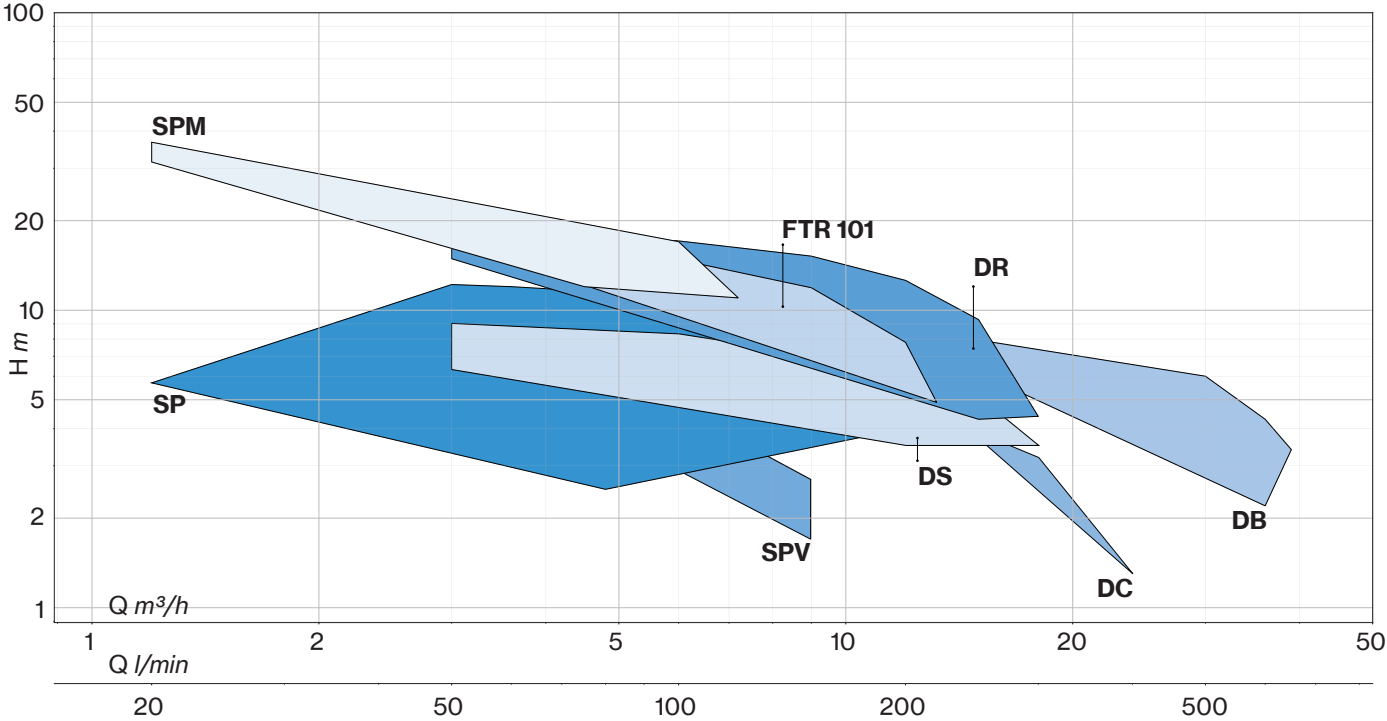
Different models available in relation to performance requirements: centrifugal, Vortex, single or double channels pumps suitable for clean water, sewage and slurry. Impeller with grinding system available.

### Applications:

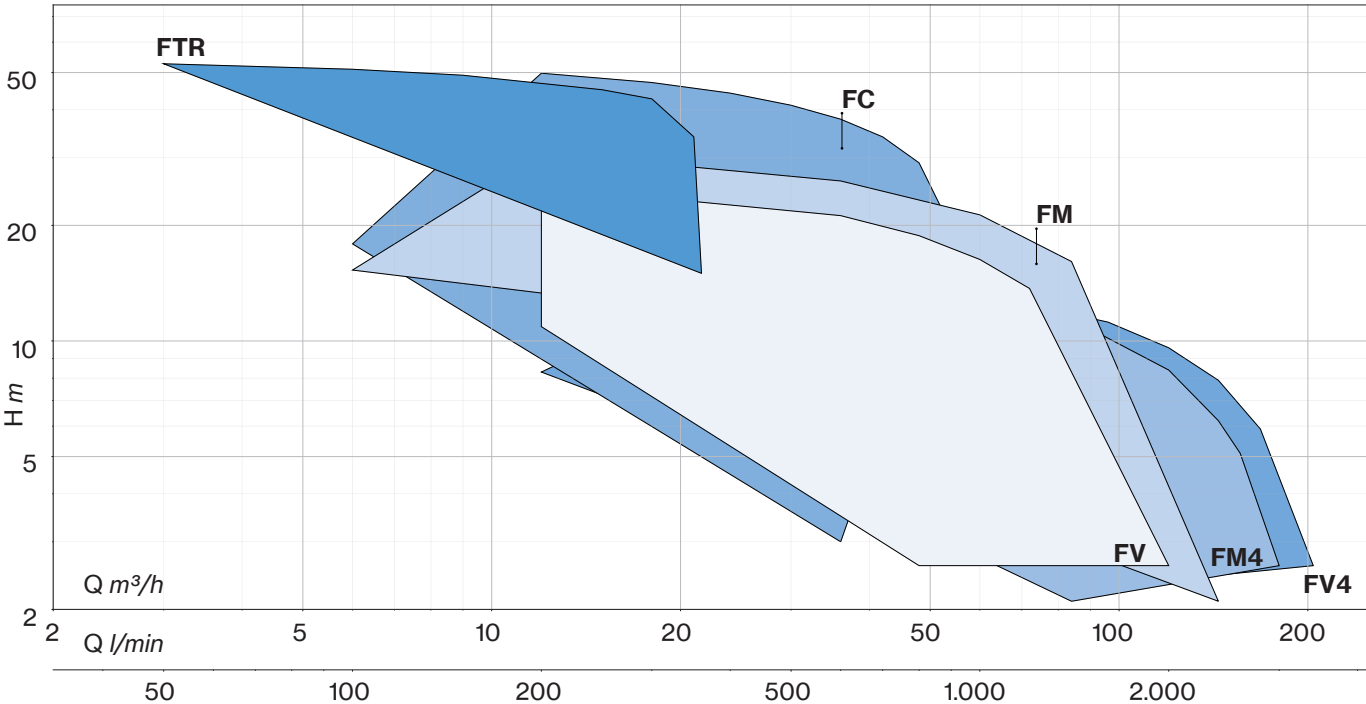
- Emptying of cisterns
- Fountains
- Swimming pools
- Draining of liquids from collection tanks and sumps

# DRAINAGE AND SEWAGE PUMPS

## Drainage



## Sewage





## Construction features

**Pump body** polypropylene



**Impeller** Noryl®

**Mechanical seal** double lip seal on ceramic bush

**Motor shaft** stainless steel AISI 416 with ceramic bush

**Free passage**  
 Ø max 4 mm (SP 40/60)  
 Ø max 7 mm (SP 80/100)  
 Ø max 15 mm (SPV 80/100)

**Max submergence** 5 m

**Liquid temperature** 0 - 40 °C

**Cable**  
 H05 RN8F, 10 m (SP 40/60)  
 H07 RN8F, 10 m (SP 80/100,  
 SPV 80/100)

**G** float switch

## Motor

3- 400V - 50Hz  
(SPV 80/100)

**2 Poles induction motor**

1- 230V - 50Hz  
(with thermal protection)

**Insulation class** F

**Protection degree** IPX8

## SPV 80 G

**T** 3-  
 1- without float switch  
**G** 1- with float switch

— pump type

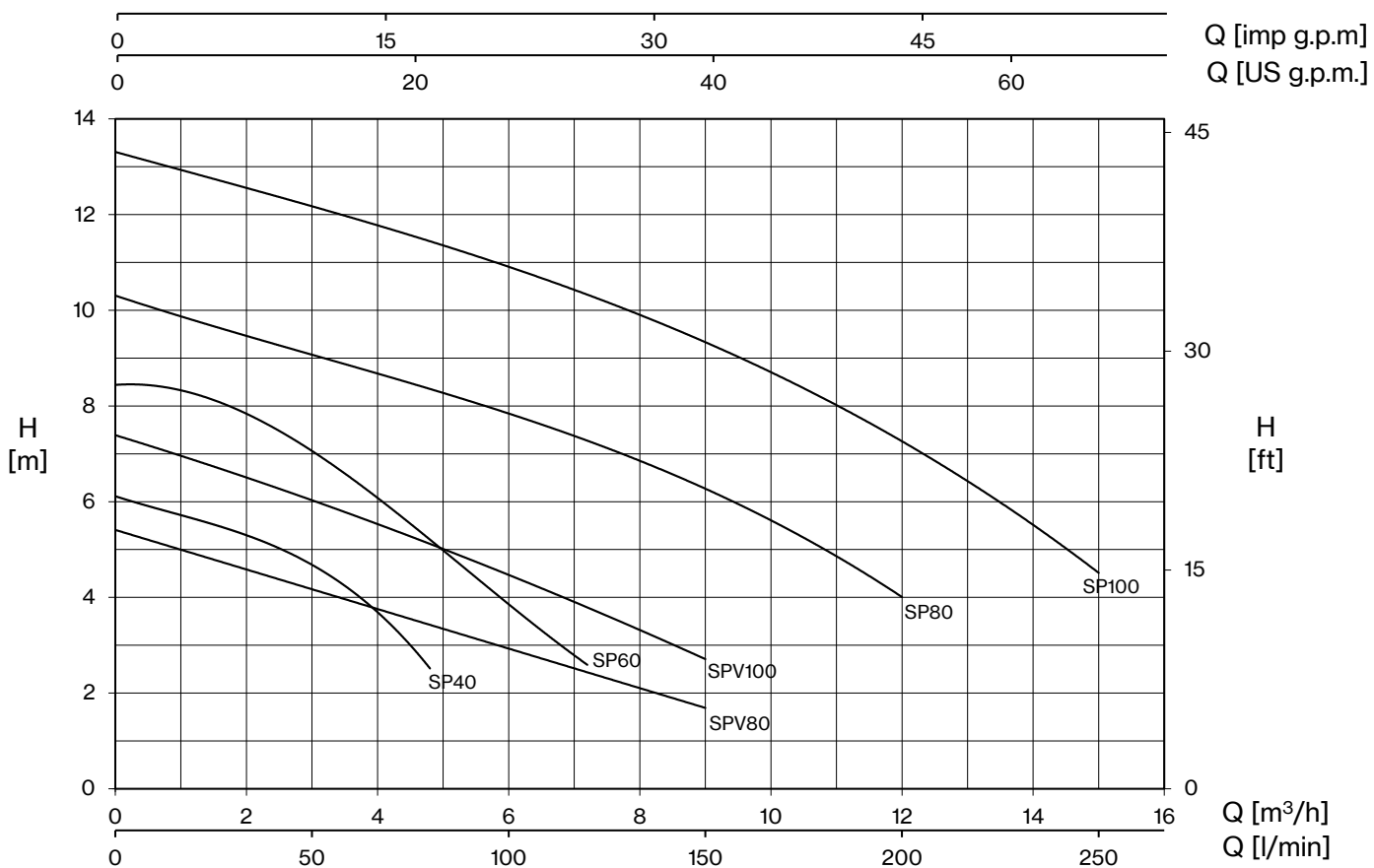
TYPE	LOTS			
	TRUCK		CONTAINER	
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
SP 40-60	80×120×175	135	80×120×205	162
SP 80-100	80×120×145	57	80×120×190	76
SPV 80-100	80×120×145	57	80×120×190	76



SP



SPV

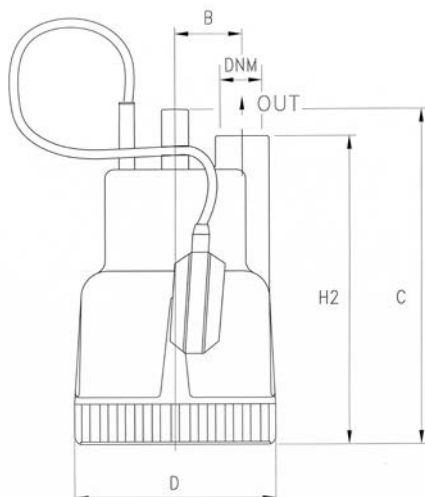



TYPE - 50 Hz		P1	CURRENT		Q (m³/h - l/min)										
1-	3-		1- 230V	3- 400V	0	1,2	2,4	3	3,6	4,8	6	7,2	9	12	15
					0	20	40	50	60	80	100	120	150	200	250
		kW	A		H (m)										
SP 40 (G)	-	0,2	1	-	6,1	5,7	5,0	4,7	4,2	2,5					
SP 60 (G)	-	0,4	2,1	-	8,5	8,1	7,6	7,2	6,7	5,0	3,9	2,6			
SP 80 (G)	SP 80T	0,8	3,7	1,8	10,3			9,1	8,8	8,3	7,8	7,3	6,3	4,0	
SP 100 (G)	SP 100T	1,05	5,1	2,3	13,3			12,2	12,0	11,5	10,9	10,3	9,3	7,3	4,5

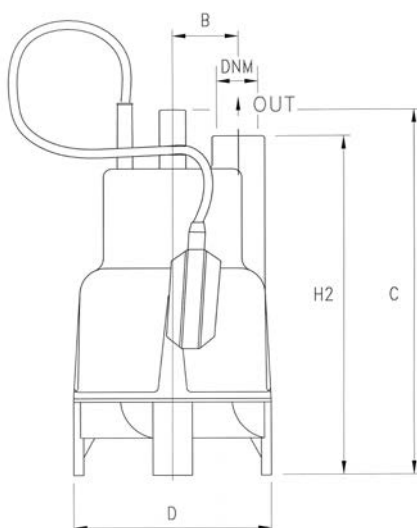
TYPE - 50 Hz		P1	CURRENT		Q (m³/h - l/min)			
1-	3-		1- 230V	3- 400V	0	3	6	9
					0	50	100	150
		kW	A		H (m)			
SPV 80 (G)	SPV 80T	0,5	2,6	1,2	5,4	4,2	2,9	1,7
SPV 100 (G)	SPV 100T	0,75	3,8	1,7	7,4	5,8	4,7	2,7




# SP/SPV



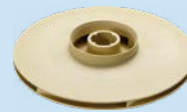
TYPE		DIMENSIONS (mm)								Kg
1~	3~	B	C	D	H2	DNM	I	L	M	
SP 40 (G)	-	50	250	150	230	1" G	170	200	320	5
SP 60 (G)	-	50	250	150	230	1" G	170	200	320	6,5
SP 80 (G)	SP 80T	55.5	296	176	276	1" ¼ G	185	230	310	8,5
SP 100 (G)	SP 100T	55.5	296	176	276	1" ¼ G	185	230	310	10



TYPE		DIMENSIONS (mm)								Kg
1~	3~	B	C	D	H2	DNM	I	L	M	
SPV 80 (G)	SPV 80T	55.5	331	176	310	1" ¼ G	185	230	345	8,5
SPV 100 (G)	SPV 100T	55.5	331	176	310	1" ¼ G	185	230	345	10



Multistage drainage pumps for clean water made of technopolymer material used for pumping liquid from wells, tanks and reservoirs, pressurization of domestic systems, irrigation of gardens and vegetable gardens. The single-phase version includes a built-in capacitor, a thermal protector and it can be equipped with a float switch. Suitable to be installed with the Hidrotank flow controller.



White water

### Construction features

**Pump body** technopolymer



**Impeller, diffusers** Noryl®

**Shell, motor cover, base support** Noryl®

**Mechanical seal** double seal with oil barrier; silicon carbide on pump side, sealing ring on motor side

**Motor shaft** stainless steel AISI 303

**Max submergence** 5 m

**Liquid temperature** 0 - 35 °C

**Cable** H07 RN8F, 10 m

**G** float switch

### Motor

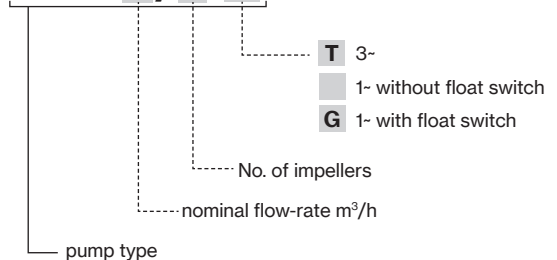
3~ 400V - 50Hz

**2 Poles induction motor** 1~ 230V - 50Hz  
(with thermal protection)

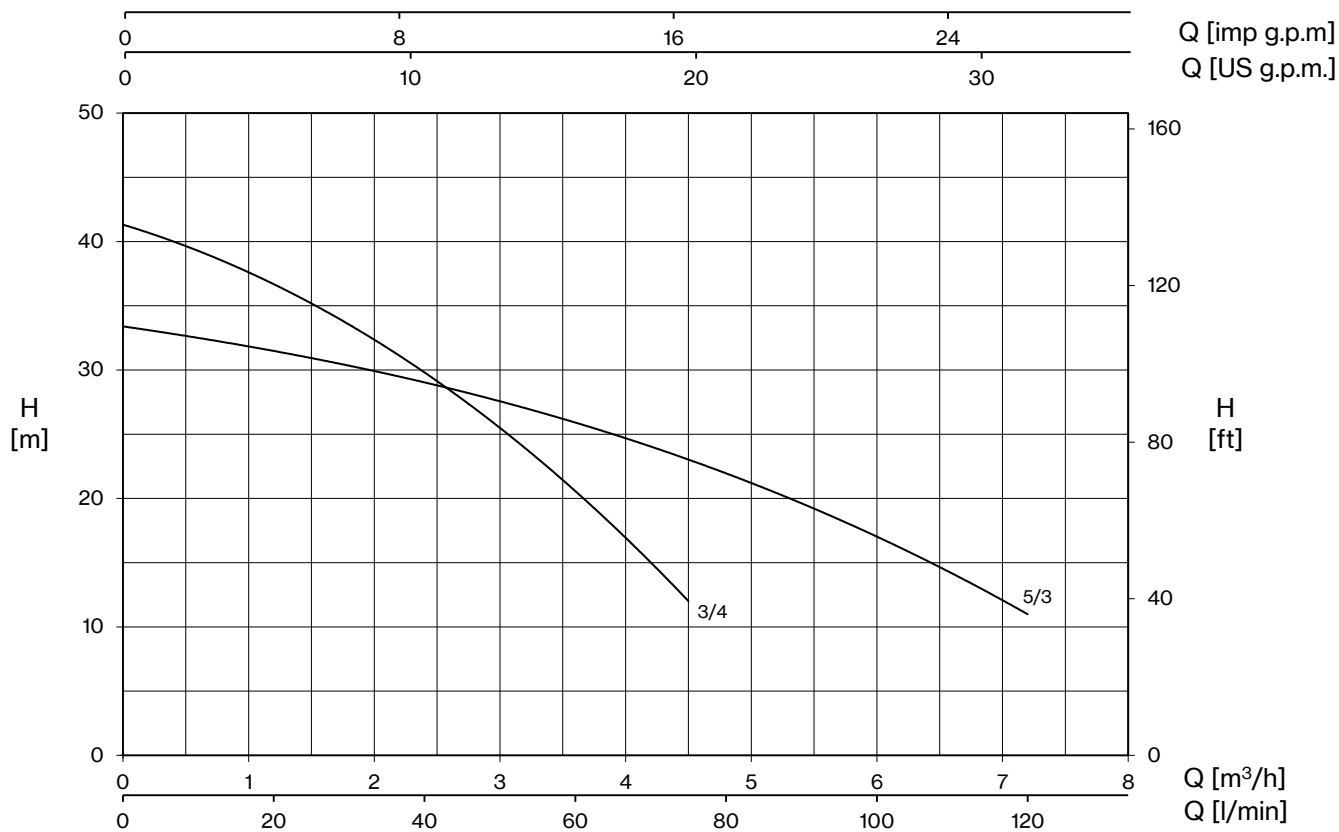
**Insulation class** F

**Protection degree** IPX8

**SPM 5/3 G**

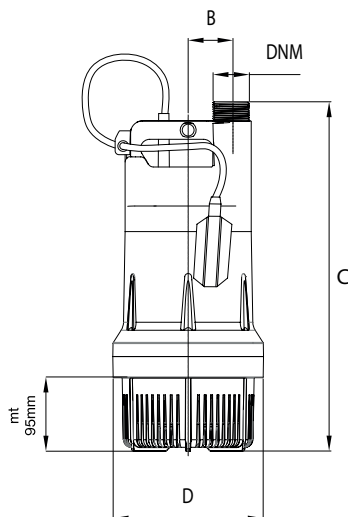


# SPM



TYPE - 50 Hz		P1	CURRENT		Q (m³/h - l/min)								
1~	3~		1~ 230V	3~ 400V	0	0,6	1,2	1,8	2,4	3,6	4,5	6	7,2
		kW	A		H (m)								
SPM 5/3 (G)	SPM 5/3T	0,9	3,9	1,7	33,4	32,5	31,5	30,3	29,0	26,0	23,0	17,0	11,0
SPM 3/4 (G)	SPM 3/4T	0,8	3,4	1,6	41,3	39,3	36,7	33,5	29,8	20,6	12,0		

mt: minimum working level



TYPE		DIMENSIONS (mm)							
1~	3~	B	C	D	DNM	I	L	M	Kg
SPM 5/3 (G)	SPM 5/3T	56	454	196	1" ½	264	203	482	10
SPM 3/4 (G)	SPM 3/4T	56	454	196	1" ½	264	203	482	10,5




Drainage pumps with open impeller for pumping liquids with suspended solids. Characterized by high head. The single-phase version includes a built-in capacitor, a thermal protector and it can be equipped with a float switch.



White water

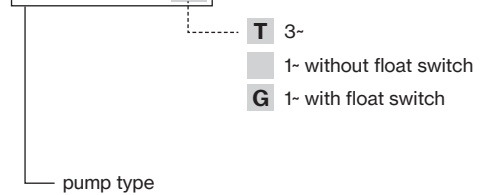
## Construction features

<b>Painting</b>	cataphoresis
<b>Pump body</b>	cast iron
<b>Shell, motor cover, base support</b>	stainless steel
 <b>Impeller</b>	brass
<b>Mechanical seal</b>	double seal with oil barrier; silicon carbide on pump side, sealing ring on motor side
<b>Motor shaft</b>	stainless steel AISI 430
<b>Free passage</b>	Ø max 10 mm
<b>Max submergence</b>	5 m
<b>Liquid temperature</b>	0 - 40 °C
<b>Cable</b>	H07 RN8F, 10 m
<b>G</b>	float switch

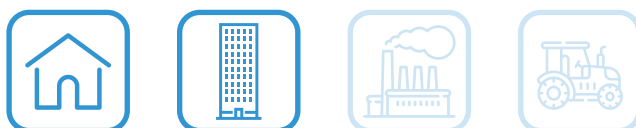
## Motor

	3~ 400V - 50Hz
<b>2 Poles induction motor</b>	1~ 230V - 50Hz (with thermal protection)
<b>Insulation class</b>	F
<b>Protection degree</b>	IPX8

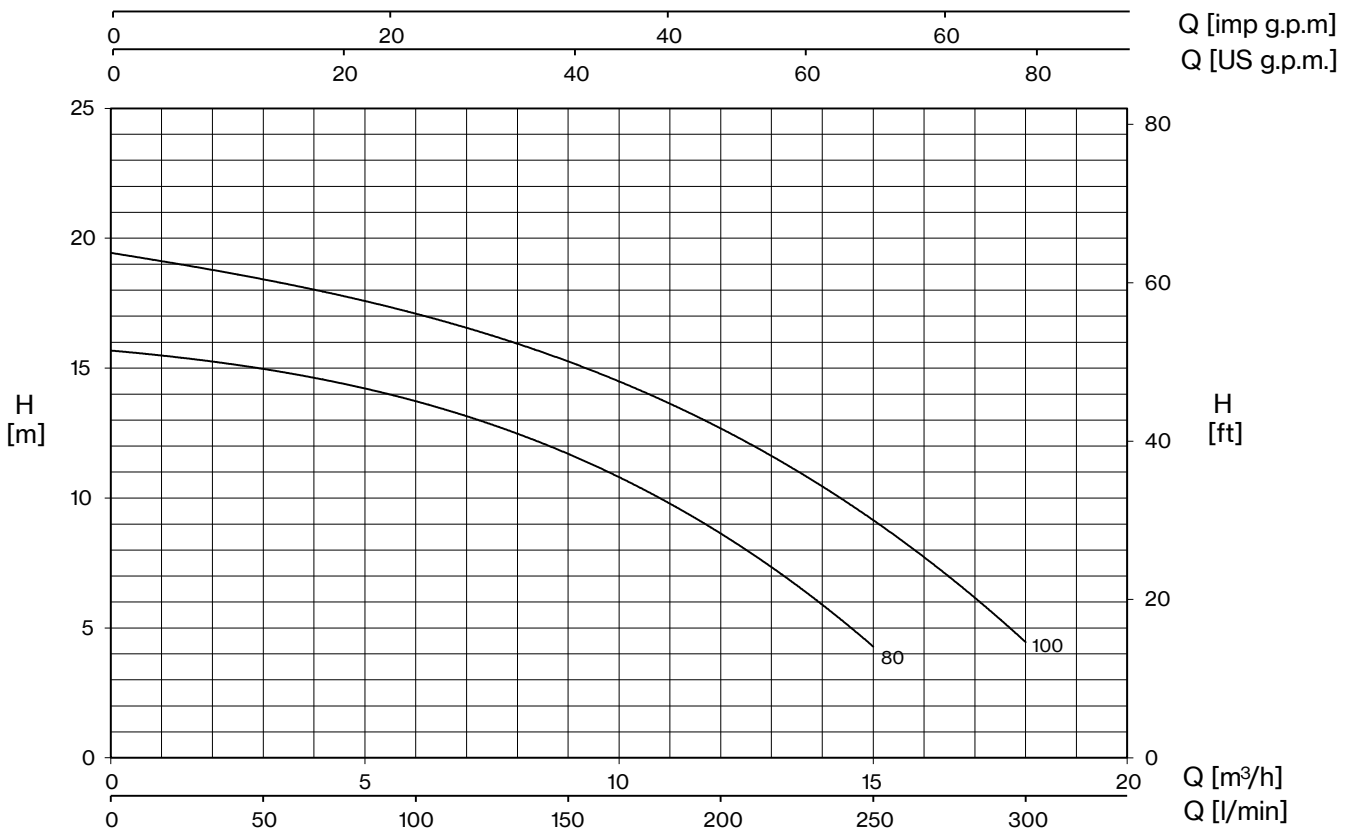
## DR 100 G



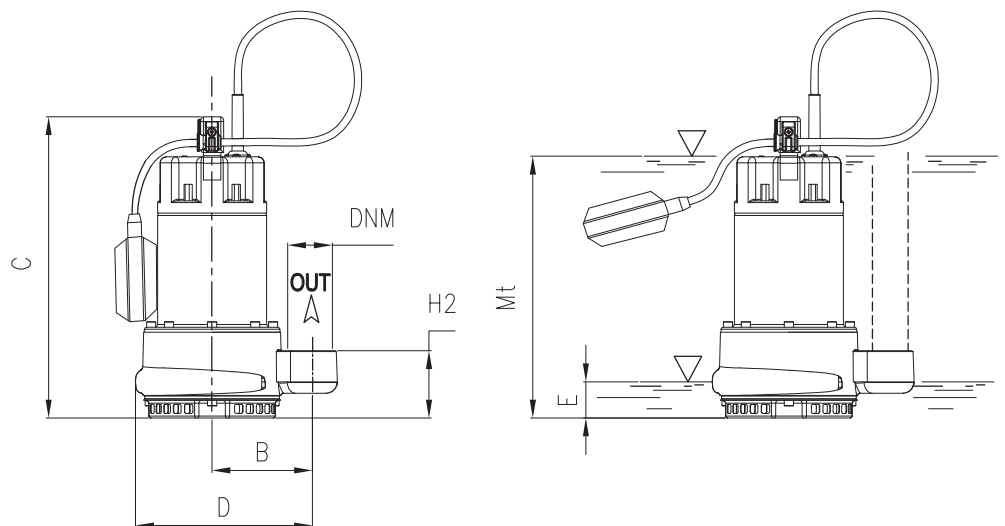
TYPE	LOTS			
	TRUCK		CONTAINER	
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
DR	80×120×125	57	80×120×165	76



# DR



TYPE - 50 Hz		P1	CURRENT		Q (m³/h - l/min)						
1-	3-		1- 230V	3- 400V	0	3	6	9	12	15	18
		kW	A		H (m)						
DR 80 (G)	DR 80T	0,98	4,3	2,1	15,7	14,9	13,8	11,7	8,6	4,3	
DR 100 (G)	DR 100T	1,37	6,2	2,8	19,4	18,5	17,1	15,2	12,6	9,3	4,4



E: maximum emptying level  
Mt: minimum liquid level for continuous duty

TYPE		DIMENSIONS (mm)										
1-	3-	B	C	D	E	H2	Mt	DNM	I	L	M	Kg
DR 80 (G)	DR 80T	105	330	218.5	45	70	190	1" 1/2 G	180	255	380	14,5
DR 100 (G)	DR 100T	105	330	218.5	45	70	190	1" 1/2 G	180	255	380	16

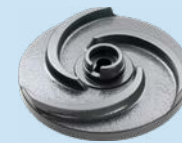
FC 160-310

FC 410-1000 T

FC 410-1000 T/P



Centrifugal drainage high head pumps ideal for civil and industrial applications, specifically designed for very heavy use. Available in the mobile or permanent versions with coupling feet.



Grey water

## Construction features

**Painting** cataphoresis

**Pump body** cast iron



**Impeller** cast iron

**Mechanical seal** double seal with oil barrier; silicon carbide on pump side, ceramic-graphite on motor side

**Motor shaft** stainless steel AISI 304

**Free passage** Ø max 10 mm

**Max submergence** 20 m

**Liquid temperature** 0 - 40 °C

**Cable** H07 RN8F, 10 m

**Bolts** A2 stainless steel

**Foot support** galvanized iron

**Gaskets** NBR rubber

## Motor

3- 230V - 50Hz

3- 400V - 50Hz

3- 230/400V - 50Hz

3- 400/690V - 50Hz

### 2 Poles induction motor

1- 230V-50Hz

required run capacitor (35µF for 1,5HP model, 50µF for 2HP model)

**Insulation class** F

**Protection degree** IPX8

**FC 560 T -CF** ..... counter-flange  not included

**CF** included

..... motor  1- **T** 3-

..... pump type



TYPE	LOTS			
	TRUCK		CONTAINER	
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
FC 160÷310	85×110×145	18	85×110×190	27
FC 410-560T	85×110×170	12	85×110×170	12
FC 750-1000T	100×120×190	12	100×120×190	12



# FC

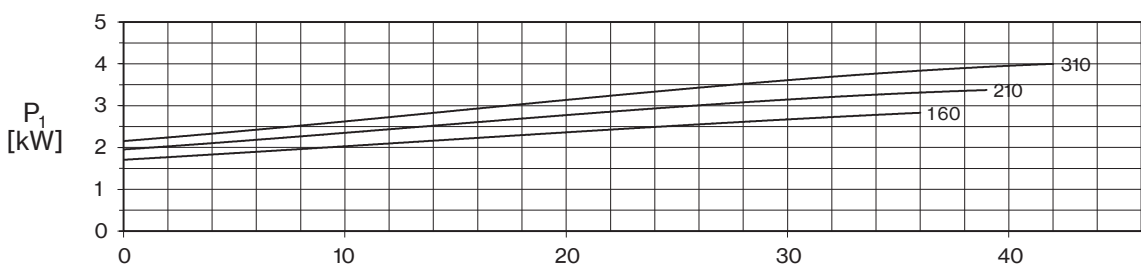
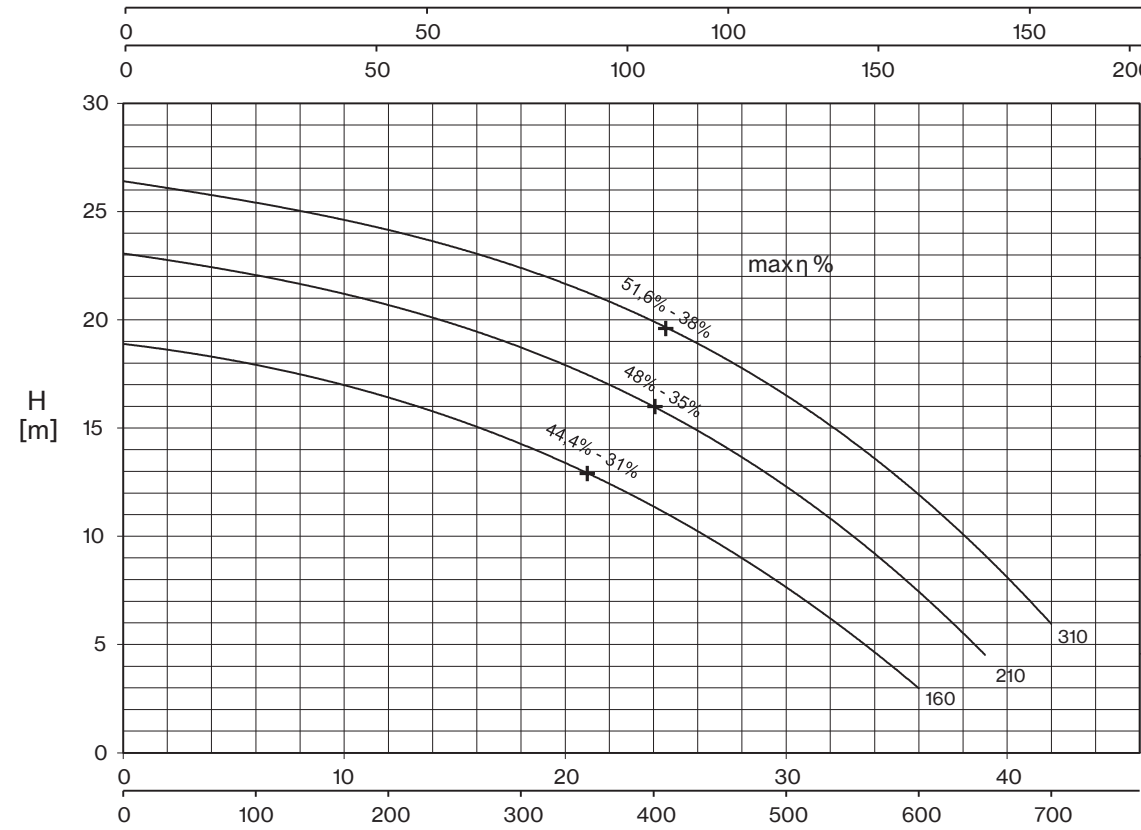
Q [imp g.p.m]  
Q [US g.p.m.]

H [m]  
H [ft]

Q [m³/h]  
Q [l/min]

HP

Q [m³/h]



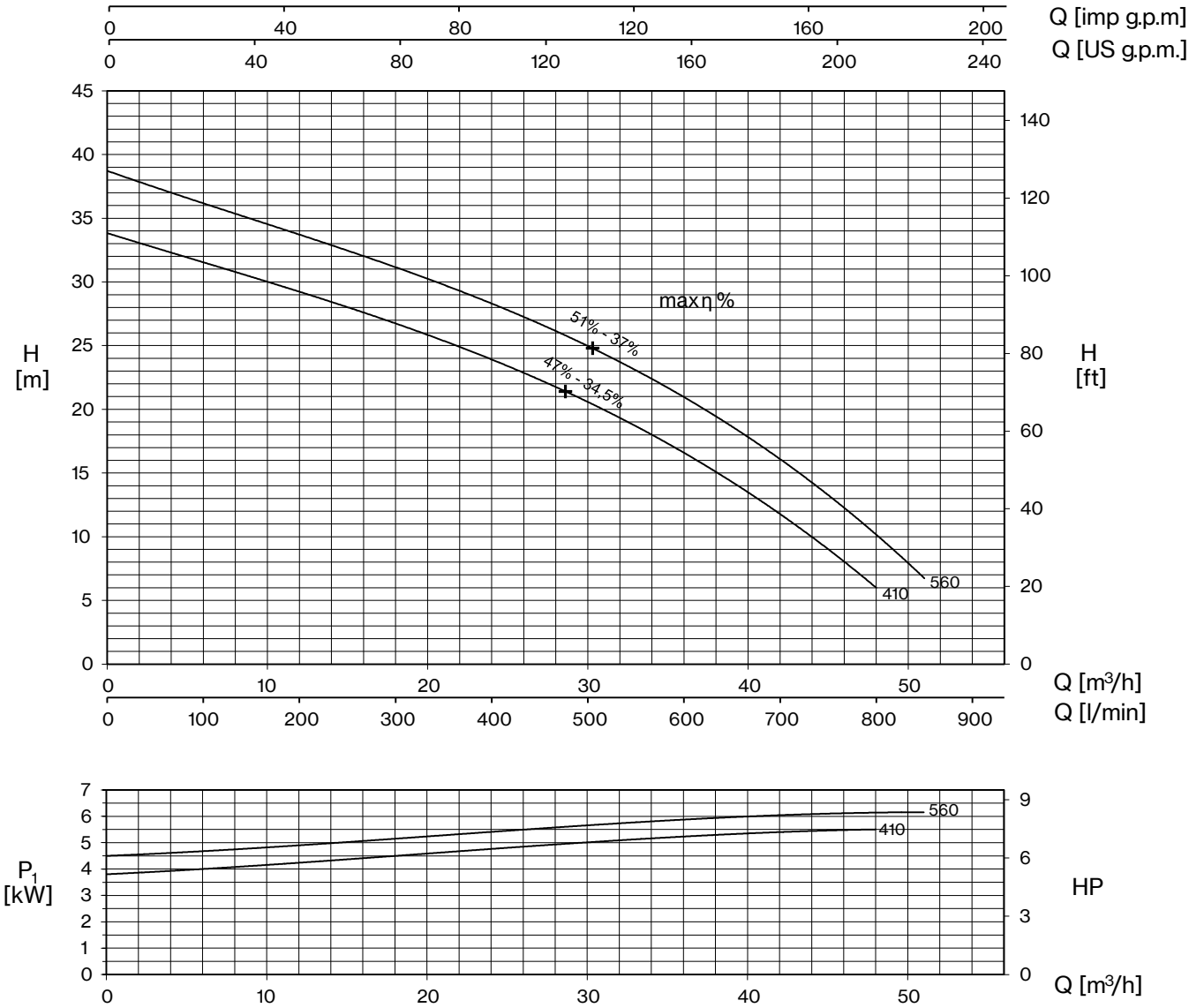
TYPE - 50 Hz		CURRENT				
1~	3~	1- 230 V	3- 230V (*)	3- 400V	230/400 V λ / Δ (*)	400/690 V λ / Δ
FC 160	FC 160T	13,8	8,3	4,8	-	-
FC 210	FC 210T	16,5	10,2	5,9	-	-
-	FC 310T	-	12,0	6,9	-	-

**+ max η %**  
max hydraulic efficiency and respective total efficiency

(\*) no standard execution

TYPE - 50 Hz		P2		P1		Q (m³/h - l/min)								
1~	3~	HP	kW	1~	3~	0	6	12	18	24	30	36	39	42
						0	100	200	300	400	500	600	650	700
				kW		H (m)								
FC 160	FC 160T	1,5	1,1	3,0	2,8	18,9	17,9	16,4	14,3	11,4	7,6	3,0		
FC 210	FC 210T	2	1,5	3,7	3,4	23,0	22,2	20,7	18,6	15,9	12,5	7,4	4,5	
-	FC 310T	3	2,2	-	4,0	26,4	25,4	24,2	22,4	19,9	16,4	12,1	9,1	5,9





TYPE - 50 Hz	CURRENT			
	3- 230V (*)	3- 400V	230/400 V λ / Δ (*)	400/690 V λ / Δ
FC 410T	15,4	8,9	-	-
FC 560T	17,6	10,2	-	-

+ max η %

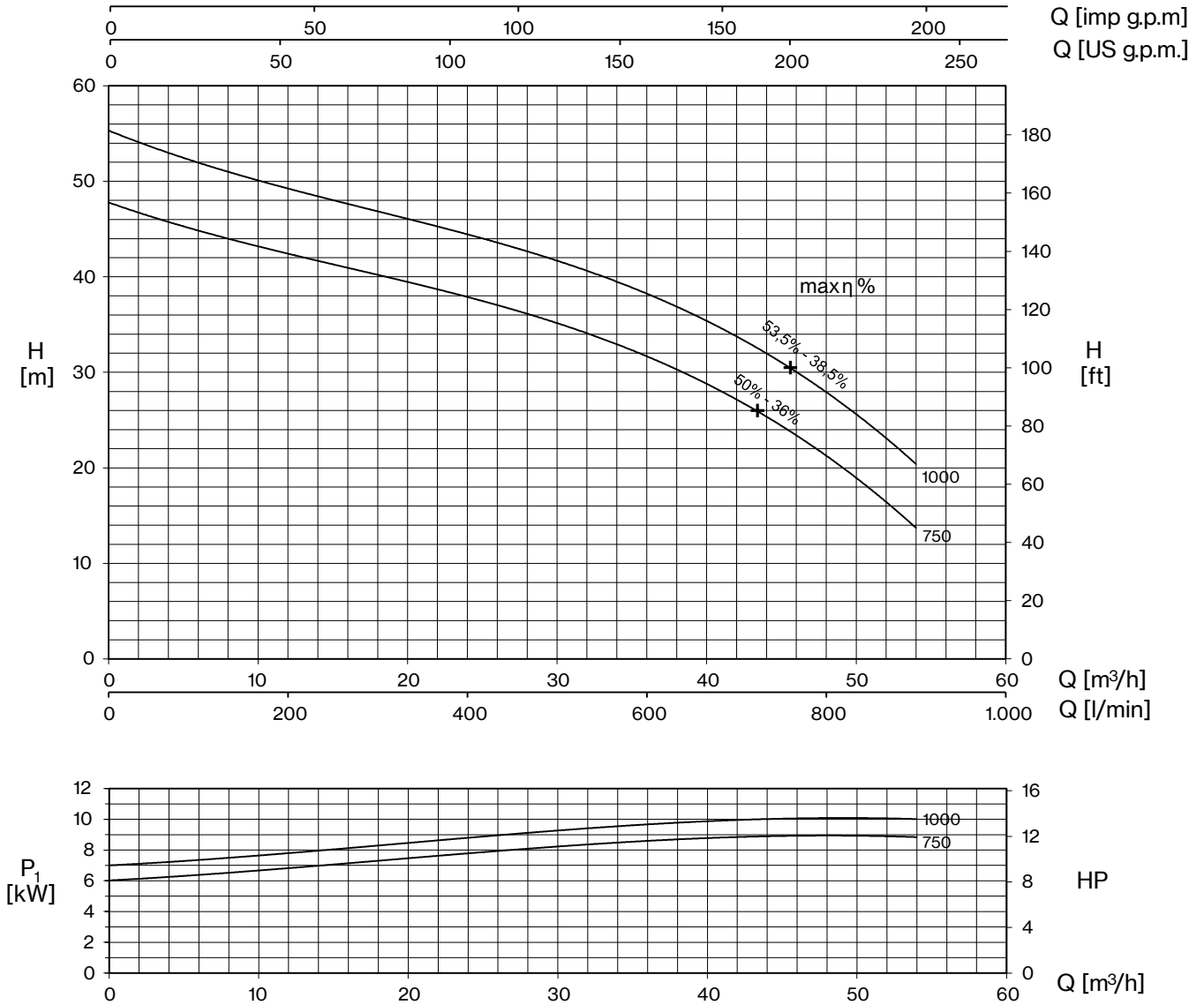
max hydraulic efficiency and respective total efficiency

(\*) no standard execution

TYPE - 50 Hz	P2		P1	Q (m³/h - l/min)									
				0	6	12	18	24	30	36	42	48	51
	HP	kW	kW	0	100	200	300	400	500	600	700	800	850
FC 410T	4	3	5,5	33,8	31,6	29,2	26,8	23,9	20,5	16,5	12,0	5,9	
FC 560T	5,5	4	6,3	38,7	36,1	33,9	31,2	28,3	24,7	20,9	16,3	10,4	6,5



# FC



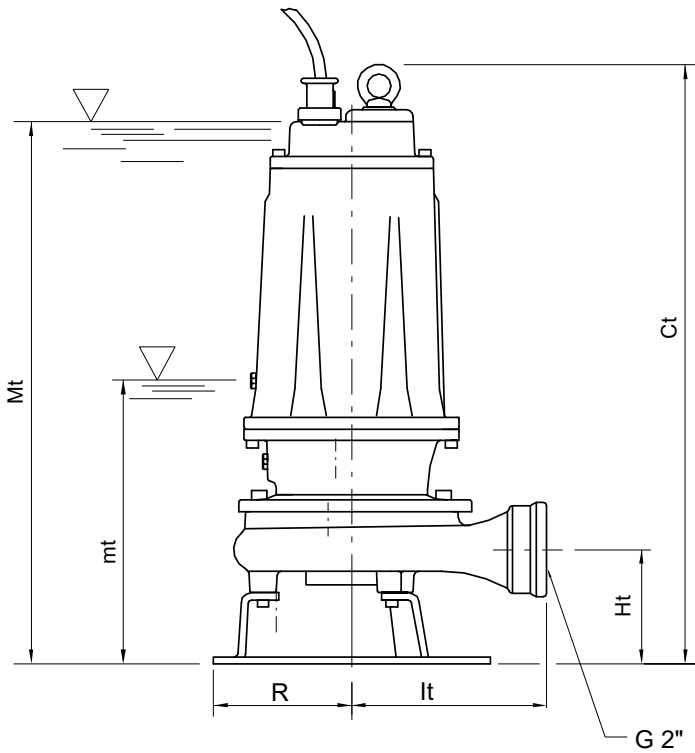
TYPE - 50 Hz	CURRENT			
	3- 230V (*)	3- 400V	230/400 V λ / Δ (*)	400/690 V λ / Δ
FC 750T	-	15,3	26,5	15,3
FC 1000T	-	17,5	30,3	17,5

**+ max η %**

max hydraulic efficiency and respective total efficiency

(\*) no standard execution

TYPE - 50 Hz	P2		P1	Q (m³/h - l/min)									
				0	12	18	24	30	36	42	48	54	
	HP	kW	kW	0	200	300	400	500	600	700	800	900	
FC 750T	7,5	5,5	9,0	47,6	42,9	40,4	37,7	34,7	31,2	27,4	22,3	13,1	
FC 1000T	10	7,5	10,3	55,1	49,8	47,1	44,2	41,1	37,8	34	29,1	19,7	

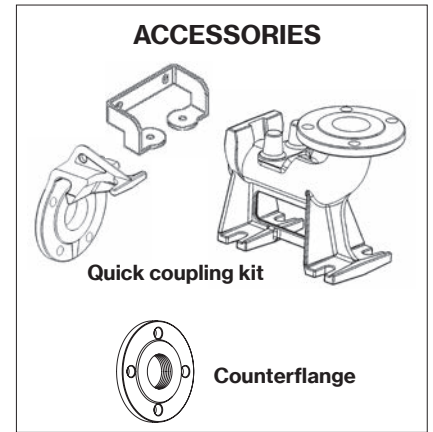
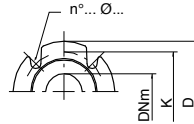
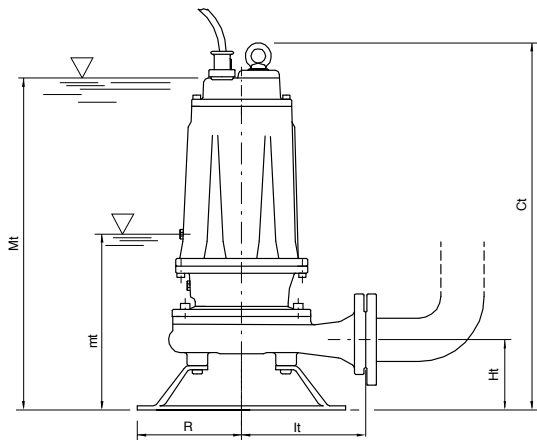


mt: minimum working level  
 Mt: minimum submencence level for  
 continuos duty

TYPE		DIMENSIONS (mm)							Kg
1~	3~	Ct	Ht	R	lt	mt	Mt	DNM	
FC 160	FC 160T	513	102	117	174	205	475	2" G	37
FC 210	FC 210T	513	102	117	174	205	475	2" G	37,5
-	FC 310T	513	102	117	174	205	475	2" G	37

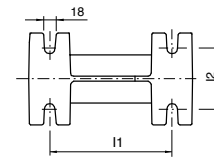
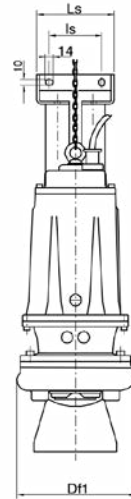
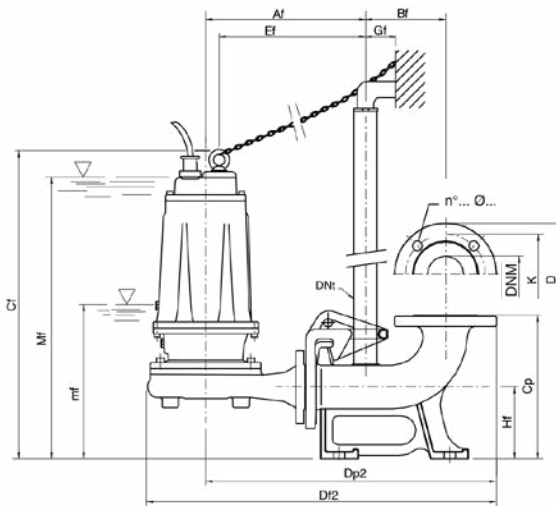
TYPE	PROTECTION		1 PUMP CONTROL PANEL			2 PUMPS CONTROL PANEL		
	1- 230V	3- 400V	1- 230V	3- 400V	400/690 V	1- 230V	3- 400V	400/690 V
FC 160	PMC 15/35-15	PT 20-30-40/4.3-6.8	EQSM + 35µF	EQSMT 10		EQ2SM + 2×35µF	EQ2SMT 10	
FC 210	PMC 20/50-18	PT 20-30-40/4.3-6.8	EQSM + 50µF	EQSMT 10		EQ2SM + 2×50µF	EQ2SMT 10	
FC 310T		PT 40-50/5.7-9.1		EQSMT 10			EQ2SMT 10	
FC 410T		PT 55-75/8.6-13.5		EQSMT 10			EQ2SMT 10	
FC 560T		PT 55-75/8.6-13.5		EQSMT 10			EQ2SMT 10	
FC 750T		PT 100/12.5-16.5		EQSMT 10	QST 7		EQ2SMT 10	Q2ST 7
FC 1000T		PT 125-150/16-21		EQSMT 10	QST 10		EQ2SMT 15	Q2ST 10

# FC



mt: minimum working level  
Mt: minimum submergence level for continuous duty

TYPE	DIMENSIONS (mm)							Kg
	Ct	Ht	R	lt	mt	Mt	DNM	
FC 410T	595	112	160	187	263	550	50	60,5
FC 560T	595	112	160	187	263	550	50	63,5
FC 750T	680	160	180	250	280	630	65	91
FC 1000T	680	160	180	250	280	630	65	93,5



mf: minimum working level  
Mf: minimum submergence level for continuous duty

TYPE	DIMENSIONS (mm)																	
	Af	Bf	Cf	Cp	Df1	Df2	Dp2	Dnt	Ef	Gf	Hf	I1	I2	Is	Ls	mf	Mf	DNM
FC 410T/P	300	145	614	260	237	654	535	1" 1/4	269	55	130	200	100	95	140	290	566	50
FC 560T/P	300	145	614	260	237	654	535	1" 1/4	269	55	130	200	100	95	140	290	566	50
FC 750T/P	331	145	656	260	279	701	569	1" 1/4	296	55	130	200	100	95	140	290	600	65
FC 1000T/P	331	145	656	260	279	701	569	1" 1/4	296	55	130	200	100	95	140	290	600	65

Flange UNI PN 10 (mm)			
DNM	K	D	n°... Ø...
50	125	165	4... 18...
65	145	185	4... 18...



Drainage pumps with “Double-Channel” impeller for pumping waste waters and liquids with suspended solids; ideal for civil and household applications. The single-phase version includes a built-in capacitor, a thermal protector and it can be equipped with a float switch.



### Construction features

**Painting** cataphoresis

**Pump body** cast iron

**Shell, motor cover, base support** stainless steel



**Impeller** stainless steel

### Mechanical seal

double seal with oil chamber: silicon carbide on pump side, ceramic-graphite on motor size

**Motor shaft** stainless steel AISI 430

**Free passage** Ø max 50 mm

**Max submergence** 5 m

**Liquid temperature** 0 - 40 °C

**Cable** H07 RN8F, 10 m

**G** float switch

### Motor

3~ 400V - 50Hz

### 2 Poles induction motor

1~ 230V - 50Hz  
(with thermal protection)

**Insulation class** F

**Protection degree** IPX8

TYPE	LOTS			
	TRUCK		CONTAINER	
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
DB	80×120×160	51	80×120×160	51

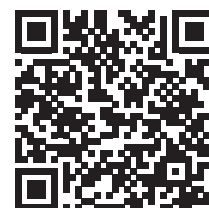
### DB 100 G

**T** 3~

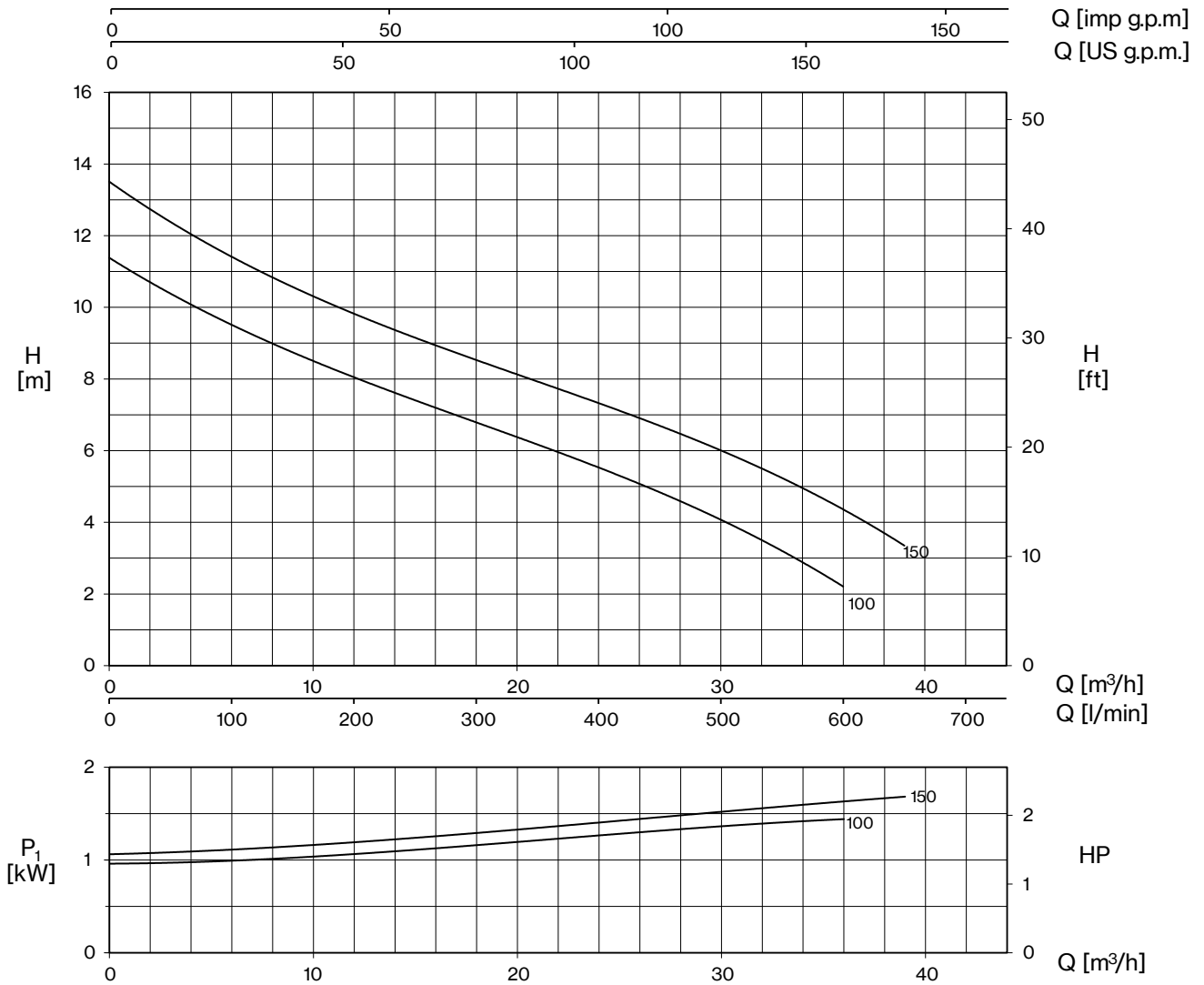
**□** 1~ without float switch

**G** 1~ with float switch

— pump type

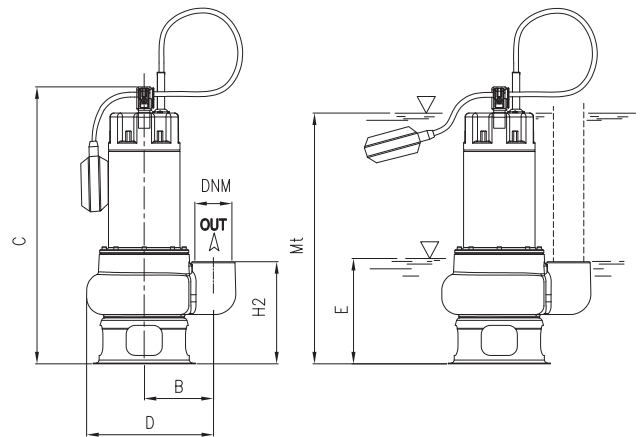


# DB



TYPE - 50 Hz		P <sub>1</sub>	CURRENT		Q (m³/h - l/min)							
1~	3~		1~ 230V	3~ 400V	0	6	12	18	24	30	36	39
		kW	A		H (m)							
DB 100 (G)	DB 100T	1,35	5,9	2,8	11,4	9,5	8,0	6,8	5,6	4,0	2,2	
DB 150 (G)	DB 150T	1,7	8,0	3,0	13,6	11,5	9,8	8,5	7,3	6,0	4,3	3,4

E: maximum emptying level  
Mt: minimum liquid level for continuous duty




TYPE		DIMENSIONS (mm)										Kg
1~	3~	B	C	D	E	H2	Mt	DNM	I	L	M	
DB 100 (G)	DB 100T	142,5	461	247,5	185	170	390	2" G	200	260	470	17
DB 150 (G)	DB 150T	142,5	461	247,5	185	170	390	2" G	200	260	470	18,5



Single channel centrifugal drainage pumps. Specifically designed for heavy duty applications they guarantee high capacity at medium head; ideal for civil and industrial applications. Available in mobile or permanent version with coupling feet.

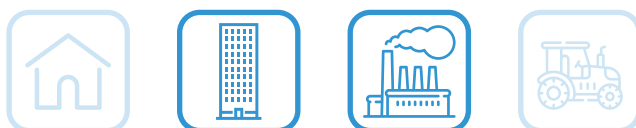
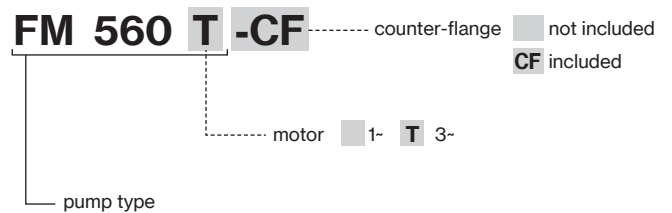
## Construction features

<b>Painting</b>	cataphoresis
<b>Pump body</b>	cast iron
	<b>Impeller</b> cast iron
<b>Mechanical seal</b>	double seal with oil barrier; silicon carbide on pump side, ceramic-graphite on motor side
<b>Motor shaft</b>	stainless steel AISI 304
<b>Free passage</b>	Ø max 50 mm
<b>Max submergence</b>	20 m
<b>Liquid temperature</b>	0 - 40 °C
<b>Cable</b>	H07 RN8F, 10 m
<b>Bolts</b>	A2 stainless steel
<b>Foot support</b>	galvanized iron
<b>Gaskets</b>	NBR rubber

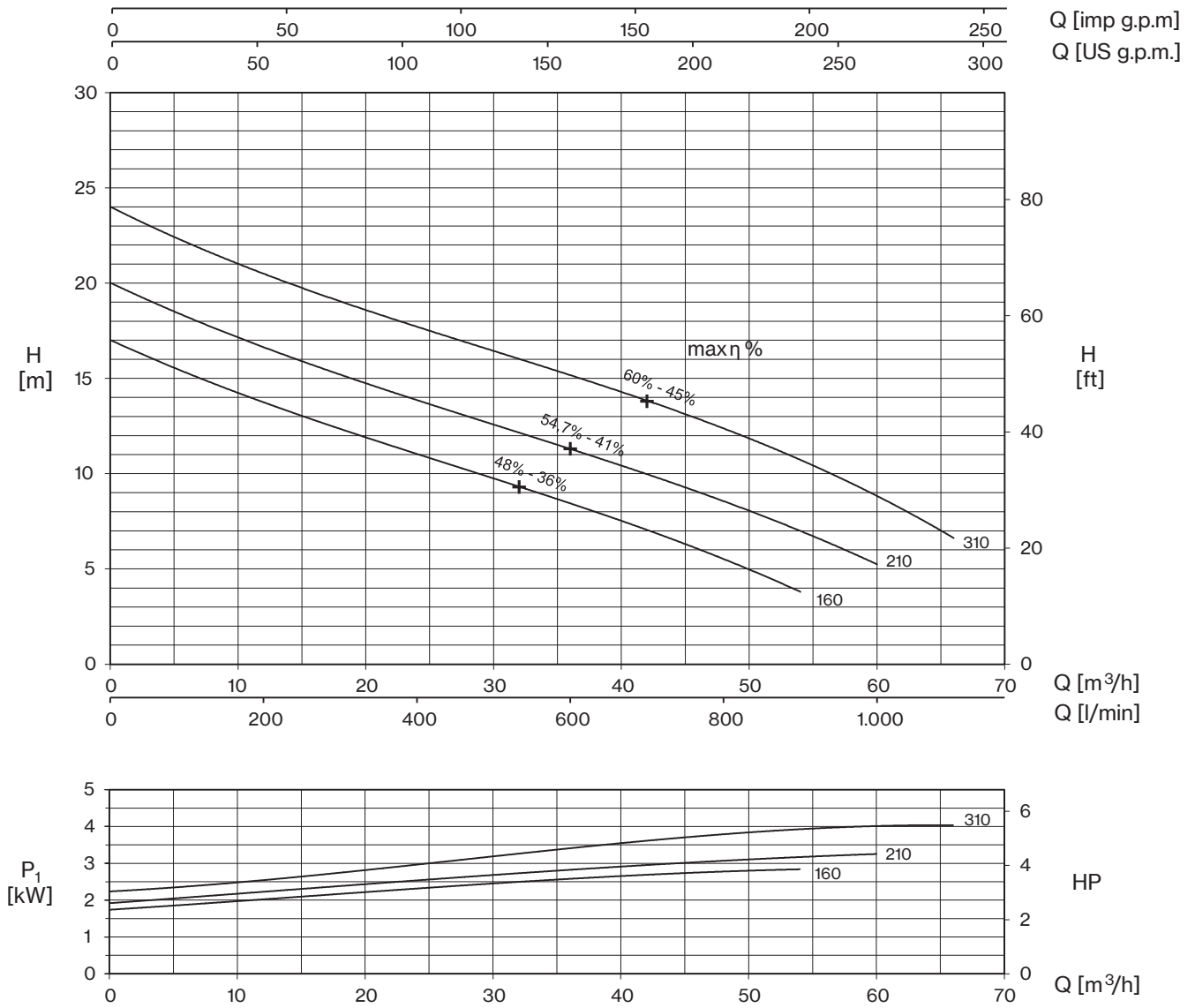
## Motor

<b>2 Poles induction motor</b>	3- 230V - 50Hz 3- 400V - 50Hz 3- 230/400V - 50Hz 3- 400/690V - 50Hz
	1- 230V - 50Hz required run capacitor (35µF for 1,5HP model, 50µF for 2HP model)
<b>Insulation class</b>	F
<b>Protection degree</b>	IPX8

TYPE	LOTS			
	TRUCK		CONTAINER	
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
FM 160÷310	85×110×145	18	85×110×190	27
FM 410-560T	85×110×170	12	85×110×170	12
FM 1000T	100×120×190	12	100×120×190	12



# FM



TYPE - 50 Hz		CURRENT				
1~	3~	230 V	3~ 230V (*)	3~ 400V	230/400 V λ / Δ (*)	400/690 V λ / Δ
FM 160	FM 160T	12,5	7,6	4,4	-	-
FM 210	FM 210T	15,0	9,5	5,5	-	-
-	FM 310T	-	12,0	6,9	-	-

**+ max η %**

max hydraulic efficiency and respective total efficiency

(\*) no standard execution

TYPE - 50 Hz		P2		P1		Q (m³/h - l/min)											
1~	3~					1~	3~	0	6	12	18	24	30	36	42	48	54
		HP	kW	kW		H (m)											
FM 160	FM 160T	1,5	1,1	2,8	2,6	17,0	15,3	13,8	12,3	11,0	9,8	8,4	7,1	5,5	3,8		
FM 210	FM 210T	2	1,5	3,3	3,1	19,9	18,4	16,7	15,2	13,8	12,4	11,3	10,1	8,6	7,0	5,2	
-	FM 310T	3	2,2	-	4,1	23,9	22,2	20,6	19,1	17,8	16,3	15,0	13,8	12,3	10,9	9,1	6,4

Q [imp g.p.m]

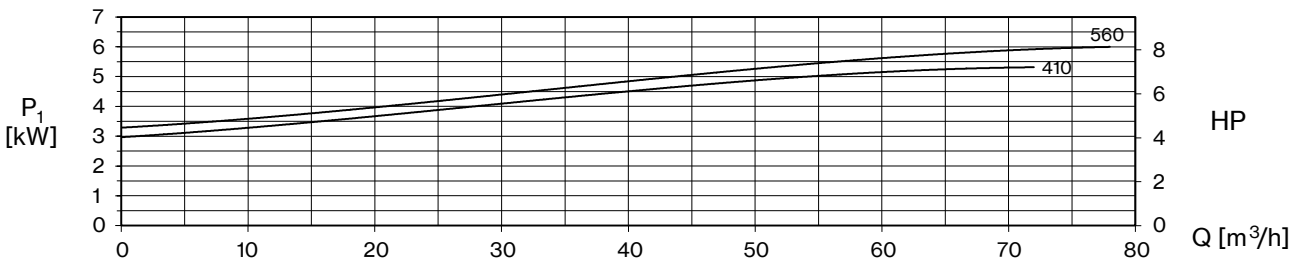
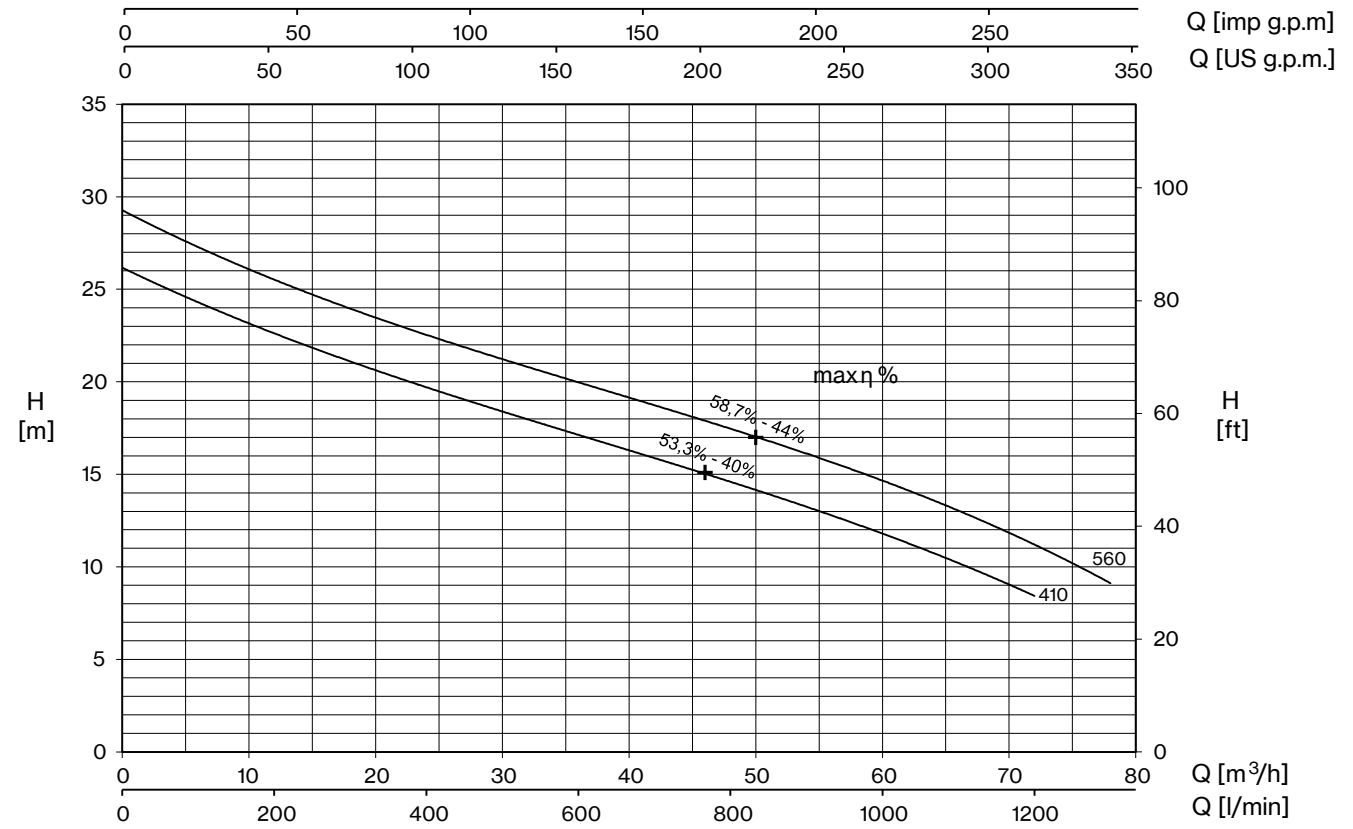
Q [US g.p.m.]

Q [m<sup>3</sup>/h]

Q [l/min]

HP

Q [m<sup>3</sup>/h]



TYPE - 50 Hz	CURRENT			
3~	3~ 230V (*)	3~ 400V	230/400 V λ / Δ (*)	400/690 V λ / Δ
FM 410T	15,4	8,9	-	-
FM 560T	17,6	10,2	-	-

+ max η %

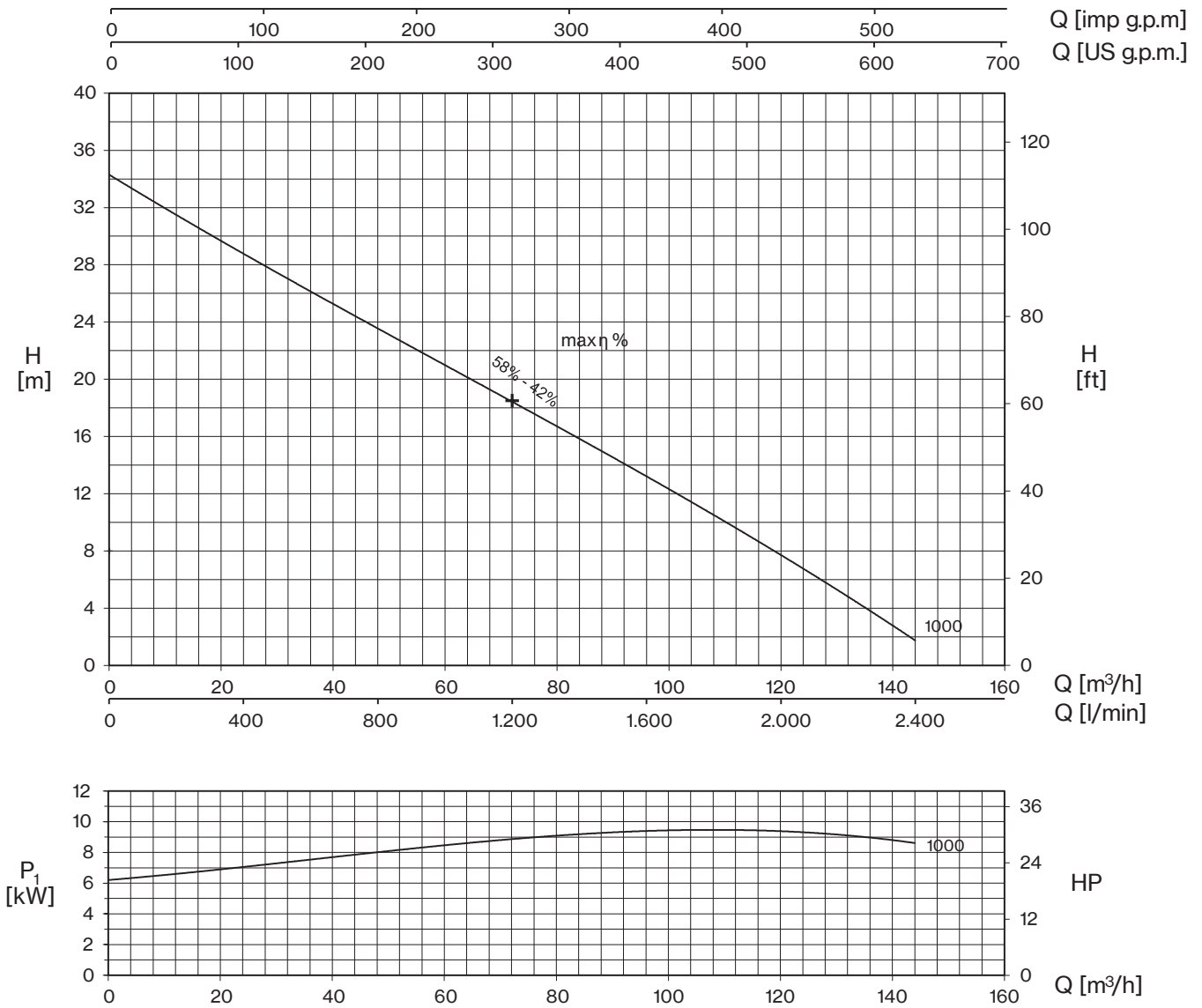
max hydraulic efficiency and respective total efficiency

(\*) no standard execution

TYPE - 50 Hz	P2		P1	Q (m <sup>3</sup> /h - l/min)									
				0	6	18	30	42	54	60	66	72	78
	HP	kW	kW	H (m)									
3~				0	100	300	500	700	900	1000	1100	1200	1300
FM 410T	4	3	5,3	26,0	24,6	21,1	18,2	15,9	13,3	11,8	10,3	8,3	
FM 560T	5,5	4	6	29,1	27,5	24,1	21,1	18,6	16,1	14,7	13,1	11,4	8,9



# FM



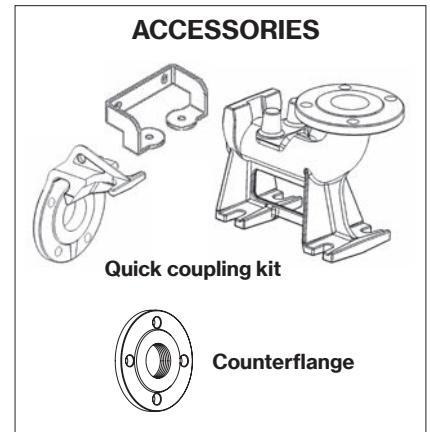
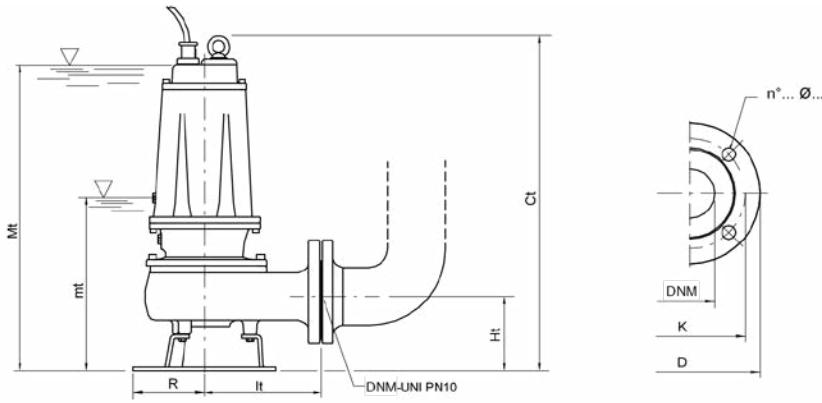
TYPE - 50 Hz	CURRENT			
	3- 230V (*)	3- 400V	230/400 V λ / Δ (*)	400/690 V λ / Δ
<b>FM 1000T</b>	-	16,3	28,2	16,3

**+ max η %**

max hydraulic efficiency and respective total efficiency

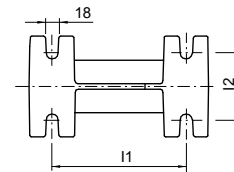
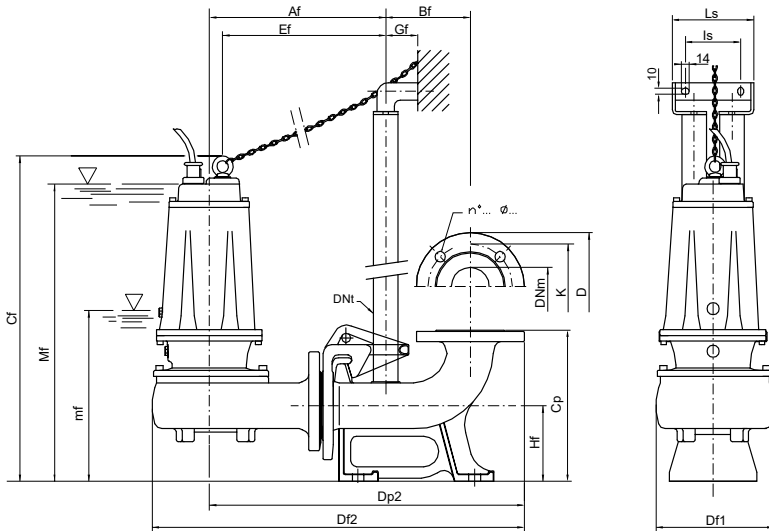
(\*) no standard execution

TYPE - 50 Hz	P2		P1	Q (m³/h - l/min)													
				0	12	24	36	48	60	72	84	96	108	120	132	144	
3-				0	200	400	600	800	1000	1200	1400	1600	1800	2000	2200	2400	
	HP	kW	kW	H (m)													
<b>FM 1000T</b>	10	7,5	9,6	34,9	30,9	28,3	26,1	23,7	21,3	18,7	16,1	13,2	10,2	7,4	4,6	2,1	



mt: minimum working level  
Mt: minimum submersion level for continuous duty

TYPE		DIMENSIONS (mm)							Kg	
1-	3-	Ct	Ht	R	It	mt	Mt	DNM	1-	3-
FM 160	FM 160T	551	123	117	191	243	513	65	41,5	40
FM 210	FM 210T	551	123	117	191	243	513	65	42,5	41,5
-	FM 310T	551	123	117	191	243	513	65	-	42,5
-	FM 410T	645	148	160	210	285	600	80	-	68
-	FM 560T	645	148	160	210	285	600	80	-	71,5
-	FM 1000T	725	178	180	232	358	670	80	-	94

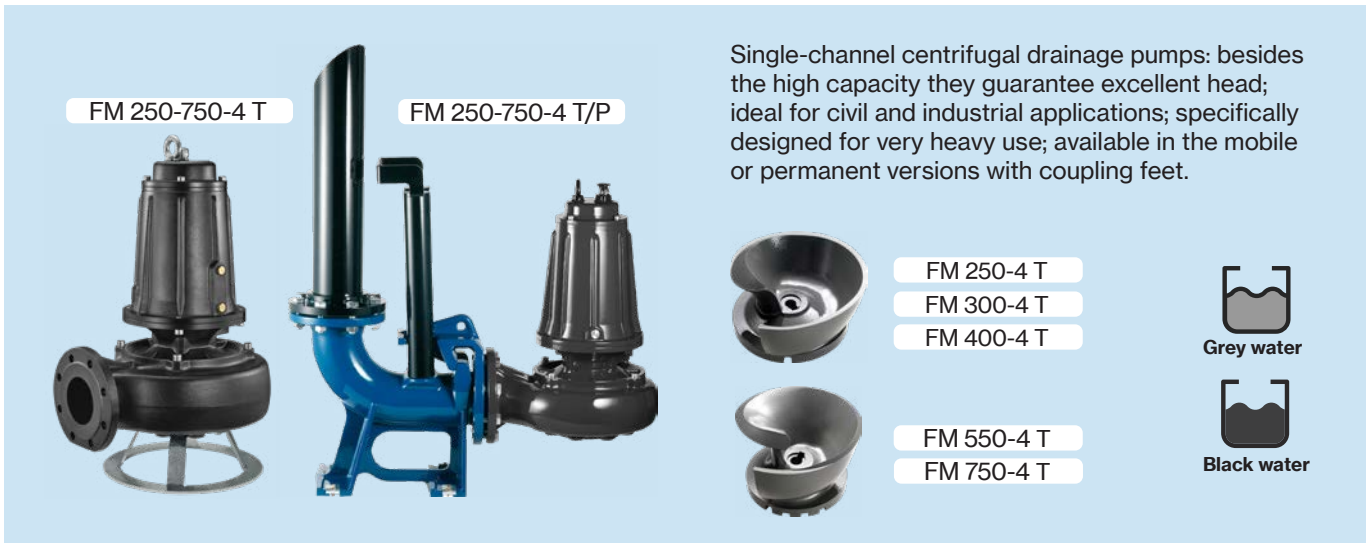


mf: minimum working level  
Mf: minimum submersion level for continuous duty


Flange UNI PN 10 (mm)			
DNM	K	D	n°... Ø...
65	145	185	4... 18...
80	160	200	8... 18...

TYPE	DIMENSIONS (mm)																	
	Af	Bf	Cf	Cp	Df1	Df2	Dp2	DNt	Ef	Gf	Hf	l1	l2	l3	Ls	mf	Mf	DNM
FM 160/P - FM 160T/P	303	145	560	260	200	639	542	1" 1/4	280	55	130	200	100	95	140	251	521	65
FM 210/P - FM 210T/P	303	145	560	260	200	639	542	1" 1/4	280	55	130	200	100	95	140	251	521	65
FM 310T/P	303	145	560	260	200	639	542	1" 1/4	280	55	130	200	100	95	140	251	521	65
FM 410T/P	350	165	690	340	220	722	615	2"	319	85	190	250	140	130	180	327	642	80
FM 560T/P	350	165	690	340	220	722	615	2"	319	85	190	250	140	130	180	327	642	80
FM 1000T/P	370	165	745	340	240	750	638	2"	350	85	190	250	140	130	180	380	690	80

TYPE	PROTECTION		1 PUMP CONTROL PANEL			2 PUMPS CONTROL PANEL		
	1- 230V	3- 400V	1- 230V	3- 400V	400/690 V	1- 230V	3- 400V	400/690 V
FM 160	PMC 15/35-15	PT 20-30-40/4.3-6.8	EQSM + 35µF	EQSMT 10		EQ2SM + 2×35µF	EQ2SMT 10	
FM 210	PMC 20/50-18	PT 20-30-40/4.3-6.8	EQSM + 50µF	EQSMT 10		EQ2SM + 2×50µF	EQ2SMT 10	
FM 310T		PT 40-50/5.7-9.1		EQSMT 10			EQ2SMT 10	
FM 400T		PT 55-75/8.6-13.5		EQSMT 10			EQ2SMT 10	
FM 560T		PT 55-75/8.6-13.5		EQSMT 10			EQ2SMT 10	
FM 1000T		PT 125-150/16-21		EQSMT 10	QST 10		EQ2SMT 15	Q2ST 10



### Construction features

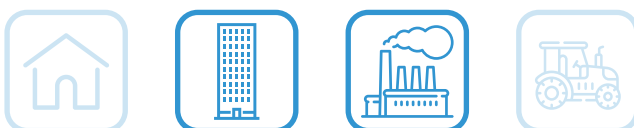
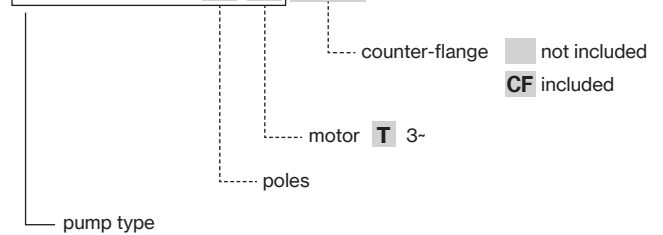
<b>Painting</b>	cataphoresis
<b>Pump body</b>	cast iron
 <b>Impeller</b>	cast iron
<b>Mechanical seal</b>	double seal with oil barrier; silicon carbide on pump side, ceramic-graphite on motor side
<b>Motor shaft</b>	stainless steel AISI 304
<b>Free passage</b>	Ø max 60 mm (FM 250/4÷400/4 T) Ø max 90 mm (FM 550/4-750/4 T)
<b>Max submergence</b>	20 m
<b>Liquid temperature</b>	0 - 40 °C
<b>Cable</b>	H07 RN8F, 10 m
<b>Bolts</b>	A2 stainless steel
<b>Foot support</b>	galvanized iron
<b>Gaskets</b>	NBR rubber

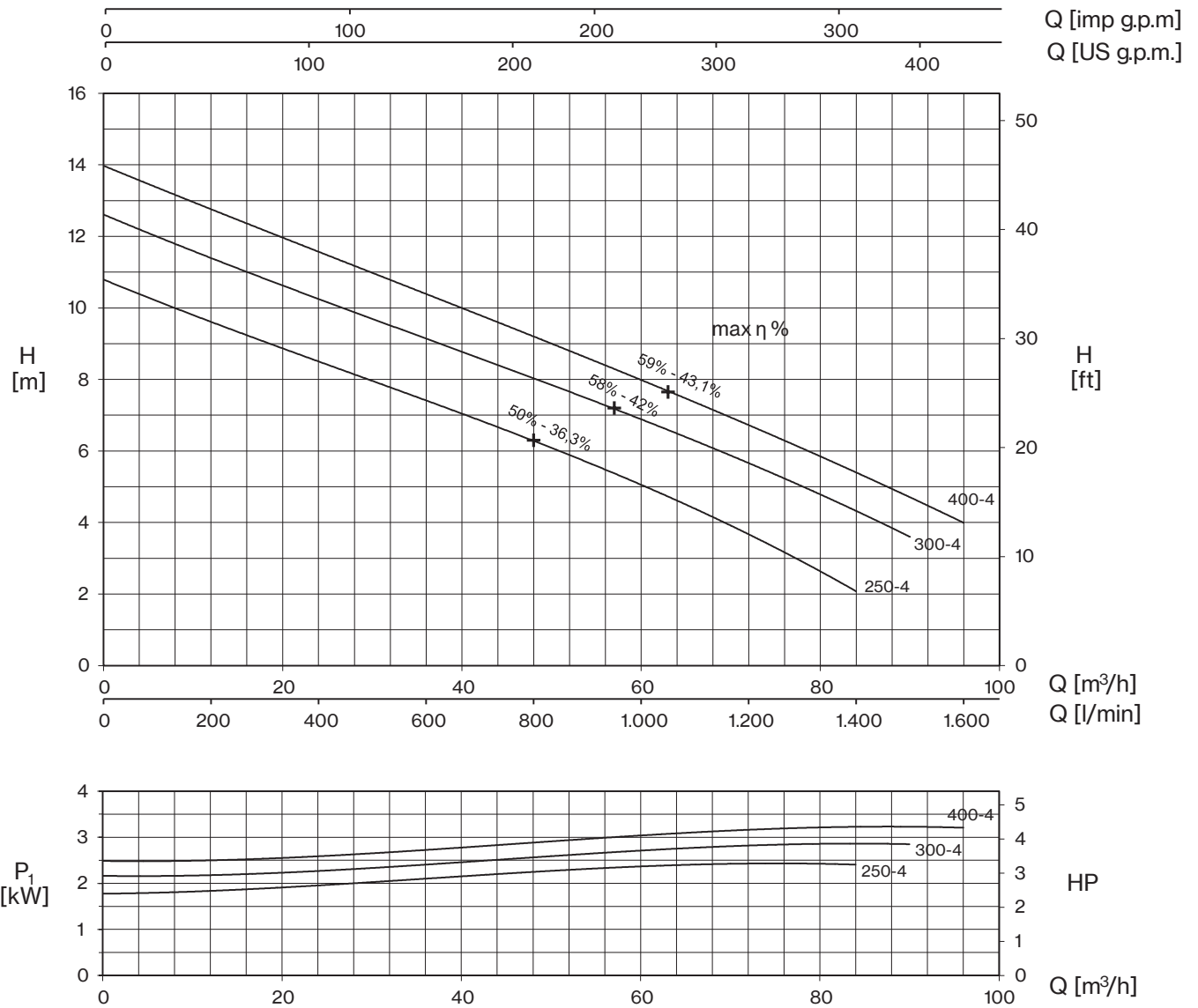
### Motor

<b>4 Poles induction motor</b>	3- 230V - 50Hz
	3- 400V - 50Hz
	3- 230/400V - 50Hz
	3- 400/690V - 50Hz
<b>Insulation class</b>	F
<b>Protection degree</b>	IPX8

TYPE	LOTS			
	TRUCK		CONTAINER	
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
FM 250-4÷750-4T	85×110×190	12	100×120×190	12

### FM 550 - 4 T -CF





TYPE - 50 Hz	CURRENT			
	3- 230V (*)	3- 400V	230/400 V λ / Δ (*)	400/690 V λ / Δ
FM 250-4T	7,8	4,5	-	-
FM 300-4T	9,0	5,2	-	-
FM 400-4T	11,2	6,5	-	-

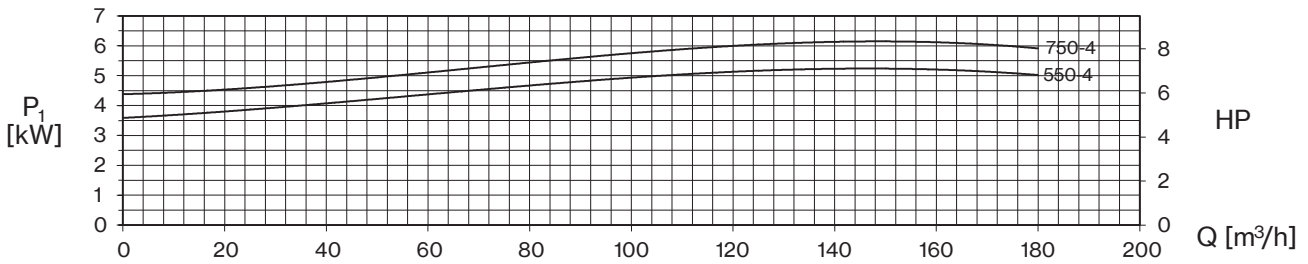
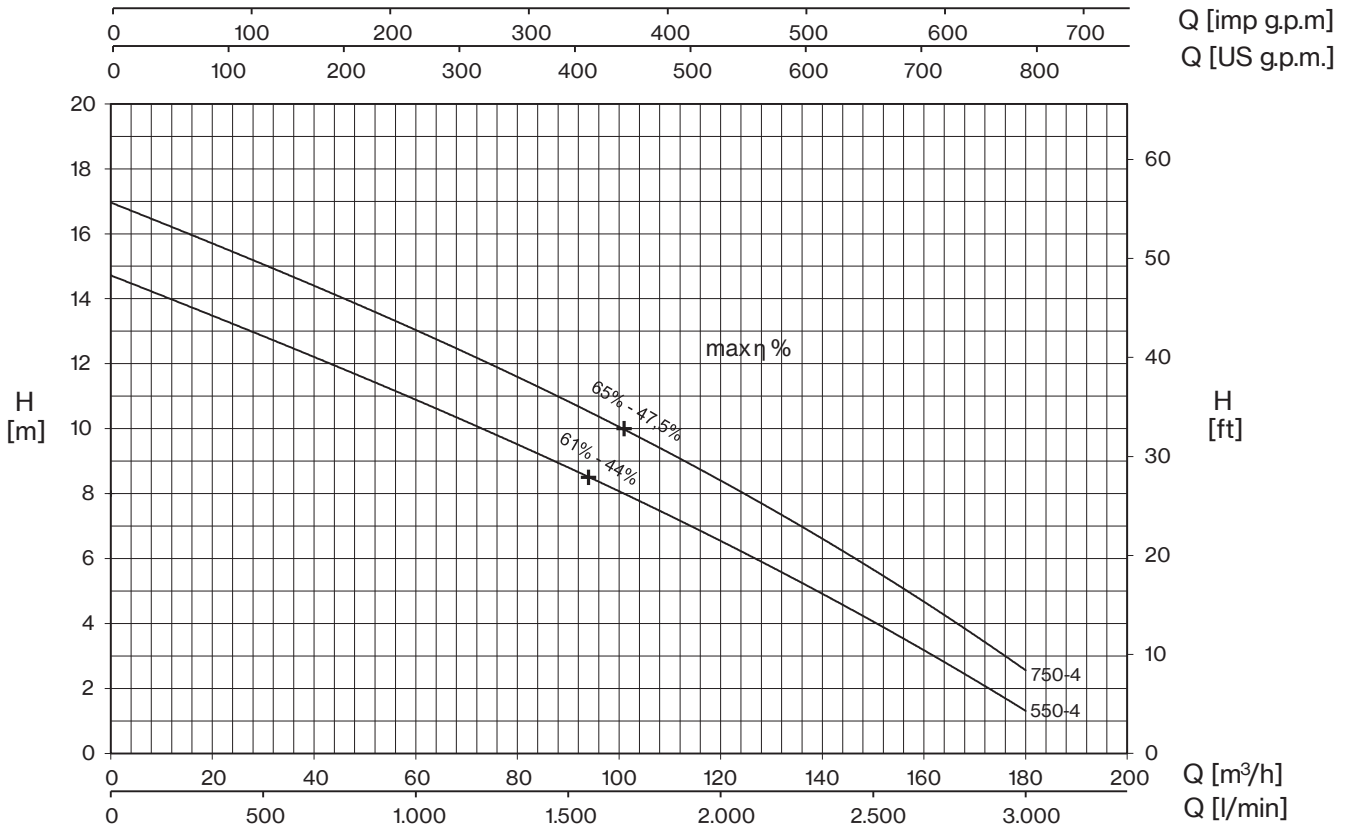
+ max η %

max hydraulic efficiency and respective total efficiency

(\*) no standard execution

TYPE - 50 Hz	P2		P1	Q (m³/h - l/min)										
				0	12	24	36	48	60	72	84	90	96	
	HP	kW	kW	H (m)										
FM 250-4T	2,5	1,8	2,4	10,8	9,6	8,5	7,4	6,3	5,1	3,6	2,1			
FM 300-4T	3	2,2	2,9	12,6	11,4	10,3	9,1	8,0	6,9	5,7	4,3	3,6		
FM 400-4T	4	3	3,2	14,0	12,7	11,6	10,4	9,2	8,0	6,7	5,4	4,7	4,0	

# FM4



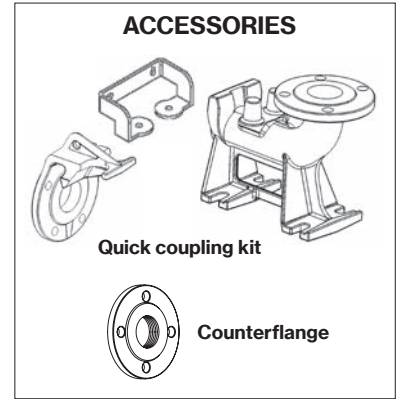
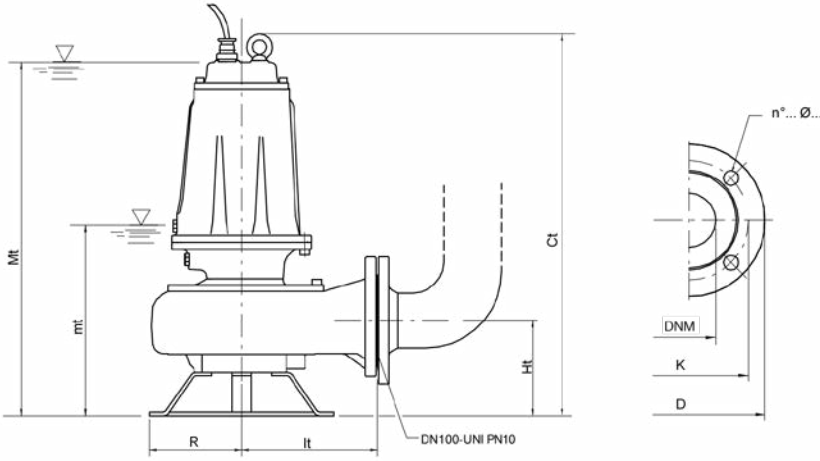
TYPE - 50 Hz	CURRENT			
3~	3- 230V (*)	3- 400V	230/400V $\lambda / \Delta$ (*)	400/690V $\lambda / \Delta$
FM 550-4T	-	9,4	16,3	9,4
FM 750-4T	-	11,8	20,4	11,8

+ max  $\eta$  %

max hydraulic efficiency and respective total efficiency

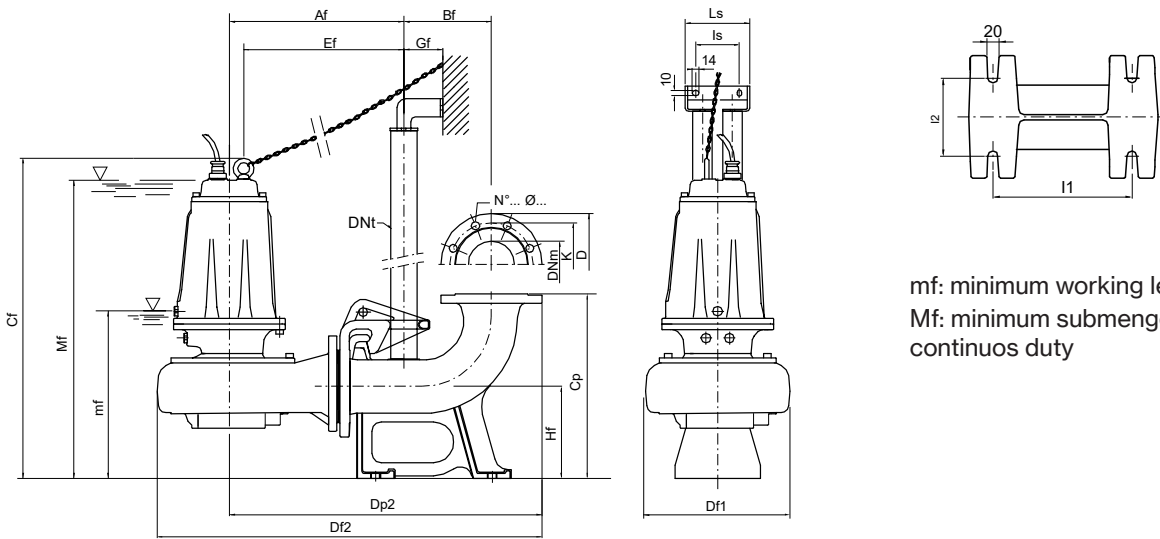
(\*) no standard execution

TYPE - 50 Hz	P2		P1	Q (m³/h - l/min)																
				H (m)																
				0	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	
3~	HP	kW	kW	0	200	400	600	800	1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	
FM 550-4T	5,5	4	5,2	14,7	14,0	13,2	12,5	11,7	10,9	10,1	9,2	8,3	7,5	6,5	5,6	4,6	3,6	2,4	1,3	
FM 750-4T	7,5	5,5	6,1	17,0	16,2	15,4	14,7	13,8	13,0	12,2	11,4	10,4	9,4	8,4	7,3	6,2	5,1	3,8	2,6	



mt: minimum working level  
 Mt: minimum submersion level for continuous duty

TYPE	DIMENSIONS (mm)							Kg
	Ct	Ht	R	lt	mt	Mt	DNM	
FM 250-4T	660	165	160	235	300	614	100	71,5
FM 300-4T	660	165	160	235	300	614	100	74
FM 400-4T	660	165	160	235	300	614	100	77,5
FM 550-4T	715	195	180	276	385	695	100	104
FM 750-4T	715	195	180	276	385	695	100	107,5



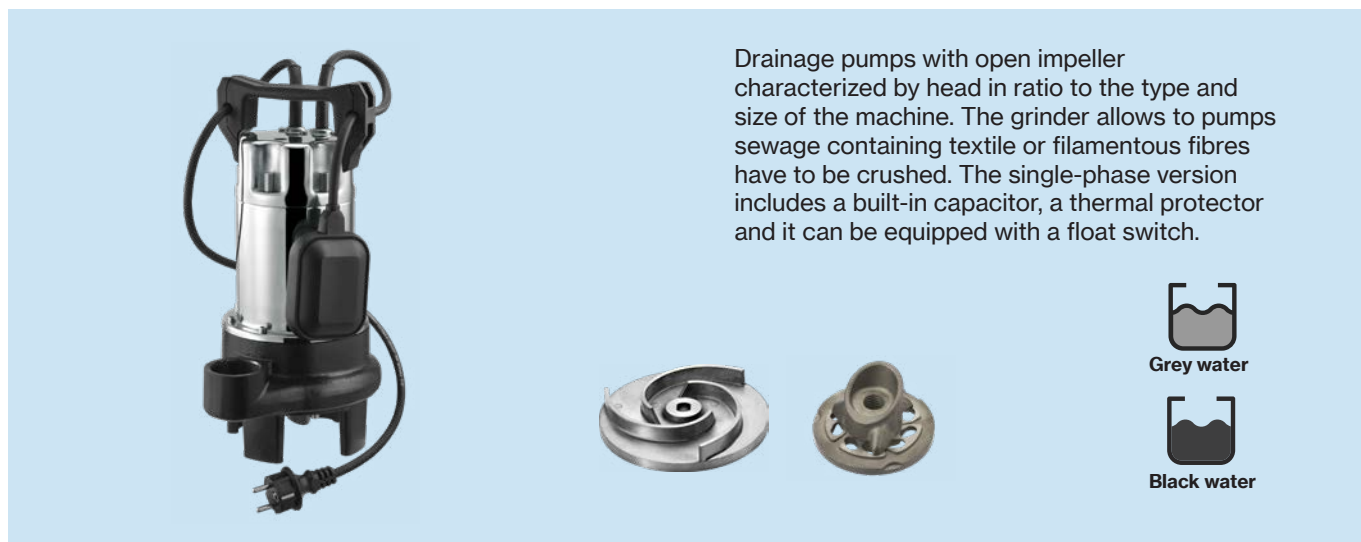
mf: minimum working level  
 Mf: minimum submersion level for continuous duty

TYPE	DIMENSIONS (mm)																		
	Af	Bf	Cf	Cp	Df1	Df2	Dp2	Dnt	Ef	Gf	Hf	l1	l2	ls	Ls	mf	Mf	DNM	
FM 250-4T/P	378	190	695	400	317	835	678	2"	347	85	200	250	140	130	180	335	650	100	
FM 300-4T/P	378	190	695	400	317	835	678	2"	347	85	200	250	140	130	180	335	650	100	
FM 400-4T/P	378	190	695	400	317	835	678	2"	347	85	200	250	140	130	180	335	650	100	
FM 550-4T/P	419	190	755	400	371	900	719	2"	384	85	200	250	140	130	180	390	700	100	
FM 750-4T/P	419	190	755	400	371	900	719	2"	384	85	200	250	140	130	180	390	700	100	

Flange UNI PN 10 (mm)			
DNM	K	D	n°... Ø...
100	180	220	8... 18...


TYPE	PROTECTION	1 PUMP CONTROL PANEL		2 PUMPS CONTROL PANEL	
	3- 400V	3- 400V	400/690 V	3- 400V	400/690 V
FM 250-4T	PT 40-50/5.7-9.1	EQSMT 10		EQ2SMT 10	
FM 300-4T	PT 40-50/5.7-9.1	EQSMT 10		EQ2SMT 10	
FM 400-4T	PT 40-50/5.7-9.1	EQSMT 10		EQ2SMT 10	
FM 550-4T	PT 55-75/8.6-13.5	EQSMT 10		EQ2SMT 10	
FM 750-4T	PT 100/12.5-16.5	EQSMT 10	QST 5	EQ2SMT 10	Q2ST 5

# FTR 101



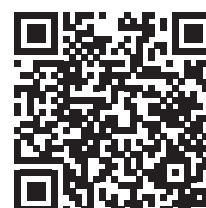
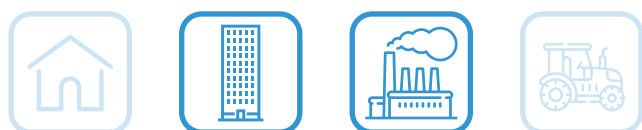
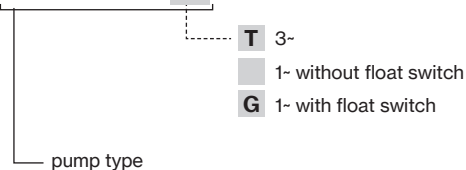
Drainage pumps with open impeller characterized by head in ratio to the type and size of the machine. The grinder allows to pumps sewage containing textile or filamentous fibres have to be crushed. The single-phase version includes a built-in capacitor, a thermal protector and it can be equipped with a float switch.



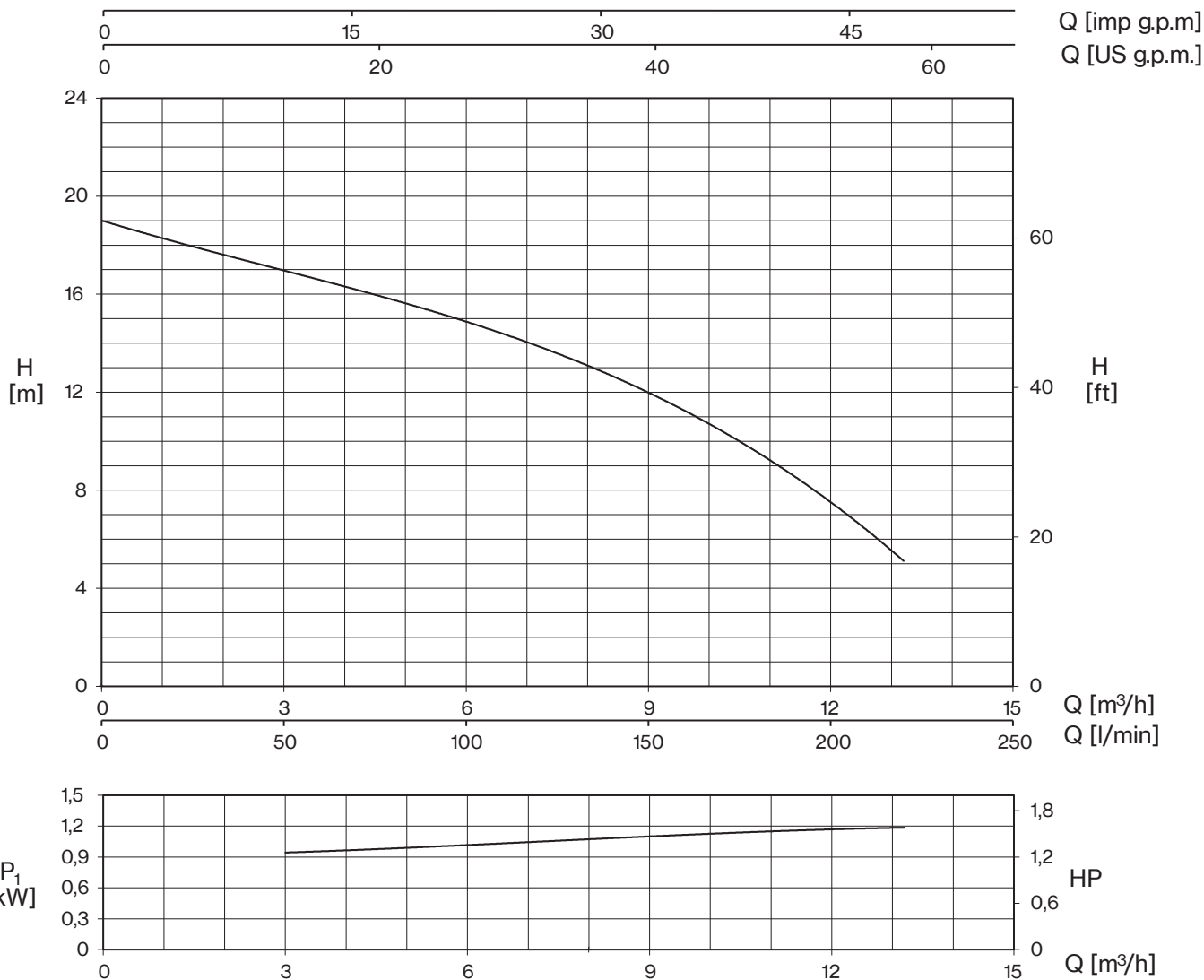
Construction features	
<b>Painting</b>	cataphoresis
<b>Pump body</b>	cast iron
<b>Shell, motor cover</b>	stainless steel
<b>Impeller</b>	brass
<b>Mechanical seal</b>	double seal with oil barrier; silicon carbide on pump side, sealing ring on motor side
<b>Motor shaft</b>	stainless steel AISI 430
 <b>Grinder</b>	treated stainless steel
<b>Max submergence</b>	max 5 m
<b>Liquid temperature</b>	0 - 40 °C
<b>Cable</b>	H07 RNF, 10 m
<b>G</b>	float switch

Motor	
	3~ 400V - 50Hz
<b>2 Poles induction motor</b>	1~ 230V - 50Hz (with thermal protection)
<b>Insulation class</b>	F
<b>Protection degree</b>	IPX8

## FTR 101 G

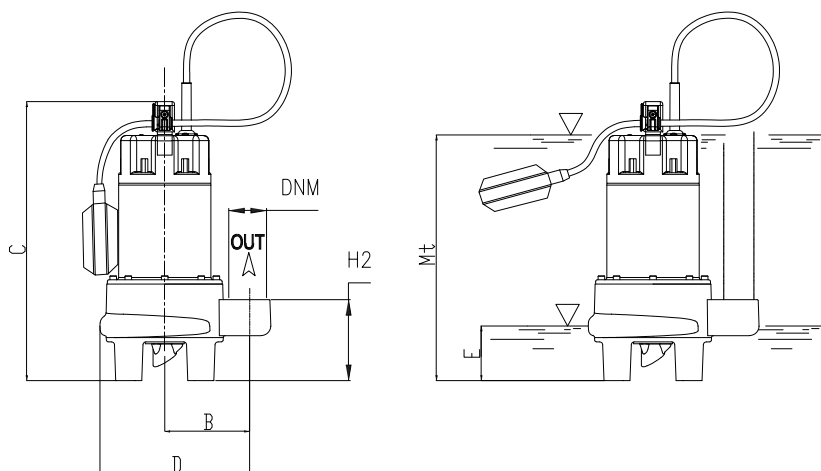


# FTR 101



TYPE - 50 Hz		P1	CURRENT		Q (m³/h - l/min)					
1~	3~		1- 230V	3- 400V	0	3	6	9	12	13,2
		kW	A		H (m)					
<b>FTR 101 (G)</b>	<b>FTR 101T</b>	1,2	5,3	2,2	19,0	17,1	14,8	11,9	7,8	4,9

E: maximum emptying level  
Mt: minimum liquid level for continuous duty

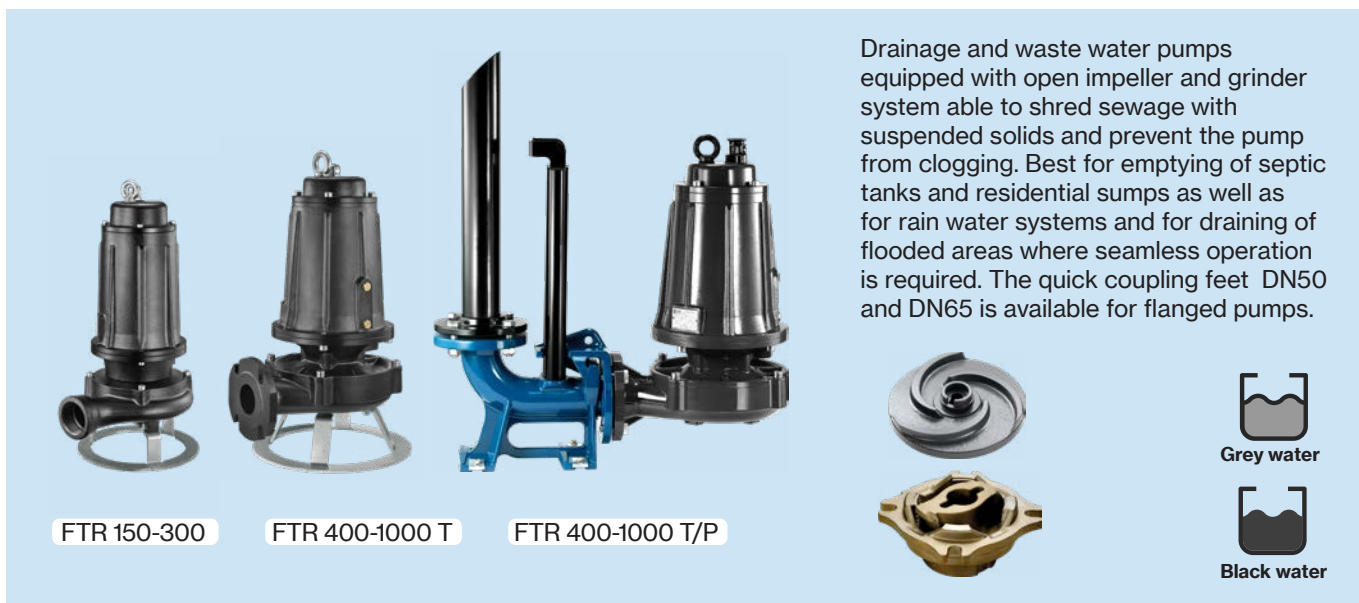


TYPE		DIMENSIONS (mm)										
1~	3~	B	C	D	E	H2	Mt	DNM	I	L	M	Kg
<b>FTR 101 (G)</b>	<b>FTR 101T</b>	105	359	218,5	70	104,5	313	1" 1/2 G	260	185	450	16,5



# FTR/FTRT

Sewage  
Grinder



Drainage and waste water pumps equipped with open impeller and grinder system able to shred sewage with suspended solids and prevent the pump from clogging. Best for emptying of septic tanks and residential sumps as well as for rain water systems and for draining of flooded areas where seamless operation is required. The quick coupling feet DN50 and DN65 is available for flanged pumps.

FTR 150-300

FTR 400-1000 T

FTR 400-1000 T/P




Grey water



Black water

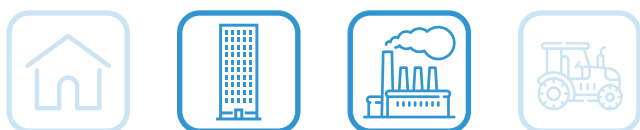
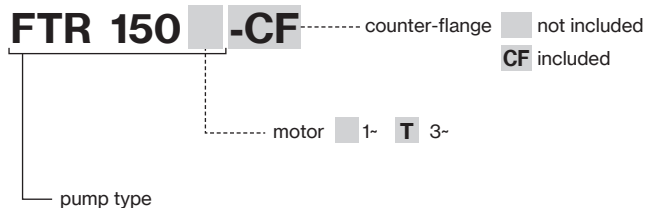
## Construction features

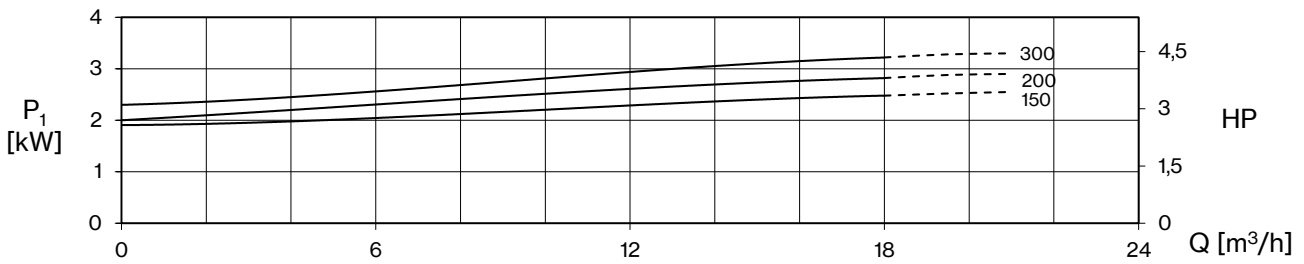
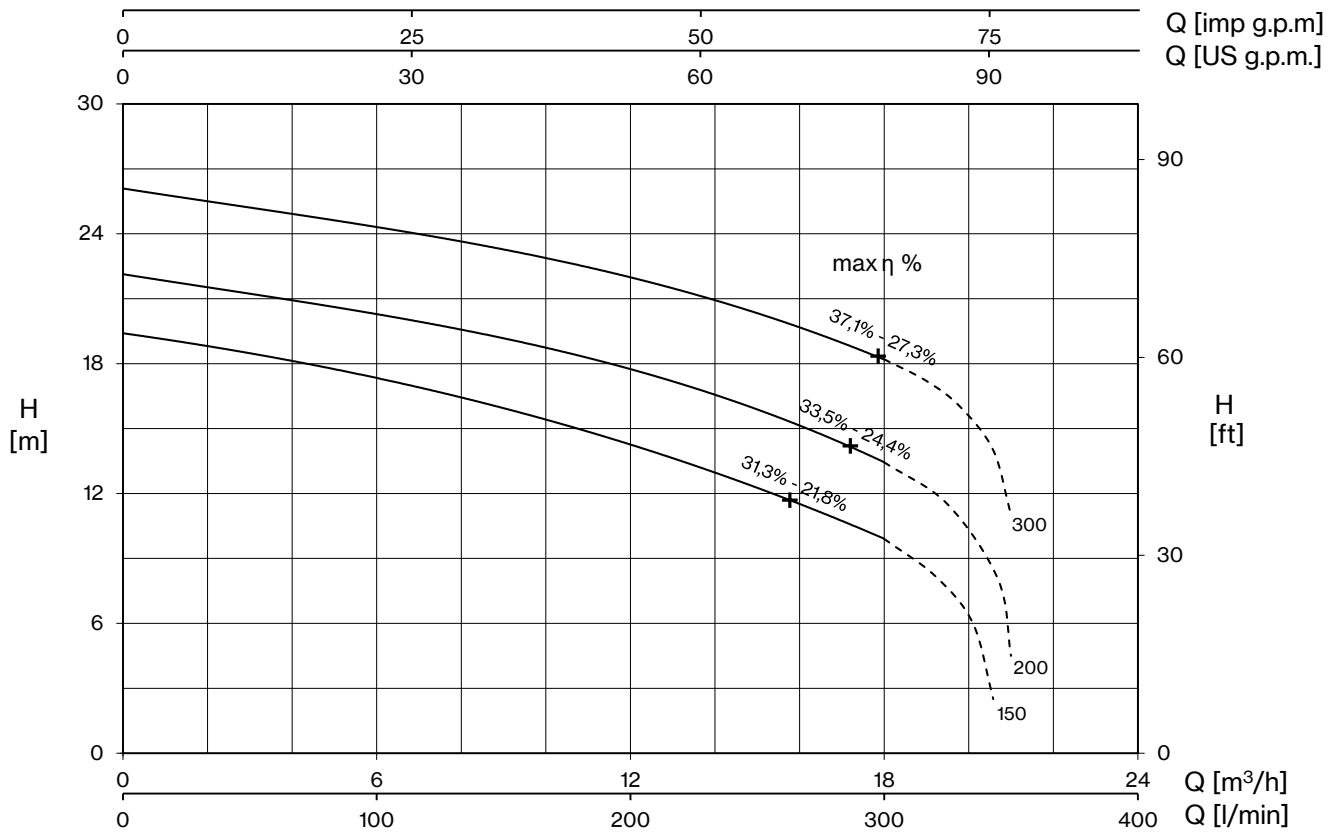
<b>Painting</b>	cataphoresis
<b>Pump body</b>	cast iron
<b>Impeller</b>	cast iron
<b>Mechanical seal</b>	double seal with oil barrier: silicon carbide on pump side, ceramic-graphite on motor side
<b>Motor shaft</b>	stainless steel AISI 304
<b>Max submergence</b>	20 m
<b>Liquid temperature</b>	0 - 40 °C
 <b>Grinder</b>	treated stainless steel
<b>Bolts</b>	A2 stainless steel
<b>Foot support</b>	galvanized iron
<b>Gaskets</b>	NBR rubber

## Motor

<b>2 Poles induction motor</b>	3- 230V - 50Hz
	3- 400V - 50Hz
	3- 230/400V - 50Hz
	3- 400/690V - 50Hz
<b>run capacitor</b> (35µF for 1,5HP models, 50µF for 2HP model) + start capacitor (80µF with disjuntor) required	
<b>Insulation class</b>	F
<b>Protection degree</b>	IPX8

TYPE	LOTS		CONTAINER	
	TRUCK			
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
FTR 150÷300T	85×110×145	18	85×110×190	27
FTR 400-550T	85×110×170	12	85×110×170	12
FTR 1000T	100×120×190	12	100×120×190	12





TYPE - 50 Hz		CURRENT				
1~	3~	230 V	3~ 230V (*)	3~ 400V	230/400 V $\lambda / \Delta$ (*)	400/690 V $\lambda / \Delta$
FTR 150	FTR 150T	11,5	7,6	4,4	-	-
FTR 200	FTR 200T	13,6	8,8	5,1	-	-
-	FTR 300T	-	10,0	5,8	-	-

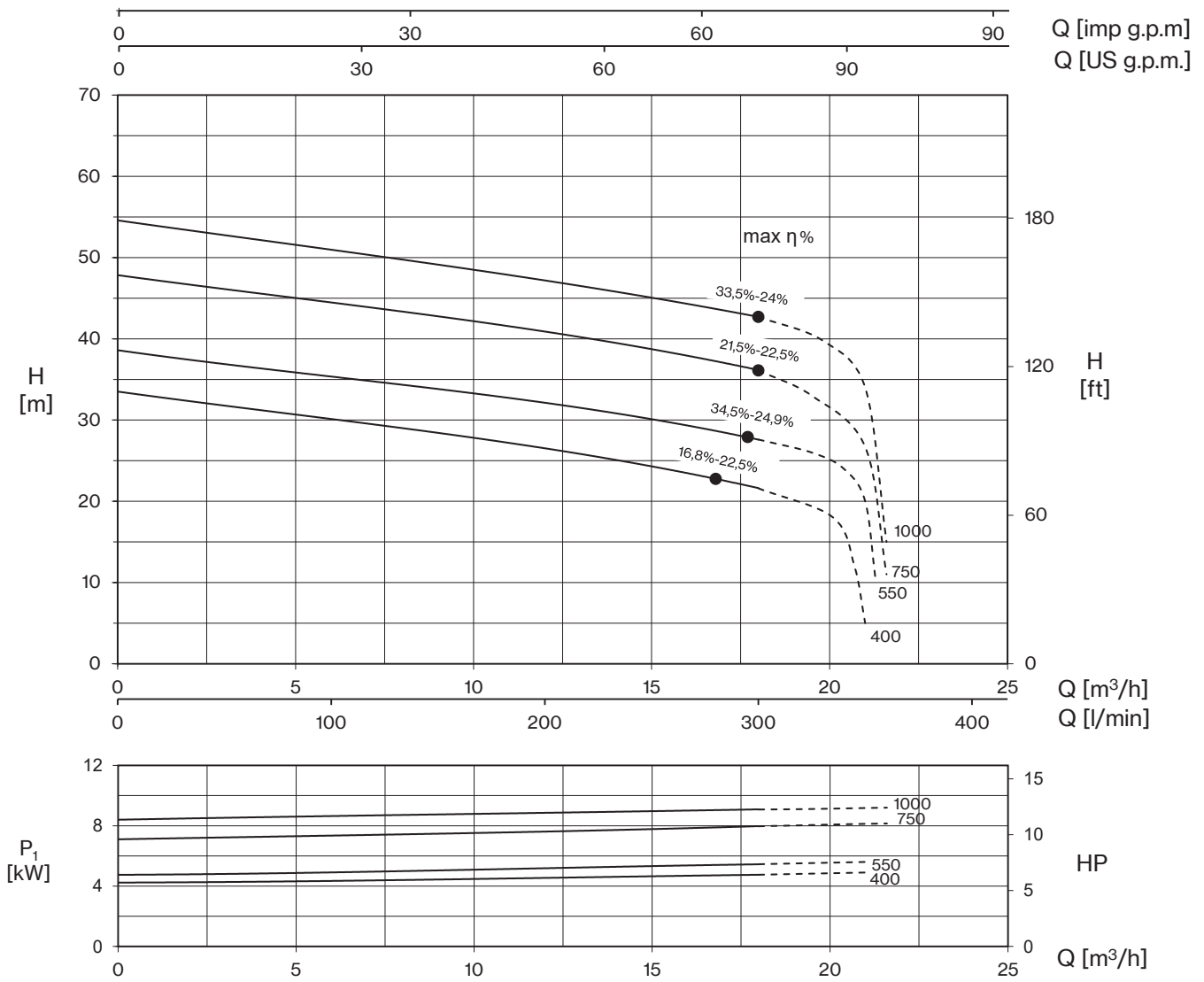
+ max  $\eta$  %

max hydraulic efficiency and respective total efficiency

(\*) no standard execution

TYPE - 50 Hz		P2		P1		Q (m³/h - l/min)							
1~	3~	HP	kW	1~	3~	0	3	6	9	12	13,2	15	18
						0	50	100	150	200	220	250	300
				kW		H (m)							
FTR 150	FTR 150T	1,5	1,1	2,6	2,5	19,4	18,5	17,3	16,0	14,2	13,5	12,3	9,9
FTR 200	FTR 200T	2	1,5	3,0	2,8	22,1	21,3	20,3	19,1	17,7	17,1	16,0	13,4
-	FTR 300T	3	2,2	-	3,2	26,1	25,2	24,3	23,3	22,0	21,4	20,3	18,2

# FTR/FTRT



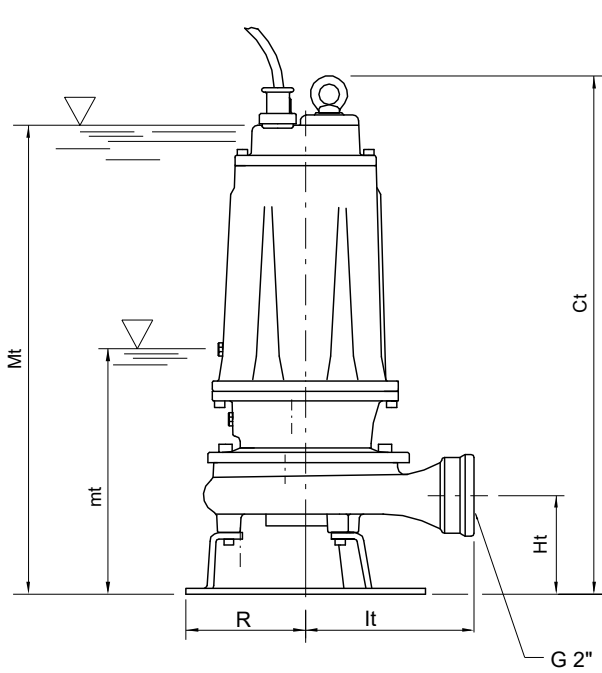
TYPE - 50 Hz	CURRENT			
3~	3- 230V (*)	3- 400V	230/400V λ / Δ (*)	400/690V λ / Δ
<b>FTR 400T</b>	13,0	7,5	-	-
<b>FTR 550T</b>	15,9	9,2	-	-
<b>FTR 750T</b>	-	13,9	24	13,9
<b>FTR 1000T</b>	-	15,5	26,8	15,5

**+ max η %**

max hydraulic efficiency and respective total efficiency

(\*) no standard execution

TYPE - 50 Hz	P2		P1	Q (m³/h - l/min)							
				0	3	6	9	12	15	18	
	HP	kW	kW	0	50	100	150	200	250	300	
3~	H (m)										
<b>FTR 400T</b>	4	3	4,5	33,5	31,8	30,1	28,5	26,4	24,4	21,6	
<b>FTR 550T</b>	5,5	4	5,3	38,6	36,9	35,3	33,9	32,1	30,1	27,6	
<b>FTR 750T</b>	7,5	5,5	8,0	47,8	46,2	44,5	42,7	40,8	38,9	36,1	
<b>FTR 1000T</b>	10	7,5	9,1	54,6	52,7	51,0	49,2	47,1	45,1	42,7	



mt: minimum working level  
Mt: minimum submergence level for continuous duty

TYPE		DIMENSIONS (mm)							Kg
1-	3-	Ct	Ht	R	lt	mt	Mt	DNM	
<b>FTR 150</b>	<b>FTR 150T</b>	513	102	117	174	205	475	2" G	38
<b>FTR 200</b>	<b>FTR 200T</b>	513	102	117	174	205	475	2" G	38,5
-	<b>FTR 300T</b>	513	102	117	174	205	475	2" G	38

TYPE	PROTECTION		1 PUMP CONTROL PANEL			2 PUMPS CONTROL PANEL		
	1- 230V	3- 400V	1- 230V	3- 400V	400/690 V	1- 230V	3- 400V	400/690 V
<b>FTR 150</b>	PMLD 15/35-13	PT 20-30-40/4.3-6.8	EQSM + 35µF + 80µF*	EQSMT 10		EQ2SM + 2×35µF + 2×80µF*	EQ2SMT 10	
<b>FTR 200</b>	PMLD 20/50-15	PT 20-30-40/4.3-6.8	EQSM + 50µF + 80µF*	EQSMT 10		EQ2SM + 2×50µF + 2×80µF*	EQ2SMT 10	
<b>FTR 300T</b>		PT 20-30-40/4.3-6.8		EQSMT 10			EQ2SMT 10	
<b>FTR 400T</b>		PT 40-50/5.7-9.1		EQSMT 10			EQ2SMT 10	
<b>FTR 550T</b>		PT 55-75/8.6-13.5		EQSMT 10			EQ2SMT 10	
<b>FTR 750T</b>		PT 100/12.5-16.5		EQSMT 10	QST 7		EQ2SMT 10	Q2ST 7
<b>FTR 1000T</b>		PT 125-150/16-21		EQSMT 10	QST 10		EQ2SMT 15	Q2ST 10

\*start capacitor with disjuntor





DC 80-102



DC 150



DC 80-102



DC 150



Drainage pumps with set-back Vortex type impeller for pumping sewage waters and liquids with suspended solids; ideal for civil and household applications. The single-phase version includes a built-in capacitor, a thermal protector and it can be equipped with a float switch.

## Construction features

**Painting** cataphoresis

**Pump body** cast iron

**Shell, motor cover, base support** stainless steel



**Impeller** Vortex stainless steel (80-102); brass (150)

**Mechanical seal** double seal with oil barrier: pump side with silicon carbide mechanical seal; motor side with sealing ring (80÷102) or ceramic-graphite mechanical seal (150)

**Motor shaft** stainless steel AISI 430

**Free passage** Ø max 35 mm (80-100)  
Ø max 50 mm (82÷150)

**Max submergence** 5 m

**Liquid temperature** 0 - 40 °C

**Cable** H07 RN8F, 10 m

**G** float switch

## Motor

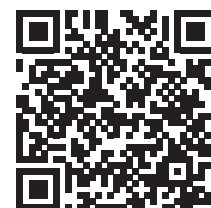
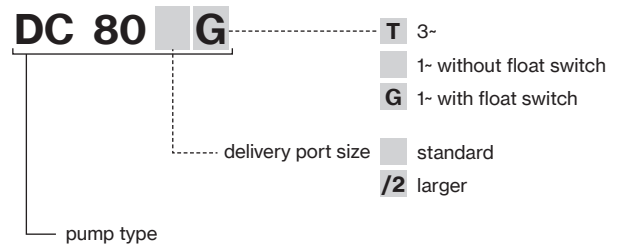
3~ 400V - 50Hz

**2 Poles induction motor** 1~ 230V - 50Hz  
(with thermal protection)

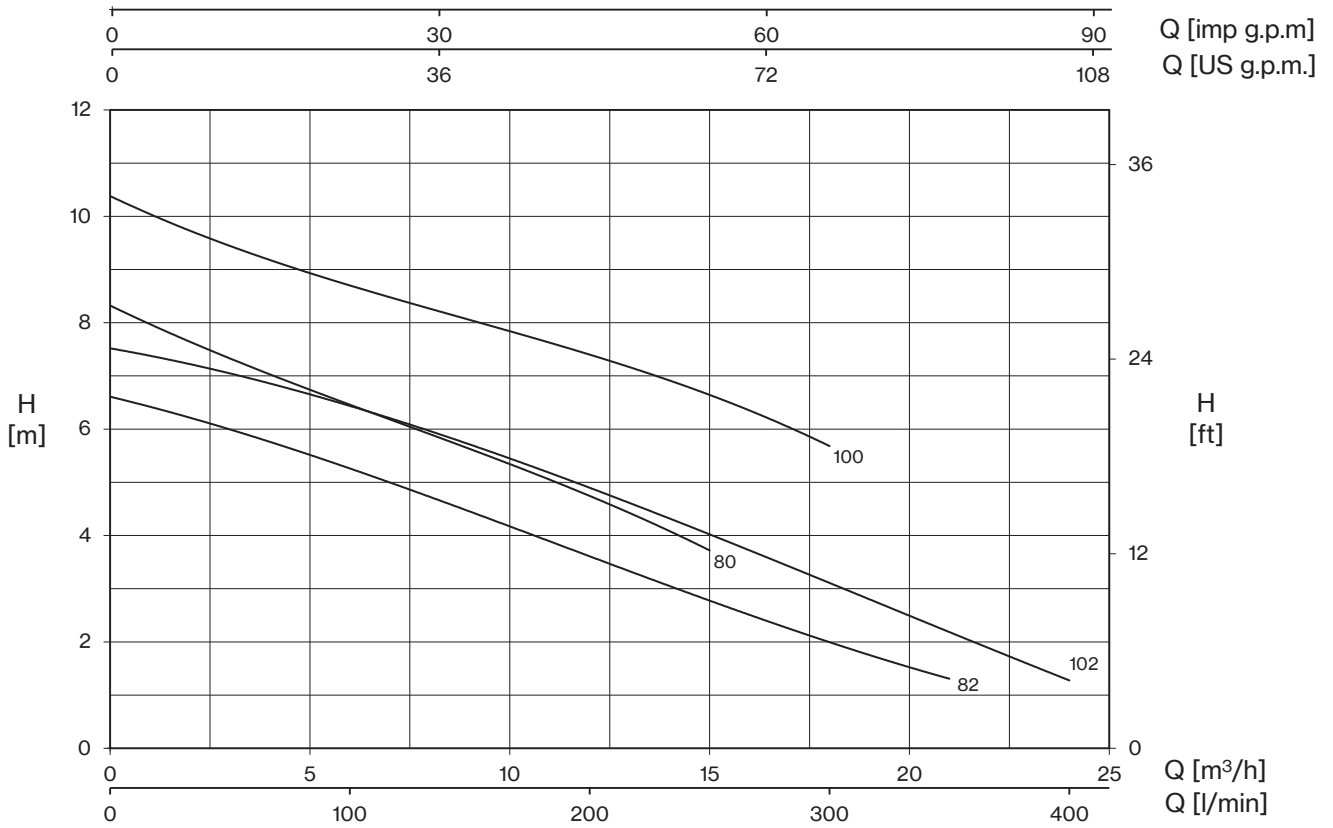
**Insulation class** F

**Protection degree** IPX8

TYPE	LOTS			
	TRUCK		CONTAINER	
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
DC 80÷102	80×120×145	48	80×120×190	76
DC 150	80×120×160	51	80×120×160	51

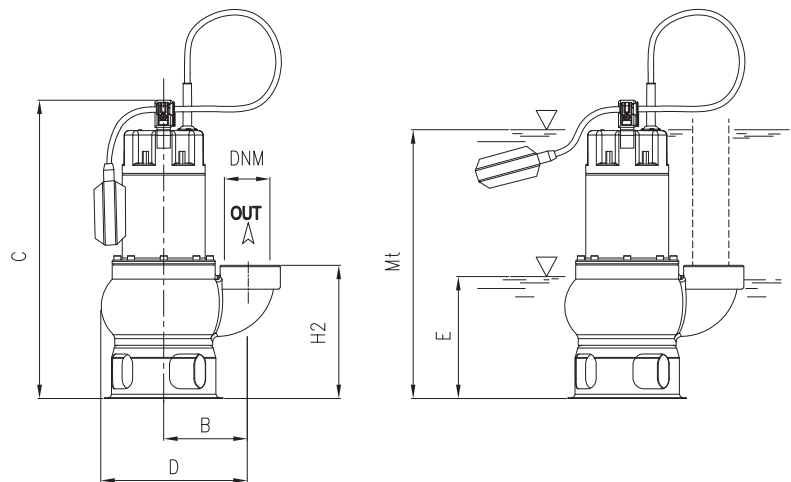


# DC

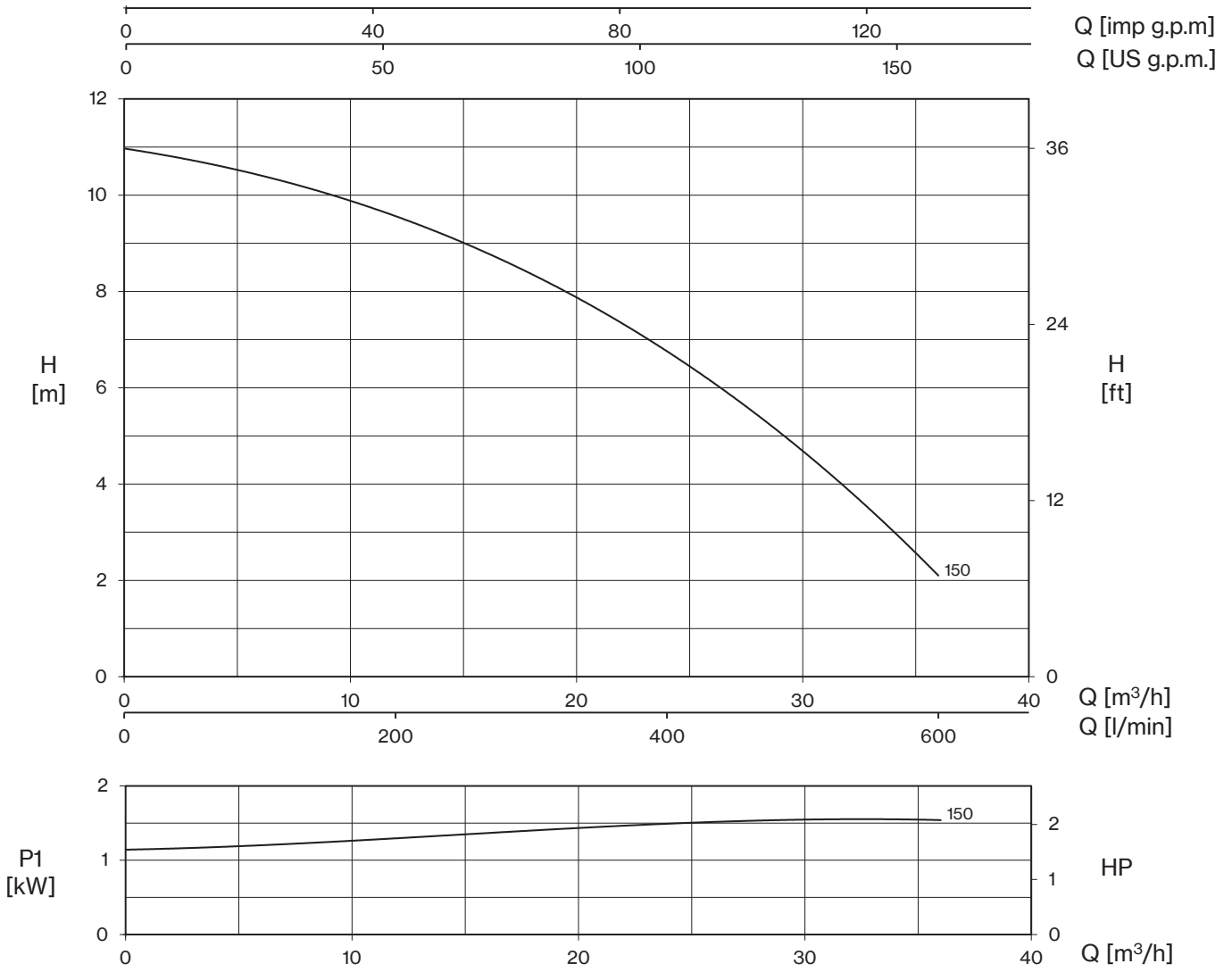


TYPE - 50 Hz		P1	CURRENT		Q (m³/h - l/min)									
1~	3~		1- 230V	3- 400V	0	3	6	9	12	15	18	21	24	
		kW	A		H (m)									
DC 80 (G)	DC 80T	1,05	4,7	2,2	8,3	7,4	6,4	5,6	4,8	3,7				
DC 80/2 (G)	DC 80/2T	1,05	4,7	2,2	8,3	7,4	6,4	5,6	4,8	3,7				
DC 100 (G)	DC 100T	1,35	6,2	2,8	10,4	9,4	8,7	8,1	7,4	6,6	5,7			
DC 100/2 (G)	DC 100/2T	1,35	6,2	2,8	10,4	9,4	8,7	8,1	7,4	6,6	5,7			
DC 82 (G)	DC 82T	1	4,5	2,1	6,6	6	5,3	4,4	3,6	2,8	2	1,3		
DC 102 (G)	DC 102T	1,2	5,3	2,4	7,5	7,1	6,4	5,7	4,9	4	3,2	2,1	1,3	

E: maximum emptying level  
Mt: minimum liquid level for continuous duty

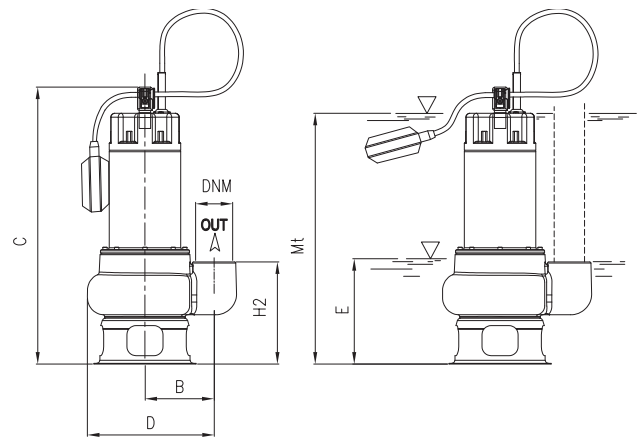


TYPE		DIMENSIONS (mm)										Kg
1~	3~	B	C	D	E	H2	Mt	DNM	I	L	M	
DC 80 (G)	DC 80T	110	410	230	140	174	290	1" 1/2 G	250	183	448	14
DC 80/2 (G)	DC 80/2T	110	410	230	140	174	290	2" G	250	183	448	14
DC 100 (G)	DC 100T	110	410	230	140	174	290	1" 1/2 G	250	183	448	15
DC 100/2 (G)	DC 100/2T	110	410	230	140	174	290	2" G	250	183	448	15,5
DC 82 (G)	DC 82T	120	426	250	150	190	300	2" G	265	205	500	15
DC 102 (G)	DC 102T	120	426	250	150	190	300	2" G	265	205	500	16



TYPE - 50 Hz		P1	CURRENT		Q (m³/h - l/min)						
1~	3~		1- 230V	3- 400V	0	6	12	18	24	30	36
		kW	A		H (m)						
<b>DC 150 (G)</b>	<b>DC 150T</b>	1,55	7,1	2,9	11,0	10,4	9,6	8,3	6,8	4,6	2,1

E: maximum emptying level  
Mt: minimum liquid level for continuous duty



TYPE		DIMENSIONS (mm)										Kg
1~	3~	B	C	D	E	H2	Mt	DNM	I	L	M	
<b>DC 150 (G)</b>	<b>DC 150T</b>	142,5	461	247,5	185	170	390	2" G	200	260	470	19





Drainage pumps with set-back Vortex type impeller for pumping charged waters and liquids with suspended solids; ideal for civil and household applications. The single-phase version includes a built-in capacitor, a thermal protector and it can be equipped with a float switch.



Grey water



Black water

### Construction features

**Pump body** stainless steel with openings 1½" and 2"

**Shell, motor cover, base support** stainless steel



**Impeller** stainless steel Vortex type

**Mechanical seal** double seal with oil barrier; silicon carbide on pump side, sealing ring on motor side

**Motor shaft** stainless steel AISI 430

**Free passage** Ø max 28 mm

**Max submergence** 5 m

**Liquid temperature** 0 - 40 °C

**Cable** H07 RN8F, 10 m

**G** float switch

### Motor

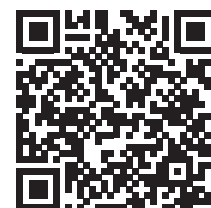
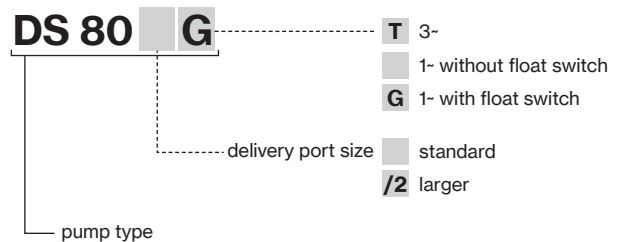
3~ 400V - 50Hz

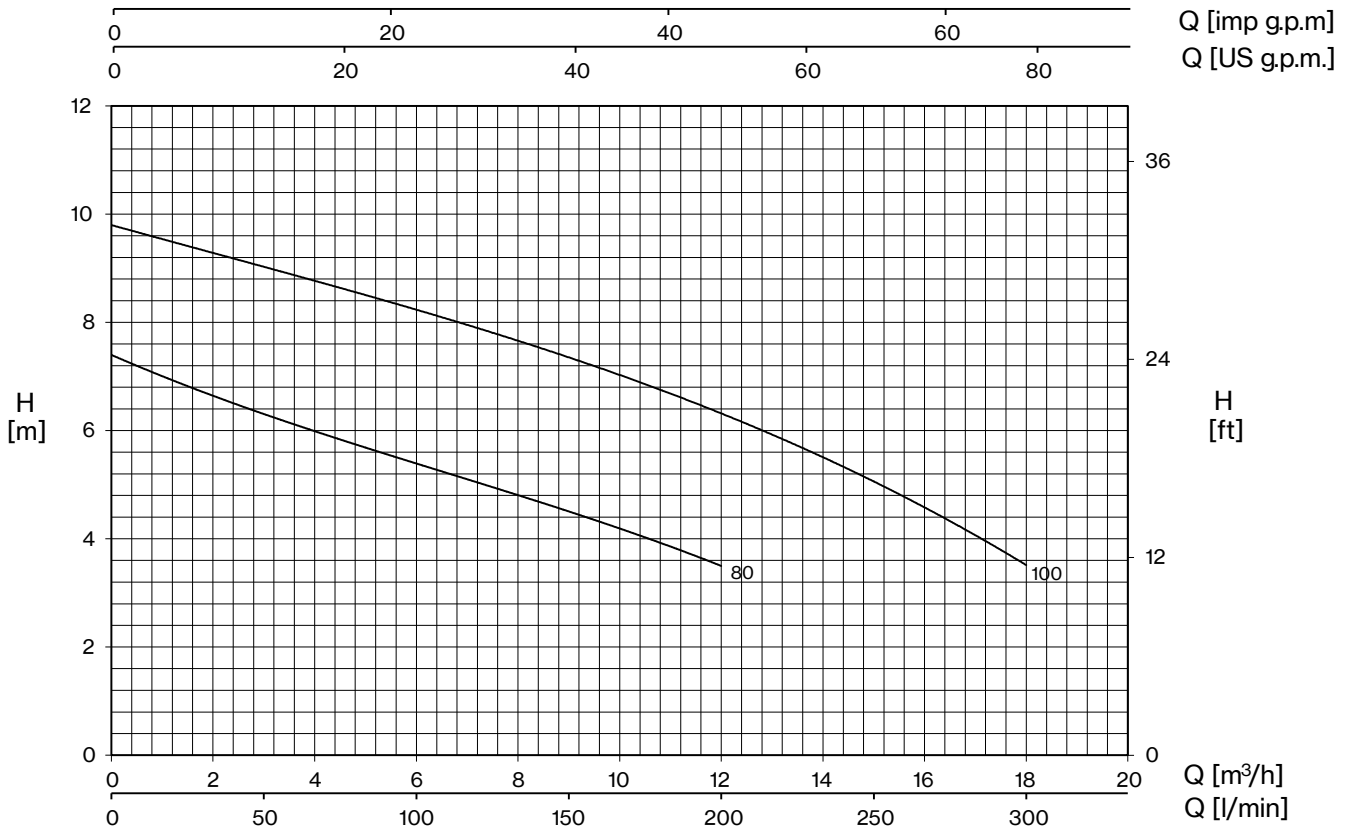
**2 Poles induction motor** 1~ 230V - 50Hz  
(with thermal protection)

**Insulation class** F

**Protection degree** IPX8

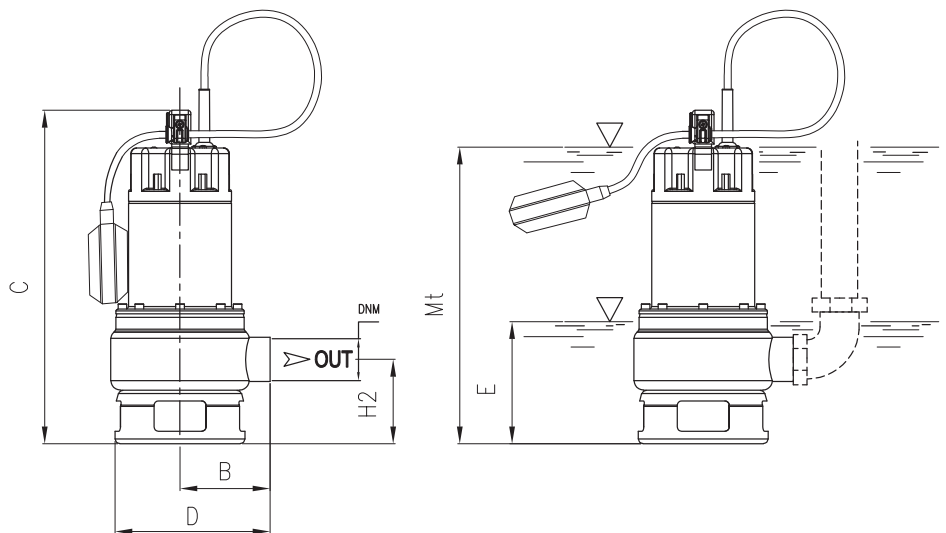
TYPE	LOTS			
	TRUCK		CONTAINER	
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
DS	80×120×145	48	80×120×190	76



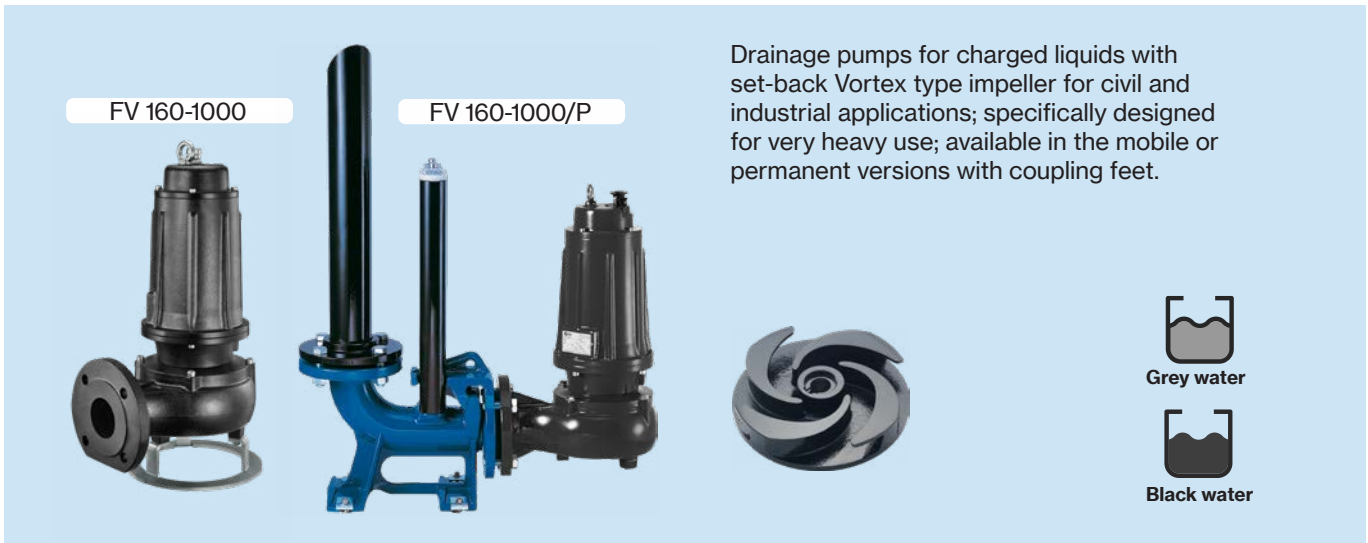


TYPE - 50 Hz		P1	CURRENT		Q (m³/h - l/min)						
1~	3~		1- 230V	3- 400V	0	3	6	9	12	15	18
			kW	A		H (m)					
DS 80 (G)	DS 80T	1050	4,7	2,2	7,4	6,3	5,4	4,5	3,5		
DS 80/2 (G)	DS 80/2T	1050	4,7	2,2	7,4	6,3	5,4	4,5	3,5		
DS 100 (G)	DS 100T	1350	6,2	2,8	9,8	9	8,3	7,3	6,3	5,1	3,5
DS 100/2 (G)	DS 100/2T	1350	6,2	2,8	9,8	9	8,3	7,3	6,3	5,1	3,5

E: maximum emptying level  
Mt: minimum liquid level for continuous duty




TYPE		DIMENSIONS (mm)										
1~	3~	B	C	D	E	H2	Mt	DNM	I	L	M	Kg
DS 80 (G)	DS 80T	104	400	183	125	112	280	1" 1/2 G	250	183	448	10,5
DS 80/2 (G)	DS 80/2T	114	400	183	125	112	280	2" G	250	183	448	10,5
DS 100 (G)	DS 100T	104	400	183	125	112	280	1" 1/2 G	250	183	448	12
DS 100/2 (G)	DS 100/2T	114	400	183	125	112	280	2" G	250	183	448	12



Drainage pumps for charged liquids with set-back Vortex type impeller for civil and industrial applications; specifically designed for very heavy use; available in the mobile or permanent versions with coupling feet.



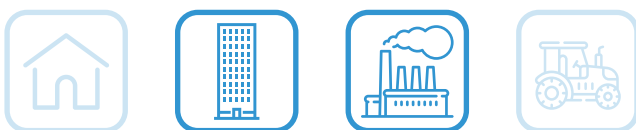
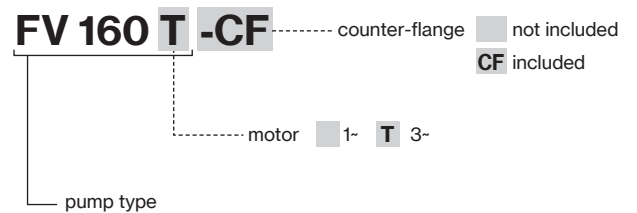
### Construction features

<b>Painting</b>	cataphoresis
<b>Pump body</b>	cast iron
	<b>Impeller</b> cast iron
<b>Mechanical seal</b>	double seal with oil barrier; silicon carbide on pump side, ceramic-graphite on motor side
<b>Motor shaft</b>	stainless steel AISI 304
<b>Free passage</b>	Ø max 50 mm (160÷310); 750-1000) Ø max 45 mm (400-550)
<b>Max submergence</b>	20 m
<b>Liquid temperature</b>	0 - 40 °C
<b>Cable</b>	H07 RN8F, 10 m
<b>Bolts</b>	A2 stainless steel
<b>Foot support</b>	galvanized iron
<b>Gaskets</b>	NBR rubber

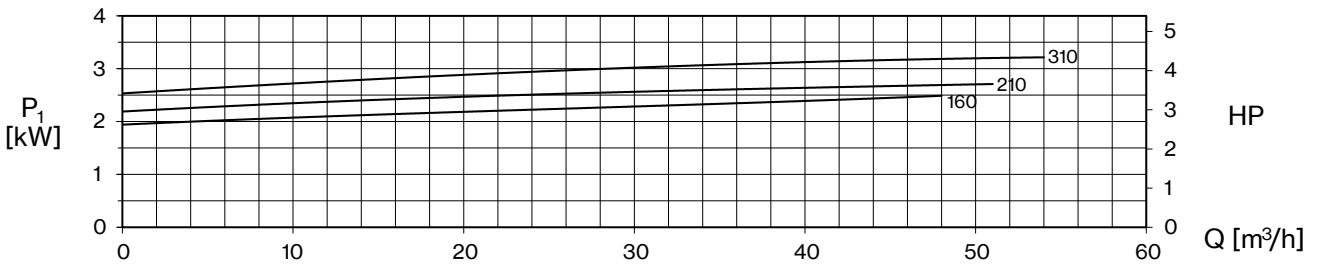
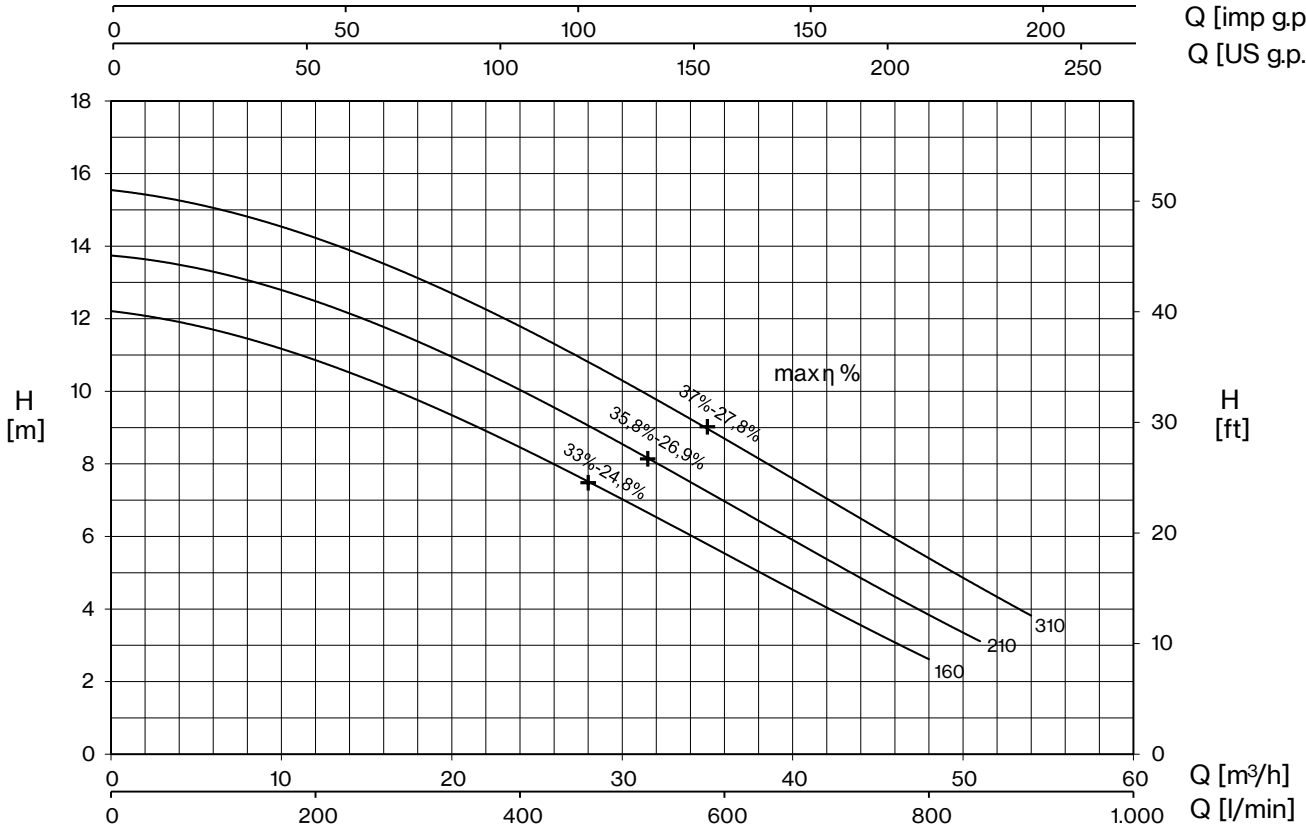
### Motor

	3- 230V - 50Hz 3- 400V - 50Hz 3- 230/400V - 50Hz 3- 400/690V - 50Hz
<b>2 Poles induction motor</b>	1- 230V - 50Hz required run capacitor (35µF for 1,5HP model, 50µF for 2HP model)
<b>Insulation class</b>	F
<b>Protection degree</b>	IPX8

TYPE	TRUCK		CONTAINER	
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
FV 160÷310	85×110×145	18	85×110×190	27
FV 400-550T	85×110×170	12	85×110×170	12
FV 750-1000T	100×120×190	12	100×120×190	12



Q [imp g.p.m]  
Q [US g.p.m.]



TYPE - 50 Hz		CURRENT				
1~	3~	230V	3- 230V (*)	3- 400V	230/400 V λ/Δ (*)	400/690 V λ/Δ
FV 160	FV 160T	11,3	7,1	4,1	-	-
FV 210	FV 210T	12,6	8,7	5,0	-	-
-	FV 310T	-	9,9	5,7	-	-

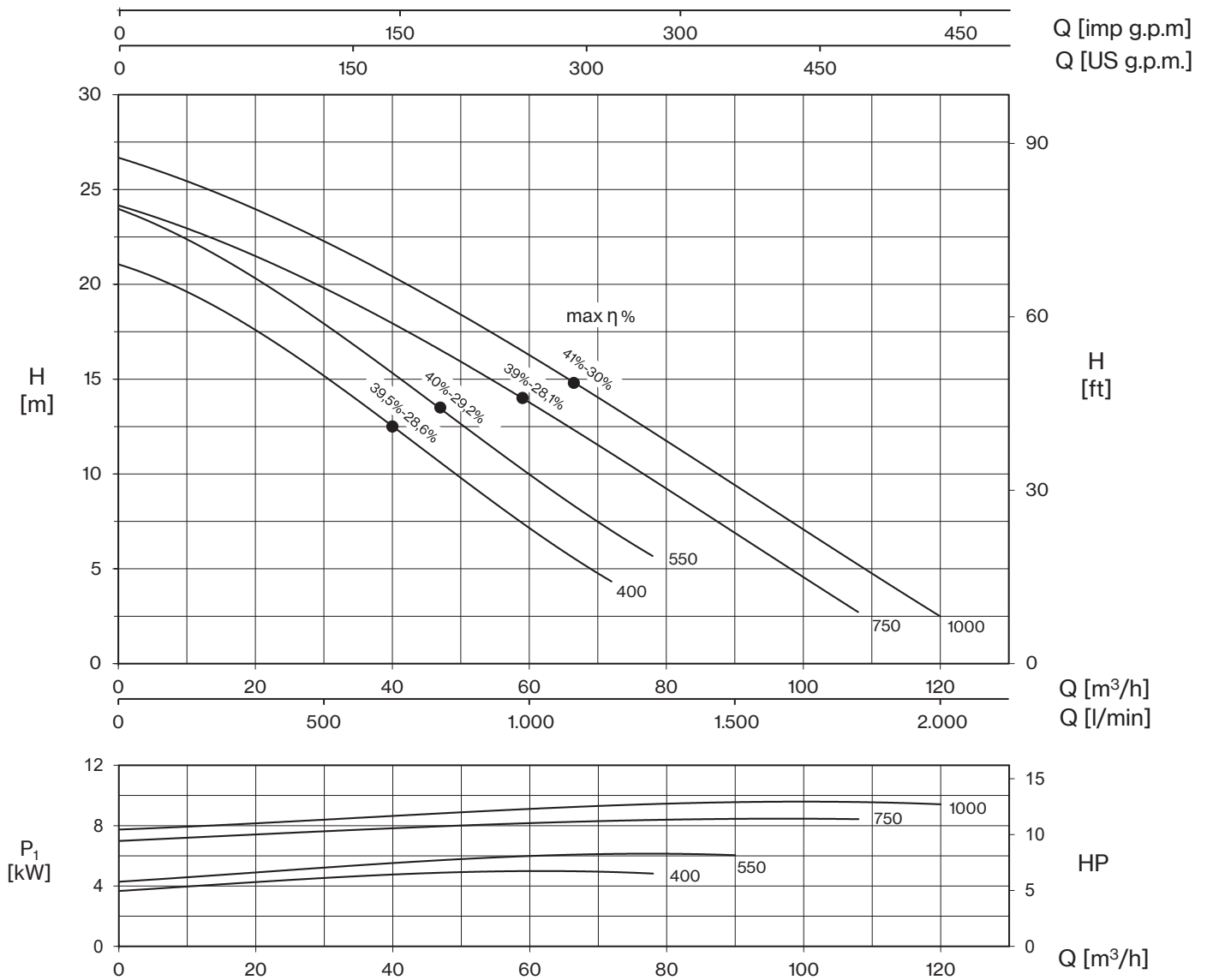
+ max η %

max hydraulic efficiency and respective total efficiency

(\*) no standard execution

TYPE - 50 Hz		P2		P1		Q (m³/h - l/min)							
1~	3~					1~	3~	0	12	24	36	42	48
		HP	kW	kW		H (m)							
FV 160	FV 160T	1,5	1,1	2,5	2,3	12,2	10,9	8,4	5,6	4,1	2,6		
FV 210	FV 210T	2	1,5	2,8	2,7	13,7	12,6	9,9	7,0	5,4	3,8	3,1	
-	FV 310T	3	2,2	-	3,3	15,5	14,4	11,6	8,8	7,1	5,4	4,5	3,8

# FV



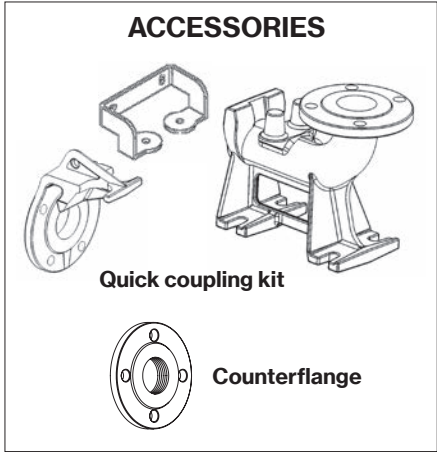
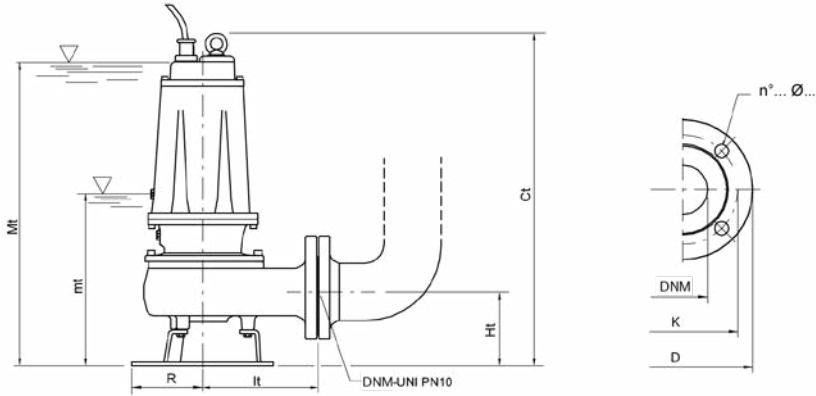
TYPE - 50 Hz	CURRENT			
3~	3- 230V (*)	3- 400V	230/400 V λ / Δ (*)	400/690 V λ / Δ
FV 400T	14,1	8,1	-	-
FV 550T	18,1	10,4	-	-
FV 750T	-	14,4	25	14,4
FV 1000T	-	16,4	28,5	16,4

(\*) no standard execution

**+ max η %**  
max hydraulic efficiency and respective total efficiency

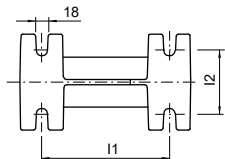
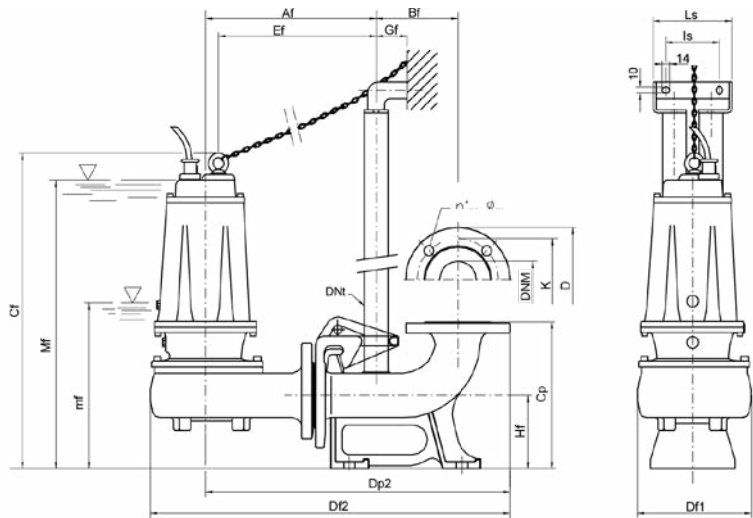
TYPE - 50 Hz	P2			P1	Q (m³/h - l/min)																
					0	12	24	36	42	48	51	54	60	72	78	84	90	96	108	114	120
	HP	kW	kW	0	200	400	600	700	800	850	900	1000	1200	1300	1400	1500	1600	1800	1900	2000	
FV 400T	4	3	4,9	21,0	19,4	16,6	13,5	12,0	10,4	9,6	8,8	7,2	4,3	2,8							
FV 550T	5,5	4	6,1	23,9	22,2	19,3	16,3	14,8	13,2	12,4	11,6	10	7,1	5,6	4,1	2,6					
FV 750T	7,5	5,5	8,5	24,2	22,7	20,7	18,7	17,6	16,4	15,8	15,2	13,9	11,1	9,7	8,2	6,8	5,4	2,8			
FV 1000T	10	7,5	9,6	26,7	25,2	23,2	21,2	20,0	18,8	18,2	17,6	16,3	13,7	12,3	10,8	9,4	8,0	5,1	3,8	2,6	





mt: minimum working level  
Mt: minimum submersion level for continuous duty

TYPE		DIMENSIONS (mm)							Kg	
1-	3-	Ct	Ht	R	It	mt	Mt	DNM	1-	3-
FV 160	FV 160T	551	123	117	191	243	513	65	40,5	39,5
FV 210	FV 210T	551	123	117	191	243	513	65	-	40,5
-	FV 310T	551	123	117	191	243	513	65	-	41,5
-	FV 400T	645	148	160	210	285	600	80	-	68
-	FV 550T	645	148	160	210	285	600	80	-	71
-	FV 750T	725	178	180	232	358	670	80	-	90
-	FV 1000T	725	178	180	232	358	670	80	-	92,5



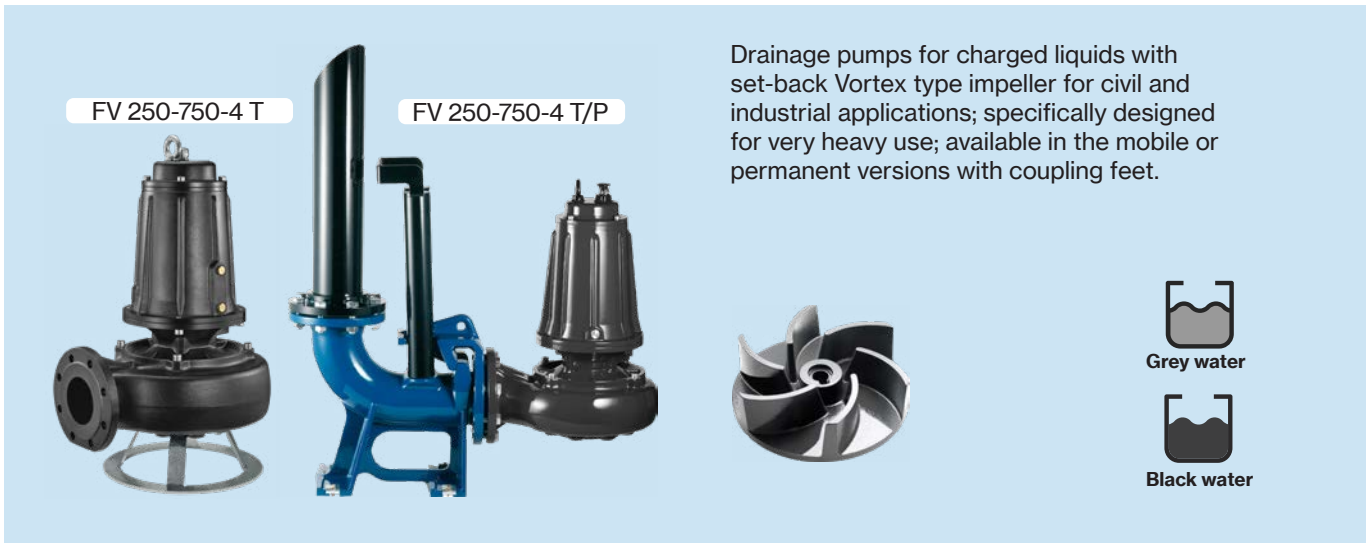
mf: minimum working level  
Mf: minimum submersion level for continuous duty

Flange UNI PN 10 (mm)			
DNM	K	D	n°... Ø...
65	145	185	4... 18...
80	160	200	8... 18...

TYPE	DIMENSIONS (mm)																		
	Af	Bf	Cf	Cp	Df1	Df2	Dp2	DNt	Ef	Gf	Hf	I1	I2	Is	Ls	mf	Mf	DNM	
FV 160/P - FV 160T/P	303	145	559	260	200	639	541	1" 1/4	280	55	130	200	100	95	140	251	521	65	
FV 210/P - FV 210T/P	303	145	559	260	200	639	541	1" 1/4	280	55	130	200	100	95	140	251	521	65	
FV 310T/P	303	145	559	260	200	639	541	1" 1/4	280	55	130	200	100	95	140	251	521	65	
FV 400T/P	350	165	690	340	220	720	615	2"	319	85	190	250	140	130	180	327	642	80	
FV 550T/P	350	165	690	340	220	720	615	2"	319	85	190	250	140	130	180	327	642	80	
FV 750T/P	370	165	745	340	235	750	638	2"	338	85	190	250	140	130	180	380	690	80	
FV 1000T/P	370	165	745	340	235	750	638	2"	338	85	190	250	140	130	180	380	690	80	

TYPE	PROTECTION		1 PUMP CONTROL PANEL			2 PUMPS CONTROL PANEL		
	1- 230V	3- 400V	1- 230V	3- 400V	400/690 V	1- 230V	3- 400V	400/690 V
FV 160	PMC 15/35-15	PT 20-30-40/4.3-6.8	EQSM + 35µF	EQSMT 10		EQ2SM + 35µF	EQ2SMT 10	
FV 210	PMC 20/50-18	PT 20-30-40/4.3-6.8	EQSM + 50µF	EQSMT 10		EQ2SM + 50µF	EQ2SMT 10	
FV 310T		PT 40-50/5.7-9.1		EQSMT 10			EQ2SMT 10	
FV 400T		PT 55-75/8.6-13.5		EQSMT 10			EQ2SMT 10	
FV 550T		PT 55-75/8.6-13.5		EQSMT 10			EQ2SMT 10	
FV 750T		PT 100/12.5-16.5		EQSMT 10	QST 7		EQ2SMT 10	Q2ST 7
FV 1000T		PT 125-150/16-21		EQSMT 10	QST 10		EQ2SMT 15	Q2ST 10






Drainage pumps for charged liquids with set-back Vortex type impeller for civil and industrial applications; specifically designed for very heavy use; available in the mobile or permanent versions with coupling feet.



## Construction features

<b>Painting</b>	cataphoresis
<b>Pump body</b>	cast iron
	<b>Impeller</b> cast iron
<b>Mechanical seal</b>	double seal with oil barrier; silicon carbide on pump side, ceramic-graphite on motor side
<b>Motor shaft</b>	stainless steel AISI 304
<b>Free passage</b>	Ø max 50 mm
<b>Max submergence</b>	20 m
<b>Liquid temperature</b>	0 - 40 °C
<b>Cable</b>	H07 RN8F, 10 m
<b>Bolts</b>	A2 stainless steel
<b>Foot support</b>	galvanized iron
<b>Gaskets</b>	NBR rubber

## Motor

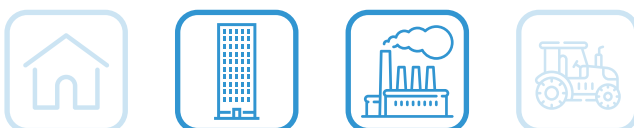
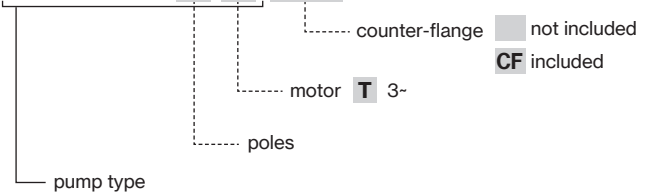
<b>4 Poles induction motor</b>	3- 230V - 50Hz
	3- 400V - 50Hz
	3- 230/400V - 50Hz
	3- 400/690V - 50Hz

**Insulation class** F

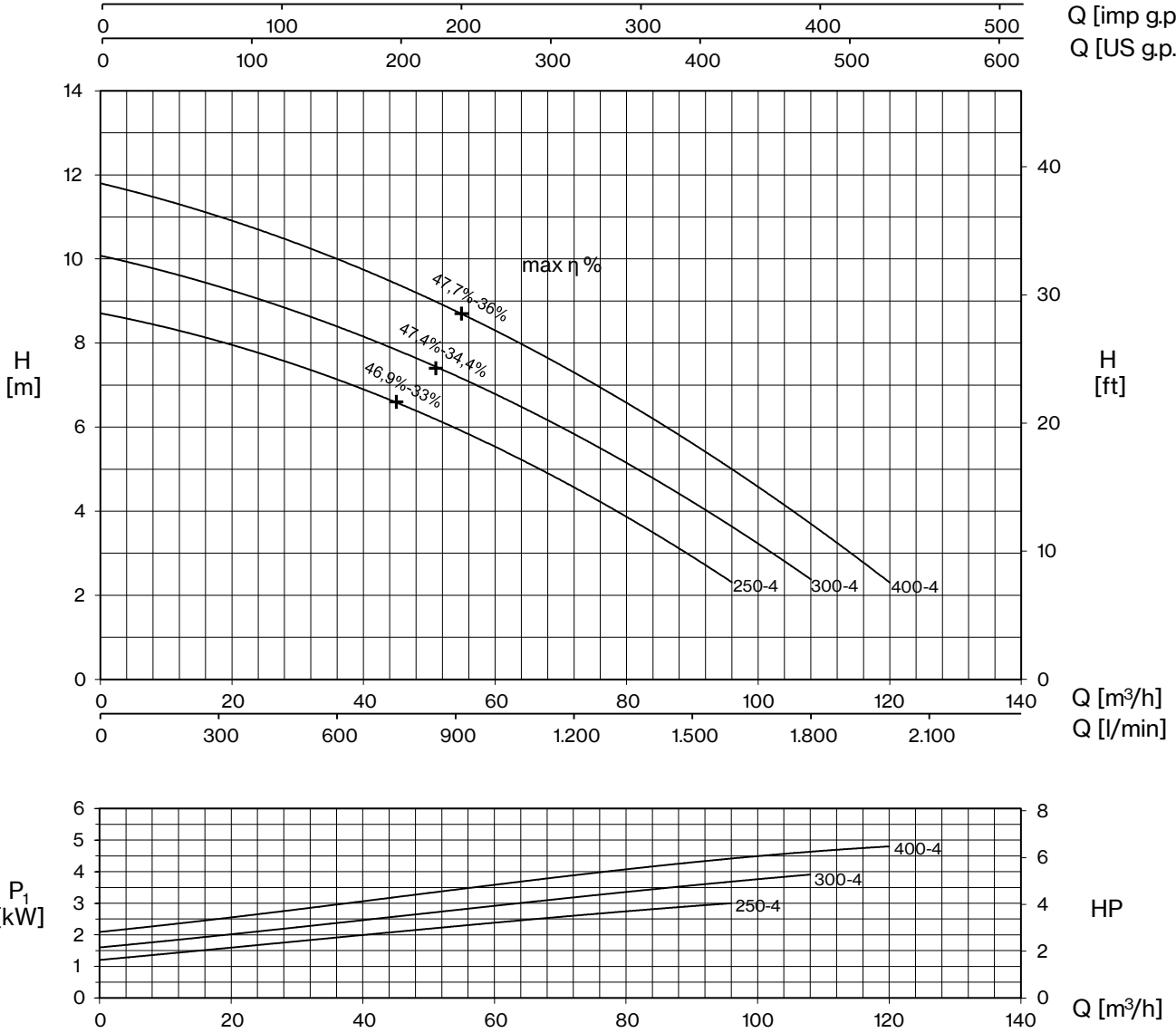
**Protection degree** IPX8

TYPE	LOTS			
	TRUCK		CONTAINER	
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
FV 250-4÷750-4T	85×110×190	8	100×120×190	12

## FV 550 - 4 T -CF



# FV4



TYPE - 50 Hz	CURRENT			
3~	3- 230V (*)	3- 400V	230/400 V λ / Δ (*)	400/690 V λ / Δ
FV 250-4T	10,0	5,8	-	-
FV 300-4T	11,8	6,8	-	-
FV 400-4T	15,1	8,7	-	-

(\*) no standard execution

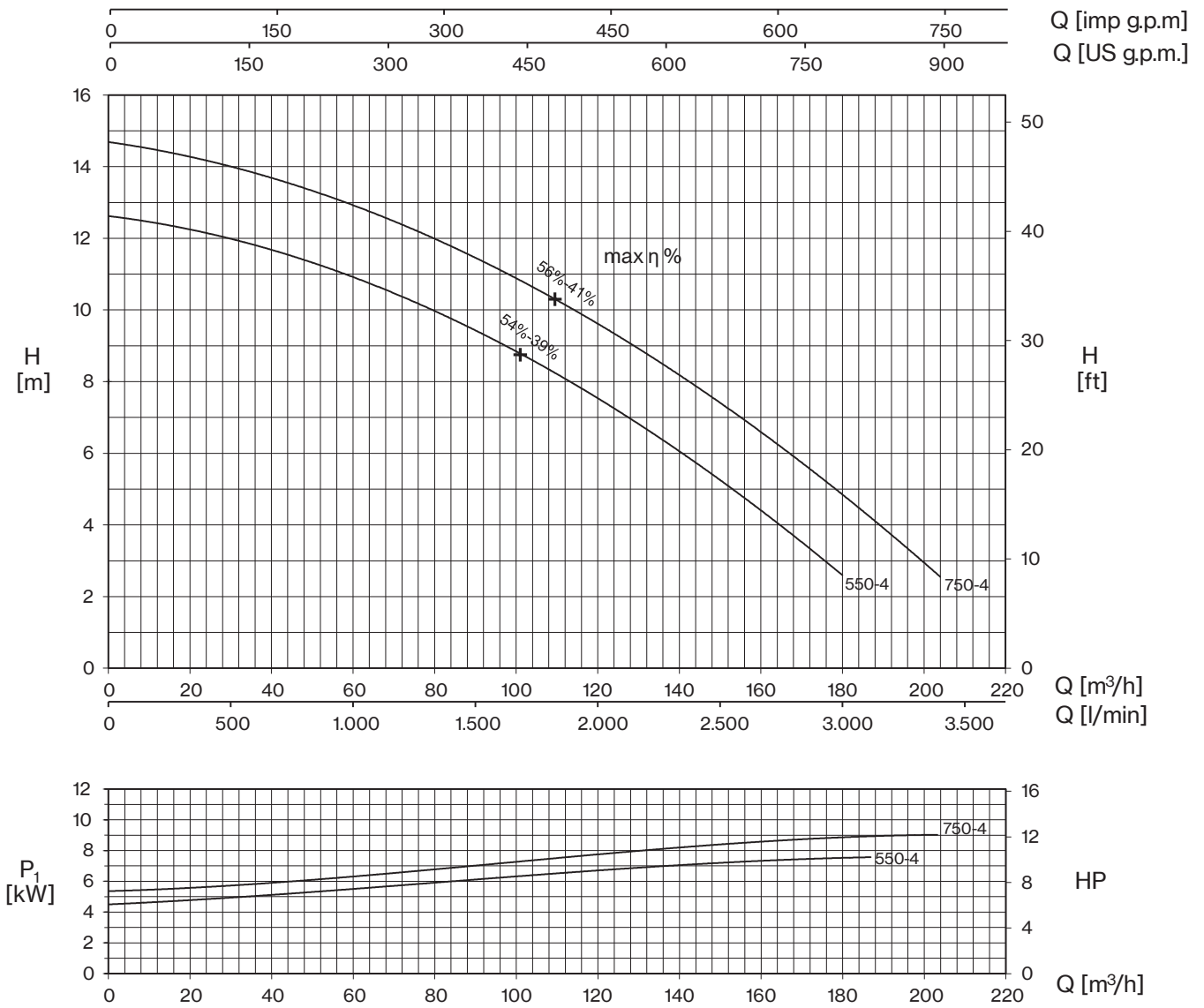
**+ max η %**

max hydraulic efficiency and respective total efficiency

TYPE - 50 Hz	P2		P1	Q (m³/h - l/min)											
				H (m)											
				0	12	24	36	48	60	72	84	96	108	120	
3~	HP	kW	kW	0	200	400	600	800	1000	1200	1400	1600	1800	2000	
FV 250-4T	2,5	1,8	3,3	8,7	8,3	7,8	7,1	6,4	5,5	4,6	3,5	2,3			
FV 300-4T	3	2,2	4,1	10,1	9,6	9	8,4	7,7	6,8	5,8	4,8	3,6	2,4		
FV 400-4T	4	3	4,9	11,8	11,3	10,7	10	9,2	8,3	7,3	6,2	5	3,7	2,3	



# FV4



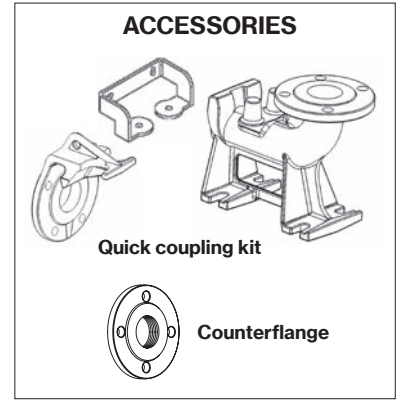
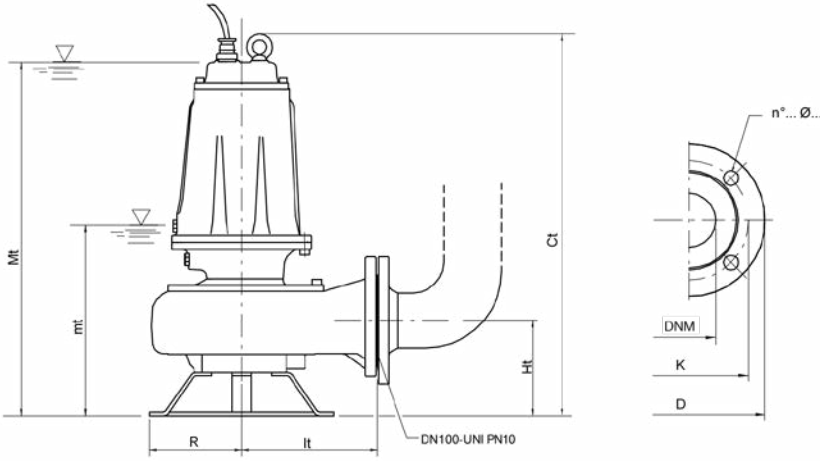
TYPE - 50 Hz	CURRENT			
3~	3- 230V (*)	3- 400V	230/400 V λ / Δ (*)	400/690 V λ / Δ
FV 550-4T	-	12,9	22,3	12,9
FV 750-4T	-	15,4	26,6	15,4

**+ max η %**  
 max hydraulic efficiency and respective total efficiency

(\*) no standard execution

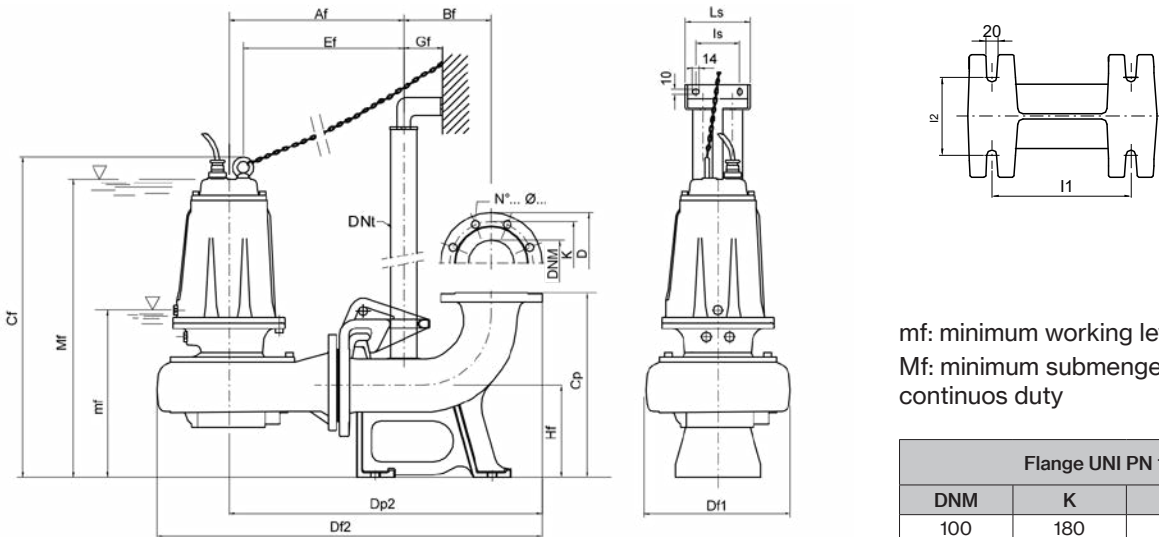
TYPE - 50 Hz	P2		P1	Q (m³/h - l/min)											
				H (m)											
				0	24	48	72	96	120	144	168	180	192	204	
3~	HP	kW	kW	0	400	800	1200	1600	2000	2400	2800	3000	3200	3400	
FV 550-4T	5,5	4	7,5	12,6	12,2	11,4	10,3	9,1	7,6	5,7	3,7	2,6			
FV 750-4T	7,5	5,5	9	14,7	14,2	13,3	12,4	11,2	9,6	7,9	5,9	4,8	3,7	2,6	





mt: minimum working level  
 Mt: minimum submersion level for continuous duty

TYPE	DIMENSIONS (mm)							Kg
	Ct	Ht	R	lt	mt	Mt	DNM	
FV 250-4T	660	165	160	235	300	614	100	69,5
FV 300-4T	660	165	160	235	300	614	100	71
FV 400-4T	660	165	160	235	300	614	100	74,5
FV 550-4T	715	195	180	276	385	695	100	101,5
FV 750-4T	715	195	180	276	385	695	100	106



mf: minimum working level  
 Mf: minimum submersion level for continuous duty

Flange UNI PN 10 (mm)			
DNM	K	D	n°... Ø...
100	180	220	8... 18...

TYPE	DIMENSIONS (mm)																	
	Af	Bf	Cf	Cp	Df1	Df2	Dp2	DNt	Ef	Gf	Hf	l1	l2	ls	Ls	mf	Mf	DNM
FV 250-4T/P	378	190	695	400	317	835	678	2"	347	85	200	250	140	130	180	335	650	100
FV 300-4T/P	378	190	695	400	317	835	678	2"	347	85	200	250	140	130	180	335	650	100
FV 400-4T/P	378	190	695	400	317	835	678	2"	347	85	200	250	140	130	180	335	650	100
FV 550-4T/P	419	190	755	400	371	900	719	2"	384	85	200	250	140	130	180	390	700	100
FV 750-4T/P	419	190	755	400	371	900	719	2"	384	85	200	250	140	130	180	390	700	100

TYPE	PROTECTION	1 PUMP CONTROL PANEL		2 PUMPS CONTROL PANEL	
	3- 400V	3- 400V	400/690 V	3- 400V	400/690 V
FV 250-4T	PT 40-50/5.7-9.1	EQSMT 10		EQ2SMT 10	
FV 300-4T	PT 40-50/5.7-9.1	EQSMT 10		EQ2SMT 10	
FV 400-4T	PT 55-75/8.6-13.5	EQSMT 10		EQ2SMT 10	
FV 550-4T	PT 55-75/8.6-13.5	EQSMT 10		EQ2SMT 10	
FV 750-4T	PT 100/12.5-16.5	EQSMT 10	QST 10	EQ2SMT 10	Q2ST 10



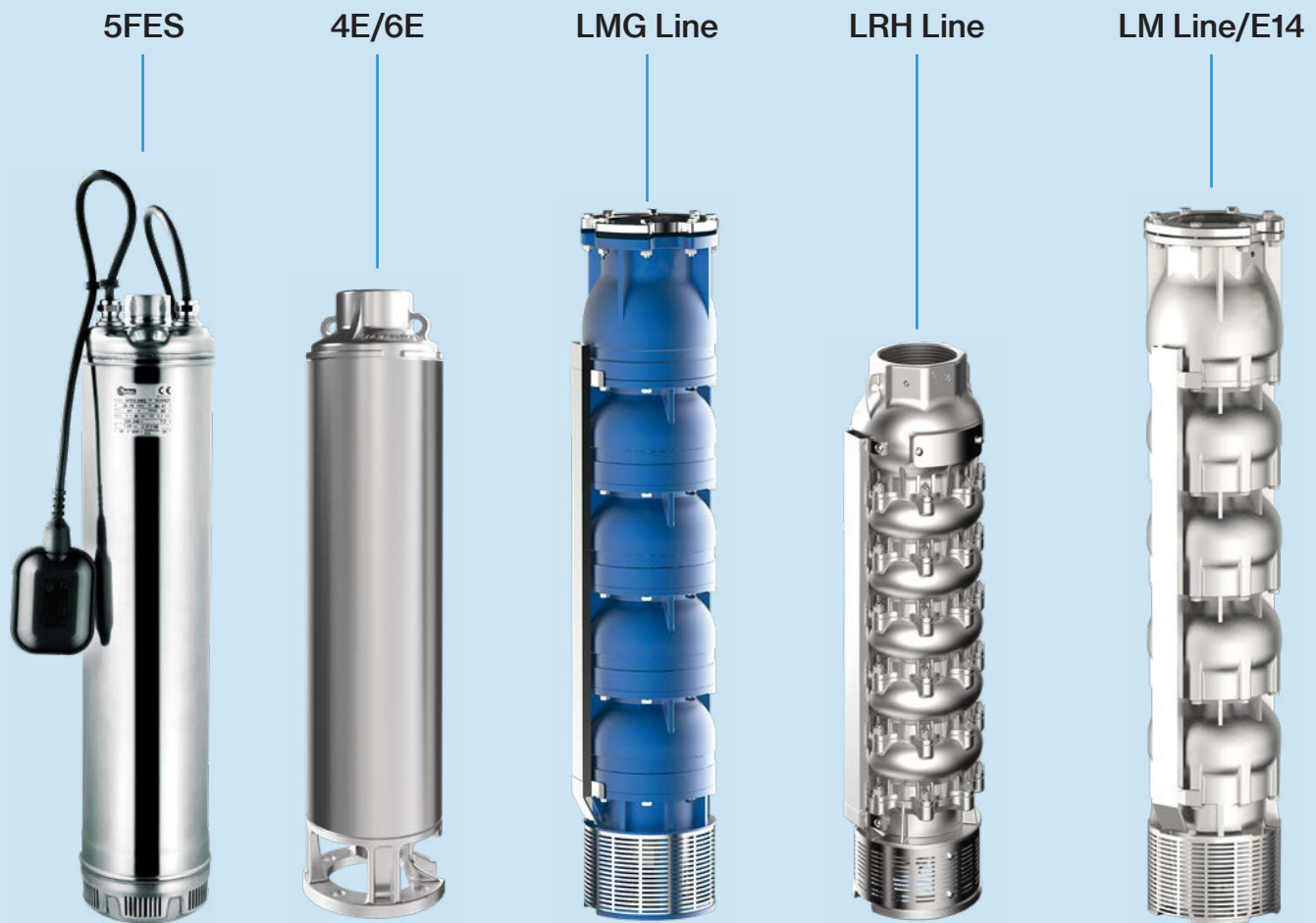


CE  
Type: SPES 300, Nr. 1030001  
L: 25-75 mm, H: 80-41  
d: 41 mm, Hmax: 89  
Hmax: 3 = 89 mm, H: 1.1 m  
230-240 V, 7.2  
1.55 m, 20 F/48  
1.30 = 482 V, 20



# DEEPWELL BOREHOLE

# DEEPWELL BOREHOLE PUMPS



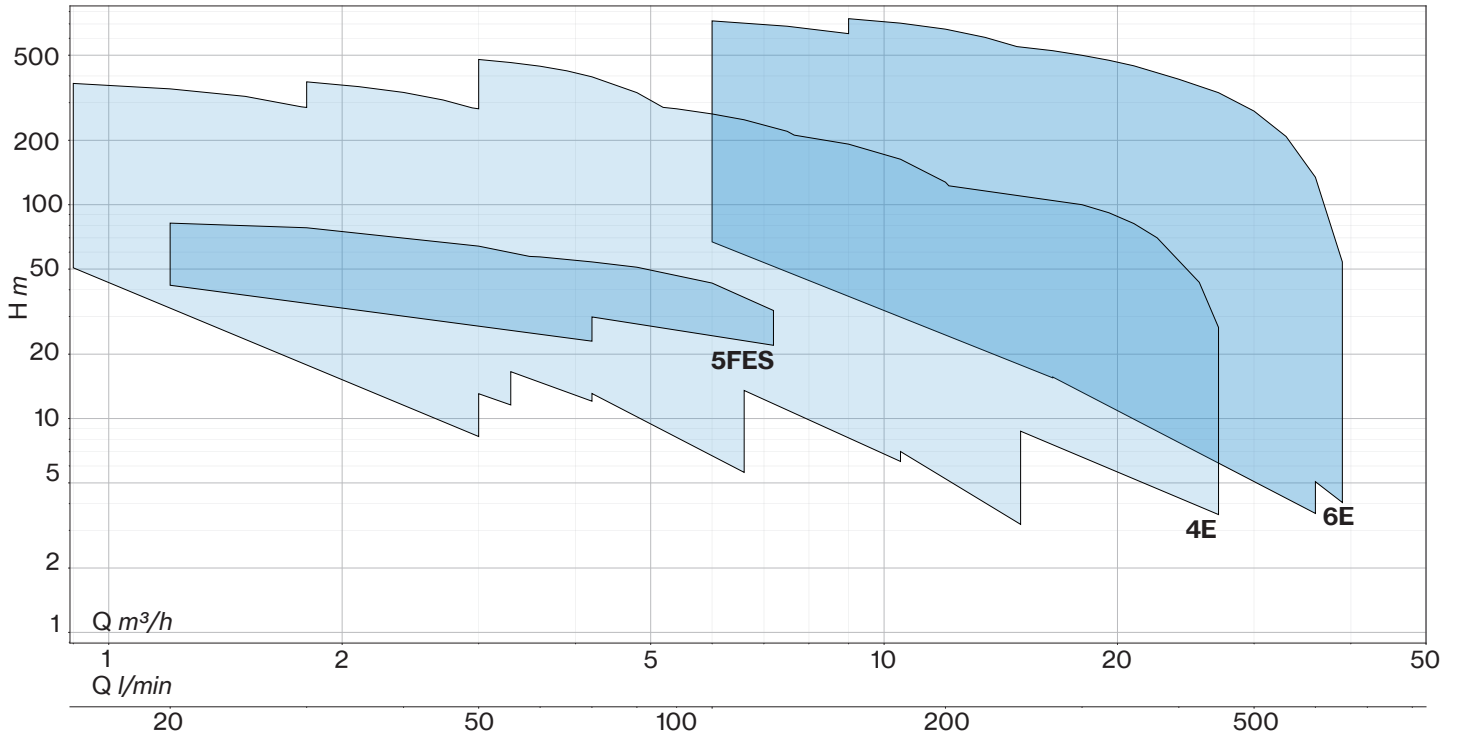
- **5FES line:** 5" electric pumps with pressed steel body and stainless steel hydraulic.
- **4E, 6E lines:** 4", 6" electric well pumps with pressed steel body, and polymer hydraulics. Coupling to the motor according to Nema flange.
- **6- 8- 10LMG lines:** 6", 8" and 10" electric well pumps with cast iron hydraulics. Non-return valve in the delivery port and motor coupling according to Nema flange.
- **LM, LR and E14 lines:** 6", 8", 10", 12" and 14" electric well pumps manufactured with a micro-casting process that allows to obtain very smooth hydraulic surfaces and therefore high hydraulic efficiency values, all combined with a high mechanical resistance thanks to the cast steel structure. The range is available in AISI304, AISI316 and Duplex steel types with flow rates up to 860m<sup>3</sup>/h and 800 m maximum head. The check valve is incorporated in the delivery port, while coupling with the motor is ensured by NEMA flanging.

## Applications:

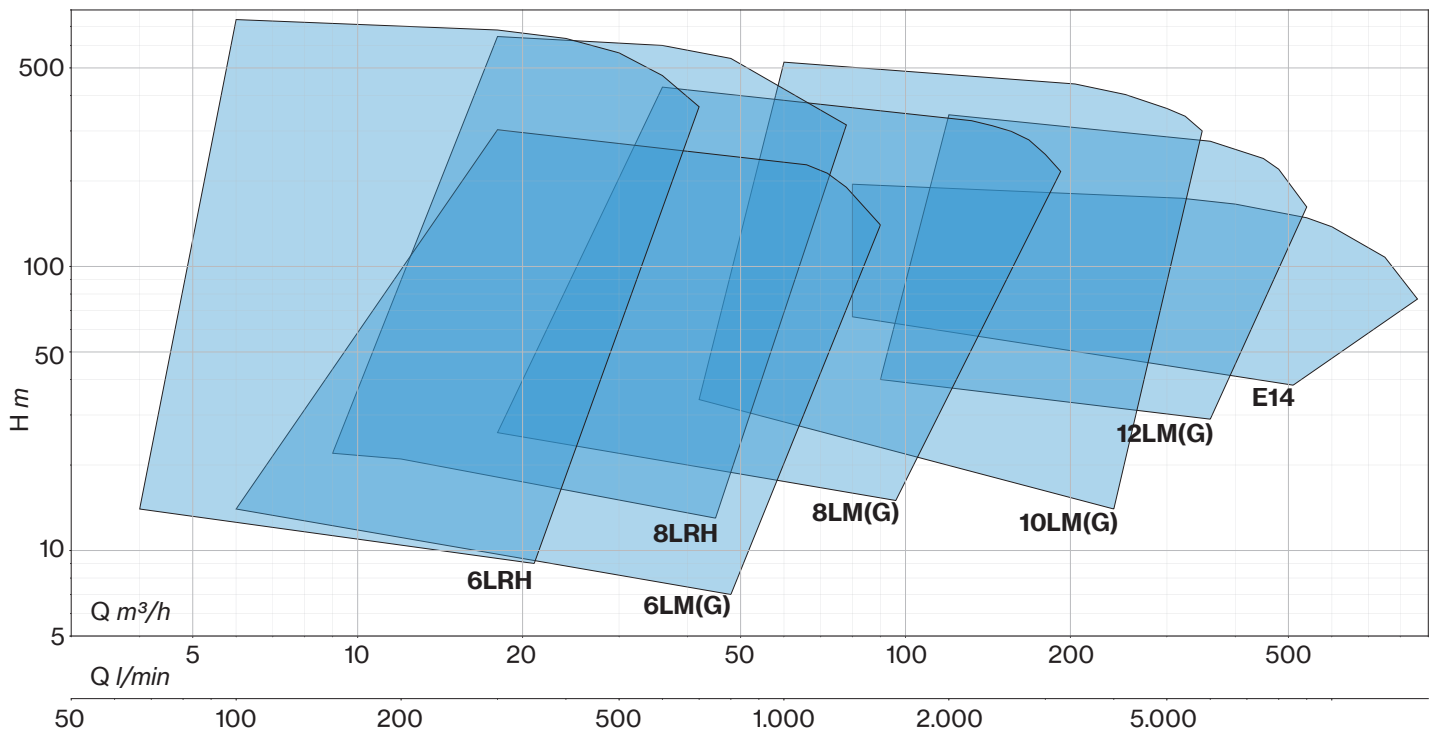
- Water supply for civil and industrial uses
- Distribution in aqueducts
- Agricultural irrigation
- Installation on wells and groundwater withdrawal
- Reverse osmosis plants

# DEEPWELL BOREHOLE PUMPS

## Low-Medium flow

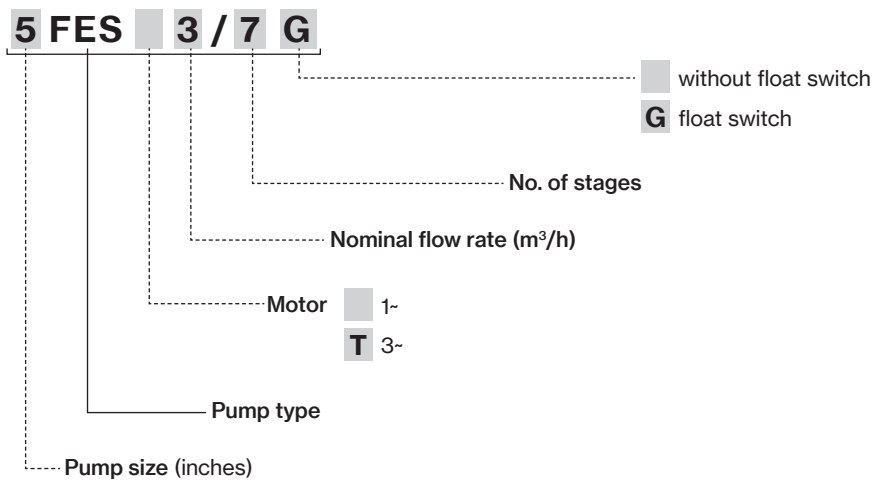


## High flow

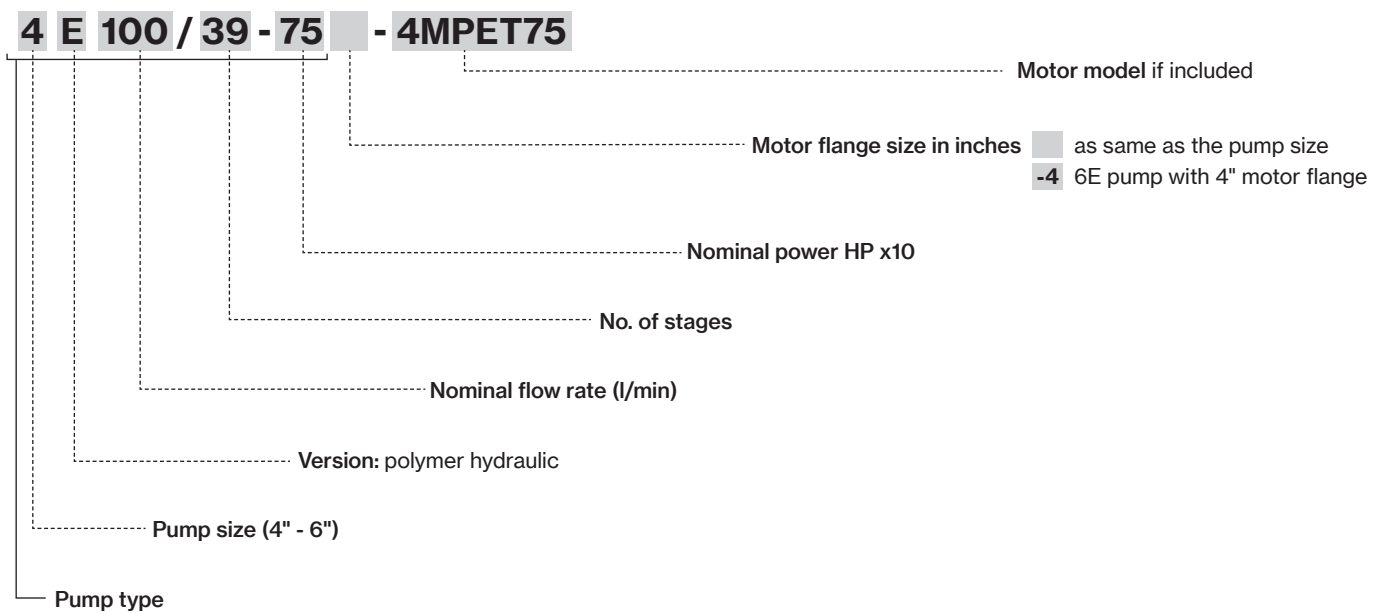


# Name key

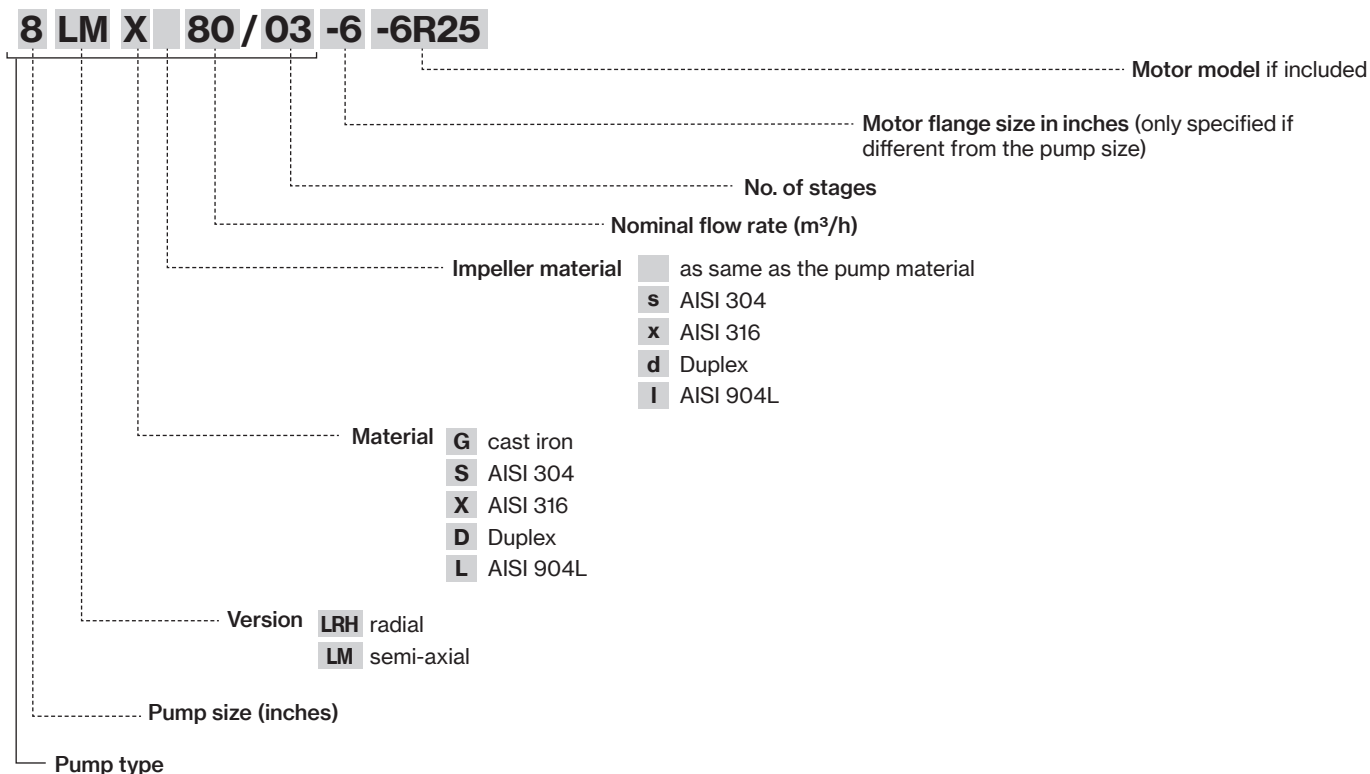
## 5 FES line



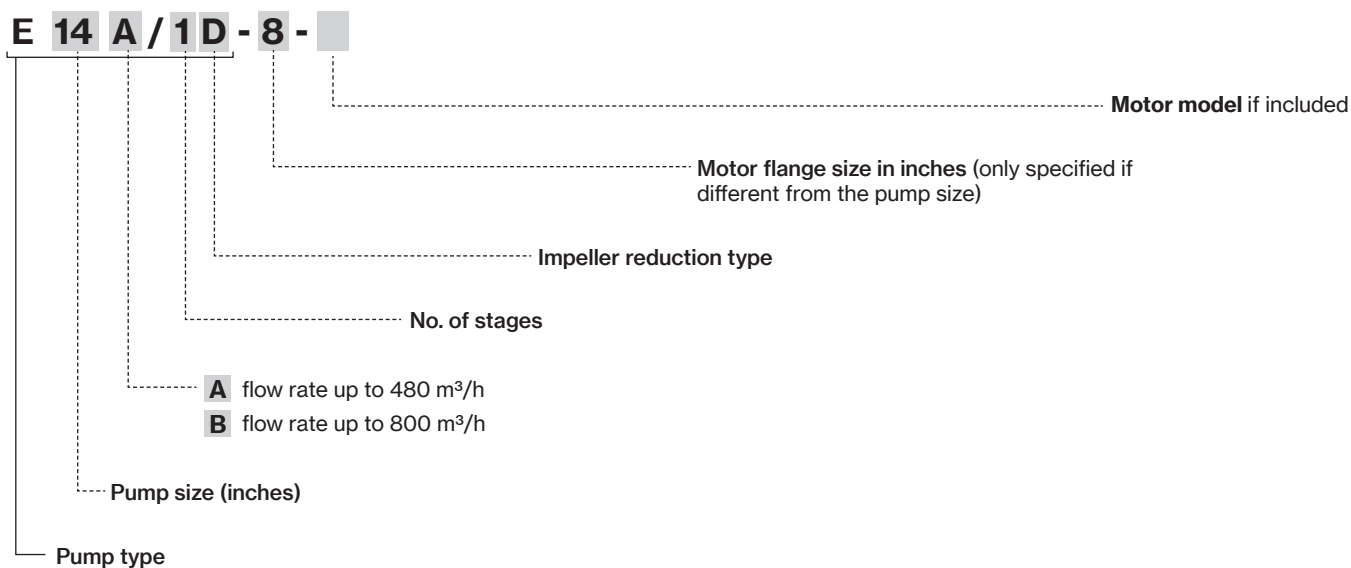
## 4E - 6E lines



LRH - LM lines



E14 line







5" submersible multistage centrifugal pumps. All components in contact with fluid are made of AISI 304 stainless steel. Particular suitable for water distribution rainwater collection, irrigation, fountains, wash down unit. Single phase versions have an internal capacitor and thermal motorprotector.

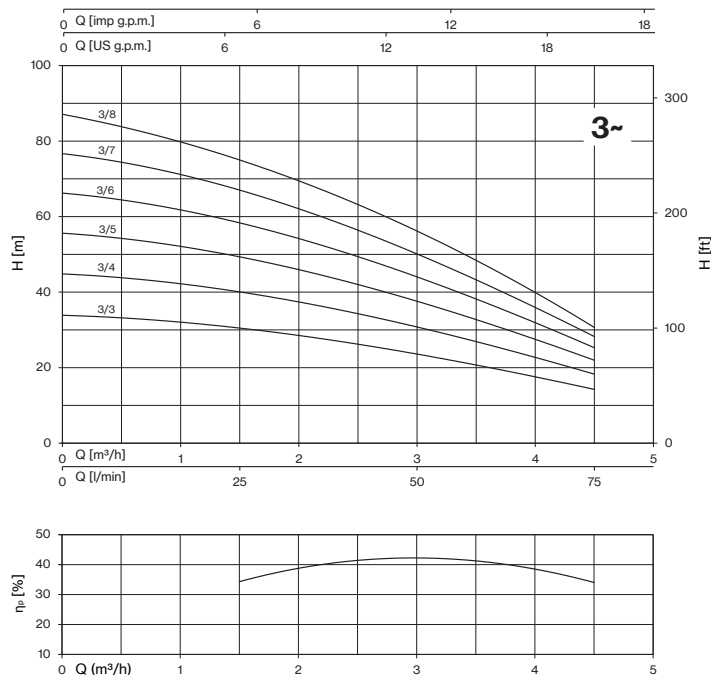
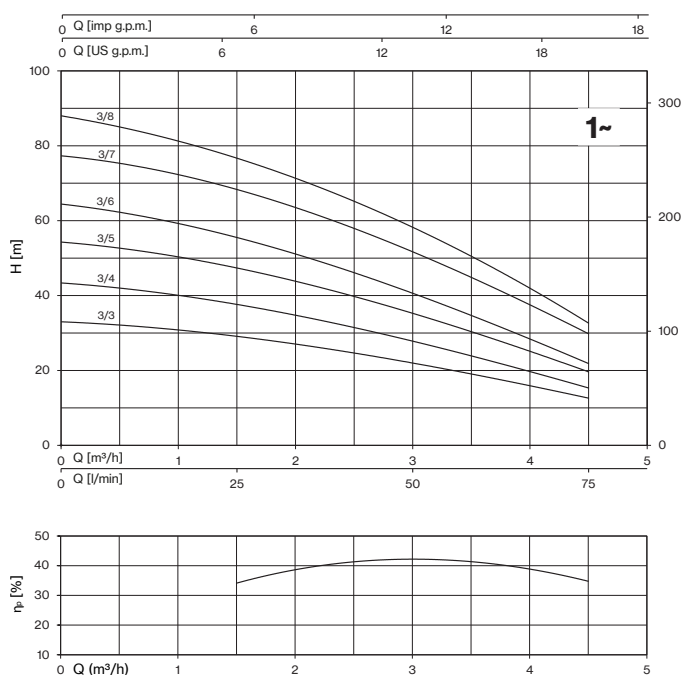
### Construction features

<b>Delivery outlet</b>	1" ¼ G
<b>External jacket, impellers and diffusers</b>	stainles steel AISI 304
<b>Passage of solids</b>	2 mm
<b>Depth of immersion</b>	max 20 m
<b>Liquid temperature</b>	+5 ÷ +40 °C
<b>Quantity of sand in the water</b>	max 50 g/m <sup>3</sup>
<b>Cable</b>	H07 RNF, 20 m
<b>Number of startups/hr</b>	max 20

### Motor

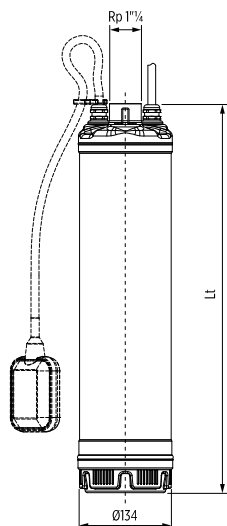
<b>Asynchronous 2 poles</b>	3~ 380/415V - 50Hz 1~ 220/240V - 50Hz (with thermal protection)
<b>Insulation class</b>	F
<b>Protection degree</b>	IP68





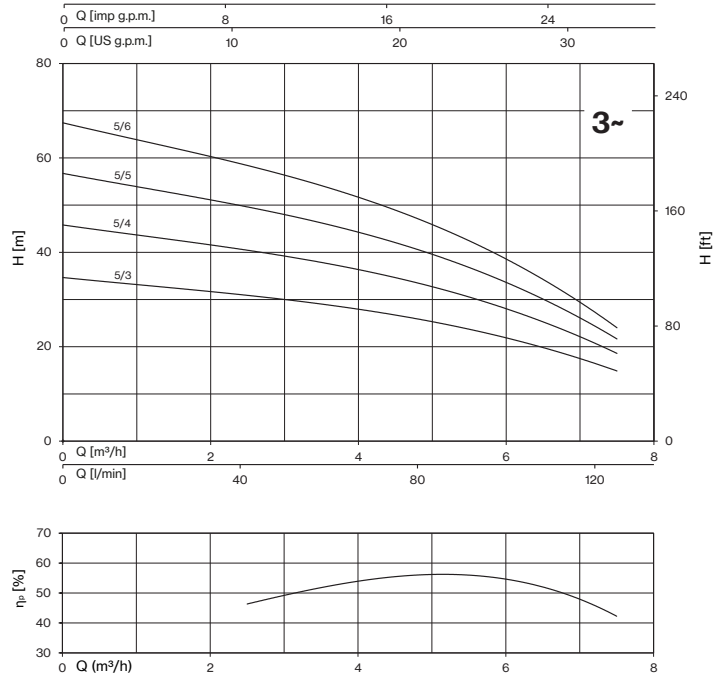
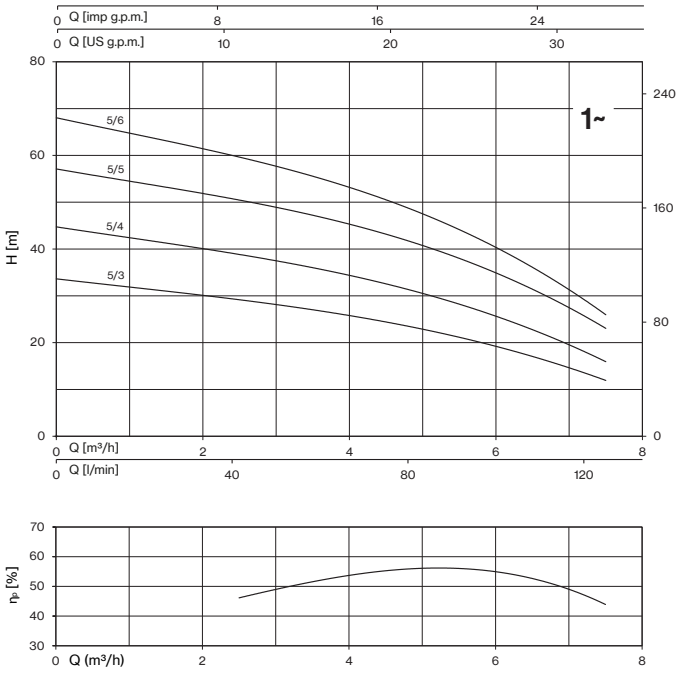
TYPE - 50 Hz	P2		P1	CURRENT	Q (m³/h - l/min)						
					1~ 230 V	0	1,5	2	2,5	3	4,5
						0	25	33,3	41,7	50	75
5FES 3/3	0,75	0,55	0,6	3,6	33	29,1	27,1	24,6	22	12,6	
5FES 3/4	0,75	0,55	0,8	4	43,4	37,7	34,8	31,3	27,9	15,3	
5FES 3/5	1	0,75	1	4,7	54,3	47,4	43,9	39,6	35,4	19,6	
5FES 3/6	1	0,75	1,2	5,2	64,4	55,5	51,2	45,9	40,7	21,8	
5FES 3/7	1,2	0,9	1,3	6,7	77,3	68,3	63,6	57,7	51,8	29,8	
5FES 3/8	1,5	1,1	1,5	7,2	87,8	77,1	71,6	64,8	58	32,8	

TYPE - 50 Hz	P2		P1	CURRENT	Q (m³/h - l/min)						
					3~ 400 V	0	1,5	2	2,5	3	4,5
						0	25	33,3	41,7	50	75
5FEST 3/3	0,75	0,55	0,6	1,8	33,9	30,5	28,5	26,2	23,6	14,2	
5FEST 3/4	0,75	0,55	0,8	2	44,8	40,1	37,4	34,2	30,8	18,3	
5FEST 3/5	1	0,75	1	2,1	55,6	49,3	46,0	41,9	37,6	22	
5FEST 3/6	1	0,75	1,2	2,3	66,2	58,4	54,2	49,2	44,1	25,3	
5FEST 3/7	1,2	0,9	1,3	2,5	76,7	67	62,1	56,2	50,2	28,2	
5FEST 3/8	1,5	1,1	1,5	2,7	86,9	75,4	69,7	62,8	56	30,8	



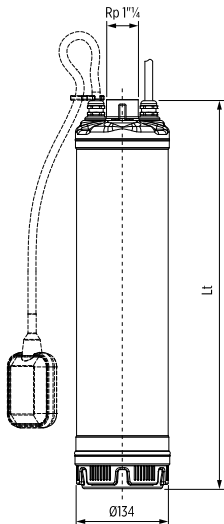
TYPE		DIMENSIONS (mm)		M			Kg	
1~	3~	Lt	DNM	I	L	M	1~	3~
5FES 3/3	5FEST 3/3	446	1" ¼ G	720	230	175	12	13,3
5FES 3/4	5FEST 3/4	470		720	230	175	12,7	14
5FES 3/5	5FEST 3/5	544		720	230	175	14,3	14,5
5FES 3/6	5FEST 3/6	568		720	230	175	14,8	15
5FES 3/7	5FEST 3/7	592		720	230	175	17	15,5
5FES 3/8	5FEST 3/8	616		720	230	175	17,1	16

# 5FES 5

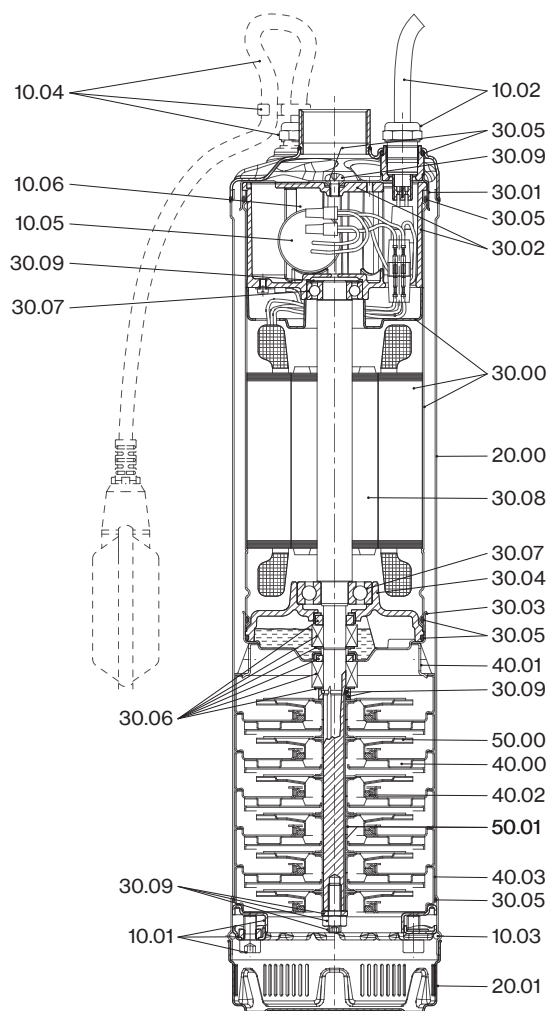


TYPE - 50 Hz	P2		P1	CURRENT		Q (m³/h - l/min)						
				1- 230 V	A	0	2,5	3,0	4,5	5,0	6,0	7,5
						0	42	50,0	75,0	83	100	125
1~	HP	kW	kW	A	H (m)							
5FES 5/3	0,75	0,55	0,8	4,1	33,6	29,2	28,2	24,3	22,9	19,3	11,9	
5FES 5/4	1	0,75	1,1	5	44,7	38,9	37,5	32,4	30,5	25,8	15,9	
5FES 5/5	1,2	0,9	1,3	6,6	57,1	50,5	49	42,9	40,7	35,1	23	
5FES 5/6	1,5	1,1	1,6	7,4	68	59,7	57,7	50,2	47,5	40,6	25,9	

TYPE - 50 Hz	P2		P1	CURRENT		Q (m³/h - l/min)						
				3- 400 V	A	0	2,5	3,0	4,5	5,0	6,0	7,5
						0	42	50,0	75,0	83	100	125
3~	HP	kW	kW	A	H (m)							
5FEST 5/3	0,75	0,55	0,8	2	34,7	30,9	30	26,6	25,3	22	14,8	
5FEST 5/4	1	0,75	1,1	2,2	45,8	40,5	39,3	34,4	32,7	28,2	18,5	
5FEST 5/5	1,2	0,9	1,3	2,5	56,7	49,7	48	41,8	39,6	33,8	21,6	
5FEST 5/6	1,5	1,1	1,6	2,7	67,4	58,5	56,4	48,6	45,9	38,8	24	



TYPE		DIMENSIONS (mm)		M			Kg	
1~	3~	Lt	DNM	I	L	M	1~	3~
5FES 5/3	5FEST 5/3	446	1" ¼ G	720	230	175	12	13,3
5FES 5/4	5FEST 5/4	470		720	230	175	13,5	14
5FES 5/5	5FEST 5/5	544		720	230	175	15,7	14,5
5FES 5/6	5FEST 5/6	568		720	230	175	16,2	15



N. CODE	DESCRIPTION	MATERIAL
10.01	SCREW AND FLANGES FOR PRE-LOADING	AISI 304
10.02	CABLE	H07RN-F
10.02	CABLE GLAND	NICKEL PLATED BRASS / NBR
10.03	SEEGER-RING	AISI 304
10.04	CABLE	H07RN-F
10.04	FLOAT SWITCH	PP
10.04	HOLDING CABLE PLATE	PA66
10.04	CABLE GLAND	NICKEL PLATED BRASS / NBR
10.05	CAPACITOR WITH CABLES AND CONNECTORS	-
10.06	CLAMP FOR CAPACITOR	-
20.00	OUTER CASE	AISI 304
20.01	SUCTION STRAINER	AISI 304
30.00	MOTOR HOUSING AND STATOR	AISI 304
30.01	UPPER MOTOR COVER	AISI 304
30.02	UPPER BEARING HOUSING WITH COVER	ALUMINUM
30.03	LOWER MOTOR COVER	AISI 304
30.04	LOWER BEARING COVER	ALUMINUM
30.05	O-RING	NBR
30.06	MECHANICAL SEALS	CERAMIC ALUMINA / CARBON GRAPHITE / NBR
30.07	BALL BEARINGS	6202 2Z-C3 / 6303 2Z-C3
30.08	ROTOR AND PUMP SHAFT	AISI 304
30.09	SCREWS, NUT AND WASHERS	AISI 304 / AISI 316
40.00	STAGE HOUSING AND DIFFUSER	AISI 304
40.01	SPACER	AISI 304
40.02	FLOATING NECK RING	PPS
40.03	INITIAL STAGE HOUSING	AISI 304
50.00	IMPELLER	AISI 304
50.01	IMPELLER SPACERS	AISI 304



Submersible multistage centrifugal pumps for 4" wells, featuring independent floating impellers that reduce axial load on the motor and prevent wear in case of dry running. The motor bracket and coupling are made according to NEMA standards.

Common applications include civil and agricultural use. The pump materials are certified for drinking water, and due to their high efficiency and reliability, these pumps are highly recommended for residential applications and irrigation. The pumps are ideal for automatic water distribution in combination with pressure tanks, irrigation systems, and other uses.

### Construction features

<b>Suction and delivery outlet</b>	stainless steel AISI 304
<b>External jacket</b>	stainless steel AISI 304
<b>Impellers</b>	polyoxymethylene
<b>Diffusers</b>	polyoxymethylene and AISI 304
<b>Support bush with sleeve</b>	polyoxymethylene and ceramic
<b>Shaft</b>	stainless steel AISI 431B
<b>Coupling</b>	stainless steel AISI 316L
<b>Quantity of sand in the water</b>	250 g/m <sup>3</sup>
<b>Max liquid temperature</b>	45 °C



## 4E 20

50 Hz - 2900 rpm							Q						
TYPE	P2		SUITABLE MOTOR			l/min	0	15	20	25	30	35	40
			1- 230V	3- 400V		l/sec	0	0,25	0,33	0,42	0,50	0,58	0,67
	HP	Kw	A	$\mu$ F	A	m <sup>3</sup> /h	0	0,9	1,2	1,5	1,8	2,1	2,4
4E 20/09-05	0,5	0,37	3,6	20	1,6	H (m)	60	56	50	43	35	26	15
4E 20/14-07	0,75	0,55	4,5	25	2		92	85	76	66	54	40	23
4E 20/19-10	1	0,75	6	35	2,6		122	112	101	86	71	53	30
4E 20/28-15	1,5	1,1	8,2	40	3,4		176	161	145	125	103	77	44
4E 20/38-20	2	1,5	11	50	4,6		231	212	191	164	135	101	58

Max Eff. %	52,5
Max kW / St.	0,039

MEI  $\geq$  0,7 (regulation EU N. 547/2012)

## 4E 30

50 Hz - 2900 rpm							Q								
TYPE	P2		SUITABLE MOTOR			l/min	0	15	20	25	30	35	40	45	50
			1- 230V	3- 400V		l/sec	0	0,25	0,33	0,42	0,50	0,58	0,67	0,75	0,83
	HP	Kw	A	$\mu$ F	A	m <sup>3</sup> /h	0	0,9	1,2	1,5	1,8	2,1	2,4	2,7	3,0
4E 30/08-05	0,5	0,37	3,6	20	1,6	H (m)	55	51	48	44	39	33	26	18	8
4E 30/12-07	0,75	0,55	4,5	25	2		83	76	72	66	58	49	39	27	12
4E 30/16-10	1	0,75	6	35	2,6		110	101	96	88	78	66	52	36	16
4E 30/23-15	1,5	1,1	8,2	40	3,4		154	141	133	123	109	92	72	51	23
4E 30/32-20	2	1,5	11	50	4,6		214	197	186	171	151	128	101	70	32
4E 30/45-30	3	2,2	14,8	70	6,2		302	277	261	241	213	180	142	99	45
4E 30/60-40	4	3	-	-	7,8		402	369	348	321	284	240	189	132	60

Max Eff. %	53,4
Max kW / St.	0,047

MEI  $\geq$  0,7 (regulation EU N. 547/2012)

## 4E 35

50 Hz - 2900 rpm							Q								
TYPE	P2		SUITABLE MOTOR			l/min	0	20	25	30	35	40	45	50	55
			1- 230V	3- 400V		l/sec	0	0,33	0,42	0,50	0,58	0,67	0,75	0,83	0,92
	HP	Kw	A	$\mu$ F	A	m <sup>3</sup> /h	0	1,2	1,5	1,8	2,1	2,4	2,7	3,0	3,3
4E 35/07-05	0,5	0,37	3,6	20	1,6	H (m)	47	42	39	36	33	28	23	18	12
4E 35/11-07	0,75	0,55	4,5	25	2		74	66	62	57	52	45	37	28	18
4E 35/15-10	1	0,75	6	35	2,6		98	87	82	76	68	59	49	37	24
4E 35/22-15	1,5	1,1	8,2	40	3,4		140	125	118	109	98	85	70	54	35
4E 35/30-20	2	1,5	11	50	4,6		191	171	161	148	134	116	96	73	47
4E 35/42-30	3	2,2	14,8	70	6,2		273	244	229	212	191	166	137	104	67
4E 35/57-40	4	3	-	-	7,8		367	327	308	285	257	223	184	140	91

Max Eff. %	57,8
Max kW / St.	0,05

MEI  $\geq$  0,7 (regulation EU N. 547/2012)

# 4E

## 4E 45

50 Hz - 2900 rpm							Q									
TYPE	P2		SUITABLE MOTOR			l/min	0	30	35	40	45	50	55	60	65	70
			1- 230V		3- 400V	l/sec	0	0,50	0,58	0,67	0,75	0,83	0,92	1,00	1,08	1,17
	HP	Kw	A	μF	A	m³/h	0	1,8	2,1	2,4	2,7	3,0	3,3	3,6	3,9	4,2
4E 45/06-05	0,5	0,37	3,6	20	1,6	H (m)	41	37	35	33	30	27	24	20	16	12
4E 45/09-07	0,75	0,55	4,5	25	2		62	55	52	49	45	41	36	31	25	18
4E 45/12-10	1	0,75	6	35	2,6		80	72	68	64	59	53	47	40	32	23
4E 45/18-15	1,5	1,1	8,2	40	3,4		120	107	102	96	88	80	70	59	48	35
4E 45/24-20	2	1,5	11	50	4,6		160	143	136	128	118	106	93	79	64	47
4E 45/36-30	3	2,2	14,8	70	6,2		240	215	204	191	176	159	140	119	95	70
4E 45/48-40	4	3	-	-	7,8		320	286	272	255	235	212	186	158	127	94
4E 45/63-55	5,5	4	-	-	9,9		420	375	357	335	309	278	244	207	167	123

MEI ≥ 0,7 (regulation EU N. 547/2012)

Max Eff. %	64
Max kW / St.	0,062

## 4E 55

50 Hz - 2900 rpm							Q							
TYPE	P2		SUITABLE MOTOR			l/min	0	45	50	55	60	65	70	80
			1- 230V		3- 400V	l/sec	0	0,75	0,83	0,92	1,00	1,08	1,17	1,33
	HP	Kw	A	μF	A	m³/h	0	2,7	3,0	3,3	3,6	3,9	4,2	4,8
4E 55/05-05	0,5	0,37	3,6	20	1,6	H (m)	33	28	27	25	23	21	19	13
4E 55/07-07	0,75	0,55	4,5	25	2		47	40	37	35	32	29	26	18
4E 55/10-10	1	0,75	6	35	2,6		67	57	54	50	46	42	37	26
4E 55/15-15	1,5	1,1	8,2	40	3,4		100	85	80	75	70	63	56	39
4E 55/20-20	2	1,5	11	50	4,6		130	110	104	97	90	81	72	50
4E 55/30-30	3	2,2	14,8	70	6,2		195	165	156	146	135	122	108	75
4E 55/40-40	4	3	-	-	7,8		260	220	208	195	180	162	144	100
4E 55/54-55	5,5	4	-	-	9,9		351	296	281	263	243	219	194	135

MEI ≥ 0,7 (regulation EU N. 547/2012)

Max Eff. %	62,1
Max kW / St.	0,076

## 4E 70

50 Hz - 2900 rpm							Q									
TYPE	P2		SUITABLE MOTOR			l/min	0	50	55	60	65	70	80	90	100	110
			1- 230V		3- 400V	l/sec	0	0,83	0,92	1,00	1,08	1,17	1,33	1,50	1,67	1,83
	HP	Kw	A	μF	A	m³/h	0	3,0	3,3	3,6	3,9	4,2	4,8	5,4	6,0	6,6
4E 70/04-05	0,5	0,37	3,6	20	1,6	H (m)	28	25	24	23	22	20	17	14	10	6
4E 70/06-07	0,75	0,55	4,5	25	2		41	37	36	34	33	31	26	20	15	8
4E 70/08-10	1	0,75	6	35	2,6		55	49	48	46	44	41	34	27	19	11
4E 70/12-15	1,5	1,1	8,2	40	3,4		83	74	72	69	65	61	52	41	29	17
4E 70/16-20	2	1,5	11	50	4,6		111	99	95	92	87	82	69	54	39	22
4E 70/24-30	3	2,2	14,8	70	6,2		166	148	143	138	131	123	103	81	58	34
4E 70/32-40	4	3	-	-	7,8		221	197	191	183	174	164	138	108	78	45
4E 70/42-55	5,5	4	-	-	9,9		290	259	250	241	229	215	181	142	102	59
4E 70/57-75	7,5	5,5	-	-	13,8		402	358	347	333	317	297	251	197	141	81
4E 70/76-100	10	7,5	-	-	19,5		536	478	462	444	422	396	334	263	188	109

MEI ≥ 0,7 (regulation EU N. 547/2012)

Max Eff. %	66,8
Max kW / St.	0,092

## 4E 100

50 Hz - 2900 rpm							Q							
TYPE	P2		SUITABLE MOTOR			l/min	0	80	90	100	110	125	150	175
			1- 230V	3- 400V	l/sec	0	1,33	1,50	1,67	1,83	2,08	2,50	2,92	
	HP	Kw	A	μF	A	m³/h	0	4,8	5,4	6,0	6,6	7,5	9,0	10,5
4E 100/04-07	0,75	0,55	4,5	25	2	H (m)	29	23	22	21	19	17	12	6
4E 100/06-10	1	0,75	6	35	2,6		43	34	32	30	29	25	18	9
4E 100/09-15	1,5	1,1	8,2	40	3,4		64	50	48	45	42	37	26	14
4E 100/12-20	2	1,5	11	50	4,6		84	65	62	59	55	49	34	18
4E 100/17-30	3	2,2	14,8	70	6,2		119	92	88	84	79	69	48	26
4E 100/23-40	4	3	-	-	7,8		161	125	120	113	106	94	66	35
4E 100/31-55	5,5	4	-	-	9,9		217	169	161	153	143	126	88	47
4E 100/39-75	7,5	5,5	-	-	13,8		273	212	203	192	180	159	111	59
4E 100/54-100	10	7,5	-	-	19,5		378	294	281	266	249	220	154	81

Max Eff. %	71,5
Max kW / St.	0,124

MEI ≥ 0,4 (regulation EU N. 547/2012)

## 4E 150

50 Hz - 2900 rpm							Q								
TYPE	P2		SUITABLE MOTOR			l/min	0	100	110	125	150	175	200	225	250
			1- 230V	3- 400V	l/sec	0	1,67	1,83	2,08	2,50	2,92	3,33	3,75	4,17	
	HP	Kw	A	μF	A	m³/h	0	6,0	6,6	7,5	9,0	10,5	12,0	13,5	15,0
4E 150/04-10	1	0,75	6	35	2,6	H (m)	27	24	23	22	20	17	13	8	3
4E 150/06-15	1,5	1,1	8,2	40	3,4		41	36	35	33	30	26	20	13	5
4E 150/08-20	2	1,5	11	50	4,6		55	48	47	45	40	34	27	17	6
4E 150/12-30	3	2,2	14,8	70	6,2		82	72	70	67	60	51	40	25	10
4E 150/15-40	4	3	-	-	7,8		103	90	88	84	75	64	50	32	12
4E 150/21-55	5,5	4	-	-	9,9		144	126	123	117	105	89	70	44	17
4E 150/28-75	7,5	5,5	-	-	13,8		196	171	167	159	143	121	95	60	23
4E 150/38-100	10	7,5	-	-	19,5		263	230	225	214	192	163	127	81	31

Max Eff. %	68,6
Max kW / St.	0,184

MEI ≥ 0,4 (regulation EU N. 547/2012)

## 4E 300

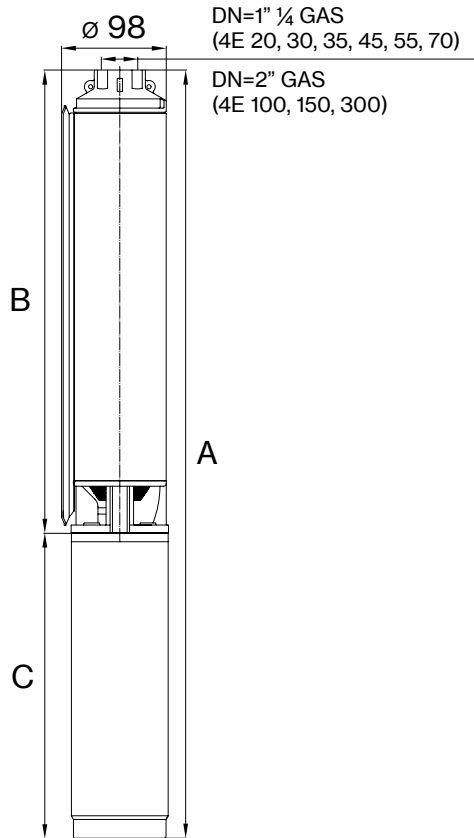
50 Hz - 2900 rpm							Q													
TYPE	P2		SUITABLE MOTOR			l/min	0	150	175	200	225	250	275	300	325	350	375	400	425	450
			1- 230V	3- 400V	l/sec	0	2,50	2,92	3,33	3,75	4,17	4,58	5,00	5,42	5,83	6,25	6,67	7,08	7,50	
	HP	Kw	A	μF	A	m³/h	0	9,0	10,5	12,0	13,5	15,0	16,5	18,0	19,5	21,0	22,5	24,0	25,5	27,0
4E 300/04-15	1,5	1,1	8,2	40	3,4	H (m)	23	19	18	17	16	15	14	13	12	11	9	8	6	4
4E 300/06-20	2	1,5	11	50	4,6		35	29	27	25	24	23	21	20	18	16	14	11	9	5
4E 300/09-30	3	2,2	14,8	70	6,2		52	43	40	38	36	34	32	30	28	24	21	17	13	8
4E 300/12-40	4	3	-	-	7,8		69	57	54	51	48	45	43	40	37	33	28	23	17	11
4E 300/16-55	5,5	4	-	-	9,9		92	76	72	68	64	60	57	53	49	44	37	30	23	14
4E 300/22-75	7,5	5,5	-	-	13,8		127	105	98	93	88	83	78	73	67	60	51	42	32	20
4E 300/30-100	10	7,5	-	-	19,5		173	143	134	127	120	113	107	100	92	82	70	57	43	27

Max Eff. %	74,3
Max kW / St.	0,243

MEI ≥ 0,7 (regulation EU N. 547/2012)



# 4E



## 4E 20

TYPE	DIMENSIONS (mm)					WEIGHT (kg)				
	A (1-)	A (3-)	B	C (1-)	C (3-)	A (1-)	A (3-)	B	C (1-)	C (3-)
4E 20/09-05	641	641	316	325	325	10,3	9,8	3,3	7	6,5
4E 20/14-07	741	741	416	325	325	12	11,4	4,4	7,6	7
4E 20/19-10	866	841	516	350	325	14,1	13	5,4	8,7	7,6
4E 20/28-15	1117	1082	732	385	350	18	16,4	7,7	10,3	8,7
4E 20/38-20	1350	1315	930	420	385	21,8	20,2	9,8	12	10,4

## 4E 30

TYPE	DIMENSIONS (mm)					WEIGHT (kg)				
	A (1-)	A (3-)	B	C (1-)	C (3-)	A (1-)	A (3-)	B	C (1-)	C (3-)
4E 30/08-05	598	598	273	325	325	10	9,5	3	7	6,5
4E 30/12-07	665	665	340	325	325	11,4	10,8	3,8	7,6	7
4E 30/16-10	758	733	408	350	325	13,2	12,1	4,5	8,7	7,6
4E 30/23-15	911	876	526	385	350	16,2	14,6	5,9	10,3	8,7
4E 30/32-20	1134	1099	714	420	385	20	18,4	8	12	10,4
4E 30/45-30	1439	1389	969	470	420	25,1	22,9	10,9	14,2	12
4E 30/60-40	-	1642	1224	-	418	-	28	13,8	-	14,2

## 4E 35

TYPE	DIMENSIONS (mm)					WEIGHT (kg)				
	A (1-)	A (3-)	B	C (1-)	C (3-)	A (1-)	A (3-)	B	C (1-)	C (3-)
4E 35/07-05	602	602	277	325	325	9,9	9,4	2,9	7	6,5
4E 35/11-07	681	681	356	325	325	11,3	10,7	3,7	7,6	7
4E 35/15-10	786	761	436	350	325	13,2	12,1	4,5	8,7	7,6
4E 35/22-15	960	925	575	385	350	16,2	14,6	5,9	10,3	8,7
4E 35/30-20	1190	1155	770	420	385	20	18,4	8	12	10,4
4E 35/42-30	1478	1428	1008	470	420	24,6	22,4	10,4	14,2	12
4E 35/57-40	-	1762	1344	-	418	-	28,1	13,9	-	14,2

## 4E 45

TYPE	DIMENSIONS (mm)					WEIGHT (kg)				
	A (1-)	A (3-)	B	C (1-)	C (3-)	A (1-)	A (3-)	B	C (1-)	C (3-)
4E 45/06-05	582	582	257	325	325	9,7	9,2	2,7	7	6,5
4E 45/09-07	641	641	316	325	325	10,9	10,3	3,3	7,6	7
4E 45/12-10	726	701	376	350	325	12,6	11,5	3,9	8,7	7,6
4E 45/18-15	880	845	495	385	350	15,4	13,8	5,1	10,3	8,7
4E 45/24-20	1035	1000	615	420	385	18,3	16,7	6,3	12	10,4
4E 45/36-30	1360	1310	890	470	420	23,4	21,2	9,2	14,2	12
4E 45/48-40	-	1582	1164	-	418	-	26,2	12	-	14,2
4E 45/63-55	-	1932	1464	-	468	-	30,4	15,1	-	15,3

## 4E 55

TYPE	DIMENSIONS (mm)					WEIGHT (kg)				
	A (1-)	A (3-)	B	C (1-)	C (3-)	A (1-)	A (3-)	B	C (1-)	C (3-)
4E 55/05-05	562	562	237	325	325	9,5	9	2,5	7	6,5
4E 55/07-07	602	602	277	325	325	10,5	9,9	2,9	7,6	7
4E 55/10-10	686	661	336	350	325	12,2	11,1	3,5	8,7	7,6
4E 55/15-15	821	786	436	385	350	14,8	13,2	4,5	10,3	8,7
4E 55/20-20	955	920	535	420	385	17,5	15,9	5,5	12	10,4
4E 55/30-30	1240	1190	770	470	420	22,2	20	8	14,2	12
4E 55/40-40	-	1388	970	-	418	-	24,2	10	-	14,2
4E 55/54-55	-	1752	1284	-	468	-	28,5	13,2	-	15,3

## 4E 70

TYPE	DIMENSIONS (mm)					WEIGHT (kg)				
	A (1-)	A (3-)	B	C (1-)	C (3-)	A (1-)	A (3-)	B	C (1-)	C (3-)
4E 70/04-05	550	550	225	325	325	9,3	8,8	2,3	7	6,5
4E 70/06-07	594	594	269	325	325	10,4	9,8	2,8	7,6	7
4E 70/08-10	663	638	313	350	325	11,9	10,8	3,2	8,7	7,6
4E 70/12-15	785	750	400	385	350	14,4	12,8	4,1	10,3	8,7
4E 70/16-20	908	873	488	420	385	16,9	15,3	4,9	12	10,4
4E 70/24-30	1133	1083	663	470	420	20,9	18,7	6,7	14,2	12
4E 70/32-40	-	1292	874	-	418	-	23	8,8	-	14,2
4E 70/42-55	-	1562	1094	-	468	-	26,3	11	-	15,3
4E 70/57-75	-	1996	1458	-	538	-	33,7	15,1	-	18,6
4E 70/76-100	-	2722	1912	-	810	-	46,7	19,7	-	27

## 4E 100

TYPE	DIMENSIONS (mm)					WEIGHT (kg)				
	A (1-)	A (3-)	B	C (1-)	C (3-)	A (1-)	A (3-)	B	C (1-)	C (3-)
4E 100/04-07	609	609	284	325	325	10,5	9,9	2,9	7,6	7
4E 100/06-10	708	683	358	350	325	12,3	11,2	3,6	8,7	7,6
4E 100/09-15	854	819	469	385	350	14,9	13,3	4,6	10,3	8,7
4E 100/12-20	1000	965	580	420	385	17,6	16	5,6	12	10,4
4E 100/17-30	1234	1184	764	470	420	21,4	19,2	7,2	14,2	12
4E 100/23-40	-	1438	1020	-	418	-	23,6	9,4	-	14,2
4E 100/31-55	-	1820	1352	-	468	-	27,7	12,4	-	15,3
4E 100/39-75	-	2185	1647	-	538	-	34	15,4	-	18,6
4E 100/54-100	-	3012	2202	-	810	-	47,3	20,3	-	27

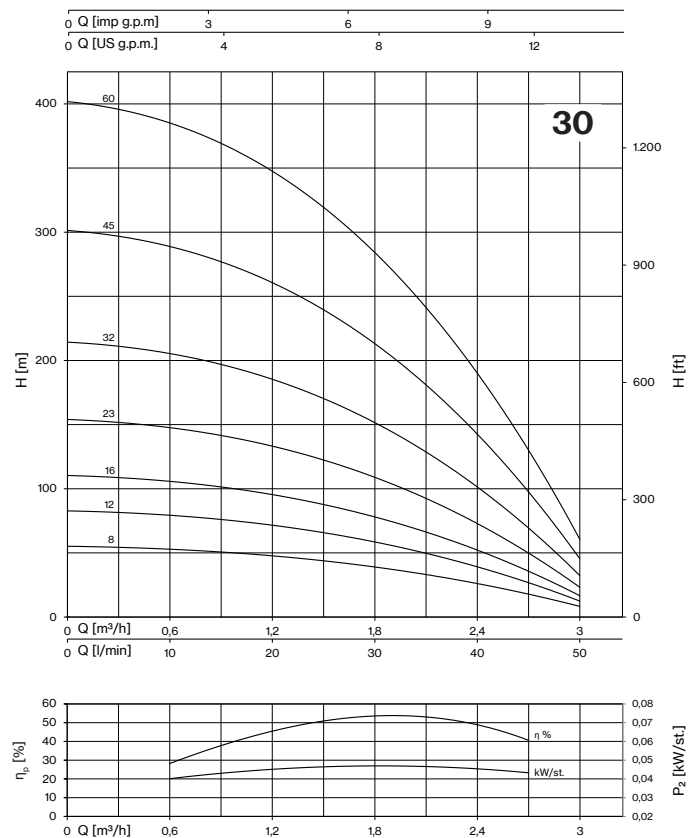
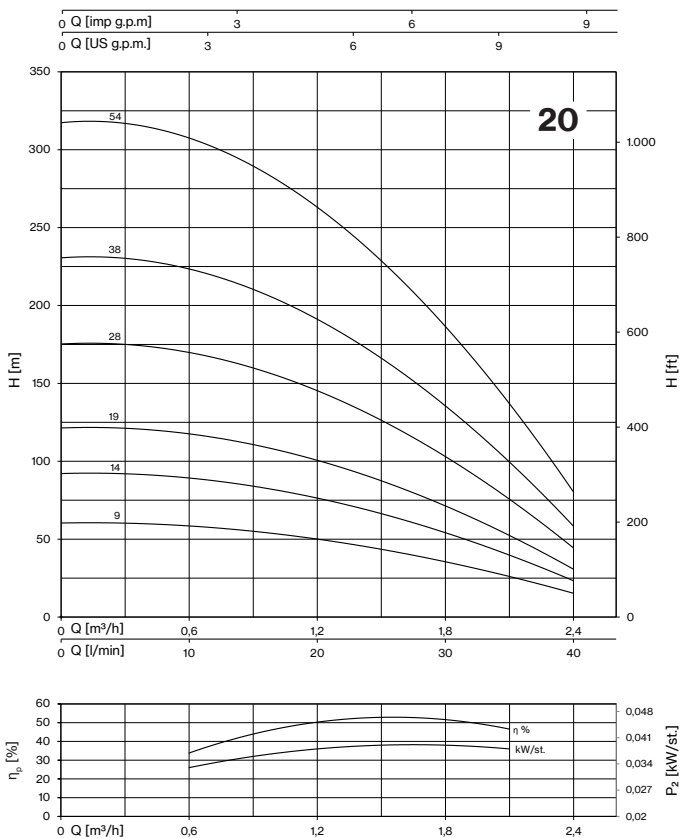
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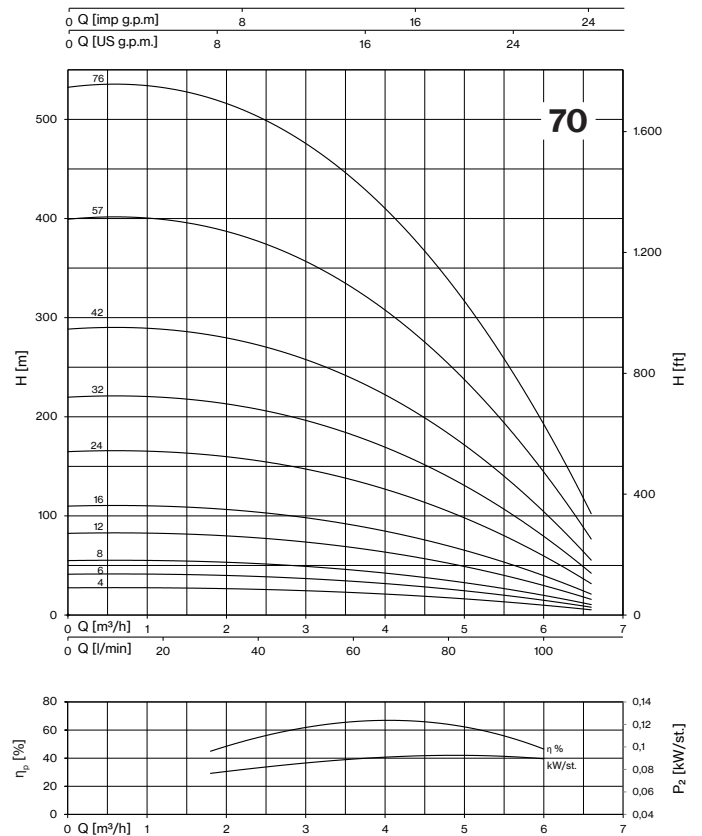
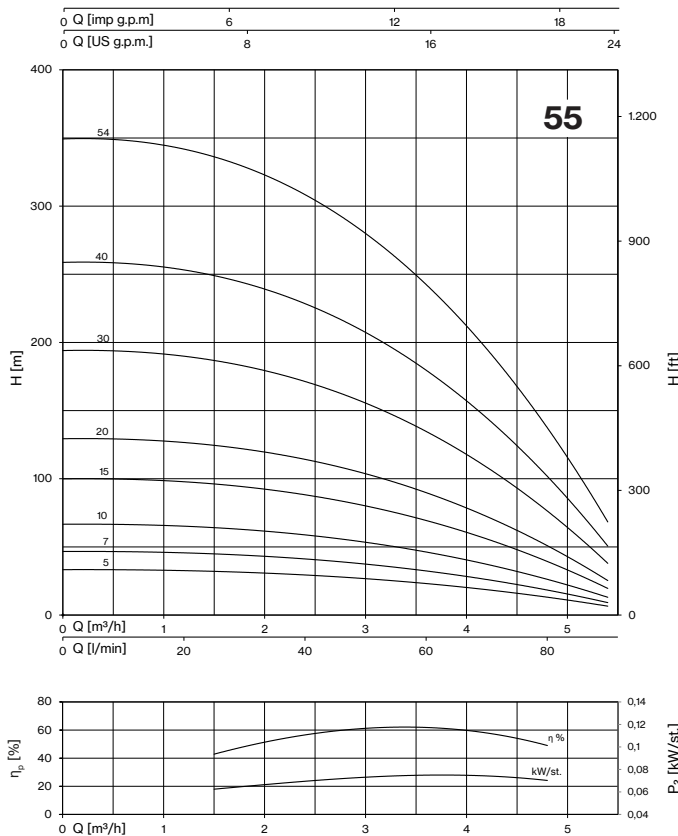
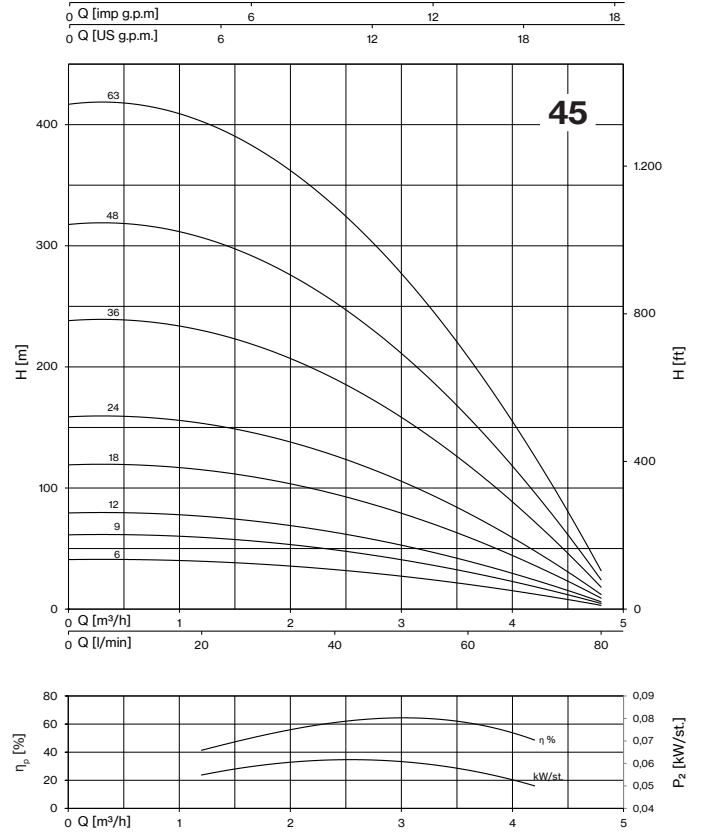
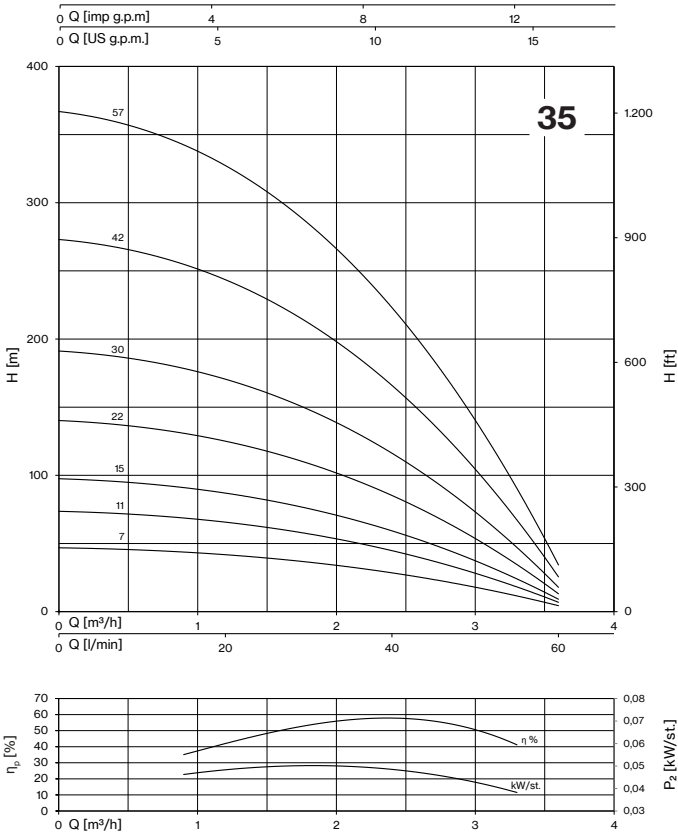
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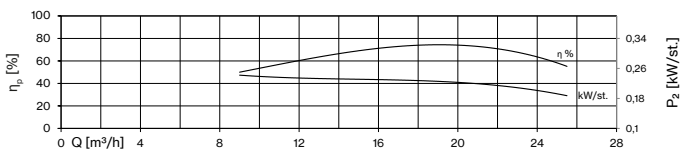
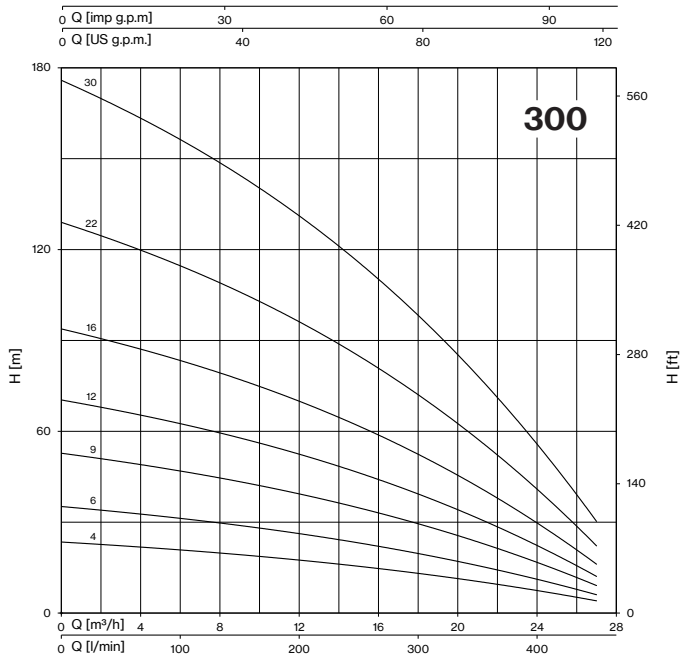
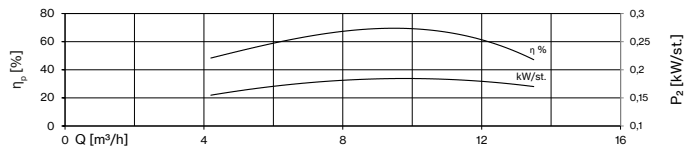
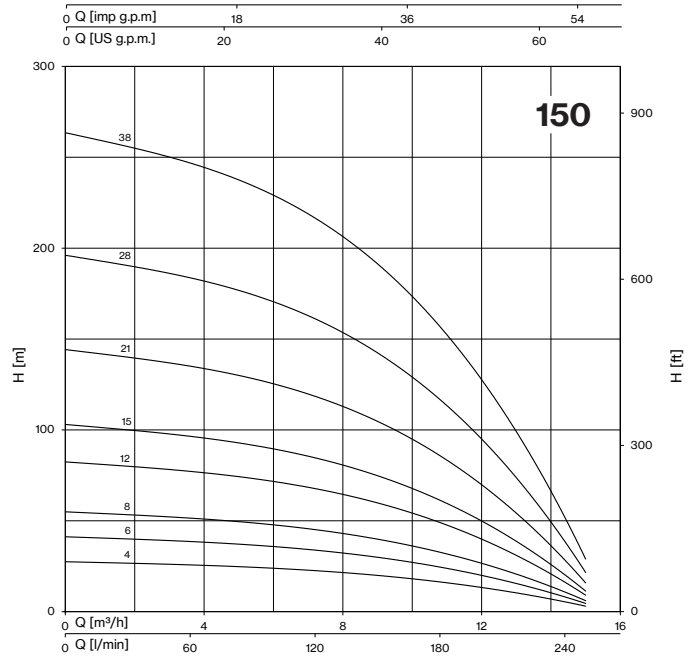
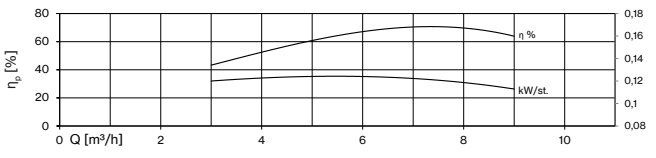
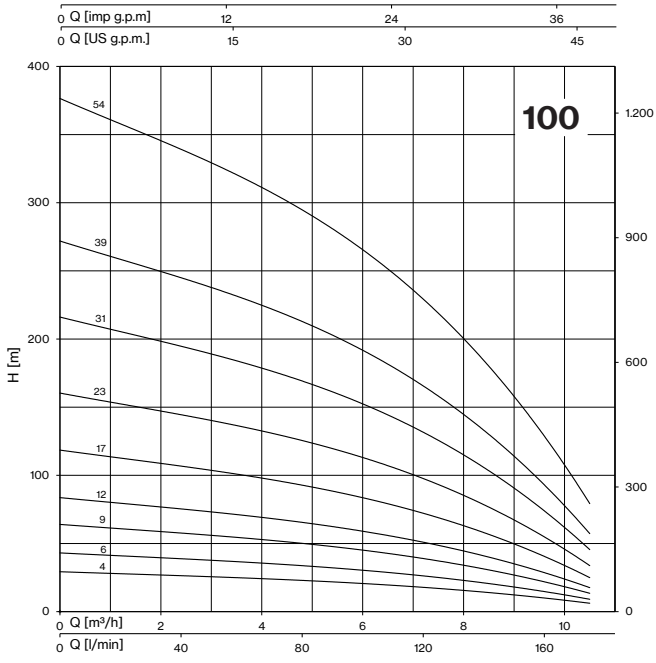
TYPE	DIMENSIONS (mm)					WEIGHT (kg)				
	A (1-)	A (3-)	B	C (1-)	C (3-)	A (1-)	A (3-)	B	C (1-)	C (3-)
4E 150/04-10	646	621	296	350	325	11,7	10,6	3	8,7	7,6
4E 150/06-15	761	726	376	385	350	14	12,4	3,7	10,3	8,7
4E 150/08-20	876	841	456	420	385	16,4	14,8	4,4	12	10,4
4E 150/12-30	1086	1036	616	470	420	20,1	17,9	5,9	14,2	12
4E 150/15-40	-	1153	735	-	418	-	21,1	6,9	-	14,2
4E 150/21-55	-	1477	1009	-	468	-	24,5	9,2	-	15,3
4E 150/28-75	-	1828	1290	-	538	-	30,6	12	-	18,6
4E 150/38-100	-	2574	1764	-	810	-	43,1	16,1	-	27

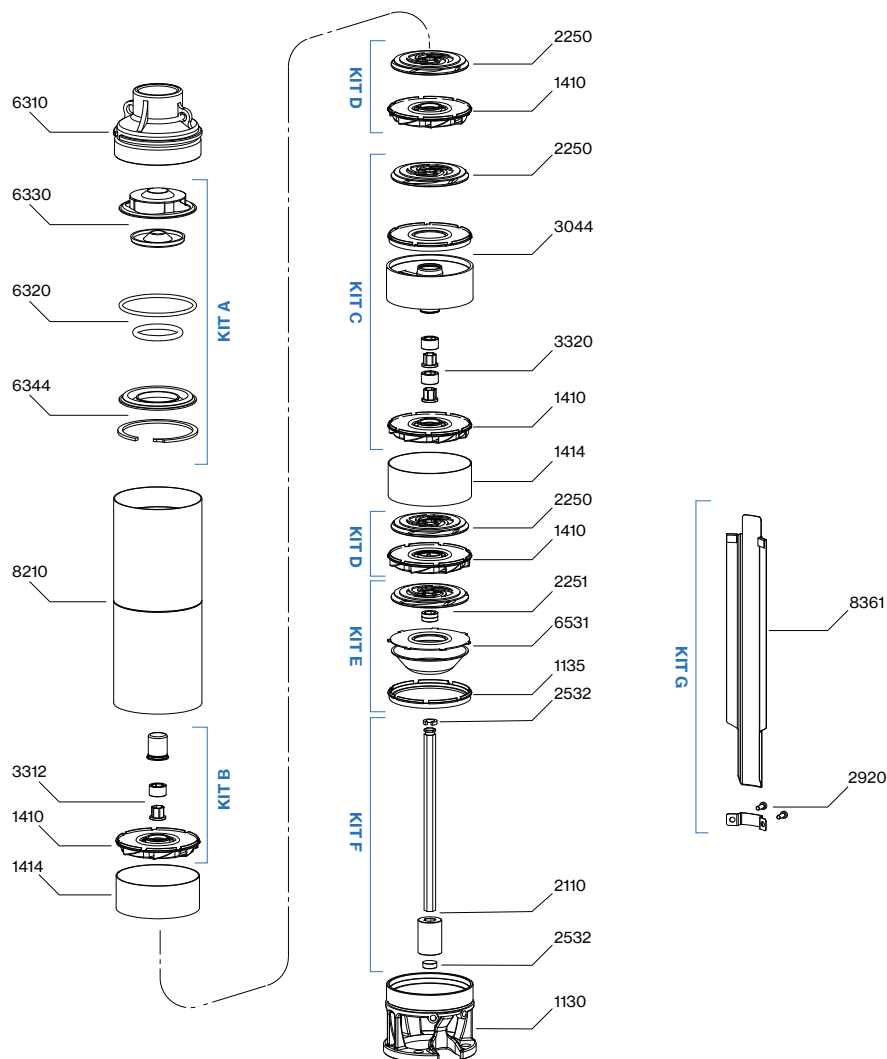
## 4E 300

TYPE	DIMENSIONS (mm)					WEIGHT (kg)				
	A (1-)	A (3-)	B	C (1-)	C (3-)	A (1-)	A (3-)	B	C (1-)	C (3-)
4E 300/04-15	789	754	404	385	350	13,4	11,8	3,1	10,3	8,7
4E 300/06-20	957	922	537	420	385	16,1	14,5	4,1	12	10,4
4E 300/09-30	1208	1158	738	470	420	-	17,7	5,7	14,2	12
4E 300/12-40	-	1357	939	-	418	-	21,5	7,3	-	14,2
4E 300/16-55	-	1674	1206	-	468	-	24,7	9,4	-	15,3
4E 300/22-75	-	2146	1608	-	538	-	31,1	12,5	-	18,6
4E 300/30-100	-	2955	2145	-	810	-	43,7	16,7	-	27









N. CODE	KIT	DESCRIPTION	MATERIAL
6320	<b>KIT A</b> <i>check valve</i>	<b>O-RINGS</b>	NBR
6330		<b>WING VALVE WITH COVER</b>	AISI 304
6340		<b>WING VALVE ALIGNER</b>	POM-C
6344		<b>SUPPORT WING VALVE AND SEEGER</b>	AISI 304
1410	<b>KIT B</b> <i>upper support</i>	<b>COMPLETE DIFFUSER WITH DISC</b>	POM-C + CERAMIC AI203 + AISI 304
3312		<b>SUPPORT BUSH WITH SLEEVE</b>	POM-C + CERAMIC AI203
2531		<b>SEEGER</b>	POM-C
1410	<b>KIT C</b> <i>intermediate support</i>	<b>COMPLETE DIFFUSER WITH DISC</b>	POM-C + CERAMIC AI203 + AISI 304
2250		<b>IMPELLER</b>	POM-C
3320		<b>SUPPORT BUSH WITH 2X SLEEVE</b>	POM-C + CERAMIC AI203
3044		<b>INTERMEDIATE SUPPORT</b>	AISI 304
1410	<b>KIT D</b> <i>stage</i>	<b>COMPLETE DIFFUSER WITH DISC</b>	POM-C + CERAMIC AI203 + AISI 304
2250		<b>IMPELLER</b>	POM-C
1135	<b>KIT E</b> <i>first stage</i>	<b>CENTERING RING</b>	POM-C
6531		<b>DISC AND GRID</b>	AISI 304
2251		<b>FIRST IMPELLER WITH SPACERS</b>	POM-C
2110	<b>KIT F</b> <i>shaft with coupling</i>	<b>SHAFT WITH COUPLING</b>	AISI 431B
2532		<b>SEEGER WITH SHOCK SUPPORT</b>	POM-C
2920	<b>KIT G</b> <i>cable cover</i>	<b>SCREWS</b>	AISI 304
8361		<b>CABLE COVER</b>	AISI 304
1130	-	<b>BOTTOM CASING</b>	AISI 304
1414		<b>SPACER PIPE</b>	AISI 304
6310		<b>TOP CASING</b>	AISI 304
8210		<b>EXTERNAL PIPE</b>	AISI 304



Submersible multistage centrifugal pumps for 6" wells, made of solid and sturdy construction. The motor bracket and coupling are made according to NEMA standards: 4" motor up to 7.5 HP, 6" motor above 10 HP.

High-pressure pumps, due to their excessive length, are delivered in separate liquid-ends and can be easily reassembled at the installation site. Common applications include civil and agricultural use. The pump materials are certified for drinking water, and due to their high efficiency and reliability, these pumps are highly recommended for residential, commercial, and agricultural applications.

The pumps are ideal for automatic water distribution in combination with pressure tanks, irrigation systems, and other uses.

### Construction features

<b>Suction and delivery outlet</b>	stainless steel AISI 304
<b>External jacket</b>	stainless steel AISI 304
<b>Impellers</b>	polyphenylene oxide
<b>Diffusers</b>	polyphenylene oxide and AISI 304
<b>Support bush with sleeves</b>	stainless steel AISI 316L
<b>Shaft</b>	stainless steel AISI 431B
<b>Coupling</b>	stainless steel AISI 316L
<b>Quantity of sand in the water</b>	150 g/m <sup>3</sup>
<b>Max liquid temperature</b>	35 °C



6E 175

50 Hz - 2900 rpm					Q										
TYPE	SUITABLE MOTOR 3- 400V			AXIAL LOAD	l/min	0	100	120	125	150	175	200	225	250	275
	P2		CURRENT			l/sec	0	1,67	2,00	2,08	2,50	2,92	3,33	3,75	4,17
	HP	kW	A	N	m³/h	0	6,0	7,2	7,5	9,0	10,5	12,0	13,5	15,0	16,5
6E 175/05-30	3	2,2	6,2	1410	H (m)	78	67	64	63	58	53	46	37	27	16
6E 175/06-40	4	3	7,8	1690		94	80	77	76	70	63	55	44	32	19
6E 175/07-55	5,5	4	9,9	1970		109	94	90	89	82	74	64	52	38	22
6E 175/08-55	5,5	4	9,9	2250		125	107	103	101	93	84	73	59	43	25
6E 175/09-55	5,5	4	9,9	2530		140	121	115	114	105	95	82	67	48	28
6E 175/12-75	7,5	5,5	13,8	3370		187	161	154	152	140	127	109	89	65	37
6E 175/16-100	10	7,5	16,9	4500		250	214	205	202	187	169	146	118	86	50
6E 175/18-125	12,5	9,3	21,5	5060		281	241	231	228	210	190	164	133	97	56
6E 175/21-125	12,5	9,3	21,5	5900		328	281	269	266	245	222	192	155	113	65
6E 175/24-150	15	11	23,7	6740		374	322	308	304	280	253	219	178	129	74
6E 175/28-175	17,5	13	27,8	7870		437	375	359	354	327	295	255	207	151	87
6E 175/32-200	20	15	30,4	8990		499	429	410	405	374	338	292	237	172	99
6E 175/40-250	25	18,5	38,3	11240		624	536	513	506	467	422	365	296	215	124
6E 175/48-300	30	22	44	13480		749	643	615	607	561	506	438	355	258	149
6E 175/54-400	40	30	62	15170		842	724	692	683	631	570	492	400	291	167

MEI ≥ 0,7 (regulation EU N. 547/2012)

Max Eff. %	68,1
Max kW / St.	0,444

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	1,1	1,5	2,0	4,5

6E 225

50 Hz - 2900 rpm					Q										
TYPE	SUITABLE MOTOR 3- 400V			AXIAL LOAD	l/min	0	150	175	200	225	250	275	300	325	350
	P2		CURRENT			l/sec	0	2,50	2,92	3,33	3,75	4,17	4,58	5,00	5,42
	HP	kW	A	N	m³/h	0	9,0	10,5	12,0	13,5	15,0	16,5	18,0	19,5	21,0
6E 225/05-40	4	3	7,8	1420	H (m)	79	71	68	64	58	52	45	37	27	15
6E 225/06-55	5,5	4	9,9	1700		94	86	81	76	70	63	54	44	32	17
6E 225/07-75	7,5	5,5	13,8	1980		110	100	95	89	82	73	63	51	37	20
6E 225/08-75	7,5	5,5	13,8	2270		126	114	109	102	93	83	72	58	42	23
6E 225/09-75	7,5	5,5	13,8	2550		141	128	122	115	105	94	81	66	48	26
6E 225/12-100	10	7,5	16,9	3400		188	171	163	153	140	125	108	88	64	35
6E 225/15-125	12,5	9,2	21,5	4240		236	214	204	191	175	156	135	110	80	44
6E 225/18-150	15	11	23,7	5090		283	257	244	229	210	188	162	131	95	52
6E 225/21-175	17,5	13	27,8	5940		330	299	285	267	245	219	189	153	111	61
6E 225/24-200	20	15	30,4	6790		377	342	326	306	280	250	216	175	127	70
6E 225/30-250	25	18,5	38,3	8480		471	428	407	382	350	313	269	219	159	87
6E 225/35-300	30	22	44	9900		550	499	475	446	408	365	314	256	186	102
6E 225/40-400	40	30	62	11310		628	570	543	509	466	417	359	292	212	116
6E 225/45-400	40	30	62	12720		707	641	611	573	524	469	404	329	239	131
6E 225/52-500	50	37	72	14700		816	741	706	662	606	542	467	380	276	151

MEI ≥ 0,7 (regulation EU N. 547/2012)

Max Eff. %	69,6
Max kW / St.	0,637

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	1,1	1,4	3,2	6,9



# 6E

## 6E 350

50 Hz - 2900 rpm					Q											
TYPE	SUITABLE MOTOR 3~ 400V			AXIAL LOAD	l/min	0	225	250	275	300	350	400	450	500	550	600
	P2		CURRENT			l/sec	0	3,75	4,17	4,58	5,00	5,83	6,67	7,50	8,33	9,17
	HP	kW	A	N	m³/h	0	13,5	15,0	16,5	18,0	21,0	24,0	27,0	30,0	33,0	36,0
6E 350/02-20	2	1,5	4,6	790	H (m)	28	23	22	21	20	18	15	13	10	7	4
6E 350/03-30	3	2,2	6,2	1180		42	34	33	32	30	27	23	19	15	10	5
6E 350/04-40	4	3	7,8	1570		56	46	44	42	40	36	31	26	20	14	7
6E 350/05-55	5,5	4	9,9	1960		70	57	55	53	50	45	39	32	25	17	9
6E 350/07-75	7,5	5,5	13,8	2750		98	80	77	74	70	62	54	45	35	24	13
6E 350/10-100	10	7,5	16,9	3920		140	114	110	105	100	89	77	64	50	34	18
6E 350/12-125	12,5	9,3	21,5	4700		168	137	131	126	120	107	93	77	60	41	22
6E 350/15-150	15	11	23,7	5880		210	171	164	158	150	134	116	96	75	51	27
6E 350/17-175	17,5	13	27,8	6660		238	194	186	179	170	152	131	109	85	58	31
6E 350/20-200	20	15	30,4	7840		280	228	219	210	200	178	154	128	100	69	36
6E 350/25-250	25	18,5	38,3	9800		350	285	274	263	250	223	193	160	125	86	45
6E 350/30-300	30	22	44	11760		420	342	329	315	300	268	232	192	149	103	54
6E 350/35-400	40	30	62	13720		490	399	383	368	350	312	270	224	174	120	63
6E 350/40-400	40	30	62	15680		560	456	438	420	400	357	309	256	199	137	72
6E 350/50-500	50	37	72	19600		700	571	548	525	500	446	386	320	249	172	90

MEI ≥ 0,4 (regulation EU N. 547/2012)

Max Eff. %	69,1
Max kW / St.	0,75

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	1,2	1,6	2	4,8

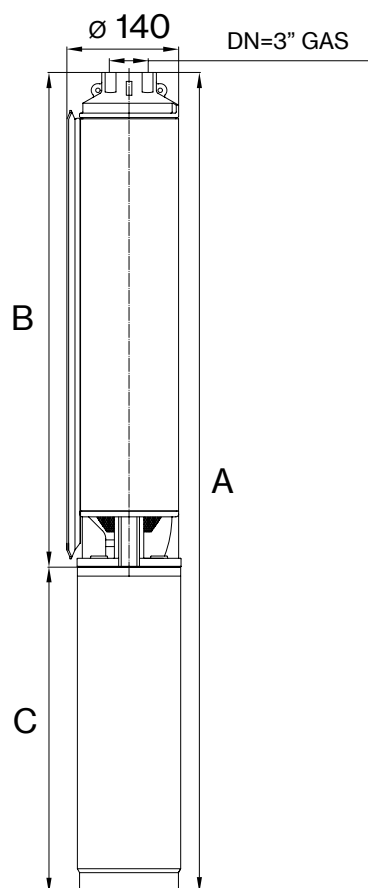
## 6E 400

50 Hz - 2900 rpm					Q											
TYPE	SUITABLE MOTOR 3~ 400V			AXIAL LOAD	l/min	0	300	325	350	375	400	450	500	550	600	650
	P2		CURRENT			l/sec	0	5,00	5,42	5,83	6,25	6,67	7,50	8,33	9,17	10,00
	HP	kW	A	N	m³/h	0	18,0	19,5	21,0	22,5	24,0	27,0	30,0	33,0	36,0	39,0
6E 400/03-40	4	3	7,8	1290	H (m)	46	35	34	32	31	29	25	21	16	10	4
6E 400/04-55	5,5	4	9,9	1720		61	47	45	43	41	39	33	27	21	13	5
6E 400/06-75	7,5	5,5	12,5	2570		92	70	68	65	61	58	50	41	31	20	8
6E 400/08-100	10	7,5	16,9	3430		122	94	90	86	82	77	67	55	42	27	11
6E 400/10-125	12,5	9,3	21,5	4290		153	117	113	108	102	97	84	69	52	34	14
6E 400/12/150	15	11	23,7	5150		184	141	135	129	123	116	100	82	63	40	16
6E 400/14-175	17,5	13	27,8	6000		214	164	158	151	143	135	117	96	73	47	19
6E 400/16-200	20	15	30,4	6860		245	187	180	172	164	154	134	110	83	54	22
6E 400/20-250	25	18,5	38,3	8570		306	234	225	215	205	193	167	137	104	67	27
6E 400/24-300	30	22	44	10290		367	281	270	258	246	232	200	164	125	81	32
6E 400/28-400	40	30	62	12000		428	328	315	301	287	270	234	192	146	94	38
6E 400/32-400	40	30	62	13710		490	375	360	344	328	309	267	219	167	108	43
6E 400/40-500	50	37	72	17140		612	468	450	430	410	386	334	274	208	134	54

MEI ≥ 0,4 (regulation EU N. 547/2012)

Max Eff. %	67,8
Max kW / St.	0,94

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	1,2	1,6	2,3	5,0



## 6E 175

TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)		
		A	B	C	A	B	C
6E 175/05-30-4	4" NEMA	898	478	420	21,8	9,8	12
6E 175/06-40-4		934	516	418	23,2	10,4	12,8
6E 175/07-55-4		1022	554	468	26,4	11,1	15,3
6E 175/08-55-4		1060	592	468	27,1	11,8	15,3
6E 175/09-55-4		1098	630	468	27,7	12,4	15,3
6E 175/12-75-4		1282	744	538	33,3	14,4	18,9
6E 175/16-100	6" NEMA	1458	858	600	58,9	16,9	42
6E 175/18-125		1572	972	600	63,3	18,3	45
6E 175/21-125		1686	1086	600	67,2	22,2	45
6E 175/24-150		1900	1200	700	72,2	24,2	48
6E 175/28-175		2104	1404	700	77,7	27,7	50
6E 175/32-200*		2453	1693	760	95	41	54
6E 175/40-250*		2827	1997	830	112,5	47,5	65
6E 175/48-300*		3191	2301	890	124,1	54,1	70
6E 175/54-400*	3559	2529	1030	149	59	90	

\* Pump supplied in separate liquid ends

# 6E

## 6E 225

TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)		
		A	B	C	A	B	C
6E 225/05-40-4	4" NEMA	896	478	418	22,6	9,8	12,8
6E 225/06-55-4		984	516	468	25,8	10,5	15,3
6E 225/07-75-4		1092	554	538	29,7	11,1	18,6
6E 225/08-75-4		1130	592	538	30,4	11,8	18,6
6E 225/09-75-4		1168	630	538	31	12,4	18,6
6E 225/12-100	6" NEMA	1344	744	600	56,3	14,3	42
6E 225/15-125		1458	858	600	61,3	16,3	45
6E 225/18-150		1672	972	700	66,2	18,2	48
6E 225/21-175		1786	1086	700	72,2	22,2	50
6E 225/24-200		1960	1200	760	78,1	24,1	54
6E 225/30-250		2310	1480	830	93,9	28,9	65
6E 225/35-300*		2697	1807	890	113,1	43,1	70
6E 225/40-400*		3027	1997	1030	137,2	47,2	90
6E 225/45-400*		3217	2187	1030	141,3	51,3	90
6E 225/52-500*		3623	2453	1170	158	57	101

\* Pump supplied in separate liquid ends

## 6E 350

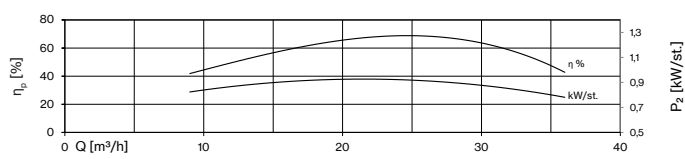
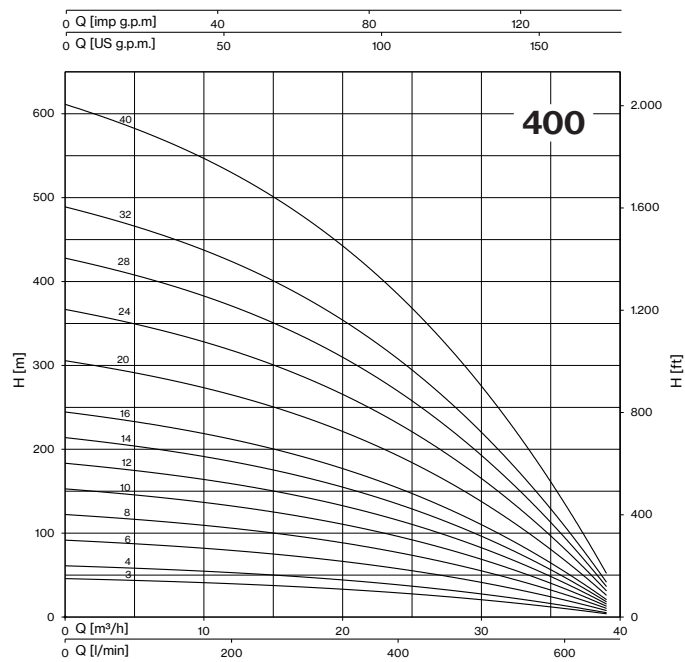
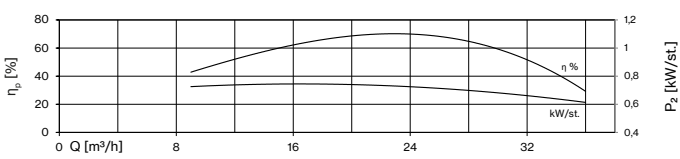
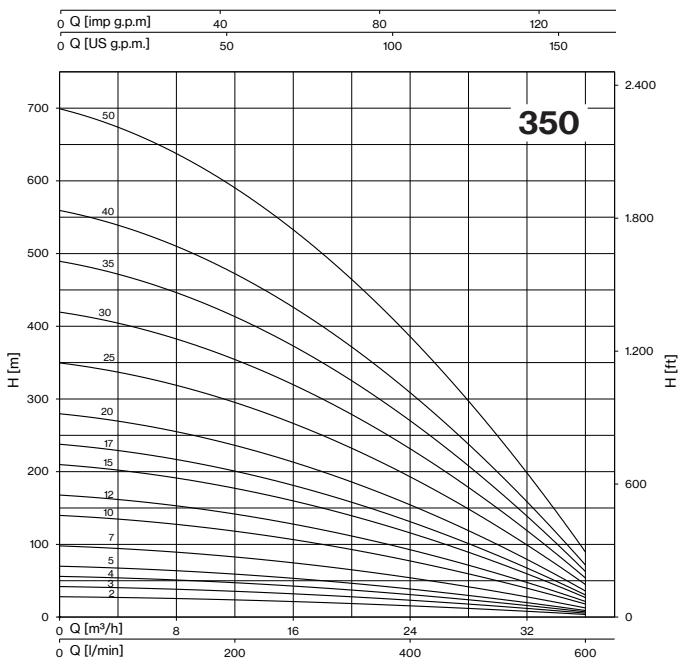
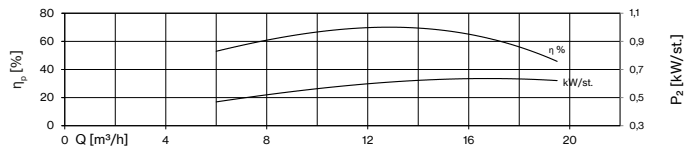
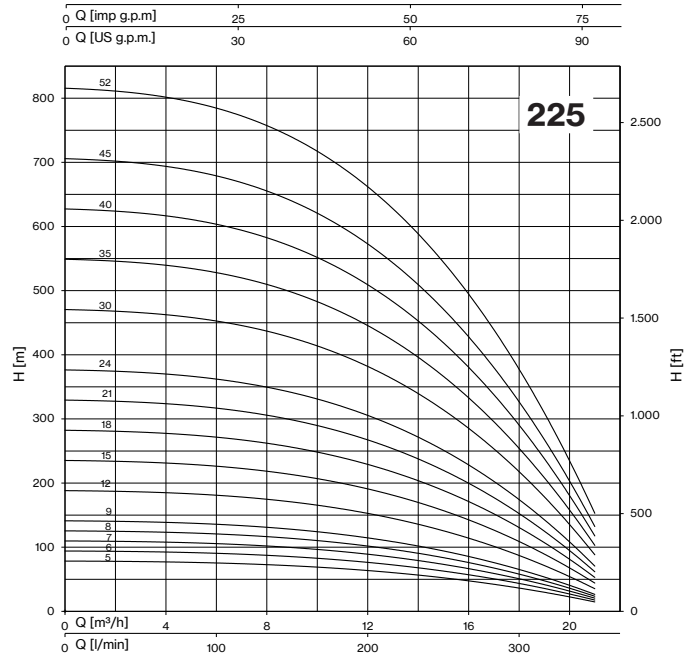
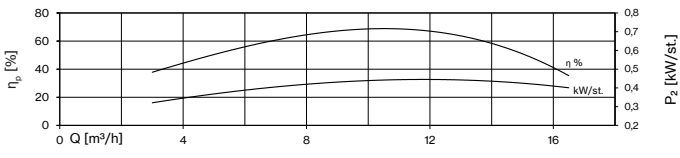
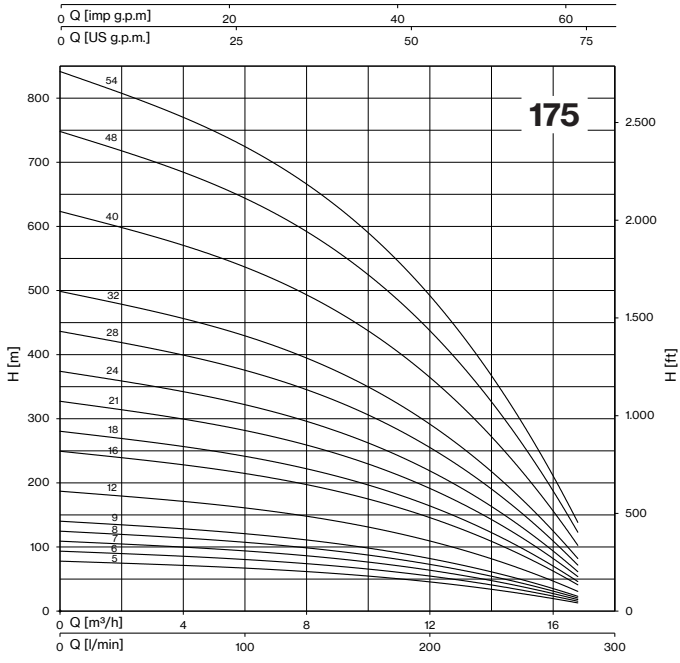
TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)		
		A	B	C	A	B	C
6E 350/02-20-4	4" NEMA	786	401	385	17,8	7,4	10,4
6E 350/03-30-4		878	458	420	20,3	8,3	12
6E 350/04-40-4		933	515	418	22	9,2	12,8
6E 350/05-55-4		1040	572	468	25,3	10	15,3
6E 350/07-75-4		1224	686	538	30,7	11,8	18,9
6E 350/10-100	6" NEMA	1457	857	600	56,3	14,3	42
6E 350/12-125		1571	971	600	61,1	16,1	45
6E 350/15-150		1842	1142	700	66,7	18,7	48
6E 350/17-175		2008	1308	700	71,2	21,2	50
6E 350/20-200		2254	1494	760	79,9	25,9	54
6E 350/25-250		2608	1778	830	95,3	30,3	65
6E 350/30-300*		3077	2187	890	119,1	49,1	70
6E 350/35-400*		3502	2472	1030	144,7	54,7	90
6E 350/40-400*		3891	2861	1030	152,5	62,5	90
6E 350/50-500*		4601	3431	1170	174,7	73,7	101

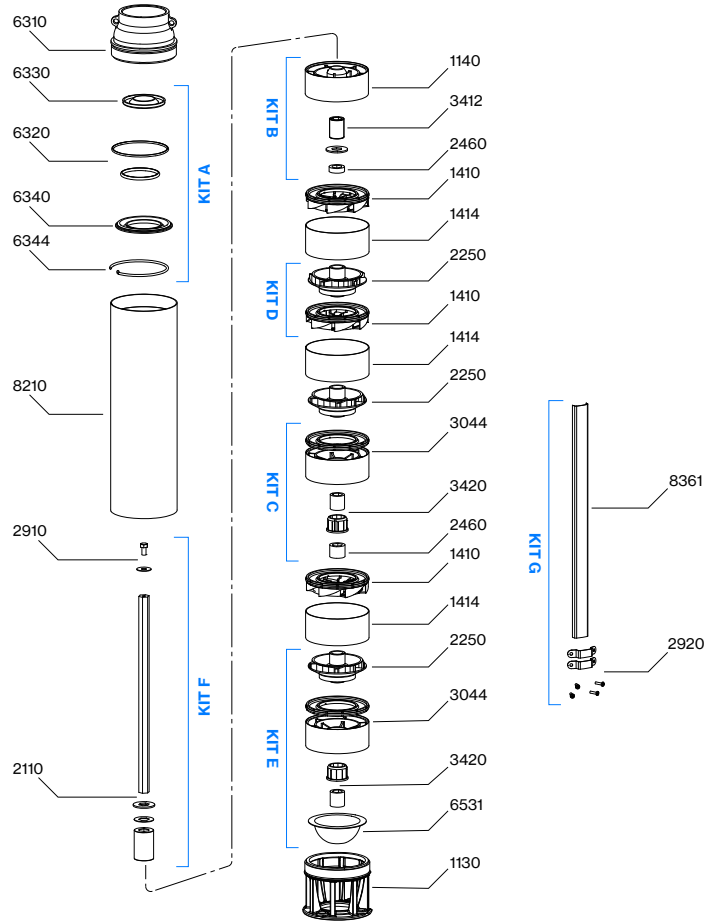
\* Pump supplied in separate liquid ends

## 6E 400

TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)		
		A	B	C	A	B	C
6E 400/03-40-4	4" NEMA	877	459	418	22,6	9,8	12,8
6E 400/04-55-4		984	516	468	26,1	10,8	15,3
6E 400/06-75-4		1200	630	570	52,9	12,9	40
6E 400/08-100	6" NEMA	1344	744	600	56,9	14,9	42
6E 400/10-125		1458	858	600	62,1	17,1	45
6E 400/12/150		1672	972	700	67,2	19,2	48
6E 400/14-175		1786	1086	700	71,4	21,4	50
6E 400/16-200		1960	1200	760	77,4	23,4	54
6E 400/20-250		2310	1480	830	92,7	27,7	65
6E 400/24-300		2597	1707	890	101,5	31,5	70
6E 400/28-400*		3103	2073	1030	136,9	46,9	90
6E 400/32-400*		3331	2301	1030	141,2	51,2	90
6E 400/40-500*		3927	2757	1170	160,8	59,8	101
6E 400/46-600*	-	3099	-	-	66,3	-	

\* Pump supplied in separate liquid ends





N. CODE	KIT	DESCRIPTION	MATERIAL
6320	<b>KIT A</b> <i>check valve</i>	<b>O-RINGS</b>	NBR
6330		<b>WING VALVE</b>	AISI 304
6340		<b>WING VALVE SUPPORT</b>	AISI 304
6344		<b>SEEGER</b>	AISI 304
1140	<b>KIT B</b> <i>upper support</i>	<b>UPPER SUPPORT</b>	PPO + PA
2460		<b>SPACER SLEEVE</b>	PPO
3412		<b>SUPPORT SLEEVE</b>	AISI 316L + CERAMIC
2460	<b>KIT C</b> <i>intermediate support</i>	<b>WASHER AND SPACERS</b>	PPO
3044		<b>SUPPORT WITH BUSH AND DISC</b>	PPO + PA
3420		<b>SUPPORT SLEEVE WITH SPACERS</b>	AISI 316L
1410	<b>KIT D</b> <i>stage</i>	<b>COMPLETE DIFFUSER</b>	PPO + AISI 304
2250		<b>IMPELLER</b>	PPO
2250	<b>KIT E</b> <i>first stage</i>	<b>FIRST IMPELLER</b>	PPO
3044		<b>SUPPORT WITH BUSH AND DISC</b>	PPO + PA
3420		<b>SUPPORT SLEEVE WITH SPACERS</b>	AISI 316L
6531		<b>GRID</b>	AISI 304
2110	<b>KIT F</b> <i>shaft with coupling</i>	<b>SHAFT WITH COUPLING</b>	AISI 431B + AISI 316
2910		<b>SCREW WITH WASHER</b>	AISI 304
2920	<b>KIT G</b> <i>cover cable</i>	<b>2× SCREW AND CLIP</b>	AISI 304
8361		<b>CABLE COVER</b>	AISI 304
1130	-	<b>BOTTOM CASING</b>	AISI 304
1414		<b>SPACER PIPE</b>	AISI 304
6310		<b>TOP CASING</b>	AISI 304
8210		<b>EXTERNAL PIPE</b>	AISI 304

# 6-8-10LMG lines

## Deepwell Borehole

Submersible multistage centrifugal pumps for 6", 8", 10" wells. Check valve built into the delivery outlet. The motor bracket and coupling are made according to NEMA standards. Most common applications are civil and agricultural.

### Construction features

<b>Suction and delivery outlet</b>	cast iron GG25
<b>Valve</b>	stainless steel AISI 304
<b>Impellers and diffusers</b>	cast iron GG25; AISI 304 impeller on request
<b>Upper bushings</b>	NBR rubber
<b>Shaft pump side</b>	stainless steel AISI 304
<b>Quantity of sand in the water</b>	max 50 g/m <sup>3</sup>

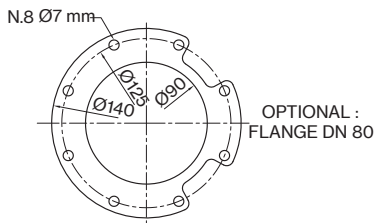
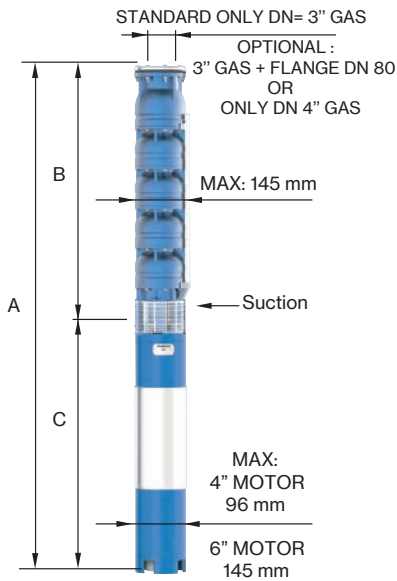


# 6LMG 38

50 Hz - 2900 rpm				Q							
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	300	400	500	600	700	800	
	P2		CURRENT	I/sec	0	5,00	6,67	8,33	10,00	11,67	13,33
	HP	kW	A	m³/h	0	18	24	30	36	42	48
6LMG 38/03	5,5	4	9,9	H (m)	43	36	33	30	27	22	15
6LMG 38/04	7,5	5,5	13,8		57	48	44	40	37	30	20
6LMG 38/05	10	7,5	17,5		71	60	55	50	46	37	25
6LMG 38/06	10	7,5	17,5		86	72	66	60	55	45	30
6LMG 38/07	12,5	9,2	21		100	84	77	70	64	52	35
6LMG 38/08	15	11	24,5		114	96	88	80	73	59	40
6LMG 38/09	15	11	24,5		129	108	99	90	82	67	45
6LMG 38/10	17,5	13	28		143	120	110	100	91	74	50
6LMG 38/11	17,5	13	28		157	132	121	110	101	82	55
6LMG 38/12	20	15	32		171	144	132	120	110	89	60
6LMG 38/13	20	15	32		186	156	143	130	119	97	65
6LMG 38/14	25	18,5	40		200	168	154	140	128	104	70
6LMG 38/15	25	18,5	40		214	180	165	150	137	111	75

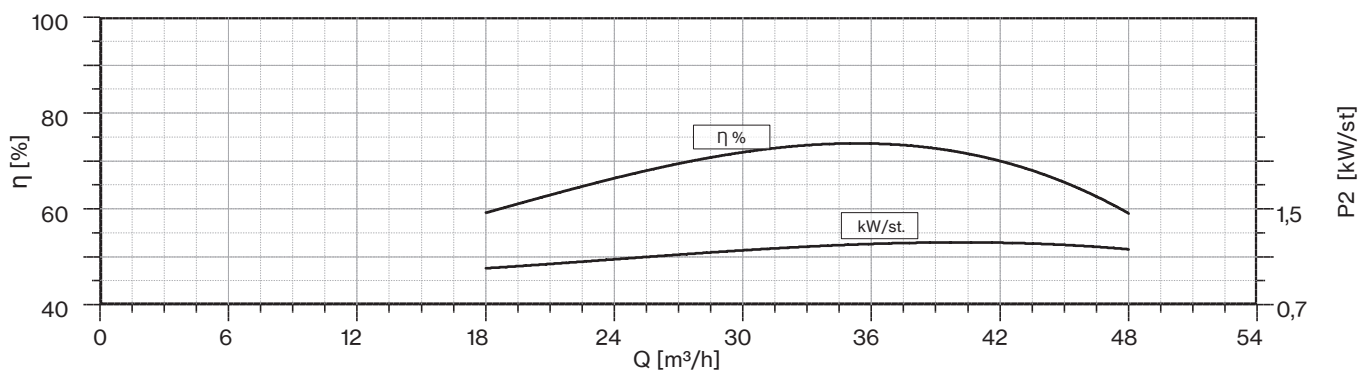
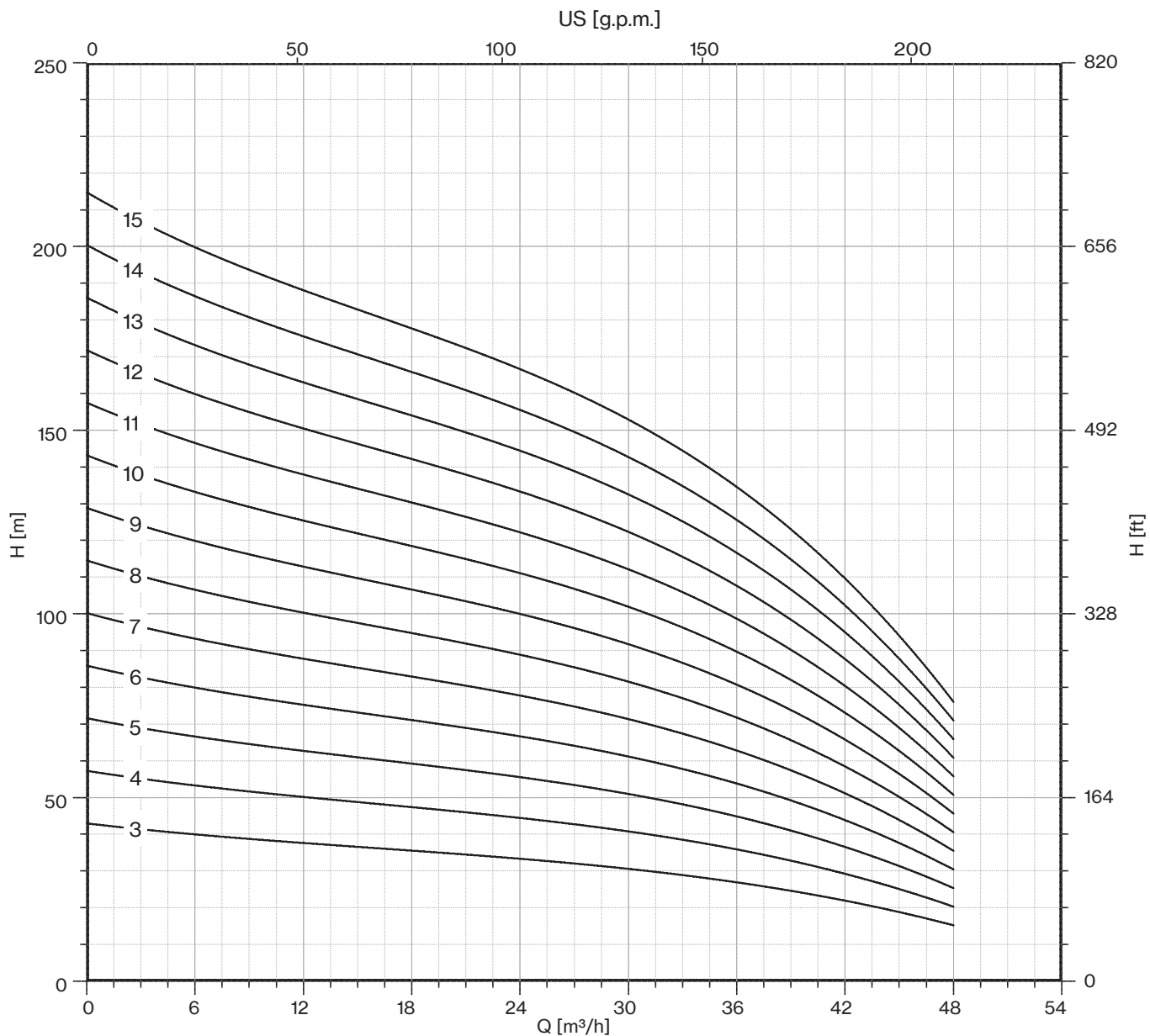
Max Eff. %	74
Max kW / St.	1,22

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3,4	3,4	3,8	8



FOR COMMERCIAL TUBE  
 EXTERNAL DIAMETER: 88,9 mm

TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
6LMG 38/03-4	4" NEMA	1064	596	468	15,3	19
6LMG 38/04-4		1235	697	538	18,6	23
6LMG 38/05	6" NEMA	1499	798	701	55	28
6LMG 38/06		1600	899	701	55	32
6LMG 38/07		1751	1000	751	60	36
6LMG 38/08		1912	1101	811	65	40
6LMG 38/09		2013	1202	811	65	44
6LMG 38/10		2144	1303	841	70	48
6LMG 38/11		2245	1404	841	70	52
6LMG 38/12		2436	1505	931	75	56
6LMG 38/13		2537	1606	931	75	60
6LMG 38/14		2698	1707	991	83	64
6LMG 38/15		2799	1808	991	83	69



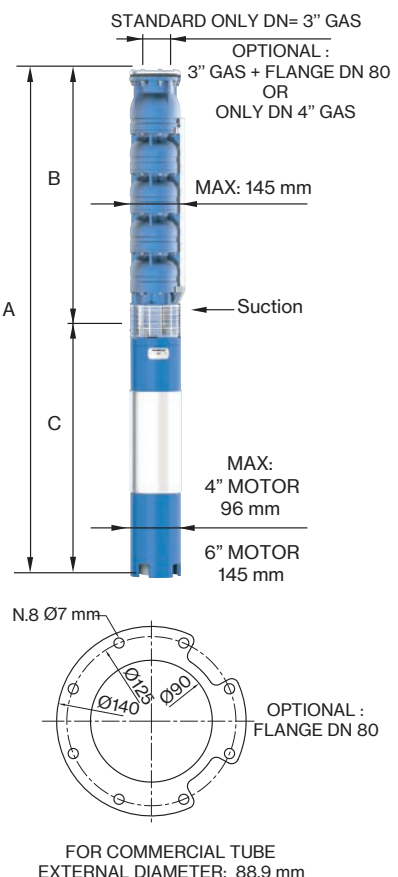


# 6LMG 38

50 Hz - 2900 rpm				Q							
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	300	400	500	600	700	800	
	P2		CURRENT	I/sec	0	5,00	6,67	8,33	10,00	11,67	13,33
	HP	kW	A	m³/h	0	18	24	30	36	42	48
6LMG 38/16	30	22	47,5	H (m)	229	192	176	160	146	119	80
6LMG 38/17	30	22	47,5		243	204	187	170	155	126	85
6LMG 38/18	30	22	47,5		257	216	198	180	165	134	90
6LMG 38/19	35	26	55		271	228	209	190	174	141	95
6LMG 38/20	35	26	55		286	240	220	200	183	149	100
6LMG 38/21	35	26	55		300	252	231	210	192	156	105
6LMG 38/22	35	26	55		314	264	242	220	201	163	110
6LMG 38/23	40	30	62,5		329	276	253	230	210	171	115
6LMG 38/24	40	30	62,5		343	288	264	240	219	178	120
6LMG 38/25	40	30	62,5		357	300	275	250	229	186	125
6LMG 38/26	50	37	78		371	312	286	260	238	193	130
6LMG 38/27	50	37	78		386	324	297	270	247	201	135
6LMG 38/28	50	37	78		400	336	308	280	256	208	140
6LMG 38/29	50	37	78		414	348	319	290	265	215	145
6LMG 38/30	50	37	78		429	360	330	300	274	223	150

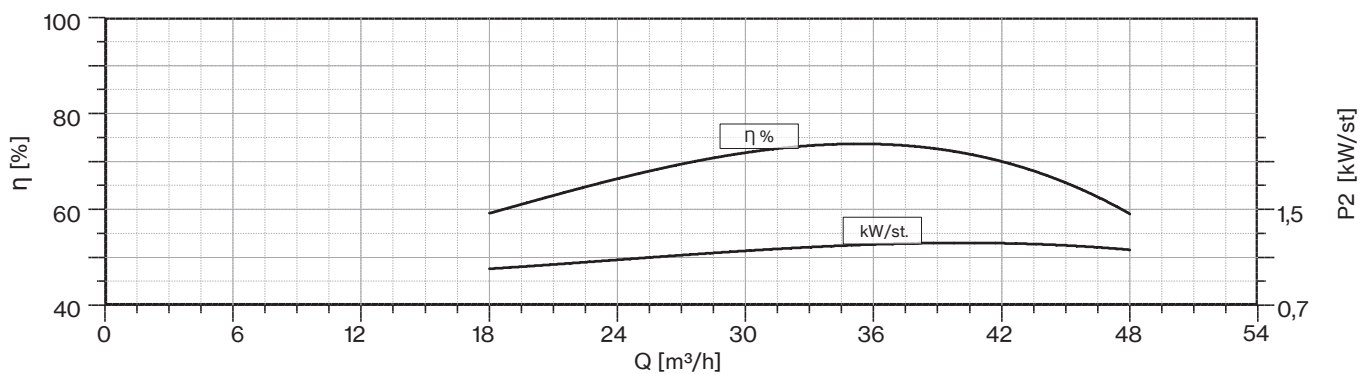
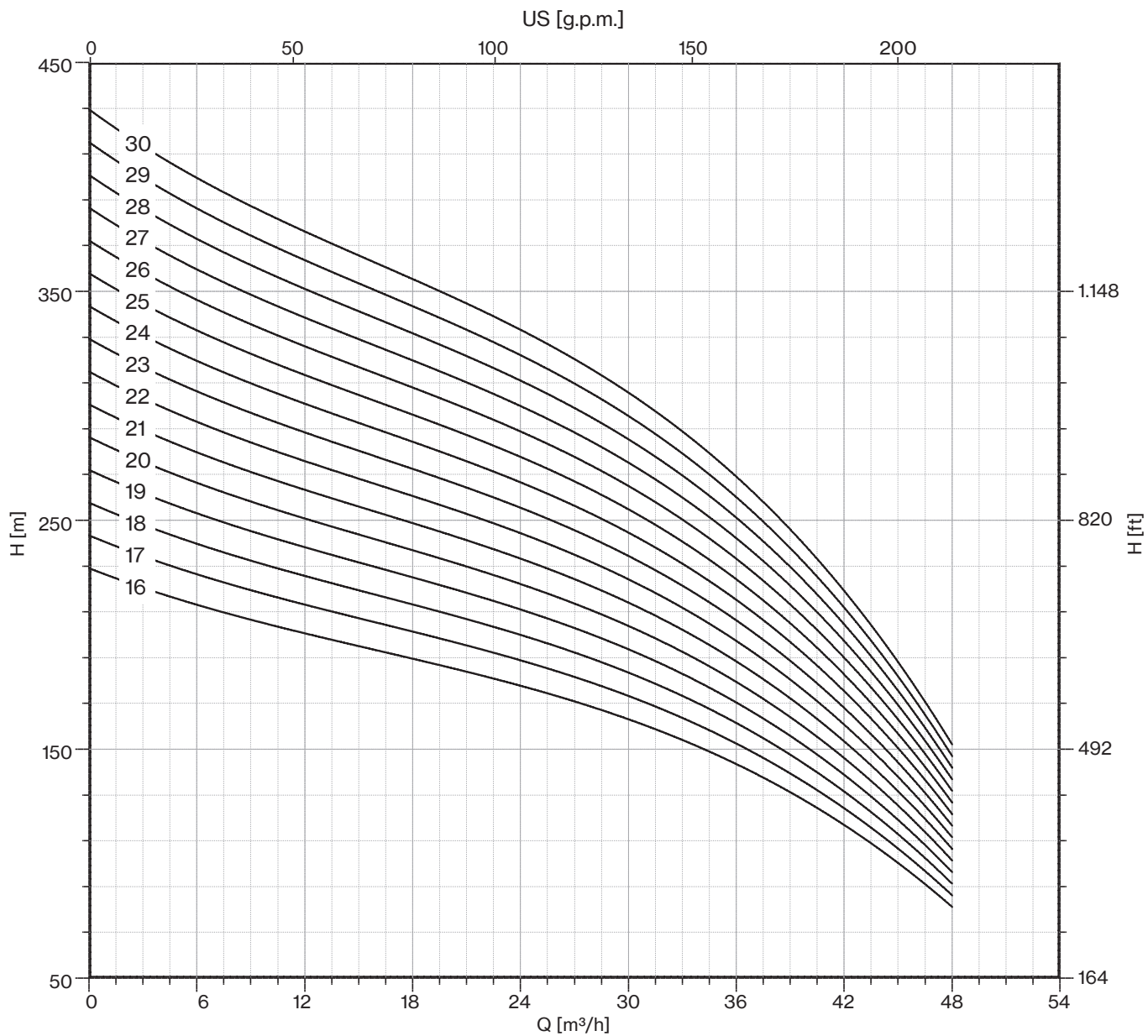
Max Eff. %	74
Max kW / St.	1,22

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3,4	3,4	3,8	8



TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
6LMG 38/16	6" NEMA	2980	1909	1071	92	73
6LMG 38/17		3081	2010	1071	92	77
6LMG 38/18		3182	2111	1071	92	81
6LMG 38/19		3393	2212	1181	100	85
6LMG 38/20		3494	2313	1181	100	89
6LMG 38/21		3595	2414	1181	100	93
6LMG 38/22		3696	2515	1181	100	97
6LMG 38/23		3867	2616	1251	108	101
6LMG 38/24		3968	2717	1251	108	105
6LMG 38/25		4069	2818	1251	108	110
6LMG 38/26		4260	2919	1341	118	114
6LMG 38/27		4361	3020	1341	118	118
6LMG 38/28		4462	3121	1341	118	122
6LMG 38/29		4563	3222	1341	118	126
6LMG 38/30		4664	3323	1341	118	130



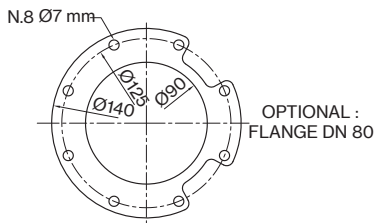
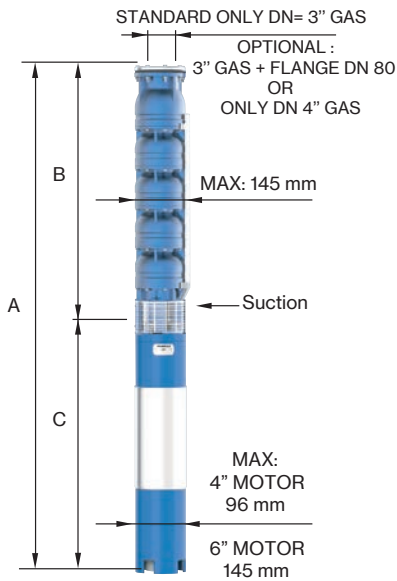


# 6LMG 48

50 Hz - 2900 rpm				Q								
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	400	500	600	700	800	900	1000	
	P2		CURRENT	I/sec	0	6,67	8,33	10,00	11,67	13,33	15,00	16,67
	HP	kW	A	m³/h	0	24	30	36	42	48	54	60
6LMG 48/03	5,5	4	9,9	H (m)	40	32	31	29	26	22	17	10
6LMG 48/04	7,5	5,5	13,8		53	43	41	38	34	29	22	13
6LMG 48/05	10	7,5	17,5		67	53	51	48	43	36	28	17
6LMG 48/06	12,5	9,2	21		80	64	61	57	51	43	33	20
6LMG 48/07	12,5	9,2	21		93	75	71	67	60	50	39	23
6LMG 48/08	15	11	24,5		107	85	81	76	68	57	44	27
6LMG 48/09	17,5	13	28		120	96	92	86	77	65	50	30
6LMG 48/10	17,5	13	28		133	107	102	95	85	72	55	33
6LMG 48/11	20	15	32		147	117	112	105	94	79	61	37
6LMG 48/12	20	15	32		160	128	122	114	102	86	66	40
6LMG 48/13	25	18,5	40		173	139	132	124	111	93	72	43
6LMG 48/14	25	18,5	40		187	149	142	133	119	100	77	47
6LMG 48/15	30	22	47,5		200	160	153	143	128	108	83	50

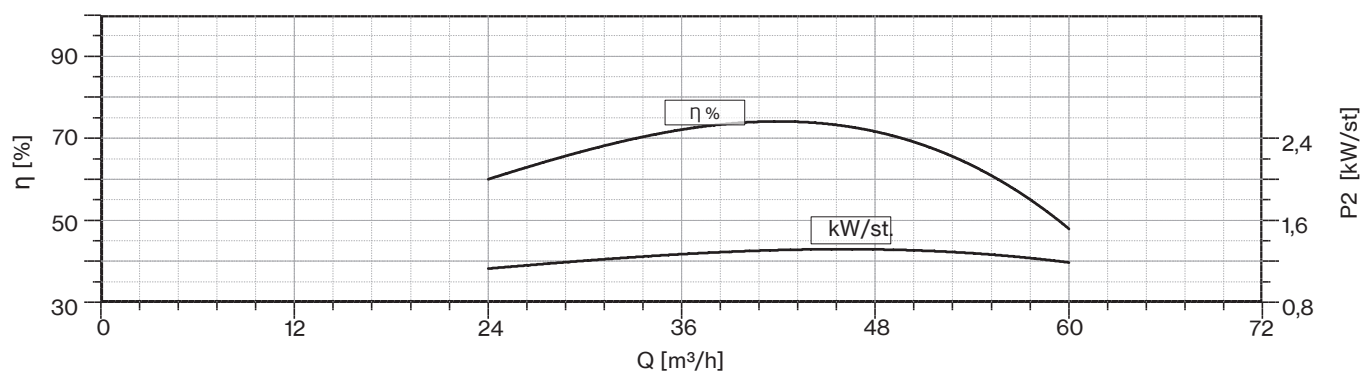
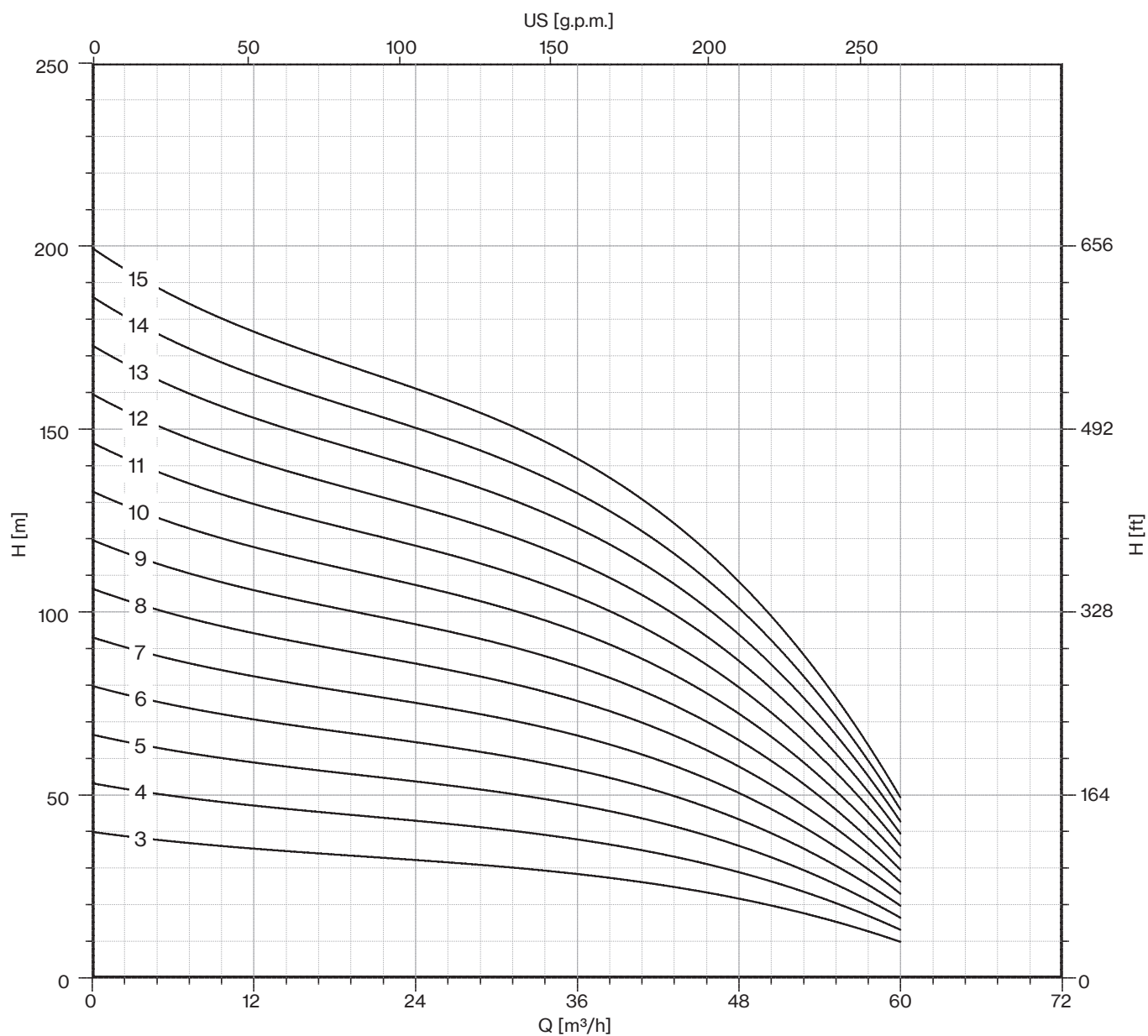
Max Eff. %	74
Max kW / St.	1,32

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3,45	3,5	3,8	5



FOR COMMERCIAL TUBE  
 EXTERNAL DIAMETER: 88,9 mm

TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
6LMG 48/03-4	4" NEMA	1064	596	468	15,3	19
6LMG 48/04-4		1235	697	538	18,6	23
6LMG 48/05		1499	798	701	55	28
6LMG 48/06		1650	899	751	60	32
6LMG 48/07	6" NEMA	1751	1000	751	60	36
6LMG 48/08		1912	1101	811	65	40
6LMG 48/09		2043	1202	841	70	44
6LMG 48/10		2144	1303	841	70	48
6LMG 48/11		2335	1404	931	75	52
6LMG 48/12		2436	1505	931	75	56
6LMG 48/13		2597	1606	991	83	60
6LMG 48/14		2698	1707	991	83	64
6LMG 48/15		2879	1808	1071	92	69

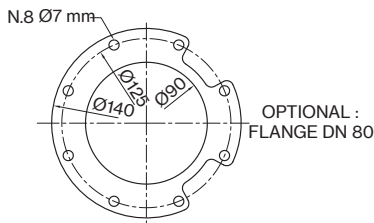
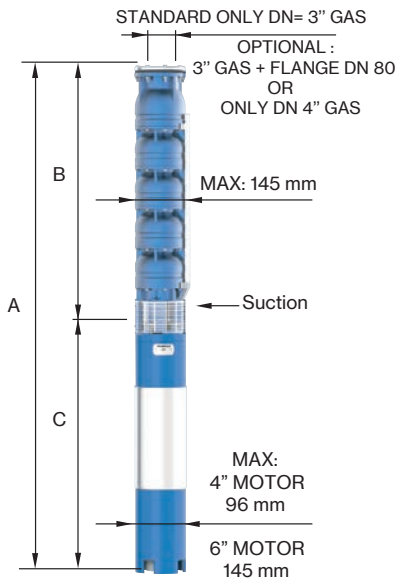


# 6LMG 48

50 Hz - 2900 rpm				Q								
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	400	500	600	700	800	900	1000	
	P2		CURRENT	I/sec	0	6,67	8,33	10,00	11,67	13,33	15,00	16,67
	HP	kW	A	m³/h	0	24	30	36	42	48	54	60
6LMG 48/16	30	22	47,5	H (m)	213	171	163	152	136	115	88	53
6LMG 48/17	30	22	47,5		227	181	173	162	145	122	94	57
6LMG 48/18	35	26	55		240	192	183	171	153	129	99	60
6LMG 48/19	35	26	55		253	203	193	181	162	136	105	63
6LMG 48/20	35	26	55		267	213	203	190	170	143	110	67
6LMG 48/21	40	30	62,5		280	224	214	200	179	151	116	70
6LMG 48/22	40	30	62,5		293	235	224	209	187	158	121	73
6LMG 48/23	40	30	62,5		307	245	234	219	196	165	127	77
6LMG 48/24	50	37	78		320	256	244	228	204	172	132	80
6LMG 48/25	50	37	78		333	267	254	238	213	179	138	83
6LMG 48/26	50	37	78		347	277	264	247	221	186	143	87
6LMG 48/27	50	37	78		360	288	275	257	230	194	149	90
6LMG 48/28	50	37	78	373	299	285	266	238	201	154	93	

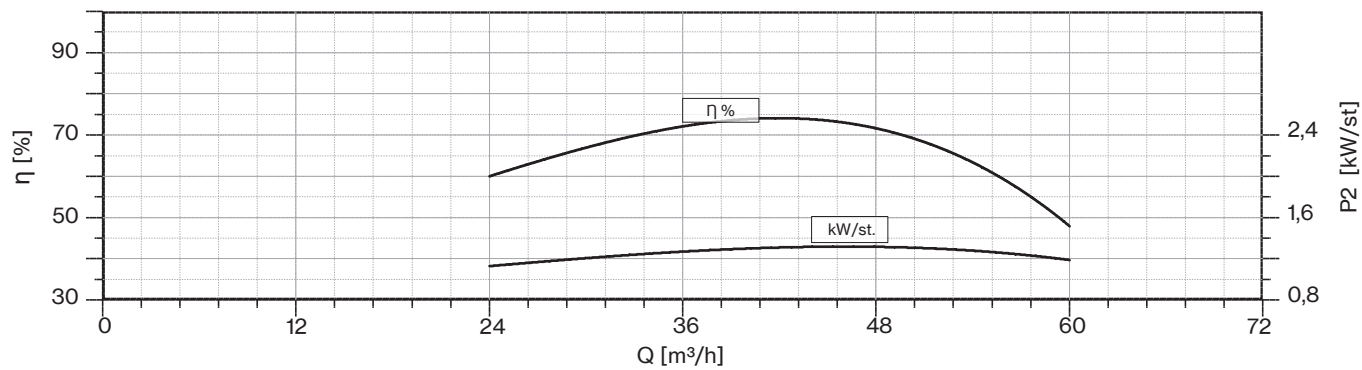
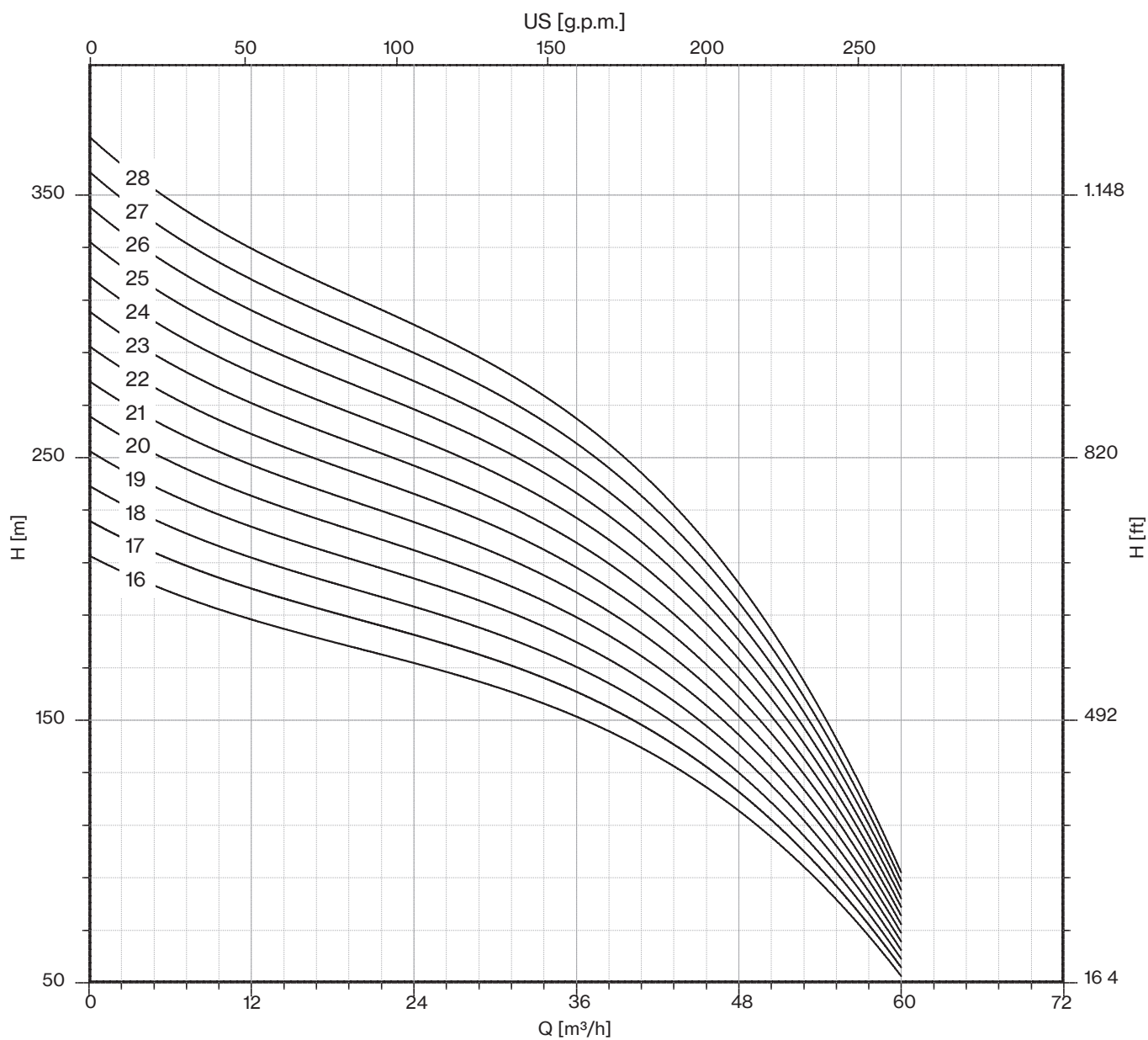
Max Eff. %	74
Max kW / St.	1,32

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3,45	3,5	3,8	5



FOR COMMERCIAL TUBE  
 EXTERNAL DIAMETER: 88,9 mm

TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
6LMG 48/16	6" NEMA	2980	1909	1071	92	73
6LMG 48/17		3081	2010	1071	92	77
6LMG 48/18		3292	2111	1181	100	81
6LMG 48/19		3393	2212	1181	100	85
6LMG 48/20		3494	2313	1181	100	89
6LMG 48/21		3665	2414	1251	108	93
6LMG 48/22		3766	2515	1251	108	97
6LMG 48/23		3867	2616	1251	108	101
6LMG 48/24		4058	2717	1341	118	105
6LMG 48/25		4159	2818	1341	118	110
6LMG 48/26		4260	2919	1341	118	114
6LMG 48/27		4361	3020	1341	118	118
6LMG 48/28	4462	3121	1341	118	122	

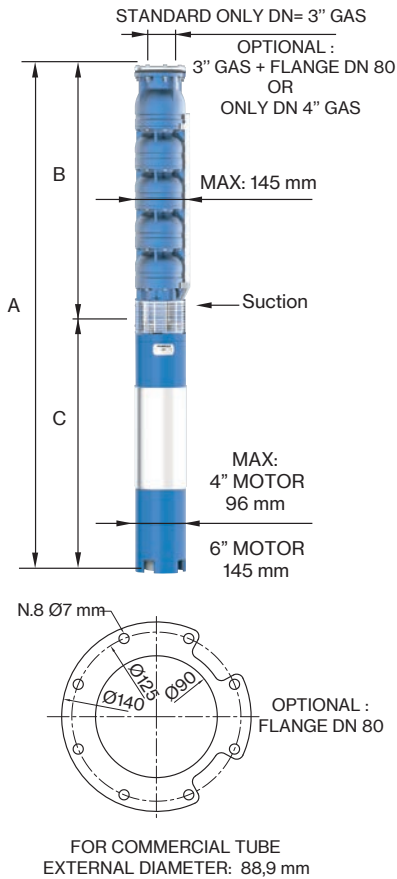


# 6LMG 60

50 Hz - 2900 rpm				Q						
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	500	600	800	1000	1200	
	P2		CURRENT	0	8,33	10,00	13,33	16,67	20,00	
	HP	kW	A	I/sec						
			m³/h	0	30	36	48	60	72	
6LMG 60/03	7,5	5,5	13,8	H (m)	39	30	28	24	18	8
6LMG 60/04	10	7,5	17,5		52	40	38	32	24	10
6LMG 60/05	10	7,5	17,5		65	50	47	40	30	13
6LMG 60/06	12,5	9,2	21		78	60	56	48	35	16
6LMG 60/07	15	11	24,5		91	70	66	56	41	18
6LMG 60/08	17,5	13	28		104	80	75	64	47	21
6LMG 60/09	17,5	13	28		117	90	85	72	53	23
6LMG 60/10	20	15	32		130	100	94	80	59	26
6LMG 60/11	25	18,5	40		143	110	103	87	65	29
6LMG 60/12	25	18,5	40		156	120	113	95	71	31
6LMG 60/13	25	18,5	40		169	130	122	103	77	34
6LMG 60/14	30	22	47,5		182	140	132	111	83	36
6LMG 60/15	30	22	47,5		195	150	141	119	89	39
6LMG 60/16	35	26	55		208	160	150	127	94	42
6LMG 60/17	35	26	55		221	170	160	135	100	44
6LMG 60/18	35	26	55		234	180	169	143	106	47
6LMG 60/19	40	30	62,5		247	190	179	151	112	49
6LMG 60/20	40	30	62,5		260	200	188	159	118	52
6LMG 60/21	40	30	62,5		273	210	197	167	124	55
6LMG 60/22	50	37	78		286	220	207	175	130	57
6LMG 60/23	50	37	78		299	230	216	183	136	60
6LMG 60/24	50	37	78		312	240	226	191	142	62
6LMG 60/25	50	37	78		325	250	235	199	148	65

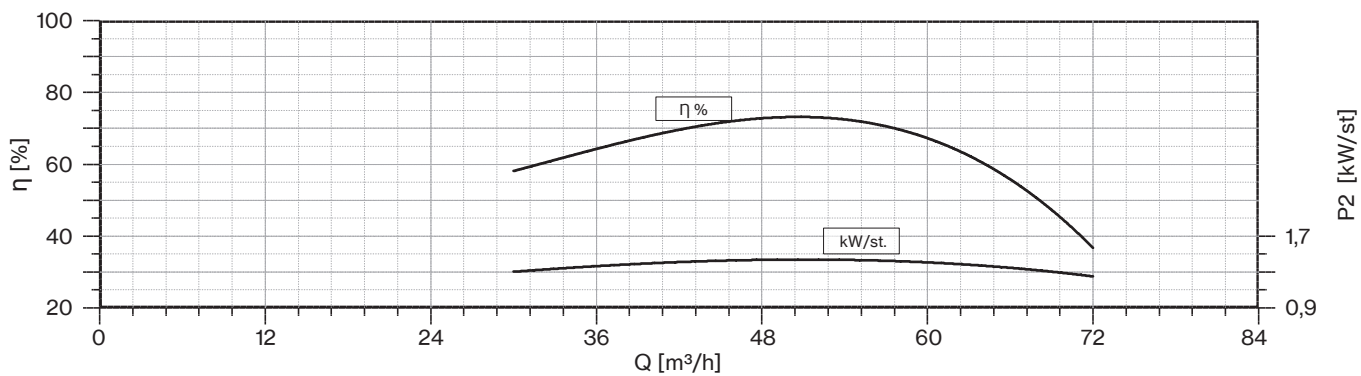
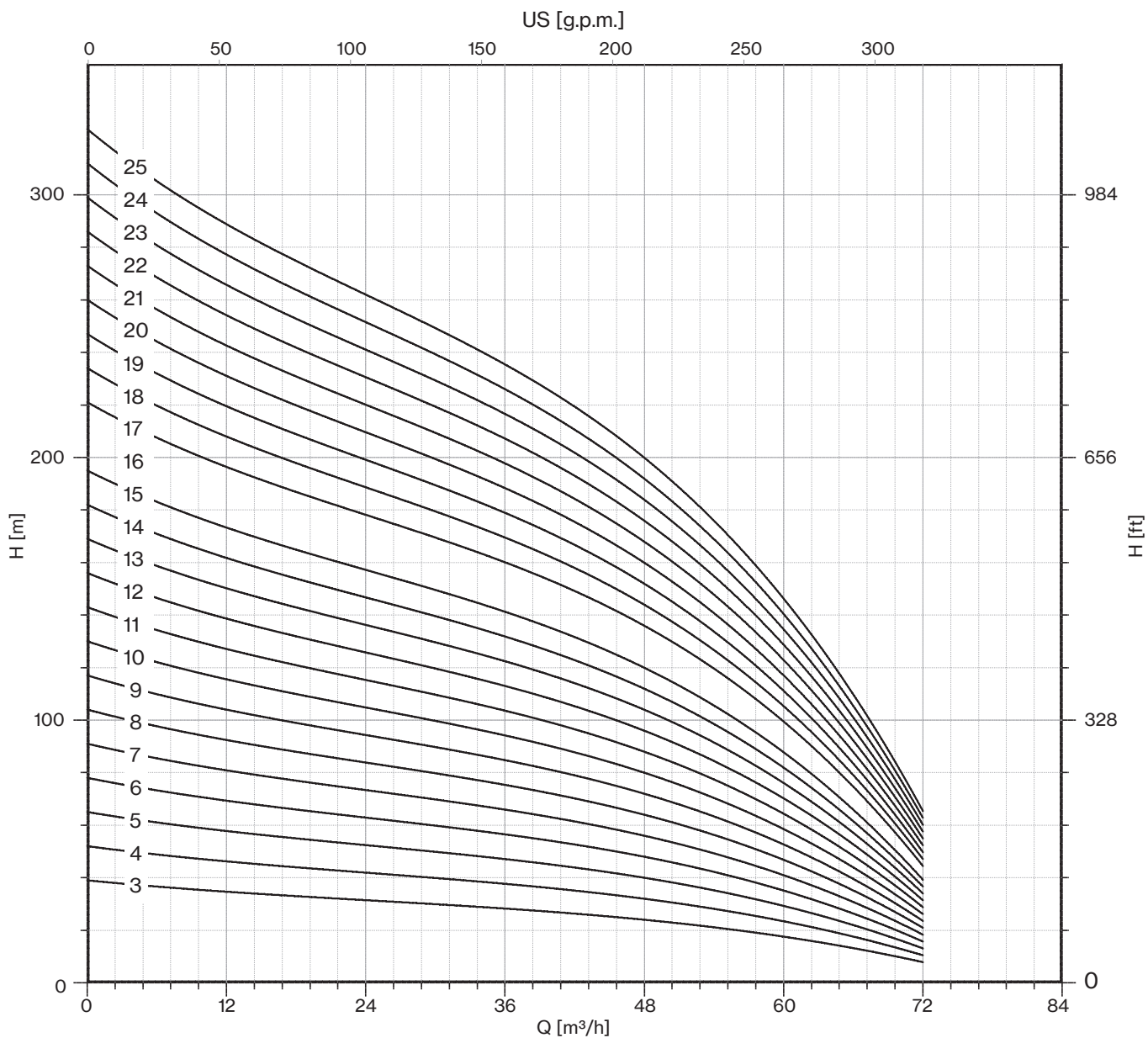
Max Eff. %	73,6
Max kW / St.	1,44

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3,8	3,8	5,1	7,1



TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
6LMG 60/03-4	4" NEMA	1152	614	538	18,6	21
6LMG 60/04	6" NEMA	1422	721	701	55	25
6LMG 60/05		1529	828	701	55	30
6LMG 60/06		1686	935	751	60	34
6LMG 60/07		1853	1042	811	65	39
6LMG 60/08		1990	1149	841	70	43
6LMG 60/09		2097	1256	841	70	48
6LMG 60/10		2294	1363	931	75	52
6LMG 60/11		2461	1470	991	83	57
6LMG 60/12		2568	1577	991	83	61
6LMG 60/13		2675	1684	991	83	66
6LMG 60/14		2862	1791	1071	92	70
6LMG 60/15		2969	1898	1071	92	75
6LMG 60/16		3186	2005	1181	100	79
6LMG 60/17		3293	2112	1181	100	84
6LMG 60/18		3400	2219	1181	100	88
6LMG 60/19		3577	2326	1251	108	93
6LMG 60/20		3684	2433	1251	108	97
6LMG 60/21		3791	2540	1251	108	102
6LMG 60/22		3988	2647	1341	118	106
6LMG 60/23		4095	2754	1341	118	111
6LMG 60/24		4202	2861	1341	118	115
6LMG 60/25		4309	2968	1341	118	120





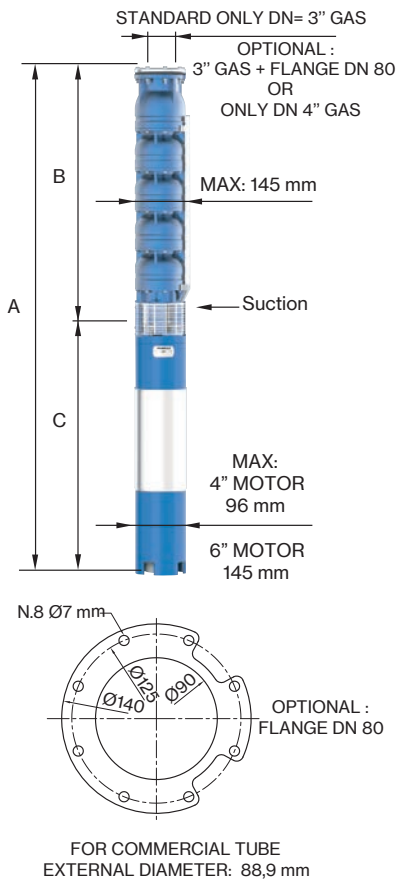


# 6LMG 70

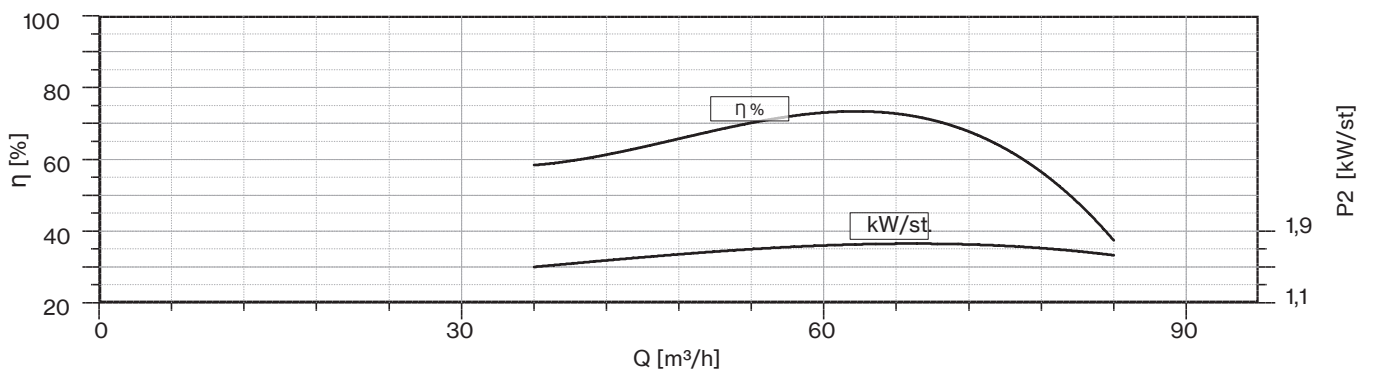
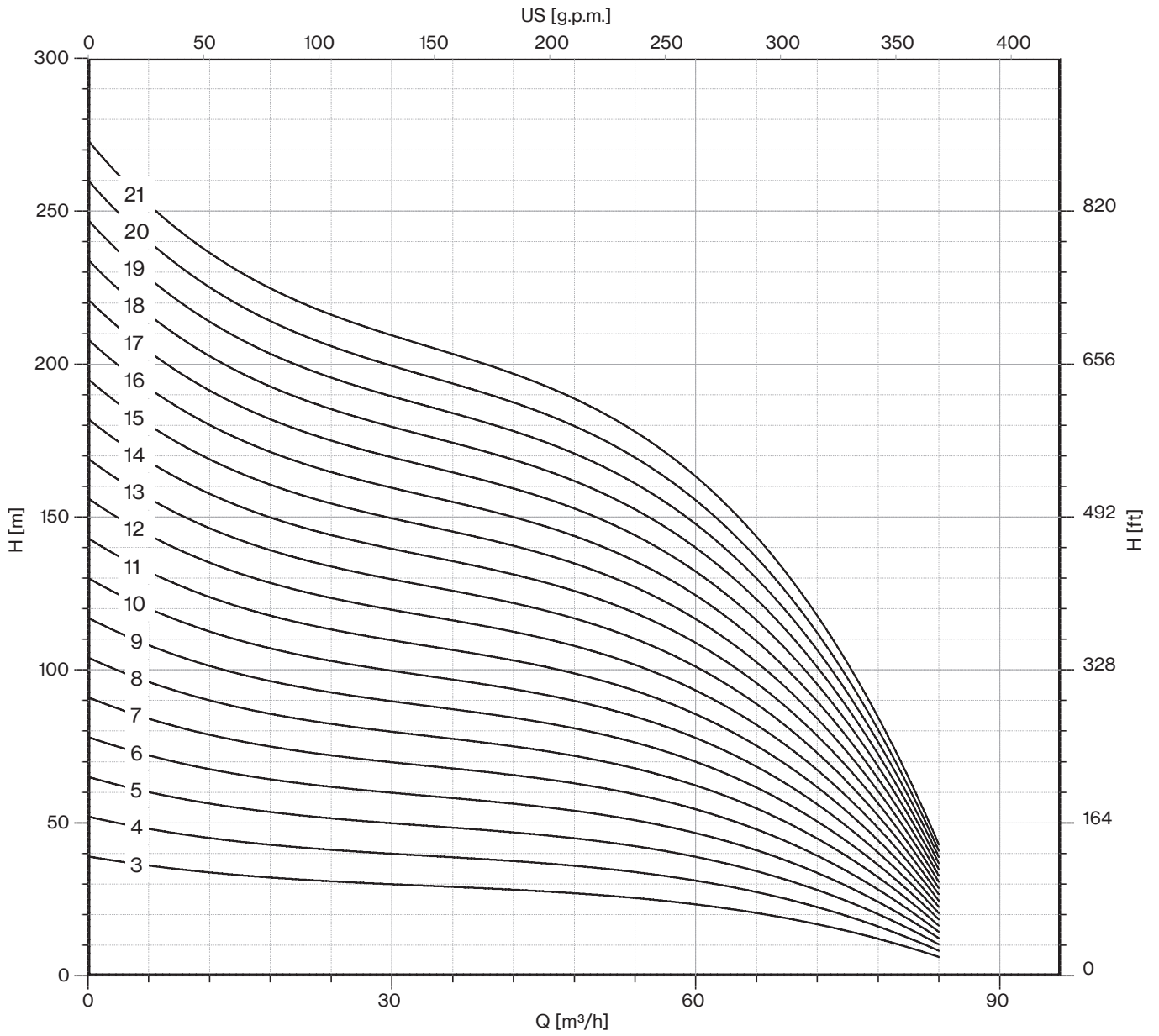
50 Hz - 2900 rpm				Q						
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	600	800	1000	1200	1400	
	P2		CURRENT	0	10,00	13,33	16,67	20,00	23,33	
	HP	kW	A	0	36	48	60	72	84	
6LMG 70/03	7,5	5,5	13,8	H (m)	39	29	26	23	17	6
6LMG 70/04	10	7,5	17,5		52	39	35	31	23	8
6LMG 70/05	12,5	9,2	21		65	49	44	39	29	10
6LMG 70/06	15	11	24,5		78	59	53	47	34	12
6LMG 70/07	17,5	13	28		91	69	62	55	40	14
6LMG 70/08	20	15	32		104	78	70	62	46	16
6LMG 70/09	20	15	32		117	88	79	70	51	18
6LMG 70/10	25	18,5	40		130	98	88	78	57	20
6LMG 70/11	30	22	47,5		143	108	97	86	63	22
6LMG 70/12	30	22	47,5		156	118	106	94	68	24
6LMG 70/13	30	22	47,5		169	127	114	101	74	26
6LMG 70/14	35	26	55		182	137	123	109	80	28
6LMG 70/15	35	26	55		195	147	132	117	86	30
6LMG 70/16	40	30	62,5		208	157	141	125	91	32
6LMG 70/17	40	30	62,5		221	167	150	133	97	34
6LMG 70/18	50	37	78		234	176	158	140	103	36
6LMG 70/19	50	37	78		247	186	167	148	108	38
6LMG 70/20	50	37	78		260	196	176	156	114	40
6LMG 70/21	50	37	78		273	206	185	164	120	42

Max Eff. %	74
Max kW / St.	1,74

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3,8	3,8	5,1	7,1



TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
6LMG 70/03-4	4" NEMA	1152	614	538	18,6	21
6LMG 70/04	6" NEMA	1422	721	701	55	25
6LMG 70/05		1579	828	751	60	30
6LMG 70/06		1746	935	811	65	34
6LMG 70/07		1883	1042	841	70	39
6LMG 70/08		2080	1149	931	75	43
6LMG 70/09		2187	1256	931	75	48
6LMG 70/10		2354	1363	991	83	52
6LMG 70/11		2541	1470	1071	92	57
6LMG 70/12		2648	1577	1071	92	61
6LMG 70/13		2755	1684	1071	92	66
6LMG 70/14		2972	1791	1181	100	70
6LMG 70/15		3079	1898	1181	100	75
6LMG 70/16		3256	2005	1251	108	79
6LMG 70/17		3363	2112	1251	108	84
6LMG 70/18		3560	2219	1341	118	88
6LMG 70/19		3667	2326	1341	118	93
6LMG 70/20		3774	2433	1341	118	97
6LMG 70/21		3881	2540	1341	118	102

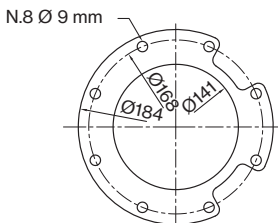
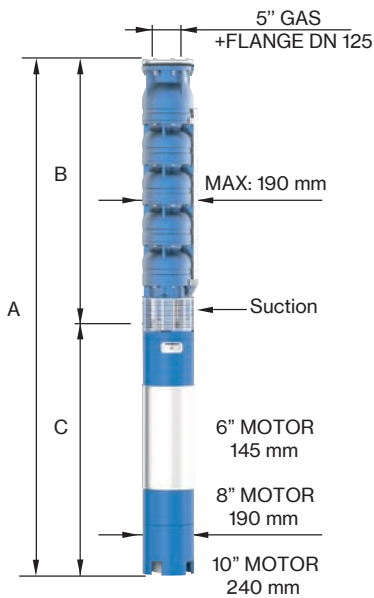


# 8LMG 80

50 Hz - 2900 rpm				Q							
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	600	800	1000	1200	1400	1600	
	P2		CURRENT	I/sec	0	10,00	13,33	16,67	20,00	23,33	26,67
	HP	kW	A	m³/h	0	36	48	60	72	84	96
8LMG 80/01	7,5	5,5	12,5	H (m)	26	22	21	19	18	15	11
8LMG 80/02	15	11	24,5		53	45	42	39	35	30	23
8LMG 80/03	20	15	32		79	67	63	58	53	44	34
8LMG 80/04	30	22	47,5		105	89	84	78	70	59	45
8LMG 80/05	35	26	55		131	111	105	97	88	74	56
8LMG 80/06	40	30	62,5		158	134	126	116	105	89	68
8LMG 80/07	50	37	78		184	156	147	136	123	103	79
8LMG 80/08	60	45	92		210	178	168	155	140	118	90
8LMG 80/09	60	45	92		236	200	189	174	158	133	101
8LMG 80/10	75	55	113,5		263	223	210	194	175	148	113
8LMG 80/11	75	55	113,5		289	245	231	213	193	162	124
8LMG 80/12	90	66	134,5		315	267	252	233	210	177	135
8LMG 80/13	90	66	134,5		341	289	273	252	228	192	146
8LMG 80/14	100	75	149,5		368	312	294	271	245	207	158
8LMG 80/15	100	75	149,5		394	334	315	291	263	221	169

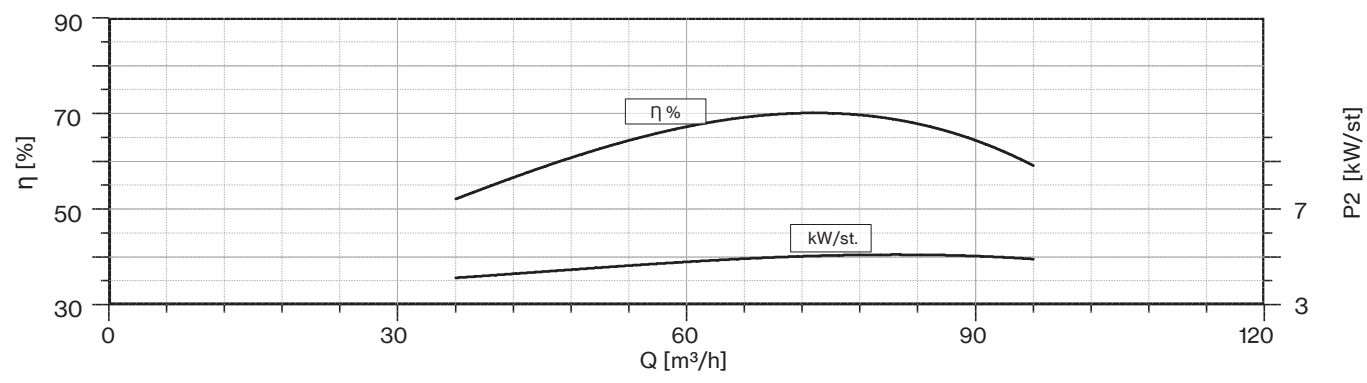
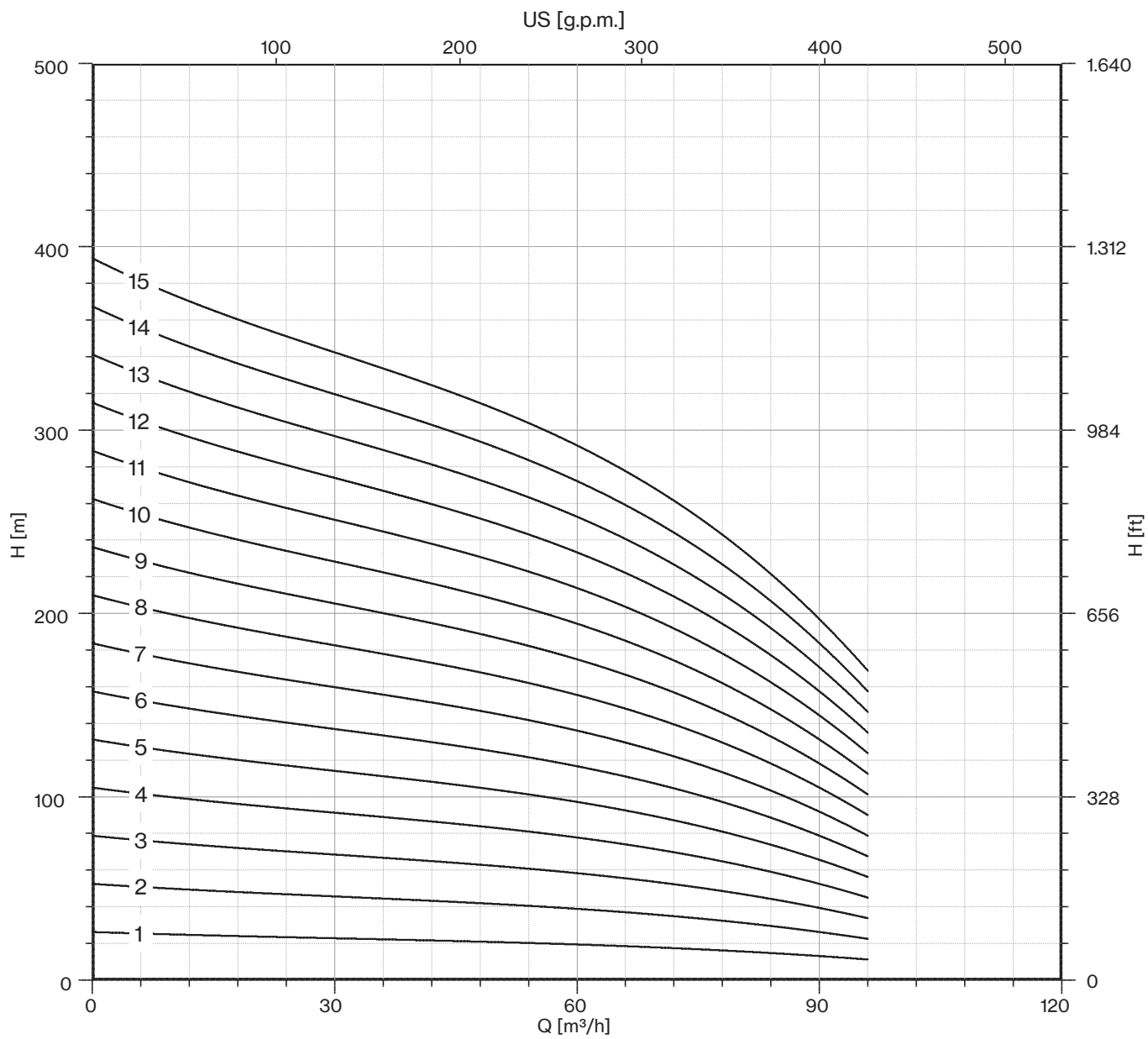
Max Eff. %	70
Max kW / St.	5,1

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3	3	3,5	4,5



FOR COMMERCIAL TUBE  
EXTERNAL DIAMETER: 139,7 mm

TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
8LMG 80/01-6	6" NEMA	1198	527	671	45	23
8LMG 80/02-6		1463	652	811	65	31
8LMG 80/03-6		1708	777	931	75	39
8LMG 80/04-6		1973	902	1071	92	48
8LMG 80/05-6		2208	1027	1181	100	56
8LMG 80/06-6		2403	1152	1251	108	64
8LMG 80/07-6		2618	1277	1341	118	73
8LMG 80/08	8" NEMA	2525	1402	1123	178	81
8LMG 80/09		2650	1527	1123	178	89
8LMG 80/10		2885	1652	1233	200	98
8LMG 80/11		3010	1777	1233	200	106
8LMG 80/12		3205	1902	1303	214	114
8LMG 80/13		3330	2027	1303	214	122
8LMG 80/14		3535	2152	1383	230	131
8LMG 80/15		3660	2277	1383	230	139

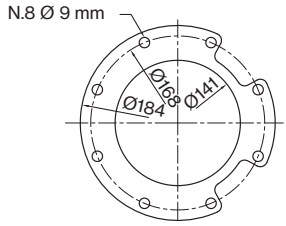
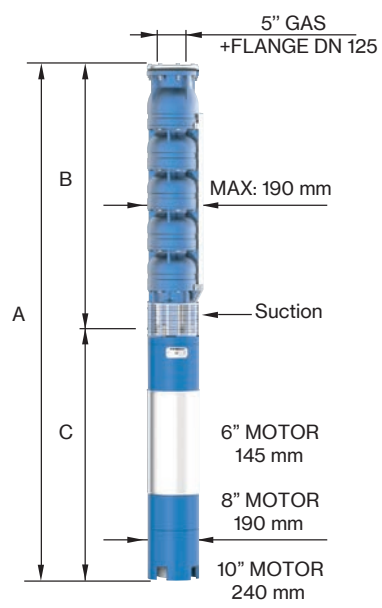


# 8LMG 92

50 Hz - 2900 rpm				Q								
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	800	1000	1200	1400	1600	1800	2000	
	P2		CURRENT	I/sec	0	13,33	16,67	20,00	23,33	26,67	30,00	33,33
	HP	kW	A	m³/h	0	48	60	72	84	96	108	120
8LMG 92/01	10	7,5	17,5	H (m)	26	22	21	20	18	15	13	10
8LMG 92/02	17,5	13	28		53	44	42	39	35	31	25	20
8LMG 92/03	25	18,5	40		79	66	63	59	53	46	38	29
8LMG 92/04	35	26	55		105	89	84	78	70	61	50	39
8LMG 92/05	40	30	62,5		131	111	104	98	88	76	63	49
8LMG 92/06	50	37	78		158	133	125	117	105	92	75	59
8LMG 92/07	60	45	92		184	155	146	137	123	107	88	68
8LMG 92/08	75	55	113,5		210	177	167	156	140	122	100	78
8LMG 92/09	75	55	113,5		236	199	188	176	158	137	113	88
8LMG 92/10	90	66	134,5		263	221	209	195	175	153	125	98
8LMG 92/11	90	66	134,5		289	243	230	215	193	168	138	107
8LMG 92/12	100	75	149,5		315	266	251	234	210	183	150	117
8LMG 92/13	100	75	149,5		341	288	271	254	228	198	163	127
8LMG 92/14	125	92	185		368	310	292	273	245	214	175	137
8LMG 92/15	125	92	185		394	332	313	293	263	229	188	146

Max Eff. %	70
Max kW / St.	5,9

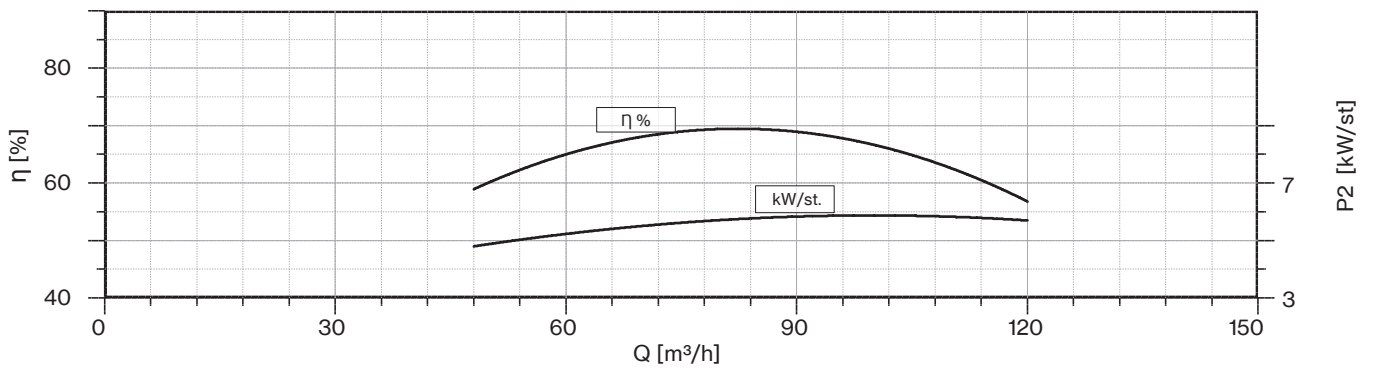
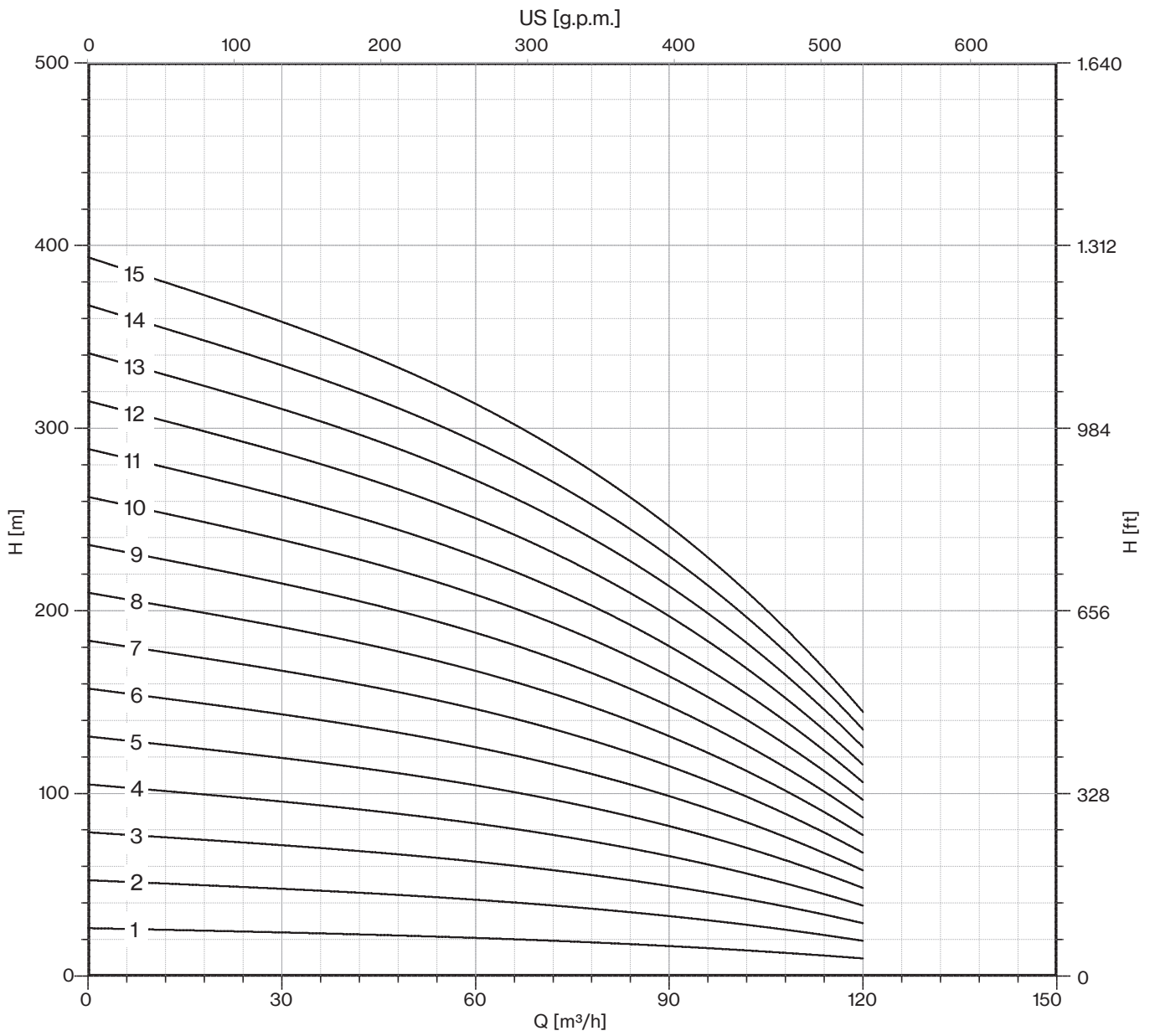
NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3	4	5	8



FOR COMMERCIAL TUBE  
EXTERNAL DIAMETER: 139,7 mm

TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
8LMG 92/01-6	6" NEMA	1228	527	701	55	23
8LMG 92/02-6		1493	652	841	70	31
8LMG 92/03-6		1768	777	991	83	39
8LMG 92/04-6		2083	902	1181	100	48
8LMG 92/05-6		2278	1027	1251	108	56
8LMG 92/06-6		2493	1152	1341	118	64
8LMG 92/07	8" NEMA	2400	1277	1123	178	73
8LMG 92/08		2635	1402	1233	200	81
8LMG 92/09		2760	1527	1233	200	89
8LMG 92/10		2955	1652	1303	214	98
8LMG 92/11		3080	1777	1303	214	106
8LMG 92/12		3285	1902	1383	230	114
8LMG 92/13		3410	2027	1383	230	122
8LMG 92/14		3735	2152	1583	270	131
8LMG 92/15		3860	2277	1583	270	139



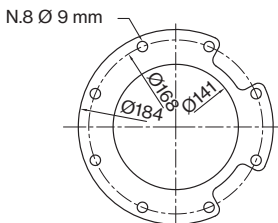
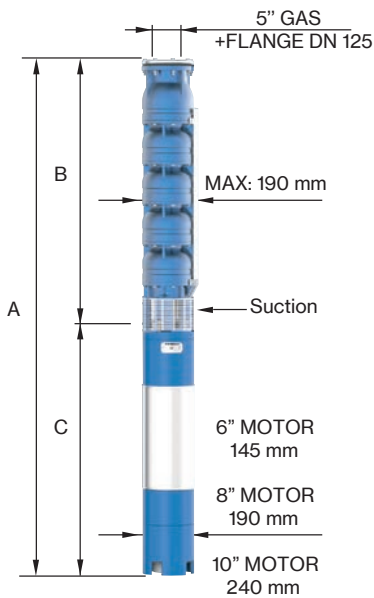


# 8LMG 110

50 Hz - 2900 rpm				Q									
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	1000	1200	1400	1600	1800	2000	2200	2400	
	P2		CURRENT	I/sec	0	16,67	20,00	23,33	26,67	30,00	33,33	36,67	40,00
	HP	kW	A	m³/h	0	60	72	84	96	108	120	132	144
8LMG 110/01	10	7,5	17,5	H (m)	26	22	21	20	19	18	16	14	11
8LMG 110/02	20	15	32		53	44	42	40	38	35	32	28	22
8LMG 110/03	30	22	47,5		79	66	63	60	57	53	48	42	33
8LMG 110/04	40	30	62,5		105	87	84	80	76	71	65	55	45
8LMG 110/05	50	37	78		131	109	105	100	95	89	81	69	56
8LMG 110/06	60	45	92		158	131	126	120	114	106	97	83	67
8LMG 110/07	75	55	113,5		184	153	147	140	133	124	113	97	78
8LMG 110/08	90	66	134,5		210	175	168	160	152	142	129	111	89
8LMG 110/09	90	66	134,5		237	197	189	180	171	159	145	125	100
8LMG 110/10	100	75	149,5		263	219	210	200	190	177	161	139	111
8LMG 110/11	125	92	185		289	240	231	220	209	195	178	152	123
8LMG 110/12	125	92	185		315	262	252	240	228	213	194	166	134
8LMG 110/13	125	92	185		342	284	273	260	247	230	210	180	145

Max Eff. %	74
Max kW / St.	7,3

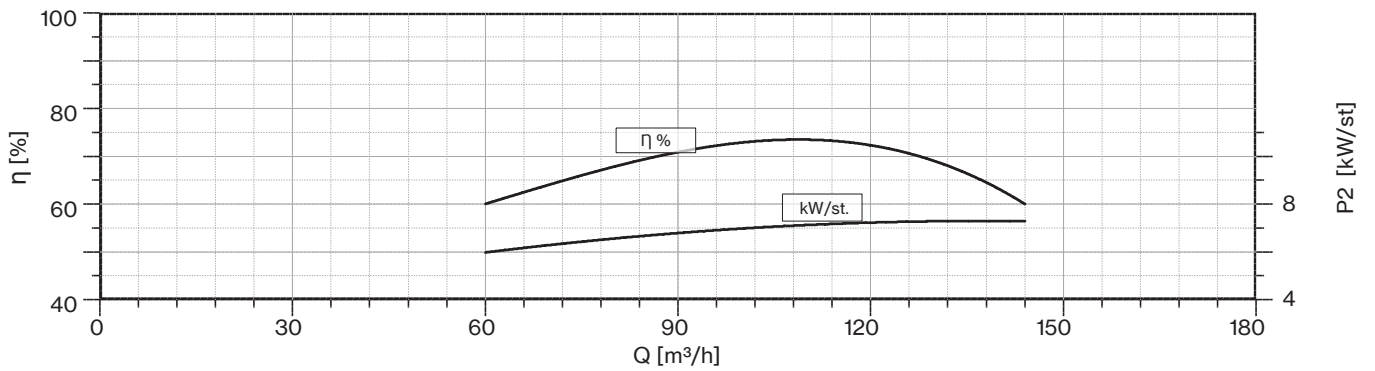
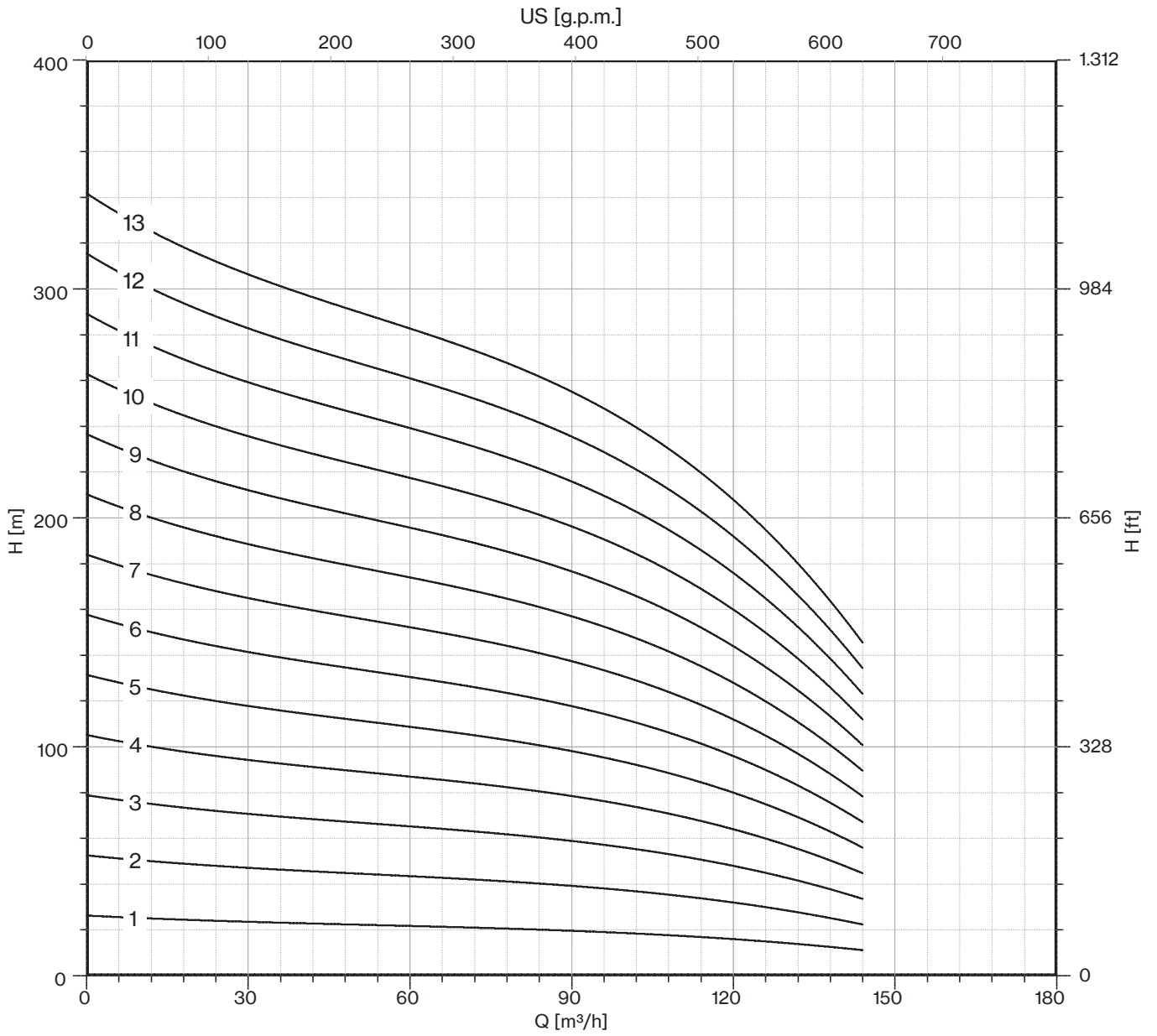
NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	2,5	3,5	4,5	8



FOR COMMERCIAL TUBE  
EXTERNAL DIAMETER: 139,7 mm

TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
8LMG 110/01-6	6" NEMA	1228	527	701	55	23
8LMG 110/02-6		1583	652	931	75	32
8LMG 110/03-6		1848	777	1071	92	40
8LMG 110/04-6		2153	902	1251	108	49
8LMG 110/05-6	8" NEMA	2368	1027	1341	118	58
8LMG 110/06		2275	1152	1123	178	66
8LMG 110/07		2510	1277	1233	200	75
8LMG 110/08		2705	1402	1303	214	83
8LMG 110/09		2830	1527	1303	214	92
8LMG 110/10		3035	1652	1383	230	101
8LMG 110/11		3360	1777	1583	270	109
8LMG 110/12		3485	1902	1583	270	118
8LMG 110/13	3610	2027	1583	270	126	





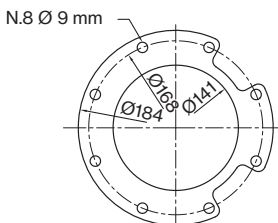
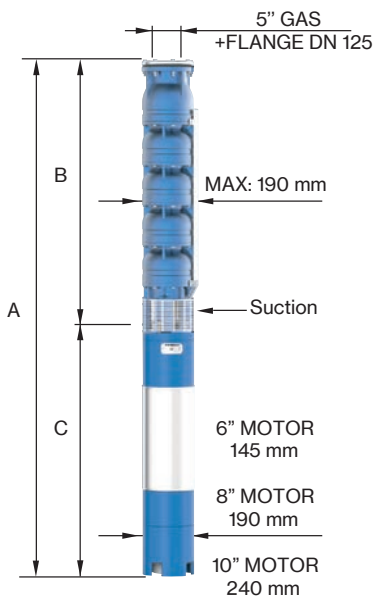


# 8LMG 130

50 Hz - 2900 rpm				Q										
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	1200	1400	1600	1800	2000	2200	2400	2600	2800	
	P2		CURRENT	I/sec	0	20,00	23,33	26,67	30,00	33,33	36,67	40,00	43,33	46,67
	HP	kW	A	m³/h	0	72	84	96	108	120	132	144	156	168
8LMG 130/01	10	7,5	17,5	H (m)	26	21	20	19	18	17	15	13	11	8
8LMG 130/02	20	15	32		53	42	41	38	36	34	31	27	21	15
8LMG 130/03	35	26	55		79	63	61	57	54	51	46	40	32	23
8LMG 130/04	40	30	62,5		106	85	81	77	73	67	62	54	43	30
8LMG 130/05	60	45	92		132	106	101	96	91	84	77	67	54	38
8LMG 130/06	75	55	113,5		159	127	122	115	109	101	93	81	64	45
8LMG 130/07	75	55	113,5		185	148	142	134	127	118	108	94	75	53
8LMG 130/08	90	66	134,5		211	169	162	153	145	135	123	107	86	61
8LMG 130/09	100	75	149,5		238	190	183	172	163	152	139	121	96	68
8LMG 130/10	100	75	149,5		264	211	203	191	181	169	154	134	107	76
8LMG 130/11	125	92	185		291	233	223	211	200	185	170	148	118	83
8LMG 130/12	125	92	185		317	254	243	230	218	202	185	161	129	91
8LMG 130/13	150	110	219		344	275	264	249	236	219	201	175	139	98
8LMG 130/14	150	110	220		370	296	284	268	254	236	216	188	150	106

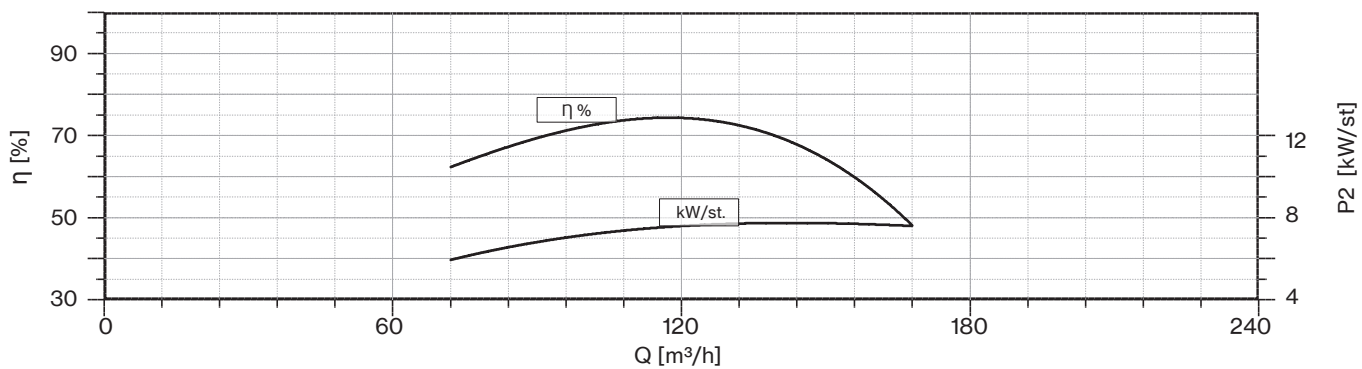
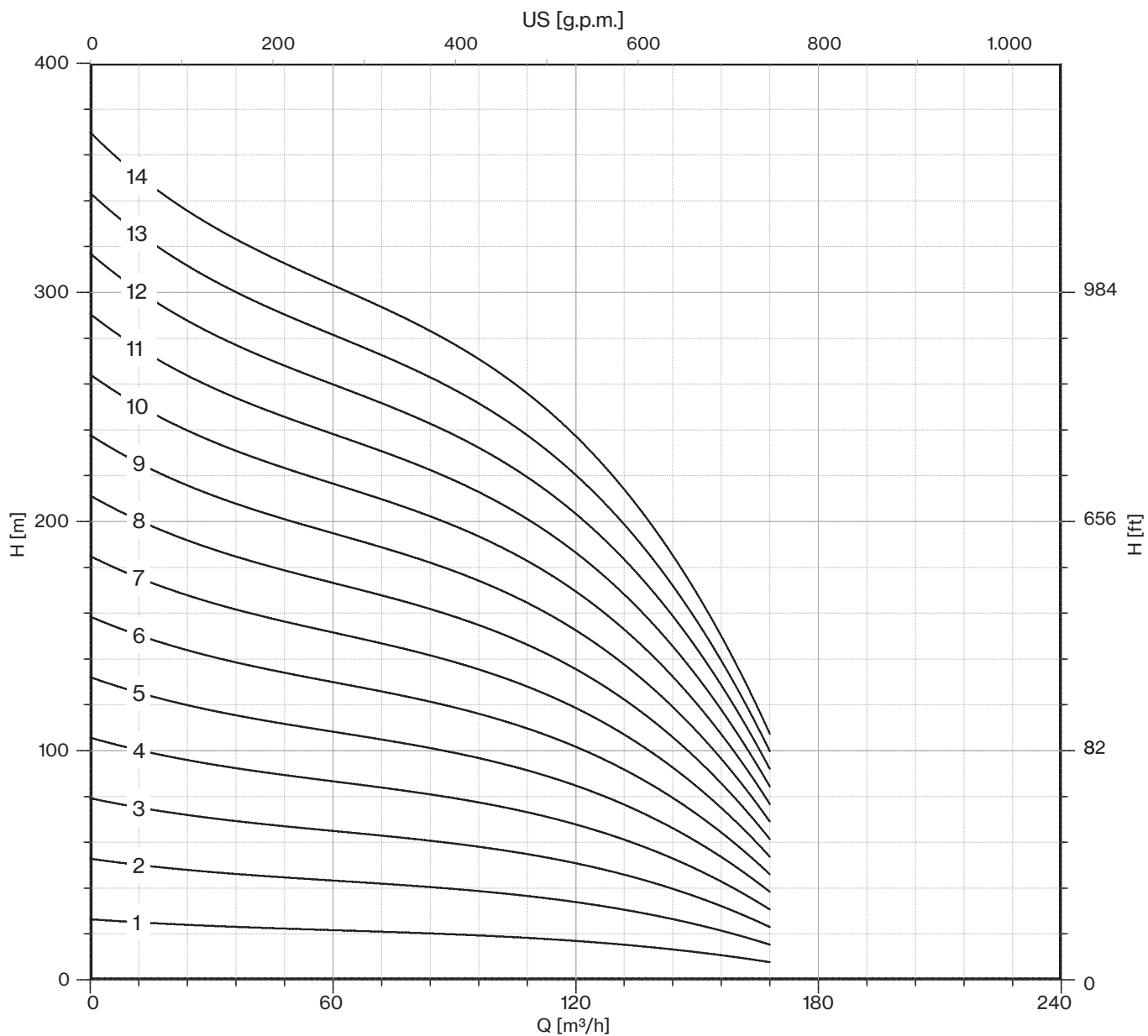
Max Eff. %	75
Max kW / St.	7,7

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	2,5	3	5	9



FOR COMMERCIAL TUBE  
EXTERNAL DIAMETER: 139,7 mm

TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
8LMG 130/01-6	6" NEMA	1228	527	701	55	23
8LMG 130/02-6		1583	652	931	75	32
8LMG 130/03-6		1958	777	1181	100	41
8LMG 130/04-6		2153	902	1251	108	49
8LMG 130/05	8" NEMA	2150	1027	1123	178	58
8LMG 130/06		2385	1152	1233	200	67
8LMG 130/07		2510	1277	1233	200	75
8LMG 130/08		2705	1402	1303	214	84
8LMG 130/09		2910	1527	1383	230	93
8LMG 130/10		3035	1652	1383	230	102
8LMG 130/11		3360	1777	1583	270	110
8LMG 130/12		3485	1902	1583	270	119
8LMG 130/13		3760	2027	1733	300	128
8LMG 130/14		3885	2152	1733	300	136

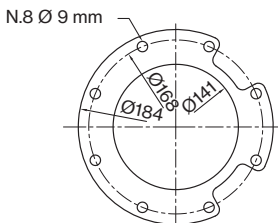
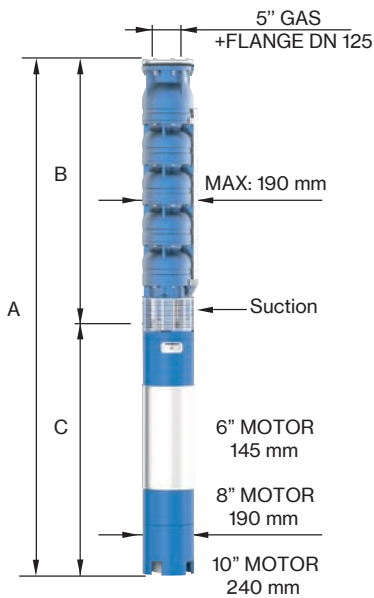


# 8LMG 160

50 Hz - 2900 rpm				Q										
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	1600	1800	2000	2200	2400	2600	2800	3000	3200	
	P2		CURRENT	I/sec	0	26,67	30,00	33,33	36,67	40,00	43,33	46,67	50,00	53,33
	HP	kW	A	m³/h	0	96	108	120	132	144	156	168	180	192
8LMG 160/01	12,5	9,2	21	H (m)	24	19	18	17	16	16	15	13	12	10
8LMG 160/02	25	18,5	40		49	38	36	35	33	31	30	27	24	20
8LMG 160/03	35	26	55		73	57	54	52	49	47	45	40	36	30
8LMG 160/04	50	37	78		97	76	72	69	66	63	59	54	48	40
8LMG 160/05	60	45	92		121	95	90	86	82	79	74	67	60	50
8LMG 160/06	75	55	113,5		146	114	108	104	99	94	89	81	72	60
8LMG 160/07	90	66	134,5		170	133	126	121	115	110	104	94	84	70
8LMG 160/08	100	75	149,5		194	152	144	138	131	126	119	107	96	80
8LMG 160/09	100	75	149,5		219	171	162	156	148	141	134	121	108	90
8LMG 160/10	125	92	185		243	190	180	173	164	157	149	134	120	100
8LMG 160/11	125	92	185		267	209	198	190	181	173	163	148	132	110
8LMG 160/12	150	110	219		291	228	216	207	197	189	178	161	144	120
8LMG 160/13	150	110	219		316	247	234	225	214	204	193	175	156	130

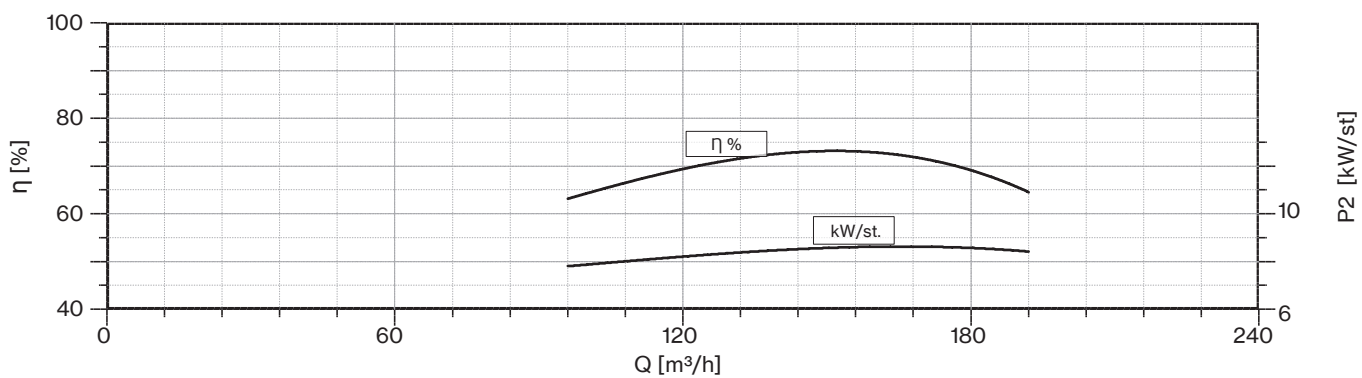
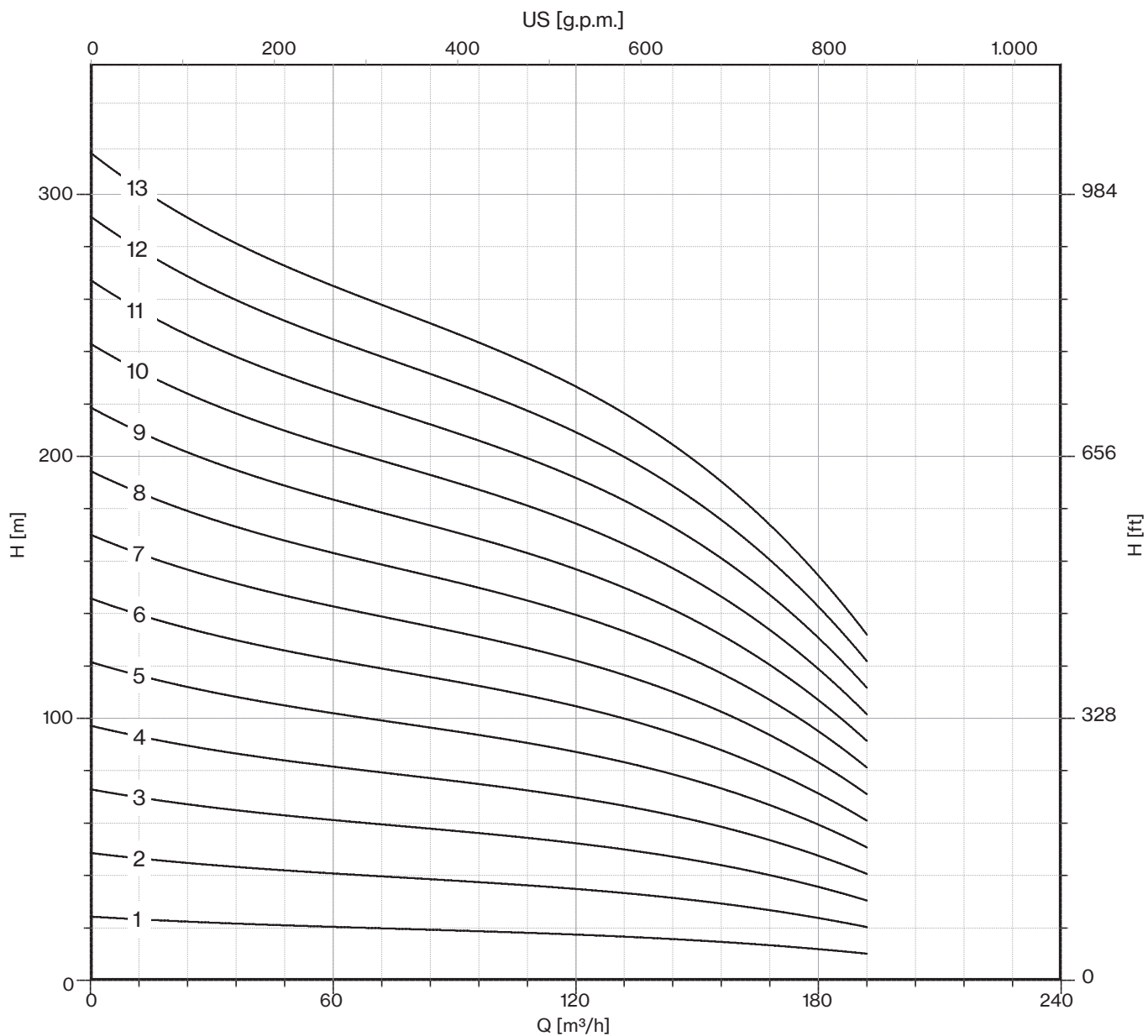
Max Eff. %	74
Max kW / St.	8,6

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	2,5	3	5	9



FOR COMMERCIAL TUBE  
EXTERNAL DIAMETER: 139,7 mm

TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
8LMG 160/01-6	6" NEMA	1303	552	751	60	24
8LMG 160/02-6		1693	702	991	83	33
8LMG 160/03-6		2033	852	1181	100	42
8LMG 160/04-6		2343	1002	1341	118	51
8LMG 160/05	8" NEMA	2275	1152	1123	178	60
8LMG 160/06		2535	1302	1233	200	69
8LMG 160/07		2755	1452	1303	214	78
8LMG 160/08		2985	1602	1383	230	87
8LMG 160/09		3135	1752	1383	230	96
8LMG 160/10		3485	1902	1583	270	105
8LMG 160/11		3635	2052	1583	270	114
8LMG 160/12		3935	2202	1733	300	123
8LMG 160/13		4085	2352	1733	300	132

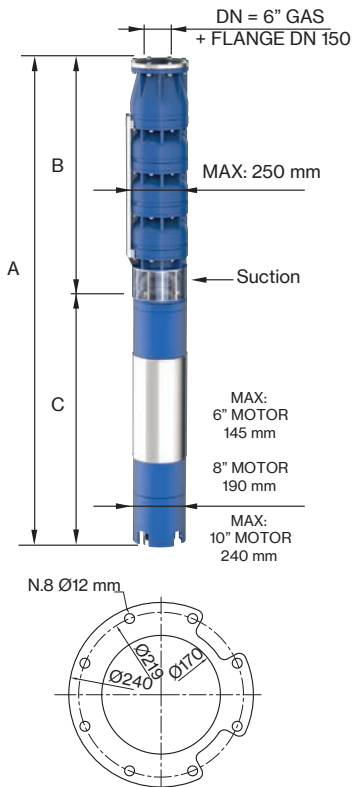


# 10LMG 190

50 Hz - 2900 rpm				Q							
TYPE	SUITABLE MOTOR 3- 400V		l/min	0	1800	2200	2600	3000	3400	3800	
	P2		CURRENT	l/sec	0	30,00	36,67	43,33	50,00	56,67	63,33
	HP	kW	A	m³/h	0	108	132	156	180	204	228
10LMG 190/01DR20	20	15	32	H (m)	32	29	28	25	24	20	16
10LMG 190/01DR10	25	18,5	40		37	33	31	29	27	22	18
10LMG 190/01	30	22	47,5		42	37	35	32	30	25	20
10LMG 190/02DR20	40	30	62,5		65	58	55	50	48	40	32
10LMG 190/02DR10	50	37	78		73	66	62	57	54	45	36
10LMG 190/02	60	45	92		83	74	70	64	60	50	40
10LMG 190/03DR20	75	55	113,5		97	88	83	76	71	59	47
10LMG 190/03DR10	75	55	113,5		110	99	94	86	80	67	53
10LMG 190/03	90	66	134,5		125	111	105	96	90	75	60
10LMG 190/04DR20	90	66	134,5		130	117	110	101	95	79	63
10LMG 190/04DR10	100	75	149,5		146	132	125	114	107	90	71
10LMG 190/04	100	75	149,5		166	148	140	128	120	100	80
10LMG 190/05DR20	100	75	149,5		162	146	138	126	119	99	79
10LMG 190/05DR10	125	92	185		183	165	156	143	134	112	89
10LMG 190/05	150	110	219		208	185	175	160	150	125	100
10LMG 190/06DR20	125	92	185		194	175	166	151	143	119	95
10LMG 190/06DR10	150	110	219		220	198	187	172	161	134	107
10LMG 190/06	175	130	254,5		250	222	210	192	180	150	120
10LMG 190/07DR20	150	110	219		227	204	193	176	167	139	111
10LMG 190/07DR10	175	130	254,5		256	231	218	200	188	157	125
10LMG 190/07	200	150	290	291	259	245	224	210	175	140	
10LMG 190/08DR20	175	130	254,5	259	234	221	202	190	158	126	
10LMG 190/08DR10	200	150	290	293	264	250	229	214	179	142	
10LMG 190/08	225	165	330	333	296	280	256	240	200	160	

Max Eff. % DR20 =	74
Max Eff. % DR10 =	75
Max Eff. %	75,5
Max kW / St. DR20 =	15,7
Max kW / St. DR10 =	17,5
Max kW / St.	19,4

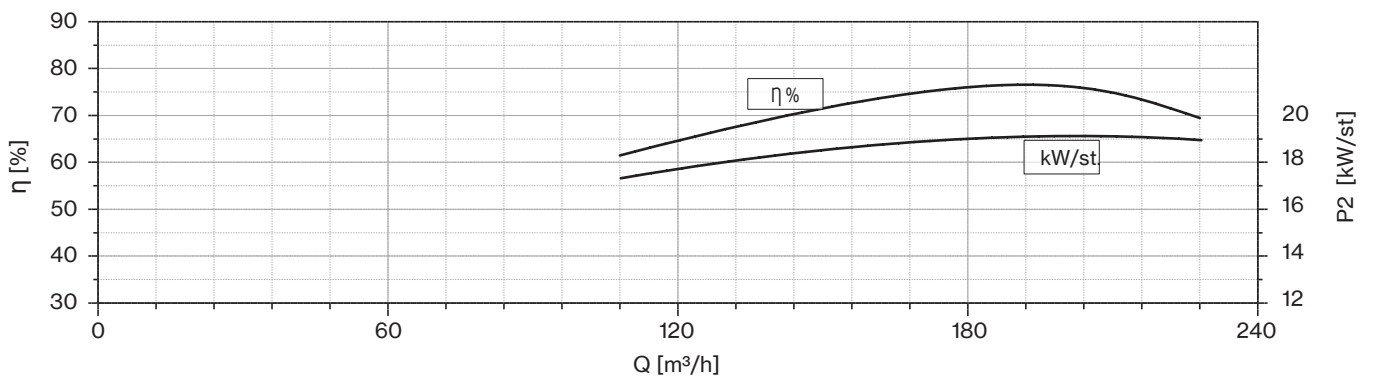
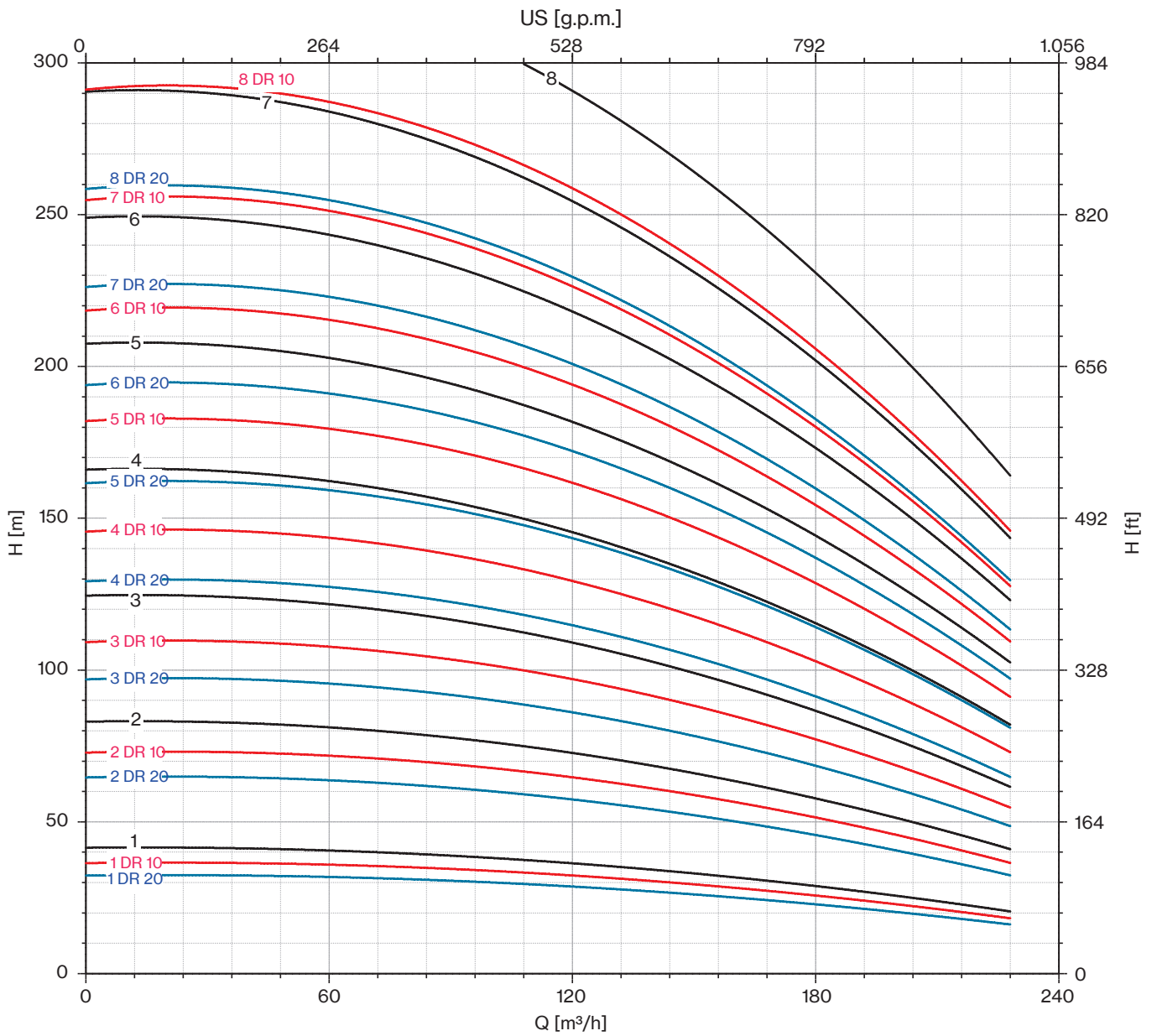
NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3,6	5,3	8,1	14



FOR COMMERCIAL TUBE  
EXTERNAL DIAMETER: 168,3 mm

TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
10LMG 190/01DR20-6	6" NEMA	1556	625	931	75	50
10LMG 190/01DR10-6		1616	625	991	83	50
10LMG 190/01-6		1696	625	1071	92	50
10LMG 190/02DR20-6	8" NEMA	2056	805	1251	108	68
10LMG 190/02DR10-6		2146	805	1341	118	68
10LMG 190/02-8		1928	805	1123	178	68
10LMG 190/03DR20-8	8" NEMA	2218	985	1233	200	87
10LMG 190/03DR10-8		2218	985	1233	200	87
10LMG 190/03-8		2288	985	1303	214	87
10LMG 190/04DR20-8	8" NEMA	2468	1165	1303	214	105
10LMG 190/04DR10-8		2548	1165	1383	230	105
10LMG 190/04-8		2548	1165	1383	230	105
10LMG 190/05DR20-8	8" NEMA	2728	1345	1383	230	124
10LMG 190/05DR10-8		2928	1345	1583	270	124
10LMG 190/05-8		3078	1345	1733	300	124
10LMG 190/06DR20	10"	3108	1525	1583	270	142
10LMG 190/06DR10		3258	1525	1733	300	142
10LMG 190/06		3159	1525	1634	385	142
10LMG 190/07DR20	10"	3438	1705	1733	300	161
10LMG 190/07DR10		3339	1705	1634	385	161
10LMG 190/07		3439	1705	1734	415	161
10LMG 190/08DR20	10"	3519	1885	1634	385	179
10LMG 190/08DR10		3619	1885	1734	415	179
10LMG 190/08		3739	1885	1854	444	179

"DR" : reduced-diameter impellers

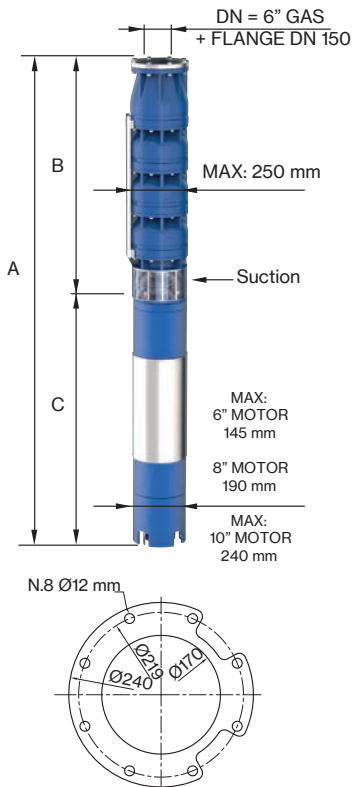


# 10LMG 230

50 Hz - 2900 rpm				Q								
TYPE	SUITABLE MOTOR 3- 400V		l/min	0	2200	2600	3000	3400	3800	4200	4400	
	P2		CURRENT	l/sec	0	36,67	43,33	50,00	56,67	63,33	70,00	73,33
	HP	kW	A	m³/h	0	132	156	180	204	228	252	264
10LMG 230/01DR20	25	18,5	40	H (m)	34	29	28	26	24	22	19	16
10LMG 230/01DR10	30	22	47,5		38	33	31	29	27	25	21	17
10LMG 230/01	30	22	47,5		43	37	35	33	30	28	24	22
10LMG 230/02DR20	50	37	78		68	58	55	52	48	44	38	33
10LMG 230/02DR10	60	45	92		77	66	62	59	54	50	43	35
10LMG 230/02	60	45	92		86	74	70	66	60	56	48	44
10LMG 230/03DR20	75	55	113,5		102	88	83	78	71	67	57	49
10LMG 230/03DR10	90	66	134,5		115	99	94	88	80	75	64	52
10LMG 230/03	100	75	149,5		129	111	105	99	90	84	72	66
10LMG 230/04DR20	100	75	149,5		136	117	110	104	95	89	76	66
10LMG 230/04DR10	125	92	185		154	132	125	118	107	100	86	70
10LMG 230/04	125	92	185		172	148	140	132	120	112	96	88
10LMG 230/05DR20	125	92	185		170	146	138	130	119	111	95	82
10LMG 230/05DR10	150	110	219		192	165	156	147	134	125	107	87
10LMG 230/05	175	130	254,5		215	185	175	165	150	140	120	110
10LMG 230/06DR20	150	110	219		204	175	166	156	143	133	114	98
10LMG 230/06DR10	175	130	254,5		230	198	187	176	161	150	128	104
10LMG 230/06	200	150	290		258	222	210	198	180	168	144	132
10LMG 230/07DR20	175	130	254,5		238	204	193	182	167	155	133	115
10LMG 230/07DR10	200	150	290		269	231	218	206	188	175	150	122
10LMG 230/07	225	165	330	301	259	245	231	210	196	168	154	

Max Eff. % DR20 =	75,5
Max Eff. % DR10 =	76
Max Eff. %	76,5
Max kW / St. DR20 =	18,3
Max kW / St. DR10 =	20,5
Max kW / St.	23

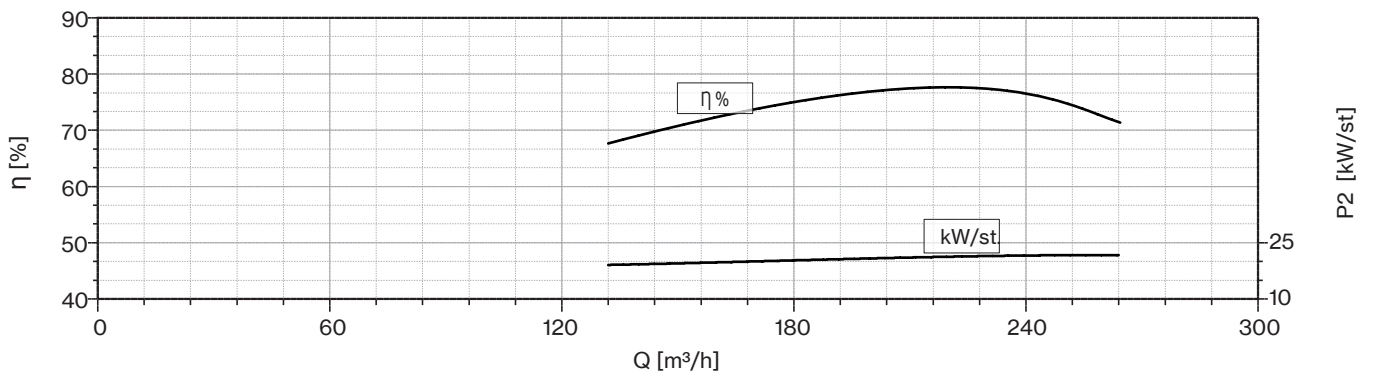
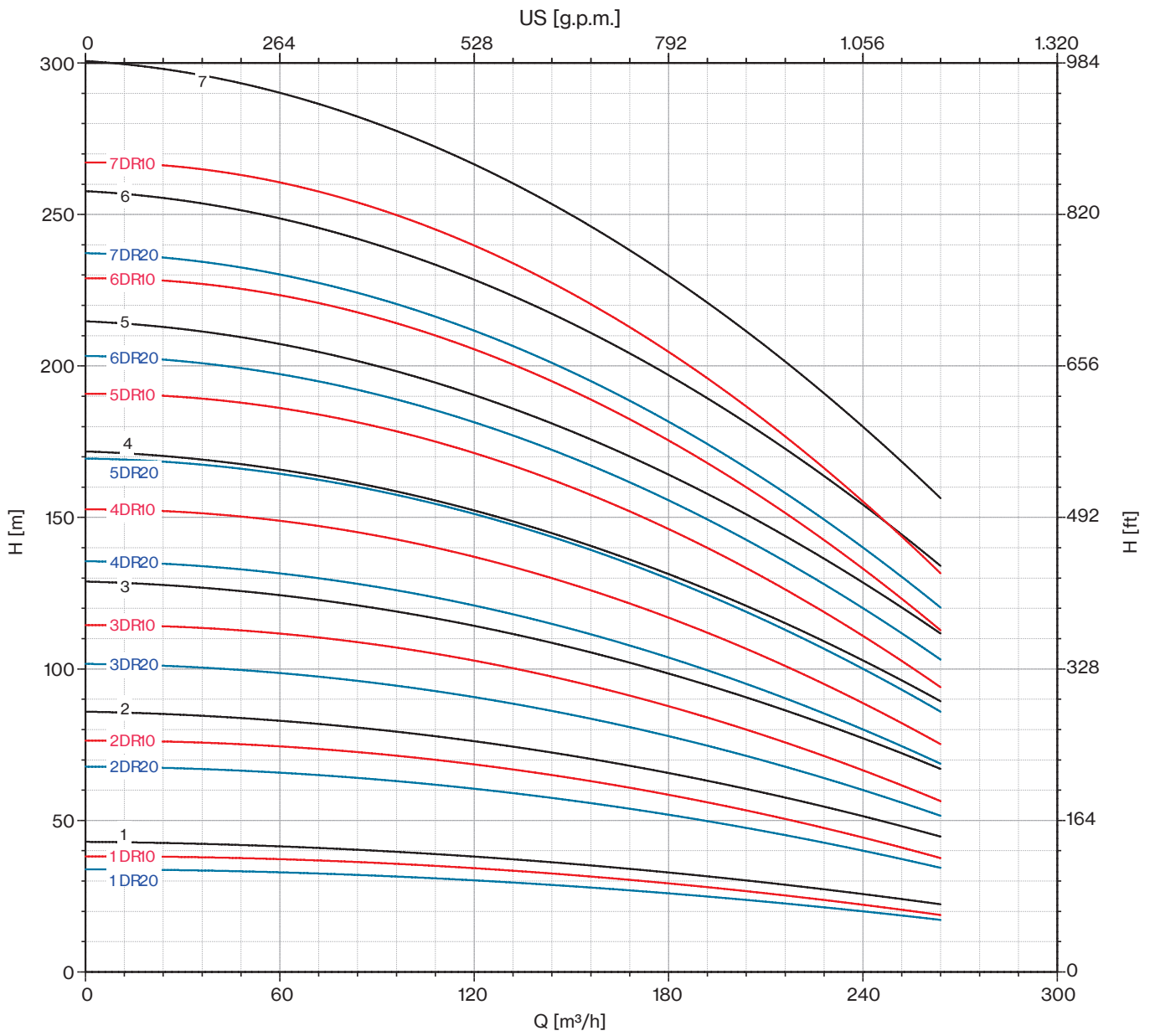
NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3,7	5,4	8,3	14,2



TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
10LMG 230/01DR20-6	6" NEMA	1616	625	991	83	50
10LMG 230/01DR10-6		1696	625	1071	92	50
10LMG 230/01-6		1696	625	1071	92	50
10LMG 230/02DR20-6	8" NEMA	2146	805	1341	118	68
10LMG 230/02DR10-8		1928	805	1123	178	68
10LMG 230/02-8		1928	805	1123	178	68
10LMG 230/03DR20-8		2218	985	1233	200	87
10LMG 230/03DR10-8		2288	985	1303	214	87
10LMG 230/03-8		2368	985	1383	230	87
10LMG 230/04DR20-8		2548	1165	1383	230	105
10LMG 230/04DR10-8		2748	1165	1583	270	105
10LMG 230/04-8		2748	1165	1583	270	105
10LMG 230/05DR20-8		2928	1345	1583	270	124
10LMG 230/05DR10-8	3078	1345	1733	300	124	
10LMG 230/05-8	2979	1345	1634	385	124	
10LMG 230/06DR20-8	3258	1525	1733	300	142	
10LMG 230/06DR10	3159	1525	1634	385	142	
10LMG 230/06	3259	1525	1734	415	142	
10LMG 230/07DR20	10"	3339	1705	1634	385	161
10LMG 230/07DR10		3439	1705	1734	415	161
10LMG 230/07		3559	1705	1854	444	161

"DR" : reduced-diameter impellers





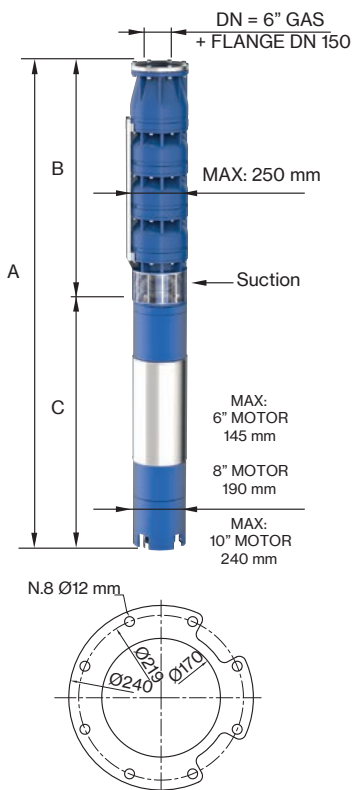


# 10LMG 250

50 Hz - 2900 rpm				Q									
TYPE	SUITABLE MOTOR 3- 400V		l/min	0	2400	2800	3200	3600	4000	4400	4800	5000	
	P2		CURRENT	l/sec	0	40,00	46,67	53,33	60,00	66,67	73,33	80,00	83,33
	HP	kW	A	m³/h	0	144	168	192	216	240	264	288	300
10LMG 250/01DR20	30	22	47,5	H (m)	34	28	27	26	25	22	21	18	17
10LMG 250/01DR10	35	26	55		38	32	30	29	28	25	23	20	20
10LMG 250/01	35	26	55		43	36	34	33	31	28	26	23	22
10LMG 250/02DR20	60	45	92		68	57	54	52	49	44	41	36	35
10LMG 250/02DR10	75	55	113,5		77	64	61	59	55	50	46	41	39
10LMG 250/02	75	55	113,5		86	72	68	66	62	56	52	46	44
10LMG 250/03DR20	90	66	134,5		102	85	81	79	74	67	62	55	52
10LMG 250/03DR10	100	75	149,5		115	96	91	88	83	75	70	61	59
10LMG 250/03	125	92	185		129	108	102	99	93	84	78	69	66
10LMG 250/04DR20	125	92	185		136	114	108	105	98	89	82	73	70
10LMG 250/04DR10	125	92	185		154	128	122	118	110	100	93	82	78
10LMG 250/04	150	110	219		172	144	136	132	124	112	104	92	88
10LMG 250/05DR20	150	110	219		170	142	135	131	123	111	103	91	87
10LMG 250/05DR10	175	130	254,5		192	160	152	147	138	125	116	102	98
10LMG 250/05	175	130	254,5		215	180	170	165	155	140	130	115	110
10LMG 250/06DR20	175	130	254,5		204	170	162	157	148	133	124	109	104
10LMG 250/06DR10	200	150	290		230	192	182	176	166	150	139	122	118
10LMG 250/06	225	165	330		258	216	204	198	186	168	156	138	132
10LMG 250/07DR20	225	165	330		238	199	189	183	172	155	144	127	122
10LMG 250/07DR10	225	165	330		269	224	213	206	193	175	162	143	137

Max Eff. % DR20 =	75,5
Max Eff. % DR10 =	76
Max Eff. %	76,5
Max kW / St. DR20 =	21,9
Max kW / St. DR10 =	23,5
Max kW / St.	26,3

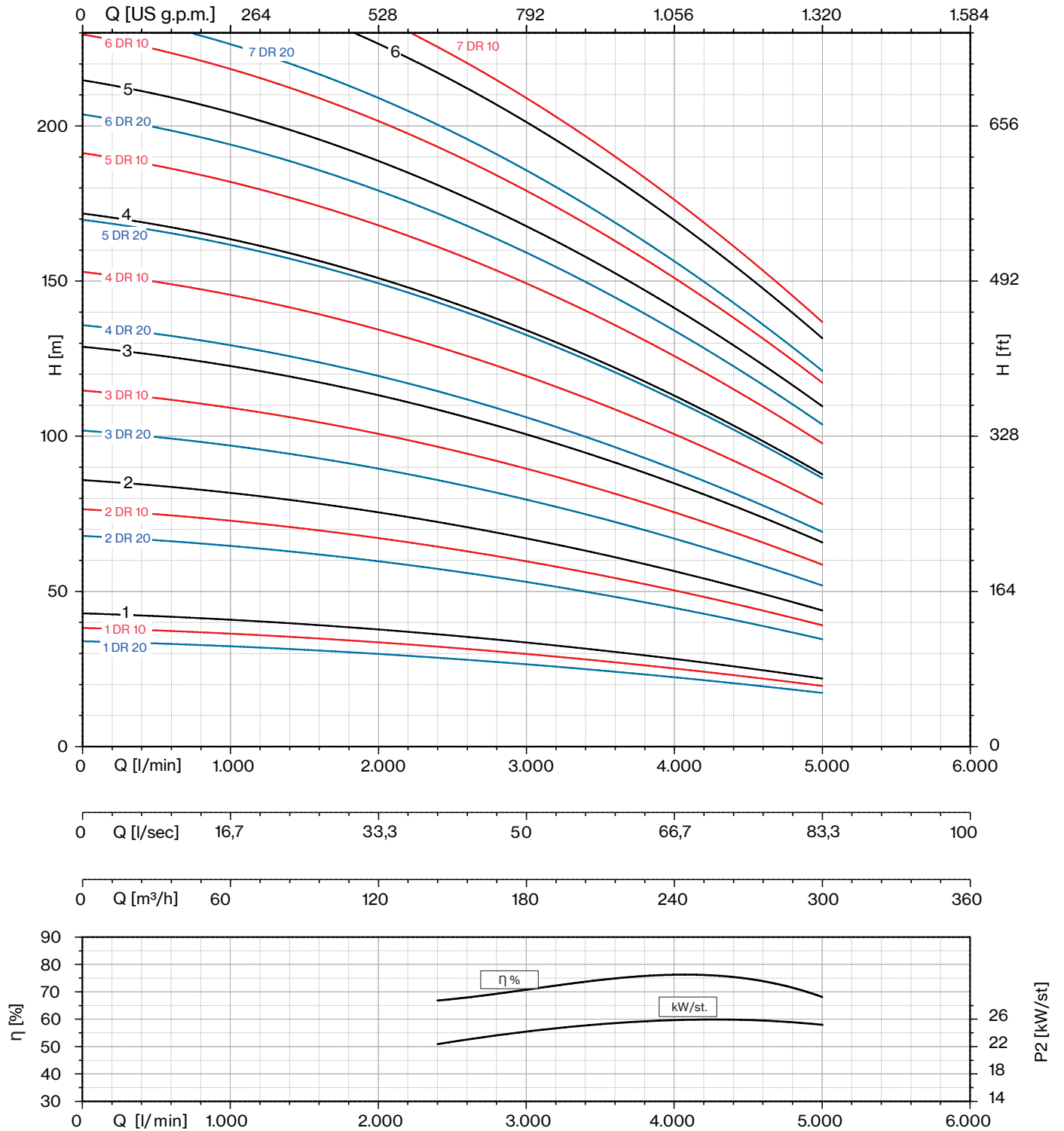
NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3,9	5,5	8,5	14,4



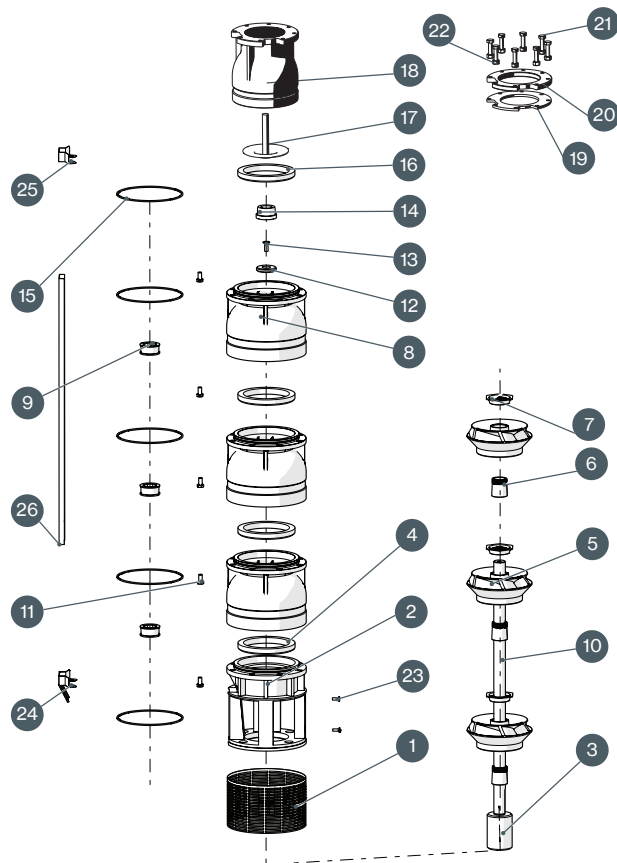
FOR COMMERCIAL TUBE  
EXTERNAL DIAMETER: 168,3 mm

TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
10LMG 250/01DR20-6	6" NEMA	1696	625	1071	92	50
10LMG 250/01DR10-6		1806	625	1181	100	50
10LMG 250/01-6		1806	625	1181	100	50
10LMG 250/02DR20-8	8" NEMA	1928	805	1123	178	68
10LMG 250/02DR10-8		2038	805	1233	200	68
10LMG 250/02-8		2038	805	1233	200	68
10LMG 250/03DR20-8		2288	985	1303	214	87
10LMG 250/03DR10-8		2368	985	1383	230	87
10LMG 250/03-8		2568	985	1583	270	87
10LMG 250/04DR20-8	10"	2748	1165	1583	270	105
10LMG 250/04DR10-8		2748	1165	1583	270	105
10LMG 250/04-8		2898	1165	1733	300	105
10LMG 250/05DR20		3078	1345	1733	300	124
10LMG 250/05DR10		2979	1345	1634	385	124
10LMG 250/05		2979	1345	1634	385	124
10LMG 250/06DR20		3159	1525	1634	385	142
10LMG 250/06DR10		3259	1525	1734	415	142
10LMG 250/06		3379	1525	1854	444	142
10LMG 250/07DR20		3559	1705	1854	444	161
10LMG 250/07DR10	3559	1705	1854	444	161	

"DR" : reduced-diameter impellers



## 6-8-10 LMG



N. CODE	DESCRIPTION	MATERIAL
1	SUCTION STRAINER	AISI 304
2	SUCTION CAGE	CAST IRON
3	JOINT	AISI 304
4	USURY RING	NBR
5	IMPELLER	CAST IRON
6	CONE	AISI 304
7	HEXAGONAL RING	AISI 304
8	DIFFUSEUR	AISI 304
9	BEARING BUSH	NBR
10	PUMP SHAFT	AISI 304
11	N.8 SCREW FOR DIFFUSEUR	AISI 304
12	RING	AISI 304
13	SCREW FOR DISK	AISI 304
14	COUNTERTHRUST	PTFE + 25% CARBON
15	O-RING	NBR
16	GASKET VALVE	NBR
17	CAP VALVE	AISI 304
18	BODY VALVE	CAST IRON
19	SEAL COUNTERFLANGE	NBR
20	COUNTERFLANGE	IRON
21	N.8 SCREW FOR COUNTERFLANGE	AISI 304
22	N.8 NUT FOR COUNTERFLANGE	AISI 304
23	N.2 SCREW FOR SUCTION STRAINER	AISI 304
24	LOWER FLANGE	AISI 304
25	UPPER FLANGE	AISI 304
26	COVER CABLE	AISI 304

# 6LRH & 6LM lines

## Deepwell Borehole

Submersible Multistage Centrifugal Pumps for 6" Wells.

These pumps feature a check valve integrated into the delivery outlet. The pump motor bracket is designed in compliance with NEMA standards. All components are constructed from stainless steel using lost wax microfusion technology. The standard material is AISI 304 stainless steel. Alternatively, the following materials are available upon request: AISI 316 stainless steel and Duplex steel (EN 1.4462). The bushing bearings and wear rings are made from sand abrasion-resistant rubber, while the reverse-thrust ring is crafted from PTFE/Graphite. These pumps are ideal for a variety of applications, including civil and agricultural use.

### General operating data:

- Capacity up to 90 m<sup>3</sup>/h
- Pressure up to 540 m
- Hydraulic efficiency 6", up to 78,5%
- Powers up to 37 kW
- Rotation speed 2.900 rpm
- Maximum depth: 350 m
- Maximum quantity of sand: 100 gr/m<sup>3</sup>
- Drinking water compatibility according to DM174 MEI ≥ 0,4 (EU directive No.547/2012)
- Performance tolerance: ISO9906-3B

### Construction features

<b>Suction and delivery outlet</b>	stainless steel AISI 304 (LRHS-LMS) stainless steel AISI 316 (LRHX-LMX) Duplex EN 1.4462 (LRHD-LMD)
<b>Valve</b>	stainless steel AISI 304 (LRHS-LMS) stainless steel AISI 316 (LRHX-LMX) Duplex EN 1.4462 (LRHD-LMD)
<b>Impellers and diffusers</b>	stainless steel AISI 304 (LRHS-LMS) stainless steel AISI 316 (LRHX-LMX) Duplex EN 1.4462 (LRHD-LMD)
<b>Upper bushings</b>	NBR rubber
<b>Shaft pump side</b>	stainless steel AISI 304 (LRHS-LMS) stainless steel AISI 316 (LRHX-LMX) Duplex EN 1.4462 (LRHD-LMD)
<b>Quantity of sand in the water</b>	max 100 g/m <sup>3</sup>

### Motor

<b>Asynchronous 2 pole</b>	rewindable water cooled
<b>Insulation class</b>	Y (max 30 °C) - PPC winding type F (max 50 °C) - PE2+PA or LPE winding type
<b>Protection degree</b>	IP68
<b>Liquid temperature</b>	max 30 °C (max 50 °C on request)
<b>Depth of immersion</b>	max 350 m



6LRH line



6LM line

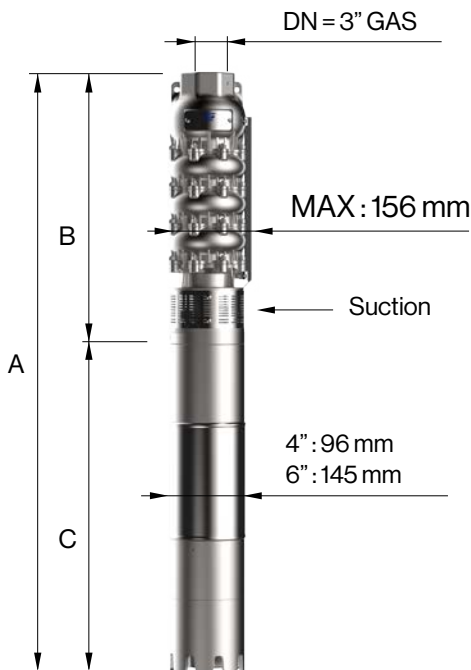


# 6LRH 14

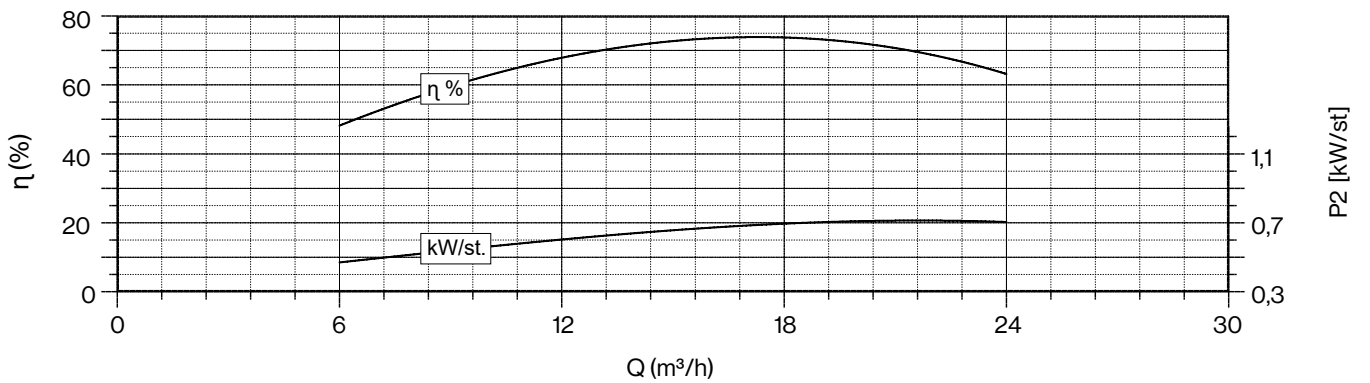
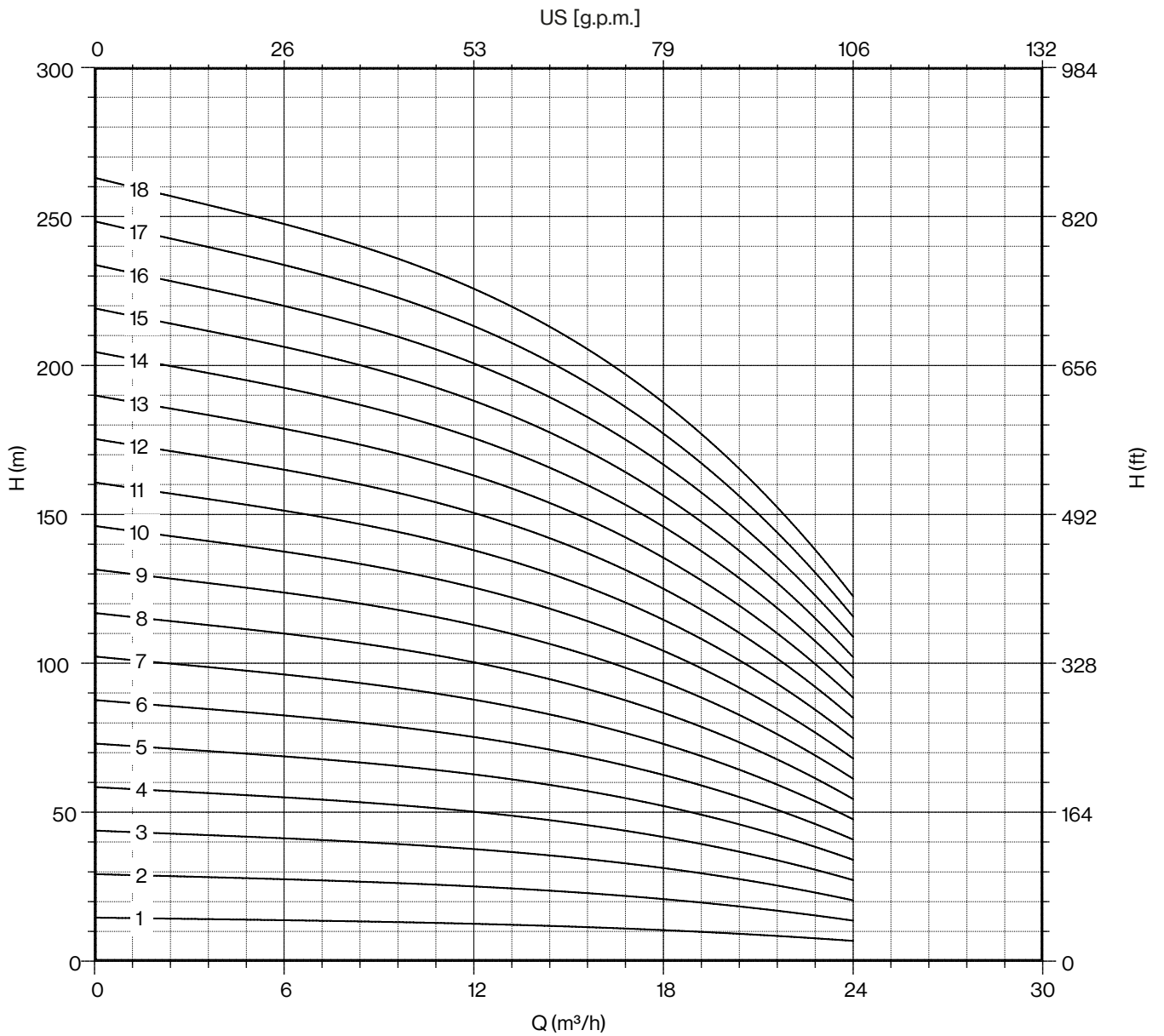
50 Hz - 2900 rpm				Q								
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	100	150	200	250	300	350	400	
	P2		CURRENT	I/sec	0,0	1,7	2,5	3,3	4,2	5,0	5,8	6,7
	HP	kW	A	m³/h	0	6	9	12	15	18	21	24
6LRH 14/01	1	0,75	2,6	H (m)	15	14	13	13	12	11	9	7
6LRH 14/02	2	1,5	4,6		29	28	26	25	23	21	18	14
6LRH 14/03	3	2,2	6,4		44	41	40	38	35	32	26	20
6LRH 14/04	4	3	8,3		58	55	53	50	46	42	35	27
6LRH 14/05	5,5	4	9,6		73	69	66	63	58	53	44	34
6LRH 14/06	7,5	5,5	13,6		88	83	79	75	70	63	53	41
6LRH 14/07	7,5	5,5	13,6		102	97	92	88	81	74	62	48
6LRH 14/08	7,5	5,5	13,6		117	110	106	100	93	84	70	54
6LRH 14/09	10	7,5	16,3		131	124	119	113	104	95	79	61
6LRH 14/10	10	7,5	16,3		146	138	132	125	116	105	88	68
6LRH 14/11	12,5	9,2	19,9		161	152	145	138	128	116	97	75
6LRH 14/12	12,5	9,2	19,9		175	166	158	150	139	126	106	82
6LRH 14/13	12,5	9,2	19,9		190	179	172	163	151	137	114	88
6LRH 14/14	15	11	23,4		204	193	185	175	162	147	123	95
6LRH 14/15	15	11	23,4		219	207	198	188	174	158	132	102
6LRH 14/16	15	11	23,4		234	221	211	200	186	168	141	109
6LRH 14/17	17,5	13	27,3		248	235	224	213	197	179	150	116
6LRH 14/18	17,5	13	27,3		263	248	238	225	209	189	158	122

Max Eff. %	71
Max kW / St.	0,74

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3	3	4	6



TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
6LRH 14/01-4	4" NEMA	627	302	325	7,6	11
6LRH 14/02-4		754	369	385	10,4	15
6LRH 14/03-4		856	436	420	12	20
6LRH 14/04-4		921	503	418	12,8	24
6LRH 14/05-4		1038	570	468	15,3	28
6LRH 14/06-4		1175	637	538	18,6	32
6LRH 14/07-4		1242	704	538	18,6	36
6LRH 14/08-4		1309	771	538	18,6	40
6LRH 14/09	6" NEMA	1539	838	701	55	44
6LRH 14/10		1606	905	701	55	49
6LRH 14/11		1723	972	751	60	53
6LRH 14/12		1790	1039	751	60	57
6LRH 14/13		1857	1106	751	60	61
6LRH 14/14		1984	1173	811	65	65
6LRH 14/15		2051	1240	811	65	69
6LRH 14/16		2118	1307	811	65	74
6LRH 14/17		2215	1374	841	70	78
6LRH 14/18		2282	1441	841	70	82

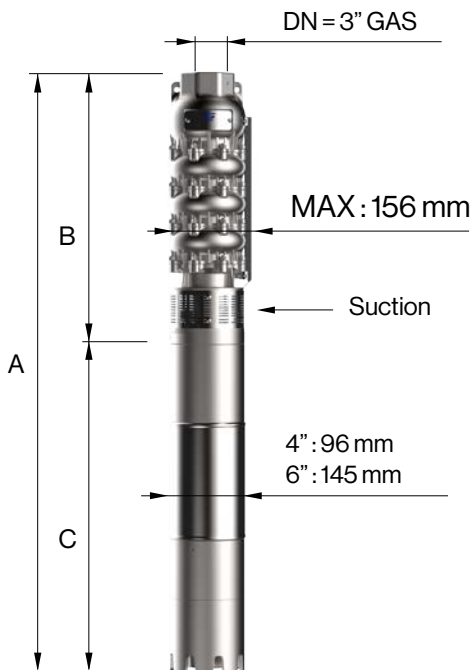


# 6LRH 14

50 Hz - 2900 rpm				Q								
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	100	150	200	250	300	350	400	
	P2		CURRENT	I/sec	0,0	1,7	2,5	3,3	4,2	5,0	5,8	6,7
	HP	kW	A	m³/h	0	6	9	12	15	18	21	24
6LRH 14/19	20	15	31,5	H (m)	277	262	251	238	220	200	167	129
6LRH 14/20	20	15	31,5		292	276	264	250	232	210	176	136
6LRH 14/21	20	15	31,5		307	290	277	263	244	221	185	143
6LRH 14/22	25	18,5	38,3		321	304	290	275	255	231	194	150
6LRH 14/23	25	18,5	38,3		336	317	304	288	267	242	202	156
6LRH 14/24	25	18,5	38,3		350	331	317	300	278	252	211	163
6LRH 14/25	25	18,5	38,3		365	345	330	313	290	263	220	170
6LRH 14/26	25	18,5	38,3		380	359	343	325	302	273	229	177
6LRH 14/27	30	22	45,1		394	373	356	338	313	284	238	184
6LRH 14/28	30	22	45,1		409	386	370	350	325	294	246	190
6LRH 14/29	30	22	45,1		423	400	383	363	336	305	255	197
6LRH 14/30	30	22	45,1		438	414	396	375	348	315	264	204
6LRH 14/31	30	22	45,1		453	428	409	388	360	326	273	211
6LRH 14/32	35	26	52,9		467	442	422	400	371	336	282	218
6LRH 14/33	35	26	52,9		482	455	436	413	383	347	290	224
6LRH 14/34	35	26	52,9		496	469	449	425	394	357	299	231
6LRH 14/35	35	26	52,9		511	483	462	438	406	368	308	238
6LRH 14/36	35	26	52,9		526	497	475	450	418	378	317	245
6LRH 14/37	35	26	52,9		540	511	488	463	429	389	326	252

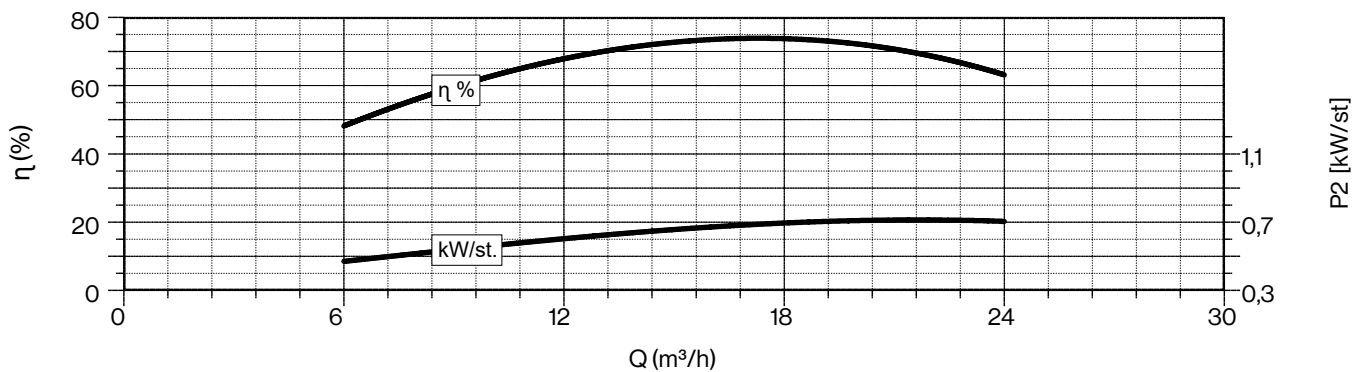
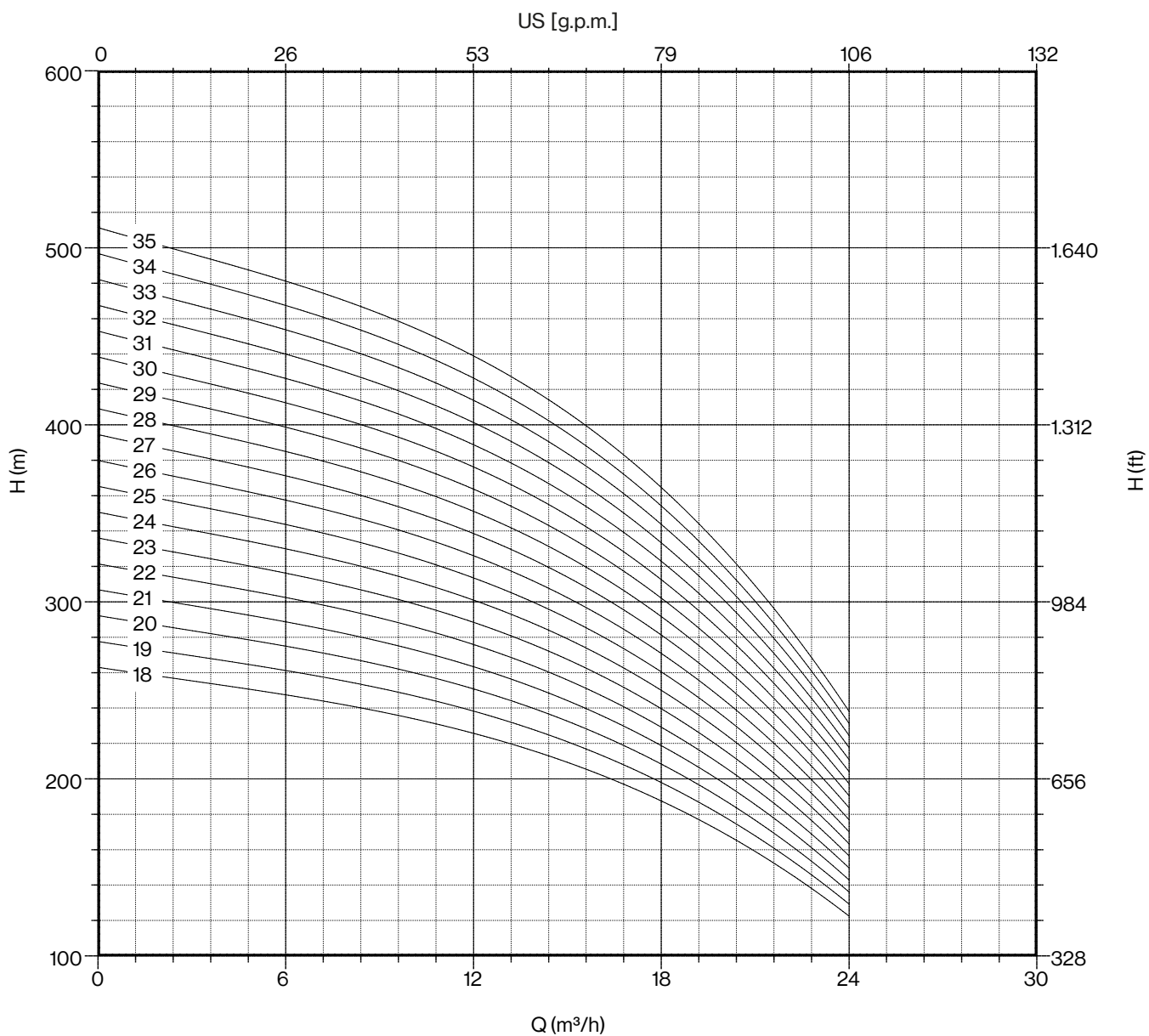
Max Eff. %	71
Max kW / St.	0,74

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3	3	4	6



TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
6LRH 14/19	6" NEMA	2439	1508	931	75	86
6LRH 14/20		2506	1575	931	75	90
6LRH 14/21		2573	1642	931	75	94
6LRH 14/22		2700	1709	991	83	98
6LRH 14/23		2767	1776	991	83	103
6LRH 14/24		2834	1843	991	83	107
6LRH 14/25		2901	1910	991	83	111
6LRH 14/26		2968	1977	991	83	115
6LRH 14/27		3115	2044	1071	92	119
6LRH 14/28		3182	2111	1071	92	123
6LRH 14/29		3249	2178	1071	92	127
6LRH 14/30		3316	2245	1071	92	132
6LRH 14/31		3383	2312	1071	92	136
6LRH 14/32		3560	2379	1181	100	140
6LRH 14/33		3627	2446	1181	100	144
6LRH 14/34		3694	2513	1181	100	148
6LRH 14/35		3761	2580	1181	100	152
6LRH 14/36		3828	2647	1181	100	157
6LRH 14/37		3895	2714	1181	100	161





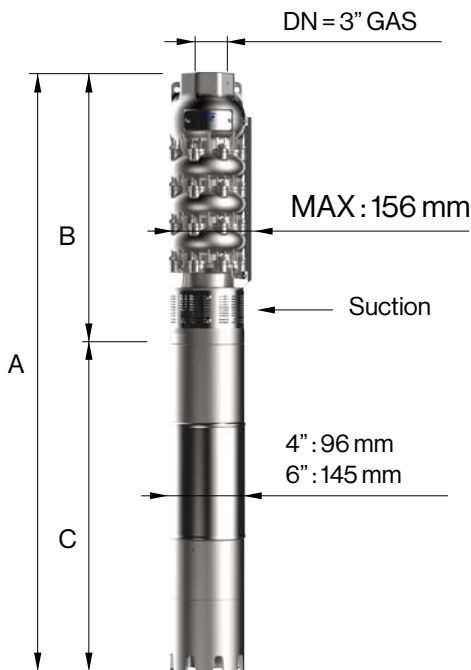


# 6LRH 20

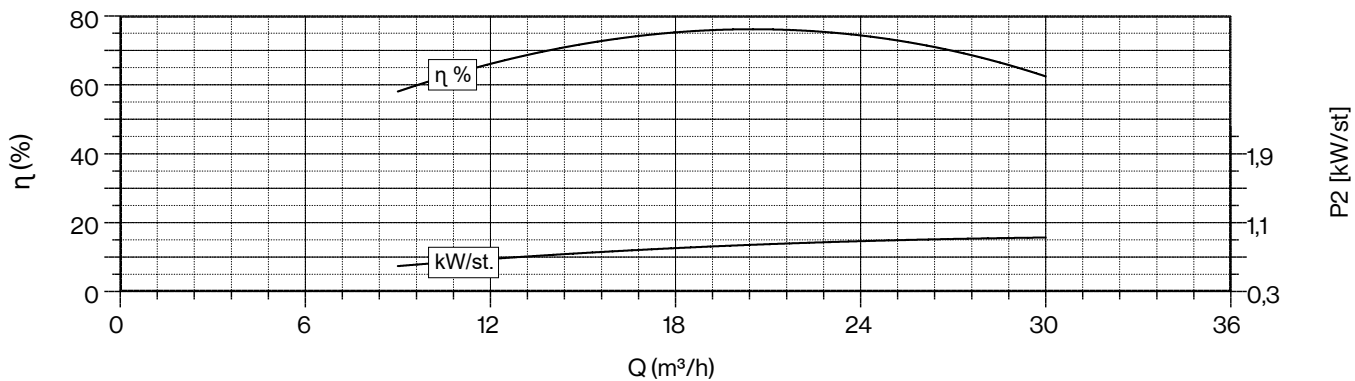
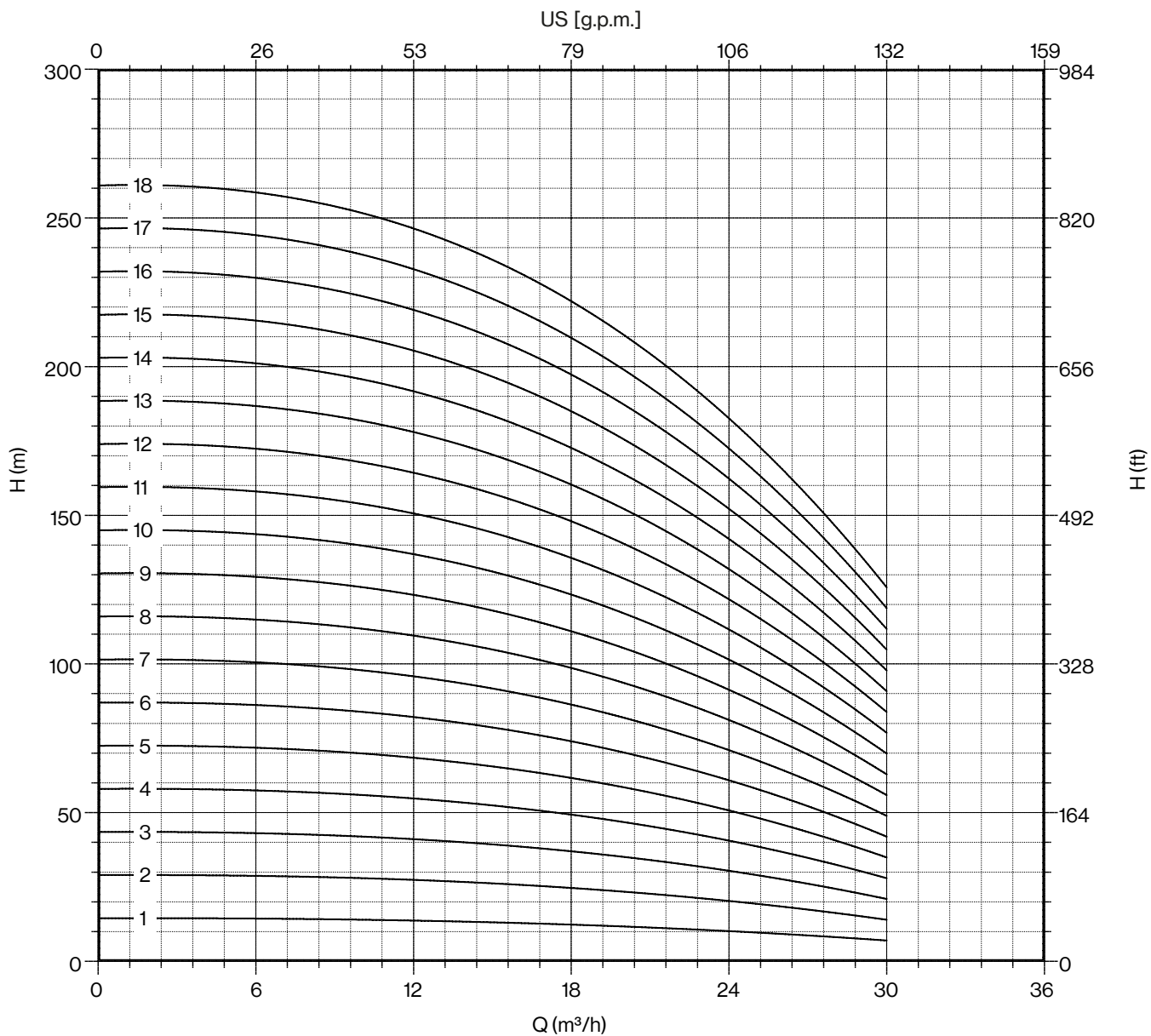
50 Hz - 2900 rpm				Q									
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	150	200	250	300	350	400	450	500	
	P2		CURRENT	I/sec	0,0	2,5	3,3	4,2	5,0	5,8	6,7	7,5	8,3
	HP	kW	A	m³/h	0	9	12	15	18	21	24	27	30
6LRH 20/01	1,5	1,1	3,4	H (m)	15	14	14	13	12	11	10	9	7
6LRH 20/02	3	2,2	6,4		29	28	27	26	25	23	20	17	14
6LRH 20/03	4	3	8,3		44	42	41	40	37	34	30	26	21
6LRH 20/04	5,5	4	9,6		58	56	54	53	50	45	40	35	28
6LRH 20/05	7,5	5,5	13,6		73	71	68	66	62	57	51	44	35
6LRH 20/06	7,5	5,5	13,6		87	85	82	79	74	68	61	52	42
6LRH 20/07	10	7,5	16,3		102	99	95	92	87	79	71	61	49
6LRH 20/08	10	7,5	16,3		116	113	109	106	99	90	81	70	56
6LRH 20/09	12,5	9,2	19,9		131	127	122	119	112	102	91	78	63
6LRH 20/10	12,5	9,2	19,9		145	141	136	132	124	113	101	87	70
6LRH 20/11	15	11	23,4		160	155	150	145	136	124	111	96	77
6LRH 20/12	15	11	23,4		174	169	163	158	149	136	121	104	84
6LRH 20/13	17,5	13	27,3		189	183	177	172	161	147	131	113	91
6LRH 20/14	17,5	13	27,3		203	197	190	185	174	158	141	122	98
6LRH 20/15	20	15	31,5		218	212	204	198	186	170	152	131	105
6LRH 20/16	20	15	31,5		232	226	218	211	198	181	162	139	112
6LRH 20/17	25	18,5	38,3		247	240	231	224	211	192	172	148	119
6LRH 20/18	25	18,5	38,3		261	254	245	238	223	203	182	157	126

Max Eff. %	76
Max kW / St.	0,93

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3	3	4	6



TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
6LRH 20/01-4	4" NEMA	652	302	350	8,7	11
6LRH 20/02-4		789	369	420	12	15
6LRH 20/03-4		854	436	418	12,8	20
6LRH 20/04-4		971	503	468	15,3	24
6LRH 20/05-4		1108	570	538	18,6	28
6LRH 20/06-4		1175	637	538	18,6	32
6LRH 20/07	6" NEMA	1405	704	701	55	36
6LRH 20/08		1472	771	701	55	40
6LRH 20/09		1589	838	751	60	44
6LRH 20/10		1656	905	751	60	49
6LRH 20/11		1783	972	811	65	53
6LRH 20/12		1850	1039	811	65	57
6LRH 20/13		1947	1106	841	70	61
6LRH 20/14		2014	1173	841	70	65
6LRH 20/15		2171	1240	931	75	69
6LRH 20/16		2238	1307	931	75	74
6LRH 20/17		2365	1374	991	83	78
6LRH 20/18		2432	1441	991	83	82

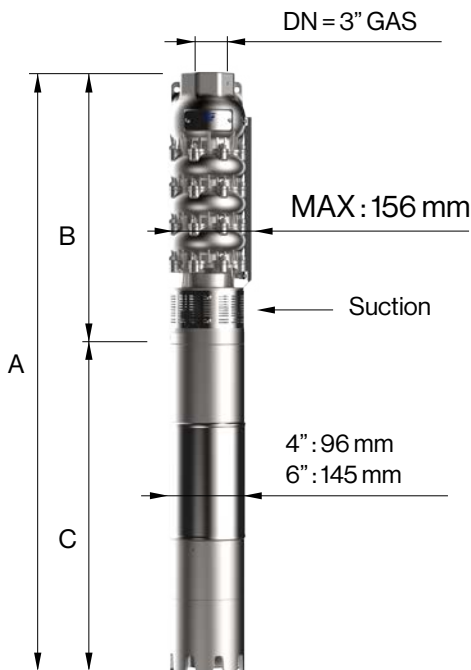


# 6LRH 20

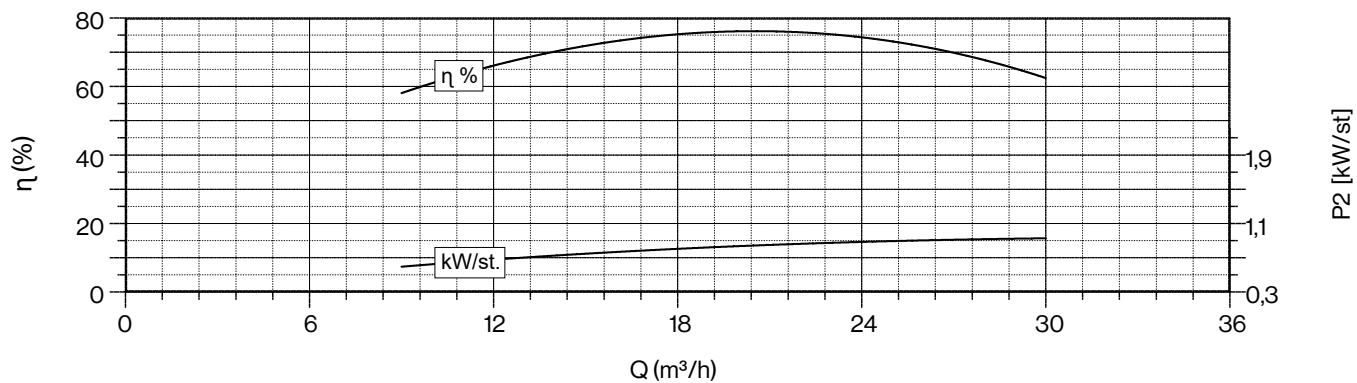
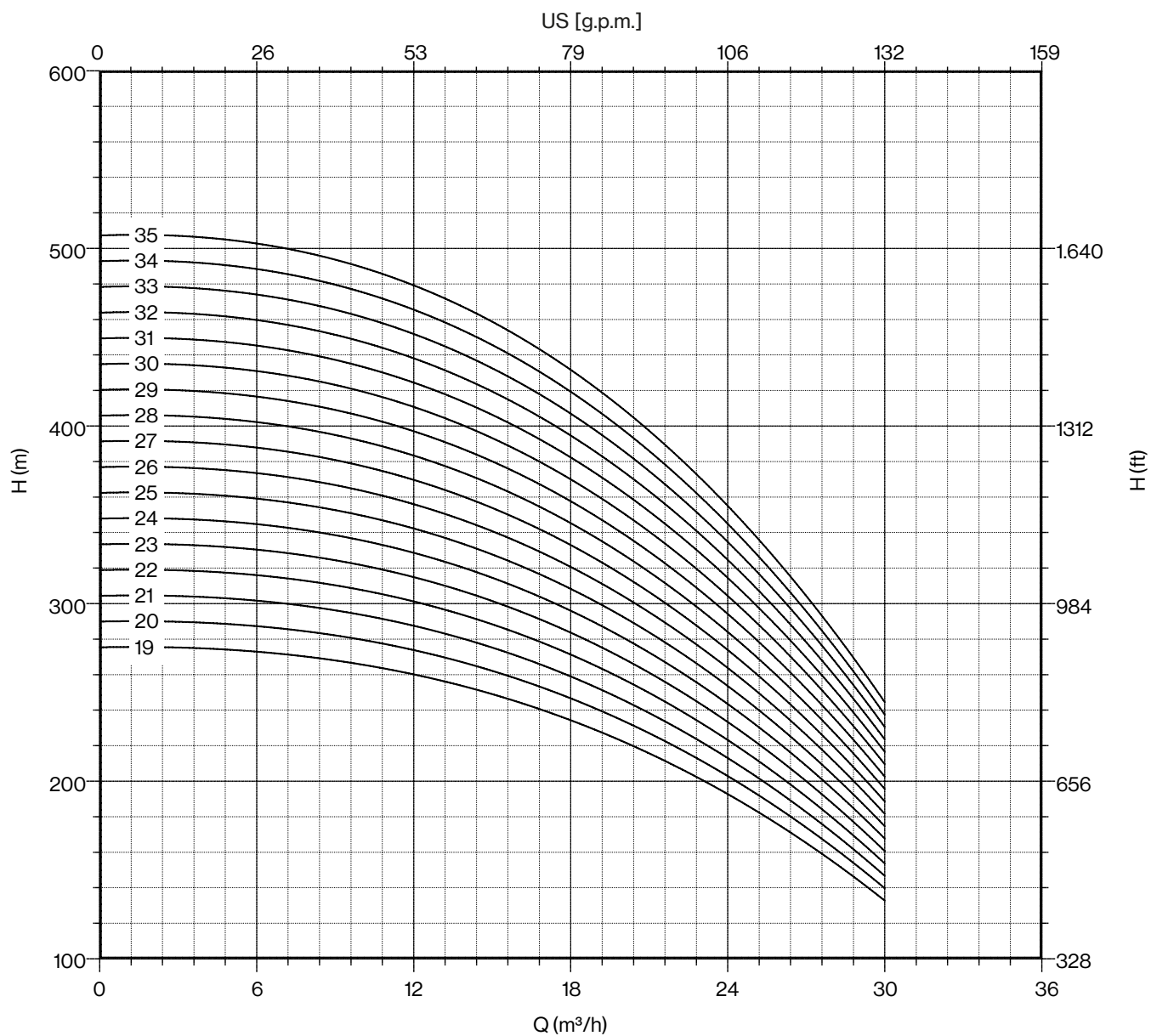
50 Hz - 2900 rpm				Q									
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	150	200	250	300	350	400	450	500	
	P2		CURRENT	I/sec	0,0	2,5	3,3	4,2	5,0	5,8	6,7	7,5	8,3
	HP	kW	A	m³/h	0	9	12	15	18	21	24	27	30
6LRH 20/19	25	18,5	38,3	H (m)	276	268	258	251	236	215	192	165	133
6LRH 20/20	25	18,5	38,3		290	282	272	264	248	226	202	174	140
6LRH 20/21	30	22	45,1		305	296	286	277	260	237	212	183	147
6LRH 20/22	30	22	45,1		319	310	299	290	273	249	222	191	154
6LRH 20/23	30	22	45,1		334	324	313	304	285	260	232	200	161
6LRH 20/24	30	22	45,1		348	338	326	317	298	271	242	209	168
6LRH 20/25	35	26	52,9		363	353	340	330	310	283	253	218	175
6LRH 20/26	35	26	52,9		377	367	354	343	322	294	263	226	182
6LRH 20/27	35	26	52,9		392	381	367	356	335	305	273	235	189
6LRH 20/28	35	26	52,9		406	395	381	370	347	316	283	244	196
6LRH 20/29	40	30	61,1		421	409	394	383	360	328	293	252	203
6LRH 20/30	40	30	61,1		435	423	408	396	372	339	303	261	210
6LRH 20/31	40	30	61,1		450	437	422	409	384	350	313	270	217
6LRH 20/32	40	30	61,1		464	451	435	422	397	362	323	278	224
6LRH 20/33	50	37	75,8		479	465	449	436	409	373	333	287	231
6LRH 20/34	50	37	75,8		493	479	462	449	422	384	343	296	238
6LRH 20/35	50	37	75,8		508	494	476	462	434	396	354	305	245

Max Eff. %	76
Max kW / St.	0,93

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3	3	4	6



TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
6LRH 20/19	6" NEMA	2499	1508	991	83	86
6LRH 20/20		2566	1575	991	83	90
6LRH 20/21		2713	1642	1071	92	94
6LRH 20/22		2780	1709	1071	92	98
6LRH 20/23		2847	1776	1071	92	103
6LRH 20/24		2914	1843	1071	92	107
6LRH 20/25		3091	1910	1181	100	111
6LRH 20/26		3158	1977	1181	100	115
6LRH 20/27		3225	2044	1181	100	119
6LRH 20/28		3292	2111	1181	100	123
6LRH 20/29		3429	2178	1251	108	127
6LRH 20/30		3496	2245	1251	108	132
6LRH 20/31		3563	2312	1251	108	136
6LRH 20/32		3630	2379	1251	108	140
6LRH 20/33		3787	2446	1341	118	144
6LRH 20/34		3854	2513	1341	118	148
6LRH 20/35		3921	2580	1341	118	152

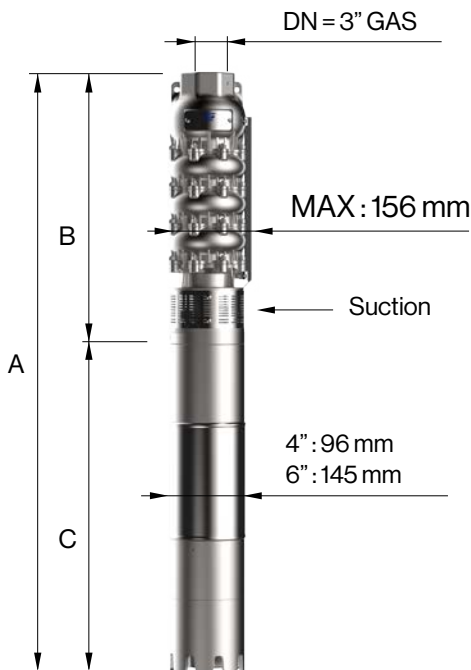


# 6LRH 25

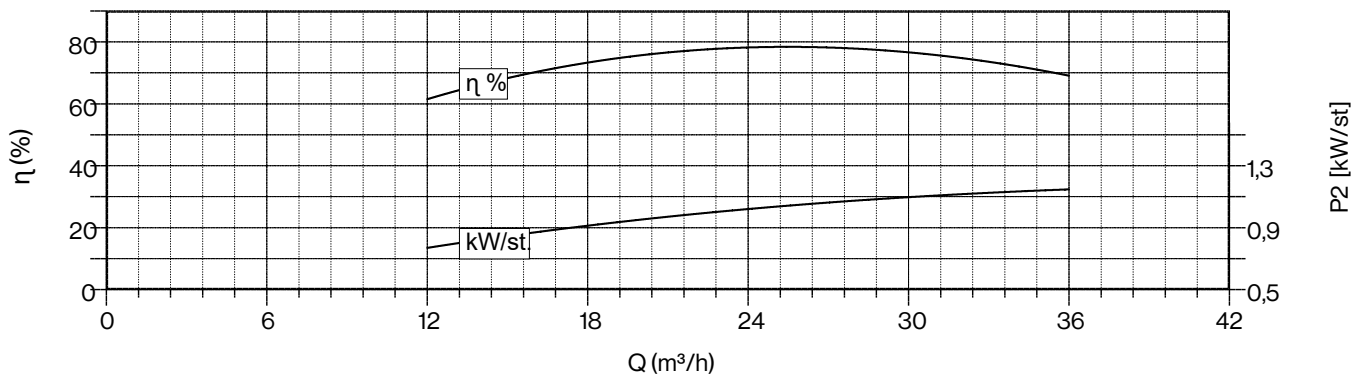
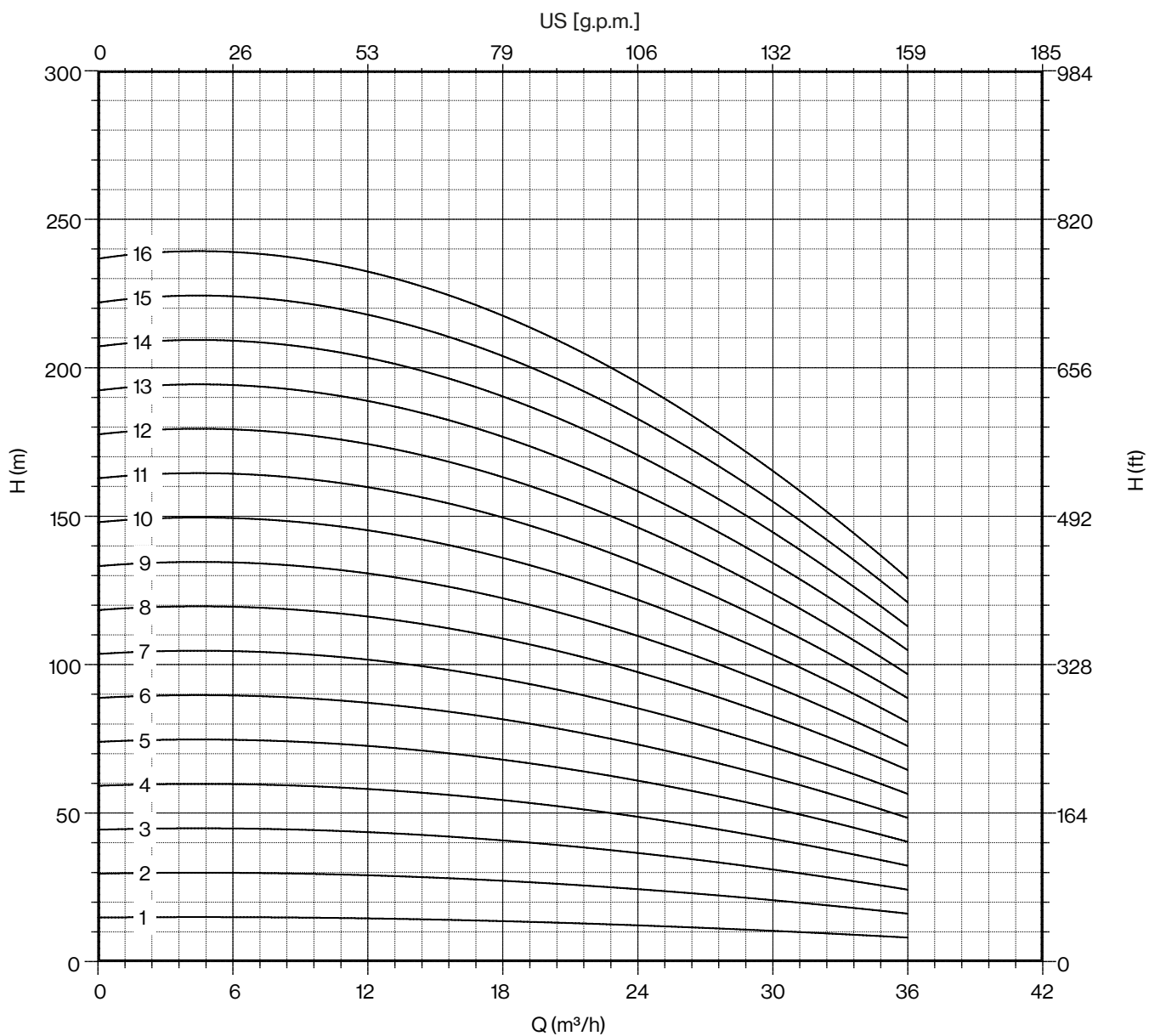
50 Hz - 2900 rpm				Q										
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	200	250	300	350	400	450	500	550	600	
	P2		CURRENT	I/sec	0,0	3,3	4,2	5,0	5,8	6,7	7,5	8,3	9,2	10,0
	HP	kW	A	m³/h	0	12	15	18	21	24	27	30	33	36
6LRH 25/01	1,5	1,1	3,4	H (m)	15	15	14	14	13	12	11	10	9	8
6LRH 25/02	3	2,2	6,4		30	29	28	27	26	24	23	21	18	16
6LRH 25/03	5,5	4	9,6		44	44	42	41	39	37	34	31	28	24
6LRH 25/04	7,5	5,5	13,6		59	58	56	54	52	49	45	41	37	32
6LRH 25/05	10	7,5	16,3		74	73	71	68	65	61	57	52	46	41
6LRH 25/06	10	7,5	16,3		89	87	85	82	78	73	68	62	55	49
6LRH 25/07	12,5	9,2	19,9		104	102	99	95	91	85	79	72	64	57
6LRH 25/08	12,5	9,2	19,9		118	116	113	109	104	98	90	82	74	65
6LRH 25/09	15	11	23,4		133	131	127	122	117	110	102	93	83	73
6LRH 25/10	17,5	13	27,3		148	145	141	136	130	122	113	103	92	81
6LRH 25/11	17,5	13	27,3		163	160	155	150	143	134	124	113	101	89
6LRH 25/12	20	15	31,5		178	174	169	163	156	146	136	124	110	97
6LRH 25/13	20	15	31,5		192	189	183	177	169	159	147	134	120	105
6LRH 25/14	25	18,5	38,3		207	203	197	190	182	171	158	144	129	113
6LRH 25/15	25	18,5	38,3		222	218	212	204	195	183	170	155	138	122
6LRH 25/16	25	18,5	38,3		237	232	226	218	208	195	181	165	147	130

Max Eff. %	78,5
Max kW / St.	1,15

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3	3	4,5	6,6



TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
6LRH 25/01-4	4" NEMA	652	302	350	8,7	11
6LRH 25/02-4		789	369	420	12	15
6LRH 25/03-4		904	436	468	15,3	20
6LRH 25/04-4		1041	503	538	18,6	24
6LRH 25/05	6" NEMA	1271	570	701	55	28
6LRH 25/06		1338	637	701	55	32
6LRH 25/07		1455	704	751	60	36
6LRH 25/08		1522	771	751	60	40
6LRH 25/09		1649	838	811	65	44
6LRH 25/10		1746	905	841	70	49
6LRH 25/11		1813	972	841	70	53
6LRH 25/12		1970	1039	931	75	57
6LRH 25/13		2037	1106	931	75	61
6LRH 25/14		2164	1173	991	83	65
6LRH 25/15		2231	1240	991	83	69
6LRH 25/16		2298	1307	991	83	74

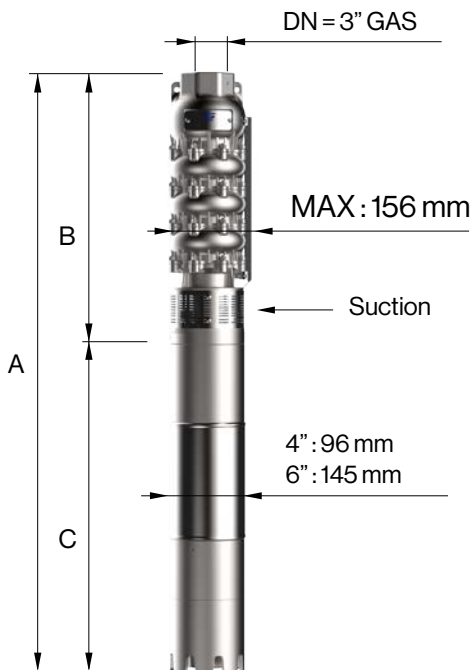


# 6LRH 25

50 Hz - 2900 rpm				Q										
TYPE	SUITABLE MOTOR 3- 400V		I/min	I/sec	0	200	250	300	350	400	450	500	550	600
	P2				CURRENT	0,0	3,3	4,2	5,0	5,8	6,7	7,5	8,3	9,2
	HP	kW	A	m³/h	0	12	15	18	21	24	27	30	33	36
6LRH 25/17	30	22	45,1	H (m)	252	247	240	231	221	207	192	175	156	138
6LRH 25/18	30	22	45,1		266	261	254	245	234	220	203	185	166	146
6LRH 25/19	30	22	45,1		281	276	268	258	247	232	215	196	175	154
6LRH 25/20	35	26	52,9		296	290	282	272	260	244	226	206	184	162
6LRH 25/21	35	26	52,9		311	305	296	286	273	256	237	216	193	170
6LRH 25/22	35	26	52,9		326	319	310	299	286	268	249	227	202	178
6LRH 25/23	35	26	52,9		340	334	324	313	299	281	260	237	212	186
6LRH 25/24	40	30	61,1		355	348	338	326	312	293	271	247	221	194
6LRH 25/25	40	30	61,1		370	363	353	340	325	305	283	258	230	203
6LRH 25/26	40	30	61,1		385	377	367	354	338	317	294	268	239	211
6LRH 25/27	50	37	75,8		400	392	381	367	351	329	305	278	248	219
6LRH 25/28	50	37	75,8		414	406	395	381	364	342	316	288	258	227
6LRH 25/29	50	37	75,8		429	421	409	394	377	354	328	299	267	235
6LRH 25/30	50	37	75,8		444	435	423	408	390	366	339	309	276	243
6LRH 25/31	50	37	75,8		459	450	437	422	403	378	350	319	285	251
6LRH 25/32	50	37	75,8		474	464	451	435	416	390	362	330	294	259
6LRH 25/33	50	37	75,8		488	479	465	449	429	403	373	340	304	267

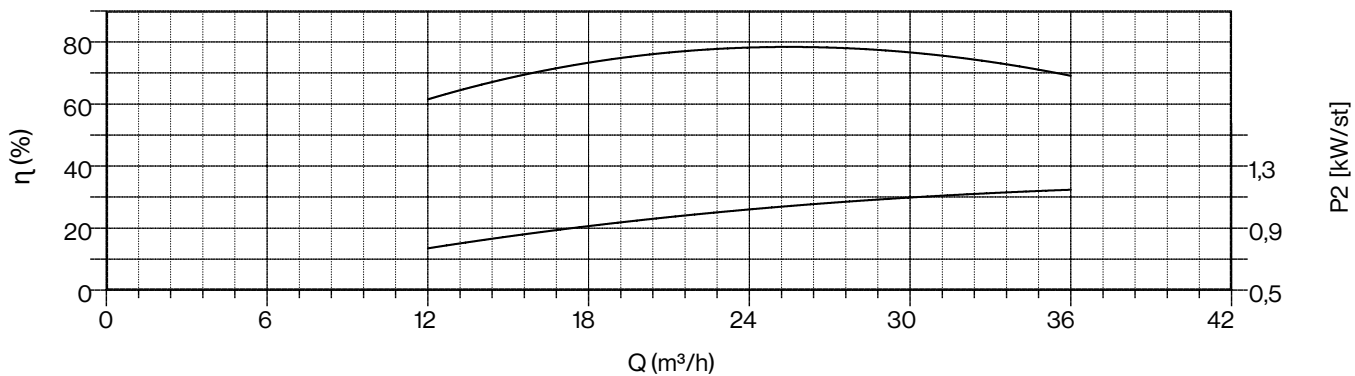
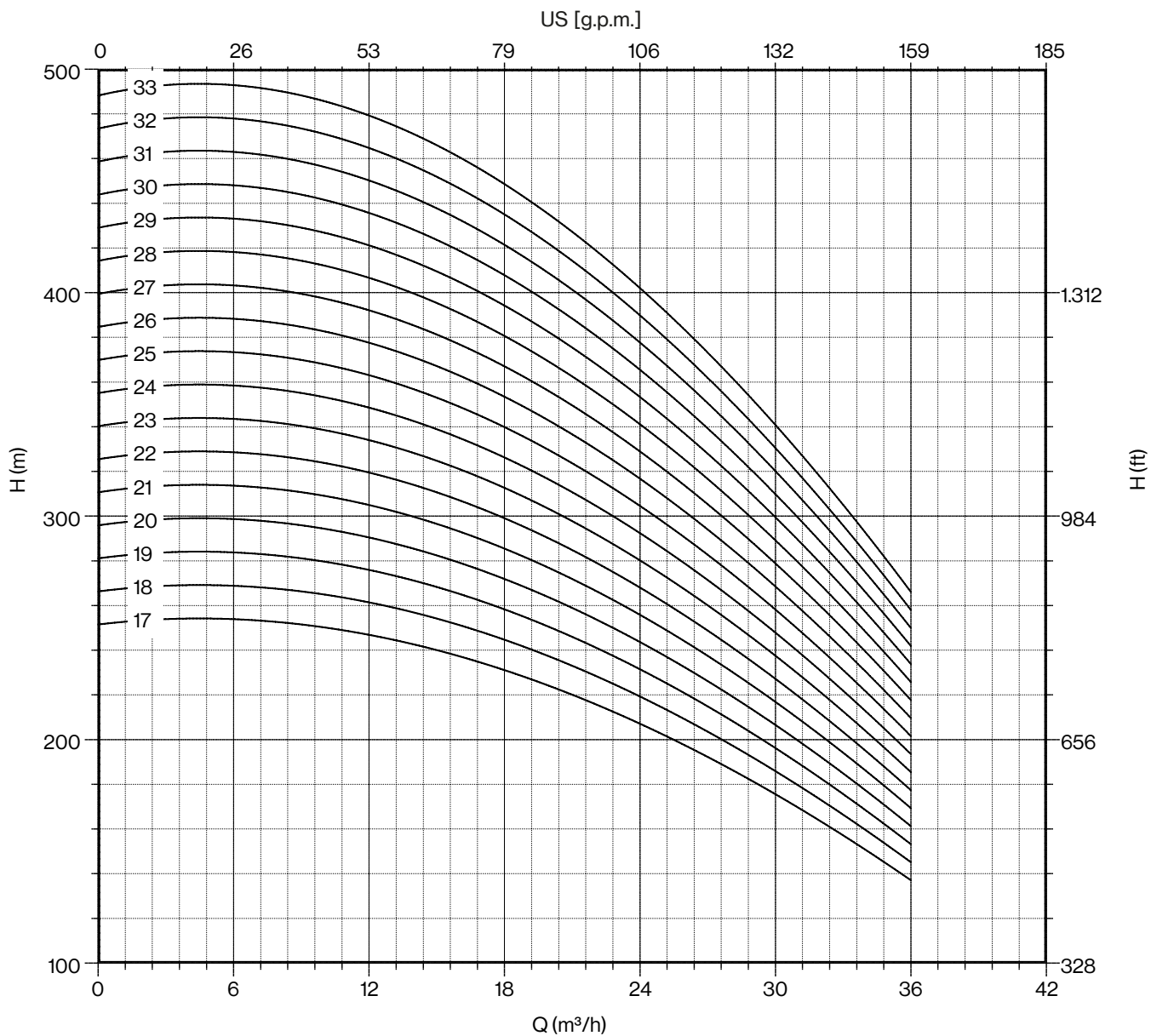
Max Eff. %	78,5
Max kW / St.	1,15

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3	3	4,5	6,6



TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
6LRH 25/17	6" NEMA	2445	1374	1071	92	78
6LRH 25/18		2512	1441	1071	92	82
6LRH 25/19		2579	1508	1071	92	86
6LRH 25/20		2756	1575	1181	100	90
6LRH 25/21		2823	1642	1181	100	94
6LRH 25/22		2890	1709	1181	100	98
6LRH 25/23		2957	1776	1181	100	103
6LRH 25/24		3094	1843	1251	108	107
6LRH 25/25		3161	1910	1251	108	111
6LRH 25/26		3228	1977	1251	108	115
6LRH 25/27		3385	2044	1341	118	119
6LRH 25/28		3452	2111	1341	118	123
6LRH 25/29		3519	2178	1341	118	127
6LRH 25/30		3586	2245	1341	118	132
6LRH 25/31		3653	2312	1341	118	136
6LRH 25/32		3720	2379	1341	118	140
6LRH 25/33		3787	2446	1341	118	144





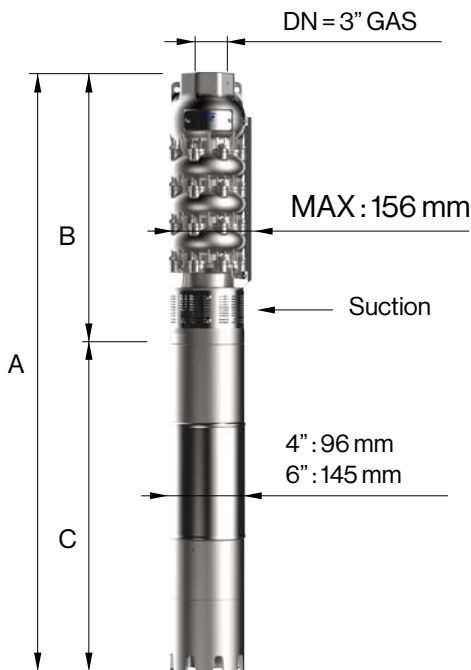


# 6LRH 32

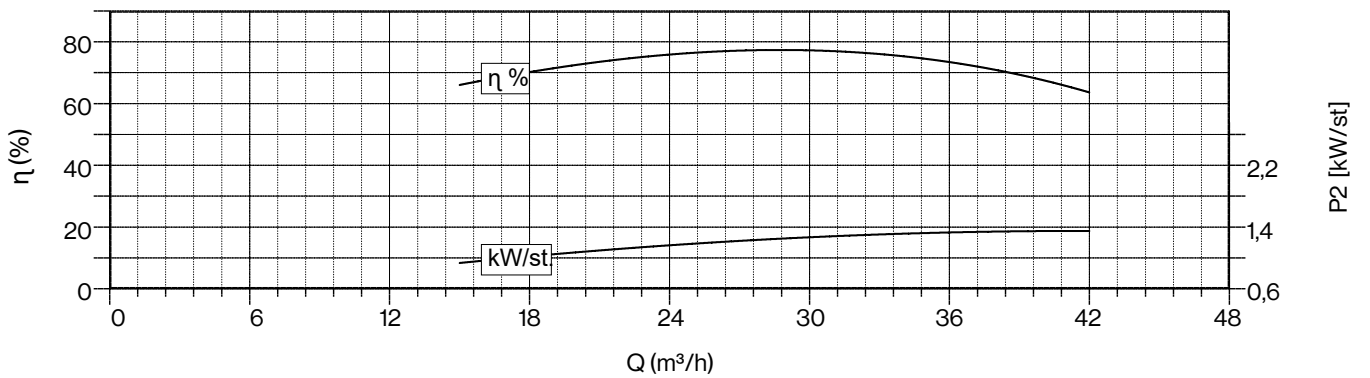
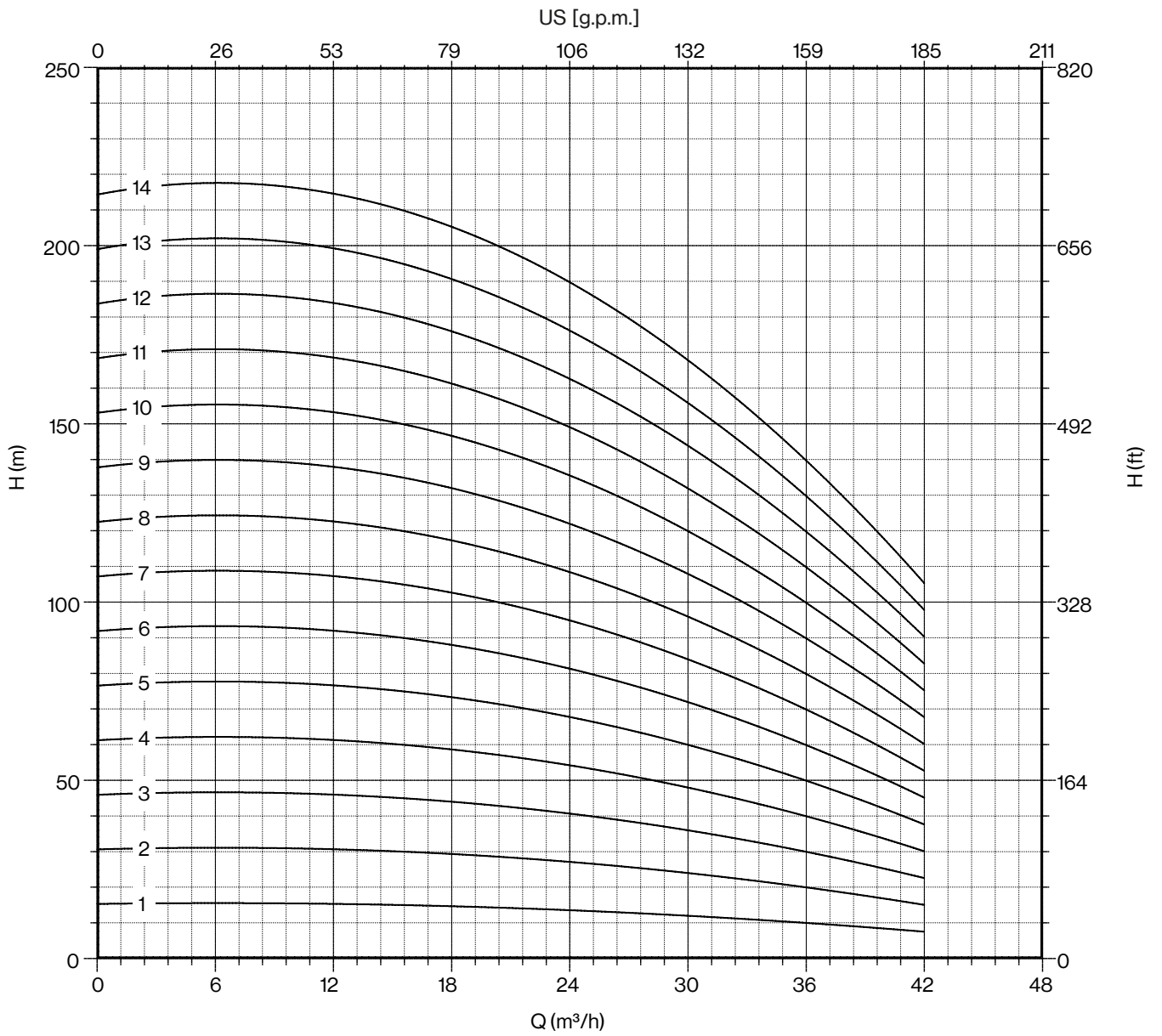
50 Hz - 2900 rpm				Q											
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	250	300	350	400	450	500	550	600	650	700	
	P2		CURRENT	I/sec	0,0	4,2	5,0	5,8	6,7	7,5	8,3	9,2	10,0	10,8	11,7
	HP	kW	A	m³/h	0	15	18	21	24	27	30	33	36	39	42
6LRH 32/01	2	1,5	4,6	H (m)	15	15	15	14	14	13	12	11	10	9	8
6LRH 32/02	4	3	8,3		31	30	29	28	27	26	24	22	20	18	15
6LRH 32/03	5,5	4	9,6		46	45	44	42	41	38	36	33	30	26	23
6LRH 32/04	7,5	5,5	13,6		61	60	59	56	54	51	48	44	40	35	30
6LRH 32/05	10	7,5	16,3		77	76	74	71	68	64	60	56	50	44	38
6LRH 32/06	12,5	9,2	19,9		92	91	88	85	81	77	72	67	60	53	45
6LRH 32/07	12,5	9,2	19,9		107	106	103	99	95	90	84	78	70	62	53
6LRH 32/08	15	11	23,4		122	121	118	113	108	102	96	89	80	70	60
6LRH 32/09	17,5	13	27,3		138	136	132	127	122	115	108	100	90	79	68
6LRH 32/10	20	15	31,5		153	151	147	141	135	128	120	111	100	88	75
6LRH 32/11	20	15	31,5		168	166	162	155	149	141	132	122	110	97	83
6LRH 32/12	25	18,5	38,3		184	181	176	169	162	154	144	133	120	106	90
6LRH 32/13	25	18,5	38,3		199	196	191	183	176	166	156	144	130	114	98
6LRH 32/14	25	18,5	38,3		214	211	206	197	189	179	168	155	140	123	105

Max Eff. %	77,5
Max kW / St.	1,35

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3,4	3,4	3,9	7,5



TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
6LRH 32/01-4	4" NEMA	687	302	385	10,4	11
6LRH 32/02-4		787	369	418	12,8	15
6LRH 32/03-4		904	436	468	15,3	20
6LRH 32/04-4		1041	503	538	18,6	24
6LRH 32/05	6" NEMA	1271	570	701	55	28
6LRH 32/06		1388	637	751	60	32
6LRH 32/07		1455	704	751	60	36
6LRH 32/08		1582	771	811	65	40
6LRH 32/09		1679	838	841	70	44
6LRH 32/10		1836	905	931	75	49
6LRH 32/11		1903	972	931	75	53
6LRH 32/12		2030	1039	991	83	57
6LRH 32/13		2097	1106	991	83	61
6LRH 32/14		2164	1173	991	83	65

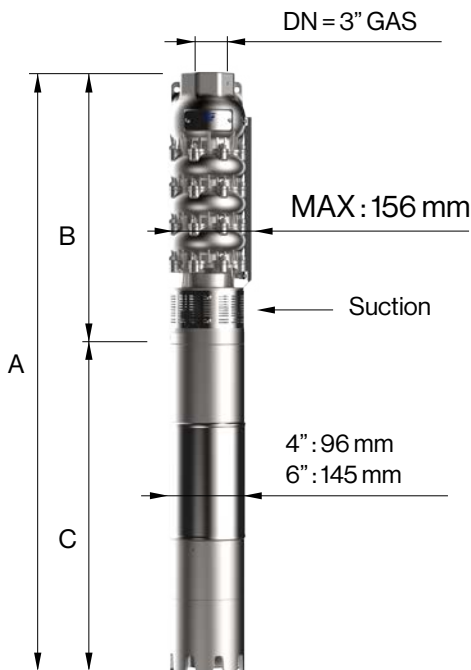


# 6LRH 32

50 Hz - 2900 rpm				Q											
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	250	300	350	400	450	500	550	600	650	700	
	P2		CURRENT	I/sec	0,0	4,2	5,0	5,8	6,7	7,5	8,3	9,2	10,0	10,8	11,7
	HP	kW	A	m³/h	0	15	18	21	24	27	30	33	36	39	42
6LRH 32/15	30	22	45,1	H (m)	230	227	221	212	203	192	180	167	150	132	113
6LRH 32/16	30	22	45,1		245	242	235	226	216	205	192	178	160	141	120
6LRH 32/17	35	26	52,9		260	257	250	240	230	218	204	189	170	150	128
6LRH 32/18	35	26	52,9		275	272	265	254	243	230	216	200	180	158	135
6LRH 32/19	35	26	52,9		291	287	279	268	257	243	228	211	190	167	143
6LRH 32/20	40	30	61,1		306	302	294	282	270	256	240	222	200	176	150
6LRH 32/21	40	30	61,1		321	317	309	296	284	269	252	233	210	185	158
6LRH 32/22	40	30	61,1		337	332	323	310	297	282	264	244	220	194	165
6LRH 32/23	50	37	75,8		352	347	338	324	311	294	276	255	230	202	173
6LRH 32/24	50	37	75,8		367	362	353	338	324	307	288	266	240	211	180
6LRH 32/25	50	37	75,8		383	378	368	353	338	320	300	278	250	220	188
6LRH 32/26	50	37	75,8		398	393	382	367	351	333	312	289	260	229	195
6LRH 32/27	50	37	75,8		413	408	397	381	365	346	324	300	270	238	203
6LRH 32/28	50	37	75,8		428	423	412	395	378	358	336	311	280	246	210

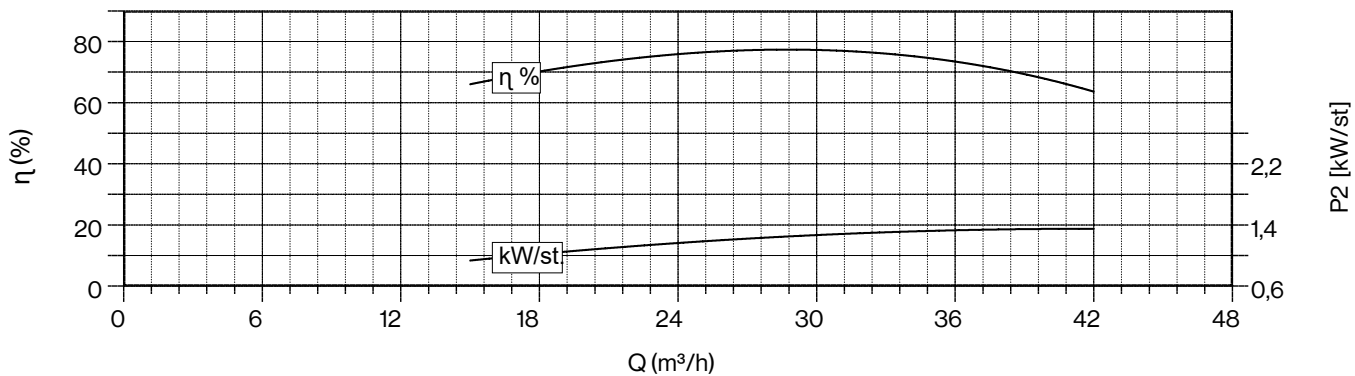
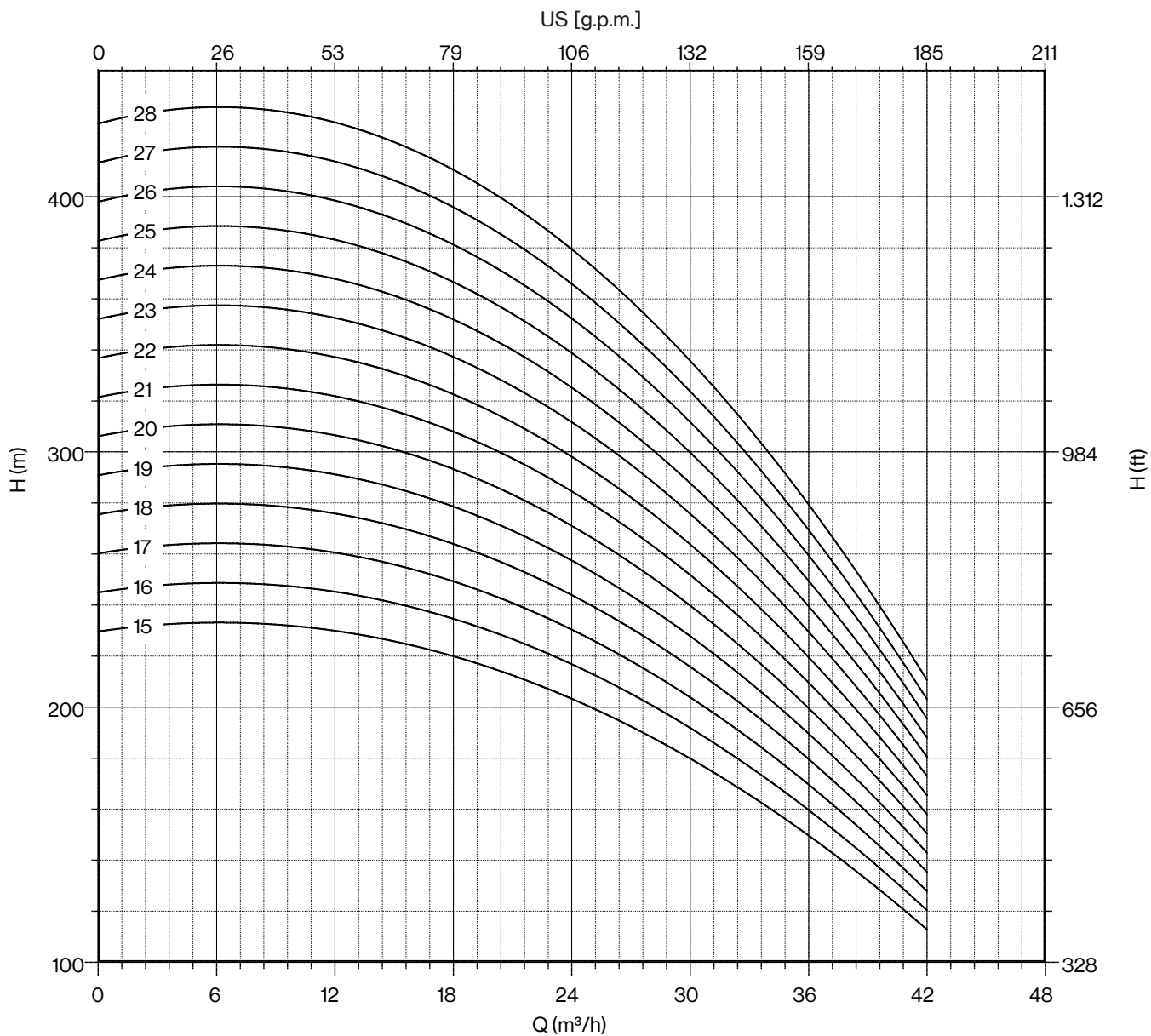
Max Eff. %	77,5
Max kW / St.	1,35

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3,4	3,4	3,9	7,5



TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
6LRH 32/15	6" NEMA	2311	1240	1071	92	69
6LRH 32/16		2378	1307	1071	92	74
6LRH 32/17		2555	1374	1181	100	78
6LRH 32/18		2622	1441	1181	100	82
6LRH 32/19		2689	1508	1181	100	86
6LRH 32/20		2826	1575	1251	108	90
6LRH 32/21		2893	1642	1251	108	94
6LRH 32/22		2960	1709	1251	108	98
6LRH 32/23		3117	1776	1341	118	103
6LRH 32/24		3184	1843	1341	118	107
6LRH 32/25		3251	1910	1341	118	111
6LRH 32/26		3318	1977	1341	118	115
6LRH 32/27		3385	2044	1341	118	119
6LRH 32/28		3452	2111	1341	118	123

\* Coupled pump shaft

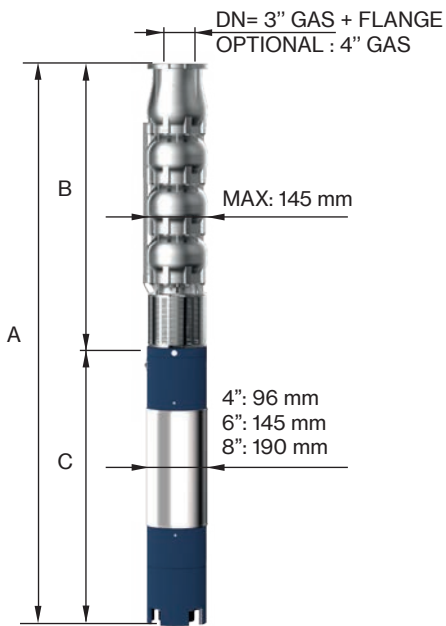


# 6LM 38

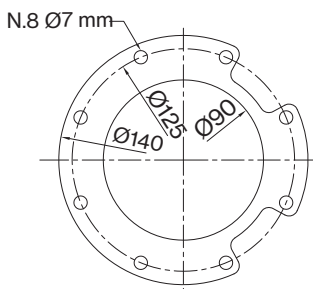
50 Hz - 2900 rpm				Q									
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	100	200	300	400	500	600	700	800	
	P2			I/sec	0	1,7	3,3	5,0	6,7	8,3	10,0	11,7	13,3
	HP	kW	CURRENT A		m³/h	0	6	12	18	24	30	36	42
6LM 38/01	2	1,5	4,0	H (m)	14	14	13	13	12	11	10	9	7
6LM 38/02	4	3	7,5		29	27	26	25	24	23	20	17	14
6LM 38/03	5,5	4	10,0		43	41	39	38	36	34	31	26	20
6LM 38/04	7,5	5,5	12,5		57	55	52	51	48	45	41	35	27
6LM 38/05	10	7,5	16,3		71	69	65	64	60	56	51	44	34
6LM 38/06	12,5	9,2	19,9		86	82	78	76	72	68	61	52	41
6LM 38/07	15	11	23,4		100	96	91	89	84	79	71	61	48
6LM 38/08	15	11	23,4		114	110	104	102	96	90	81	70	55
6LM 38/09	17,5	13	27,3		129	123	117	114	108	102	92	78	61
6LM 38/10	20	15	31,5		143	137	130	127	120	113	102	87	68
6LM 38/11	20	15	31,5		157	151	143	140	132	124	112	96	75
6LM 38/12	25	18,5	38,3		172	164	156	152	144	136	122	104	82
6LM 38/13	25	18,5	38,3		186	178	169	165	156	147	132	113	89
6LM 38/14	30	22	45,1		200	192	182	178	168	158	143	122	95
6LM 38/15	30	22	45,1		214	206	195	191	180	169	153	131	102
6LM 38/16	30	22	45,1		229	219	208	203	192	181	163	139	109

Max Eff. %	76
Max kW / St.	1,33

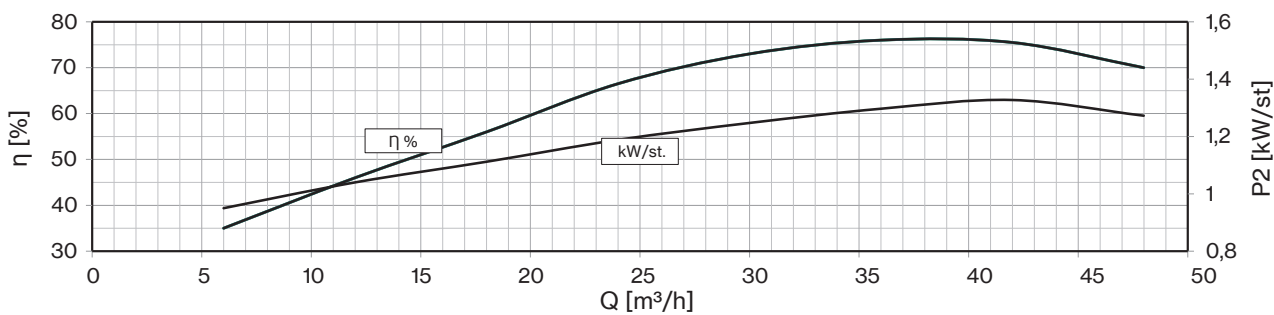
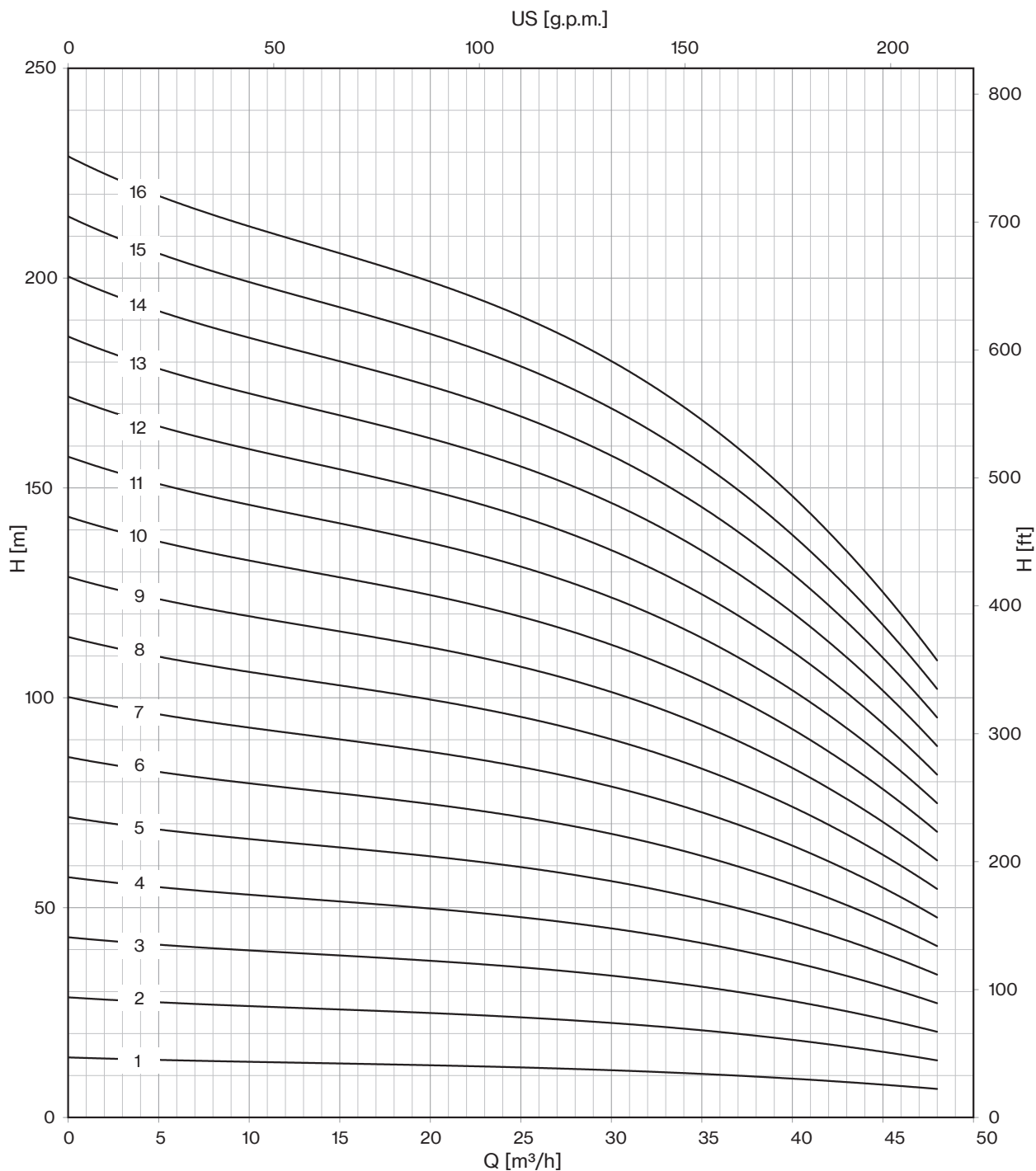
NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3,4	3,4	3,8	8



TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
6LM 38/01-4	4" NEMA	746	354	392	13	8
6LM 38/02-4		1012	455	557	19	12
6LM 38/03-4		1153	556	597	22	15
6LM 38/04-4		1355	657	698	27	19
6LM 38/05-4	6" NEMA	1499	798	701	55	23
6LM 38/06		1650	899	751	60	26
6LM 38/07		1811	1000	811	65	30
6LM 38/08		1912	1101	811	65	33
6LM 38/09		2043	1202	841	70	37
6LM 38/10		2234	1303	931	75	41
6LM 38/11		2335	1404	931	75	44
6LM 38/12		2496	1505	991	83	48
6LM 38/13		2597	1606	991	83	51
6LM 38/14		2778	1707	1071	92	55
6LM 38/15		2879	1808	1071	92	59
6LM 38/16		2980	1909	1071	92	62



FOR COMMERCIAL TUBE  
EXTERNAL DIAMETER: 88,9 mm

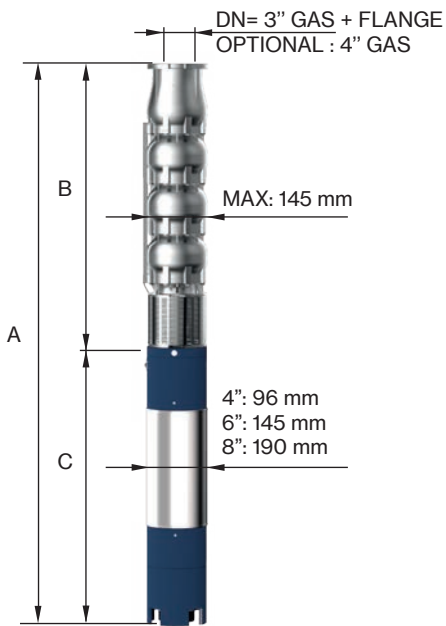


# 6LM 38

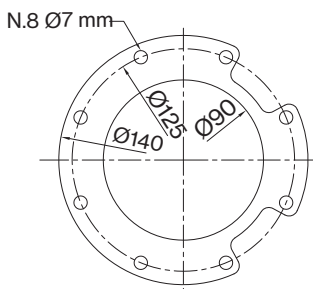
50 Hz - 2900 rpm				Q									
TYPE	SUITABLE MOTOR 3- 400V		l/min	0	100	200	300	400	500	600	700	800	
	P2		CURRENT	l/sec	0	1,7	3,3	5,0	6,7	8,3	10,0	11,7	13,3
	HP	kW	A	m³/h	0	6	12	18	24	30	36	42	48
6LM 38/17	35	26	52,9	H (m)	243	233	221	216	204	192	173	148	116
6LM 38/18	35	26	52,9		257	247	234	229	216	203	183	157	123
6LM 38/19	35	26	52,9		272	260	247	241	228	215	194	165	129
6LM 38/20	40	30	61,1		286	274	260	254	240	226	204	174	136
6LM 38/21	40	30	61,1		300	288	273	267	252	237	214	183	143
6LM 38/22	40	30	61,1		315	301	286	279	264	249	224	191	150
6LM 38/23	50	37	75,8		329	315	299	292	276	260	234	200	157
6LM 38/24	50	37	75,8		343	329	312	305	288	271	244	209	164
6LM 38/25	50	37	75,8		357	343	325	318	300	282	255	218	170
6LM 38/26	50	37	75,8		372	356	338	330	312	294	265	226	177
6LM 38/27	50	37	75,8		386	370	351	343	324	305	275	235	184
6LM 38/28	60	45	86,3		400	384	364	356	336	316	285	244	191
6LM 38/29	60	45	86,3		415	397	377	368	348	328	295	252	198
6LM 38/30	60	45	86,3		429	411	390	381	360	339	306	261	204
6LM 38/31	60	45	86,3		443	425	403	394	372	350	316	270	211
6LM 38/32	60	45	86,3		457	438	416	407	384	361	326	279	218
6LM 38/33	60	45	86,3	472	452	429	419	396	373	336	287	225	

Max Eff. %	76
Max kW / St.	1,33

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3,4	3,4	3,8	8

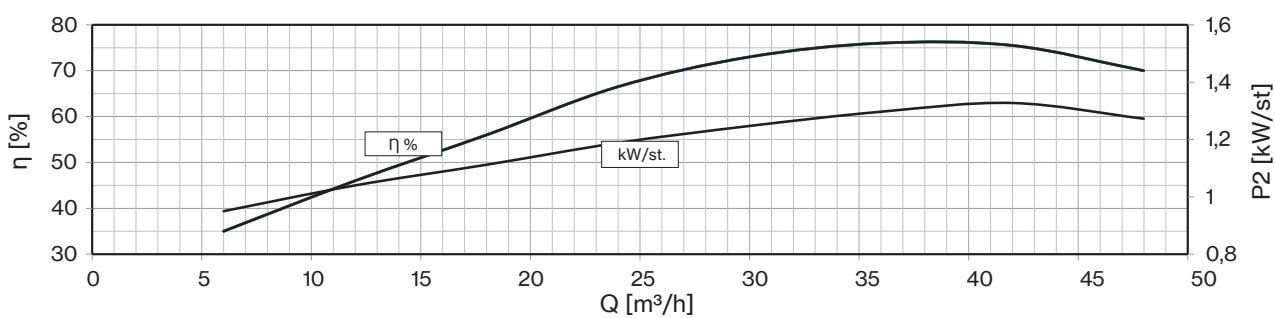
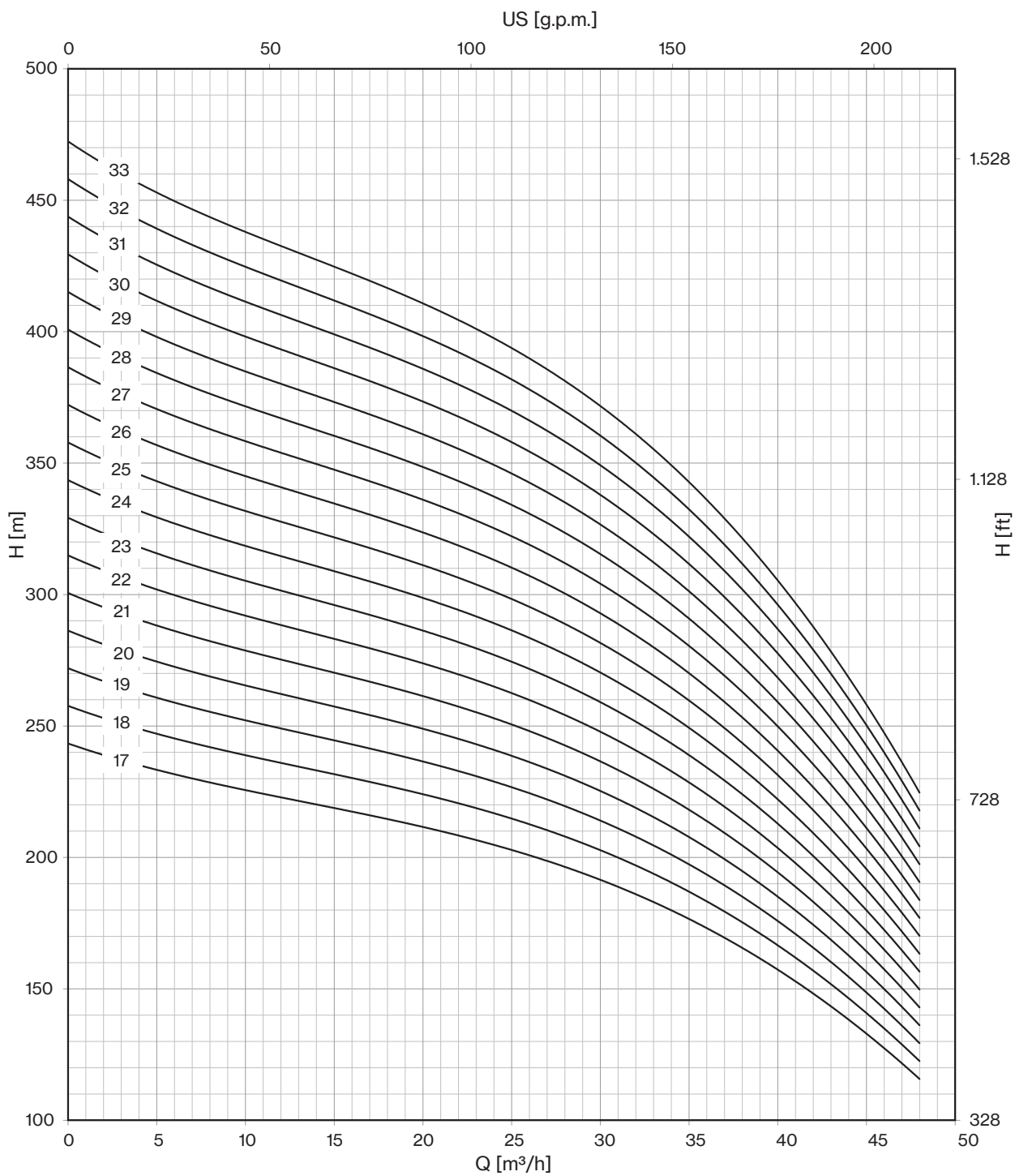


TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
6LM 38/17	6" NEMA	3191	2010	1181	100	66
6LM 38/18		3292	2111	1181	100	69
6LM 38/19		3393	2212	1181	100	73
6LM 38/20		3564	2313	1251	108	77
6LM 38/21		3665	2414	1251	108	80
6LM 38/22		3766	2515	1251	108	84
6LM 38/23		3957	2616	1341	118	87
6LM 38/24		4058	2717	1341	118	91
6LM 38/25		4159	2818	1341	118	95
6LM 38/26		4260	2919	1341	118	98
6LM 38/27		4361	3020	1341	118	102
6LM 38/28		4311	3188	1123	178	109
6LM 38/29		4412	3289	1123	178	113
6LM 38/30		4513	3390	1123	178	116
6LM 38/31		4614	3491	1123	178	120
6LM 38/32		4715	3592	1123	178	124
6LM 38/33	4816	3693	1123	178	127	



FOR COMMERCIAL TUBE  
EXTERNAL DIAMETER: 88,9 mm





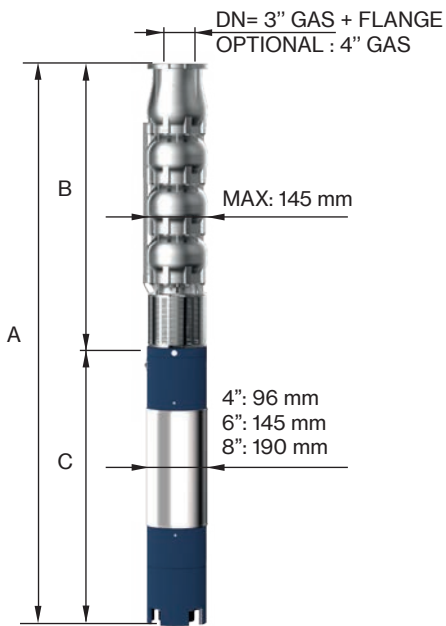


# 6LM 48

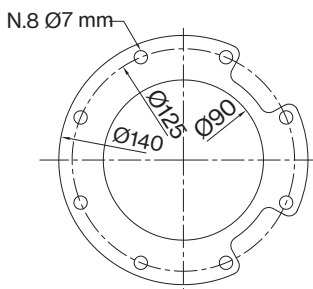
50 Hz - 2900 rpm				Q									
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	200	400	500	600	700	800	900	1000	
	P2			I/sec	0	3,3	6,7	8,3	10,0	11,7	13,3	15,0	16,7
	HP	kW	CURRENT A		m³/h	0	12	24	30	36	42	48	54
6LM 48/01	2	1,5	4,0	H (m)	14	14	11	11	11	10	9	7	6
6LM 48/02	4	3	7,5		28	27	23	22	21	20	18	15	13
6LM 48/03	7,5	5,5	12,5		42	41	34	33	32	29	26	22	19
6LM 48/04	10	7,5	16,3		56	54	46	44	42	39	35	30	26
6LM 48/05	10	7,5	16,3		70	68	57	56	53	49	44	37	32
6LM 48/06	12,5	9,2	19,9		84	81	68	67	64	59	53	44	38
6LM 48/07	15	11	23,4		98	95	80	78	74	69	62	52	45
6LM 48/08	17,5	13	27,3		112	108	91	89	85	78	70	59	51
6LM 48/09	17,5	13	27,3		126	122	103	100	95	88	79	67	58
6LM 48/10	20	15	31,5		140	135	114	111	106	98	88	74	64
6LM 48/11	25	18,5	38,3		154	149	125	122	117	108	97	81	70
6LM 48/12	25	18,5	38,3		168	162	137	133	127	118	106	89	77
6LM 48/13	30	22	45,1		182	176	148	144	138	127	114	96	83
6LM 48/14	30	22	45,1		196	189	160	155	148	137	123	104	90
6LM 48/15	30	22	45,1		210	203	171	167	159	147	132	111	96
6LM 48/16	35	26	52,9		224	216	182	178	170	157	141	118	102

Max Eff. %	78,5
Max kW / St.	1,44

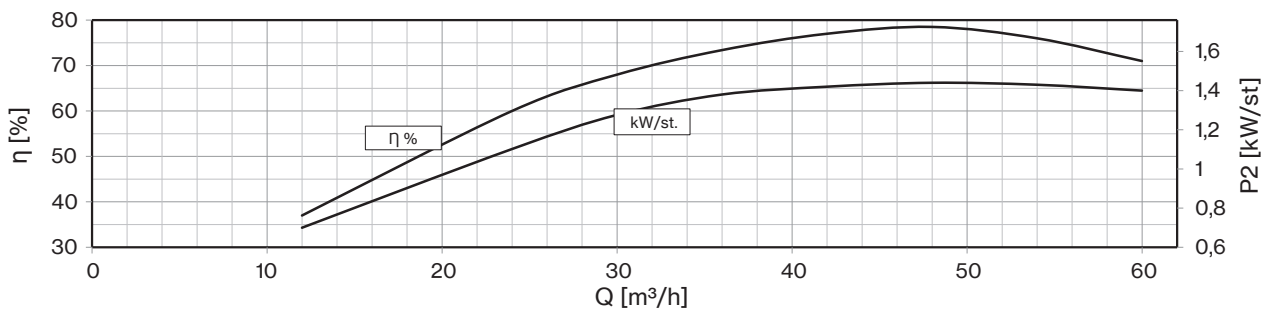
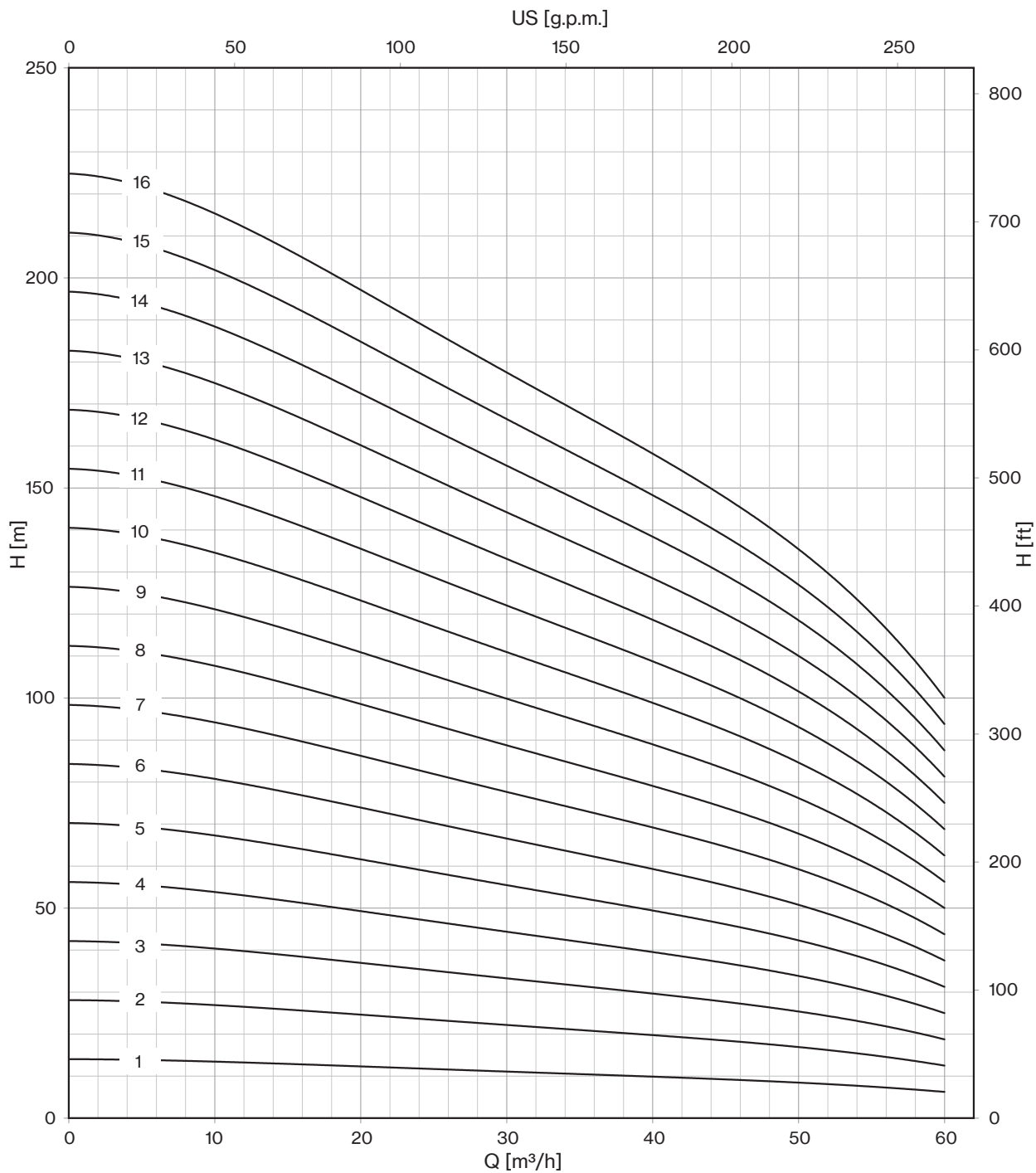
NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3,45	3,5	3,8	5



TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
6LM 48/01-4	4" NEMA	746	354	392	13	8
6LM 48/02-4		1012	455	557	19	12
6LM 48/03-4		1254	556	698	27	15
6LM 48/04	6" NEMA	1358	657	701	55	19
6LM 48/05		1499	798	701	55	23
6LM 48/06		1650	899	751	60	26
6LM 48/07		1811	1000	811	65	30
6LM 48/08		1942	1101	841	70	33
6LM 48/09		2043	1202	841	70	37
6LM 48/10		2234	1303	931	75	41
6LM 48/11		2395	1404	991	83	44
6LM 48/12		2496	1505	991	83	48
6LM 48/13		2677	1606	1071	92	51
6LM 48/14		2778	1707	1071	92	55
6LM 48/15		2879	1808	1071	92	59
6LM 48/16		3090	1909	1181	100	62



FOR COMMERCIAL TUBE  
EXTERNAL DIAMETER: 88,9 mm

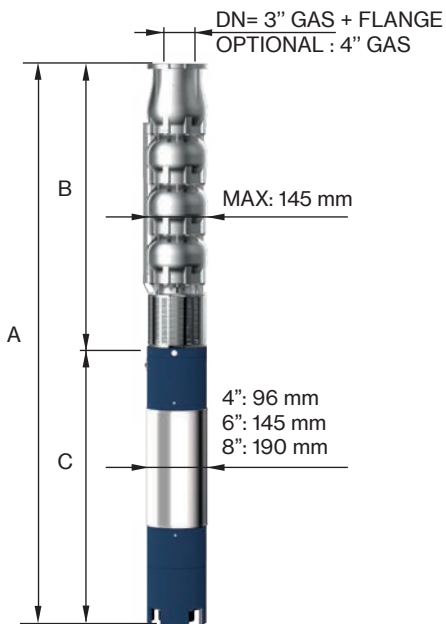


# 6LM 48

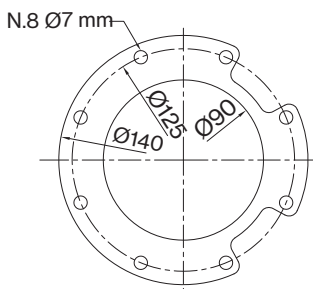
50 Hz - 2900 rpm				Q									
TYPE	SUITABLE MOTOR 3- 400V		I/min	I/sec	0	200	400	500	600	700	800	900	1000
	P2				CURRENT	0	3,3	6,7	8,3	10,0	11,7	13,3	15,0
	HP	kW	A	m³/h	0	12	24	30	36	42	48	54	60
6LM 48/17	35	26	52,9	H (m)	238	230	194	189	180	167	150	126	109
6LM 48/18	35	26	52,9		252	243	205	200	191	176	158	133	115
6LM 48/19	40	30	61,1		266	257	217	211	201	186	167	141	122
6LM 48/20	40	30	61,1		280	270	228	222	212	196	176	148	128
6LM 48/21	50	37	75,8		294	284	239	233	223	206	185	155	134
6LM 48/22	50	37	75,8		308	297	251	244	233	216	194	163	141
6LM 48/23	50	37	75,8		322	311	262	255	244	225	202	170	147
6LM 48/24	50	37	75,8		336	324	274	266	254	235	211	178	154
6LM 48/25	50	37	75,8		350	338	285	278	265	245	220	185	160
6LM 48/26	60	45	86,3		364	351	296	289	276	255	229	192	166
6LM 48/27	60	45	86,3		378	365	308	300	286	265	238	200	173
6LM 48/28	60	45	86,3		392	378	319	311	297	274	246	207	179
6LM 48/29	60	45	86,3		406	392	331	322	307	284	255	215	186
6LM 48/30	60	45	86,3	420	405	342	333	318	294	264	222	192	

Max Eff. %	78,5
Max kW / St.	1,44

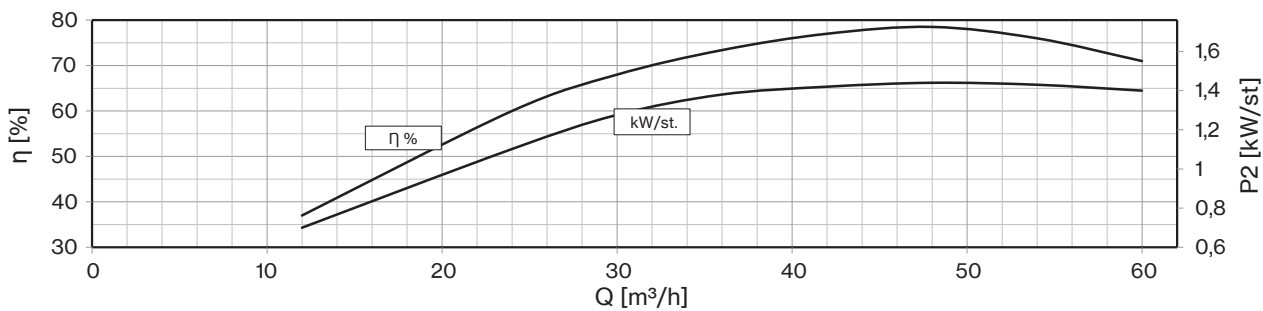
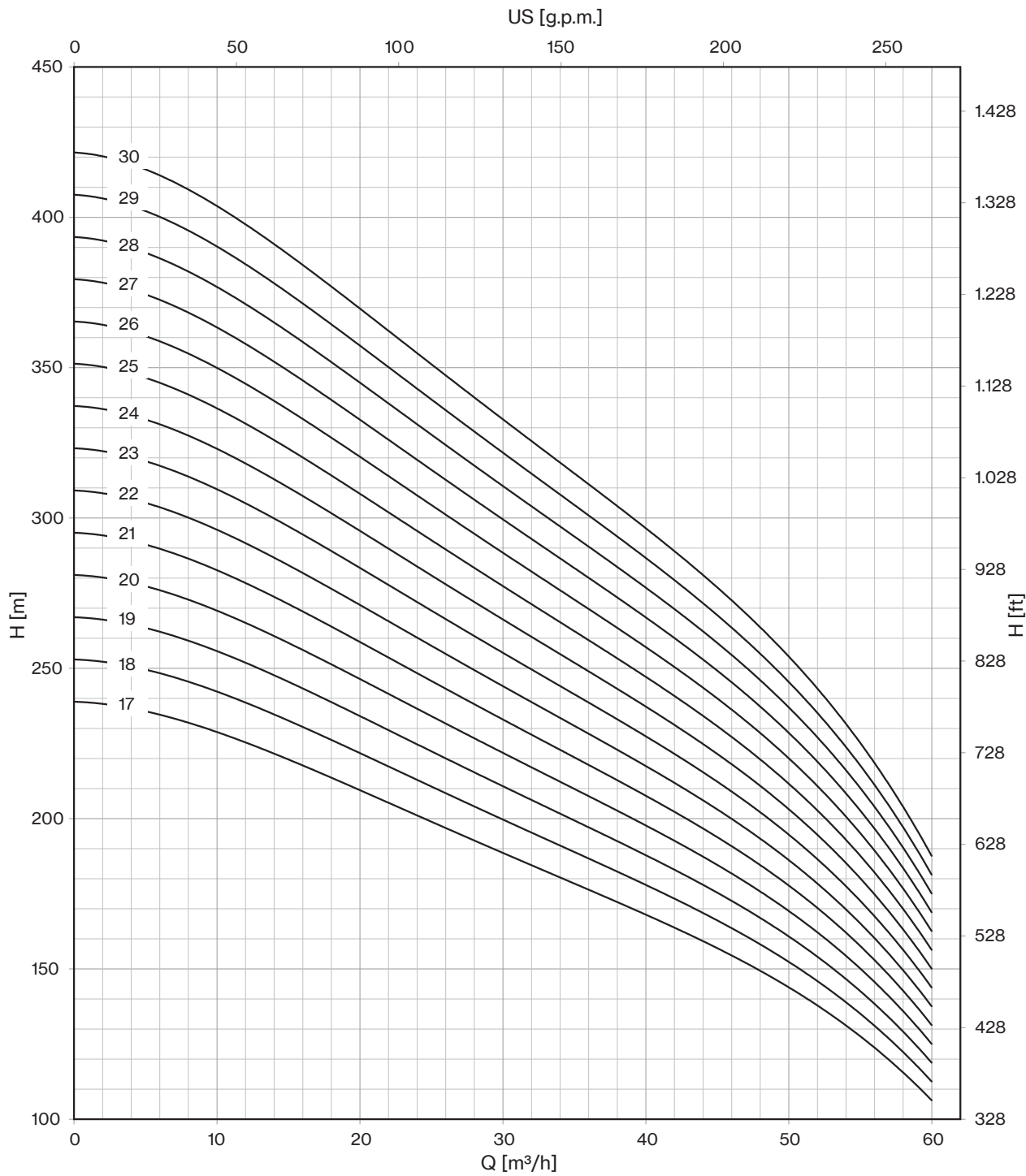
NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3,45	3,5	3,8	5



TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
6LM 48/17	6" NEMA	3191	2010	1181	100	66
6LM 48/18		3292	2111	1181	100	69
6LM 48/19		3463	2212	1251	108	73
6LM 48/20		3564	2313	1251	108	77
6LM 48/21		3755	2414	1341	118	80
6LM 48/22		3856	2515	1341	118	84
6LM 48/23		3957	2616	1341	118	87
6LM 48/24		4058	2717	1341	118	91
6LM 48/25		4159	2818	1341	118	95
6LM 48/26		4109	2986	1123	178	102
6LM 48/27		4210	3087	1123	178	106
6LM 48/28		4311	3188	1123	178	109
6LM 48/29		4412	3289	1123	178	113
6LM 48/30	4513	3390	1123	178	116	



FOR COMMERCIAL TUBE  
EXTERNAL DIAMETER: 88,9 mm

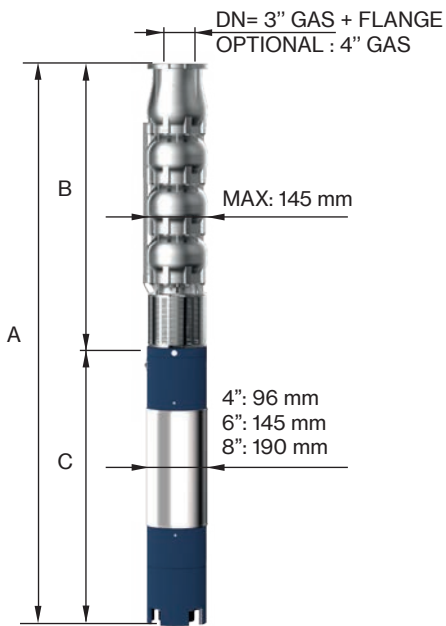


# 6LM 60

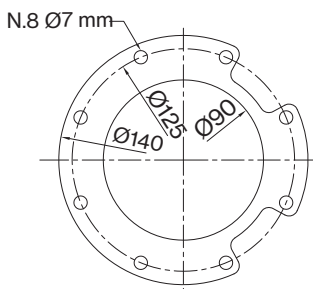
50 Hz - 2900 rpm				Q									
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	300	600	700	800	900	1000	1100	1200	
	P2			I/sec	0	5,0	10,0	11,7	13,3	15,0	16,7	18,3	20,0
	HP	kW	CURRENT A		m³/h	0	18	36	42	48	54	60	66
6LM 60/01	3	2	5,50	H (m)	14	12	10	10	9	9	8	7	6
6LM 60/02	5,5	4	10,00		27	25	21	19	18	17	16	14	12
6LM 60/03	7,5	5,5	12,50		41	37	31	29	27	26	23	21	18
6LM 60/04	10	7,5	16,30		55	49	41	38	36	34	31	28	24
6LM 60/05	12,5	9,2	19,90		69	62	52	48	46	43	39	35	30
6LM 60/06	15	11	23,40		82	74	62	58	55	51	47	41	36
6LM 60/07	17,5	13	27,30		96	86	72	67	64	60	55	48	42
6LM 60/08	20	15	31,50		110	98	82	77	73	68	62	55	48
6LM 60/09	20	15	31,50		123	111	93	86	82	77	70	62	54
6LM 60/10	25	18,5	38,30		137	123	103	96	91	85	78	69	60
6LM 60/11	25	18,5	38,30		151	135	113	106	100	94	86	76	66
6LM 60/12	30	22	45,10		164	148	124	115	109	102	94	83	72
6LM 60/13	30	22	45,10		178	160	134	125	118	111	101	90	78
6LM 60/14	35	26	52,90		192	172	144	134	127	119	109	97	84
6LM 60/15	35	26	52,90		206	185	155	144	137	128	117	104	90
6LM 60/16	40	30	61,10		219	197	165	154	146	136	125	110	96

Max Eff. %	77
Max kW / St.	1,65

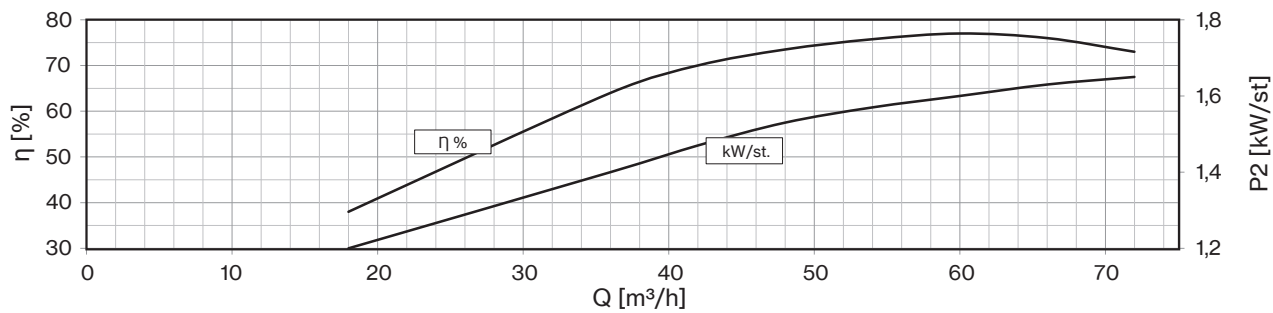
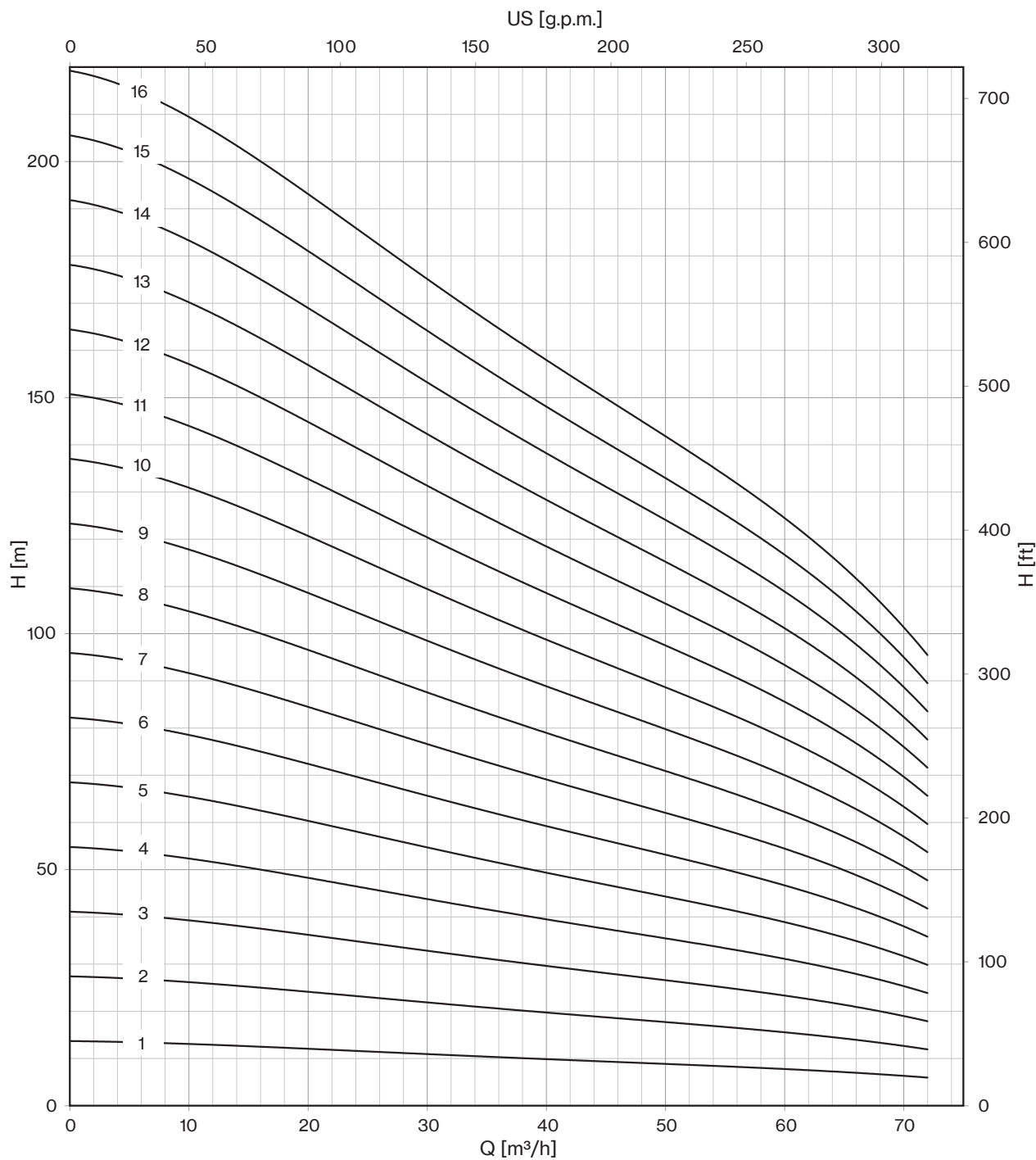
NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3,8	3,8	5,1	7,1



TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
6LM 60/01-4	4" NEMA	812	360	452	15	8
6LM 60/02-4		1064	467	597	22	12
6LM 60/03-4		1272	574	698	27	16
6LM 60/04	6" NEMA	1422	721	701	55	20
6LM 60/05		1579	828	751	60	24
6LM 60/06		1746	935	811	65	27
6LM 60/07		1883	1042	841	70	31
6LM 60/08		2080	1149	931	75	35
6LM 60/09		2187	1256	931	75	39
6LM 60/10		2354	1363	991	83	43
6LM 60/11		2461	1470	991	83	46
6LM 60/12		2648	1577	1071	92	50
6LM 60/13		2755	1684	1071	92	54
6LM 60/14		2972	1791	1181	100	58
6LM 60/15		3079	1898	1181	100	62
6LM 60/16		3256	2005	1251	108	65



FOR COMMERCIAL TUBE  
EXTERNAL DIAMETER: 88,9 mm

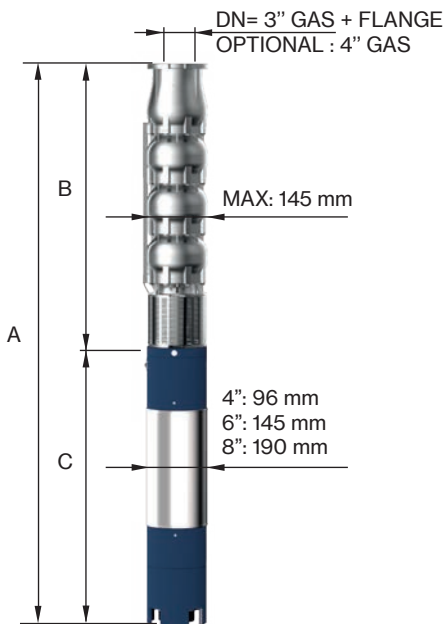


# 6LM 60

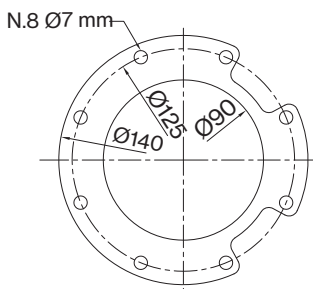
50 Hz - 2900 rpm				Q									
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	300	600	700	800	900	1000	1100	1200	
	P2		CURRENT	I/sec	0	5,0	10,0	11,7	13,3	15,0	16,7	18,3	20,0
	HP	kW	A	m³/h	0	18	36	42	48	54	60	66	72
6LM 60/17	40	30	61,1	H (m)	233	209	175	163	155	145	133	117	102
6LM 60/18	40	30	61,1		247	221	185	173	164	153	140	124	108
6LM 60/19	50	37	75,8		260	234	196	182	173	162	148	131	114
6LM 60/20	50	37	75,8		274	246	206	192	182	170	156	138	120
6LM 60/21	50	37	75,8		288	258	216	202	191	179	164	145	126
6LM 60/22	50	37	75,8		301	271	227	211	200	187	172	152	132
6LM 60/23	60	45	86,3		315	283	237	221	209	196	179	159	138
6LM 60/24	60	45	86,3		329	295	247	230	218	204	187	166	144
6LM 60/25	60	45	86,3		343	308	258	240	228	213	195	173	150
6LM 60/26	60	45	86,3		356	320	268	250	237	221	203	179	156
6LM 60/27	60	45	86,3		370	332	278	259	246	230	211	186	162
6LM 60/28	75	55	106,2		384	344	288	269	255	238	218	193	168
6LM 60/29	75	55	106,2		397	357	299	278	264	247	226	200	174
6LM 60/30	75	55	106,2		411	369	309	288	273	255	234	207	180
6LM 60/31	75	55	106,2		425	381	319	298	282	264	242	214	186
6LM 60/32	75	55	106,2		438	394	330	307	291	272	250	221	192
6LM 60/33	75	55	106,2	452	406	340	317	300	281	257	228	198	

Max Eff. %	77
Max kW / St.	1,65

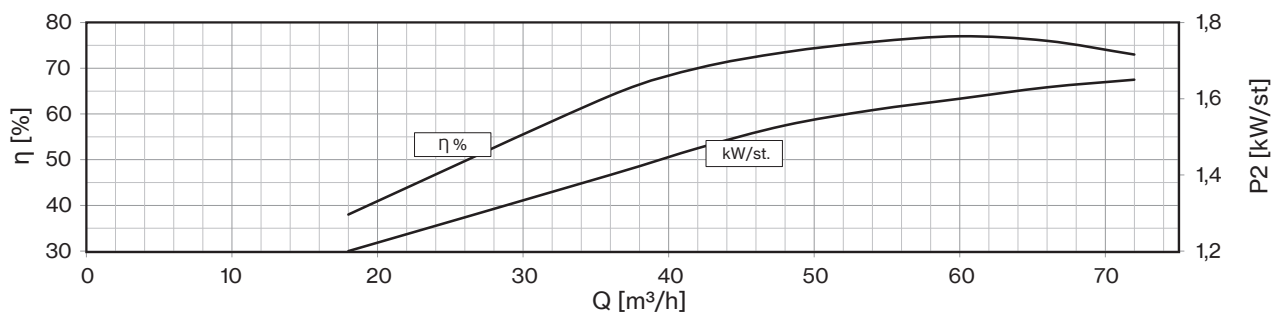
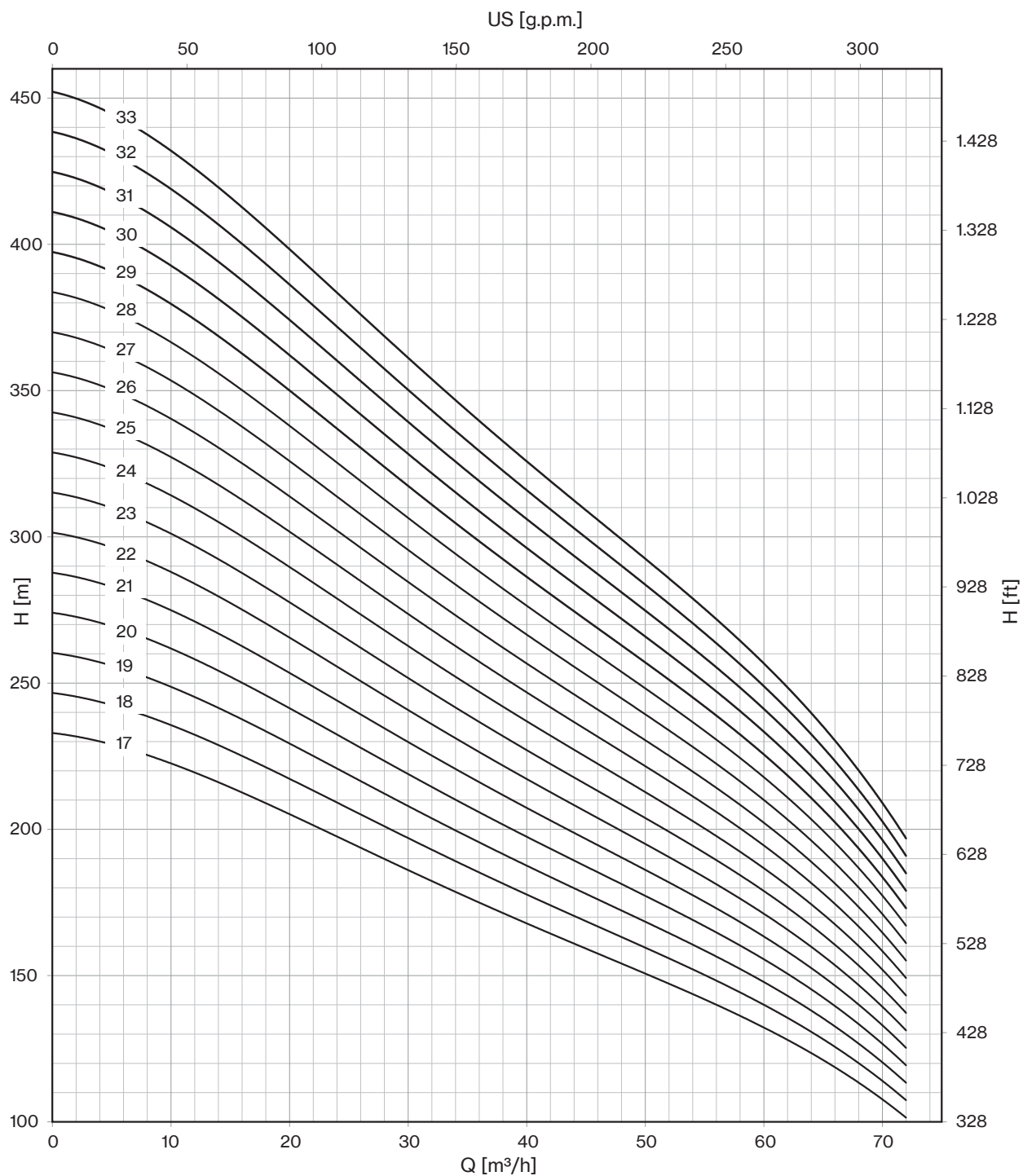
NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3,8	3,8	5,1	7,1



TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
6LM 60/17	6" NEMA	3363	2112	1251	108	69
6LM 60/18		3470	2219	1251	108	73
6LM 60/19		3667	2326	1341	118	77
6LM 60/20		3774	2433	1341	118	81
6LM 60/21		3881	2540	1341	118	84
6LM 60/22		3988	2647	1341	118	88
6LM 60/23		3944	2821	1123	178	96
6LM 60/24		4051	2928	1123	178	100
6LM 60/25		4158	3035	1123	178	103
6LM 60/26		4265	3142	1123	178	107
6LM 60/27		4372	3249	1123	178	111
6LM 60/28		4589	3356	1233	200	115
6LM 60/29		4696	3463	1233	200	119
6LM 60/30		4803	3570	1233	200	122
6LM 60/31		4910	3677	1233	200	126
6LM 60/32		5017	3784	1233	200	130
6LM 60/33	5124	3891	1233	200	134	



FOR COMMERCIAL TUBE  
EXTERNAL DIAMETER: 88,9 mm



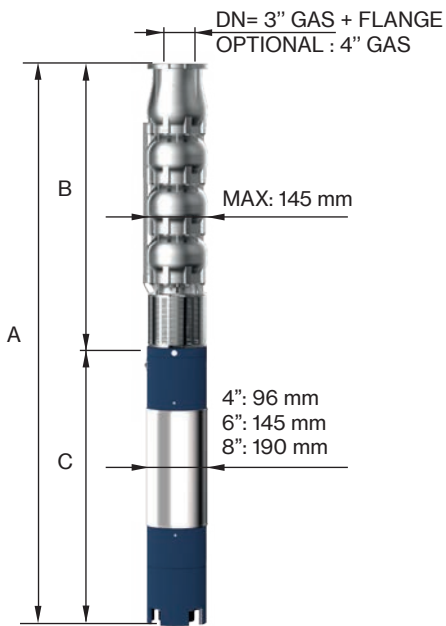


# 6LM 70

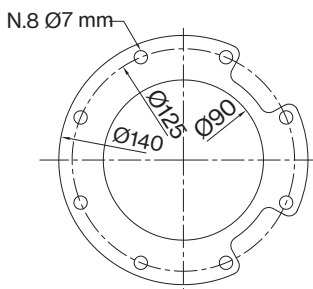
50 Hz - 2900 rpm				Q									
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	300	900	1000	1100	1200	1300	1400	1500	
	P2		CURRENT	I/sec	0	5,0	15,0	16,7	18,3	20,0	21,7	23,3	25,0
	HP	kW	A	m³/h	0	18	54	60	66	72	78	84	90
6LM 70/01	3	2,2	5,5	H (m)	13	12	10	9	9	9	8	7	6
6LM 70/02	7,5	5,5	12,5		26	24	19	19	18	17	15	13	11
6LM 70/03	10	7,5	16,3		39	36	29	28	27	26	23	20	17
6LM 70/04	12,5	9,2	19,9		52	48	38	38	36	34	30	26	22
6LM 70/05	15	11	23,4		66	61	48	47	46	43	38	33	28
6LM 70/06	20	15	31,5		79	73	57	56	55	51	46	40	34
6LM 70/07	25	18,5	38,3		92	85	67	66	64	60	53	46	39
6LM 70/08	25	18,5	38,3		105	97	76	75	73	68	61	53	45
6LM 70/09	30	22	45,1		118	109	86	85	82	77	68	59	50
6LM 70/10	30	22	45,1		131	121	96	94	91	85	76	66	56
6LM 70/11	35	26	52,9		144	133	105	103	100	94	84	73	62
6LM 70/12	40	30	61,1		157	145	115	113	109	102	91	79	67
6LM 70/13	40	30	61,1		170	157	124	122	118	111	99	86	73

Max Eff. %	76
Max kW / St.	2,18

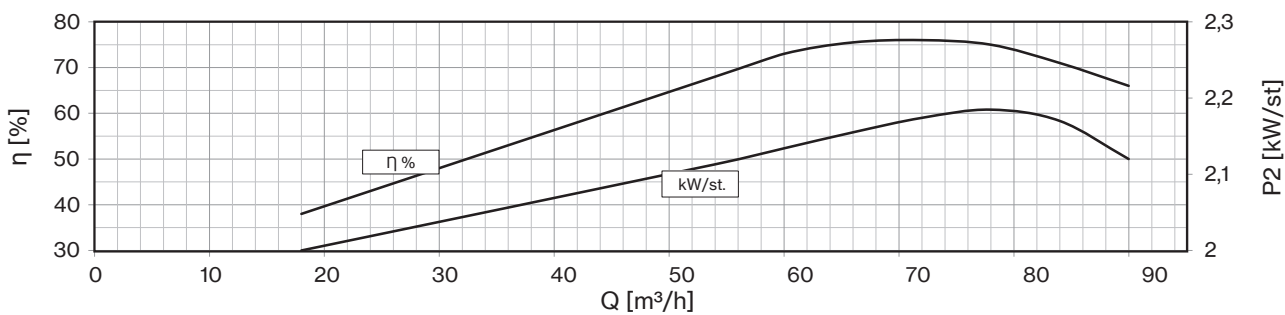
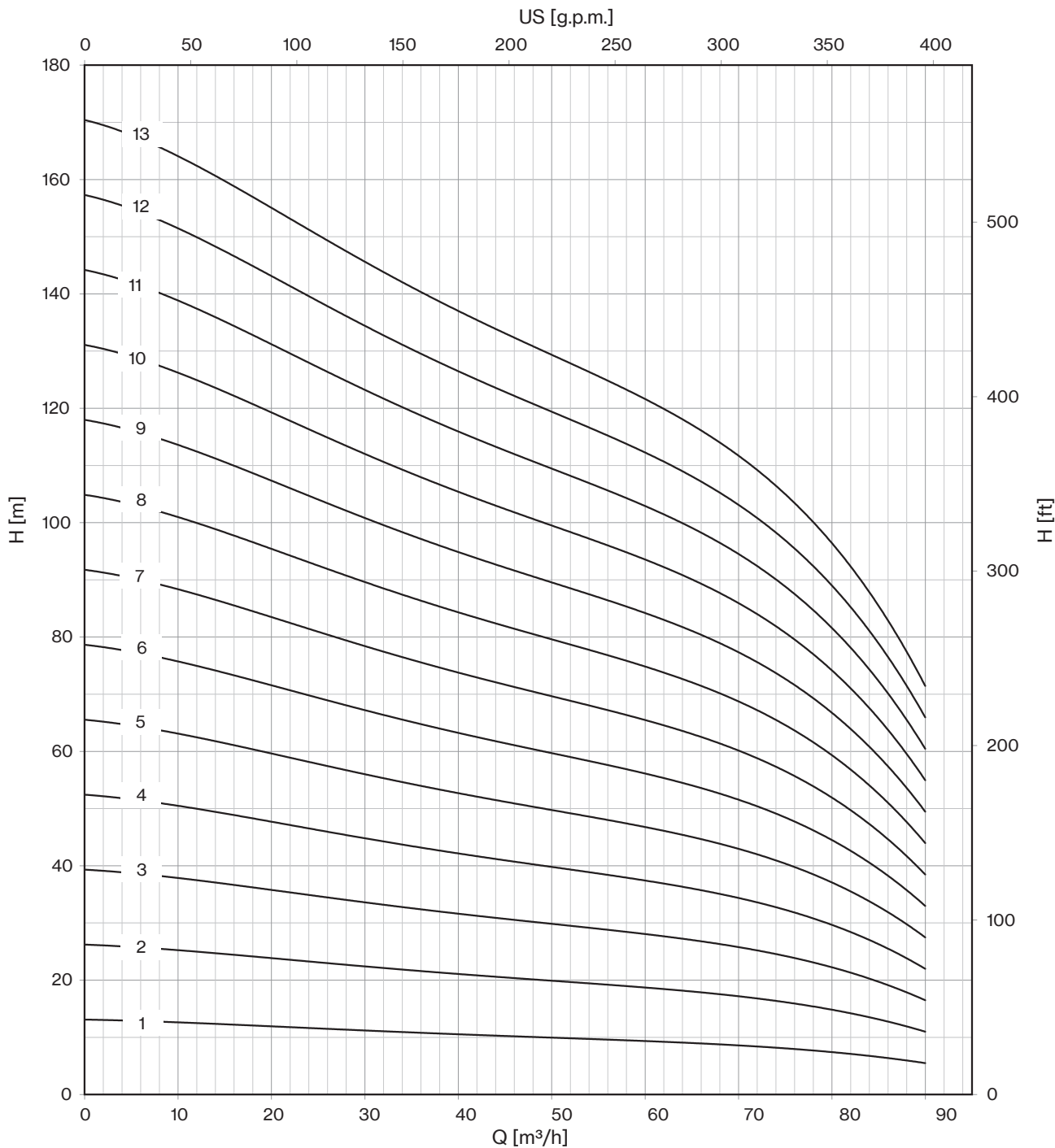
NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3,8	3,8	5,1	7,1



TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
6LM 70/01-4	4" NEMA	812	360	452	15	8
6LM 70/02-4		1165	467	698	27	12
6LM 70/03	6" NEMA	1315	614	701	55	16
6LM 70/04		1472	721	751	60	20
6LM 70/05		1639	828	811	65	24
6LM 70/06		1866	935	931	75	27
6LM 70/07		2033	1042	991	83	31
6LM 70/08		2140	1149	991	83	35
6LM 70/09		2327	1256	1071	92	39
6LM 70/10		2434	1363	1071	92	43
6LM 70/11		2651	1470	1181	100	46
6LM 70/12		2828	1577	1251	108	50
6LM 70/13		2935	1684	1251	108	54



FOR COMMERCIAL TUBE  
EXTERNAL DIAMETER: 88,9 mm

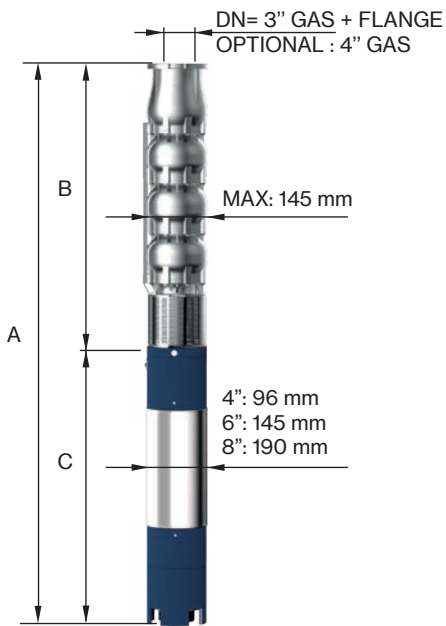


# 6LM 70

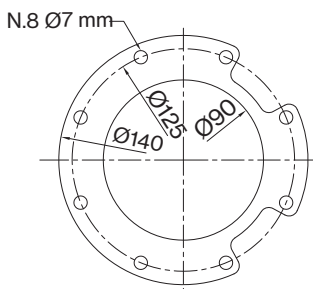
50 Hz - 2900 rpm				Q									
TYPE	SUITABLE MOTOR 3- 400V		I/min	I/sec	0	300	900	1000	1100	1200	1300	1400	1500
	P2				CURRENT	0	5,0	15,0	16,7	18,3	20,0	21,7	23,3
	HP	kW	A	m³/h	0	18	54	60	66	72	78	84	90
6LM 70/14	50	37	75,8	H (m)	183	169	134	132	127	119	106	92	78
6LM 70/15	50	37	75,8		197	182	143	141	137	128	114	99	84
6LM 70/16	50	37	75,8		210	194	153	150	146	136	122	106	90
6LM 70/17	60	45	86,3		223	206	162	160	155	145	129	112	95
6LM 70/18	60	45	86,3		236	218	172	169	164	153	137	119	101
6LM 70/19	60	45	86,3		249	230	181	179	173	162	144	125	106
6LM 70/20	60	45	86,3		262	242	191	188	182	170	152	132	112
6LM 70/21	75	55	106,2		275	254	201	197	191	179	160	139	118
6LM 70/22	75	55	106,2		288	266	210	207	200	187	167	145	123
6LM 70/23	75	55	106,2		301	278	220	216	209	196	175	152	129
6LM 70/24	75	55	106,2		314	290	229	226	218	204	182	158	134
6LM 70/25	75	55	106,2		328	303	239	235	228	213	190	165	140

Max Eff. %	76
Max kW / St.	2,18

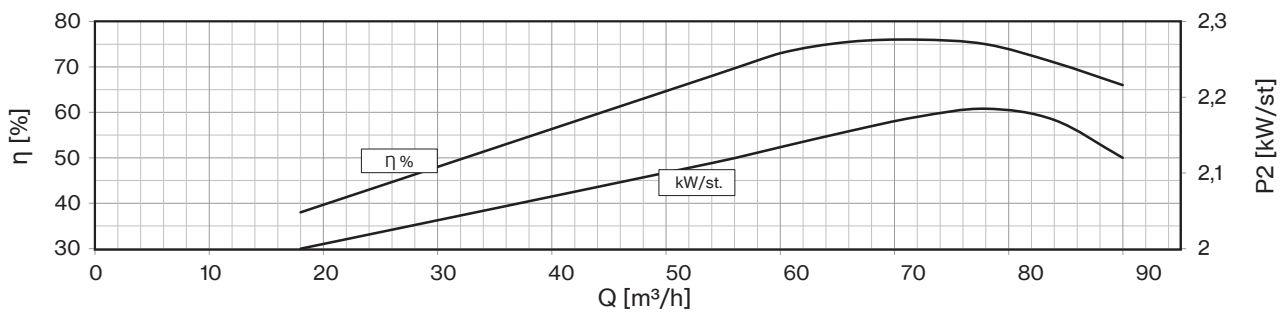
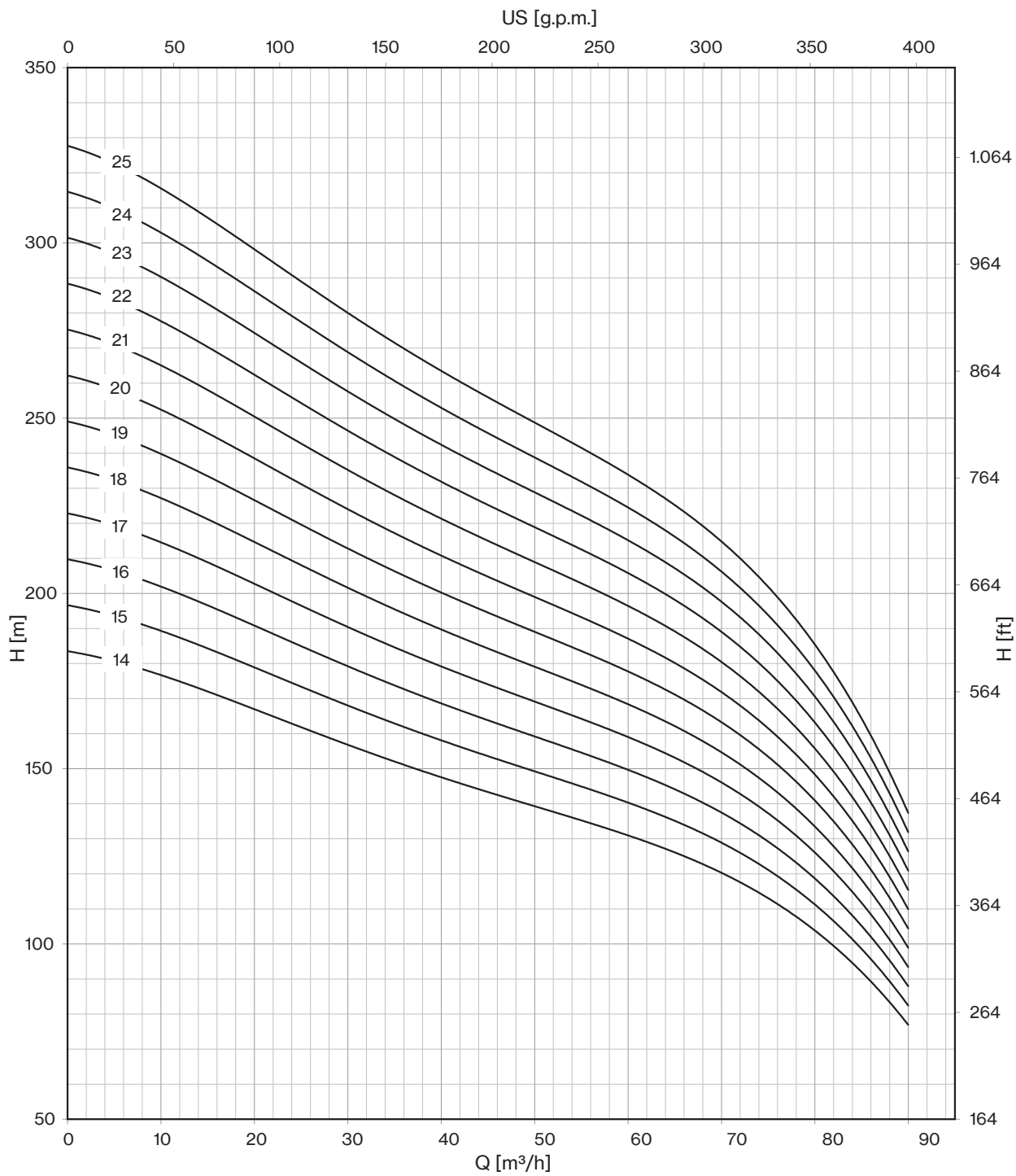
NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3,8	3,8	5,1	7,1



TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
6LM 70/14	6" NEMA	3132	1791	1341	118	58
6LM 70/15		3239	1898	1341	118	62
6LM 70/16		3346	2005	1341	118	65
6LM 70/17		3235	2112	1123	178	69
6LM 70/18		3342	2219	1123	178	73
6LM 70/19		3516	2393	1123	178	81
6LM 70/20		3623	2500	1123	178	84
6LM 70/21		3840	2607	1233	200	88
6LM 70/22		3947	2714	1233	200	92
6LM 70/23		4054	2821	1233	200	96
6LM 70/24		4161	2928	1233	200	100
6LM 70/25		4268	3035	1233	200	103



FOR COMMERCIAL TUBE  
EXTERNAL DIAMETER: 88,9 mm

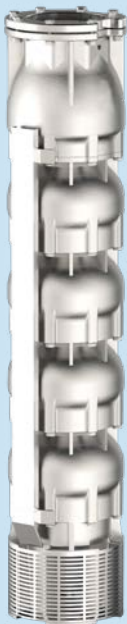


# 8LR & 8LM lines

Deepwell Borehole



8LRH line



8LM line



Submersible Multistage Centrifugal Pumps for 8" Wells.

These pumps feature a check valve integrated into the delivery outlet. The pump motor bracket and coupling are manufactured in compliance with NEMA standards. All components are constructed from stainless steel using lost wax microfusion technology. The standard material is AISI 304 stainless steel. Alternatively, the following materials are available upon request: AISI 316 stainless steel and Duplex steel (EN 1.4462).

The bushing bearings and wear rings are made from sand abrasion-resistant rubber, while the reverse-thrust ring is made of PTFE/Graphite.

These pumps are suitable for a wide range of applications, including civil and agricultural uses.

### General operating data:

- Capacity up to 192 m<sup>3</sup>/h
- Pressure up to 719 m
- Hydraulic efficiency 8", up to 78,5%
- Powers up to 185 kW
- Rotation speed 2.900 rpm
- Maximum depth: 350 m
- Maximum quantity of sand: 100 gr/m<sup>3</sup>
- Drinking water compatibility according to DM174 MEI  $\geq 0,4$  (EU directive No.547/2012)
- Performance tolerance: ISO9906-3B.

### Construction features

<b>Suction and delivery outlet</b>	stainless steel AISI 304 (LRHS-LMS) stainless steel AISI 316 (LRHX-LMX) Duplex EN 1.4462 (LRHD-LMD)
<b>Valve</b>	stainless steel AISI 304 (LRHS-LMS) stainless steel AISI 316 (LRHX-LMX) Duplex EN 1.4462 (LRHD-LMD)
<b>Impellers and diffusers</b>	stainless steel AISI 304 (LRHS-LMS) stainless steel AISI 316 (LRHX-LMX) Duplex EN 1.4462 (LRHD-LMD)
<b>Upper bushings</b>	NBR rubber
<b>Shaft pump side</b>	stainless steel AISI 304 (LRS-LMS) stainless steel AISI 316 (LRX-LMX) Duplex EN 1.4462 (LRD-LMD)
<b>Quantity of sand in the water</b>	max 100 gr/m <sup>3</sup>

### Motor

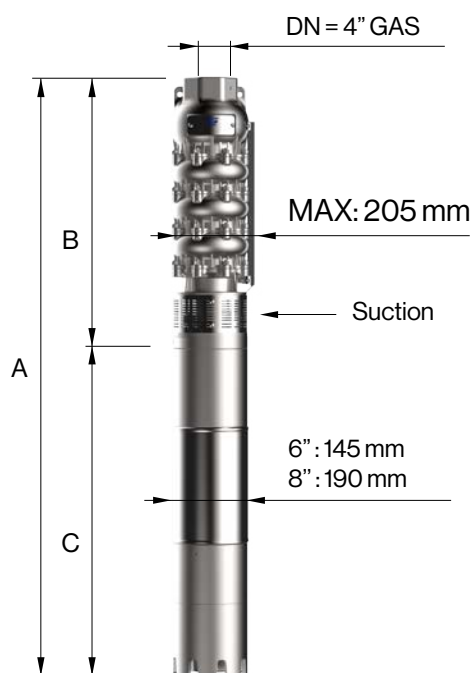
<b>Asynchronous 2 pole</b>	rewindable water cooled
<b>Insulation class</b>	Y (max 30 °C) - PPC winding type F (max 50 °C) - PE2+PA or LPE winding type
<b>Protection degree</b>	IP68
<b>Liquid temperature</b>	max 30 °C (max 50 °C on request)
<b>Depth of immersion</b>	max 350 m



50 Hz - 2900 rpm				Q							
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	200	300	400	500	600	700	
	P2		CURRENT	I/sec	0,0	3,3	5,0	6,7	8,3	10,0	11,7
	HP	kW	A	m³/h	0	12	18	24	30	36	42
8LRH 34/01	5,5	4	9,1	H (m)	23	22	21	20	19	17	14
8LRH 34/02	7,5	5,5	12,3		46	44	42	40	37	33	27
8LRH 34/03	10	7,5	16,3		69	66	63	59	56	50	41
8LRH 34/04	15	11	23,4		92	88	84	79	74	66	54
8LRH 34/05	17,5	13	27,3		115	110	105	99	93	83	68
8LRH 34/06	20	15	31,5		138	132	126	119	111	100	82
8LRH 34/07	25	18,5	38,3		161	154	147	139	130	116	95
8LRH 34/08	30	22	45,1		184	176	168	158	148	133	109
8LRH 34/09	30	22	45,1		207	198	189	178	167	149	122
8LRH 34/10	35	26	52,9		230	220	210	198	185	166	136
8LRH 34/11	35	26	52,9		253	242	231	218	204	183	150
8LRH 34/12	40	30	61,1		276	264	252	238	222	199	163
8LRH 34/13	50	37	75,8		299	286	273	257	241	216	177
8LRH 34/14	50	37	75,8		322	308	294	277	259	232	190
8LRH 34/15	50	37	75,8		345	330	315	297	278	249	204
8LRH 34/16	60	44	86,3		368	352	336	317	296	266	218

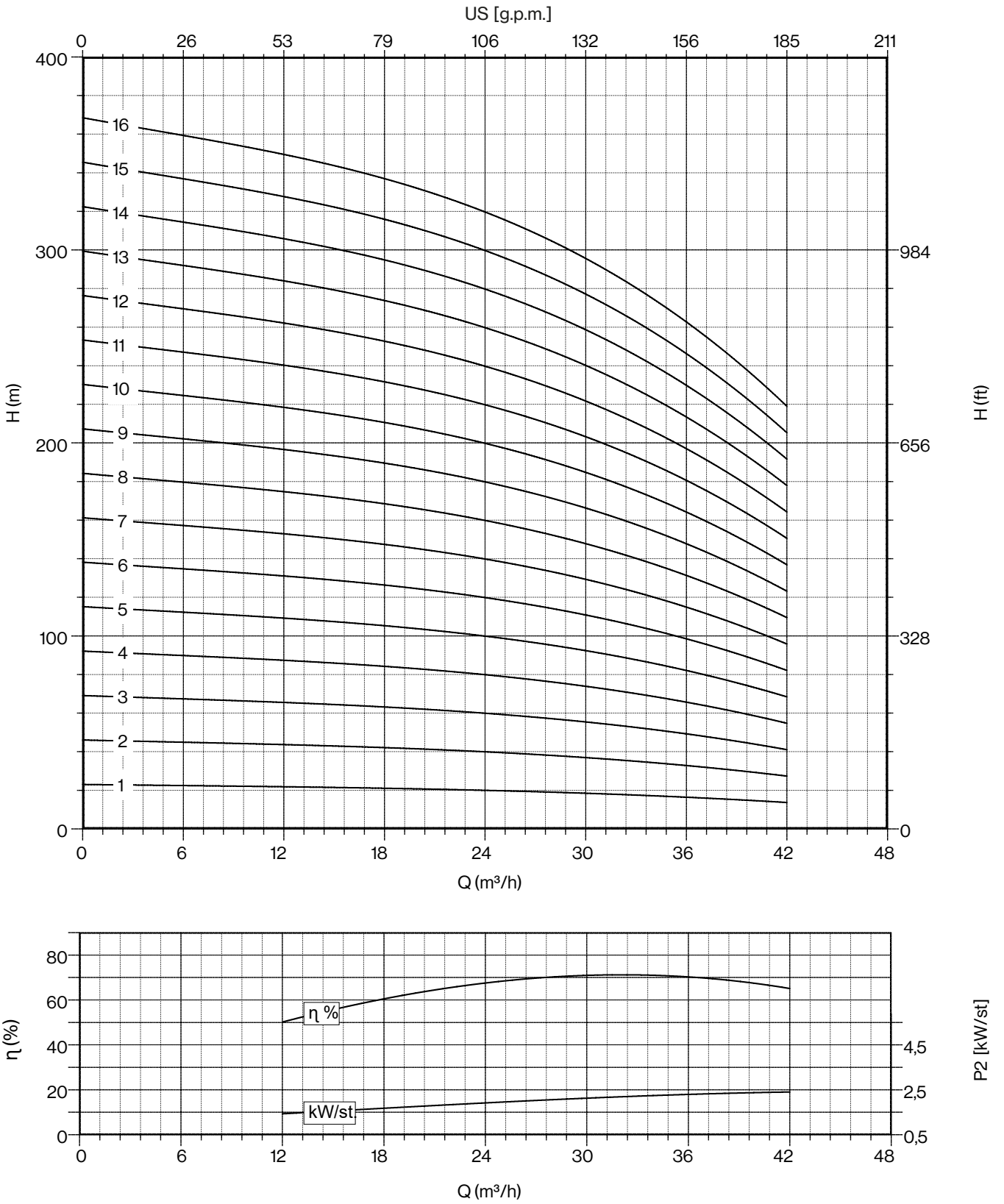
Max Eff. %	71
Max kW / St.	2,4

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3,3	3,3	4,5	6,7



TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
8LRH 34/01-6	6" NEMA	1106	460	646	40	21
8LRH 34/02-6		1211	540	671	45	27
8LRH 34/03-6		1321	620	701	55	33
8LRH 34/04-6		1511	700	811	65	40
8LRH 34/05-6		1621	780	841	70	46
8LRH 34/06-6		1791	860	931	75	52
8LRH 34/07-6		1931	940	991	83	58
8LRH 34/08-6		2091	1020	1071	92	64
8LRH 34/09-6		2171	1100	1071	92	70
8LRH 34/10-6		2361	1180	1181	100	77
8LRH 34/11-6		2441	1260	1181	100	83
8LRH 34/12-6		2591	1340	1251	108	89
8LRH 34/13-6		2761	1420	1341	118	95
8LRH 34/14-6		2841	1500	1341	118	101
8LRH 34/15-6		2921	1580	1341	118	107
8LRH 34/16	8" NEMA	2783	1660	1123	178	113

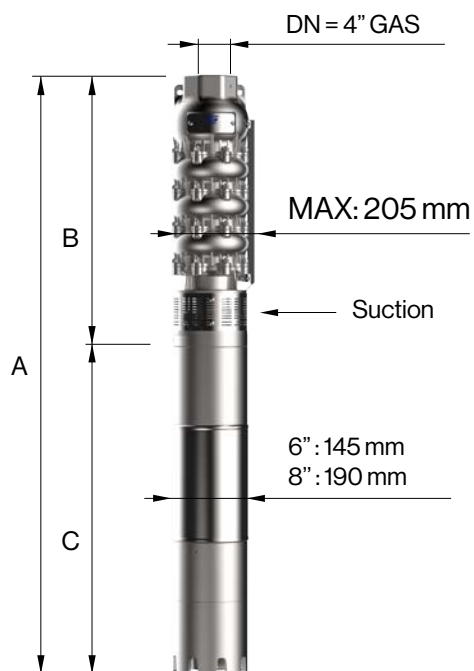
# 8LRH 34



50 Hz - 2900 rpm				Q							
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	200	300	400	500	600	700	
	P2		CURRENT	I/sec	0,0	3,3	5,0	6,7	8,3	10,0	11,7
	HP	kW	A	m³/h	0	12	18	24	30	36	42
8LRH 34/17	60	44	86,3	H (m)	391	374	357	337	315	282	231
8LRH 34/18	60	44	86,3		414	396	378	356	333	299	245
8LRH 34/19	75	55	106,2		437	418	399	376	352	315	258
8LRH 34/20	75	55	106,2		460	440	420	396	370	332	272
8LRH 34/21	75	55	106,2		483	462	441	416	389	349	286
8LRH 34/22	75	55	106,2		506	484	462	436	407	365	299
8LRH 34/23	75	55	106,2		529	506	483	455	426	382	313
8LRH 34/24	90	66	126		552	528	504	475	444	398	326
8LRH 34/25	90	66	126		575	550	525	495	463	415	340
8LRH 34/26	90	66	126		598	572	546	515	481	432	354
8LRH 34/27	90	66	126		621	594	567	535	500	448	367
8LRH 34/28	90	66	126		644	616	588	554	518	465	381
8LRH 34/29	100	75	143,2		667	638	609	574	537	481	394
8LRH 34/30	100	75	143,2		690	660	630	594	555	498	408
8LRH 34/31	100	75	143,2		713	682	651	614	574	515	422

Max Eff. %	71
Max kW / St.	2,4

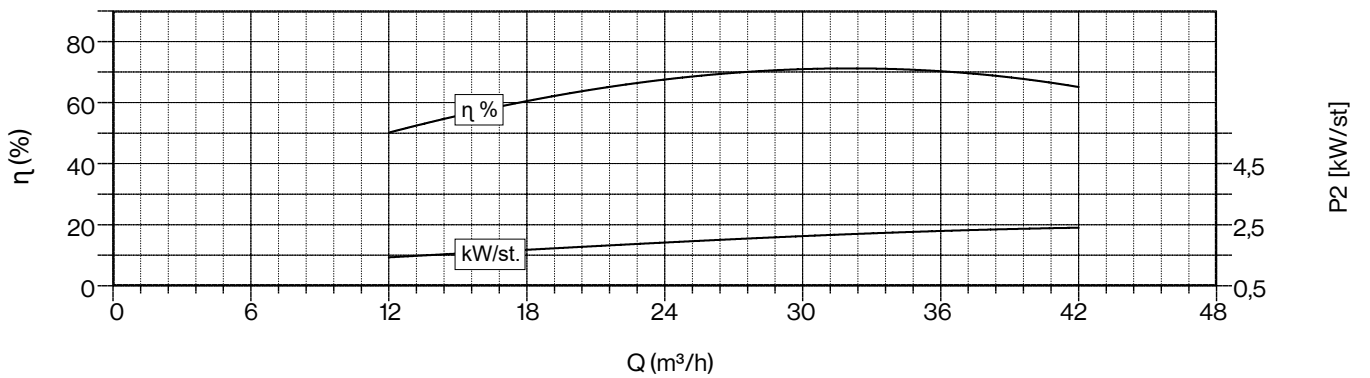
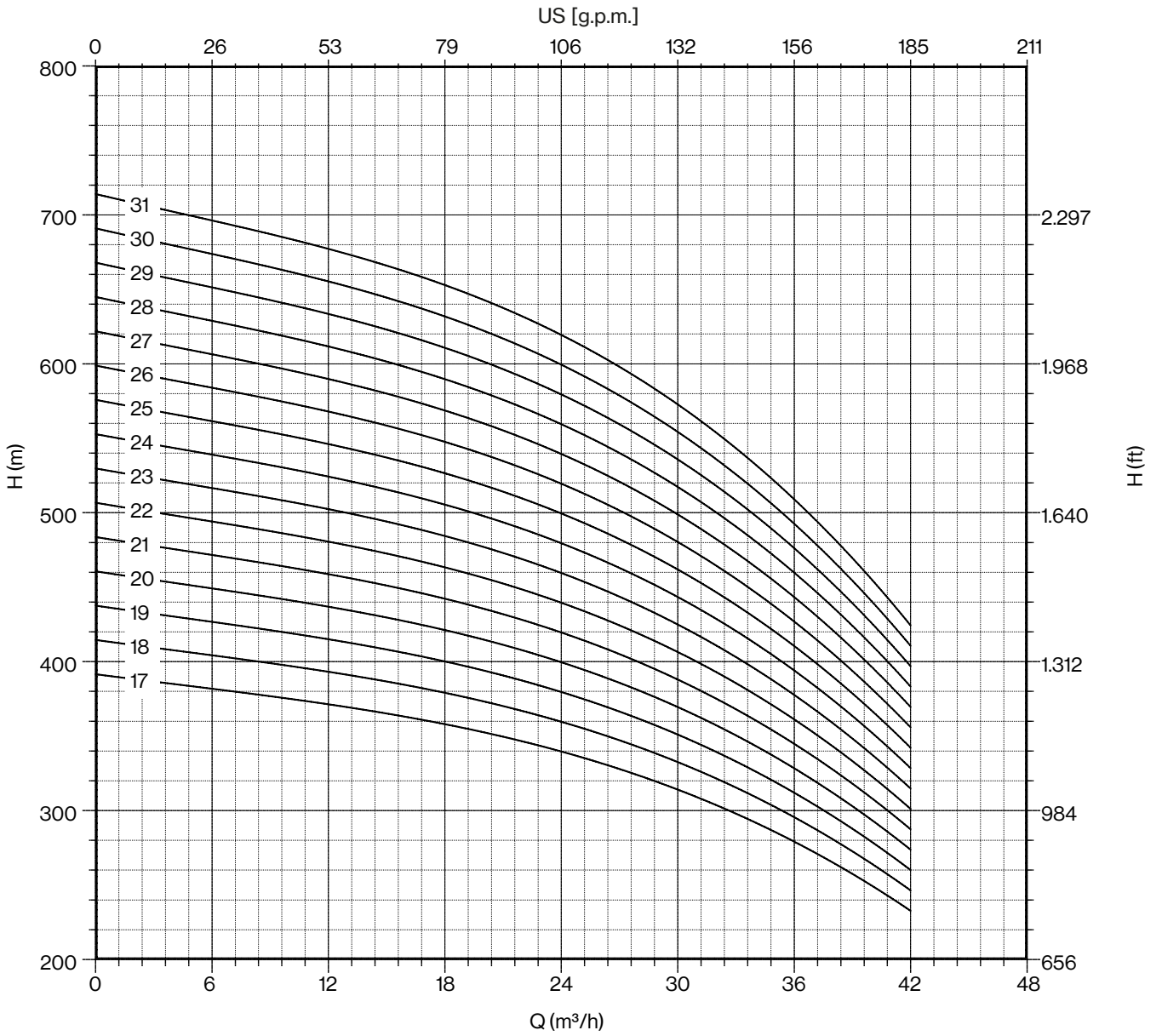
NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3,3	3,3	4,5	6,7



TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
8LRH 34/17	8" NEMA	2863	1740	1123	178	120
8LRH 34/18		2943	1820	1123	178	126
8LRH 34/19		3133	1900	1233	200	132
8LRH 34/20		3213	1980	1233	200	138
8LRH 34/21		3293	2060	1233	200	144
8LRH 34/22		3373	2140	1233	200	150
8LRH 34/23		3453	2220	1233	200	156
8LRH 34/24		3603	2300	1303	214	163
8LRH 34/25		3683	2380	1303	214	169
8LRH 34/26		3763	2460	1303	214	175
8LRH 34/27		3843	2540	1303	214	181
8LRH 34/28		3923	2620	1303	214	187
8LRH 34/29		4083	2700	1383	230	193
8LRH 34/30		4163	2780	1383	230	200
8LRH 34/31		4243	2860	1383	230	206



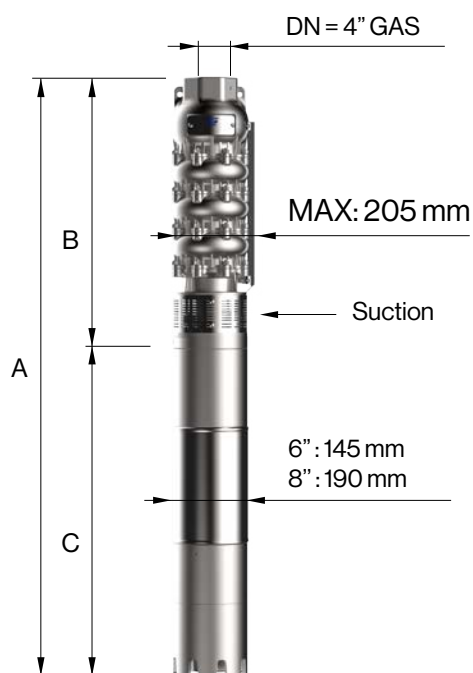
# 8LRH 34



50 Hz - 2900 rpm				Q								
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	300	400	500	600	700	800	900	
	P2		CURRENT	I/sec	0,0	5,0	6,7	8,3	10,0	11,7	13,3	15,0
	HP	kW	A	m³/h	0	18	24	30	36	42	48	54
8LRH 42/01	5,5	4	9,1	H (m)	23	22	21	20	18	16	14	12
8LRH 42/02	7,5	5,5	12,3		46	44	43	40	37	33	28	23
8LRH 42/03	12,5	9,2	19,9		70	66	64	60	55	49	42	35
8LRH 42/04	15	11	23,4		93	88	86	80	74	66	56	46
8LRH 42/05	20	15	31,5		116	110	107	100	92	82	70	58
8LRH 42/06	25	18,5	38,3		139	132	128	120	110	98	84	70
8LRH 42/07	30	22	45,1		162	154	150	140	129	115	98	81
8LRH 42/08	30	22	45,1		186	176	171	160	147	131	112	93
8LRH 42/09	35	26	52,9		209	198	193	180	166	148	126	104
8LRH 42/10	40	30	61,1		232	220	214	200	184	164	140	116
8LRH 42/11	50	37	75,8		255	242	235	220	202	180	154	128
8LRH 42/12	50	37	75,8		278	264	257	240	221	197	168	139
8LRH 42/13	50	37	75,8		302	286	278	260	239	213	182	151
8LRH 42/14	60	44	86,3		325	308	300	280	258	230	196	162
8LRH 42/15	60	44	86,3		348	330	321	300	276	246	210	174
8LRH 42/16	60	44	86,3		371	352	342	320	294	262	224	186

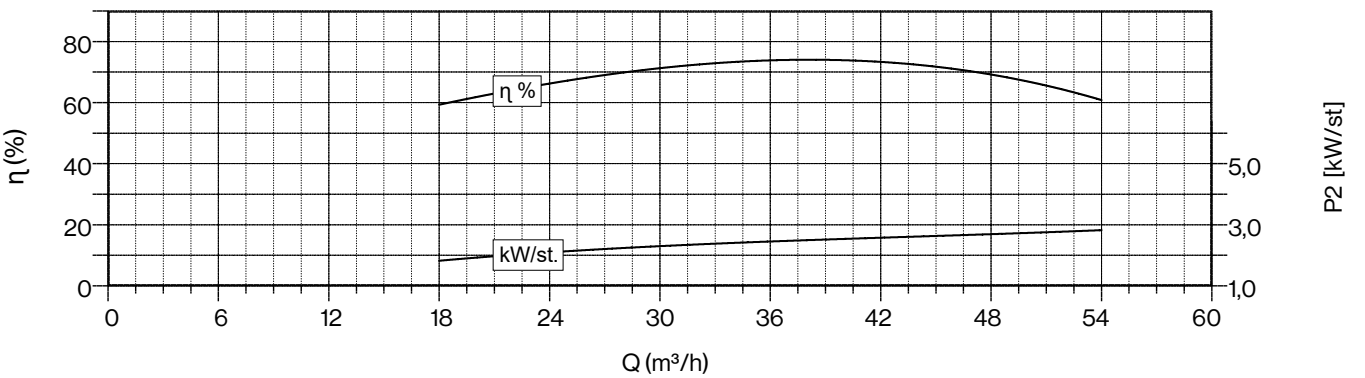
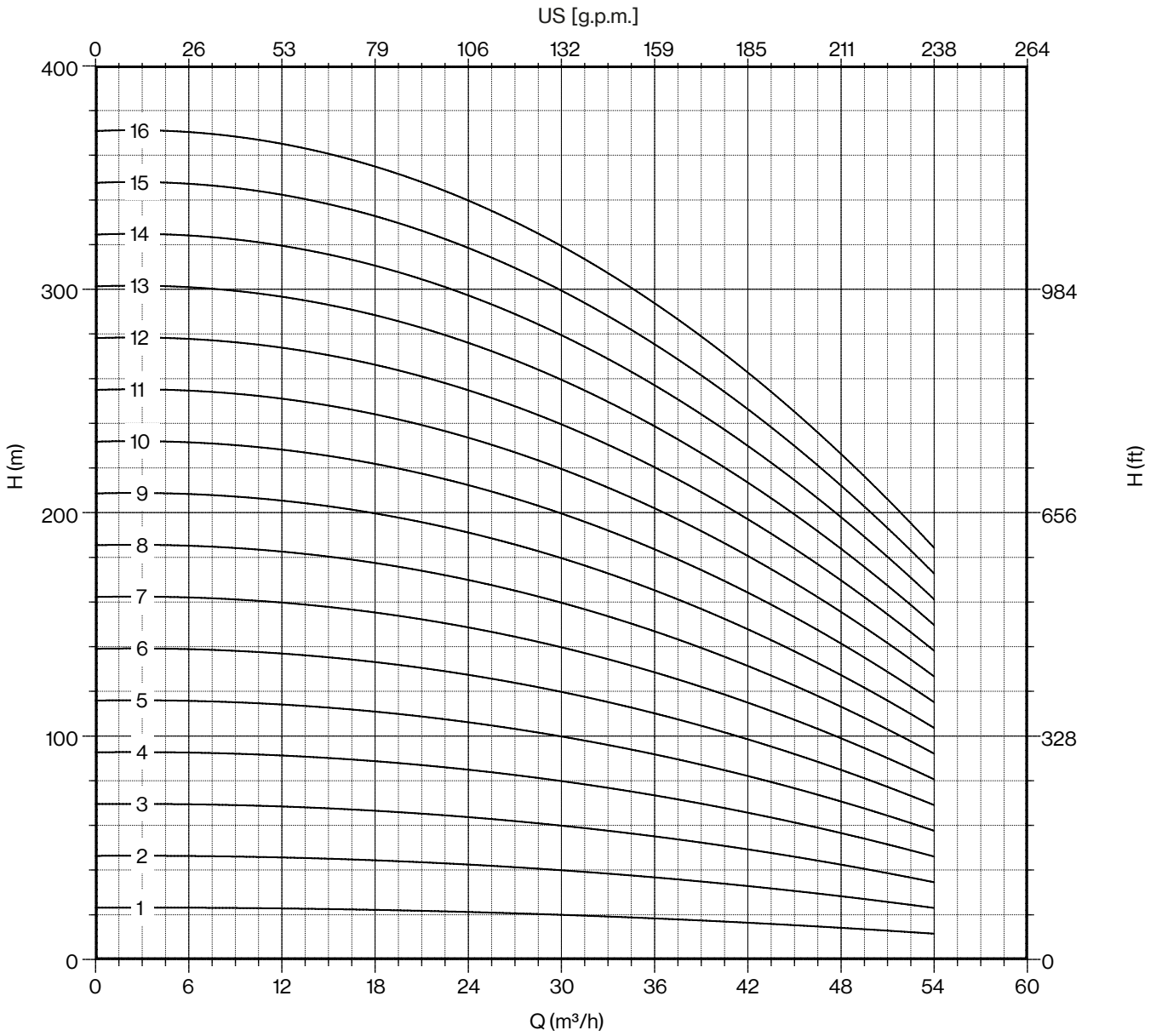
Max Eff. %	74
Max kW / St.	2,8

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3,4	3,4	4,8	8



TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
8LRH 42/01-6	6" NEMA	1106	460	646	40	21
8LRH 42/02-6		1211	540	671	45	27
8LRH 42/03-6		1371	620	751	60	33
8LRH 42/04-6		1511	700	811	65	40
8LRH 42/05-6		1711	780	931	75	46
8LRH 42/06-6		1851	860	991	83	52
8LRH 42/07-6		2011	940	1071	92	58
8LRH 42/08-6		2091	1020	1071	92	64
8LRH 42/09-6		2281	1100	1181	100	70
8LRH 42/10-6		2431	1180	1251	108	77
8LRH 42/11-6		2601	1260	1341	118	83
8LRH 42/12-6		2681	1340	1341	118	89
8LRH 42/13-6	8" NEMA	2761	1420	1341	118	95
8LRH 42/14		2623	1500	1123	178	101
8LRH 42/15		2703	1580	1123	178	107
8LRH 42/16		2783	1660	1123	178	113

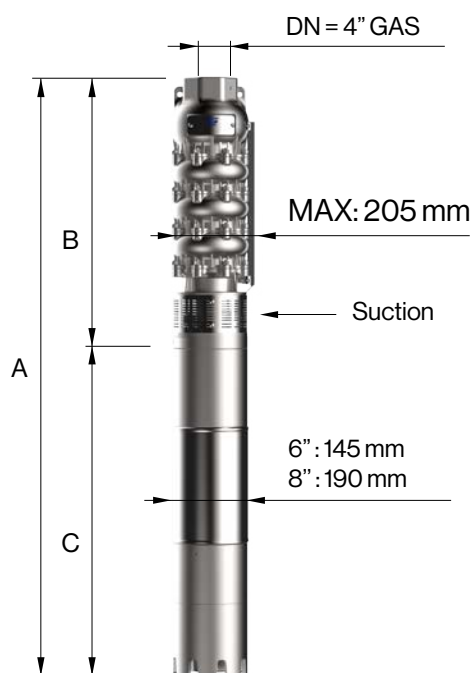
# 8LRH 42



50 Hz - 2900 rpm				Q								
TYPE	SUITABLE MOTOR 3- 400V		CURRENT	I/min	0	300	400	500	600	700	800	900
	P2				I/sec	0,0	5,0	6,7	8,3	10,0	11,7	13,3
	HP	kW	A	m <sup>3</sup> /h	0	18	24	30	36	42	48	54
8LRH 42/17	75	55	106,2	H (m)	394	374	364	340	313	279	238	197
8LRH 42/18	75	55	106,2		418	396	385	360	331	295	252	209
8LRH 42/19	75	55	106,2		441	418	407	380	350	312	266	220
8LRH 42/20	90	66	126		464	440	428	400	368	328	280	232
8LRH 42/21	90	66	126		487	462	449	420	386	344	294	244
8LRH 42/22	90	66	126		510	484	471	440	405	361	308	255
8LRH 42/23	90	66	126		534	506	492	460	423	377	322	267
8LRH 42/24	100	75	143,2		557	528	514	480	442	394	336	278
8LRH 42/25	100	75	143,2		580	550	535	500	460	410	350	290
8LRH 42/26	100	75	143,2		603	572	556	520	478	426	364	302
8LRH 42/27	125	92	175,1		626	594	578	540	497	443	378	313
8LRH 42/28	125	92	175,1		650	616	599	560	515	459	392	325
8LRH 42/29	125	92	175,1		673	638	621	580	534	476	406	336
8LRH 42/30	125	92	175,1		696	660	642	600	552	492	420	348
8LRH 42/31	125	92	175,1		719	682	663	620	570	508	434	360

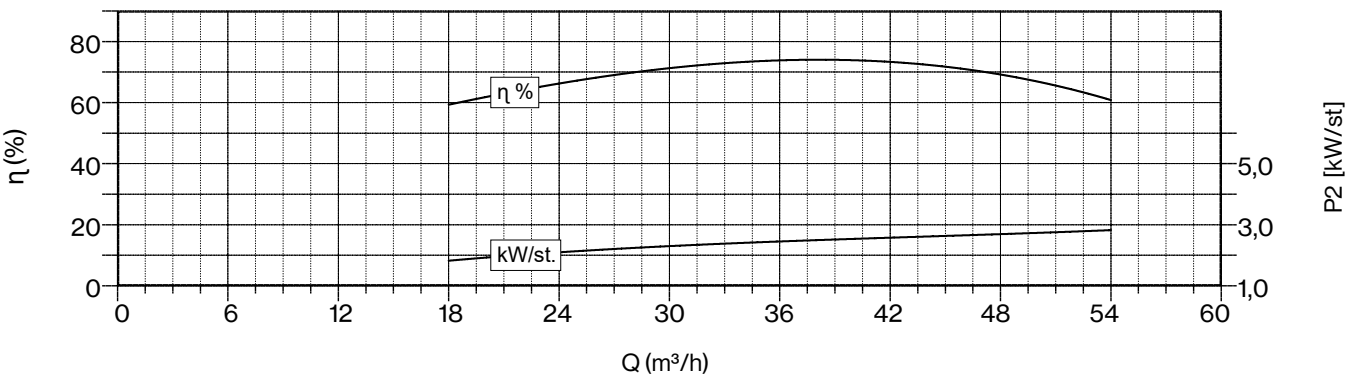
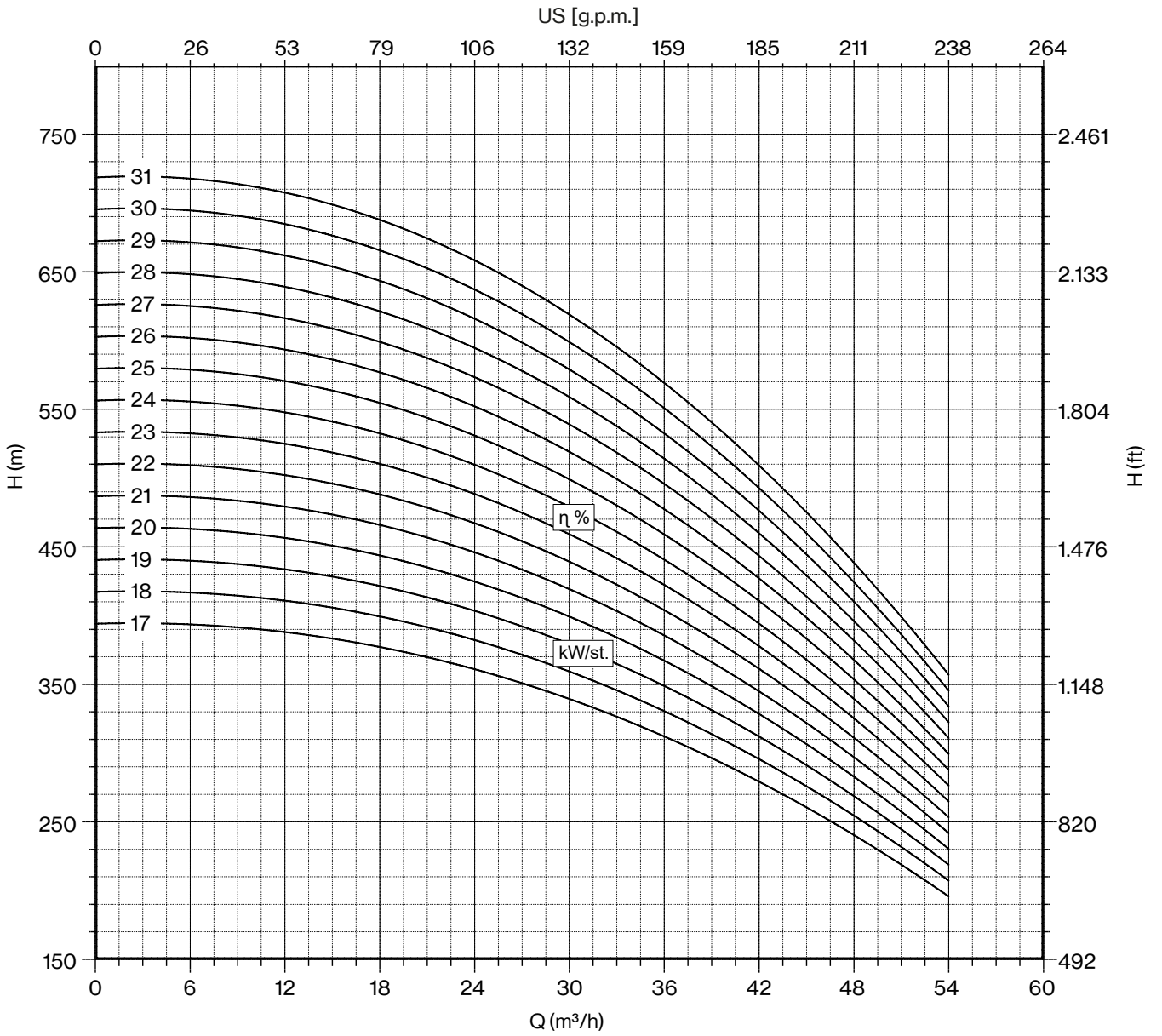
Max Eff. %	74
Max kW / St.	2,8

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3,4	3,4	4,8	8



TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
8LRH 42/17	8" NEMA	2973	1740	1233	200	120
8LRH 42/18		3053	1820	1233	200	126
8LRH 42/19		3133	1900	1233	200	132
8LRH 42/20		3283	1980	1303	214	138
8LRH 42/21		3363	2060	1303	214	144
8LRH 42/22		3443	2140	1303	214	150
8LRH 42/23		3523	2220	1303	214	156
8LRH 42/24		3683	2300	1383	230	163
8LRH 42/25		3763	2380	1383	230	169
8LRH 42/26		3843	2460	1383	230	175
8LRH 42/27		4123	2540	1583	270	181
8LRH 42/28		4203	2620	1583	270	187
8LRH 42/29		4283	2700	1583	270	193
8LRH 42/30		4363	2780	1583	270	200
8LRH 42/31		4443	2860	1583	270	206

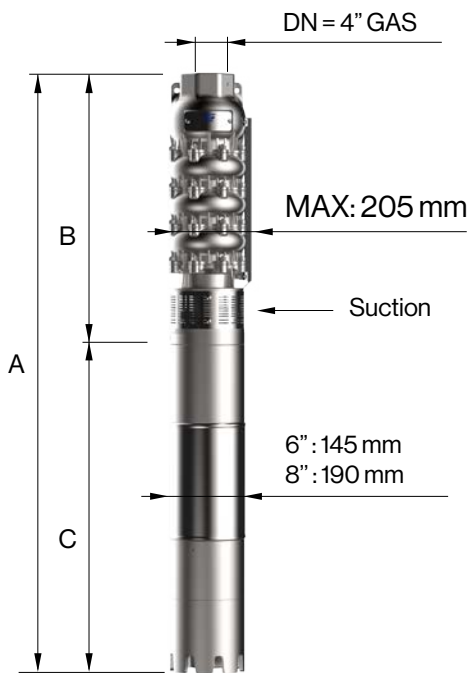
# 8LRH 42



50 Hz - 2900 rpm				Q								
TYPE	SUITABLE MOTOR 3- 400V		CURRENT	I/min	0	500	600	700	800	900	1000	1100
	P2				I/sec	0,0	8,3	10,0	11,7	13,3	15,0	16,7
	HP	kW	A	m³/h	0	30	36	42	48	54	60	66
8LRH 52/01	5,5	4	9,1	H (m)	24	21	21	19	18	17	15	13
8LRH 52/02	10	7,5	16,3		48	43	41	39	36	33	30	25
8LRH 52/03	15	11	23,4		72	64	62	58	55	50	44	38
8LRH 52/04	20	15	31,5		96	86	82	78	73	66	59	50
8LRH 52/05	25	18,5	38,3		120	107	103	97	91	83	74	63
8LRH 52/06	30	22	45,1		144	128	124	116	109	100	89	76
8LRH 52/07	35	26	52,9		168	150	144	136	127	116	104	88
8LRH 52/08	40	30	61,1		192	171	165	155	146	133	118	101
8LRH 52/09	50	37	75,8		216	193	185	175	164	149	133	113
8LRH 52/10	50	37	75,8		240	214	206	194	182	166	148	126
8LRH 52/11	60	44	86,3		264	235	227	213	200	183	163	139
8LRH 52/12	60	44	86,3		288	257	247	233	218	199	178	151
8LRH 52/13	75	55	106,2		312	278	268	252	237	216	192	164

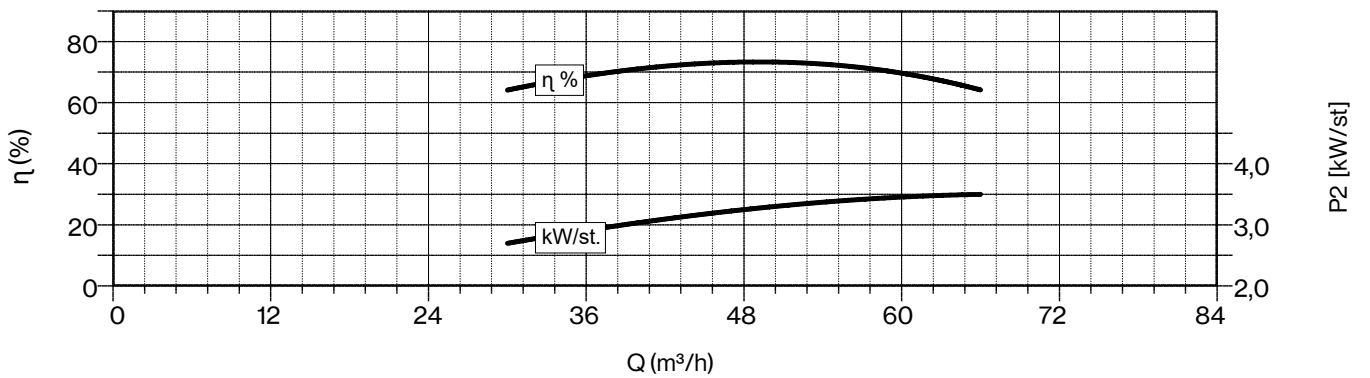
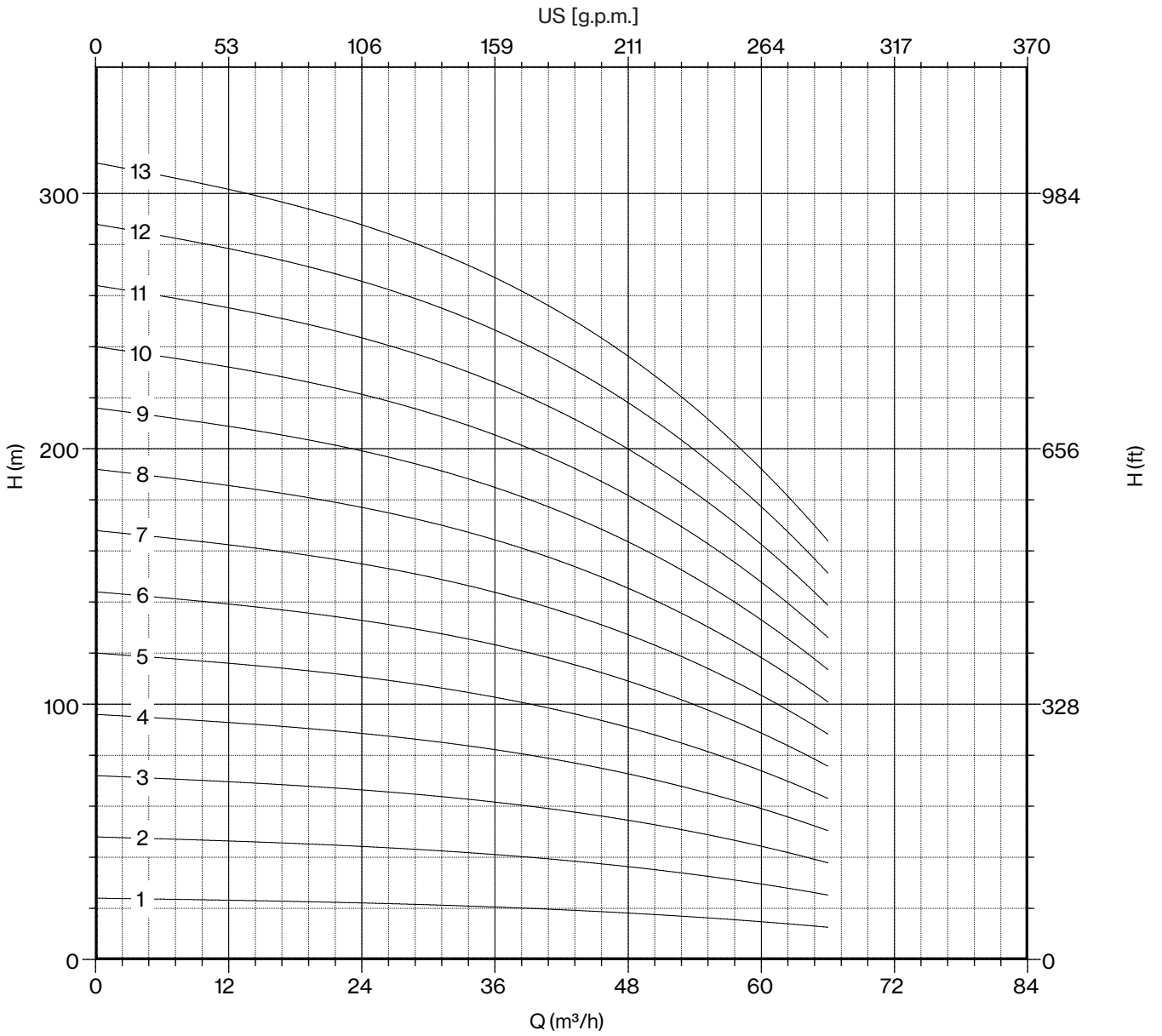
Max Eff. %	73
Max kW / St.	3,5

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3,5	3,5	6	8



TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
8LRH 52/01-6	6" NEMA	1114	468	646	40	22
8LRH 52/02-6		1257	556	701	55	29
8LRH 52/03-6		1455	644	811	65	36
8LRH 52/04-6		1663	732	931	75	44
8LRH 52/05-6		1811	820	991	83	51
8LRH 52/06-6		1979	908	1071	92	58
8LRH 52/07-6		2177	996	1181	100	65
8LRH 52/08-6		2335	1084	1251	108	72
8LRH 52/09-6		2513	1172	1341	118	79
8LRH 52/10-6		2601	1260	1341	118	87
8LRH 52/11	8" NEMA	2471	1348	1123	178	94
8LRH 52/12		2559	1436	1123	178	101
8LRH 52/13		2757	1524	1233	200	108

# 8LRH 52

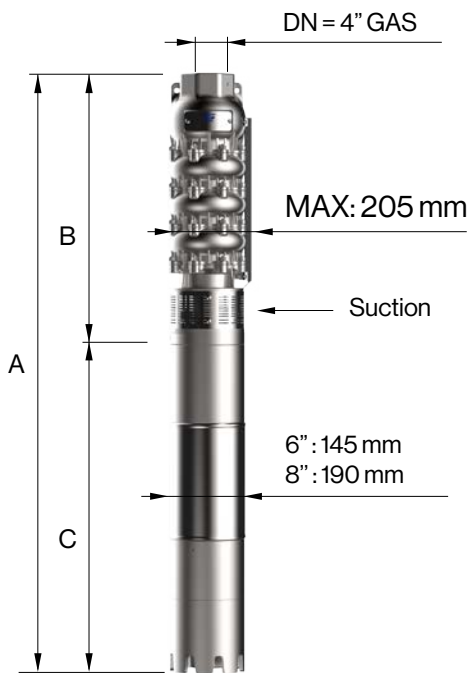




50 Hz - 2900 rpm				Q								
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	500	600	700	800	900	1000	1100	
	P2		CURRENT	I/sec	0,0	8,3	10,0	11,7	13,3	15,0	16,7	18,3
	HP	kW	A	m³/h	0	30	36	42	48	54	60	66
8LRH 52/14	75	55	106,2	H (m)	336	300	288	272	255	232	207	176
8LRH 52/15	75	55	106,2		360	321	309	291	273	249	222	189
8LRH 52/16	75	55	106,2		384	342	330	310	291	266	237	202
8LRH 52/17	90	66	126		408	364	350	330	309	282	252	214
8LRH 52/18	90	66	126		432	385	371	349	328	299	266	227
8LRH 52/19	90	66	126		456	407	391	369	346	315	281	239
8LRH 52/20	100	75	143,2		480	428	412	388	364	332	296	252
8LRH 52/21	100	75	143,2		504	449	433	407	382	349	311	265
8LRH 52/22	125	92	175,1		528	471	453	427	400	365	326	277
8LRH 52/23	125	92	175,1		552	492	474	446	419	382	340	290
8LRH 52/24	125	92	175,1		576	514	494	466	437	398	355	302
8LRH 52/25	125	92	175,1		600	535	515	485	455	415	370	315
8LRH 52/26	125	92	175,1		624	556	536	504	473	432	385	328

Max Eff. %	73
Max kW / St.	3,5

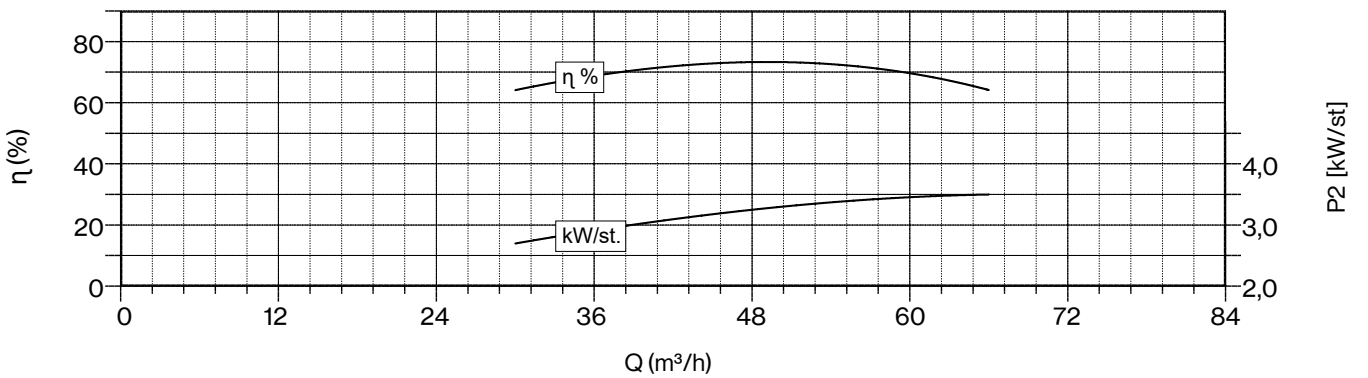
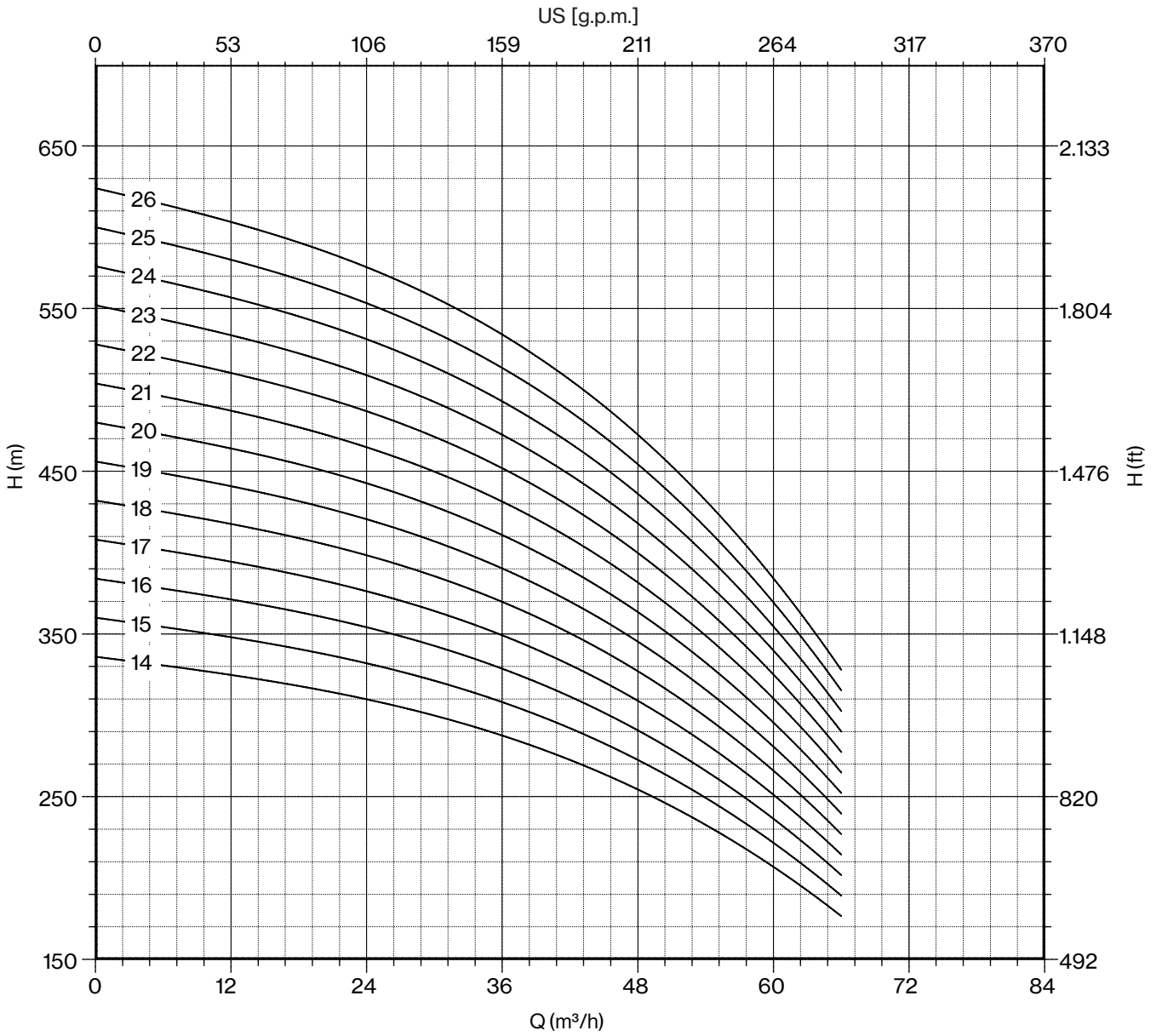
NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3,5	3,5	6	8



TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
8LRH 52/14	8" NEMA	2845	1612	1233	200	115
8LRH 52/15		2933	1700	1233	200	122
8LRH 52/16		3021	1788	1233	200	129
8LRH 52/17		3179	1876	1303	214	137
8LRH 52/18		3267	1964	1303	214	144
8LRH 52/19		3355	2052	1303	214	151
8LRH 52/20		3523	2140	1383	230	158
8LRH 52/21		3611	2228	1383	230	165
8LRH 52/22		3899	2316	1583	270	172
8LRH 52/23		3987	2404	1583	270	179
8LRH 52/24		4075	2492	1583	270	187
8LRH 52/25		4163	2580	1583	270	194
8LRH 52/26		4251	2668	1583	270	201



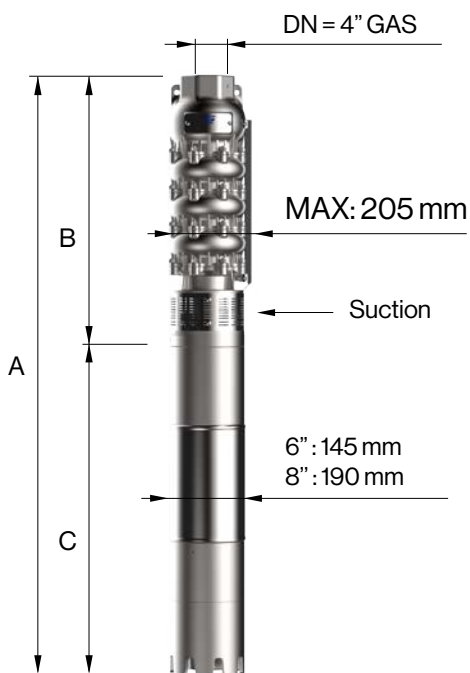
# 8LRH 52



50 Hz - 2900 rpm				Q								
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	600	800	900	1000	1100	1200	1300	
	P2		CURRENT	I/sec	0,0	10,0	13,3	15,0	16,7	18,3	20,0	21,7
	HP	kW	A	m³/h	0	36	48	54	60	66	72	78
8LRH 62/01	5,5	4	9,1	H (m)	23	21	19	18	17	15	14	12
8LRH 62/02	10	7,5	16,3		45	42	38	36	34	30	27	23
8LRH 62/03	15	11	23,4		68	63	57	54	50	46	41	35
8LRH 62/04	20	15	31,5		90	84	76	72	67	61	54	46
8LRH 62/05	25	18,5	38,3		113	105	95	90	84	76	68	58
8LRH 62/06	30	22	45,1		136	126	114	108	101	91	82	70
8LRH 62/07	35	26	52,9		158	147	133	126	118	106	95	81
8LRH 62/08	40	30	61,1		181	168	152	144	134	122	109	93
8LRH 62/09	50	37	75,8		203	189	171	162	151	137	122	104
8LRH 62/10	50	37	75,8		226	210	190	180	168	152	136	116
8LRH 62/11	60	44	86,3		249	231	209	198	185	167	150	128
8LRH 62/12	60	44	86,3		271	252	228	216	202	182	163	139

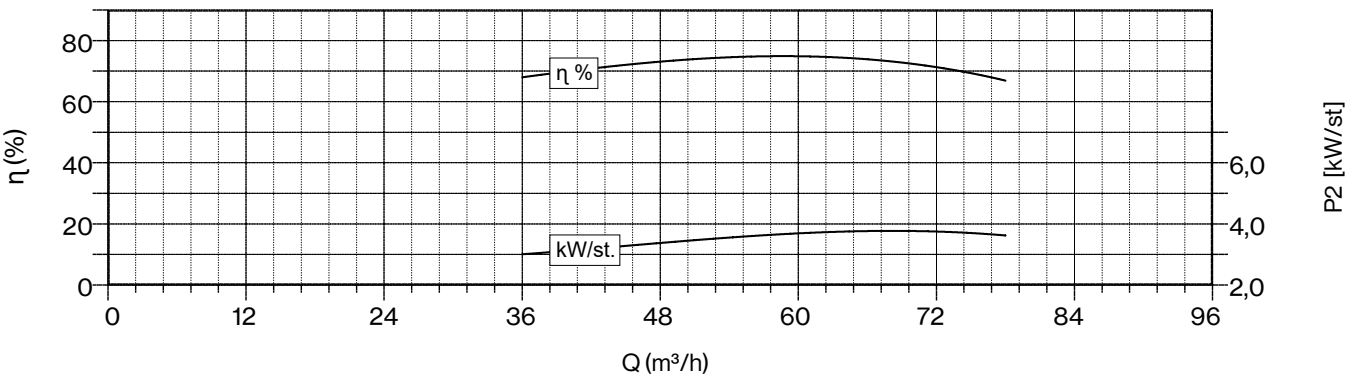
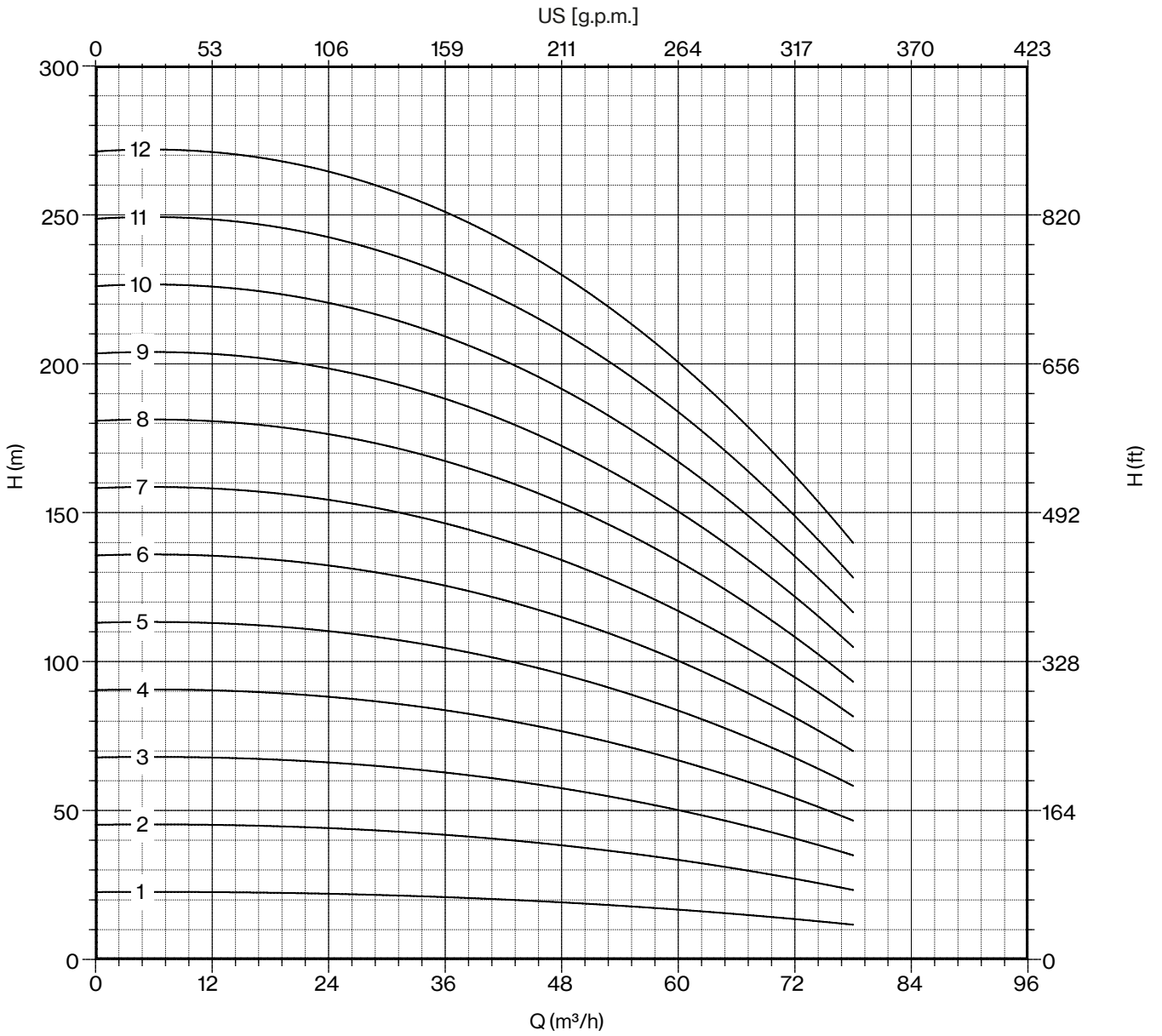
Max Eff. %	75
Max kW / St.	3,8

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3,6	3,6	6	8



TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
8LRH 62/01-6	6" NEMA	1114	468	646	40	22
8LRH 62/02-6		1257	556	701	55	29
8LRH 62/03-6		1455	644	811	65	36
8LRH 62/04-6		1663	732	931	75	44
8LRH 62/05-6		1811	820	991	83	51
8LRH 62/06-6		1979	908	1071	92	58
8LRH 62/07-6		2177	996	1181	100	65
8LRH 62/08-6		2335	1084	1251	108	72
8LRH 62/09-6		2513	1172	1341	118	79
8LRH 62/10-6		2601	1260	1341	118	87
8LRH 62/11	8" NEMA	2471	1348	1123	178	94
8LRH 62/12		2559	1436	1123	178	101

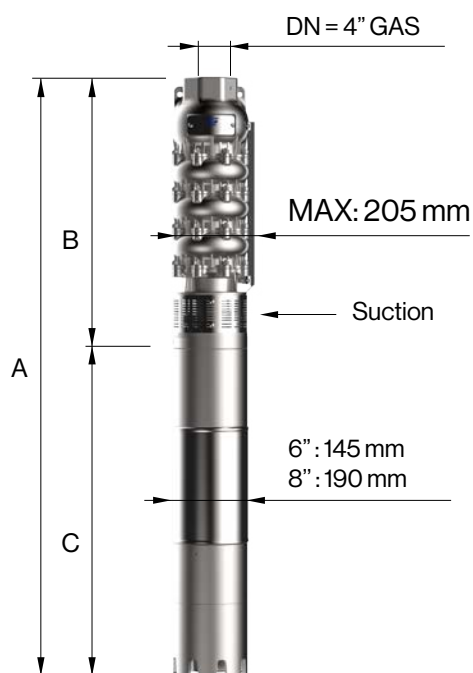
# 8LRH 62



50 Hz - 2900 rpm				Q								
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	600	800	900	1000	1100	1200	1300	
	P2		CURRENT	I/sec	0,0	10,0	13,3	15,0	16,7	18,3	20,0	21,7
	HP	kW	A	m <sup>3</sup> /h	0	36	48	54	60	66	72	78
8LRH 62/13	75	55	106,2	H (m)	294	273	247	234	218	198	177	151
8LRH 62/14	75	55	106,2		316	294	266	252	235	213	190	162
8LRH 62/15	90	66	126		339	315	285	270	252	228	204	174
8LRH 62/16	90	66	126		362	336	304	288	269	243	218	186
8LRH 62/17	90	66	126		384	357	323	306	286	258	231	197
8LRH 62/18	100	75	143,2		407	378	342	324	302	274	245	209
8LRH 62/19	100	75	143,2		429	399	361	342	319	289	258	220
8LRH 62/20	100	75	143,2		452	420	380	360	336	304	272	232
8LRH 62/21	125	92	175,1		475	441	399	378	353	319	286	244
8LRH 62/22	125	92	175,1		497	462	418	396	370	334	299	255
8LRH 62/23	125	92	175,1		520	483	437	414	386	350	313	267
8LRH 62/24	125	92	175,1		542	504	456	432	403	365	326	278

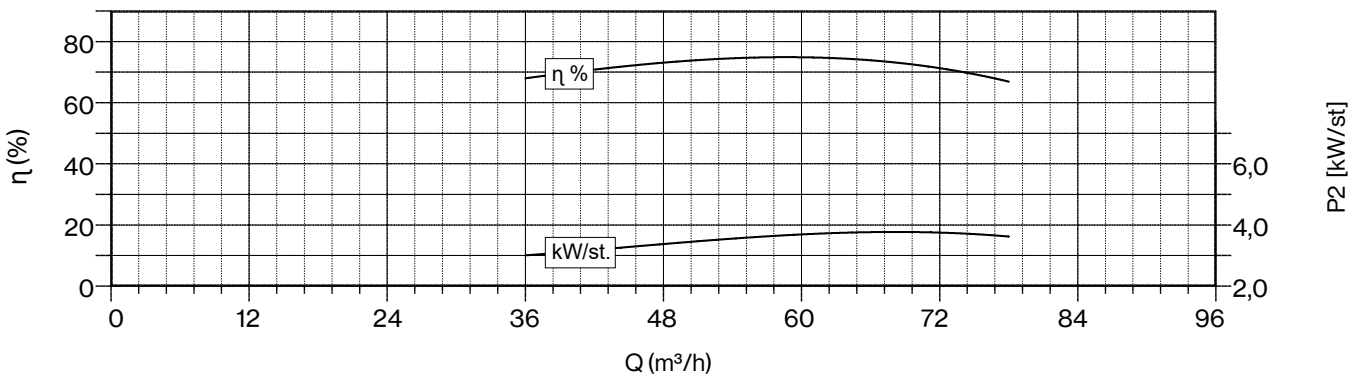
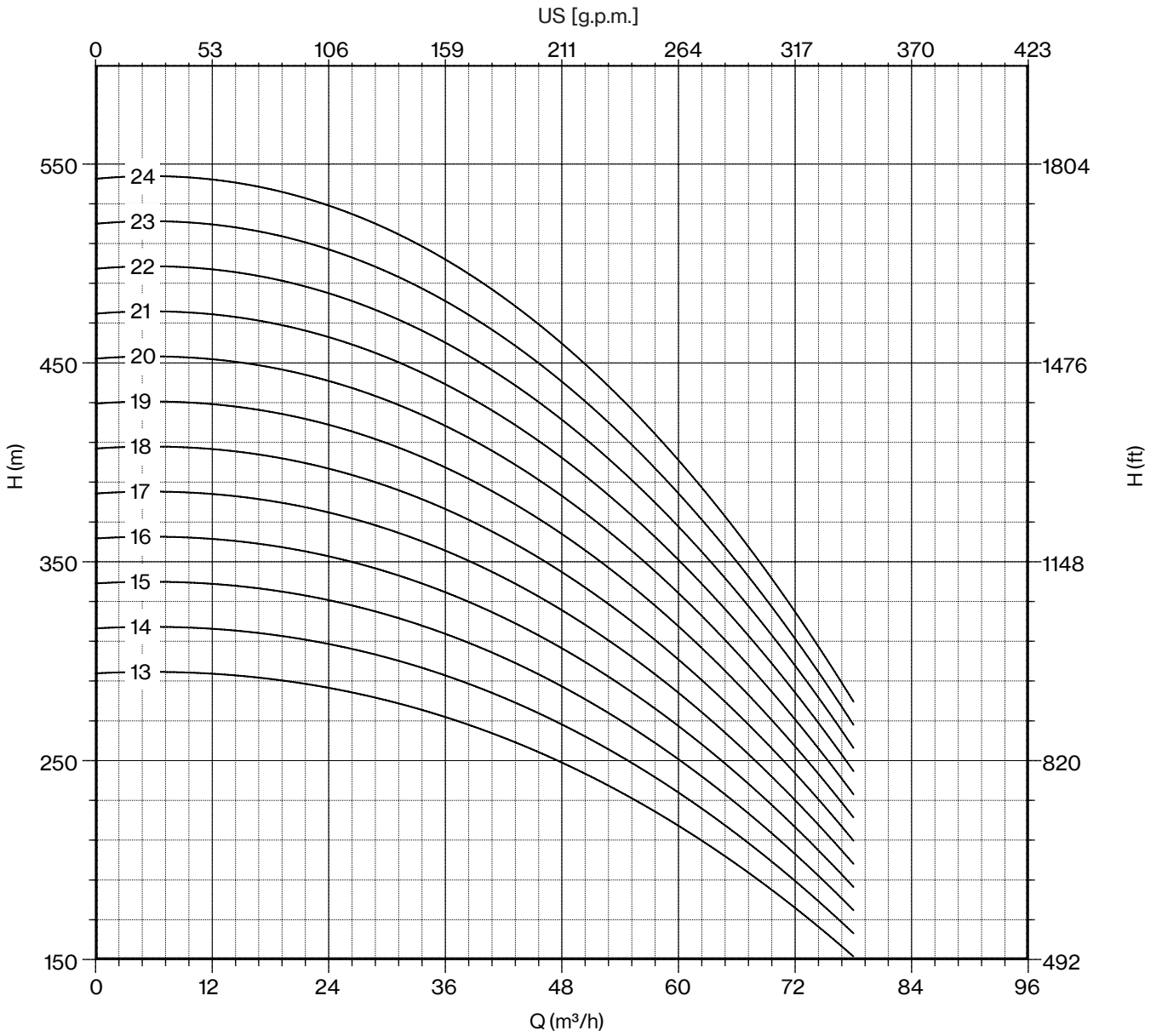
Max Eff. %	75
Max kW / St.	3,8

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3,6	3,6	6	8



TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
8LRH 62/13	8" NEMA	2757	1524	1233	200	108
8LRH 62/14		2845	1612	1233	200	115
8LRH 62/15		3003	1700	1303	214	122
8LRH 62/16		3091	1788	1303	214	129
8LRH 62/17		3179	1876	1303	214	137
8LRH 62/18		3347	1964	1383	230	144
8LRH 62/19		3435	2052	1383	230	151
8LRH 62/20		3523	2140	1383	230	158
8LRH 62/21		3811	2228	1583	270	165
8LRH 62/22		3899	2316	1583	270	172
8LRH 62/23		3987	2404	1583	270	179
8LRH 62/24		4075	2492	1583	270	187

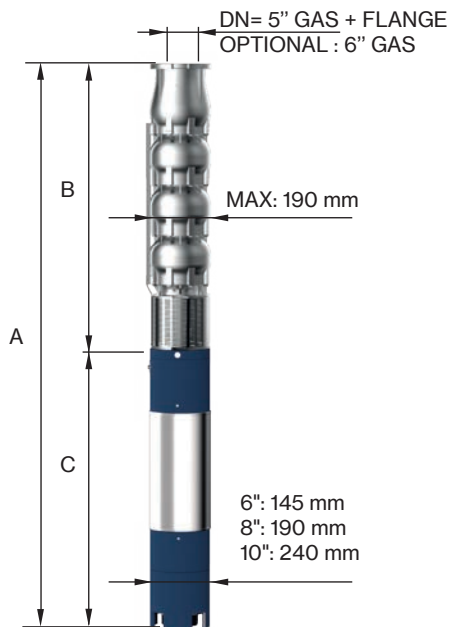
# 8LRH 62



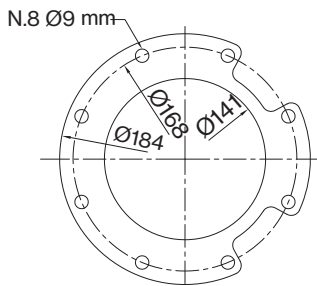
50 Hz - 2900 rpm				Q									
TYPE	SUITABLE MOTOR 3- 400V		l/min	0	300	400	600	800	1000	1200	1400	1600	
	P2		CURRENT	l/sec	0	5,0	6,7	10,0	13,3	16,7	20,0	23,3	26,7
	HP	kW	A	m <sup>3</sup> /h	0	18	24	36	48	60	72	84	96
8LM 80/01	10	7,5	16,3	H (m)	27	26	26	24	23	22	20	18	15
8LM 80/02	17,5	13	27,3		54	53	51	49	47	44	40	35	30
8LM 80/03	25	18,5	38,3		81	79	77	73	70	65	60	53	44
8LM 80/04	35	26	52,9		108	105	103	97	93	87	80	70	59
8LM 80/05	40	30	61,1		135	132	129	122	117	109	100	88	74
8LM 80/06	50	37	75,8		162	158	154	146	140	131	120	105	89
8LM 80/07	60	45	86,3		189	184	180	170	163	153	140	123	104
8LM 80/08	75	55	106,2		216	210	206	194	186	174	160	140	118
8LM 80/09	75	55	106,2		243	237	231	219	210	196	180	158	133
8LM 80/10	90	66	126,0		270	263	257	243	233	218	200	175	148

Max Eff. %	74
Max kW / St.	5,75

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3	3	3,5	4,5

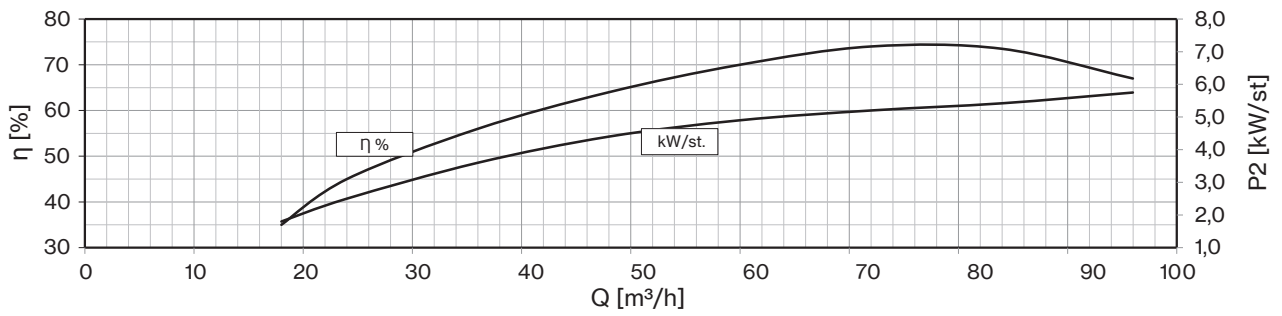
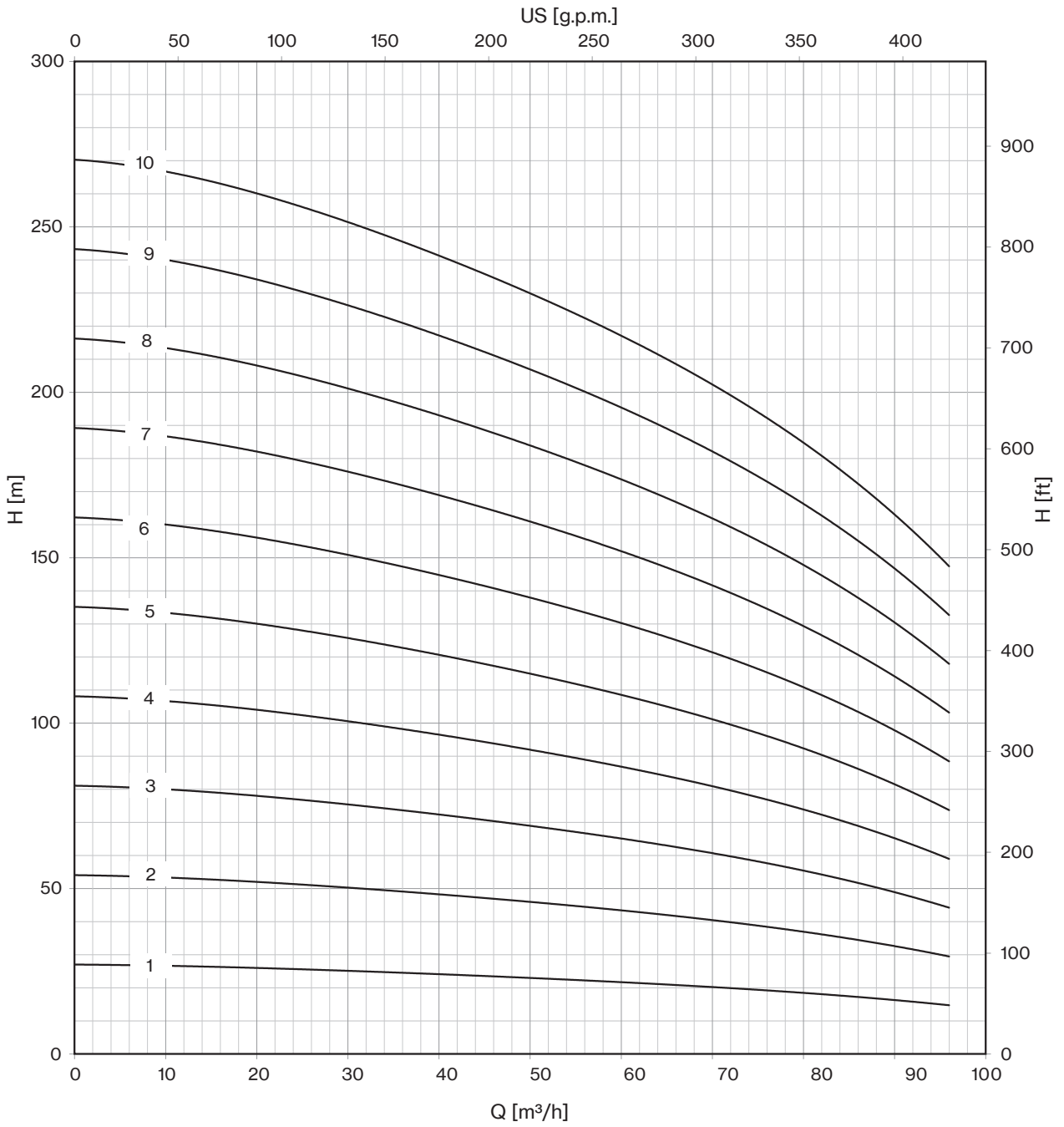


TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
8LM 80/01-6	6" NEMA	1164	463	701	55	19
8LM 80/02-6		1429	588	841	70	25
8LM 80/03-6		1704	713	991	83	32
8LM 80/04-6		2019	838	1181	100	38
8LM 80/05-6		2214	963	1251	108	45
8LM 80/06-6	2429	1088	1341	118	51	
8LM 80/07	8" NEMA	2336	1213	1123	178	58
8LM 80/08		2633	1400	1233	200	65
8LM 80/09		2758	1525	1233	200	71
8LM 80/10		2952	1650	1302	214	78



FOR COMMERCIAL TUBE  
EXTERNAL DIAMETER: 139,7 mm

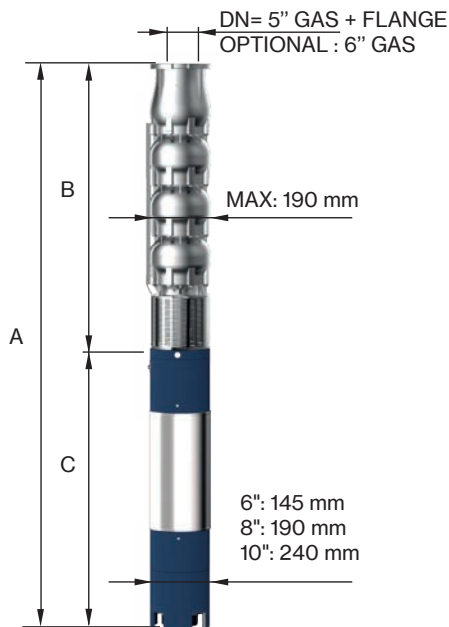
# 8LM 80



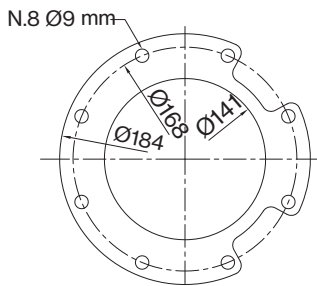
50 Hz - 2900 rpm					Q								
TYPE	SUITABLE MOTOR 3- 400V		I/min		0	300	400	600	800	1000	1200	1400	1600
	P2		CURRENT	I/sec	0	5,0	6,7	10,0	13,3	16,7	20,0	23,3	26,7
	HP	kW	A	m³/h	0	18	24	36	48	60	72	84	96
8LM 80/11	90	66	126,0	H (m)	297	289	283	267	256	240	220	193	163
8LM 80/12	100	75	143,2		324	316	308	292	280	262	240	210	178
8LM 80/13	100	75	143,2		351	342	334	316	303	283	260	228	192
8LM 80/14	125	92	175,1		378	368	360	340	326	305	280	245	207
8LM 80/15	125	92	175,1		405	395	386	365	350	327	300	263	222
8LM 80/16	125	92	175,1		432	421	411	389	373	349	320	280	237
8LM 80/17D	150	110	211,0		459	447	437	413	396	371	340	298	252
8LM 80/18D	150	110	211,0		486	473	463	437	419	392	360	315	266
8LM 80/19D	150	110	211,0		513	500	488	462	443	414	380	333	281
8LM 80/20D	175	130	245,3		540	526	514	486	466	436	400	350	296

Max Eff. %	74
Max kW / St.	5,75

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3	3	3,5	4,5



TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
8LM 80/11	8" NEMA	3077	1775	1302	214	84
8LM 80/12		3283	1900	1383	230	90
8LM 80/13		3408	2025	1383	230	97
8LM 80/14		3733	2150	1583	270	103
8LM 80/15		3858	2275	1583	270	110
8LM 80/16		3983	2400	1583	270	116
8LM 80/17D		4258	2525	1733	300	123
8LM 80/18D		4383	2650	1733	300	129
8LM 80/19D		4508	2775	1733	300	136
8LM 80/20D-10	10"	4534	2900	1634	385	142

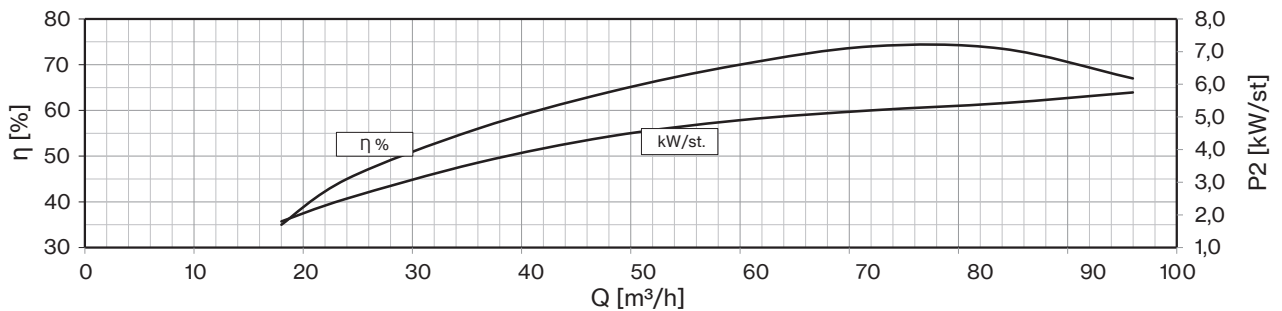
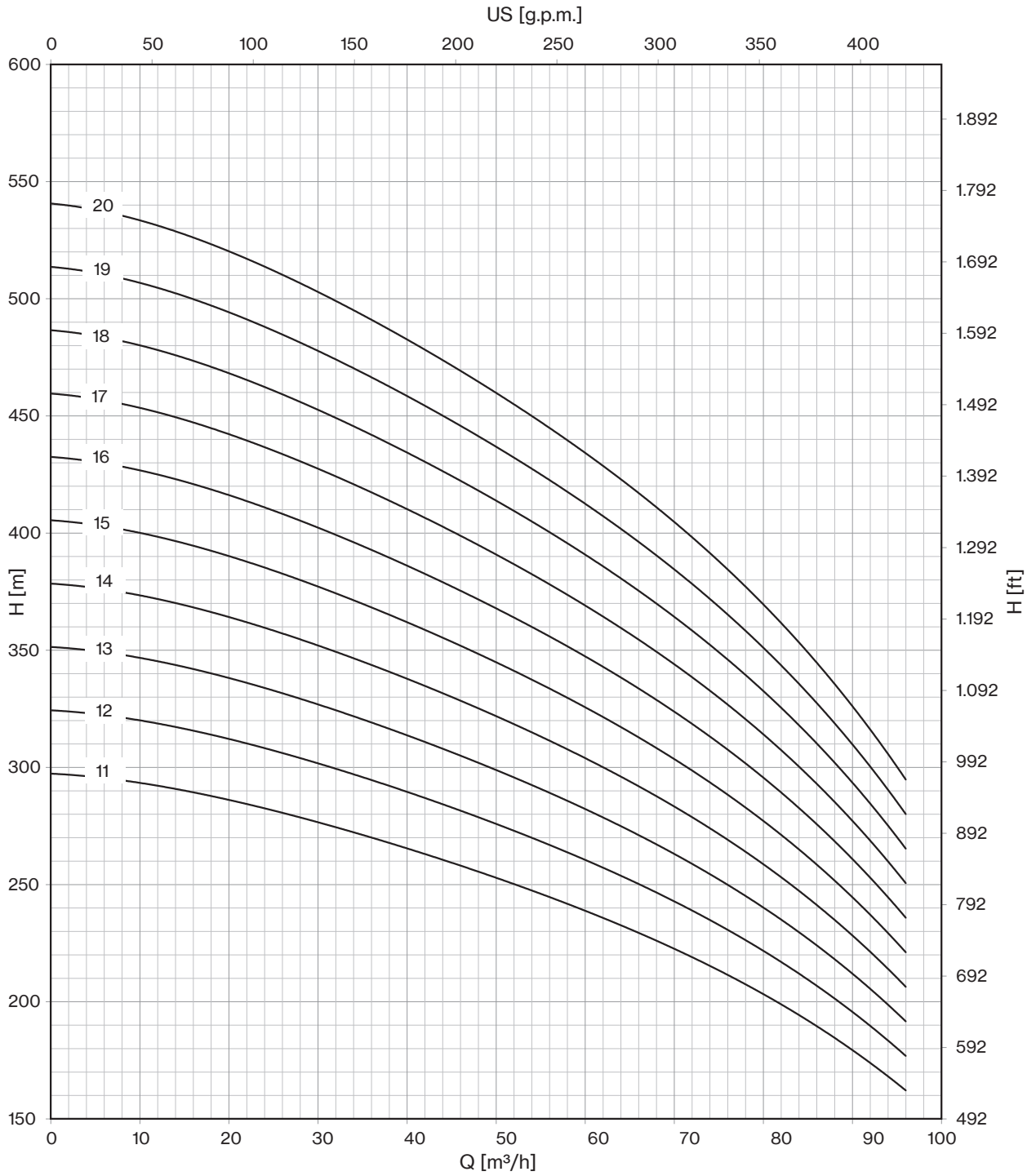


FOR COMMERCIAL TUBE  
EXTERNAL DIAMETER: 139,7 mm

"D" Pump shaft in Duplex EN 1.4462



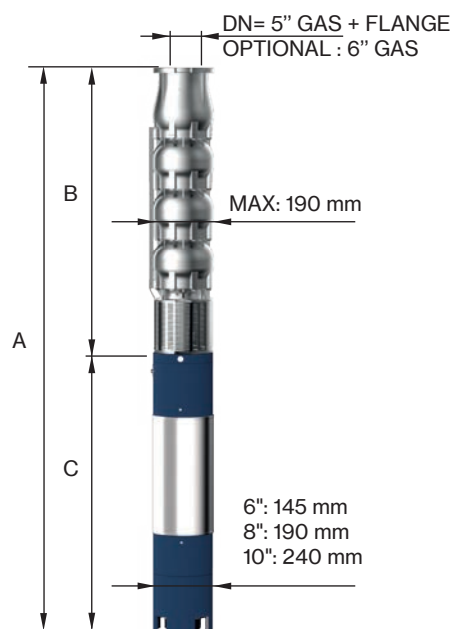
# 8LM 80



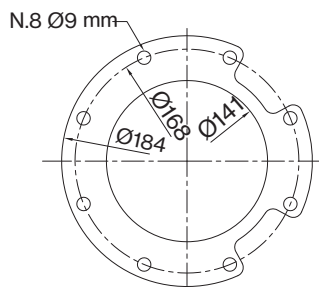
50 Hz - 2900 rpm				Q									
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	300	800	1000	1200	1400	1600	1800	2000	
	P2		CURRENT	I/sec	0	5,0	13,3	16,7	20,0	23,3	26,7	30,0	33,3
	HP	kW	A	m <sup>3</sup> /h	0	18	48	60	72	84	96	108	120
8LM 92/01	10	7,5	16,3	H (m)	27	26	24	23	22	20	18	16	13
8LM 92/02	17,5	13	27,3		54	53	49	47	44	40	36	31	25
8LM 92/03	30	22	45,1		81	79	73	70	65	60	54	47	38
8LM 92/04	35	26	52,9		108	105	97	93	87	80	72	62	50
8LM 92/05	50	37	75,8		135	132	122	117	109	101	90	78	63
8LM 92/06	60	45	86,3		162	158	146	140	131	121	107	93	76
8LM 92/07	75	55	106,2		189	184	170	163	153	141	125	109	88
8LM 92/08	75	55	106,2		216	210	194	186	174	161	143	124	101
8LM 92/09	90	66	126,0		243	237	219	210	196	181	161	140	113
8LM 92/10	90	66	126,0		270	263	243	233	218	201	179	155	126

Max Eff. %	75
Max kW / St.	6,47

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	2,5	2,9	3,9	7,8

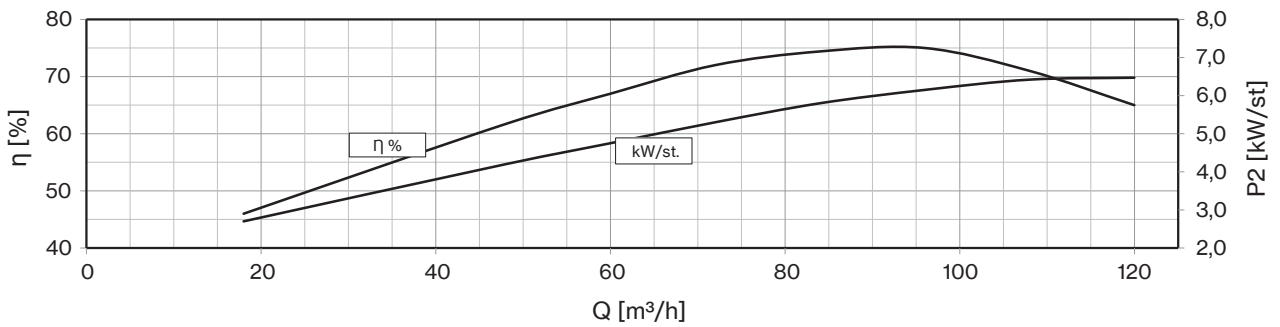
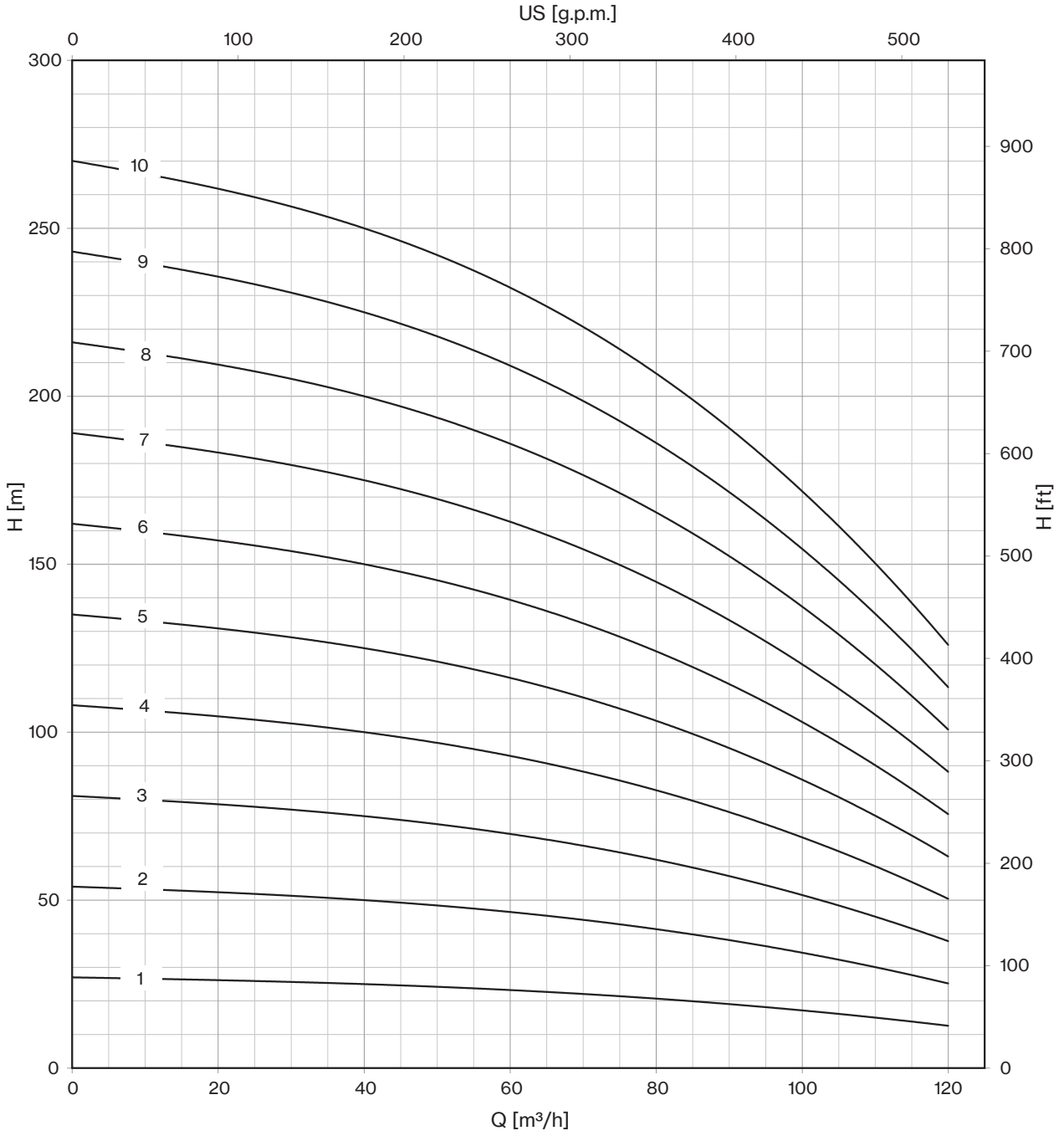


TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
8LM 92/01-6	6" NEMA	1164	463	701	55	19
8LM 92/02-6		1429	588	841	70	26
8LM 92/03-6		1784	713	1071	92	32
8LM 92/04-6		2019	838	1181	100	39
8LM 92/05-6		2304	963	1341	118	46
8LM 92/06	8" NEMA	2211	1088	1123	178	53
8LM 92/07		2508	1275	1233	200	60
8LM 92/08		2633	1400	1233	200	67
8LM 92/09		2827	1525	1302	214	74
8LM 92/10		2952	1650	1302	214	81



FOR COMMERCIAL TUBE  
EXTERNAL DIAMETER: 139,7 mm

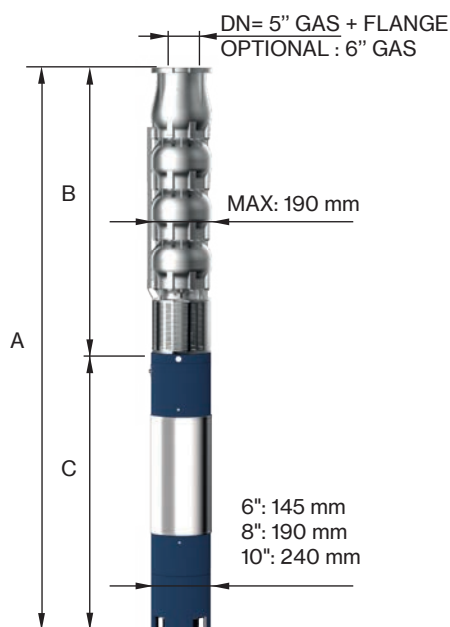
# 8LM 92



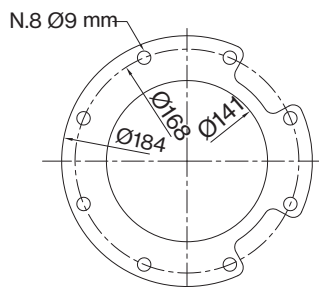
50 Hz - 2900 rpm				Q									
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	300	800	1000	1200	1400	1600	1800	2000	
	P2		CURRENT	I/sec	0	5,0	13,3	16,7	20,0	23,3	26,7	30,0	33,3
	HP	kW	A	m <sup>3</sup> /h	0	18	48	60	72	84	96	108	120
8LM 92/11	100	75	143,2	H (m)	297	289	267	256	240	221	197	171	139
8LM 92/12	125	92	175,1		324	316	292	280	262	241	215	186	151
8LM 92/13	125	92	175,1		351	342	316	303	283	261	233	202	164
8LM 92/14	125	92	175,1		378	368	340	326	305	281	251	217	176
8LM 92/15D	150	110	211,0		405	395	365	350	327	302	269	233	189
8LM 92/16D	150	110	211,0		432	421	389	373	349	322	286	248	202
8LM 92/17D	150	110	211,0		459	447	413	396	371	342	304	264	214
8LM 92/18D	175	130	245,3		486	473	437	419	392	362	322	279	227
8LM 92/19D	175	130	245,3		513	500	462	443	414	382	340	295	239
8LM 92/20D	175	130	245,3		540	526	486	466	436	402	358	310	252

Max Eff. %	75
Max kW / St.	6,5

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	2,5	2,9	3,9	7,8



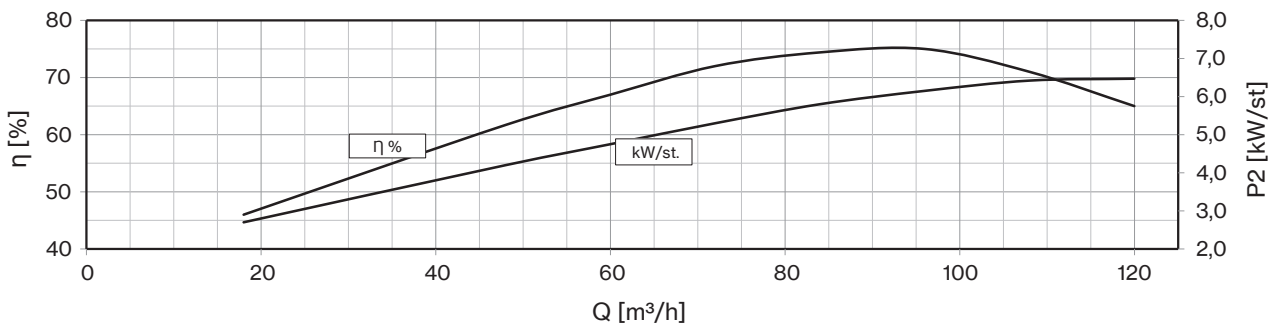
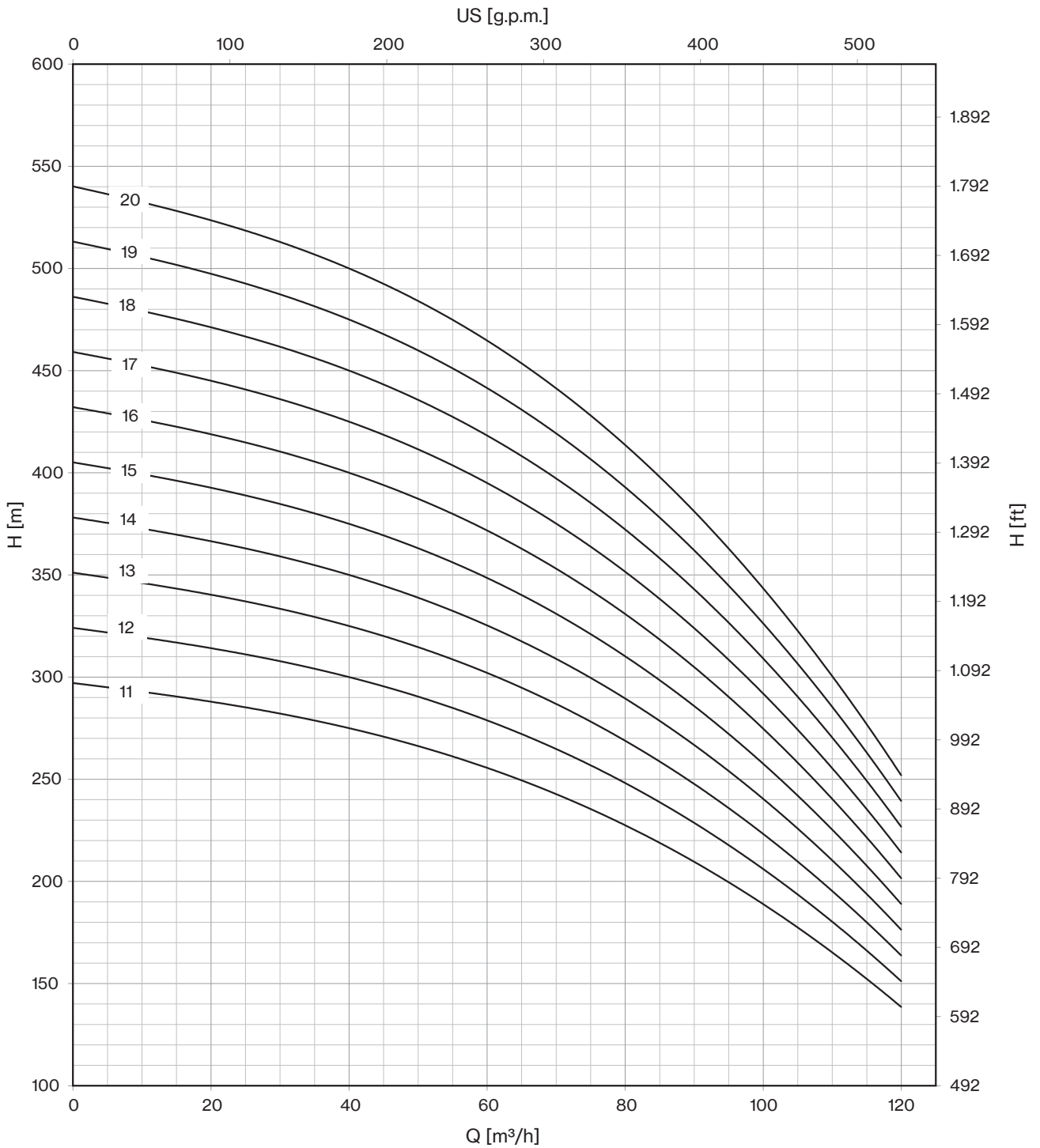
TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
8LM 92/11	8" NEMA	3158	1775	1383	230	88
8LM 92/12		3483	1900	1583	270	94
8LM 92/13		3608	2025	1583	270	101
8LM 92/14		3733	2150	1583	270	108
8LM 92/15D		4008	2275	1733	300	115
8LM 92/16D		4133	2400	1733	300	122
8LM 92/17D	4258	2525	1733	300	128	
8LM 92/18D-10	10"	4284	2650	1634	385	138
8LM 92/19D-10		4409	2775	1634	385	145
8LM 92/20D-10		4534	2900	1634	385	152



FOR COMMERCIAL TUBE  
EXTERNAL DIAMETER: 139,7 mm

"D" Pump shaft in Duplex EN 1.4462

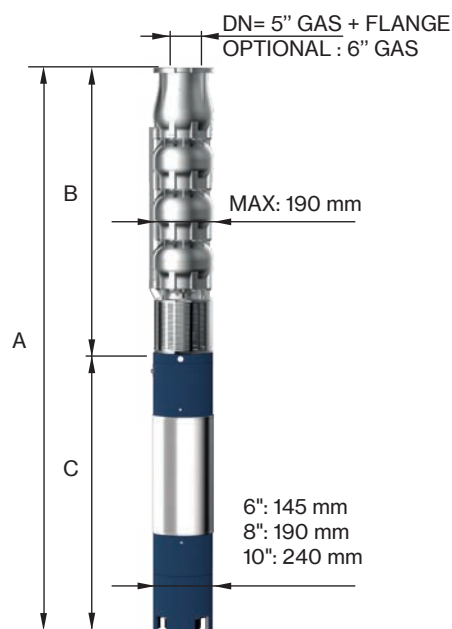
# 8LM 92



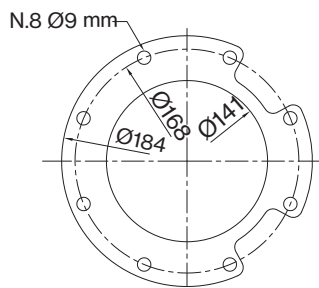
50 Hz - 2900 rpm				Q									
TYPE	SUITABLE MOTOR 3- 400V		l/min	0	600	1200	1400	1600	1800	2000	2200	2400	
	P2		CURRENT	l/sec	0	10,0	20,0	23,3	26,7	30,0	33,3	36,7	40,0
	HP	kW	A	m <sup>3</sup> /h	0	36	72	84	96	108	120	132	144
8LM 110/01	10	7,5	16,3	H (m)	28	25	22	21	20	19	17	15	13
8LM 110/02	20	15	31,5		55	51	44	42	41	38	35	31	26
8LM 110/03	30	22	45,1		83	76	65	63	61	57	52	46	38
8LM 110/04	40	30	61,1		110	101	87	84	82	76	69	62	51
8LM 110/05	50	37	75,8		138	127	109	106	102	96	87	77	64
8LM 110/06	60	45	86,3		165	152	131	127	122	115	104	92	77
8LM 110/07	75	55	106,2		193	177	153	148	143	134	121	108	90

Max Eff. %	77
Max kW / St.	7,2

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	2,5	2,9	3,9	7,8

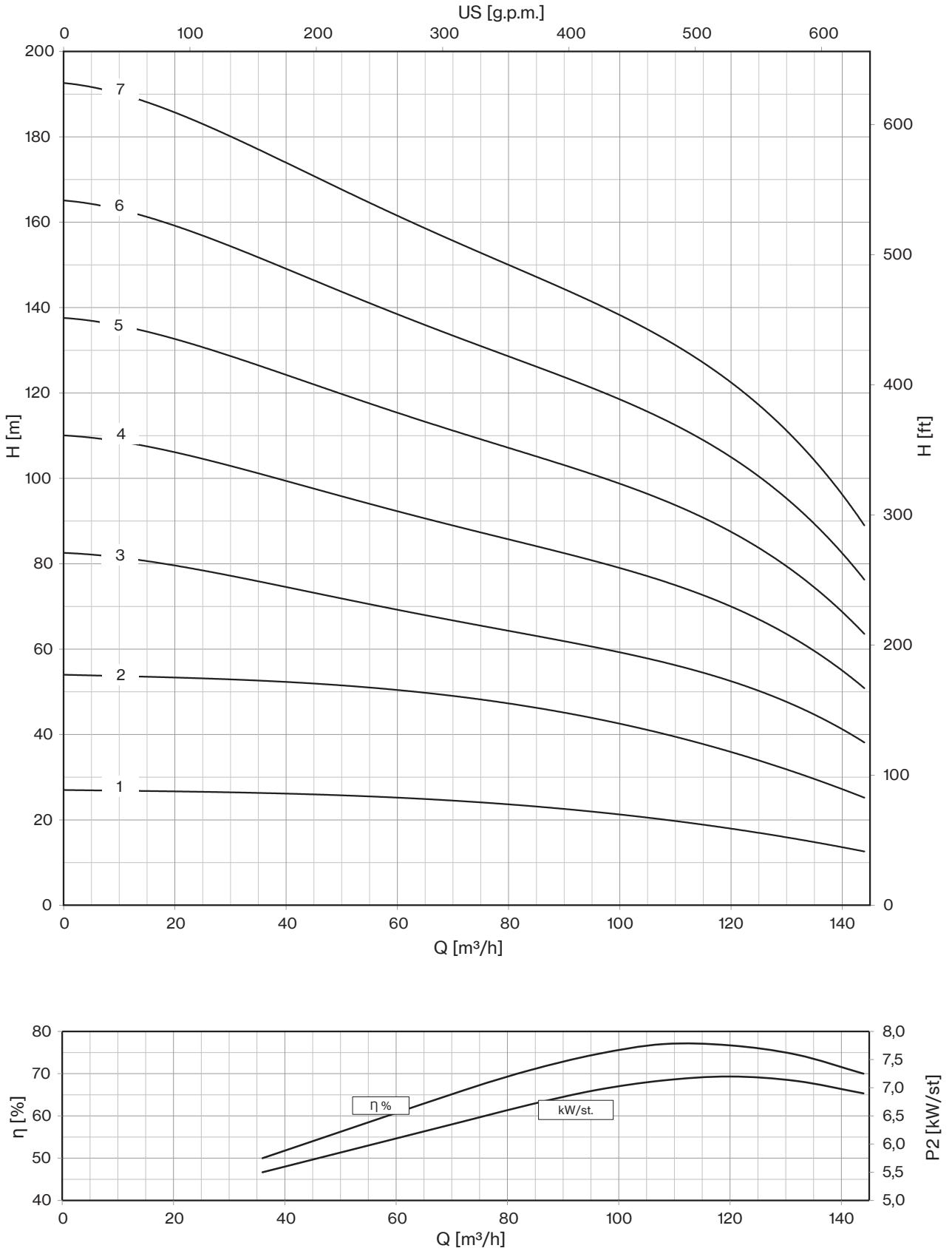


TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
8LM 110/01-6	6" NEMA	1164	463	701	55	19
8LM 110/02-6		1519	588	931	75	26
8LM 110/03-6		1784	713	1071	92	32
8LM 110/04-6		2089	838	1251	108	39
8LM 110/05-6		2304	963	1341	118	46
8LM 110/06	8" NEMA	2273	1150	1123	178	54
8LM 110/07		2508	1275	1233	200	60



FOR COMMERCIAL TUBE  
EXTERNAL DIAMETER: 139,7 mm

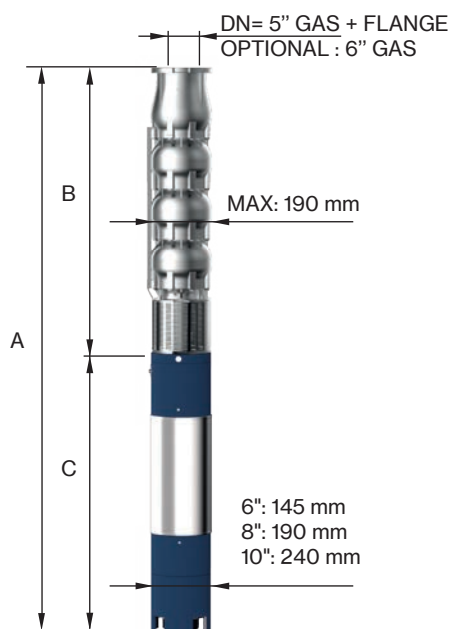
# 8LM 110



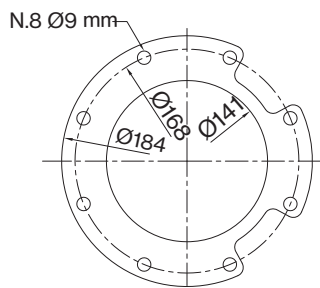
50 Hz - 2900 rpm				Q									
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	600	1200	1400	1600	1800	2000	2200	2400	
	P2			I/sec	0	10,0	20,0	23,3	26,7	30,0	33,3	36,7	40,0
	HP	kW	CURRENT		A	m <sup>3</sup> /h	0	36	72	84	96	108	120
8LM 110/08	90	66	126,0	H (m)	220	202	174	169	163	153	138	123	102
8LM 110/09	90	66	126,0		248	228	196	190	184	172	156	139	115
8LM 110/10	100	75	143,2		275	253	218	211	204	191	173	154	128
8LM 110/11	125	92	175,1		303	278	240	232	224	210	190	169	141
8LM 110/12	125	92	175,1		330	304	262	253	245	229	208	185	154
8LM 110/13D	150	110	211,0		358	329	283	274	265	248	225	200	166
8LM 110/14D	150	110	211,0		385	354	305	295	286	267	242	216	179
8LM 110/15D	150	110	211,0		413	380	327	317	306	287	260	231	192
8LM 110/16D	175	130	245,3		440	405	349	338	326	306	277	246	205
8LM 110/17D	175	130	245,3		468	430	371	359	347	325	294	262	218
8LM 110/18D	175	130	245,3	495	455	392	380	367	344	311	277	230	

Max Eff. %	77
Max kW / St.	7,2

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	2,5	2,9	3,9	7,8



TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
8LM 110/08	8" NEMA	2702	1400	1302	214	67
8LM 110/09		2827	1525	1302	214	74
8LM 110/10		3033	1650	1383	230	81
8LM 110/11		3358	1775	1583	270	88
8LM 110/12		3483	1900	1583	270	94
8LM 110/13D		3758	2025	1733	300	101
8LM 110/14D		3883	2150	1733	300	108
8LM 110/15D		4008	2275	1733	300	115
8LM 110/16D-10	10"	4034	2400	1634	385	125
8LM 110/17D-10		4159	2525	1634	385	132
8LM 110/18D-10		4284	2650	1634	385	138

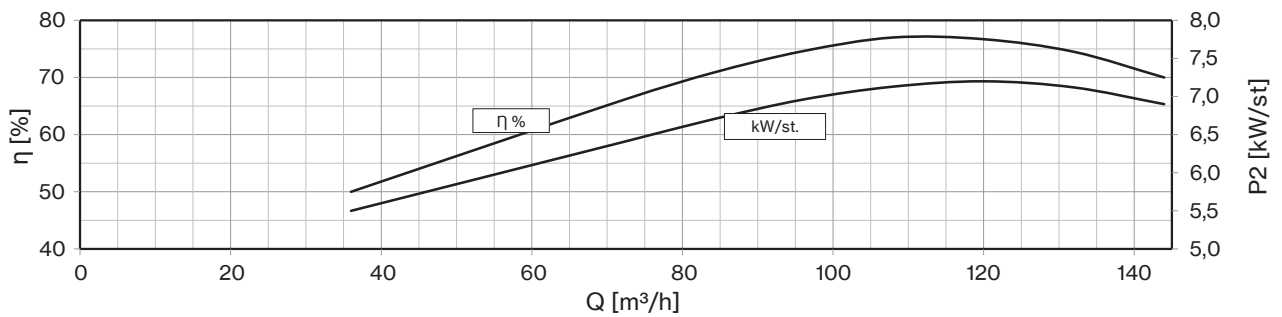
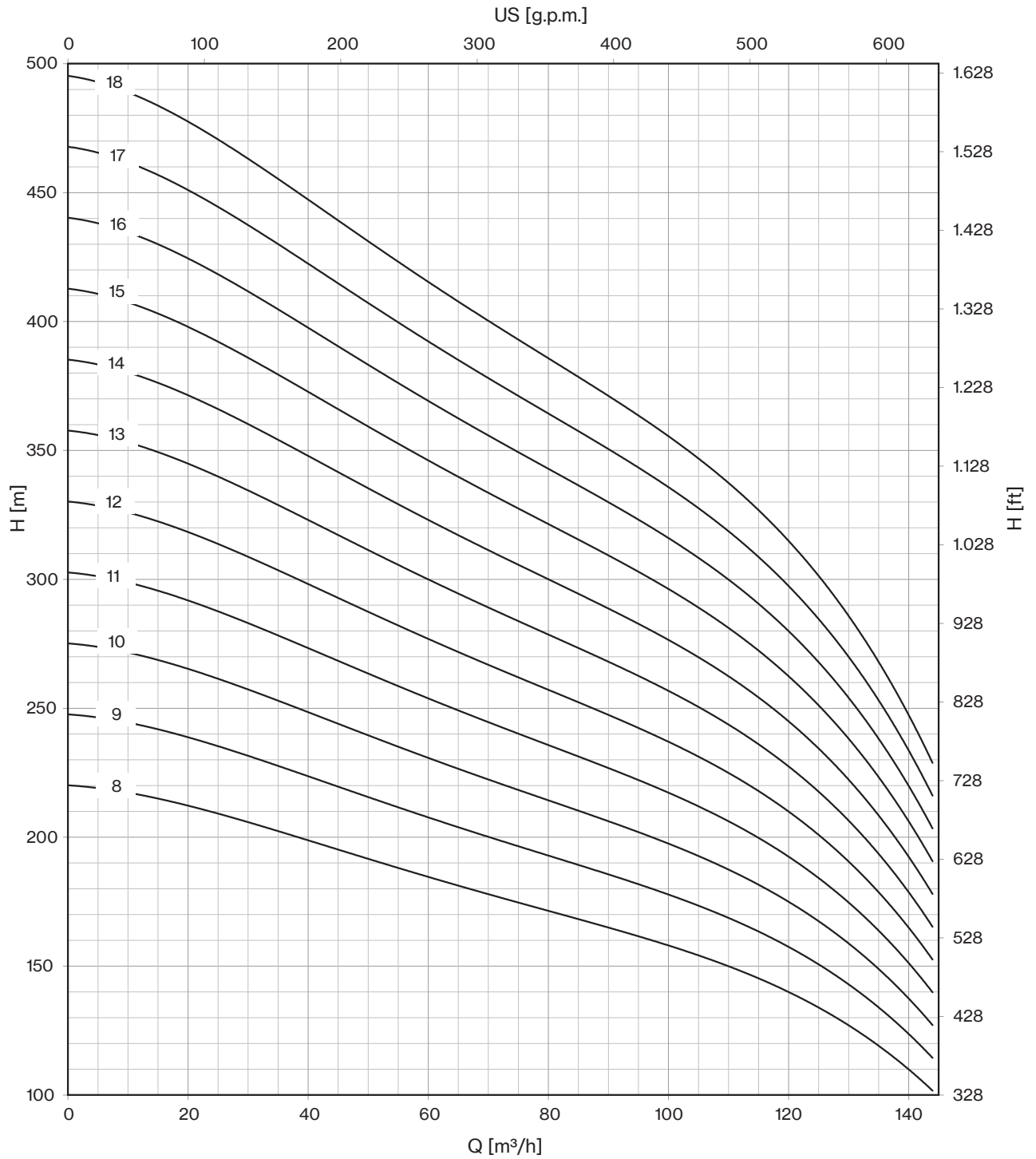


FOR COMMERCIAL TUBE  
EXTERNAL DIAMETER: 139,7 mm

"D" Pump shaft in Duplex EN 1.4462



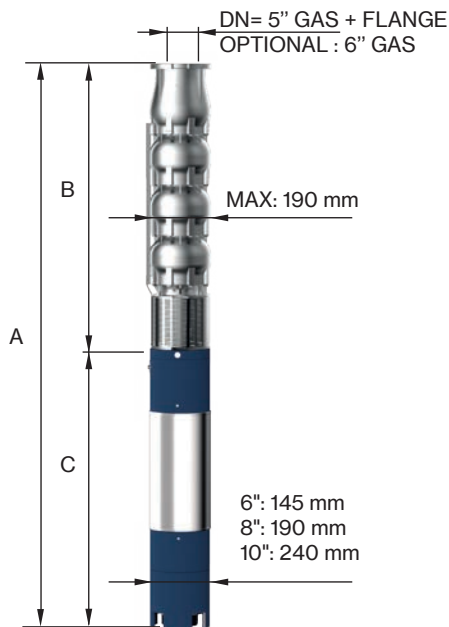
# 8LM 110



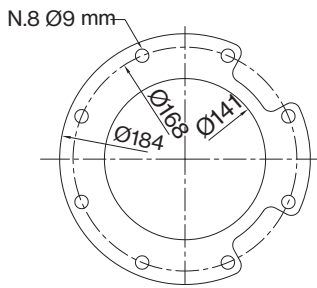
50 Hz - 2900 rpm				Q									
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	600	1600	1800	2000	2200	2400	2600	2800	
	P2		CURRENT	I/sec	0	10,0	26,7	30,0	33,3	36,7	40,0	43,3	46,7
	HP	kW	A	m³/h	0	36	96	108	120	132	144	156	168
8LM 130/01	12,5	9,2	19,9	H (m)	27	25	21	20	19	18	16	15	12
8LM 130/02	25	18,5	38,3		54	49	41	40	38	36	33	29	24
8LM 130/03	35	26	52,9		81	74	62	59	57	54	49	44	36
8LM 130/04	50	37	75,8		108	98	83	79	76	72	66	58	48
8LM 130/05	60	45	86,3		135	123	104	99	95	90	82	73	60
8LM 130/06	75	55	106,2		162	147	124	119	114	108	98	87	72
8LM 130/07	90	66	126,0		189	172	145	139	133	126	115	102	84
8LM 130/08	100	75	143,2		216	196	166	158	152	144	131	116	96

Max Eff. %	78
Max kW / St.	8,4

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	2,5	3	3,5	8,7

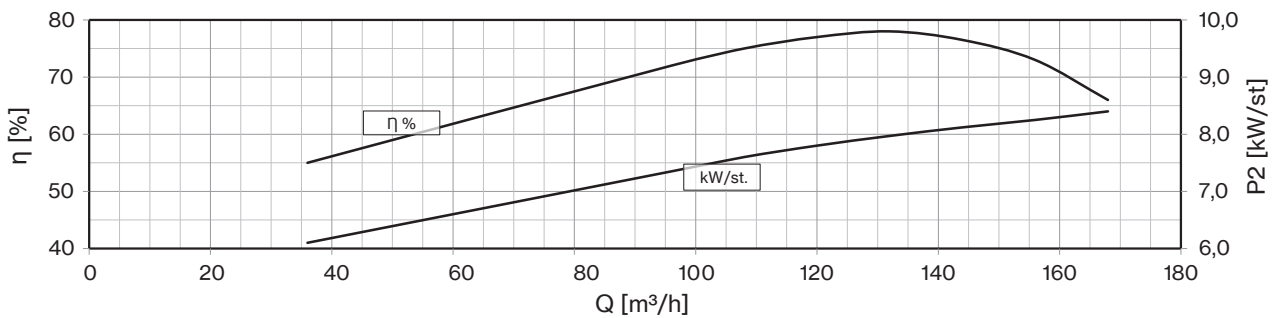
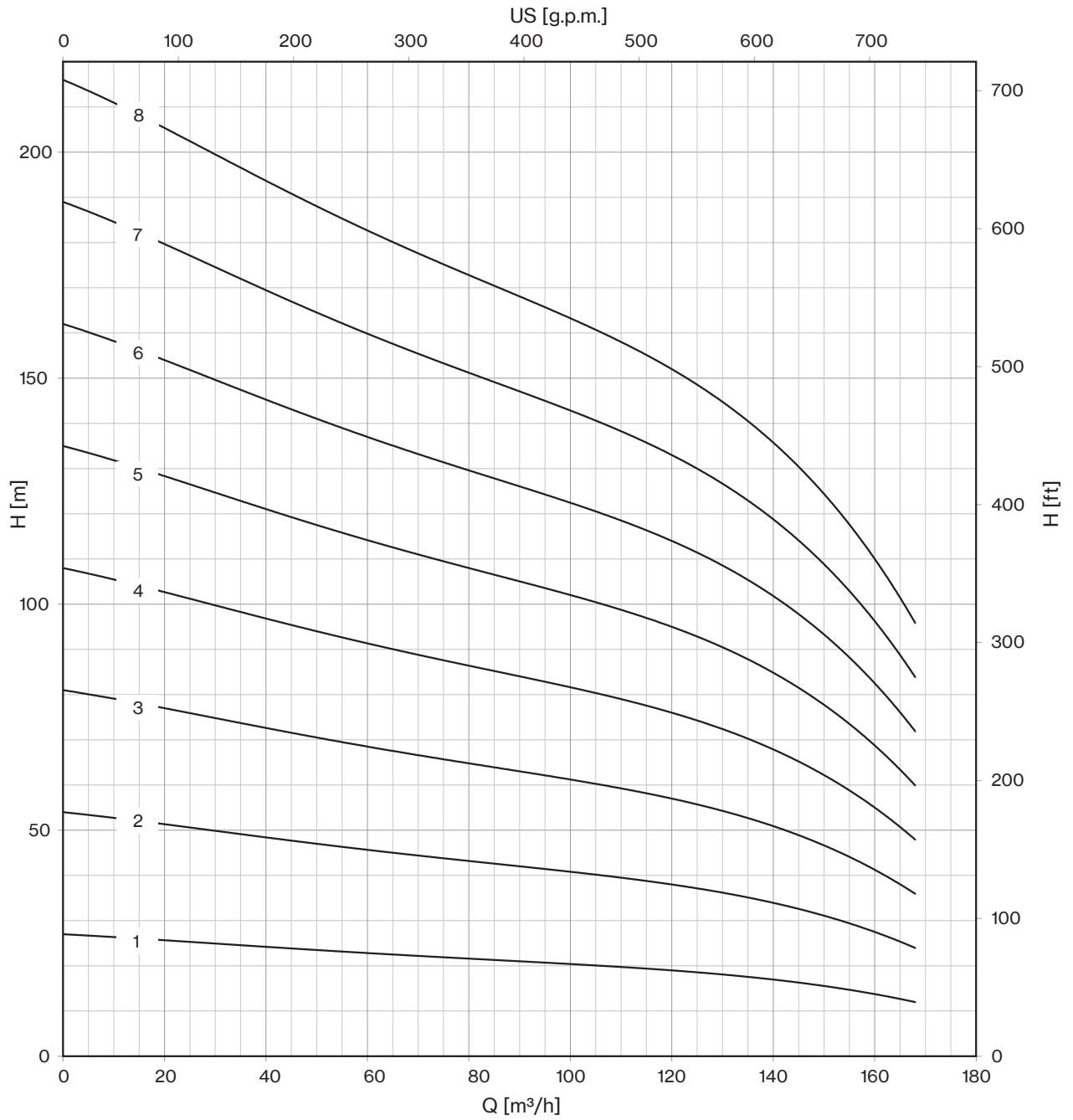


TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
8LM 130/01-6	6" NEMA	1214	463	751	60	19
8LM 130/02-6		1579	588	991	83	26
8LM 130/03-6		1894	713	1181	100	33
8LM 130/04-6	8" NEMA	2179	838	1341	118	40
8LM 130/05		2148	1025	1123	178	48
8LM 130/06		2383	1150	1233	200	55
8LM 130/07		2577	1275	1302	214	62
8LM 130/08		2783	1400	1383	230	69



FOR COMMERCIAL TUBE  
EXTERNAL DIAMETER: 139,7 mm

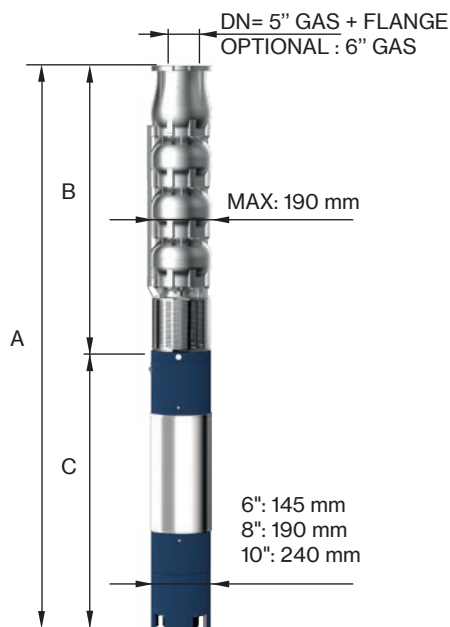
# 8LM 130



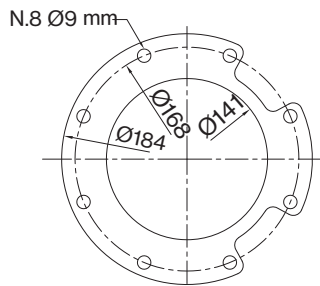
50 Hz - 2900 rpm				Q									
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	600	1600	1800	2000	2200	2400	2600	2800	
	P2			I/sec	0	10,0	26,7	30,0	33,3	36,7	40,0	43,3	46,7
	HP	kW	CURRENT		A	m <sup>3</sup> /h	0	36	96	108	120	132	144
8LM 130/09	125	92	175,1	H (m)	243	221	186	178	171	162	148	131	108
8LM 130/10	125	92	175,1		270	245	207	198	190	180	164	145	120
8LM 130/11	150	110	211,0		297	270	228	218	209	198	180	160	132
8LM 130/12D	150	110	211,0		324	294	248	238	228	216	197	174	144
8LM 130/13D	150	110	211,0		351	319	269	257	247	234	213	189	156
8LM 130/14D	175	130	245,3		378	343	290	277	266	252	230	203	168
8LM 130/15D	175	130	245,3		405	368	311	297	285	270	246	218	180
8LM 130/16D	200	150	277,2		432	392	331	317	304	288	262	232	192
8LM 130/17D	200	150	277,2		459	417	352	337	323	306	279	247	204
8LM 130/18D	225	165	313,3		486	441	373	356	342	324	295	261	216

Max Eff. %	78
Max kW / St.	8,4

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	2,5	3	3,5	8,7



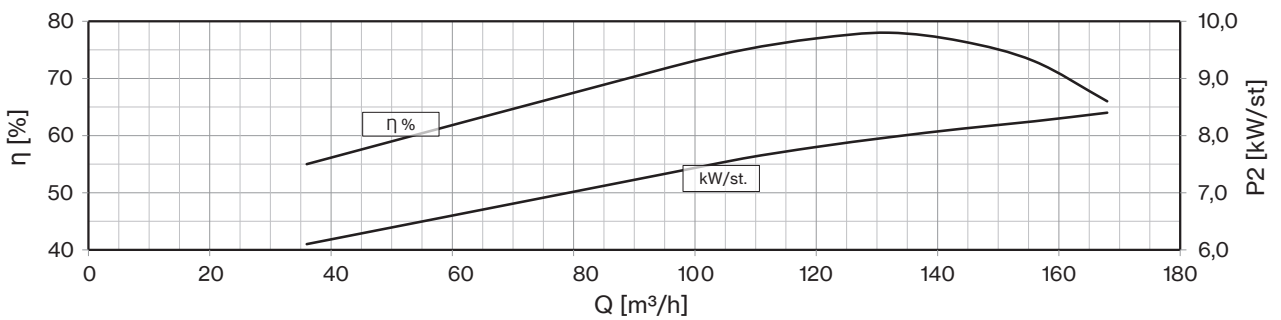
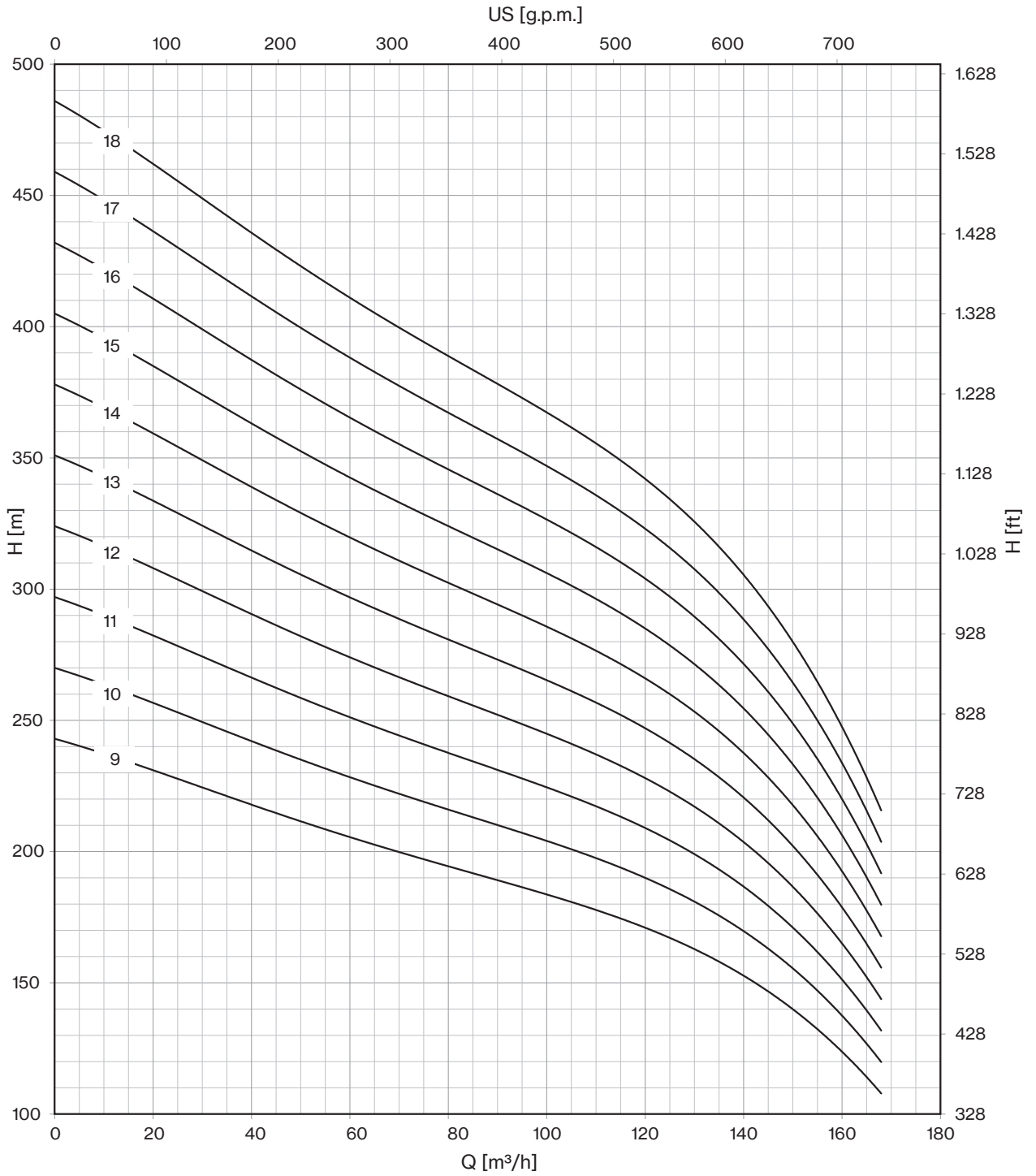
TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
8LM 130/09	8" NEMA	3108	1525	1583	270	76
8LM 130/10		3233	1650	1583	270	83
8LM 130/11		3508	1775	1733	300	90
8LM 130/12D		3633	1900	1733	300	97
8LM 130/13D		3758	2025	1733	300	104
8LM 130/14D-10	10"	3784	2150	1634	385	114
8LM 130/15D-10		3909	2275	1634	385	121
8LM 130/16D-10		4134	2400	1734	415	128
8LM 130/17D-10		4259	2525	1734	415	135
8LM 130/18D-10		4504	2650	1854	444	142



FOR COMMERCIAL TUBE  
EXTERNAL DIAMETER: 139,7 mm

"D" Pump shaft in Duplex EN 1.4462

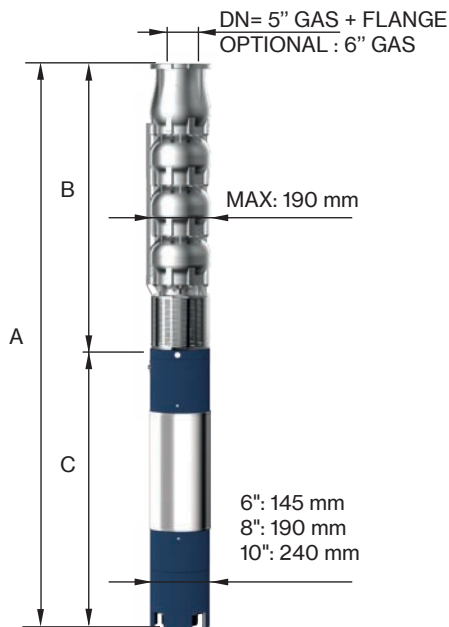
# 8LM 130



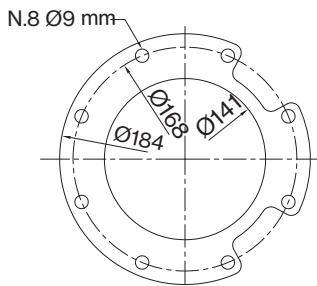
50 Hz - 2900 rpm				Q									
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	600	2000	2200	2400	2600	2800	3000	3200	
	P2		CURRENT	I/sec	0	10,0	33,3	36,7	40,0	43,3	46,7	50,0	53,3
	HP	kW	A	m³/h	0	36	120	132	144	156	168	180	192
8LM 160/01	15	11	23,4	H (m)	25	24	19	18	17	17	16	14	12
8LM 160/02	30	22	45,1		50	48	38	36	35	33	31	28	24
8LM 160/03	40	30	61,1		75	71	56	54	52	50	47	41	36
8LM 160/04	60	45	86,3		100	95	75	72	70	66	62	55	48
8LM 160/05	75	55	106,2		125	119	94	91	87	83	78	69	60
8LM 160/06	90	66	126,0		150	143	113	109	104	100	93	83	72
8LM 160/07	90	66	126,0		175	167	132	127	122	116	109	97	84
8LM 160/08	125	92	175,1		200	190	150	145	139	133	124	110	96

Max Eff. %	78,5
Max kW / St.	9,4

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	4	4,5	7	13

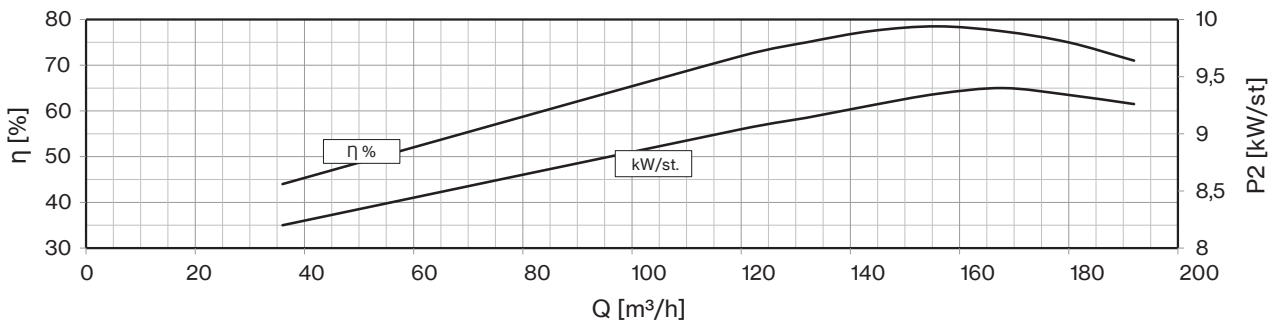
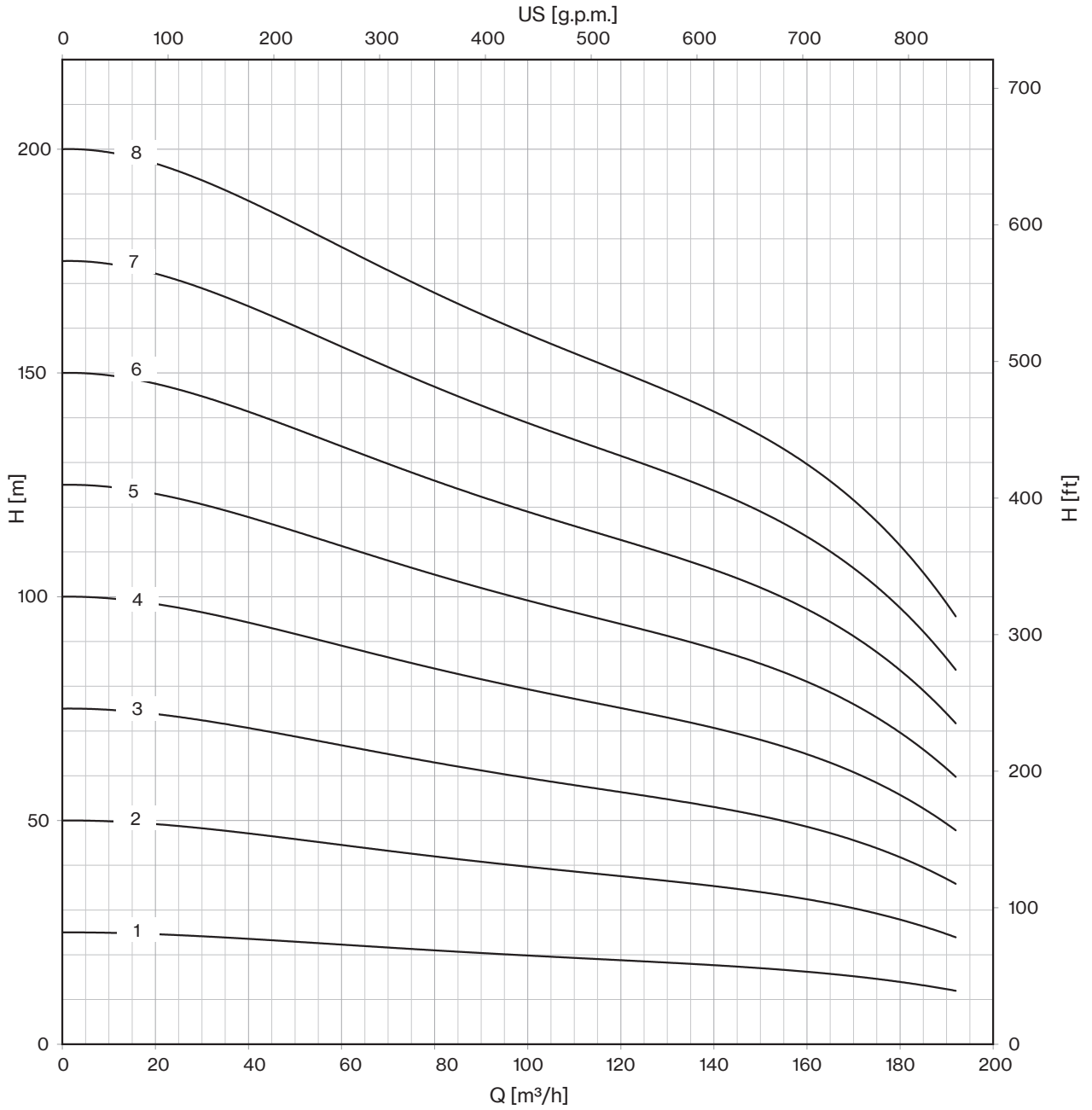


TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
8LM 160/01-6	6" NEMA	1299	488	811	65	20
8LM 160/02-6		1709	638	1071	92	27
8LM 160/03-6		2039	788	1251	108	35
8LM 160/04	8" NEMA	2061	938	1123	178	42
8LM 160/05		2383	1150	1233	200	50
8LM 160/06		2602	1300	1302	214	58
8LM 160/07		2752	1450	1302	214	65
8LM 160/08		3183	1600	1583	270	73



FOR COMMERCIAL TUBE  
EXTERNAL DIAMETER: 139,7 mm

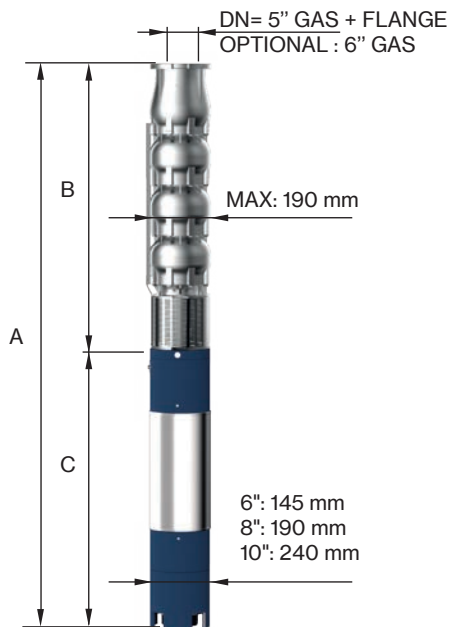
# 8LM 160



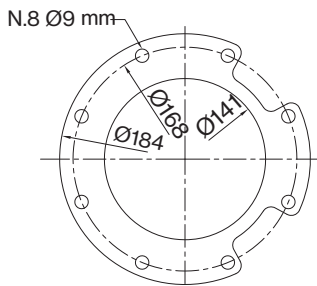
50 Hz - 2900 rpm				Q									
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	600	2000	2200	2400	2600	2800	3000	3200	
	P2		CURRENT	I/sec	0	10,0	33,3	36,7	40,0	43,3	46,7	50,0	53,3
	HP	kW	A	m³/h	0	36	120	132	144	156	168	180	192
8LM 160/09	125	92	175,1	H (m)	225	214	169	163	157	149	140	124	108
8LM 160/10D	150	110	211,0		250	238	188	181	174	166	155	138	120
8LM 160/11D	150	110	211,0		275	262	207	199	191	183	171	152	132
8LM 160/12D	175	130	245,3		300	286	226	217	209	199	186	166	144
8LM 160/13D	175	130	245,3		325	309	244	235	226	216	202	179	156
8LM 160/14D	200	150	277,2		350	333	263	253	244	232	217	193	168
8LM 160/15D	200	150	277,2		375	357	282	272	261	249	233	207	180
8LM 160/16D	225	165	313,3		400	381	301	290	278	266	248	221	192
8LM 160/17D	225	165	313,3		425	405	320	308	296	282	264	235	204
8LM 160/18D	250	185	342,2		450	428	338	326	313	299	279	248	216

Max Eff. %	78,5
Max kW / St.	9,4

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	4	4,5	7	13



TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
8LM 160/09	8" NEMA	3333	1750	1583	270	80
8LM 160/10D		3633	1900	1733	300	88
8LM 160/11D		3783	2050	1733	300	95
8LM 160/12D-10	10"	3834	2200	1634	385	103
8LM 160/13D-10		3984	2350	1634	385	114
8LM 160/14D-10		4234	2500	1734	415	121
8LM 160/15D-10		4384	2650	1734	415	129
8LM 160/16D-10		4654	2800	1854	444	136
8LM 160/17D-10		4804	2950	1854	444	144
8LM 160/18D-10	5084	3100	1984	480	151	

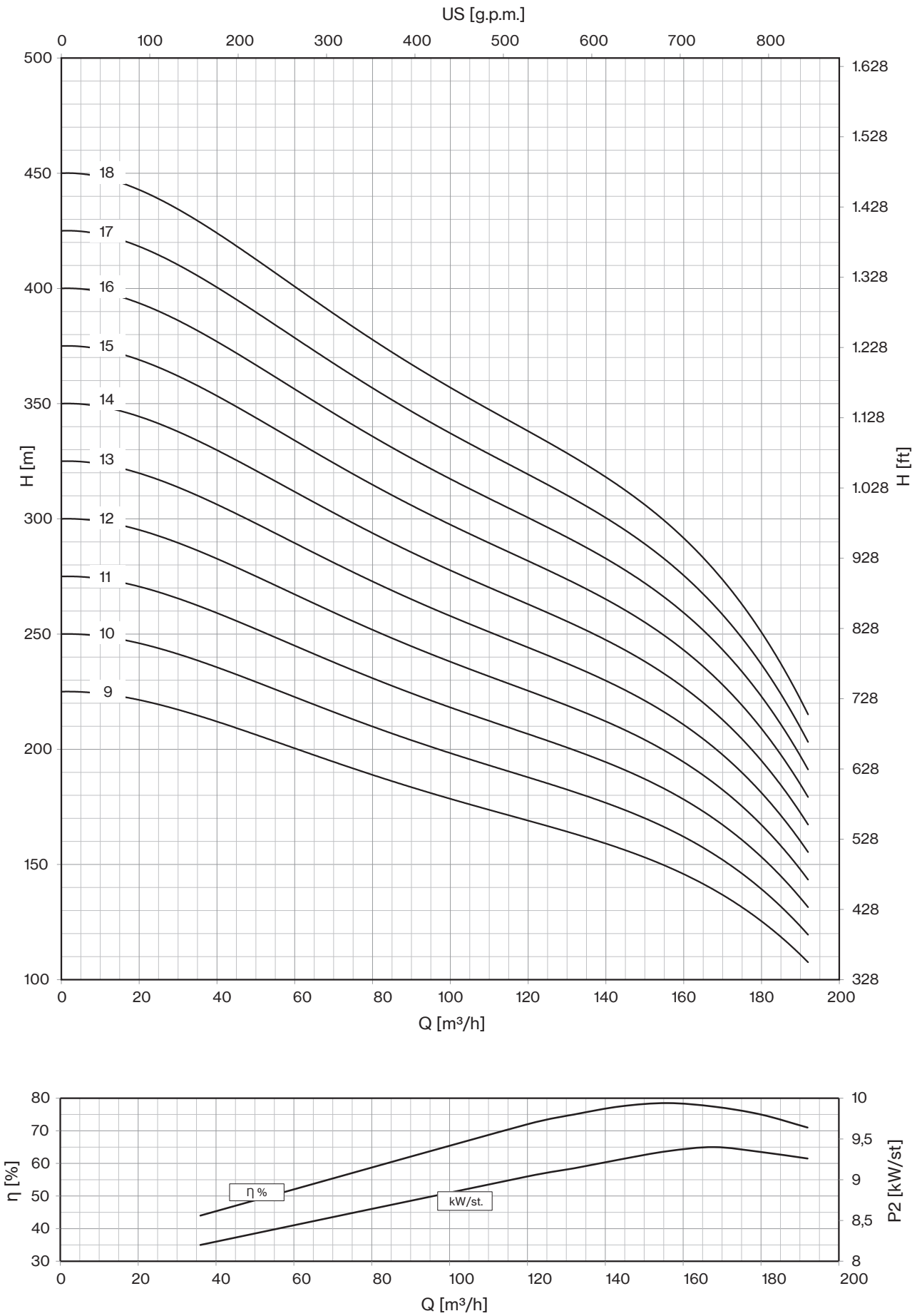


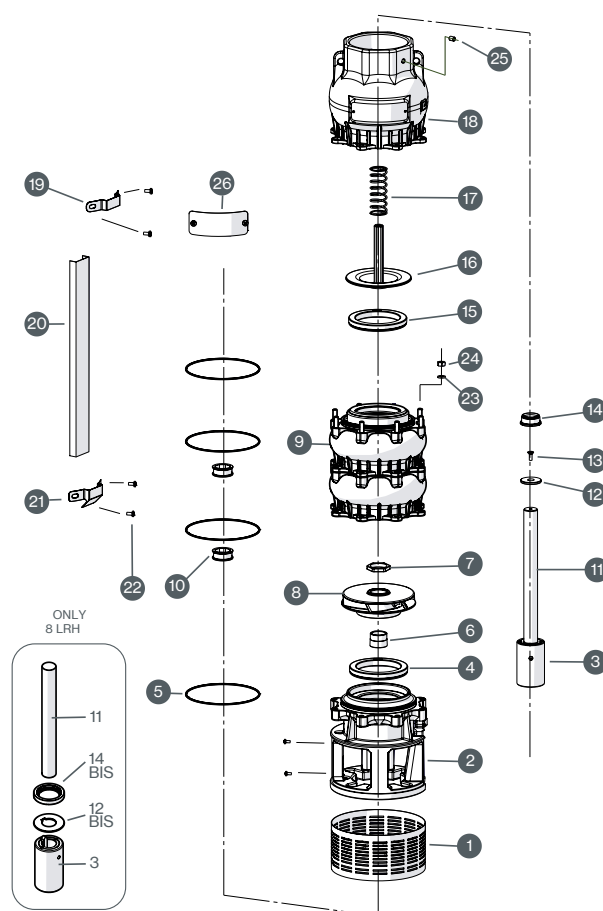
FOR COMMERCIAL TUBE  
EXTERNAL DIAMETER: 139,7 mm

"D" Pump shaft in Duplex EN 1.4462



# 8LM 160

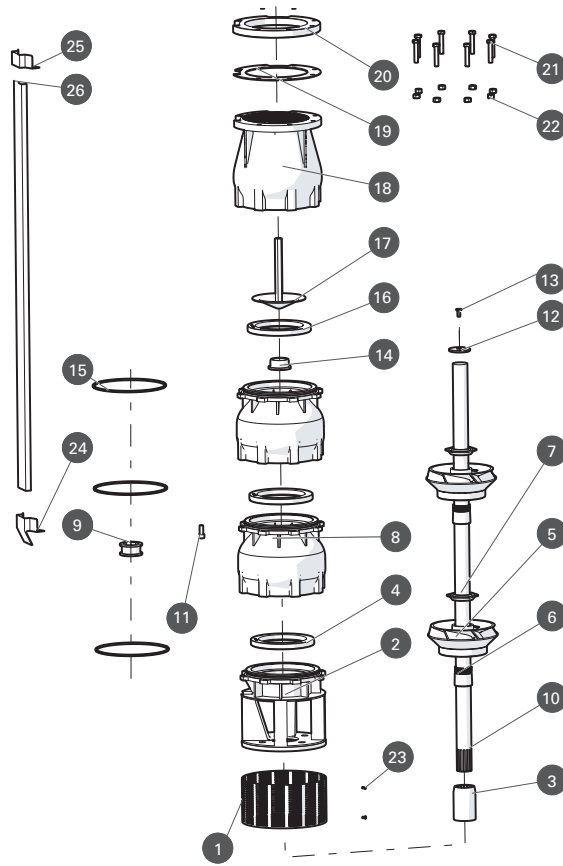




N. CODE	DESCRIPTION	LRS EXECUTION	LRX EXECUTION	LRD EXECUTION	(*) Q.TY
1	MOTOR BRACKET	AISI 304	AISI 316	Duplex EN 1.4462	-
2	SUCTION STRAINER	AISI 304	AISI 316	Duplex EN 1.4462	-
3	M4X8 SCREWS FOR STRAINER	AISI 304	AISI 316	Duplex EN 1.4462	-
4	COUPLING	AISI 304	AISI 316	Duplex EN 1.4462	1
5	KEY	AISI 304	AISI 316	Duplex EN 1.4462	1
6	PUMP SHAFT	AISI 304	AISI 316	Duplex EN 1.4462	1
7	IMPELLER WEAR RING	NBR	NBR	NBR	N° of St.
8	CONIC COLLAR	AISI 304	AISI 316	Duplex EN 1.4462	N° of St.
9	CONIC COLLAR NUT	AISI 304	AISI 316	Duplex EN 1.4462	N° of St.
10	DIFFUSER BUSH BEARING	NBR	NBR	NBR	N° of St.
11	DIFFUSER	AISI 304	AISI 316	Duplex EN 1.4462	-
12	IMPELLER	AISI 304	AISI 316	Duplex EN 1.4462	N° of St.
13	REVERSE THRUST RING	PTFE+25% CARBONE / Graphite	PTFE+25% CARBONE / Graphite	PTFE+25% CARBONE / Graphite	1
14	NRV GASKET	NBR	NBR	NBR	1
15	VALVE PLATE	AISI 304	AISI 316	Duplex EN 1.4462	-
16	DELIVERY PUMP BODY	AISI 304	AISI 316	Duplex EN 1.4462	-
17	DELIVERY BODY LOCKING SCREW	AISI 304	AISI 316	Duplex EN 1.4462	1
18	DIFFUSER LOCKING SCREW	AISI 304	AISI 316	Duplex EN 1.4462	N° of St.
19	BOTTOM CABLE GUARD CLAMP	AISI 304	AISI 316	Duplex EN 1.4462	-
20	BOTTOM CABLE GUARD SCREWS M4X8	AISI 304	AISI 316	Duplex EN 1.4462	-
21	CABLE GUARD	AISI 304	AISI 316	Duplex EN 1.4462	-
22	UPPER CABLE GUARD CLAMP	AISI 304	AISI 316	Duplex EN 1.4462	-
23	UPPER CABLE GUARD SCREWS M4X8	AISI 304	AISI 316	Duplex EN 1.4462	-
24	O-RING	NBR	NBR	NBR	N° of St.

\* Recommended spare parts quantity

# 6LM-8LM



N. CODE	DESCRIPTION	LMS EXECUTION	LMX EXECUTION	LMD EXECUTION	(*) Q.TY
1	<b>SUCTION STRAINER</b>	AISI 304	AISI 316	Duplex EN 1.4462	-
2	<b>SUCTION CAGE</b>	AISI 304	AISI 316	Duplex EN 1.4462	-
3	<b>JOINT</b>	AISI 304	AISI 316	Duplex EN 1.4462	1
4	<b>USURY RING</b>	NBR	NBR	NBR	N° of St.
5	<b>IMPELLER</b>	AISI 304	AISI 316	Duplex EN 1.4462	-
6	<b>CONE</b>	AISI 304	AISI 316	Duplex EN 1.4462	N° of St.
7	<b>HEXAGONAL RING</b>	AISI 304	AISI 316	Duplex EN 1.4462	N° of St.
8	<b>DIFFUSEUR</b>	AISI 304	AISI 316	Duplex EN 1.4462	-
9	<b>BEARING BUSH</b>	NBR	NBR	NBR	N° of St.
10	<b>PUMP SHAFT</b>	AISI 304	AISI 316	Duplex EN 1.4462	1
11	<b>N.8 SCREW FOR DIFFUSEUR</b>	AISI 304	AISI 316	Duplex EN 1.4462	-
12	<b>RING</b>	AISI 304	AISI 316	Duplex EN 1.4462	1
13	<b>SCREW FOR DISK</b>	AISI 304	AISI 316	Duplex EN 1.4462	1
14	<b>COUNTERTHRUST</b>	PTFE + 25% CARBON	PTFE + 25% CARBON	PTFE + 25% CARBON	1
15	<b>O-RING</b>	NBR	NBR	NBR	N° of St.
16	<b>GASKET VALVE</b>	NBR	NBR	NBR	1
17	<b>CAP VALVE</b>	AISI 304	AISI 316	Duplex EN 1.4462	-
18	<b>BODY VALVE</b>	AISI 304	AISI 316	Duplex EN 1.4462	-
19	<b>SEAL COUNTERFLANGE</b>	NBR	NBR	NBR	1
20	<b>COUNTERFLANGE</b>	AISI 304	AISI 316	Duplex EN 1.4462	-
21	<b>N.8 SCREW FOR COUNTERFLANGE</b>	AISI 304	AISI 316	Duplex EN 1.4462	-
22	<b>N.8 NUT FOR COUNTERFLANGE</b>	AISI 304	AISI 316	Duplex EN 1.4462	-
23	<b>N.2 SCREW FOR SUCTION STRAINER</b>	AISI 304	AISI 316	Duplex EN 1.4462	-
24	<b>LOWER CLAMP</b>	AISI 304	AISI 316	Duplex EN 1.4462	-
25	<b>UPPER CLAMP</b>	AISI 304	AISI 316	Duplex EN 1.4462	-
26	<b>COVER CABLE</b>	AISI 304	AISI 316	Duplex EN 1.4462	-

\* Recommended spare parts quantity

# 10-12LM & E14 lines

## Deepwell Borehole

Submersible Multistage Centrifugal Pumps for 10", 12", and 14" Wells. These pumps are equipped with a check valve integrated into the delivery outlet. The pump motor bracket and coupling are designed in accordance with NEMA standards, ensuring reliability and compatibility. Common applications include civil and agricultural uses. All components are manufactured from stainless steel using lost wax microfusion technology. The standard material is AISI 304 stainless steel, with the following materials available upon request: AISI 316 stainless steel, Duplex steel (EN 1.4462), and AISI 904L stainless steel. The bushing bearings and wear rings are made from sand abrasion-resistant rubber, while the reverse-thrust ring is constructed from PTFE/Graphite for enhanced durability and performance.

### General operating data:

- Capacity up to 860 m<sup>3</sup>/h
- Pressure up to 540 m
- Hydraulic efficiency 10", up to 79,3%
- Hydraulic efficiency 12", up to 82,5%
- Hydraulic efficiency 14", up to 85,7%
- Powers up to 400 kW
- Rotation speed 2.900 rpm
- Maximum depth: 350 m
- Maximum quantity of sand: 100 gr/m<sup>3</sup>
- Drinking water compatibility according to DM174 MEI  $\geq 0,4$  (EU directive No.547/2012)
- Performance tolerance: ISO9906-3B.

### Construction features

<b>Suction and delivery outlet and NRV valve</b>	stainless steel AISI 304 (LMS) stainless steel AISI 316 (LMX - EX) Duplex EN 1.4462 (LMD - ED) Cast iron (E)
<b>Impellers and diffusers</b>	stainless steel AISI 304 (LMS) stainless steel AISI 316 (LMX - EX) Duplex EN 1.4462 (LMD - ED) Cast iron (E)
<b>Upper bushings</b>	NBR rubber
<b>Shaft pump side</b>	stainless steel AISI 304 (LMS) stainless steel AISI 316 (LMX) Duplex EN 1.4462 (LMD) stainless steel AISI 431 (E - EX - ED)
<b>Quantity of sand in the water</b>	max 100 g/m <sup>3</sup>

### Motor

<b>Asynchronous 2 pole</b>	rewindable water cooled
<b>Insulation class</b>	Y (max 30 °C) - PPC winding type F (max 50 °C) - PE2+PA or LPE winding type
<b>Protection degree</b>	IP68
<b>Liquid temperature</b>	max 30 °C (max 50 °C on request)
<b>Depth of immersion</b>	max 350 m



10LM line



12LM line



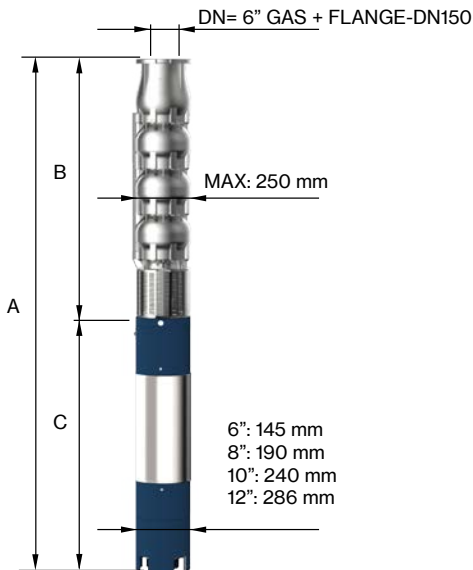
E14

# 10LM 190

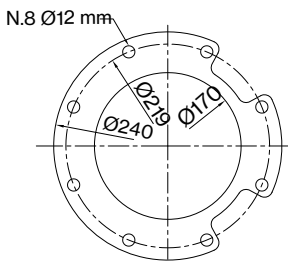
50 Hz - 2900 rpm				Q									
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	700	1800	2200	2600	3000	3400	3800	4000	
	P2		CURRENT	I/sec	0	11,7	30,0	36,7	43,3	50,0	56,7	63,3	66,7
	HP	kW	A	m³/h	0	42	108	132	156	180	204	228	240
10LM 190/01DR20	25	18,5	38,3	H (m)	35	34	32	30	27	24	21	16	14
10LM 190/01	30	22	45,1		42	41	38	36	34	31	28	23	21
10LM 190/02DR10	50	37	75,8		76	75	70	66	61	55	48	40	35
10LM 190/02	60	45	86,3		83	82	77	73	68	62	55	47	41
10LM 190/03DR20	75	55	106,2		104	102	95	89	82	73	62	49	42
10LM 190/03	90	66	126,0		125	124	115	109	102	93	83	70	62
10LM 190/04DR10	100	75	143,2		152	150	140	132	122	110	96	79	70
10LM 190/04	125	92	175,1		166	165	154	146	136	124	110	94	82
10LM 190/05DR10	150	110	211,0		190	188	175	165	153	138	120	99	87
10LM 190/05D	150	110	211,0		208	206	192	182	170	155	138	117	103
10LM 190/06DR10D	175	130	245,3	228	225	210	198	184	166	144	119	104	
10LM 190/06D	175	130	245,3	250	247	230	218	204	186	166	140	124	

Max Eff. % DR20 =	76,5
Max Eff. % DR10 =	77,5
Max Eff. %	77
Max kW / St. DR20 =	16
Max kW / St. DR10 =	18,5
Max kW / St.	20,8

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3,4	5	7,8	11,8

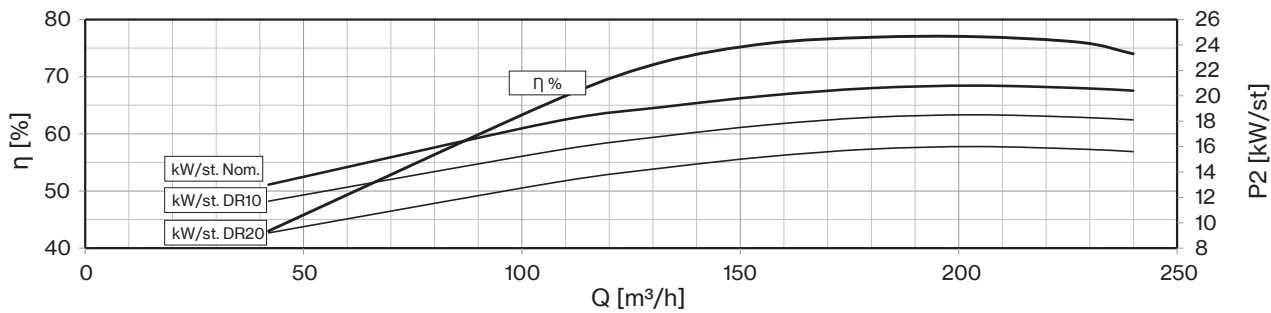
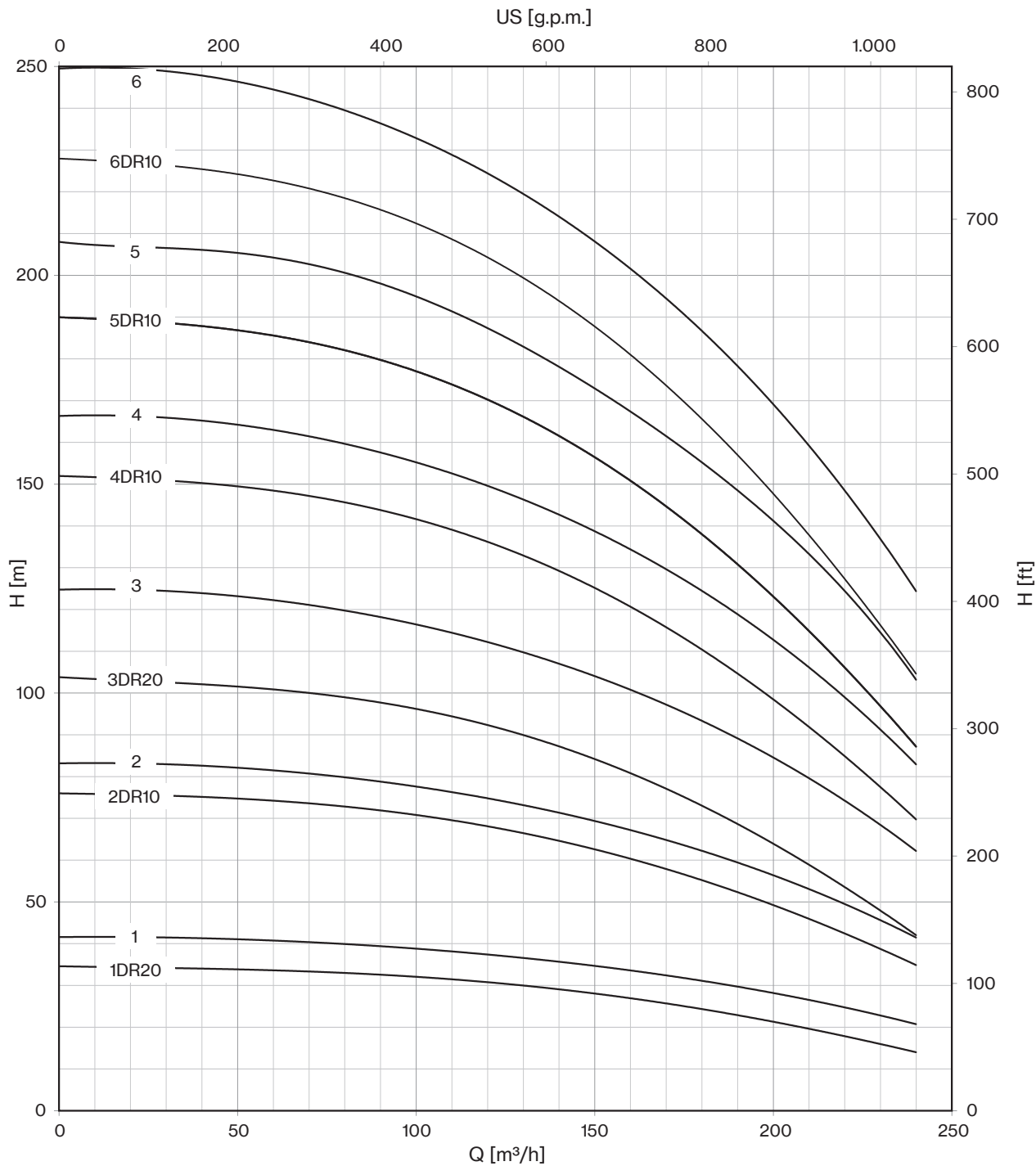


TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
10LM 190/01DR20-8	8" NEMA	1616	625	991	83	41
10LM 190/01-8		1696	625	1071	92	41
10LM 190/02DR10-8		2146	805	1341	118	56
10LM 190/02-8		1928	805	1123	178	56
10LM 190/03DR20-8		2218	985	1233	200	72
10LM 190/03-8		2287	985	1302	214	72
10LM 190/04DR10-8		2548	1165	1383	230	87
10LM 190/04-8		2748	1165	1583	270	87
10LM 190/05DR10-8		2898	1165	1733	300	87
10LM 190/05D-8		2898	1165	1733	300	87
10LM 190/06DR10D	10"	2799	1165	1634	385	87
10LM 190/06D		2799	1165	1634	385	87



FOR COMMERCIAL TUBE  
EXTERNAL DIAMETER: 168,3 mm

"DR" : reduced-diameter impellers  
"D" Pump shaft in Duplex EN 1.4462

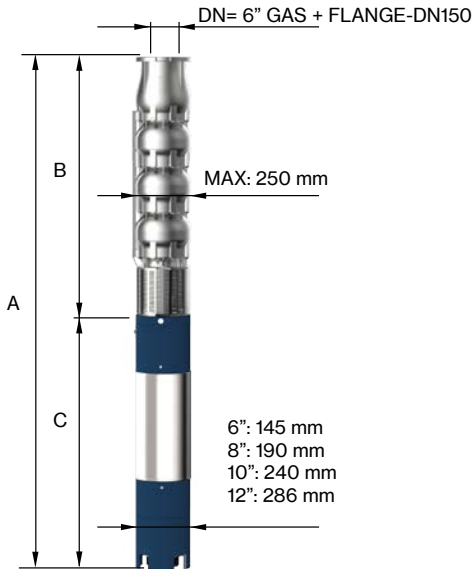


# 10LM 190

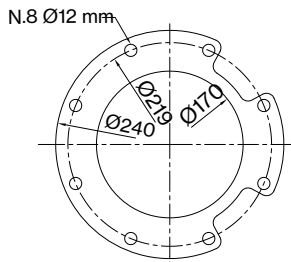
50 Hz - 2900 rpm				Q									
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	700	1800	2200	2600	3000	3400	3800	4000	
	P2		CURRENT	I/sec	0	11,7	30,0	36,7	43,3	50,0	56,7	63,3	66,7
	HP	kW	A	m³/h	0	42	108	132	156	180	204	228	240
10LM 190/07DR10D	175	130	245,3	H (m)	266	263	245	231	214	193	168	139	122
10LM 190/07D	200	150	277,2		291	288	269	255	238	217	193	164	144
10LM 190/08DR10D	200	150	277,2		304	300	280	264	245	221	192	158	139
10LM 190/08D	250	185	342,2		333	330	307	291	272	248	221	187	165
10LM 190/09D	300	220	430,0		374	371	346	328	306	279	248	211	185
10LM 190/10D	300	220	430,0		416	412	384	364	340	310	276	234	206
10LM 190/11D	340	250	481,0		458	453	422	400	374	341	304	257	227

Max Eff. % DR20 =	76,5
Max Eff. % DR10 =	77,5
Max Eff. %	77
Max kW / St. DR20 =	16
Max kW / St. DR10 =	18,5
Max kW / St.	20,8

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
		3,4	5	7,8

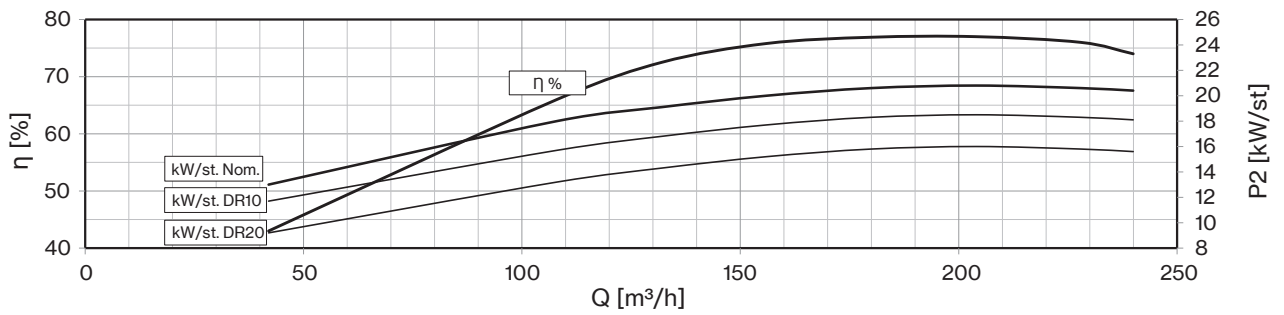
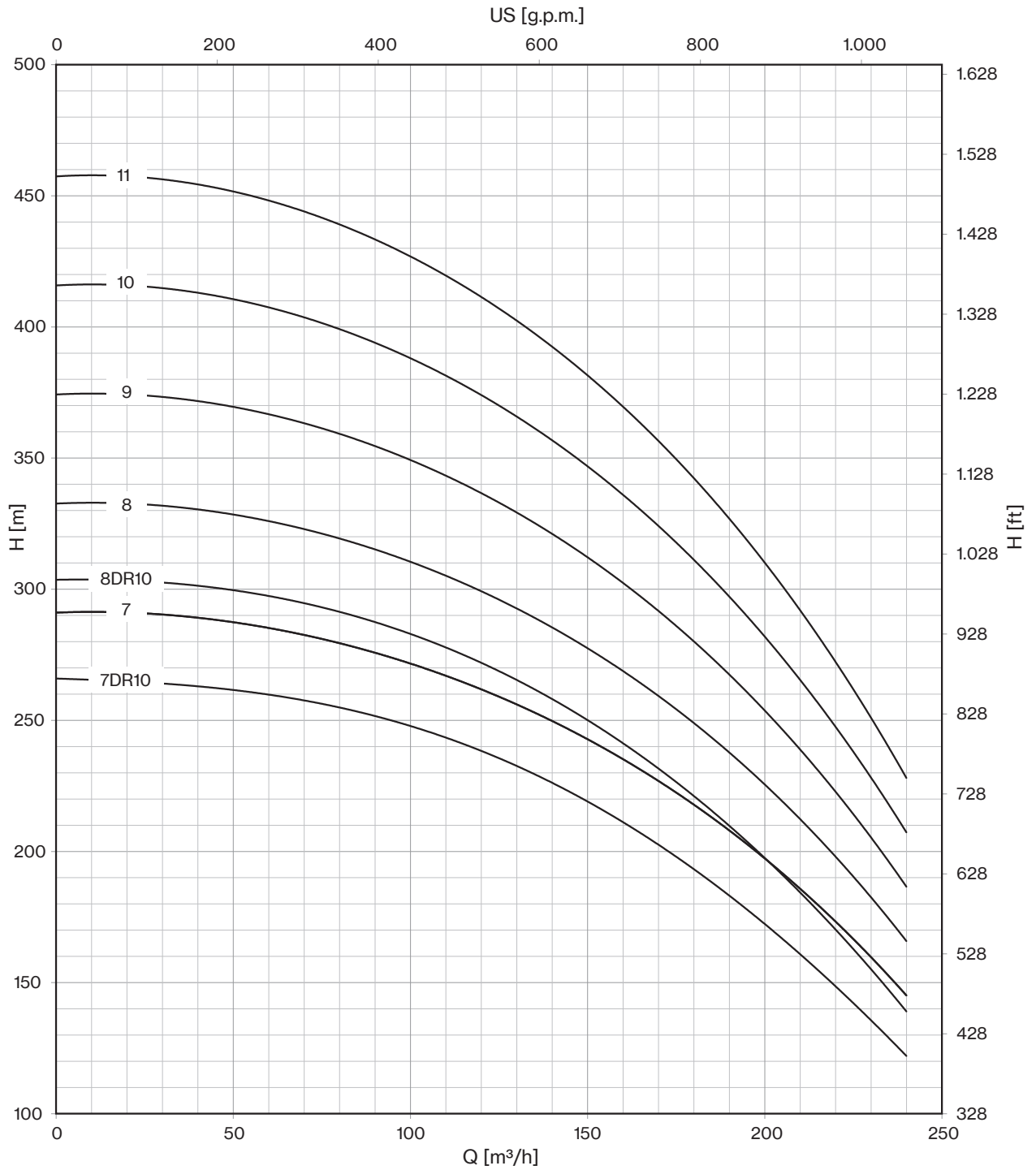


TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
10LM 190/07 DR10D	10"	3339	1705	1634	385	134
10LM 190/07D		3439	1705	1734	415	134
10LM 190/08DR10D		3619	1885	1734	415	149
10LM 190/08D		3869	1885	1984	480	149
10LM 190/09D-12	12"	4175	2065	2110	700	165
10LM 190/10D-12		4355	2245	2110	700	180
10LM 190/11D-12		4705	2425	2280	775	196



FOR COMMERCIAL TUBE  
EXTERNAL DIAMETER: 168,3 mm

"DR" : reduced-diameter impellers  
"D" Pump shaft in Duplex EN 1.4462



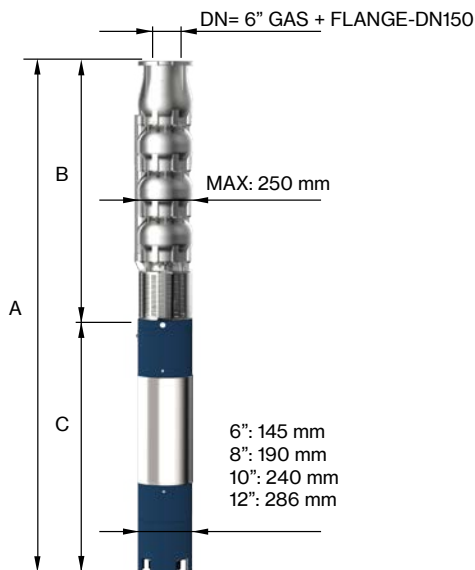


# 10LM 230

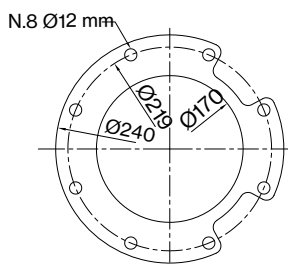
50 Hz - 2900 rpm				Q									
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	800	2200	2600	3000	3400	3800	4200	4600	
	P2		CURRENT	I/sec	0	13,3	36,7	43,3	50,0	56,7	63,3	70,0	76,7
	HP	kW	A	m3/h	0	48	132	156	180	204	228	252	276
10LM 230/01DR20	25	18,5	38,3	H (m)	37	36	31	29	27	25	23	19	16
10LM 230/01	35	26	52,9		44	43	38	36	34	32	30	26	23
10LM 230/02DR20	50	37	75,8		74	71	62	58	54	50	45	38	32
10LM 230/02	75	55	106,2		88	85	75	72	68	64	59	53	46
10LM 230/03DR20	75	55	106,2		110	107	93	87	81	75	68	57	48
10LM 230/03DR10	90	66	126,0		121	116	102	98	92	86	78	68	59
10LM 230/03	100	75	143,2		131	128	113	108	102	96	89	79	69
10LM 230/04DR10	125	92	175,1		162	154	136	130	122	114	104	91	78
10LM 230/04	125	92	175,1		175	170	150	144	136	128	118	106	92
10LM 230/05DR10D	150	110	211,0		202	193	170	163	153	143	130	114	98
10LM 230/05 D	175	130	245,3		219	213	188	180	170	160	148	132	115
10LM 230/06DR10D	175	130	245,3		242	231	204	195	183	171	156	137	117
10LM 230/06D	200	150	277,2		263	255	225	216	204	192	178	159	138

Max Eff. % DR20 =	78,4
Max Eff. % DR10 =	79,5
Max Eff. %	79,2
Max kW / St. DR20 =	17,5
Max kW / St. DR10 =	19,5
Max kW / St.	22,8

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3,4	5	7,8	11,8

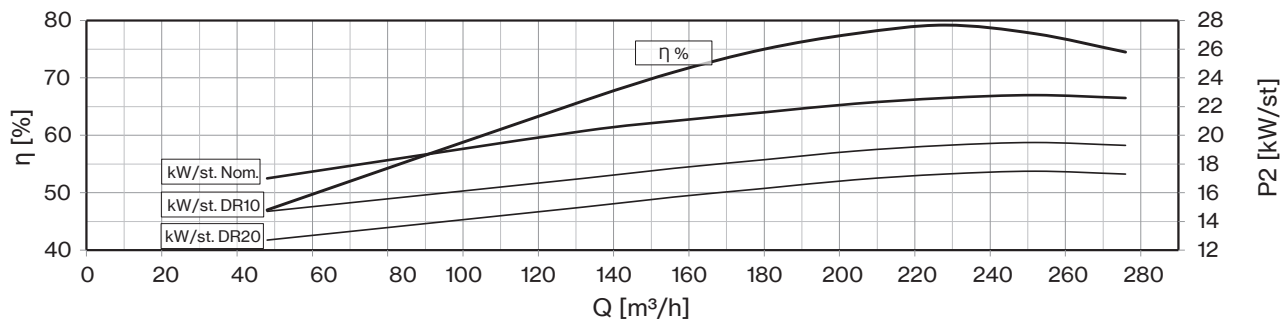
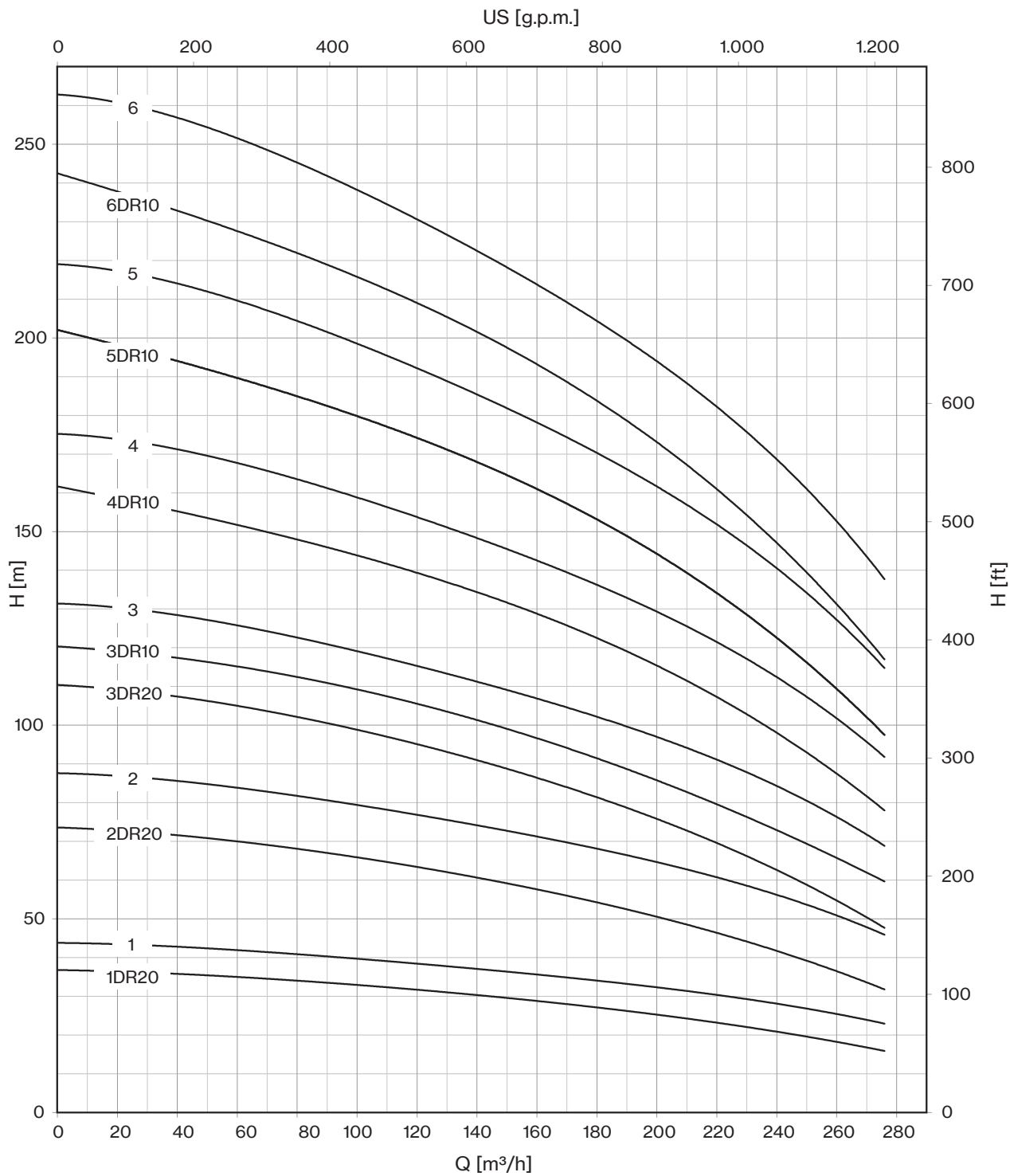


TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
10LM 230/01DR20-6	6" NEMA	1616	625	991	83	41
10LM 230/01-6		1806	625	1181	100	41
10LM 230/02DR20-6		2146	805	1341	118	56
10LM 230/02-8	8" NEMA	2038	805	1233	200	56
10LM 230/03DR20-8		2218	985	1233	200	72
10LM 230/03DR10-8		2287	985	1302	214	72
10LM 230/03-8		2368	985	1383	230	72
10LM 230/04DR10-8		2748	1165	1583	270	87
10LM 230/04-8		2748	1165	1583	270	87
10LM 230/05DR10D-8	10"	3078	1345	1733	300	103
10LM 230/05D		3078	1345	1733	300	103
10LM 230/06DR10D		3159	1525	1634	385	118
10LM 230/06D		3159	1525	1634	385	118



FOR COMMERCIAL TUBE  
EXTERNAL DIAMETER: 168,3 mm

"DR" : reduced-diameter impellers  
"D" Pump shaft in Duplex EN 1.4462

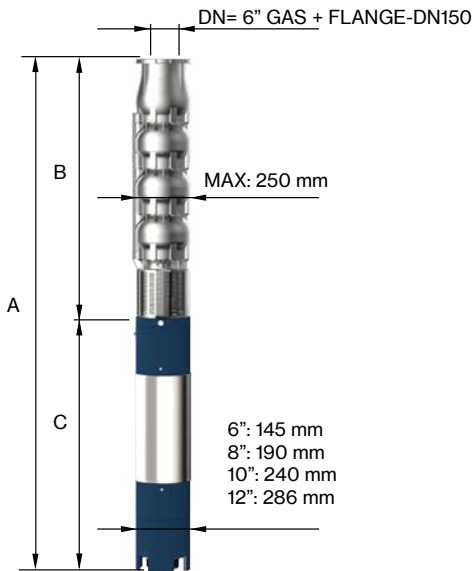


# 10LM 230

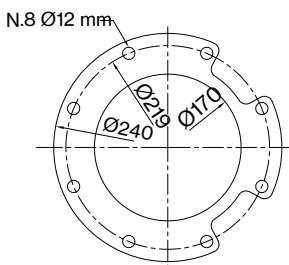
50 Hz - 2900 rpm				Q									
TYPE	P2		400 V	l/min	0	800	2200	2600	3000	3400	3800	4200	4600
	HP	kW	A	l/sec	0	13,3	36,7	43,3	50,0	56,7	63,3	70,0	76,7
				m <sup>3</sup> /h	0	48	132	156	180	204	228	252	276
10LM 230/07 DR10 D	200	150	277,2	H (m)	283	270	238	228	214	200	182	160	137
10LM 230/07 D	225	165	313,3		307	298	263	252	238	224	207	185	161
10LM 230/08 DR10 D	225	165	313,3		323	308	272	261	245	229	208	182	157
10LM 230/08 D	250	185	342,2		350	340	301	288	272	256	237	211	184
10LM 230/09 D	300	220	430,0		394	383	338	324	306	288	266	238	207
10LM 230/10 D	340	250	481,0		438	425	376	360	340	320	296	264	230
10LM 230/11 D	340	250	481,0		482	468	413	396	374	352	326	291	253

Max Eff. % DR20 =	78,4
Max Eff. % DR10 =	79,5
Max Eff. % =	79,2
Max kW / St. DR20 =	17,5
Max kW / St. DR10 =	19,5
Max kW / St. =	22,8

Q (flow)	25%	50%	75%	100%
NPSH (m)	3,4	5	7,8	11,8

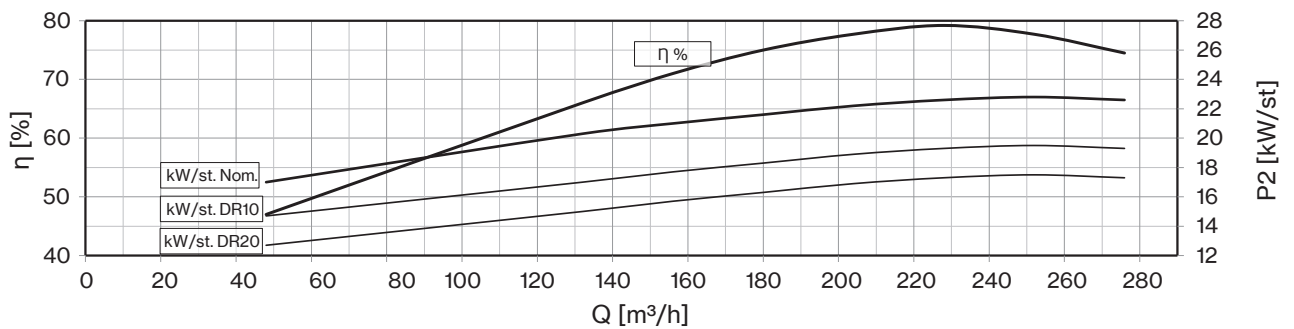
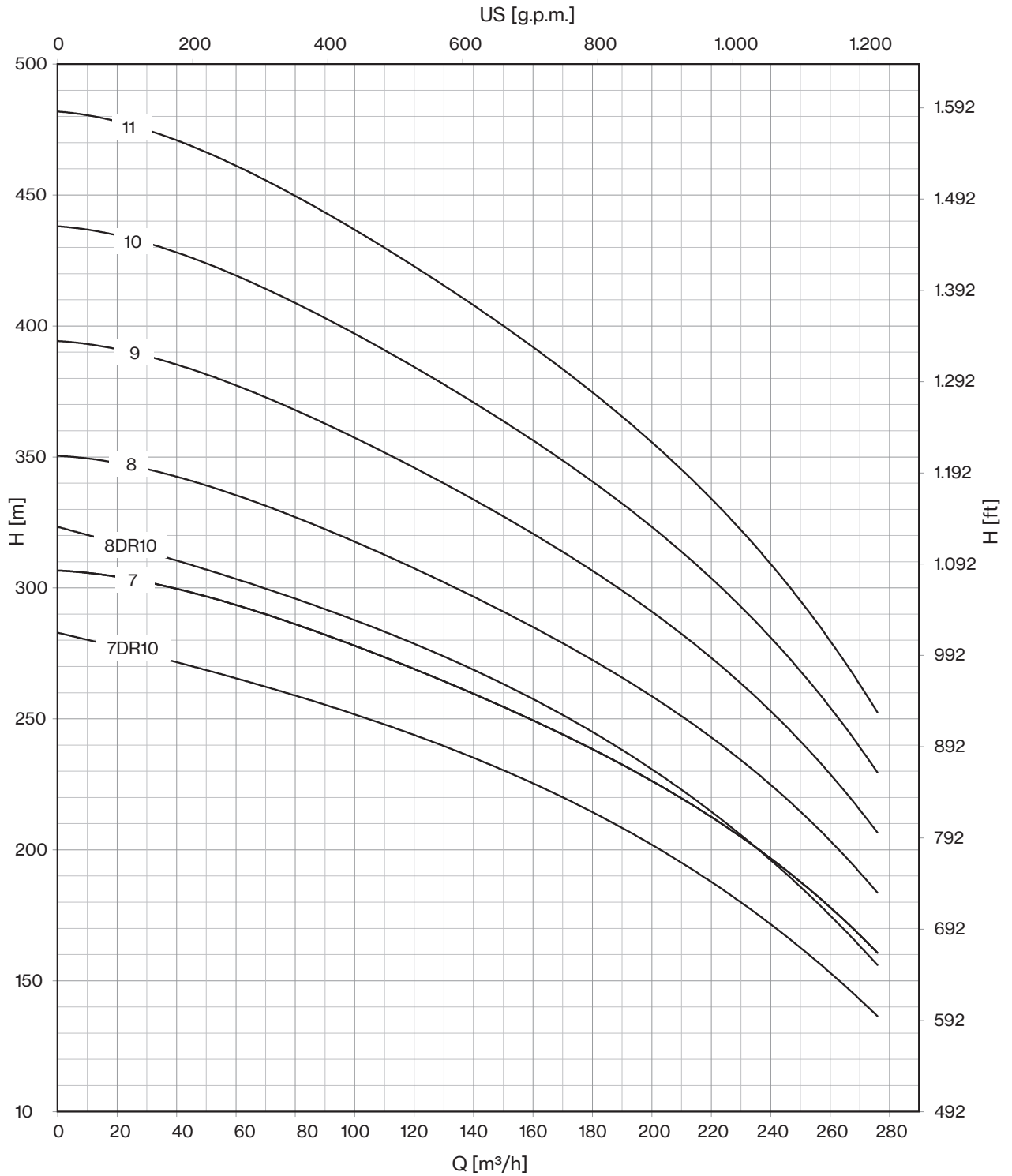


50 Hz 2900 rpm	DIMENSIONS (mm)			WEIGHT (kg)	
	TYPE	A	B	C	MOTOR
10LM 230/07 DR10 D	3439	1705	1734	415	134
10LM 230/07 D	3559	1705	1854	444	134
10LM 230/08 DR10 D	3739	1885	1854	444	149
10LM 230/08 D	3869	1885	1984	480	149
10LM 230/09 D	4175	2065	2110	700	165
10LM 230/10 D	4355	2245	2110	700	180
10LM 230/11 D	4705	2425	2280	775	196



FOR COMMERCIAL TUBE  
EXTERNAL DIAMETER: 168,3 mm

"D" Pump shaft in Duplex

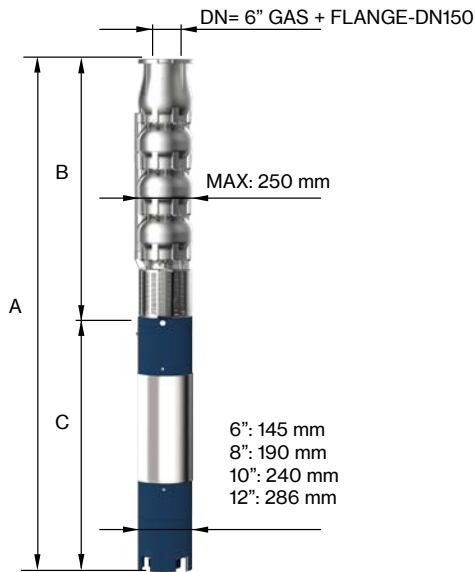


# 10LM 250

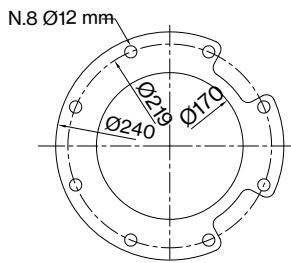
50 Hz - 2900 rpm				Q									
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	1000	3200	3600	4000	4400	4800	5000	5200	
	P2		CURRENT	I/sec	0	16,7	53,3	60,0	66,7	73,3	80,0	83,3	86,7
	HP	kW	A	m <sup>3</sup> /h	0	60	192	216	240	264	288	300	312
10LM 250/01DR20	25	18,5	38,3	H (m)	31	31	27	25	23	21	18	17	14
10LM 250/01	40	30	61,1		44	42	34	32	30	28	26	25	24
10LM 250/02DR20	50	37	75,8		63	62	54	50	46	42	36	33	27
10LM 250/02	75	55	106,2		88	84	67	64	59	56	52	50	48
10LM 250/03DR10	100	75	143,2		107	107	93	86	80	73	65	59	53
10LM 250/03	125	92	175,1		132	126	101	96	89	83	78	75	72
10LM 250/04DR10	125	92	175,1		143	142	124	115	107	97	87	79	70
10LM 250/04D	150	110	211,0		176	168	134	128	118	111	104	100	96
10LM 250/05DR10D	175	130	245,3		179	178	155	144	134	121	109	99	88
10LM 250/05D	200	150	277,2		220	210	168	160	148	139	130	125	120
10LM 250/06D	225	165	313,3		264	252	202	192	178	167	156	150	144

Max Eff. % DR20 =	79
Max Eff. % DR10 =	79,5
Max Eff. %	79,3
Max kW / St. DR20 =	18
Max kW / St. DR10 =	22,5
Max kW / St.	27,4

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3,4	5	7,8	11,8

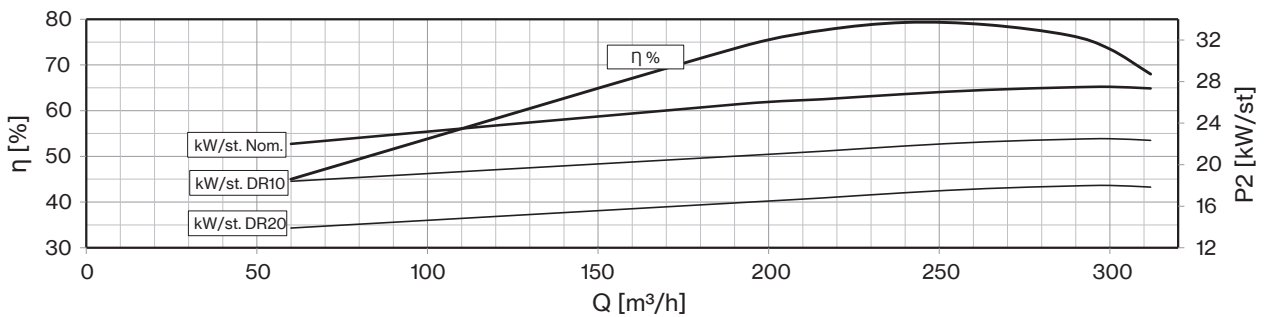
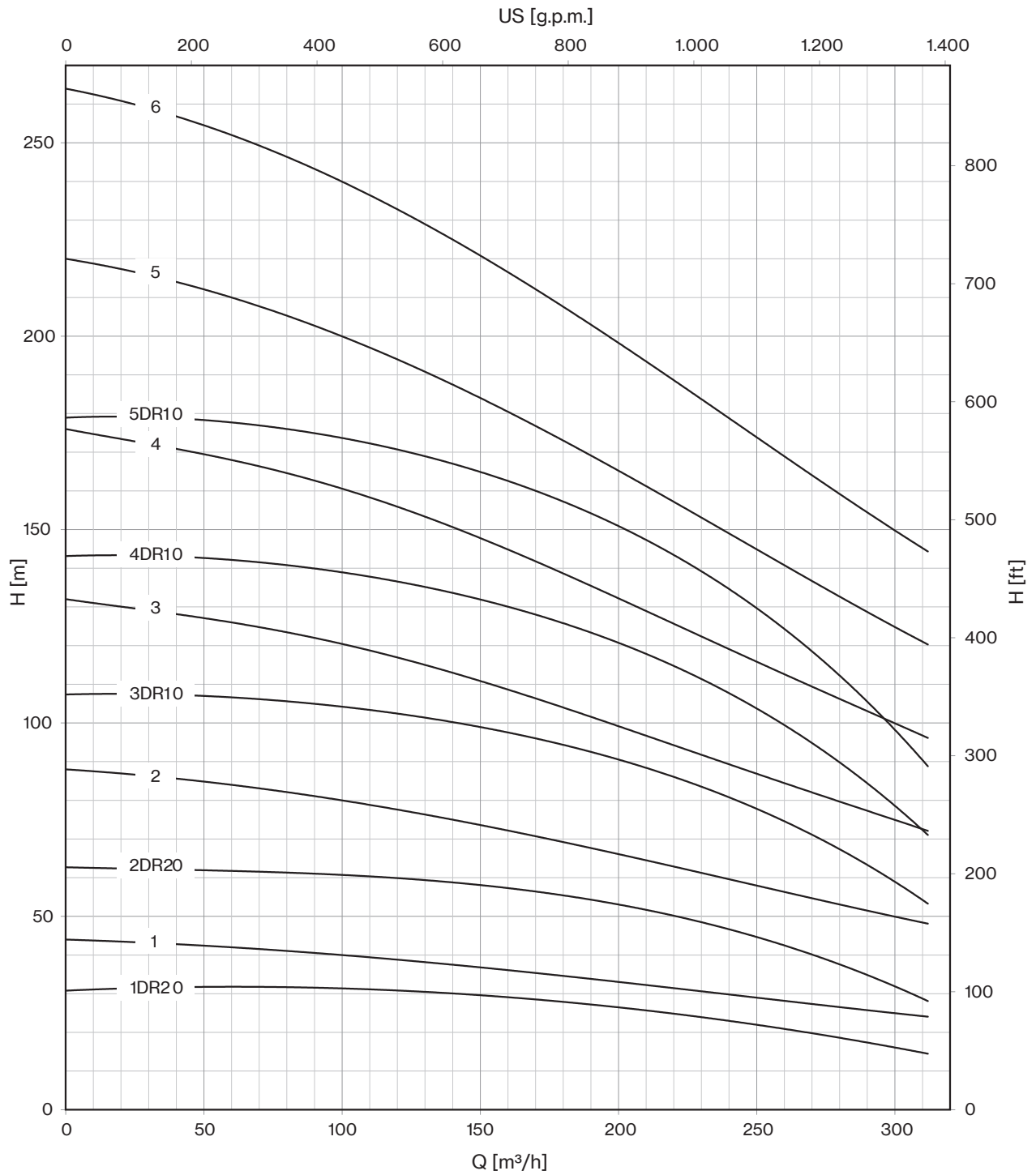


TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
10LM 250/01DR20-6	6" NEMA	1616	625	991	83	41
10LM 250/01-6		1876	625	1251	108	41
10LM 250/02DR20-6		2146	805	1341	118	57
10LM 250/02-8	8" NEMA	2038	805	1233	200	57
10LM 250/03DR10-8		2368	985	1383	230	72
10LM 250/03-8		2568	985	1583	270	72
10LM 250/04DR10-8		2748	1165	1583	270	88
10LM 250/04D-8	10"	2898	1165	1733	300	88
10LM 250/05DR10D		2979	1345	1634	385	103
10LM 250/05D		2979	1345	1634	385	103
10LM 250/06D		3379	1525	1854	444	119



FOR COMMERCIAL TUBE  
EXTERNAL DIAMETER: 168,3 mm

"DR" : reduced-diameter impellers  
"D" Pump shaft in Duplex EN 1.4462

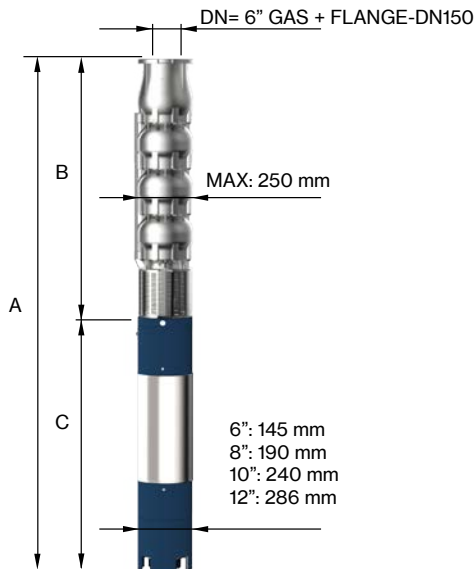


# 10LM 250

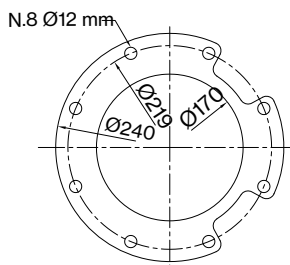
50 Hz - 2900 rpm				Q									
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	1000	3200	3600	4000	4400	4800	5000	5200	
	P2		CURRENT	I/sec	0	16,7	53,3	60,0	66,7	73,3	80,0	83,3	86,7
	HP	kW	A	m³/h	0	60	192	216	240	264	288	300	312
10LM 250/07DR10D	225	165	313,3	H (m)	251	249	217	202	188	169	153	139	123
10LM 250/07D	300	220	430,0		308	294	235	224	207	195	182	175	168
10LM 250/08D	300	220	430,0		352	336	269	256	237	222	208	200	192
10LM 250/09D	340	250	481,0		396	378	302	288	266	250	234	225	216
10LM 250/10D	400	300	551,0		440	420	336	320	296	278	260	250	240
10LM 250/11D	450	330	620,0		484	462	370	352	326	306	286	275	264
10LM 250/12D	450	330	620,0		528	504	403	384	355	334	312	300	288

Max Eff. % DR20 =	79
Max Eff. % DR10 =	79,5
Max Eff. %	79,3
Max kW / St. DR20 =	18
Max kW / St. DR10 =	22,5
Max kW / St.	27,4

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3,4	5	7,8	11,8

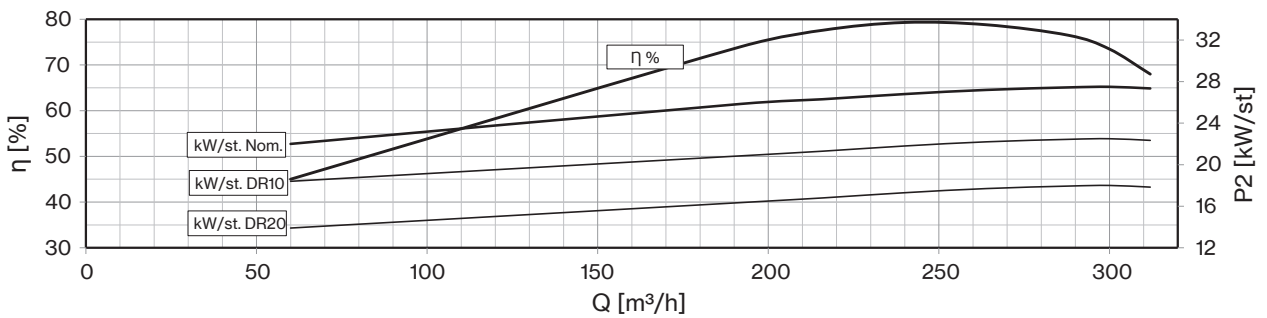
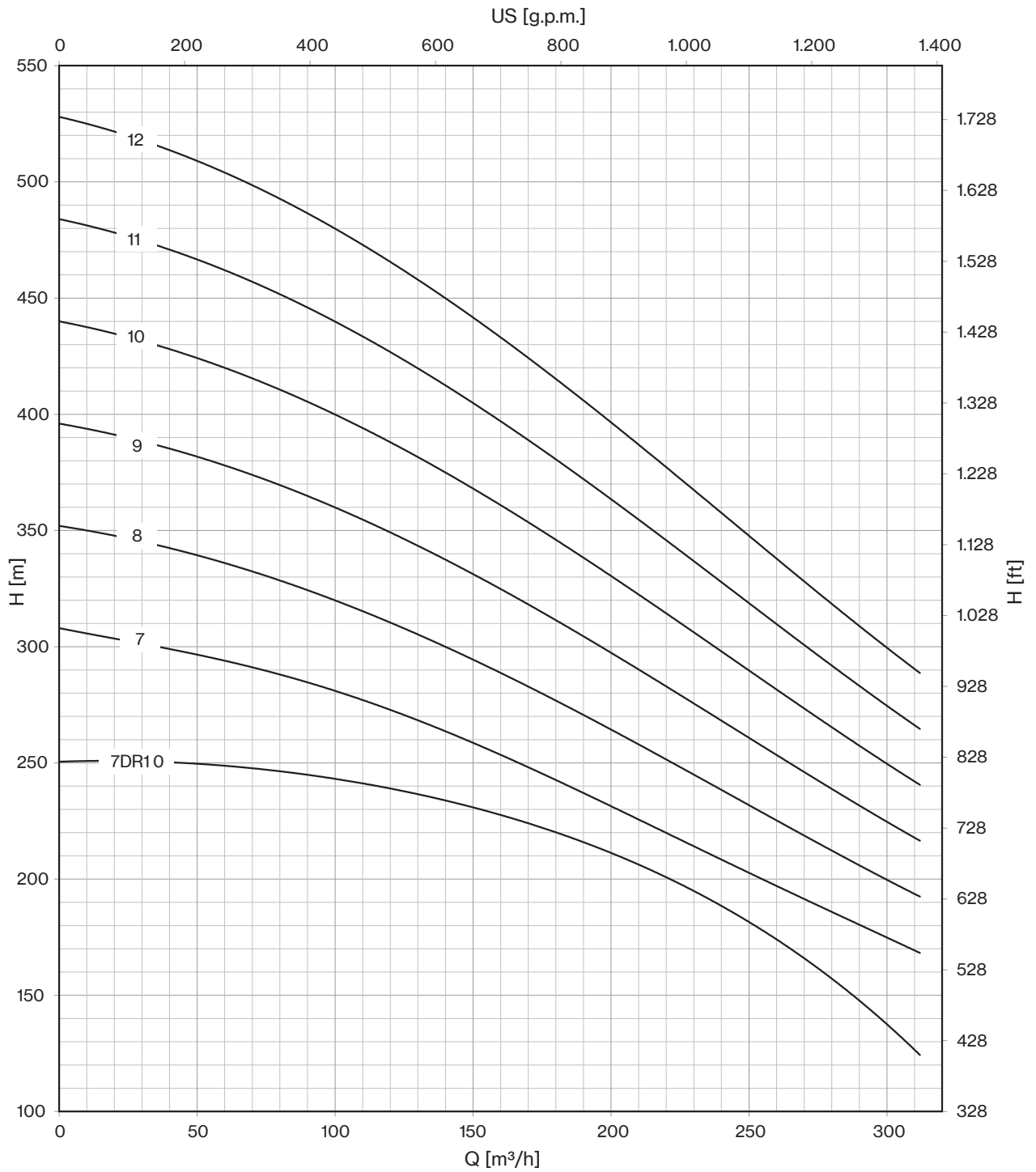


TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
10LM 250/07DR10D	10"	3559	1705	1854	444	134
10LM 250/07D-12	12"	3815	1705	2110	700	134
10LM 250/08D-12		3995	1885	2110	700	150
10LM 250/09D-12	14"	4345	2065	2280	775	165
10LM 250/10D-14		4525	2245	2280	775	181
10LM 250/11D-14		4705	2425	2280	775	196
10LM 250/12D-14		4765	2605	2160	906	212



FOR COMMERCIAL TUBE  
EXTERNAL DIAMETER: 168,3 mm

"DR": reduced-diameter impellers  
"D" Pump shaft in Duplex EN 1.4462



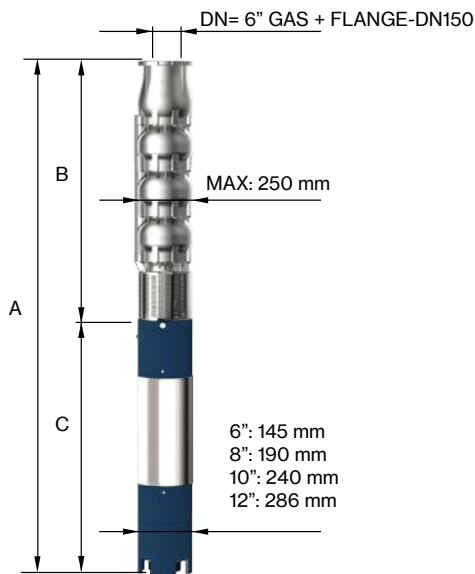


# 10LM 275

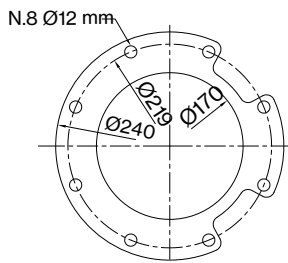
50 Hz - 2900 rpm				Q									
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	1000	3400	3800	4200	4600	5000	5400	5800	
	P2		CURRENT	I/sec	0	16,7	56,7	63,3	70,0	76,7	83,3	90,0	96,7
	HP	kW	A	m³/h	0	60	204	228	252	276	300	324	348
10LM 275/01DR20	35	26	52,9	H (m)	36	36	28	26	25	23	21	19	16
10LM 275/01	50	37	75,8		45	44	37	35	34	32	30	28	25
10LM 275/02DR20	75	55	106,2		72	71	56	52	50	46	42	39	32
10LM 275/02	90	66	126,0		90	87	73	70	67	63	60	56	50
10LM 275/03DR10	125	92	175,1		122	121	97	92	88	82	77	72	62
10LM 275/03D	150	110	211,0		135	131	110	105	101	95	90	85	75
10LM 275/04DR10D	175	130	245,3		163	161	130	123	118	110	103	96	83
10LM 275/04D	200	150	277,2		180	175	146	140	134	126	120	113	100
10LM 275/05DR10D	200	150	277,2		204	202	162	154	147	137	129	120	104
10LM 275/05D	225	165	313,3		225	219	183	175	168	158	150	141	125
10LM 275/06DR10D	250	185	342,2	245	242	194	185	176	164	155	144	125	
10LM 275/06D	300	220	430,0	270	262	220	210	202	190	180	169	150	

Max Eff. % DR20 =	76,1
Max Eff. % DR10 =	77,2
Max Eff. %	76,5
Max kW / St. DR20 =	25
Max kW / St. DR10 =	29
Max kW / St.	33

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3,4	5	7,8	11,8

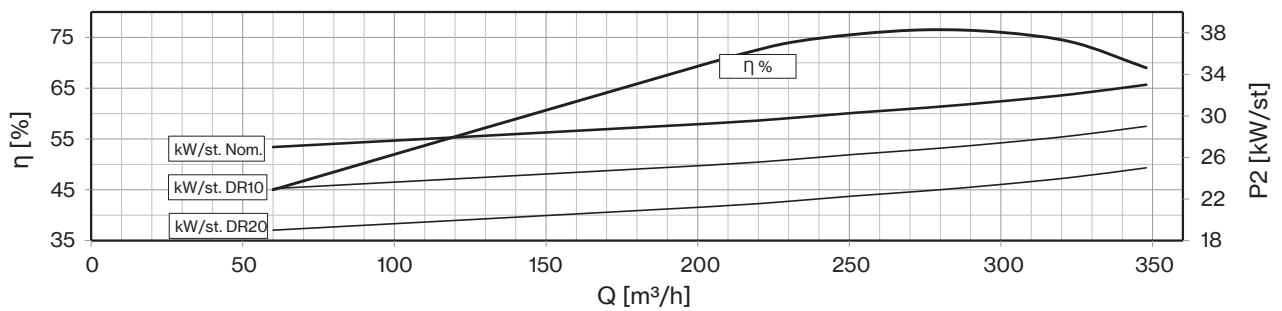
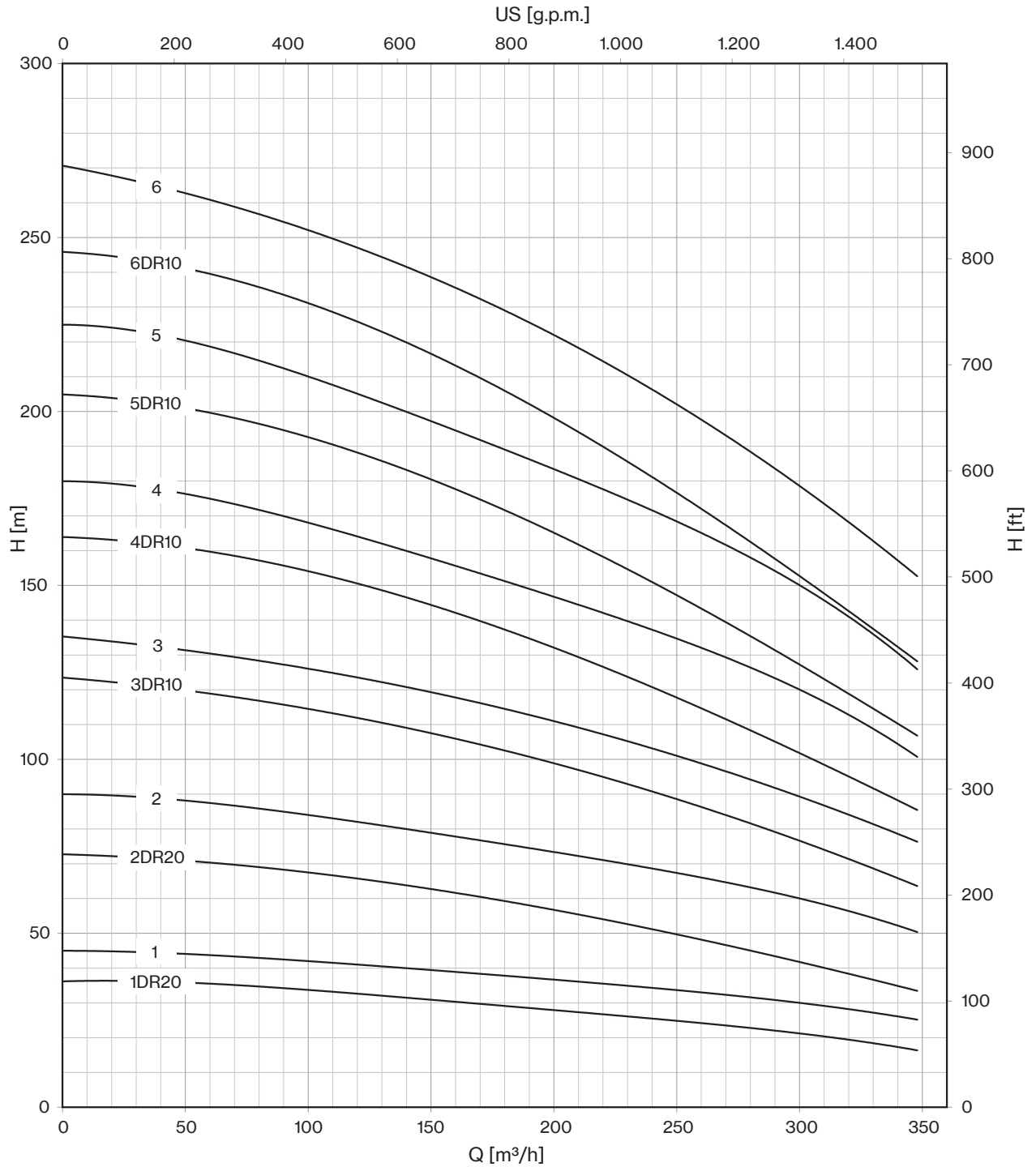


TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
10LM 275/01DR20-6	6" NEMA	1806	625	1181	100	41
10LM 275/01-6		1966	625	1341	118	41
10LM 275/02DR20-8	8" NEMA	2038	805	1233	200	56
10LM 275/02-8		2107	805	1302	214	56
10LM 275/03DR10-8		2568	985	1583	270	72
10LM 275/03D-8	10"	2718	985	1733	300	72
10LM 275/04DR10D		2799	1165	1634	385	87
10LM 275/04D		2899	1165	1734	415	87
10LM 275/05DR10D		3079	1345	1734	415	103
10LM 275/05D		3199	1345	1854	444	103
10LM 275/06DR10D		3509	1525	1984	480	118
10LM 275/06D		3635	1525	2110	700	118



FOR COMMERCIAL TUBE  
EXTERNAL DIAMETER: 168,3 mm

"DR": reduced-diameter impellers  
"D" Pump shaft in Duplex EN 1.4462

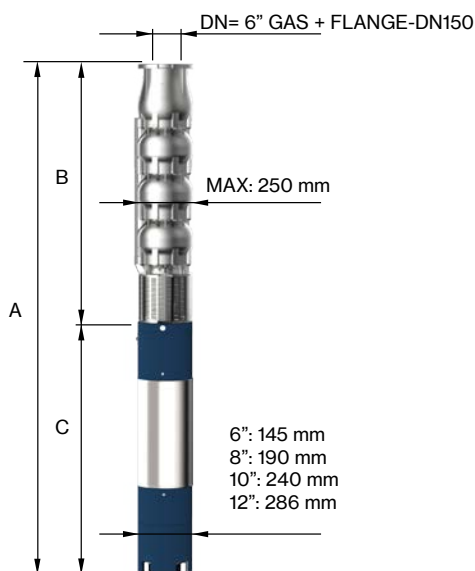


# 10LM 275

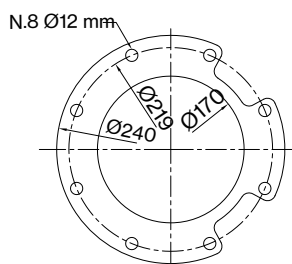
50 Hz - 2900 rpm				Q									
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	1000	3400	3800	4200	4600	5000	5400	5800	
	P2		CURRENT	I/sec	0	16,7	56,7	63,3	70,0	76,7	83,3	90,0	96,7
	HP	kW	A	m³/h	0	60	204	228	252	276	300	324	348
10LM 275/07DR10D	300	220	430,0	H (m)	286	282	227	216	206	192	181	168	146
10LM 275/07D	340	250	481,0		315	306	256	245	235	221	210	197	175
10LM 275/08D	400	300	551,0		360	350	293	280	269	253	240	226	200
10LM 275/09D	400	300	551,0		405	393	329	315	302	284	270	254	225
10LM 275/10D	450	330	620,0		450	437	366	350	336	316	300	282	250
10LM 275/11D	500	370	693,0		495	481	403	385	370	348	330	310	275
10LM 275/12D	550	400	798,0		540	524	439	420	403	379	360	338	300

Max Eff. % DR20 =	76,1
Max Eff. % DR10 =	77,2
Max Eff. %	76,5
Max kW / St. DR20 =	25
Max kW / St. DR10 =	29
Max kW / St.	33

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3,4	5	7,8	11,8

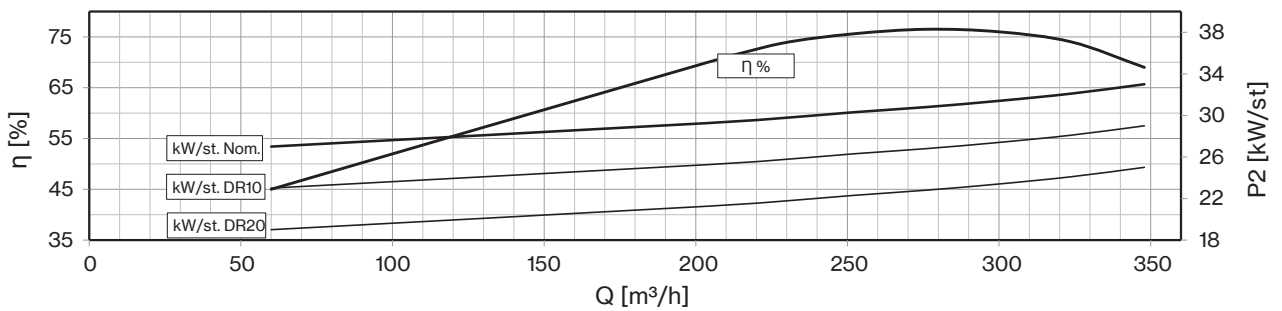
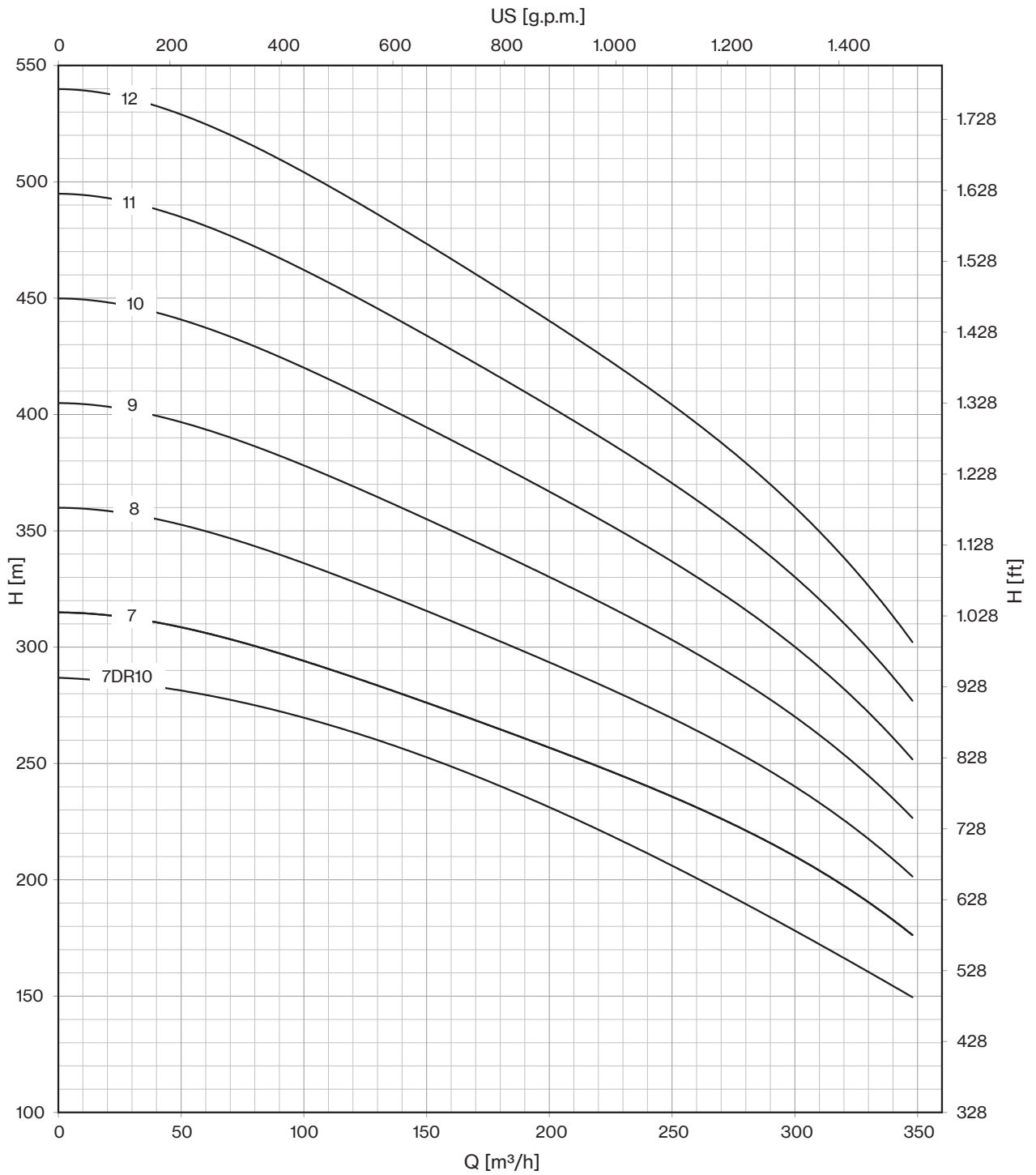


TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
10LM 275/07DR10D-12	12"	3815	1705	2110	700	134
10LM 275/07D-12		3985	1705	2280	775	134
10LM 275/08D-14		4165	1885	2280	775	149
10LM 275/09D-14	14"	4345	2065	2280	775	165
10LM 275/10D-14		4405	2245	2160	906	180
10LM 275/11D-14		4585	2425	2160	906	196
10LM 275/12D-14		4925	2605	2320	1010	211



FOR COMMERCIAL TUBE  
EXTERNAL DIAMETER: 168,3 mm

"DR": reduced-diameter impellers  
"D" Pump shaft in Duplex EN 1.4462

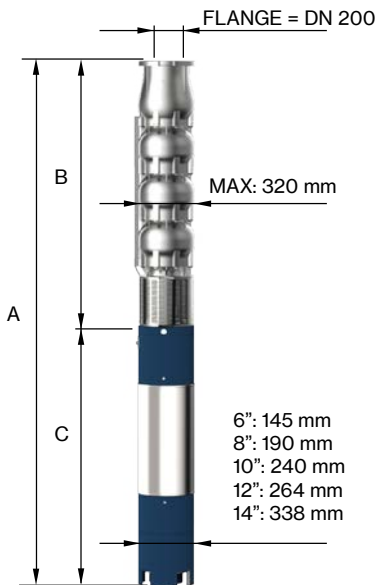


# 12LM 360

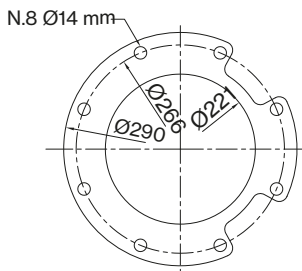
50 Hz - 2900 rpm				Q									
TYPE	SUITABLE MOTOR 3- 400V		l/min	0	1500	4000	4500	5000	5500	6000	6500	7000	
	P2		CURRENT	l/sec	0	25,0	66,7	75,0	83,3	91,7	100,0	108,3	116,7
	HP	kW	A	m³/h	0	90	240	270	300	330	360	390	420
12LM 360/01DR35	50	37	75,8	H (m)	41	40	37	35	33	32	29		
12LM 360/01DR20	75	55	106,2		49	48	47	45	44	42	40	38	34
12LM 360/01	90	66	126,0		62	61	55	53	52	52	50	47	42
12LM 360/02DR35	100	75	143,2		82	80	73	70	66	63	57		
12LM 360/02DR20D	150	110	211,0		98	96	93	90	87	84	80	75	68
12LM 360/02D	175	130	245,3		124	122	109	106	104	103	100	93	84
12LM 360/03DR20D	200	150	277,2		147	144	140	135	131	126	120	113	102
12LM 360/03DR10D	250	185	342,2		165	162	152	149	144	140	132	126	120
12LM 360/03D	300	220	430,0		186	183	164	159	156	155	150	140	126
12LM 360/04DR20D	300	220	430,0		196	192	186	180	174	168	160	150	136
12LM 360/04DR10D	340	250	481,0		220	216	202	198	192	186	176	168	160
12LM 360/04D	400	300	551,0		248	244	218	212	208	206	200	186	168

Max Eff. % DR35 =	77,5
Max Eff. % DR20 =	80
Max Eff. % DR10 =	80,5
Max Eff. %	81
Max kW / St. DR35 =	36,80
Max kW / St. DR20 =	49,5
Max kW / St. DR10 =	55,2
Max kW / St.	64,2

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3,4	5	7,8	11,8

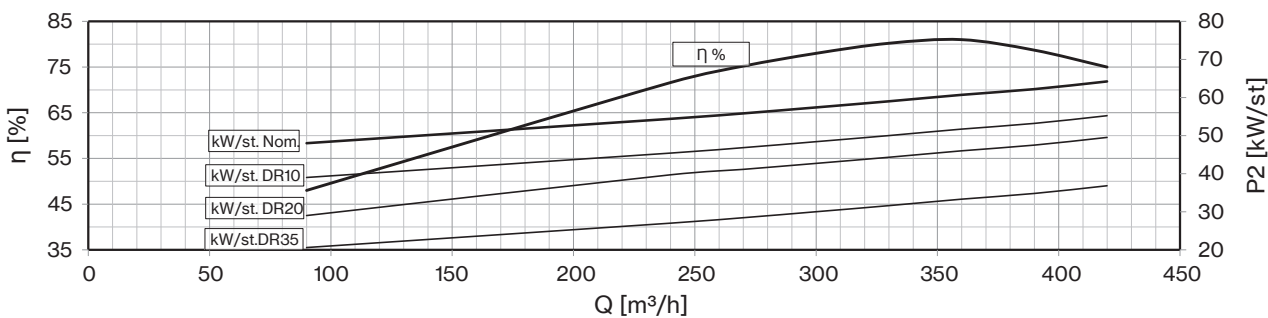
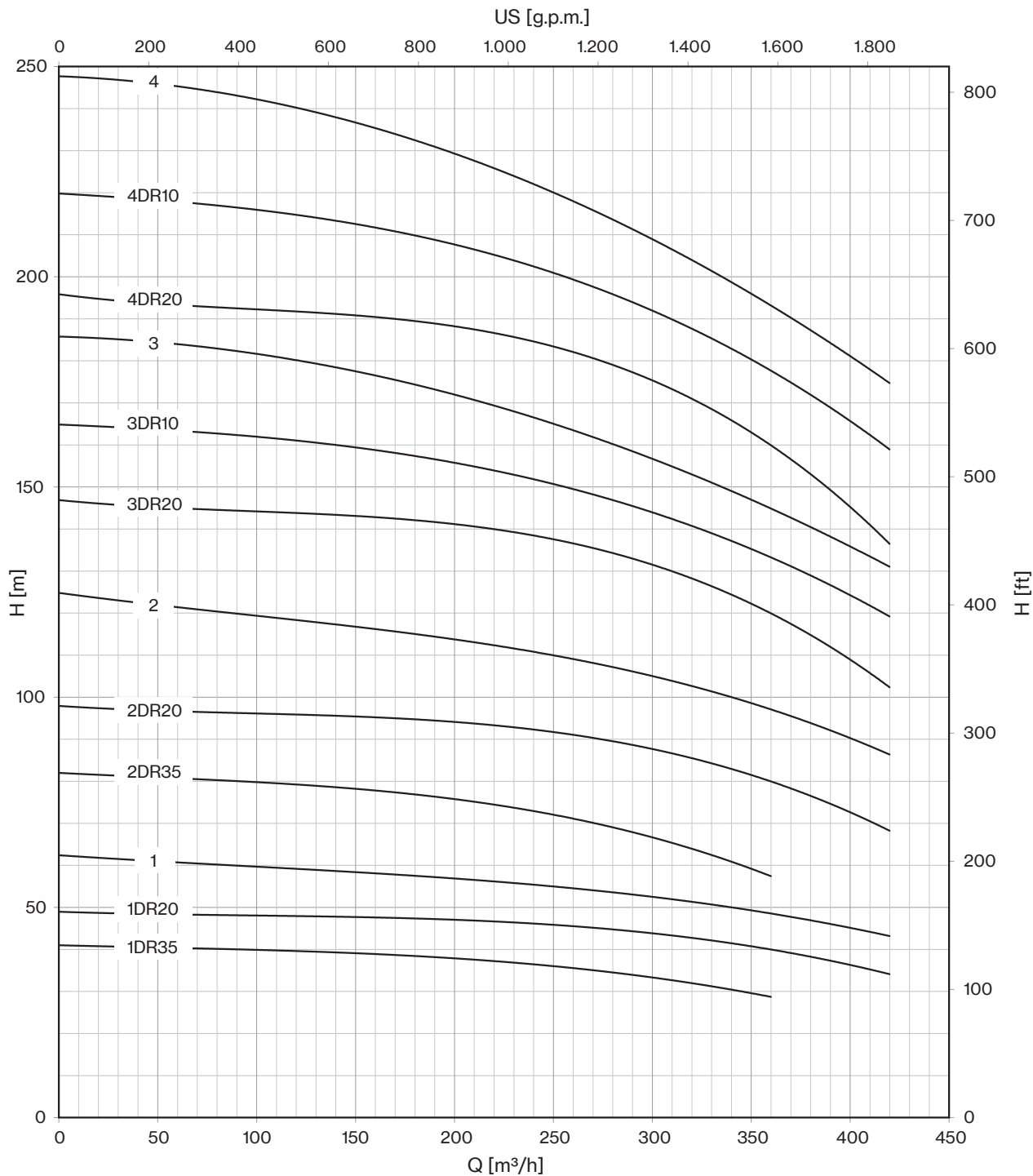


TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
12LM 360/01DR35-6	6" NEMA	2111	770	1341	118	79
12LM 360/01DR20-8	8" NEMA	2003	770	1233	200	79
12LM 360/01-8		2072	770	1302	214	79
12LM 360/02DR35-8		2383	1000	1383	230	104
12LM 360/02DR20D-8	10"	2733	1000	1733	300	104
12LM 360/02D-10		2634	1000	1634	385	104
12LM 360/03DR20D-10		2964	1230	1734	415	129
12LM 360/03DR10D-10	12"	3214	1230	1984	480	129
12LM 360/03D		3340	1230	2110	700	129
12LM 360/04DR20D		3570	1460	2110	700	154
12LM 360/04DR10D	14"	3740	1460	2280	775	154
12LM 360/04D-14		3740	1460	2280	775	154



FOR COMMERCIAL TUBE  
EXTERNAL DIAMETER: 219,1 mm

"DR": reduced-diameter impellers  
"D" Pump shaft in Duplex EN 1.4462

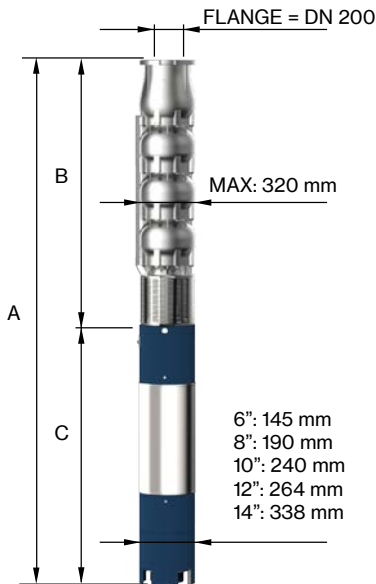


# 12LM 360

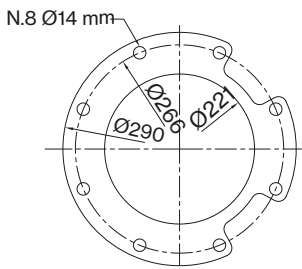
50 Hz - 2900 rpm				Q									
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	1500	4000	4500	5000	5500	6000	6500	7000	
	P2		CURRENT	I/sec	0	25,0	66,7	75,0	83,3	91,7	100,0	108,3	116,7
	HP	kW	A	m³/h	0	90	240	270	300	330	360	390	420
12LM 360/05DR20D	340	250	481,0	H (m)	245	240	233	225	218	210	200	188	170
12LM 360/05DR10D	400	300	551,0		275	270	253	248	240	233	220	210	200
12LM 360/05D	450	330	620,0		310	305	273	265	260	258	250	233	210
12LM 360/06DR10D	500	370	693,0		330	324	304	298	288	280	264	252	240
12LM 360/06D	550	400	798,0		372	366	328	318	312	310	300	280	252
12LM 360/07DR10D	550	400	798,0		385	378	354	347	336	326	308	294	280

Max Eff. % DR35 =	77,5
Max Eff. % DR20 =	80
Max Eff. % DR10 =	80,5
Max Eff. %	81
Max kW / St. DR35 =	36,80
Max kW / St. DR20 =	49,5
Max kW / St. DR10 =	55,2
Max kW / St.	64,2

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3,4	5	7,8	11,8

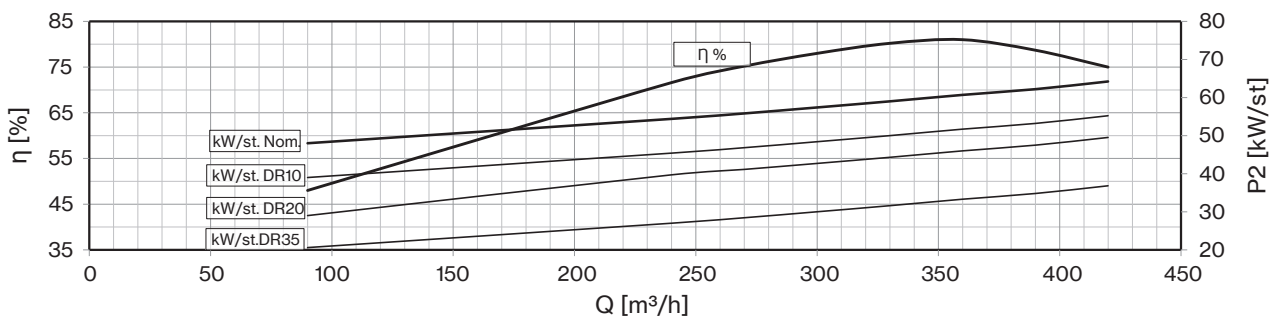
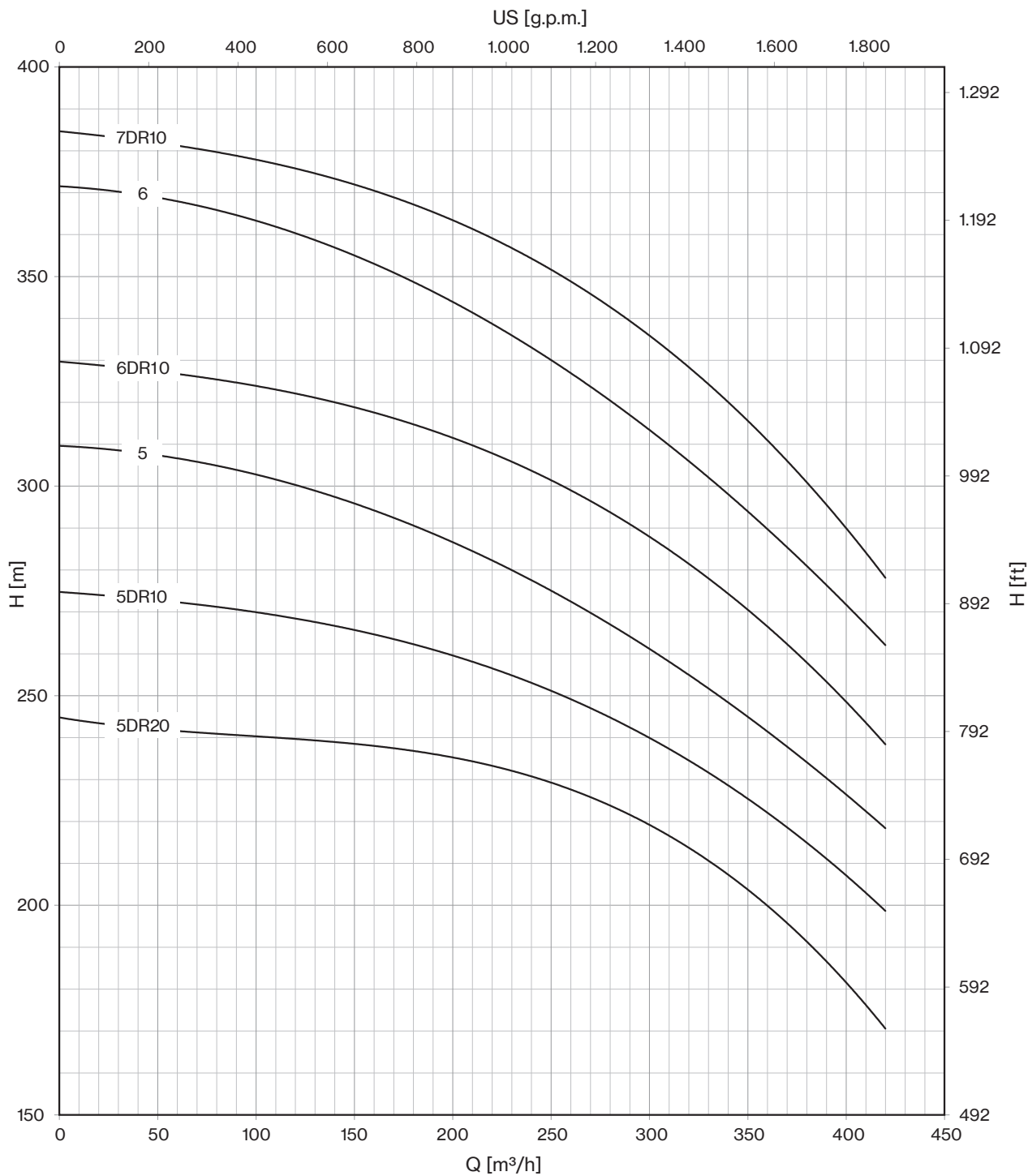


TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
12LM 360/05DR20D	12"	3970	1690	2280	775	179
12LM 360/05DR10D-14	14"	3970	1690	2280	775	179
12LM 360/05D-14		3850	1690	2160	906	179
12LM 360/06DR10D-14		4240	1920	2320	1010	204
12LM 360/06D-14		4380	1920	2460	1105	204
12LM 360/07DR10D-14		4610	2150	2460	1105	229



FOR COMMERCIAL TUBE  
EXTERNAL DIAMETER: 219,1 mm

"DR": reduced-diameter impellers  
"D" Pump shaft in Duplex EN 1.4462



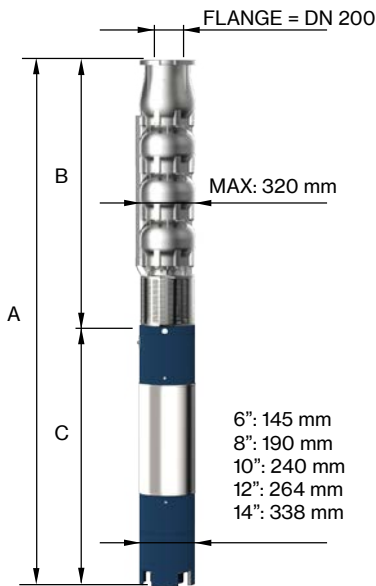


# 12LM 400

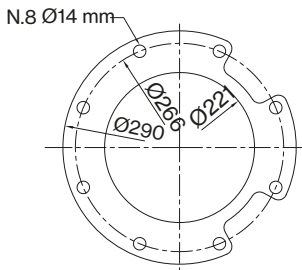
50 Hz - 2900 rpm				Q									
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	2000	6000	6500	7000	7500	8000	8500	9000	
	P2		CURRENT	I/sec	0	33,3	100,0	108,3	116,7	125,0	133,3	141,7	150,0
	HP	kW	A	m³/h	0	120	360	390	420	450	480	510	540
12LM 400/01DR30	50	37	75,8	H (m)	43	42	32	30	27	24			
12LM 400/01DR20	75	55	106,2		47	45	37	35	33	30	26	22	
12LM 400/01DR10	75	55	106,2		53	52	42	40	38	36	32	28	
12LM 400/01	90	66	126,0		58	57	46	44	42	40	37	31	27
12LM 400/02DR30	100	75	143,2		86	84	64	59	54	48			
12LM 400/02DR20	125	92	175,1		94	90	73	69	65	59	52	44	
12LM 400/02DR10D	150	110	211,0		106	104	84	80	76	71	64	56	
12LM 400/02D	175	130	245,3		116	114	92	88	84	80	73	62	54
12LM 400/03DR20D	200	150	277,2		141	135	110	104	98	89	78	66	
12LM 400/03DR10D	225	165	313,3		159	156	126	120	114	107	96	84	
12LM 400/03D	250	185	342,2		174	171	138	132	126	120	110	93	81

Max Eff. % DR30 =	81,2
Max Eff. % DR20 =	81,8
Max Eff. % DR10 =	82,7
Max Eff. %	81,6
Max Eff. % A =	82,5
Max kW / St. DR30 =	37
Max kW / St. DR20 =	45,6
Max kW / St. DR10 =	53
Max kW / St.	60,4
Max kW / St. A =	67

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3,4	5	7,8	11,8

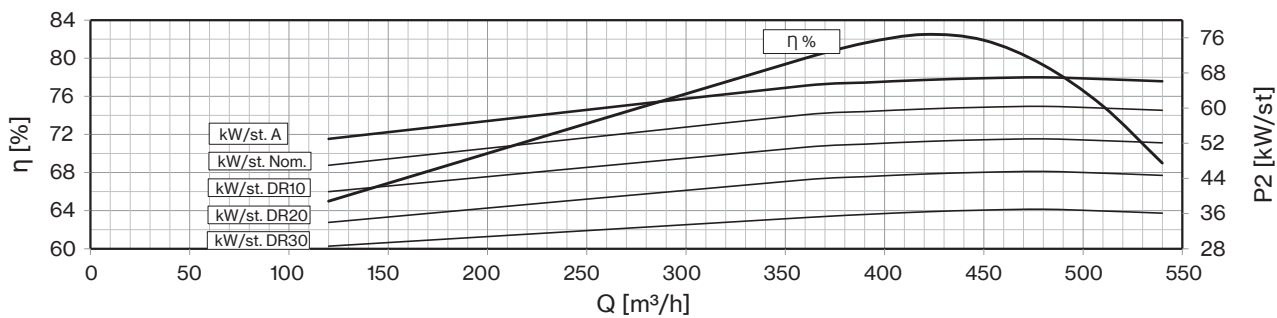
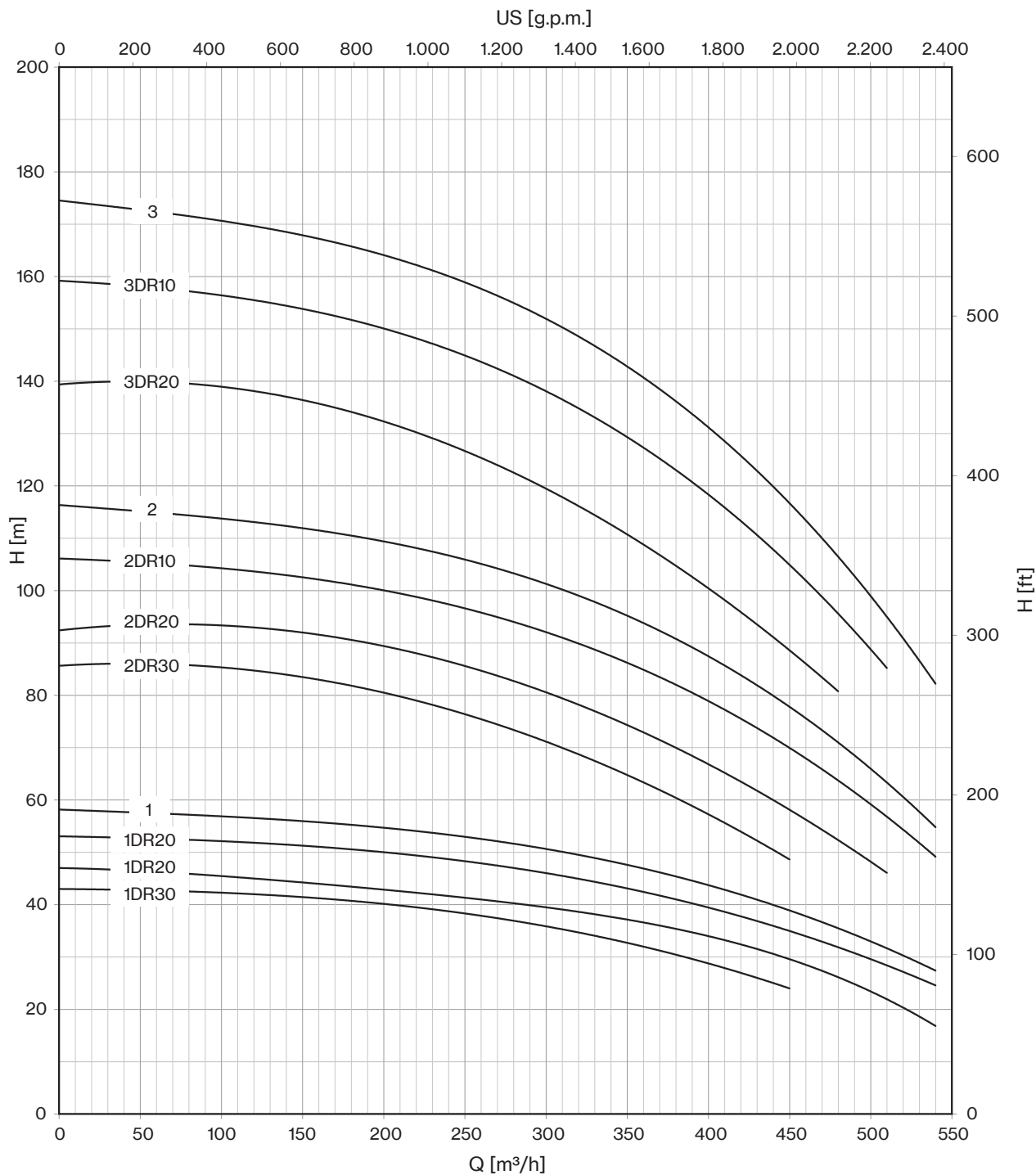


TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
12LM 400/01DR30-6	6" NEMA	2111	770	1341	118	79
12LM 400/01DR20-8	8" NEMA	2003	770	1233	200	79
12LM 400/01DR10-8		2003	770	1233	200	79
12LM 400/01-8		2072	770	1302	214	79
12LM 400/02DR30-8		2383	1000	1383	230	104
12LM 400/02DR20-8	2583	1000	1583	270	104	
12LM 400/02DR10D-8	2733	1000	1733	300	104	
12LM 400/02D-10	10"	2634	1000	1634	385	104
12LM 400/03DR20D-10		2964	1230	1734	415	129
12LM 400/03DR10D-10		3084	1230	1854	444	129
12LM 400/03D-10		3214	1230	1984	480	129



FOR COMMERCIAL TUBE  
EXTERNAL DIAMETER: 219,1 mm

"DR" : reduced-diameter impellers  
"D" Pump shaft in Duplex EN 1.4462

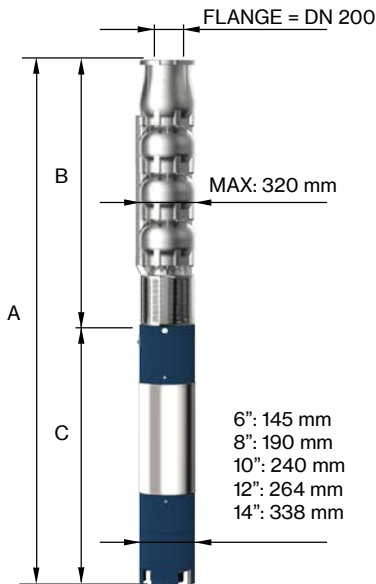


# 12LM 400

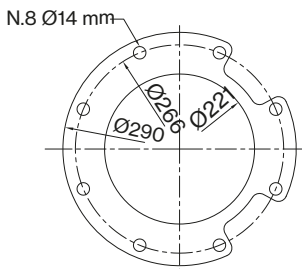
50 Hz - 2900 rpm				Q									
TYPE	SUITABLE MOTOR 3- 400V		I/min	0	2000	6000	6500	7000	7500	8000	8500	9000	
	P2		CURRENT	I/sec	0	33,3	100,0	108,3	116,7	125,0	133,3	141,7	150,0
	HP	kW	A	m³/h	0	120	360	390	420	450	480	510	540
12LM 400/04DR20D	250	185	342,2	H (m)	188	180	146	138	130	118	104	88	
12LM 400/04DR10D	300	220	430,0		212	208	168	160	152	142	128	112	
12LM 400/04D	340	250	481,0		232	228	184	176	168	160	146	124	108
12LM 400/05DR10D	400	300	551,0		265	260	210	200	190	178	160	140	
12LM 400/05D	450	330	620,0		290	285	230	220	210	200	183	155	135
12LM 400/05AD	500	370	693,0		305	300	250	240	230	223	205	195	160
12LM 400/06D	500	370	693,0		348	342	276	264	252	240	220	186	162

Max Eff. % DR30 =	81,2
Max Eff. % DR20 =	81,8
Max Eff. % DR10 =	82,7
Max Eff. %	81,6
Max Eff. % A =	82,5
Max kW / St. DR30 =	37
Max kW / St. DR20 =	45,6
Max kW / St. DR10 =	53
Max kW / St.	60,4
Max kW / St. A =	67

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	3,4	5	7,8	11,8

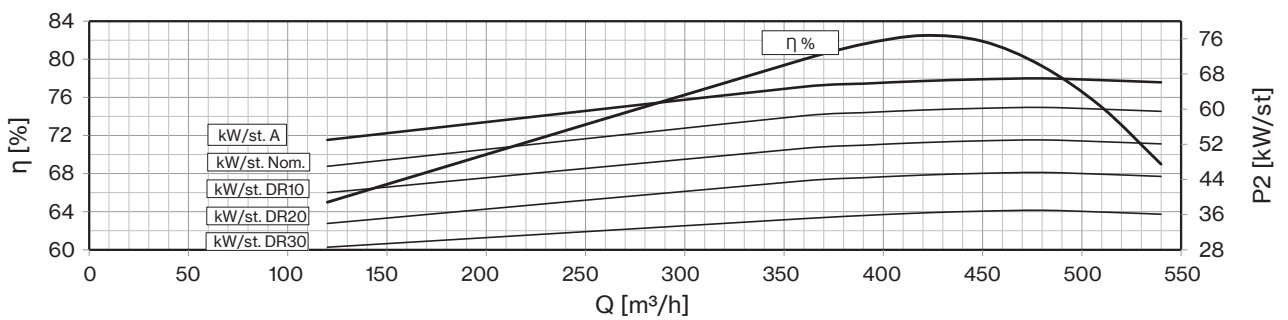
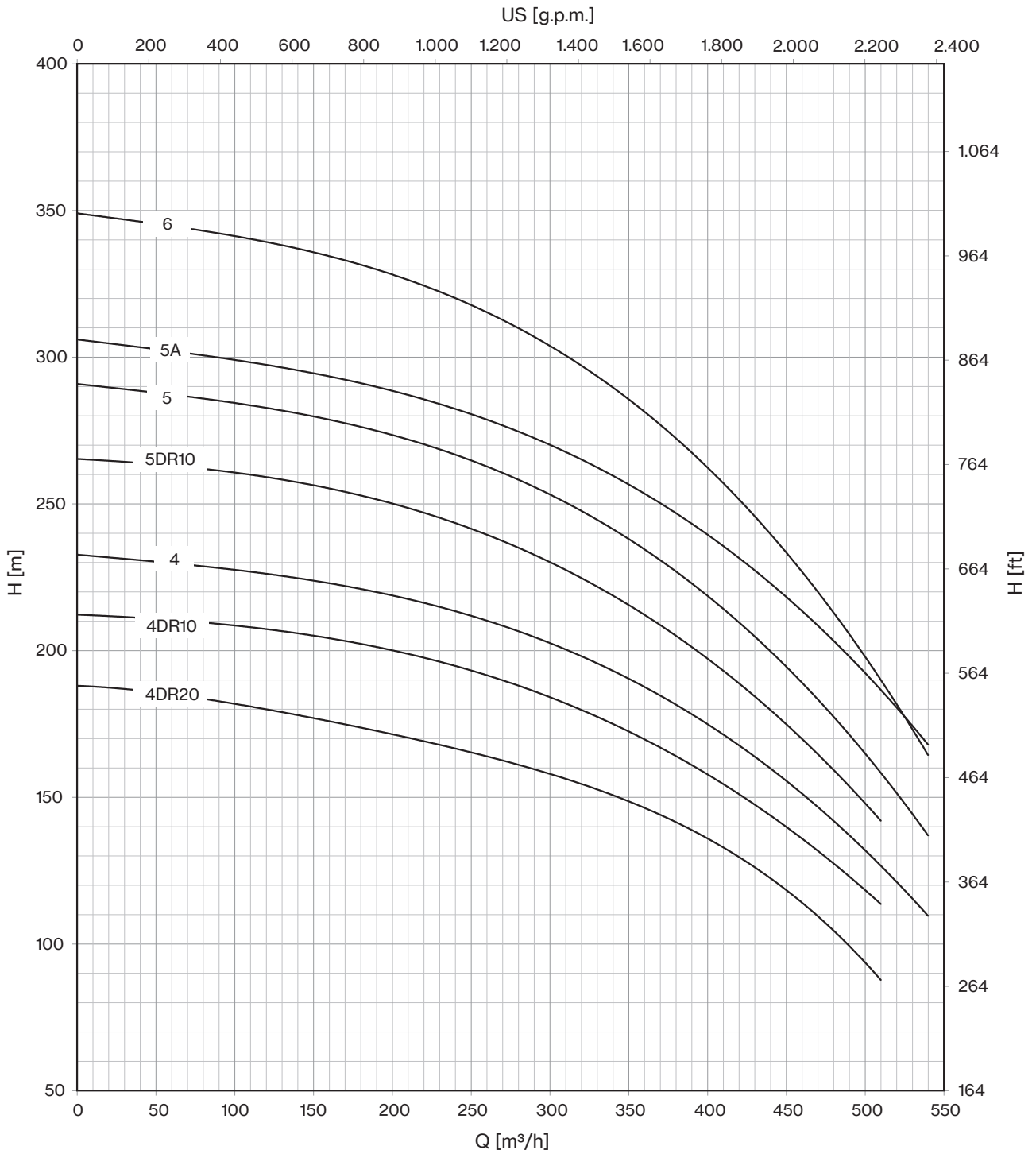


TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
12LM 400/04DR20D	12"	3444	1460	1984	480	154
12LM 400/04DR10D		3570	1460	2110	700	154
12LM 400/04D		3740	1460	2280	775	154
12LM 400/05 DR10D-14	14"	3970	1690	2280	775	179
12LM 400/05D-14		3850	1690	2160	906	179
12LM 400/05AD-14		4010	1690	2320	1010	179
12LM 400/06D-14		4240	1920	2320	1010	204



FOR COMMERCIAL TUBE  
EXTERNAL DIAMETER: 219,1 mm

"DR": reduced-diameter impellers  
"D" Pump shaft in Duplex EN 1.4462

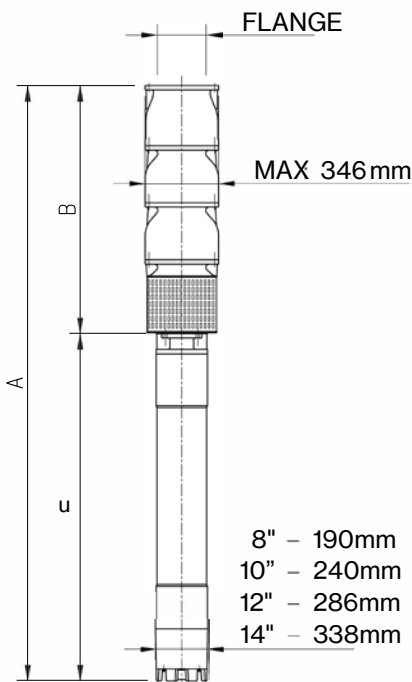


# E14 A

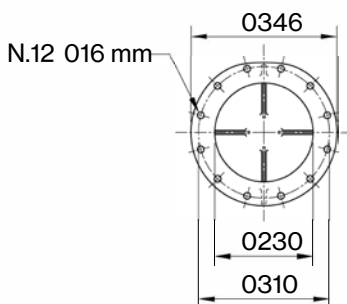
50 Hz - 2900 rpm				Q									
TYPE	SUITABLE MOTOR 3- 400V		l/min	0	1333	2667	4000	5333	6667	8000	8500	9667	
	P2		CURRENT	l/sec	0	22,2	44,5	66,7	88,9	111,1	133,3	141,8	161,2
	HP	kW	A	m³/h	0	80	160	240	320	400	480	510	580
E14 A/1D	90	66	126,0	H (m)	71,8	66,5	62,5	58,7	54,4	49,0	41,6	38,2	
E14 A/1C	100	75	143,2		76,8	71,7	67,5	63,8	59,6	54,6	47,9	45,0	39,0
E14 A/1B	125	92	175,1		85,1	79,9	75,6	71,8	67,8	63,3	57,7	55,1	48,2
E14 A/1A	150	110	211,0		97,1	90,8	85,5	80,4	75,6	70,7	65,4	63,0	57,6
E14 A/1	175	130	245,3		108,6	99,3	92,3	87,0	82,5	78,0	73,0	70,8	64,1
E14 A/2D	175	130	245,3		143,5	133,0	125,0	117,4	108,8	98,0	83,2	76,4	
E14 A/2C	200	150	277,2		153,6	143,4	135,0	127,6	119,1	109,1	95,8	90,0	78,0
E14 A/2B	250	185	342,2		170,2	159,8	151,2	143,6	135,6	126,5	115,4	110,2	96,4
E14 A/2A	300	220	430,0		194,3	181,6	171,0	160,8	151,2	141,4	130,8	126,0	115,2
E14 A/2	340	250	481,0		217,3	198,6	184,6	174,0	165,0	156,0	146,0	141,6	128,2

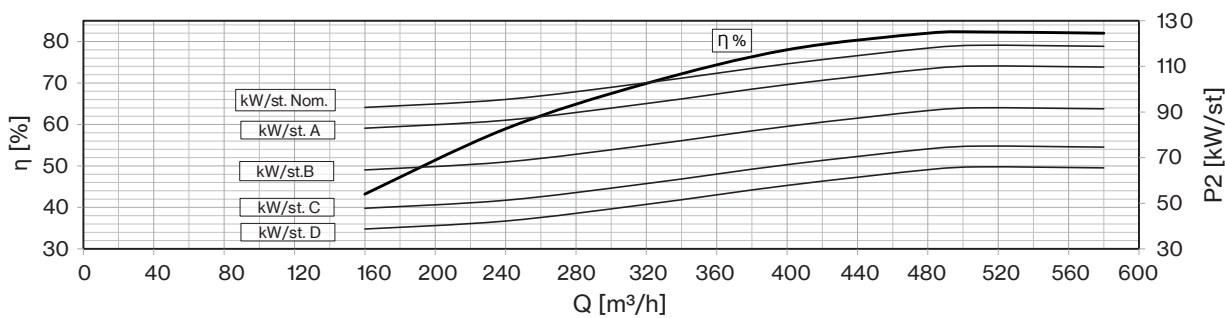
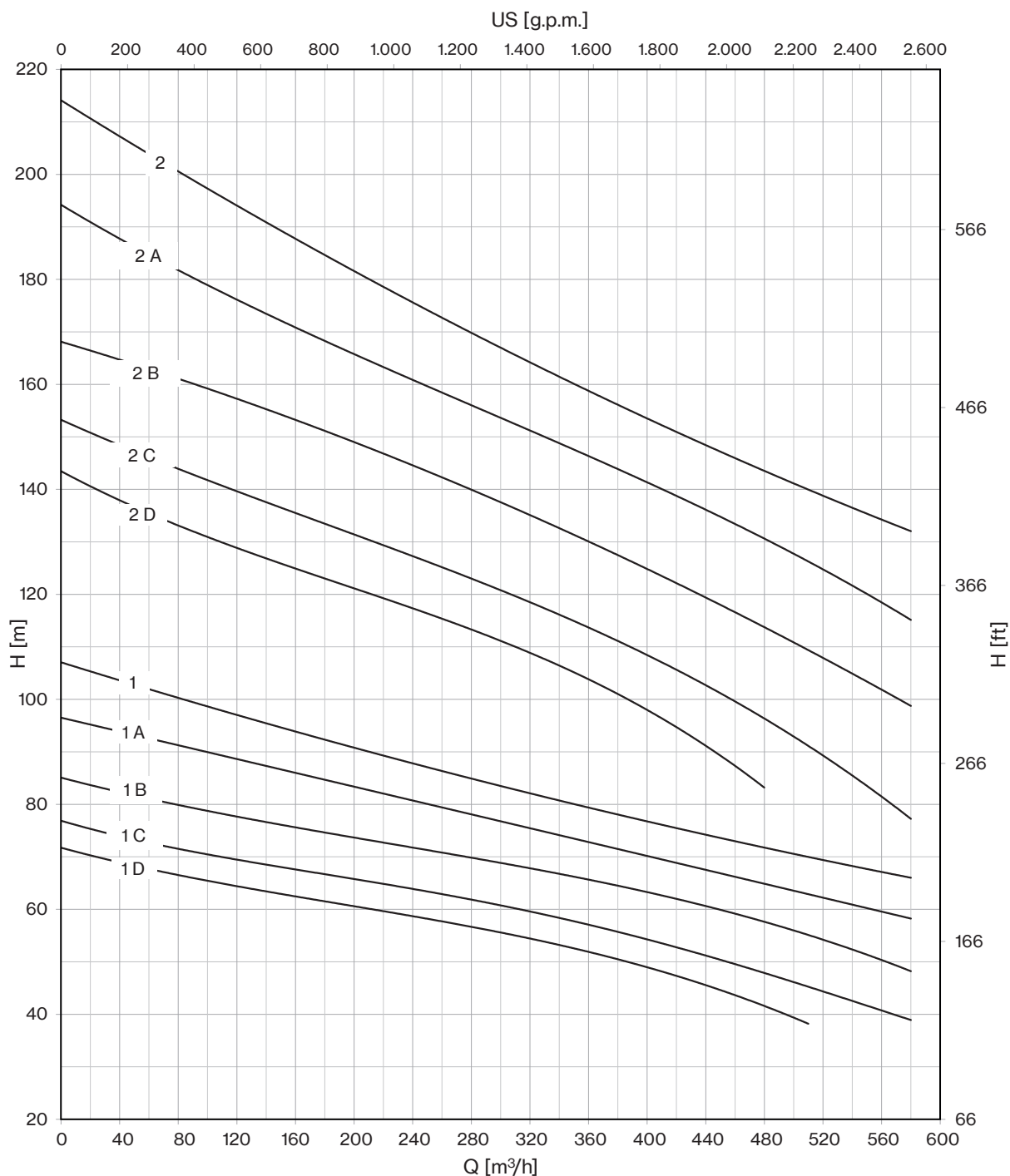
Max Eff. %	82,3
Max KW / St. D (230mm) =	64,9
Max KW / St. C (238mm) =	74,0
Max KW / St. B (251mm) =	90,8
Max KW / St. A (268mm) =	109,1
Max KW / St. - (276mm) =	119,3

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	5,8	6,4	9,4	15,3



TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
E14 A/1D-8	8" NEMA	2237	935	1302	214	184
E14 A/1C-8		2318	935	1383	230	184
E14 A/1B-8		2518	935	1583	270	184
E14 A/1A-8		2668	935	1733	300	184
E14 A/1-10	10"	2569	935	1634	385	184
E14 A/2D-10		2809	1175	1634	385	260
E14 A/2C-10		2909	1175	1734	415	260
E14 A/2B-10	12"	3159	1175	1984	480	260
E14 A/2A-12		3285	1175	2110	700	260
E14 A/2-12		3455	1175	2280	775	260



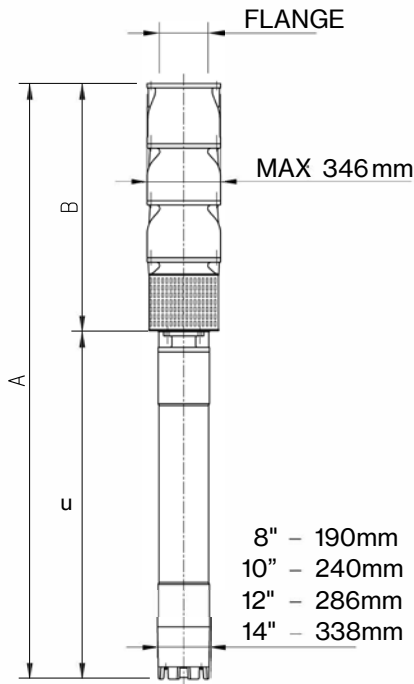


# E14 B

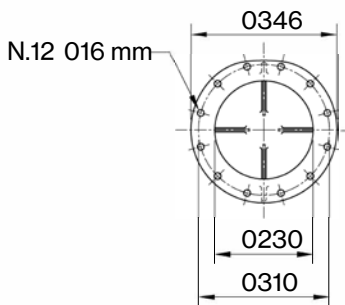
50 Hz - 2900 rpm				Q									
TYPE	SUITABLE MOTOR 3- 400V		l/min	0	1333	4000	5333	6667	9000	10000	12500	14333	
	P2		CURRENT	l/sec	0	22,2	66,7	88,9	111,1	150,0	166,7	208,3	238,9
	HP	kW	A	m³/h	0	80	240	320	400	540	600	750	860
E14 B/1C	125	92	175,1	H (m)	73,5	72,5	68,0	63,5	57,8	44,0	36,5	14,0	
E14 B/1B	150	110	211,0		80,4	79,5	75,0	71,5	66,0	53,5	46,7	26,5	
E14 B/1A	175	130	245,3		87,0	84,0	79,0	77,0	73,8	66,0	61,5	45,5	29,0
E14 B/1	200	150	277,2		100,8	97,4	90,4	86,9	82,9	74,2	69,0	53,9	38,4
E14 B/2C	250	185	342,2		147,0	145,0	136,0	127,0	115,6	88,0	73,0	28,0	
E14 B/2B	300	220	430,0		160,7	159,0	150,0	143,0	132,0	107,0	93,4	53,0	
E14 B/2A	400	300	551,0		174,0	168,0	158,0	154,0	147,6	132,0	123,0	91,0	58,0
E14 B/2	400	300	551,0		201,6	194,8	180,8	173,8	165,8	148,4	138,0	107,8	76,8

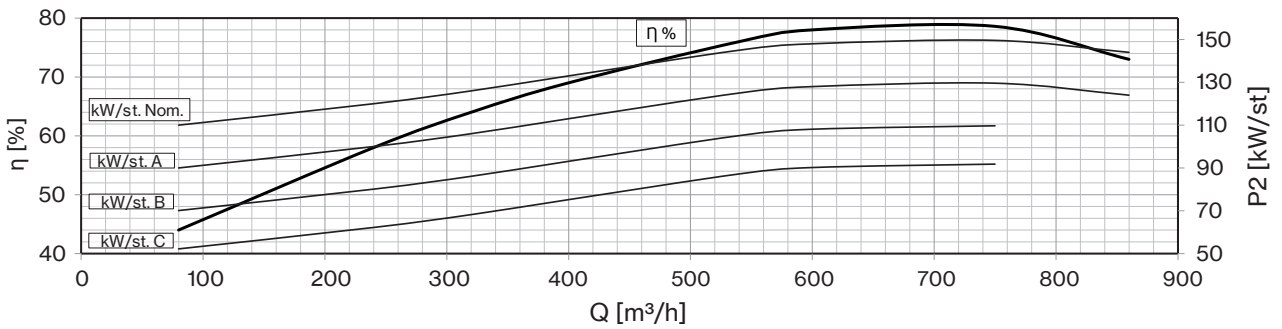
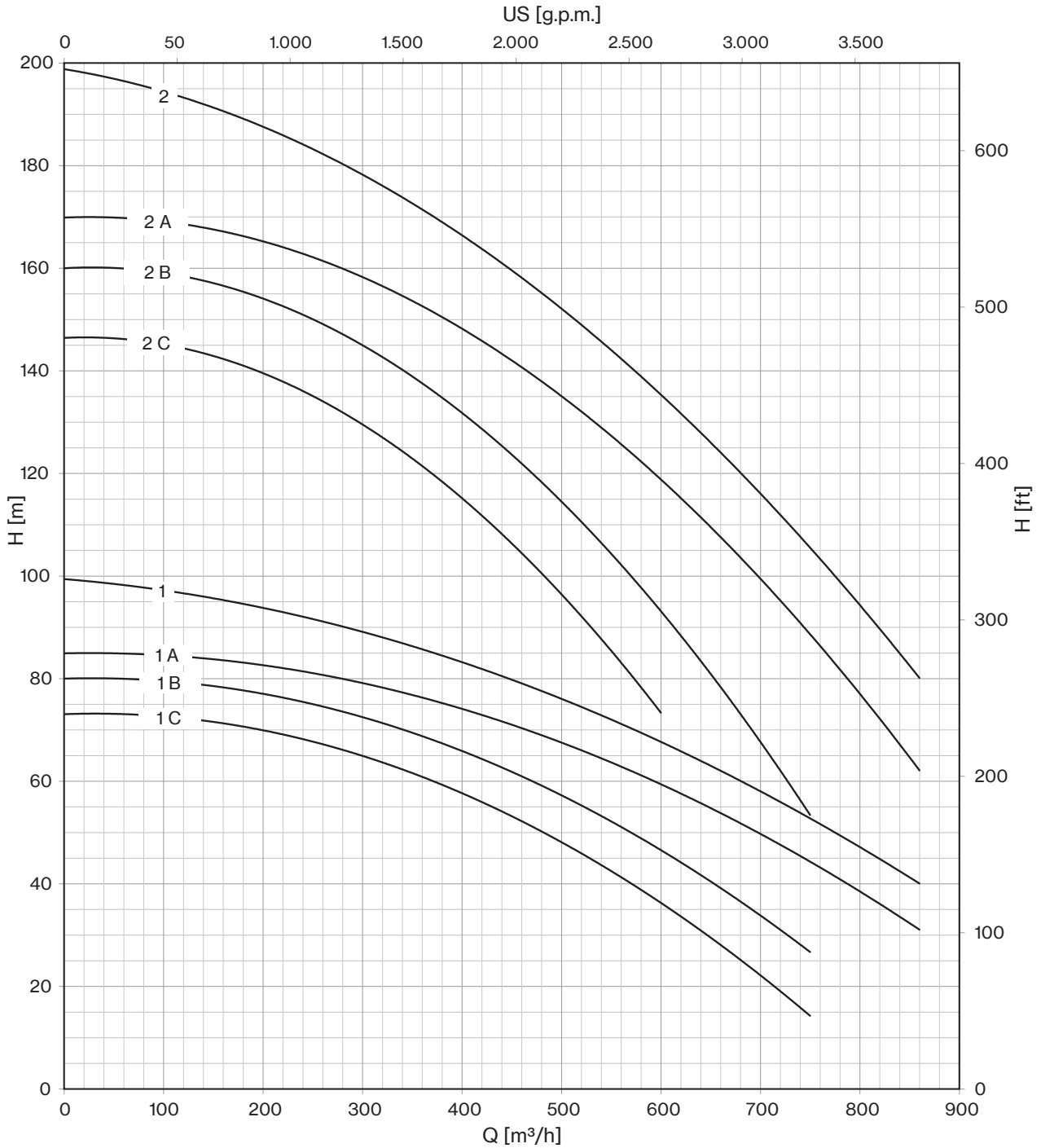
Max Eff. %	78,6
Max KW / St. C (240mm) =	91,8
Max KW / St. B (D.250mm) =	109,7
Max KW / St. A (259mm) =	129,6
Max KW / St. - (274mm) =	149,6

NPSH (m)	Q=25%	Q=50%	Q=75%	Q=100%
	6	6,4	8,6	16,3



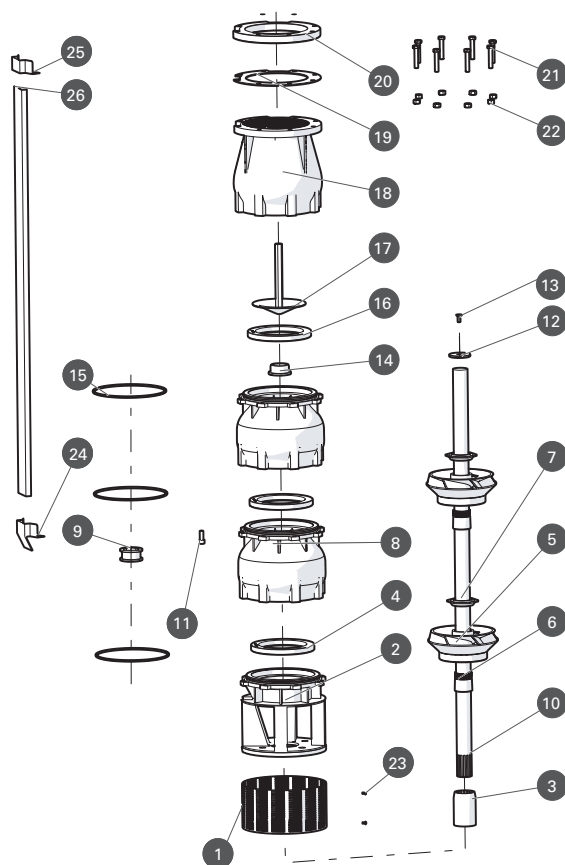
TYPE	MOTOR BRACKET	DIMENSIONS (mm)			WEIGHT (kg)	
		A	B	C	MOTOR	PUMP
E14 B/1C-8	8" NEMA	2488	905	1583	270	184
E14 B/1B-8		2638	905	1733	300	184
E14 B/1A-10		2539	905	1634	385	184
E14 B/1-10	10"	2639	905	1734	415	184
E14 B/2C-10	12"	3159	1175	1984	480	260
E14 B/2B-12		3285	1175	2110	700	260
E14 B/2A	14"	3455	1175	2280	775	260
E14 B/2		3455	1175	2280	775	260





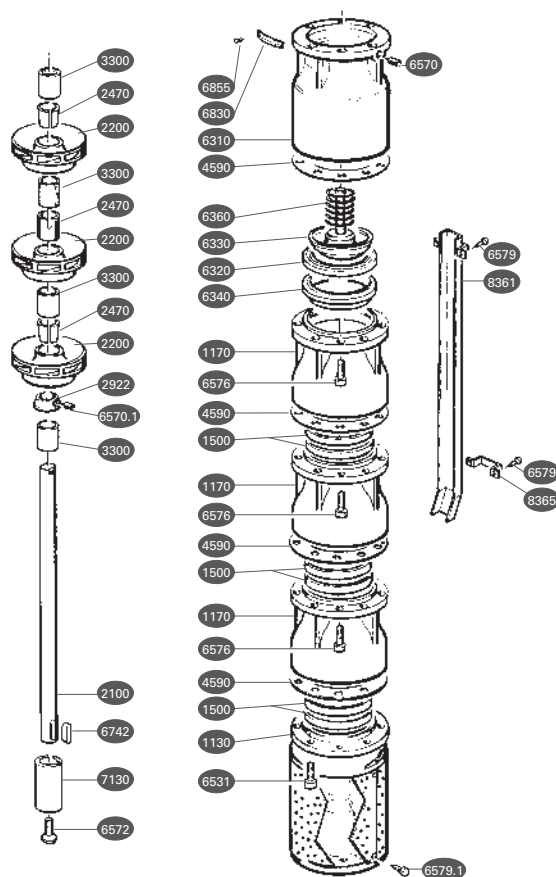


# 10LM-12LM



N. CODE	DESCRIPTION	LMS EXECUTION	LMX EXECUTION	LMD EXECUTION	(*) Q.TY
1	<b>SUCTION STRAINER</b>	AISI 304	AISI 316	Duplex EN 1.4462	-
2	<b>SUCTION CAGE</b>	AISI 304	AISI 316	Duplex EN 1.4462	-
3	<b>JOINT</b>	AISI 304	AISI 316	Duplex EN 1.4462	1
4	<b>USURY RING</b>	NBR	NBR	NBR	N° of St.
5	<b>IMPELLER</b>	AISI 304	AISI 316	Duplex EN 1.4462	-
6	<b>CONE</b>	AISI 304	AISI 316	Duplex EN 1.4462	N° of St.
7	<b>HEXAGONAL RING</b>	AISI 304	AISI 316	Duplex EN 1.4462	N° of St.
8	<b>DIFFUSEUR</b>	AISI 304	AISI 316	Duplex EN 1.4462	-
9	<b>BEARING BUSH</b>	NBR	NBR	NBR	N° of St.
10	<b>PUMP SHAFT</b>	AISI 304	AISI 316	Duplex EN 1.4462	1
11	<b>N.8 SCREW FOR DIFFUSEUR</b>	AISI 304	AISI 316	Duplex EN 1.4462	-
12	<b>RING</b>	AISI 304	AISI 316	Duplex EN 1.4462	1
13	<b>SCREW FOR DISK</b>	AISI 304	AISI 316	Duplex EN 1.4462	1
14	<b>COUNTERTHRUST</b>	PTFE + 25% CARBON	PTFE + 25% CARBON	PTFE + 25% CARBON	1
15	<b>O-RING</b>	NBR	NBR	NBR	N° of St.
16	<b>GASKET VALVE</b>	NBR	NBR	NBR	1
17	<b>CAP VALVE</b>	AISI 304	AISI 316	Duplex EN 1.4462	-
18	<b>BODY VALVE</b>	AISI 304	AISI 316	Duplex EN 1.4462	-
19	<b>SEAL COUNTERFLANGE</b>	NBR	NBR	NBR	1
20	<b>COUNTERFLANGE</b>	AISI 304	AISI 316	Duplex EN 1.4462	-
21	<b>N.8 SCREW FOR COUNTERFLANGE</b>	AISI 304	AISI 316	Duplex EN 1.4462	-
22	<b>N.8 NUT FOR COUNTERFLANGE</b>	AISI 304	AISI 316	Duplex EN 1.4462	-
23	<b>N.2 SCREW FOR SUCTION STRAINER</b>	AISI 304	AISI 316	Duplex EN 1.4462	-
24	<b>LOWER CLAMP</b>	AISI 304	AISI 316	Duplex EN 1.4462	-
25	<b>UPPER CLAMP</b>	AISI 304	AISI 316	Duplex EN 1.4462	-
26	<b>COVER CABLE</b>	AISI 304	AISI 316	Duplex EN 1.4462	-

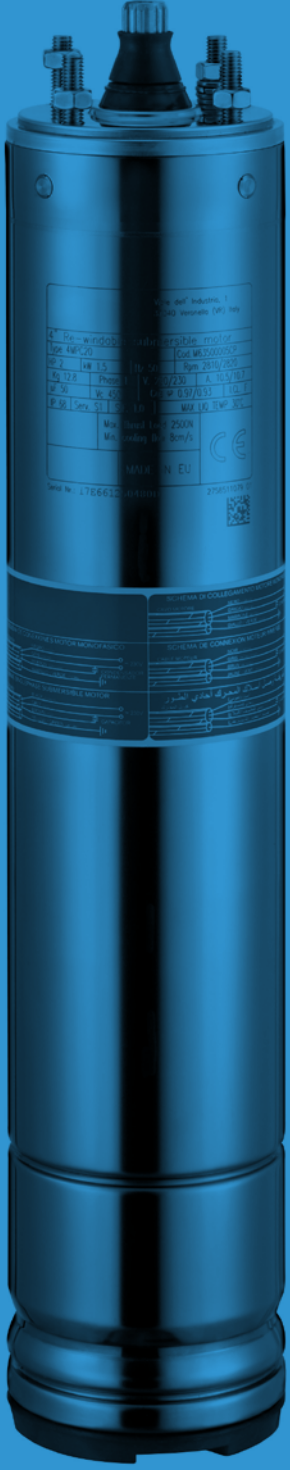
\* Recommended spare parts quantity



N. CODE	DESCRIPTION	MATERIAL	(*) Q.TY
1130	<b>SUPPORT</b>	Cast iron	
1170	<b>DIFFUSER</b>	Cast iron	
1170.1	<b>LAT DIFFUSER</b>	Cast iron	
1500	<b>WEAR RING</b>	Rubber	1 x stage
2100	<b>SHAFT</b>	Stainless steel	
2200	<b>IMPELLER</b>	Cast iron	1 x stage
2470	<b>BUSHING</b>	Steel	1 x stage
2922	<b>SANDGUARD</b>	Brass	
3300	<b>BEARING</b>	Steel - rubber	1 x stage
4590	<b>GLAND</b>	Guarnital	1 x stage
6310	<b>VALVE BODY</b>	Valve body / Cast Iron	
6320	<b>VALVE HOUSING</b>	Rubber	
6330	<b>WASHER</b>	Stainless steel	
6340	<b>HOUSING RING</b>	Cast iron	
6360	<b>SPRING</b>	Stainless steel	
6531	<b>STRAINER</b>	Stainless steel	
6570	<b>SCREW</b>	Stainless steel	
6570.1	<b>SCREW</b>	Stainless steel	
6572	<b>SCREW</b>	Stainless steel	
6576	<b>SCREW</b>	Stainless steel	
6579	<b>SCREW</b>	Stainless steel	
6579.1	<b>SCREW</b>	Stainless steel	
6742	<b>KEY</b>	Stainless steel	
6830	<b>LABEL</b>	Stainless steel	
6855	<b>PIN</b>	Stainless steel	
7130	<b>JOINT</b>	Stainless steel	
8361	<b>SHEAT</b>	Stainless steel	
8365	<b>CABLE GUARD CLAMP</b>	Stainless steel	

\* Recommended spare parts quantity





# DEEPWELL BOREHOLE MOTORS

# DEEPWELL BOREHOLE MOTORS

4MFE/6MFE



4MPC/6MPC



6R/8R/10R



PTR12/PTR14

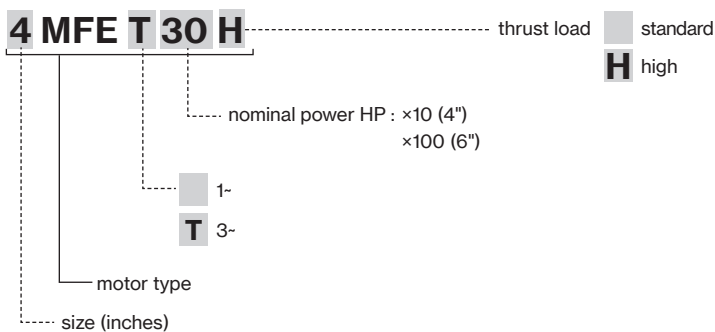
Line of motors for submersible electric pumps, available with different construction technologies and available in sizes 4", 6", 8", 10", 12" and 14".

# 4MFE/6MFE

4" and 6" rewindable oil filled submersible motors characterized by high torque, strong mechanical structure, high reliability. Suitable for vertical and horizontal operations.

## Construction features

<b>Upper support</b>	nickel plated cast iron
<b>External jacket, shaft and cup</b>	stainless steel AISI 304
<b>Mechanical seal</b>	ceramic-graphite
<b>Ball bearings</b>	axial and radial oil lubricated
<b>Number of startups/hr</b>	max 30
<b>Coolant</b>	non-toxic dielectric lubricant
<b>Cable</b>	1,75 to 4 m according to motor size (3 wires + ground)
<b>Shaft extension and coupling</b>	NEMA standard
<b>Voltage</b>	1~ 220/230V - 50Hz 3~ 380/415V - 50Hz
<b>Insulation class</b>	F
<b>Protection degree</b>	IP68
<b>Max liquid temperature</b>	35° C
<b>Max depth immersion</b>	150 m



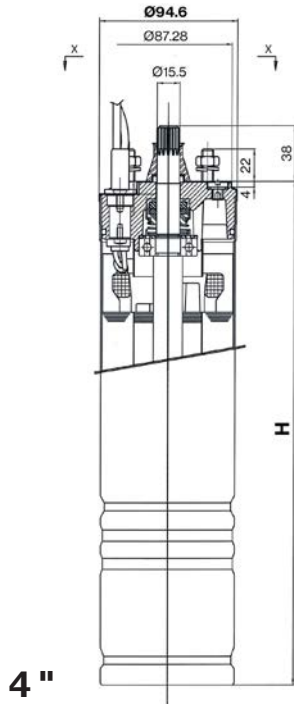
4MFE



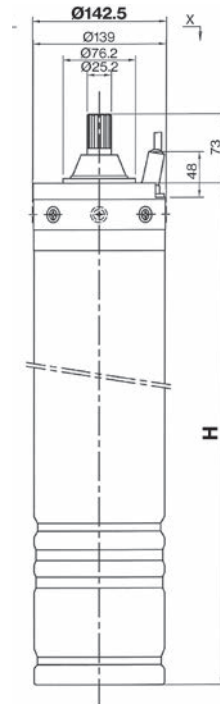
6MFE



# 4MFE/6MFE




4 "



6 "

TYPE 1- 230V	Power		Axial load N	I <sub>N</sub> A	I <sub>START</sub> A	C µF	Efficiency %	Cos φ	T <sub>s</sub> / T <sub>N</sub>	H mm	Kg	CABLE	
	HP	kW										Lenght m	Size mm <sup>2</sup>
4MFE 5	0,5	0,37	1500	3,4/3,6	10,8	20	53	0,94	1	325	7	1,75	1,5
4MFE 7	0,75	0,55		4,2/4,5	13,9	25	60	0,92	0,87	325	7,6		
4MFE10	1	0,75		5,6/6	18,5	35	62	0,92	0,7	350	8,7		
4MFE15	1,5	1,1		7,8/8,2	23	40	66	0,92	0,5	385	10,3		
4MFE20	2	1,5		10,8/11	38,7	50	68	0,88	0,55	420	12		
4MFE30	3	2,2		14,6/14,8	43,5	70	69	0,94	0,48	470	14,2		
4MFE30H	3	2,2	7500	14,6/14,8	43,5	70	69	0,94	0,48	520	15,5	2,5	

TYPE 3- 400V	Power		Axial load N	I <sub>N</sub> A	I <sub>START</sub> A	Efficiency %	Cos φ	T <sub>s</sub> / T <sub>N</sub>	H mm	Kg	CABLE	
	HP	kW									Lenght m	Size mm <sup>2</sup>
4MFET 5	0,5	0,37	1500	1,3/1,6	6,2	60	0,72	2,9	325	6,5	1,75	1,5
4MFET 7	0,75	0,55		1,9/2	8,5	62	0,71	3,1	325	7		
4MFET 10	1	0,75		2,4/2,6	10,9	66	0,71	3,1	325	7,6		
4MFET 15	1,5	1,1		3,2/3,4	14	73	0,7	3,2	350	8,7		
4MFET 20	2	1,5		4,4/4,6	17	73	0,7	3,1	385	10,4		
4MFET 30	3	2,2		5,8/6,2	25	75	0,78	3,1	420	12		
4MFET 30H	3	2,2	7500	5,8/6,2	25	75	0,78	3,1	470	14,2	2,5	1,5
4MFET 40	4	3	2500	7,6/7,8	35	74	0,81	2,8	418	12,8		
4MFET 42	4	3	5000	7,6/7,8	34	74	0,81	2,8	418	13,1		
4MFET 42H	4	3	7500	7,9/8	34	77	0,75	3	550	19		
4MFET 55	5,5	4	2500	9,8/9,9	49	76	0,82	3	468	15,3		
4MFET 57	5,5	4	5000	9,8/9,9	49	76	0,82	3	468	15,6		
4MFET 57H	5,5	4	7500	10/10,2	51	76	0,79	3,2	580	20,5	3	1,5
4MFET 75	7,5	5,5	2500	13,5/13,8	57	78	0,85	3	538	18,6		
4MFET 77	7,5	5,5	5000	13,5/13,8	57	78	0,85	3	538	18,9		
4MFET 77H	7,5	5,5	7500	14,5/14,7	58	76	0,72	3,1	650	22,4	4	2
4MFET 100H	10	7,5	7500	19/19,5	77	79	0,8	3,2	810	27		

TYPE 3- 400V	Power		Axial load	I <sub>N</sub>	I <sub>START</sub>	Efficiency	Cos φ	T <sub>s</sub> / T <sub>N</sub>	H	 Kg	CABLE	
	HP	kW									N	A
	6MFET 55	5,5	4	10000	8,8	45	76	0,82	2,4	540		
6MFET 75	7,5	5,5	12,5		64	78	0,82	3	570	40		
6MFET 100	10	7,5	16,9		78	77	0,82	2,5	600	42		
6MFET 125	12,5	9,2	21,5		95	80	0,81	2,4	600	45		
6MFET 150	15	11	23,7		121	83	0,83	2,4	700	48		
6MFET 175	17,5	12,8	27,8		145	82	0,84	2,4	700	50		
6MFET 200	20	15	30,4		160	82	0,85	2,5	760	54		
6MFET 250	25	18,5	38,3		225	82	0,85	2,1	830	65		
6MFET 300	30	22	44		250	83	0,86	2	890	70		
6MFET 400	40	30	20000	62	330	86	0,86	2	1030	90	8	
6MFET 500	50	37		72	400	86	0,87	2	1170	101		

TYPE 1-	Power		PROTECTION	CONTROL PANEL
	HP	kW		
4MFE 5	0,5	0,37	PML 5/20-4	EQSM + 20μF
4MFE 7	0,75	0,55	PML 7/25-6	EQSM + 25μF
4MFE 10	1	0,75	PML 10/35-7	EQSM + 35μF
4MFE 15	1,5	1	PML 15/40-10	EQSM + 40μF
4MFE 20	2	1,5	PML 20/50-13	EQSM + 50μF
4MFE 30	3	2,2	PML 30/80-18	EQSM + 80μF

TYPE 3-	Power		PROTECTION	CONTROL PANEL
	HP	kW		
4MFET 5	0,5	0,37	PT 7/1,3-2,1	EQSMT 10
4MFET 7	0,75	0,55	PT 7/1,3-2,1	EQSMT 10
4MFET 10	1	0,75	PT 10/1,9-3	EQSMT 10
4MFET 15	1,5	1	PT 15-20/2,9-4,5	EQSMT 10
4MFET 20	2	1,5	PT 20/30-40/4,3-6,8	EQSMT 10
4MFET 30	3	2,2	PT 20/30-40/4,3-6,8	EQSMT 10
4MFET 40	4	3	PT 40-50/5,7-9,1	EQSMT 10
4MFET 55	5,5	4	PT 55-75/8,6-13,5	EQSMT 10
4MFET 75	7,5	5,5	PT 100/12,5-16,5	EQSMT 10
4MFET 100	10	7,5	PT 125-150/16-21	EQSMT 15

TYPE	Power		PROTECTION	CONTROL PANEL	CONTROL PANEL star-delta starting 400/690 V
	HP	kW			
6MFET 55	5,4	4	PT 55-75/8,6-13,5	EQSMT 10	QST 5
6MFET 75	7,5	5,5	PT 100/12,5-16,5	EQSMT 10	QST 7
6MFET 100	10	7,5	PT 125-150/16-21	EQSMT 10	QST 10
6MFET 125	12,5	9,2	PT 200/22-29	EQSMT 15	QST 15
6MFET 150	15	11	PT 200/22-29	EQSMT 15	QST 15
6MFET 175	17,5	13	-	EQSMT 20	QST 20
6MFET 200	20	15	-	EQSMT 20	QST 20
6MFET 250	25	18,5	-	-	QST 30
6MFET 300	30	22	-	-	QST 30
6MFET 400	40	30	-	-	QST 50
6MFET 500	50	37	-	-	QST 60



# 4MPC/6MPC

Deepwell Motors

4" and 6" rewindable oil filled submersible motors characterized by high torque, strong mechanical structure, high reliability. Suitable for vertical and horizontal operations.



4MPC

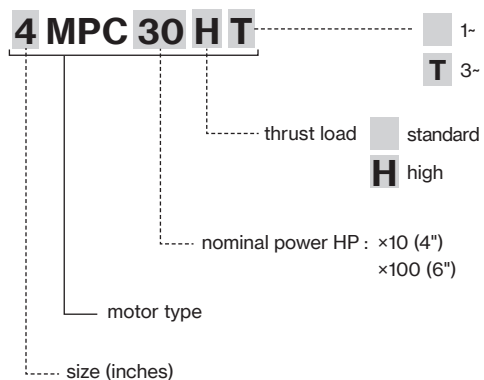


6MPC



## Construction features

<b>Upper support</b>	cast iron and stainless steel
<b>External jacket, shaft and cup</b>	stainless steel
<b>Mechanical seal</b>	ceramic-graphite
<b>Ball bearings</b>	axial and radial oil lubricated
<b>Number of startups/hr</b>	4": max 30 6": max 20
<b>Coolant</b>	non-toxic dielectric lubricant
<b>Cable</b>	1,5 m (4" 0,37-2,2 kW) 2,5 m (4" 3,0-5,5 kW) 3,5 m (4" 7,5 kW) 4m (6" 4-30 kW)
<b>Shaft extension and coupling</b>	NEMA standard
<b>Voltage</b>	1- 220/230V - 50Hz 3- 380/415V - 50Hz
<b>Insulation class</b>	F
<b>Protection degree</b>	IP68
<b>Max liquid temperature</b>	30° C
<b>Max depth immersion</b>	4": 250m 6": 350m



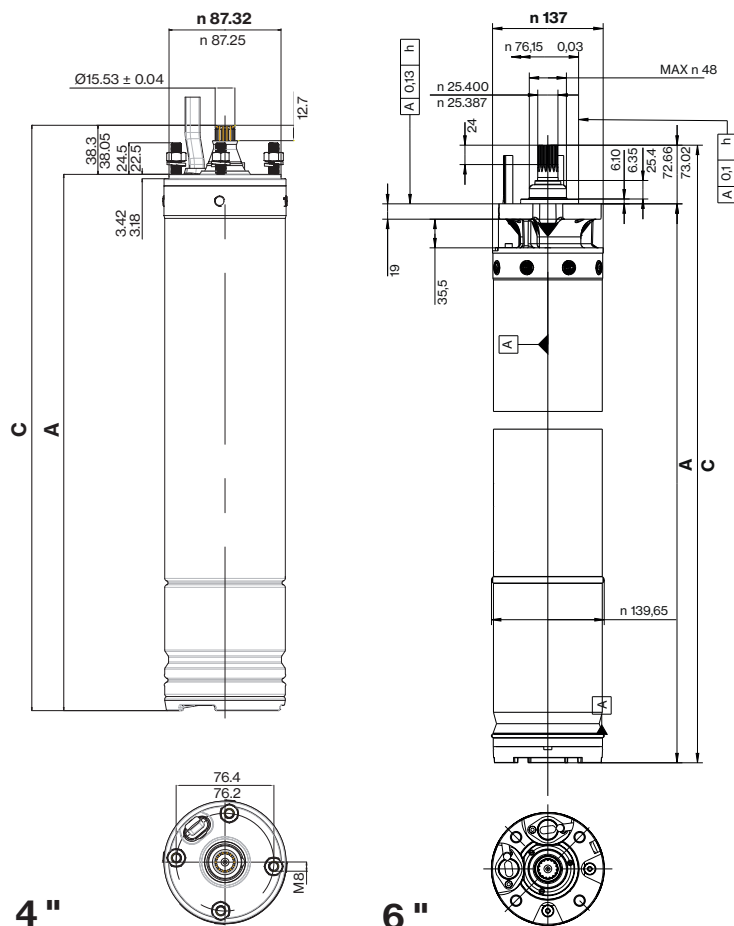
TYPE 1- 230V	V	Power		I <sub>N</sub> A	rpm	Efficiency %			Cos Φ			C μF
		HP	kW			50%	75%	100%	50%	75%	100%	
4MPC 5	220	0,50	0,37	3,2	2835	37	48	55	0,88	0,94	0,97	20
	230			3,3	2850	34	45	53	0,82	0,89	0,94	
4MPC 7	220	0,75	0,55	4,5	2811	41	52	59	0,87	0,94	0,97	25
	230			4,6	2822	37	48	56	0,81	0,89	0,95	
4MPC 10	220	1,0	0,75	5,8	2855	44	55	61	0,81	0,90	0,96	36
	230			6,2	2865	42	52	59	0,74	0,84	0,91	
4MPC 15	220	1,5	1,1	8,1	2815	47	59	65	0,86	0,93	0,98	40
	230			8,3	2826	43	55	62	0,78	0,87	0,94	
4MPC 20	220	2,0	1,5	10,5	2815	51	61	65	0,93	0,98	0,99	50
	230			10,5	2833	47	58	64	0,85	0,93	0,97	
4MPC 30	220	3,0	2,2	15,1	2816	53	63	68	0,90	0,96	0,99	76
	230			15,4	2831	48	60	66	0,80	0,90	0,96	
4MPC 30H	220	3,0	2,2	14,8	2810	57	67	71	0,91	0,96	0,98	76
	230			14,5	2830	54	64	70	0,82	0,91	0,96	
4MPC 50	220	5,0	3,7	24,6	2900	62	72	76	0,85	0,93	0,97	130+178
	230			25,1	2910	55	67	74	0,75	0,87	0,94	

TYPE 3- 400V	V	Power		I <sub>N</sub> A	rpm	Efficiency %			Cos Φ		
		HP	kW			50%	75%	100%	50%	75%	100%
4MPC 5T	380	0,50	0,37	1,3	2845	50	57	61	0,59	0,69	0,76
	400			1,3	2865	49	57	61	0,54	0,64	0,72
	415			1,3	2880	48	56	61	0,50	0,60	0,68
4MPC 7T	380	0,75	0,55	1,8	2840	54	61	64	0,57	0,68	0,77
	400			1,9	2860	51	59	63	0,51	0,62	0,71
	415			1,9	2870	49	58	63	0,47	0,57	0,66
4MPC 10T	380	1,0	0,75	2,2	2835	60	66	69	0,57	0,69	0,78
	400			2,3	2855	57	65	68	0,50	0,62	0,71
	415			2,4	2865	55	63	67	0,45	0,56	0,66
4MPC 15T	380	1,5	1,1	3,1	2835	66	71	73	0,57	0,70	0,79
	400			3,2	2855	63	69	72	0,50	0,62	0,72
	415			3,4	2865	61	68	71	0,44	0,57	0,67
4MPC 20T	380	2,0	1,5	3,8	2825	70	74	74	0,63	0,76	0,83
	400			3,9	2845	67	72	74	0,55	0,68	0,77
	415			4,1	2860	64	71	73	0,48	0,62	0,72
4MPC 30T	380	3,0	2,2	5,7	2810	73	76	76	0,55	0,70	0,80
	400			6,1	2830	69	74	75	0,48	0,62	0,73
	415			6,4	2845	66	72	75	0,43	0,56	0,67
4MPC 30HT	380	3,0	2,2	5,5	2800	70	73	74	0,63	0,76	0,83
	400			5,6	2825	68	73	74	0,56	0,69	0,78
	415			5,7	2840	66	72	73	0,50	0,64	0,73
4MPC 40T	380	4,0	3	7,4	2780	73	74	75	0,59	0,73	0,83
	400			7,5	2810	69	73	74	0,51	0,66	0,78
	415			7,9	2825	66	72	73	0,47	0,60	0,72
4MPC 40HT	380	4,0	3	7,4	2780	73	74	75	0,59	0,73	0,83
	400			7,5	2810	69	73	74	0,51	0,66	0,78
	415			7,9	2825	66	72	73	0,47	0,60	0,72
4MPC 55T	380	5,5	4	9,6	2800	77	79	79	0,57	0,72	0,82
	400			9,8	2820	74	78	78	0,50	0,64	0,77
	415			10,3	2835	70	76	77	0,45	0,59	0,71
4MPC 55HT	380	5,5	4	9,6	2800	77	79	79	0,57	0,72	0,82
	400			9,8	2820	74	78	78	0,50	0,64	0,77
	415			10,3	2835	70	76	77	0,45	0,59	0,71
4MPC 75T	380	7,5	5,5	12,6	2825	79	80	80	0,63	0,77	0,86
	400			12,5	2845	77	80	80	0,55	0,71	0,82
	415			12,8	2860	74	79	79	0,50	0,65	0,78
4MPC 75HT	380	7,5	5,5	12,6	2825	79	80	80	0,63	0,77	0,86
	400			12,5	2845	77	80	80	0,55	0,71	0,82
	415			12,8	2860	74	79	79	0,50	0,65	0,78
4MPC 100T	380	10,0	7,5	16,9	2810	80	80	80	0,65	0,79	0,87
	400			16,9	2835	78	80	80	0,57	0,72	0,83
	415			17,3	2850	75	79	79	0,51	0,66	0,77

## 4MPC/6MPC

TYPE 3- 400V	V	Power		I <sub>N</sub>	I <sub>START</sub>	rpm	Efficiency %	Cos Φ	T <sub>N</sub>	T <sub>s</sub> /T <sub>N</sub>
		HP	kW						A	
6MPC 55T	380			9,6	37,5	2815	76	0,85	13,6	1,44
	400	5,5	4	9,5	38,0	2820	76	0,81	13,5	1,62
	415			9,6	38,5	2835	76	0,77	13,4	1,78
6MPC 75T	380			12,9	50,3	2800	79	0,84	18,7	1,43
	400	7,5	5,5	13,0	52,0	2830	79	0,79	18,5	1,58
	415			13,2	54,1	2850	79	0,75	18,4	1,75
6MPC 100T	380			17,1	63,3	2810	79	0,86	25,6	1,29
	400	10	7,5	16,8	67,2	2835	79	0,82	25,3	1,46
	415			17,1	73,5	2850	79	0,78	25,2	1,54
6MPC 125T	380			20,8	81,1	2800	81	0,84	31,3	1,41
	400	12,5	9,2	20,9	85,7	2830	81	0,80	31,0	1,59
	415			21,5	88,1	2845	81	0,75	30,9	1,73
6MPC 150T	380			24,5	129,9	2800	85	0,81	36,6	1,97
	400	15	11	25,3	136,6	2825	85	0,75	36,4	2,22
	415			26,6	143,6	2840	84	0,70	36,3	2,41
6MPC 200T	380			33,0	168,3	2800	84	0,84	50,2	2,50
	400	20	15	33,4	183,7	2825	84	0,79	49,9	2,74
	415			34,7	190,8	2840	84	0,73	49,7	2,97
6MPC 250T	380			40,1	180,4	2800	85	0,84	62,3	2,10
	400	25	18,5	40,7	187,2	2825	85	0,79	61,9	2,35
	415			42,1	193,7	2840	85	0,73	61,5	2,57
6MPC 300T	380			50,3	286,7	2780	86	0,79	73,1	2,25
	400	30	22	53,3	293,1	2810	85	0,71	72,7	2,52
	415			57,6	311,0	2825	84	0,64	72,5	2,73
6MPC 400T	380			63,2	297,0	2780	83	0,88	101,5	1,58
	400	40	30	61,9	309,5	2810	84	0,85	100,9	1,76
	415			62,2	317,2	2825	84	0,81	100,3	1,91

TYPE	DIMENSIONS			Kg	Oil
	Axial load	A	C		Kg
	N	mm			
4MPC 5	1500	364	402	8,1	0,71
4MPC 7	1500	389	427	9,2	0,72
4MPC 10	1500	411	449	10,3	0,76
4MPC 15	2500	434	472	11,4	0,79
4MPC 20	2500	467	505	12,8	0,76
4MPC 30	2500	565	603	17,4	0,86
4MPC 30H	4500	565	603	17,4	0,84
4MPC 50	2500	680	718	24,1	0,86
4MPC 5T	1500	350	388	7,4	0,70
4MPC 7T	1500	364	402	8,0	0,71
4MPC 10T	2500	384	422	8,8	0,72
4MPC 15T	2500	411	449	10,6	0,70
4MPC 20T	2500	428	466	10,8	0,74
4MPC 30T	2500	467	505	12,5	0,78
4MPC 30HT	4500	467	505	12,5	0,78
4MPC 40T	2500	522	560	15,0	0,80
4MPC 40HT	4500	522	560	15,0	0,80
4MPC 55T	2500	587	625	18,3	0,82
4MPC 55HT	4500	587	625	18,3	0,82
4MPC 75T	2500	687	725	24,3	0,86
4MPC 75HT	4500	687	725	24,3	0,86
4MPC 100T	4500	768	806	28,3	1,09
6MPC 55T	10000	633	706	34	2,50
6MPC 75T	10000	667	740	36	2,95
6MPC 100T	10000	698	771	39	3,15
6MPC 125T	10000	731	804	42	3,25
6MPC 150T	10000	826	899	50	3,30
6MPC 200T	10000	894	967	57	3,50
6MPC 250T	10000	959	1032	65	3,60
6MPC 300T	10000	1116	1189	78	3,80
6MPC 400T	10000	1243	1316	91	4,10



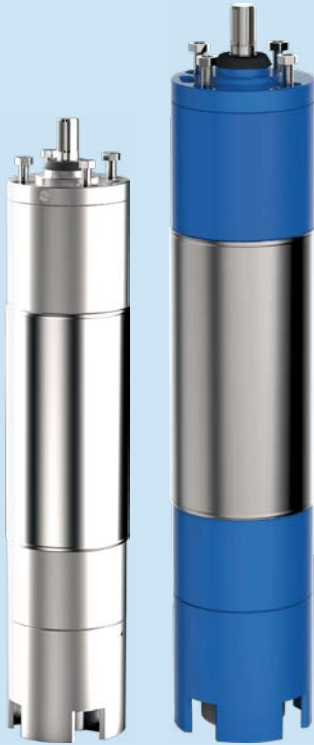
6MPC cables		
TYPE	DOL	λ / Δ
4 × 4 mm <sup>2</sup>	4 - 18,5 kW	4 - 30 kW
3 × 8 mm <sup>2</sup> + 8 mm <sup>2</sup>	22 - 30 kW	-

4"

6"

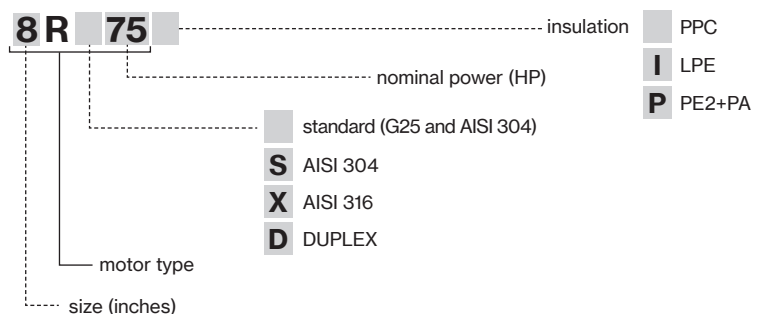
# 6R/8R/10R

6", 8", 10" rewindable submersible water-filled motors with NEMA coupling flange and shaftend. Power from 4 kW up to 185 kW. Available in PPC (standard), LPE and PE2+PA insulation class. The motor can be supplied in stainless steel AISI 304, AISI 316 or Duplex EN 1.4462.



## Construction features

<b>Upper and bottom support</b>	G25 (6R / 8R / 10R) stainless steel AISI 304 (6RS / 8RS / 10RS) stainless steel AISI 316 (6RX / 8RX / 10RX) Duplex EN 1.4462 (6RD / 8RD / 10RD)
<b>Stator sleeve</b>	stainless steel AISI 304 - (R) stainless steel AISI 304 - (RS) stainless steel AISI 316 - (RX) Duplex EN 1.4462 - (RD)
<b>Shaft end</b>	stainless steel AISI 431 - (R) stainless steel AISI 431 - (RS) stainless steel AISI 316 - (RX) Duplex EN 1.4462 - (RD)
<b>Seal type</b>	lip seal (standard); mechanical seal (on request)
<b>Bearings</b>	radial and axial, water lubricated
<b>Thrust bearing</b>	Michell
<b>Voltage</b>	3~ 400V ± 10% - 50Hz 3~ 400/690V ± 10% - 50Hz
<b>Min. cooling flow</b>	0,5 m/s
<b>Insulation class</b>	Y (max 30° C) for PPC F (max 50° C) for PE2+PA or LPE
<b>Insulation</b>	PPC (standard) PE2 + PA or LPE (on request)
<b>Protection degree</b>	IP68
<b>Max depth immersion</b>	350m
<b>Available on demand</b>	- PT 100 - Star/Delta starting - Cooling Sleeve - Cer./Carb./NBR Seal - SIC/SIC/NBR Seal

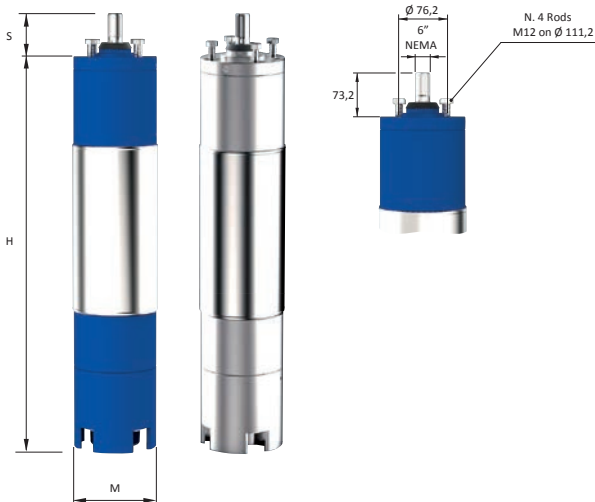


# 6R-6RS-6RX-6RD

TYPE	Power		V	I <sub>N</sub>	rpm	Efficiency %			Cos φ			Starting			Axial load N	Start/ hour (max)									
	HP	kW				50%	75%	100%	50%	75%	100%	Direct	Star-delta	Statoric											
			Cs/Cn	Is / In	Is / In							Is / In													
6R7	7,5	5,5	380	12,4	2846	77,0	82,0	81,0	0,67	0,78	0,83	1,60	5,60	1,90	3,40	1600	15								
			400	12,3	2859	76,0	81,0	80,0	0,65	0,76	0,81														
			415	12,3	2880	75,0	80,0	79,0	0,63	0,74	0,79														
6R10	10	7,5	380	16,6	2843	78,0	82,5	82,0	0,68	0,78	0,84	1,80	5,70	1,90	3,40			1600	15						
			400	16,3	2861	77,0	81,5	81,0	0,66	0,76	0,82														
			415	16,3	2882	76,0	80,5	80,0	0,64	0,74	0,80														
6R12	12,5	9,2	380	20,2	2846	79,0	83,0	82,0	0,68	0,79	0,85	1,80	5,70	1,90	3,40					1600	15				
			400	19,9	2864	78,0	82,0	81,0	0,66	0,77	0,83														
			415	19,9	2886	77,0	81,0	80,0	0,64	0,75	0,81														
6R15	15	11	380	23,7	2849	80,0	84,5	83,5	0,69	0,79	0,85	1,90	5,90	2,00	3,50							1600	15		
			400	23,4	2867	79,0	83,5	82,5	0,67	0,77	0,83														
			415	23,4	2882	78,0	82,5	81,5	0,65	0,75	0,81														
6R17	17,5	13	380	27,7	2851	81,0	84,5	84,0	0,69	0,79	0,85	1,80	6,00	2,00	3,60									1600	15
			400	27,3	2870	80,0	83,5	83,0	0,67	0,77	0,83														
			415	27,3	2887	79,0	82,5	82,0	0,65	0,75	0,81														
6R20	20	15	380	32	2852	82,0	85,0	84,0	0,69	0,79	0,85	1,70	5,90	2,00	3,50	1600	15								
			400	31,5	2871	81,0	84,0	83,0	0,67	0,77	0,83														
			415	31,5	2883	80,0	83,0	82,0	0,65	0,75	0,81														
6R25	25	18,5	380	38,9	2854	82,5	85,5	85,0	0,69	0,79	0,85	1,70	5,60	1,90	3,40			1600	15						
			400	38,3	2873	81,5	84,5	84,0	0,67	0,77	0,83														
			415	38,6	2889	80,0	83,0	82,5	0,65	0,75	0,81														
6R30	30	22	380	45,8	2857	82,5	85,5	85,0	0,70	0,80	0,86	1,70	5,90	2,00	3,50					1600	15				
			400	45,1	2877	81,5	84,5	84,0	0,68	0,78	0,84														
			415	45,3	2890	80,0	83,0	82,5	0,66	0,76	0,82														
6R35	35	26	380	53,8	2867	82,5	86,0	85,5	0,71	0,81	0,86	1,70	5,70	1,90	3,40							2500	15		
			400	52,9	2878	81,5	85,0	84,5	0,69	0,79	0,84														
			415	53,2	2891	80,0	83,5	83,0	0,67	0,77	0,82														
6R40	40	30	380	62,1	2861	82,5	86,0	85,5	0,72	0,81	0,86	1,70	5,60	1,90	3,40									2500	15
			400	61,1	2880	81,5	85,0	84,5	0,70	0,79	0,84														
			415	61,4	2892	80,0	83,5	83,0	0,68	0,77	0,82														
6R50	50	37	380	77	2863	83,0	86,5	85,0	0,72	0,81	0,86	1,60	5,60	1,90	3,40	2500	15								
			400	75,8	2882	82,0	85,5	84,0	0,70	0,79	0,84														
			415	76,2	2891	80,5	84,0	82,5	0,68	0,77	0,82														

Service factor: 50Hz=1 - Direction of rotation (view from shaft projection side: anti-clockwise)  
Cs = Starting torque - Cn = Nominal couple - Is = Starting current - In = Nominal current

TYPE	Power		Cables		Cable length	Max water temperature by winding type	
	HP	kW	Starting			m	PPC
			Direct	Star Delta			
6R7	7,5	5,5	4G × 4 mm <sup>2</sup>	2×(4G × 4 mm <sup>2</sup> )	3	30 °C	50 °C
6R10	10	7,5	4G × 4 mm <sup>2</sup>	2×(4G × 4 mm <sup>2</sup> )			
6R12	12,5	9,2	4G × 4 mm <sup>2</sup>	2×(4G × 4 mm <sup>2</sup> )			
6R15	15	11	4G × 4 mm <sup>2</sup>	2×(4G × 4 mm <sup>2</sup> )			
6R17	17,5	13	4G × 6 mm <sup>2</sup>	2×(4G × 4 mm <sup>2</sup> )			
6R20	20	15	4G × 6 mm <sup>2</sup>	2×(4G × 4 mm <sup>2</sup> )			
6R25	25	18,5	4G × 6 mm <sup>2</sup>	2×(4G × 4 mm <sup>2</sup> )			
6R30	30	22	4G × 6 mm <sup>2</sup>	2×(4G × 4 mm <sup>2</sup> )			
6R35	35	26	4G × 10 mm <sup>2</sup>	2×(4G × 6 mm <sup>2</sup> )			
6R40	40	30	4G × 10 mm <sup>2</sup>	2×(4G × 6 mm <sup>2</sup> )			
6R50	50	37	4G × 10 mm <sup>2</sup>	2×(4G × 10 mm <sup>2</sup> )			



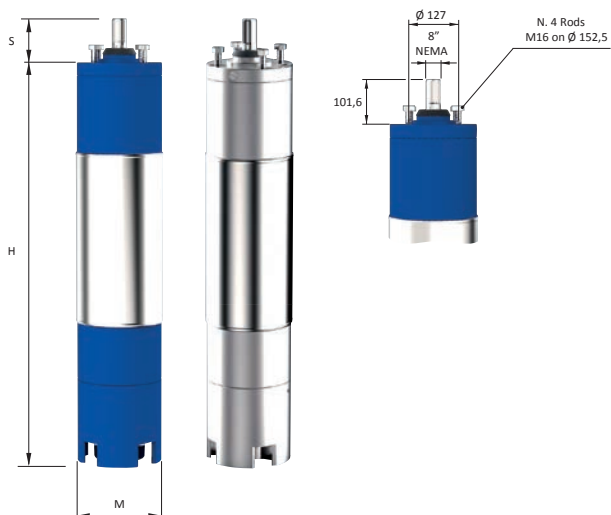
TYPE	DIMENSIONS			Kg
	H	S	M	
	mm			
6R7	671	73,2	145	45
6R10	701			55
6R12	751			60
6R15	811			65
6R17	841			70
6R20	931			75
6R25	991			83
6R30	1071			92
6R35	1181			100
6R40	1251			108
6R50	1341			118

# 8R-8RS-8RX-8RD

TYPE	Power		V	I <sub>N</sub> A	rpm	Efficiency %			Cos φ			Starting			Axial load N	Start/ hour (max)	
	HP	kW				50%	75%	100%	50%	75%	100%	Direct	Star-delta	Statoric			
			Cs/Cn	Is / In	Is / In	Is / In											
8R40	40	30	380	64,4	2859	79,8	85,2	84,3	0,77	0,81	0,84	2,05	6,40	2,10	3,80	4500	10
			400	61,7	2875	80,1	85,0	84,7	0,76	0,80	0,83						
			415	60	2892	79,3	84,5	85,0	0,75	0,79	0,82						
8R50	50	37	380	75,4	2865	80,3	85,7	84,8	0,79	0,83	0,88	1,95	5,70	2,00	3,70		
			400	73	2888	80,6	85,5	85,2	0,77	0,81	0,86						
			415	71,8	2904	79,8	85,0	85,5	0,75	0,79	0,84						
8R60	60	45	380	90,2	2882	80,8	86,2	85,3	0,76	0,86	0,87	1,95	5,80	2,00	3,70		
			400	86,3	2893	81,1	86,0	85,7	0,74	0,81	0,86						
			415	84,8	2905	80,3	85,5	86,0	0,72	0,79	0,84						
8R75	75	55	380	110,2	2880	81,3	86,7	85,8	0,76	0,85	0,89	1,85	5,80	2,00	3,60		
			400	106,2	2889	81,6	86,5	86,2	0,74	0,81	0,87						
			415	105,4	2901	80,8	86,0	86,5	0,72	0,80	0,84						
8R90	90	66	380	130,7	2881	82,4	87,5	86,8	0,76	0,86	0,89	1,85	5,80	2,00	3,50		
			400	126	2892	82,6	87,4	87,2	0,74	0,82	0,87						
			415	125,1	2905	81,9	86,9	87,5	0,72	0,79	0,84						
8R100	100	75	380	148,5	2882	82,3	87,7	86,8	0,75	0,85	0,89	1,80	5,80	2,00	3,50		
			400	143,2	2893	82,6	87,5	87,2	0,73	0,81	0,87						
			415	142,1	2905	81,8	87,0	87,5	0,71	0,77	0,84						
8R125	125	92	380	183,5	2880	83,0	86,0	85,7	0,75	0,84	0,89	1,80	5,70	1,90	3,50		
			400	175,1	2891	83,5	86,5	86,3	0,74	0,83	0,88						
			415	172,7	2903	83,0	86,0	86,3	0,72	0,81	0,86						
8R150	150	110	380	218,6	2885	85,5	86,5	86,0	0,74	0,83	0,89	1,80	5,70	1,90	3,50		
			400	211	2898	86,1	87,0	86,6	0,73	0,82	0,87						
			415	212,1	2908	85,5	86,5	86,0	0,72	0,81	0,84						

Service factor: 50Hz=1 - Direction of rotation (view from shaft projection side: anti-clockwise)  
Cs = Starting torque - Cn = Nominal couple - Is = Starting current - In = Nominal current

TYPE	Power		Cables		Cable length	Max water temperature by winding type	
	HP	kW	Starting			m	PPC
			Direct	Star Delta			
8R40	40	30	3×1×10 mm <sup>2</sup>	6×1×10 mm <sup>2</sup>	3	30 °C	50 °C
8R50	50	37	3×1×10 mm <sup>2</sup>	6×1×10 mm <sup>2</sup>			
8R60	60	45	3×1×16 mm <sup>2</sup>	6×1×10 mm <sup>2</sup>			
8R75	75	55	3×1×16 mm <sup>2</sup>	6×1×10 mm <sup>2</sup>			
8R90	90	66	3×1×25 mm <sup>2</sup>	6×1×16 mm <sup>2</sup>			
8R100	100	75	3×1×25 mm <sup>2</sup>	6×1×16 mm <sup>2</sup>			
8R125	125	92	3×1×25 mm <sup>2</sup>	6×1×16 mm <sup>2</sup>			
8R150	150	110	3×1×35 mm <sup>2</sup>	6×1×25 mm <sup>2</sup>			



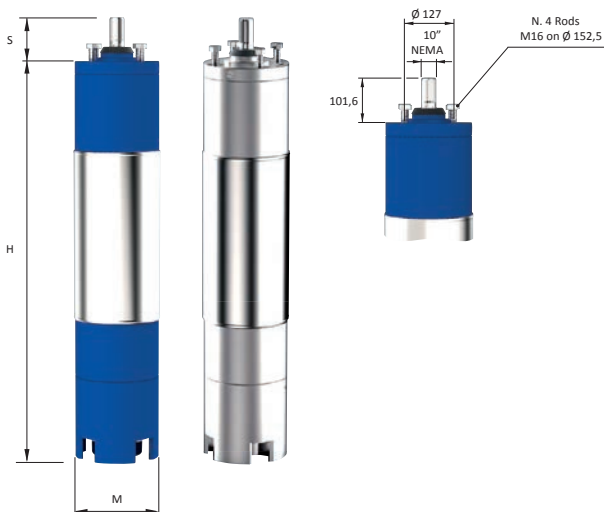
TYPE	DIMENSIONS			Kg
	H	S	M	
	mm			
8R40	993	101,6	194	150
8R50	1043			160
8R60	1123			178
8R75	1233			200
8R90	1302			214
8R100	1383			230
8R125	1583			270
8R150	1733			300

# 10R-10RS-10RX-10RD

TYPE	Power		V	I <sub>N</sub> A	rpm	Efficiency %			Cos φ			Starting			Axial load N	Start/ hour (max)	
	HP	kW				50%	75%	100%	50%	75%	100%	Direct	Star-delta	Statoric			
			Cs/Cn	Is / In	Is / In	Is / In											
10R100	100	75	380	154,3	2884	86,9	87,0	88,0	0,73	0,80	0,84	1,80	6,40	1,90	3,40	6000	10
			400	142,7	2896	85,9	88,0	88,3	0,72	0,84	0,86						
			415	143,9	2909	86,4	88,3	88,5	0,64	0,77	0,82						
10R125	125	92	380	188,7	2890	87,2	87,3	88,3	0,74	0,83	0,84	1,60	6,30	1,80	3,40		
			400	174,5	2904	86,2	88,3	88,6	0,71	0,83	0,86						
			415	176	2914	86,7	88,6	88,8	0,63	0,75	0,82						
10R150	150	110	380	222,2	2930	87,9	88,0	89,0	0,71	0,81	0,85	1,55	6,70	1,80	3,30		
			400	207	2937	86,9	89,0	89,3	0,73	0,84	0,86						
			415	211,3	2943	87,4	89,3	89,5	0,63	0,77	0,81						
10R175	175	130	380	265,6	2895	87,5	88,2	89,0	0,73	0,81	0,83	1,85	5,80	2,00	3,60		
			400	245,3	2915	86,5	89,3	89,4	0,71	0,83	0,85						
			415	244,6	2928	87,1	89,5	89,6	0,62	0,75	0,82						
10R200	200	150	380	299,1	2898	87,1	88,2	89,0	0,72	0,82	0,84	1,55	6,50	1,80	3,30		
			400	277,2	2917	86,1	88,5	89,1	0,71	0,81	0,86						
			415	278,1	2931	86,5	88,1	88,7	0,65	0,75	0,83						
10R225	225	165	380	337,2	2901	86,5	87,5	88,6	0,72	0,82	0,84	1,55	6,50	1,80	3,30		
			400	313,3	2920	85,4	87,2	88,5	0,71	0,81	0,86						
			415	313,9	2930	86,0	87,3	88,2	0,65	0,75	0,83						
10R250	250	185	380	370	2904	87,4	88,0	89,0	0,73	0,83	0,85	1,50	6,50	1,80	3,30		
			400	342,2	2924	86,5	88,7	89,3	0,72	0,82	0,87						
			415	340,9	2936	87,3	89,3	89,5	0,65	0,77	0,84						

Service factor: 50Hz=1 - Direction of rotation (view from shaft projection side: anti-clockwise)  
 Cs = Starting torque - Cn = Nominal couple - Is = Starting current - In = Nominal current

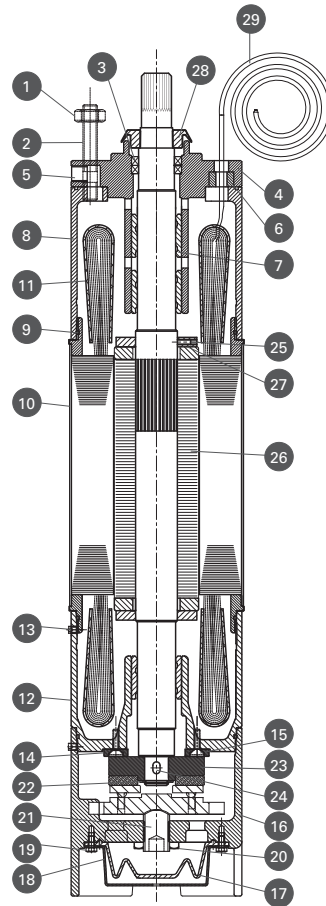
TYPE	Power		Cables		Cable length	Max water temperature by winding type	
	HP	kW	Starting			m	PPC
			Direct	Star Delta			
10R100	100	75	3×1×25 mm <sup>2</sup>	6×1×16 mm <sup>2</sup>	3	30 °C	50 °C
10R125	125	92	3×1×25 mm <sup>2</sup>	6×1×16 mm <sup>2</sup>			
10R150	150	110	3×1×35 mm <sup>2</sup>	6×1×16 mm <sup>2</sup>			
10R175	175	130	3×1×35 mm <sup>2</sup>	6×1×25 mm <sup>2</sup>			
10R200	200	150	3×1×50 mm <sup>2</sup>	6×1×25 mm <sup>2</sup>			
10R225	225	165	3×1×50 mm <sup>2</sup>	6×1×35 mm <sup>2</sup>			
10R250	250	185	3×1×50 mm <sup>2</sup>	6×1×35 mm <sup>2</sup>			



TYPE	DIMENSIONS			Kg
	H	S	M	
	mm			
10R100	1284	101,6	240	270
10R125	1354			310
10R150	1504			350
10R175	1634			385
10R200	1734			415
10R225	1854			444
10R250	1984			480



# 6R/8R/10R

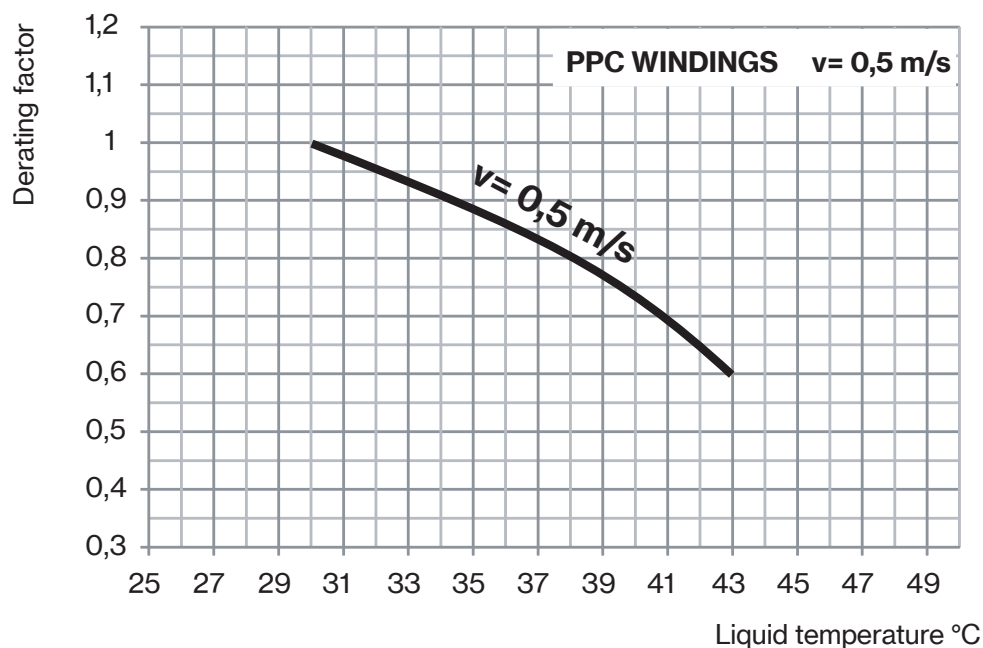


N. CODE	(*) N°	DESCRIPTION	MATERIAL STANDARD VERSION R	MATERIAL VERSION RS-RX-RD
1		<b>N.4 Nuts</b>	AISI 304	AISI 304 / AISI 316 / DUPLEX
2		<b>N.4 Studs</b>	AISI 304	AISI 304 / AISI 316 / DUPLEX
3(*)	1	<b>N.2 Seal rings</b>	NBR	NBR
4		<b>Upper support</b>	CAST IRON	AISI 304 / AISI 316 / DUPLEX
5		<b>N.2 Grains for Liquid filling</b>	AISI 304	AISI 304 / AISI 316 / DUPLEX
6		<b>Grommet</b>	NBR	NBR
7(*)	3	<b>N.3 Bearings</b>	GRAPHITE	GRAPHITE
8		<b>Motor casing</b>	CAST IRON	AISI 304 / AISI 316 / DUPLEX
9(*)	4	<b>N.4 O-ring</b>	NBR	NBR
10		<b>Motor external sleeve</b>	AISI 304	AISI 304 / AISI 316 / DUPLEX
11		<b>N.2 Covers winding protection</b>	POM	POM
12		<b>Lower support</b>	CAST IRON	AISI 304 / AISI 316 / DUPLEX
13		<b>N.3 Screw</b>	AISI 304	AISI 304 / AISI 316 / DUPLEX
14(*)	2	<b>N.2 Disks controsuspention</b>	TEFLON	TEFLON
15		<b>N.2 Screws for controsuspention</b>	AISI 304	AISI 304
16		<b>Base motor</b>	CAST IRON	AISI 304 / AISI 316 / DUPLEX
17(*)	1	<b>Diaphram</b>	NBR	NBR
18		<b>Cover diaphram</b>	AISI 304	AISI 304 / AISI 316 / DUPLEX
19		<b>N.4 Screw for cover diaphram</b>	AISI 304	AISI 304 / AISI 316 / DUPLEX
20		<b>Nut</b>	AISI 304	AISI 304
21		<b>Screw</b>	AISI 304	AISI 304
22		<b>Seeger</b>	AISI 304	AISI 304
23(*)	1	<b>Trust bearing</b>	AISI + GRAPHITE	AISI + GRAPHITE
24		<b>Key</b>	AISI 304	AISI 304
25		<b>N.2 Grains for stabilizer</b>	AISI 304	AISI 304
26		<b>Complete rotor</b>	AISI	AISI
27		<b>N.2 Stabilizers</b>	AISI	AISI
28(*)	1	<b>Deflector</b>	NBR	NBR
29		<b>Cable</b>	H07 RNF	H07 RNF

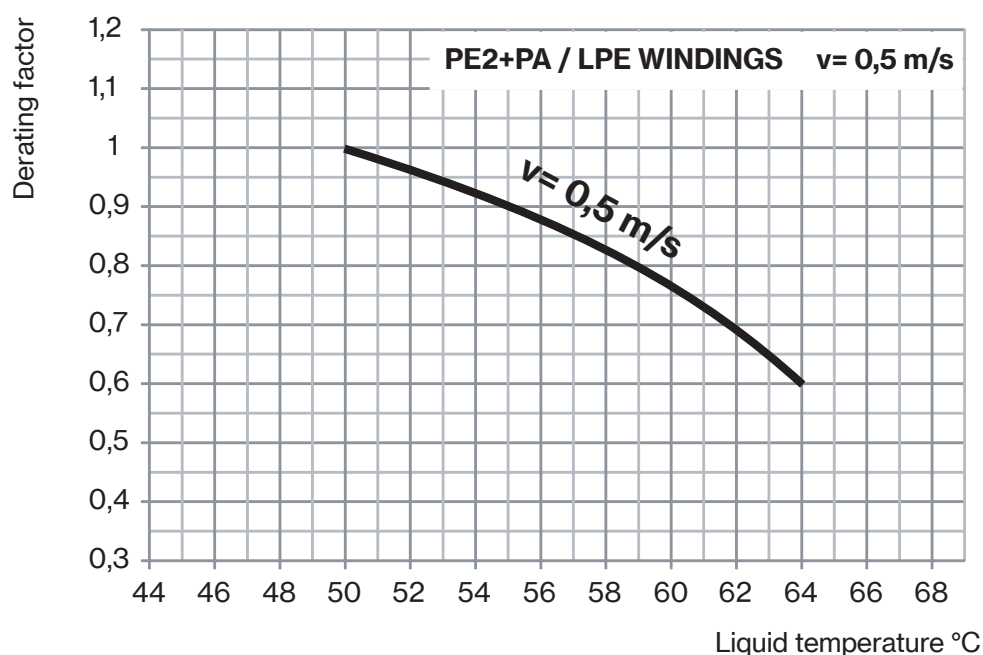
\*Reccomended spare parts

## OPERATING CONDITIONS AT DIFFERENT WATER TEMPERATURE

All 6" - 8" - 10" standard motors with PPC windings can operate at liquid temperatures up to 30 °C without derating factor. From 31 °C till 43 °C the motors have to be derated according to the factor shown in the following graph.



All 6" - 8" - 10" motors with PE2+PA / LPE windings can operate at liquid temperatures up to 50 °C without derating factor. From 51 °C till 64 °C the motors have to be derated according to the factor shown in the following graph.



Motor size	Max motor starts per hour	Winding max temperature (°C)			Liquid max temperature (°C)		
		PPC	LPE	PE2+PA	PPC	LPE	PE2+PA
6"	15	70	80	80	30	50	50
8"	10	70	80	80	30	50	50
10"	10	70	80	80	30	50	50

PPC = Y insulation class

LPE = F insulation class

PE2+PA = / F insulation class

Minimum liquid velocity for motor 6" - 8" - 10": 0,5 m/s

# PTR12/PTR14

Deepwell Motors

12" - 14" submersible rewindable water-filled motors. Power from 185 kW up to 400 kW. Standard PE2+PA winding insulation class for temperature up to 30°C.

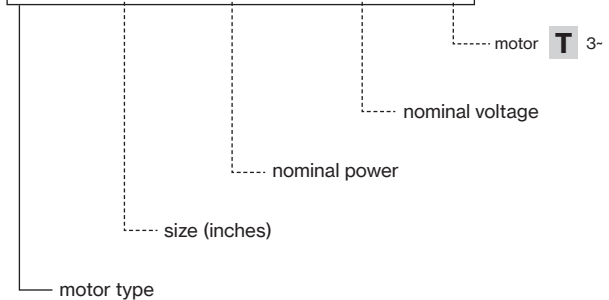


## Construction features

<b>Upper and bottom support</b>	GG25 or stainless steel AISI 316
<b>Stator sleeve</b>	stainless steel AISI 316
<b>Shaft end</b>	stainless steel
<b>Mechanical seal</b>	SIC / SIC / NBR
<b>Bearings</b>	steel / NBR
<b>Voltage</b>	3- 380-400V - 50Hz
<b>Cooling flow</b>	min 0,5 m/s
<b>Insulation class</b>	F
<b>Insulation</b>	PE2 + PA
<b>Protection degree</b>	IP68
<b>Available on demand</b>	<ul style="list-style-type: none"> <li>- Full motor in AISI 316</li> <li>- Full motor in AISI 904</li> <li>- PT 100</li> <li>- Star/Delta starting</li> <li>- Cooling Sleeve</li> <li>- Clockwise rotation</li> </ul>

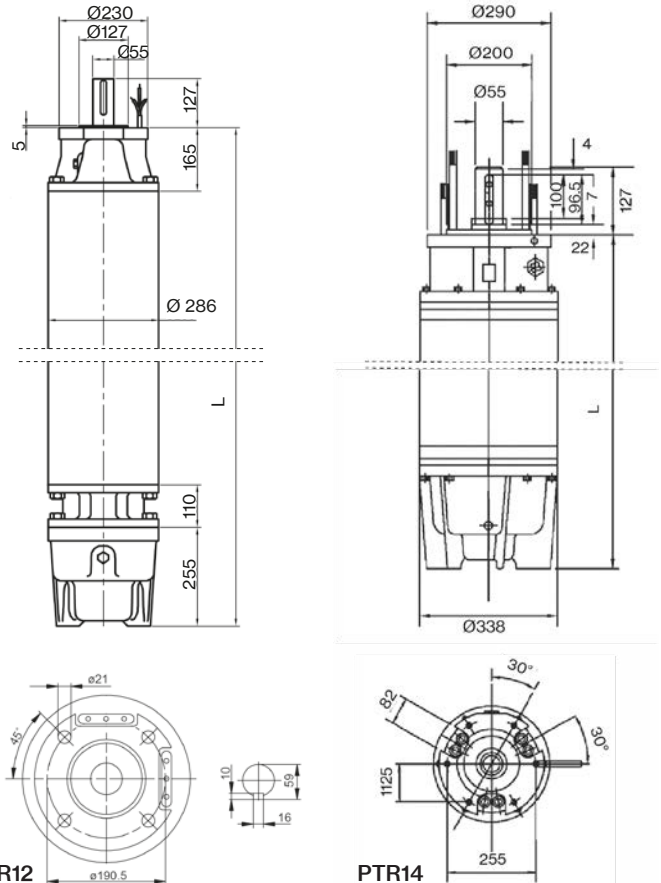


**PTR 12 - 220kW-400V - T**

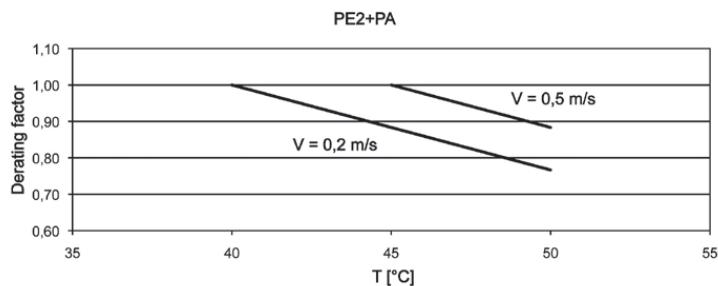


TYPE 3- 400V	V	P <sub>2</sub>		I <sub>N</sub> A	I <sub>s</sub> /I <sub>N</sub>	P <sub>1</sub> kW	rpm	Efficiency %	Cos Φ	CABLE	
		HP	kW							Lenght m	Size mm <sup>2</sup>
		PTR12 - 220kW	400	300	220	424	6,1	250	2920	88	0,85
PTR12 - 250kW	400	340	250	481	5,9	284	2920	88	0,85	3×70+1×50	
PTR14 - 294kW	380	400	300	551	5,8	327	2900	90	0,9	8	3×95+1×50
PTR14 - 330kW	380	450	330	620	6	367	2900	90	0,9		3×95+1×50
PTR14 - 367kW	380	500	370	693	6,4	406	2900	90,5	0,89		3×95+1×50
PTR14 - 404kW	380	550	400	798	6,8	446	2900	90,5	0,85		3×95+1×50

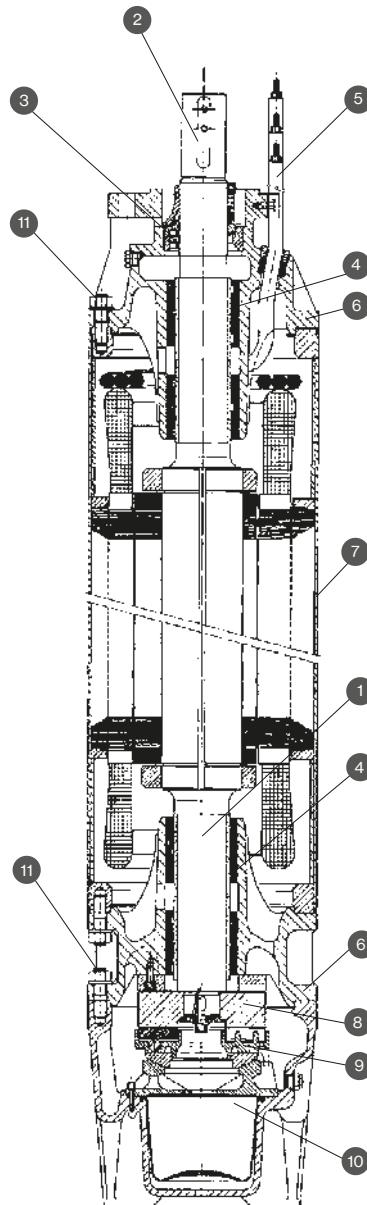
TYPE	DIMENSIONS				Kg
	Power		Axial load N	L mm	
	HP	kW			
PTR12 - 220kW	300	220	70000	2110	700
PTR12 - 250kW	340	250		2280	775
PTR14 - 294kW	400	300	70000	2020	845
PTR14 - 330kW	450	330		2160	906
PTR14 - 367kW	500	370		2320	1010
PTR14 - 404kW	550	400		2460	1105



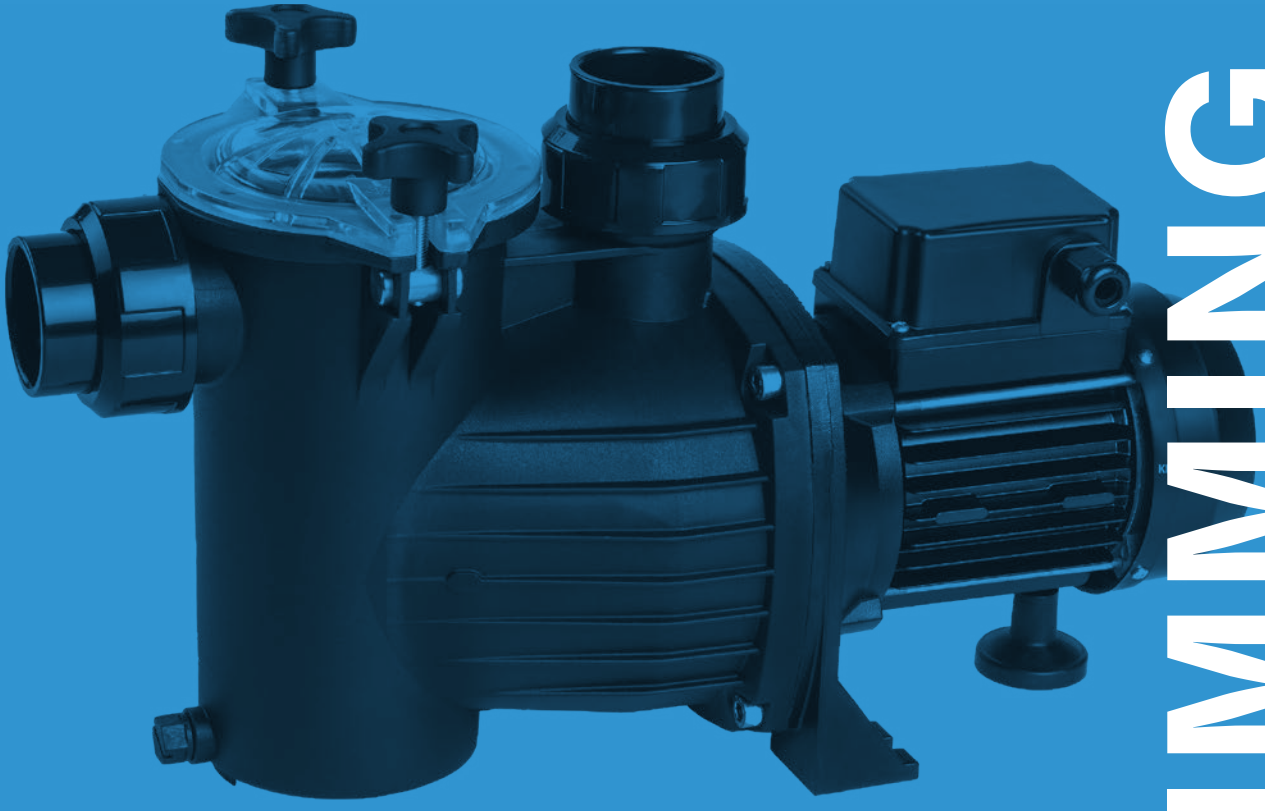
### POWER DERATING AT DIFFERENT LIQUID TEMPERATURE



The graph above does not include the PTR12 220kW, 250kW and 300kW models. The maximum temperature is 10° C for models PTR12 220kW and 250kW, 25° C for PTR12 300kW.



N.	PARTS	STD VERSION	VERSION 316 SS	VERSION 904 SS
1	<b>Shaft</b>	stainless steel	stainless steel	stainless steel
2	<b>Shaft Terminal</b>	AISI 316 stainless steel	AISI 316 stainless steel	AISI 904 stainless steel
3	<b>Mechanical Seal</b>	ceramic/carbon	SIC/SIC	SIC/SIC
4	<b>Bushes</b>	steel/NBR	steel/NBR	steel/NBR
5	<b>Cable</b>	EPDM	EPDM	EPDM
6	<b>Structural Parts</b>	cast iron	AISI 316 stainless steel	AISI 904 stainless steel
7	<b>Jacket</b>	AISI 316 stainless steel	AISI 316 stainless steel	AISI 904 stainless steel
8	<b>Thrust Plate</b>	steel	steel	steel
9	<b>Thrust Bearing</b>	steel/NBR	steel/NBR	steel/NBR
10	<b>Diaphragm</b>	EPDM	EPDM	EPDM
11	<b>Screws</b>	AISI 304 stainless steel	AISI 316 stainless steel	AISI 904 stainless steel



# SWIMMING POOL



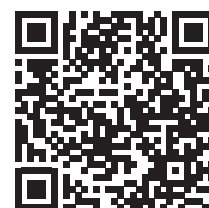
Self priming pumps for pools with a large built-in pre-filter, which, together with the excellent hydraulic performance of the pump, generates a very high filtration capacity. The transparent polycarbonate lid easily allows inspection of the pre-filter sieve. Pump body, seal housing and diffuser reinforced with glass fibre polypropylene are resistant to chemical products used for pools and guarantee excellent duration.

### Construction features

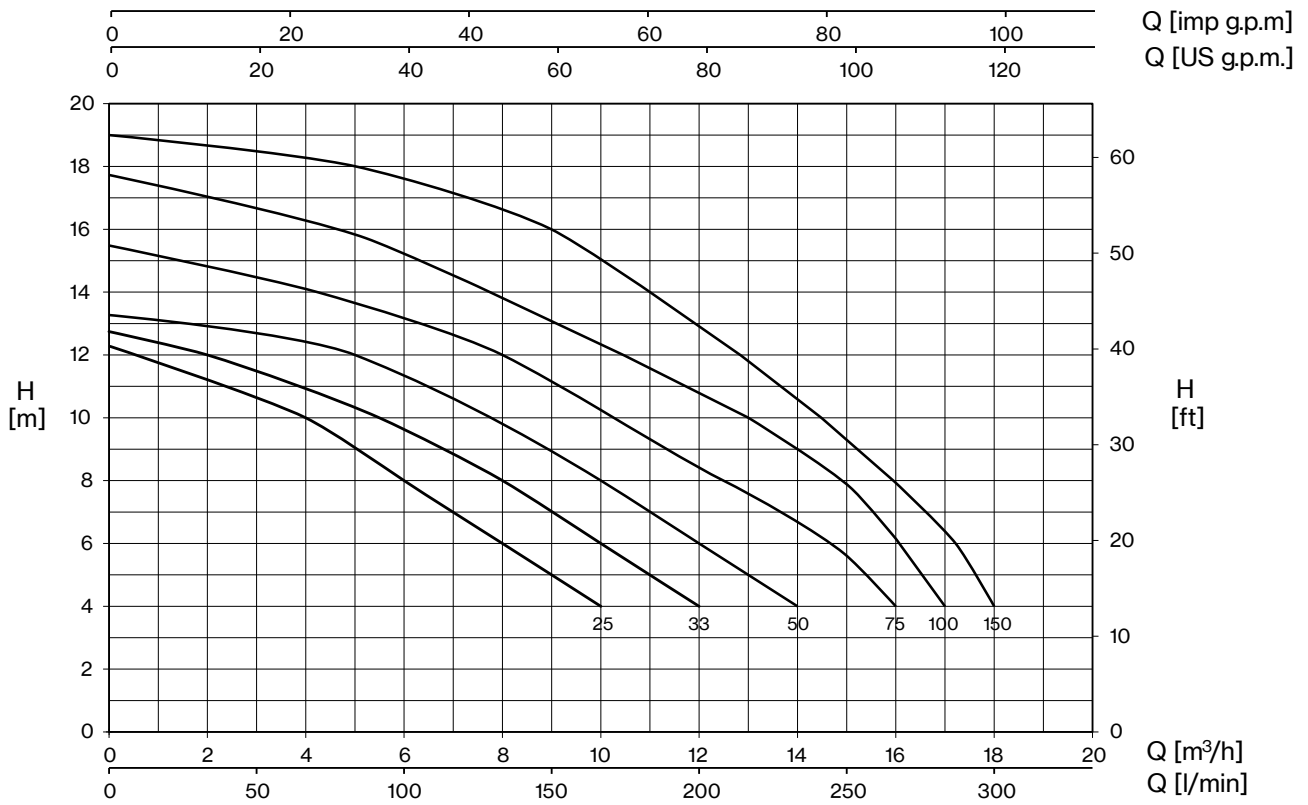
<b>Painting</b>	cataphoresis
<b>Pump body, seal housing, diffuser</b>	polypropylene + fiberglass
<b>Motor bracket</b>	aluminum
<b>Impeller</b>	Noryl®
<b>Mechanical seal</b>	ceramic-graphite-AISI 316
<b>Motor shaft</b>	stainless steel AISI 316
<b>Liquid temperature</b>	max 40 °C
<b>Pre-filter cover</b>	polycarbonate

### Motor

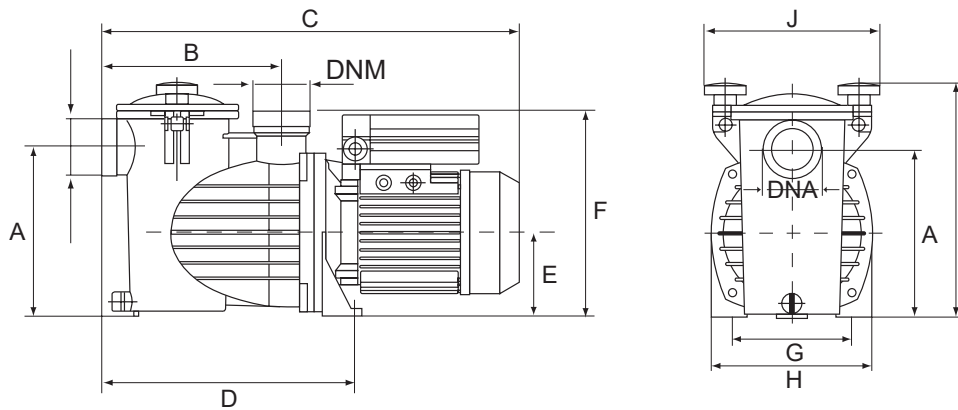
	3~ 230/400V - 50Hz
<b>2 poles induction motor</b>	1~ 230V - 50Hz
<b>Insulation class</b>	F
<b>Protection degree</b>	IP55



# POOL1



TYPE - 50 Hz		P2		CURRENT			H (m)							
1~	3~			1- 230V	3- 230V	3- 400V	4	6	8	10	12	14	16	18
		HP	kW	A			Q (m³/h)							
POOL1 25M	POOL1 25T	0,25	0,16	2,6	1,3	0,8	10,0	8,0	6,0	4,0	0,5			
POOL1 33M	POOL1 33T	0,33	0,25	2,9	1,9	1,1	12,0	10,0	8,0	5,5	2,0			
POOL1 50M	POOL1 50T	0,5	0,37	3,3	2,5	1,4	14,0	12,0	10,0	7,0	5,0			
POOL1 75M	POOL1 75T	0,75	0,55	3,8	3,0	1,7	16,0	15,0	12,5	10,0	8,0	4,2		
POOL1 100M	POOL1 100T	1	0,75	4,2	3,4	2,0	17,0	16,0	15,3	13,0	10,5	7,6	5,5	
POOL1 150M	POOL1 150T	1,5	1,1	7,3	5,0	2,9	18,0	17,3	15,9	14,5	12,8	11,0	9,0	5,0



TYPE		DIMENSIONS (mm)																
1~	3~	A	B	C	D	E	F	G	H	I	J	DNA	DNM	L1	A1	H1	1~	3~
POOL1 25M	POOL1 25T	191	205	470	285	95	233	140	180	265	197	1" 1/2 Ø 50 PVC		630	230	360	9,5	10,8
POOL1 33M	POOL1 33T	191	205	470	285	95	233	140	180	265	197			630	230	360	9,5	10,8
POOL1 50M	POOL1 50T	191	205	470	285	95	233	140	180	265	197			630	230	360	9,5	10,8
POOL1 75M	POOL1 75T	191	205	470	285	95	233	140	180	265	197			630	230	360	10,9	10,8
POOL1 100M	POOL1 100T	191	205	470	285	95	233	140	180	265	197			630	230	360	10,9	10,8
POOL1 150M	POOL1 150T	191	205	470	285	95	233	140	180	265	197			630	230	360	11,6	11,8



# POOL1 EASY

Swimming Pool



POOL1 pumps with electronic EASY control panel for an intuitive setting of the pool. It includes dry running and overload protection, security for people, filtration timers and input / outputs for the management of the lighting system, salt chlorinator, heat pump, temperature probe.



EASY control panel

## Construction features

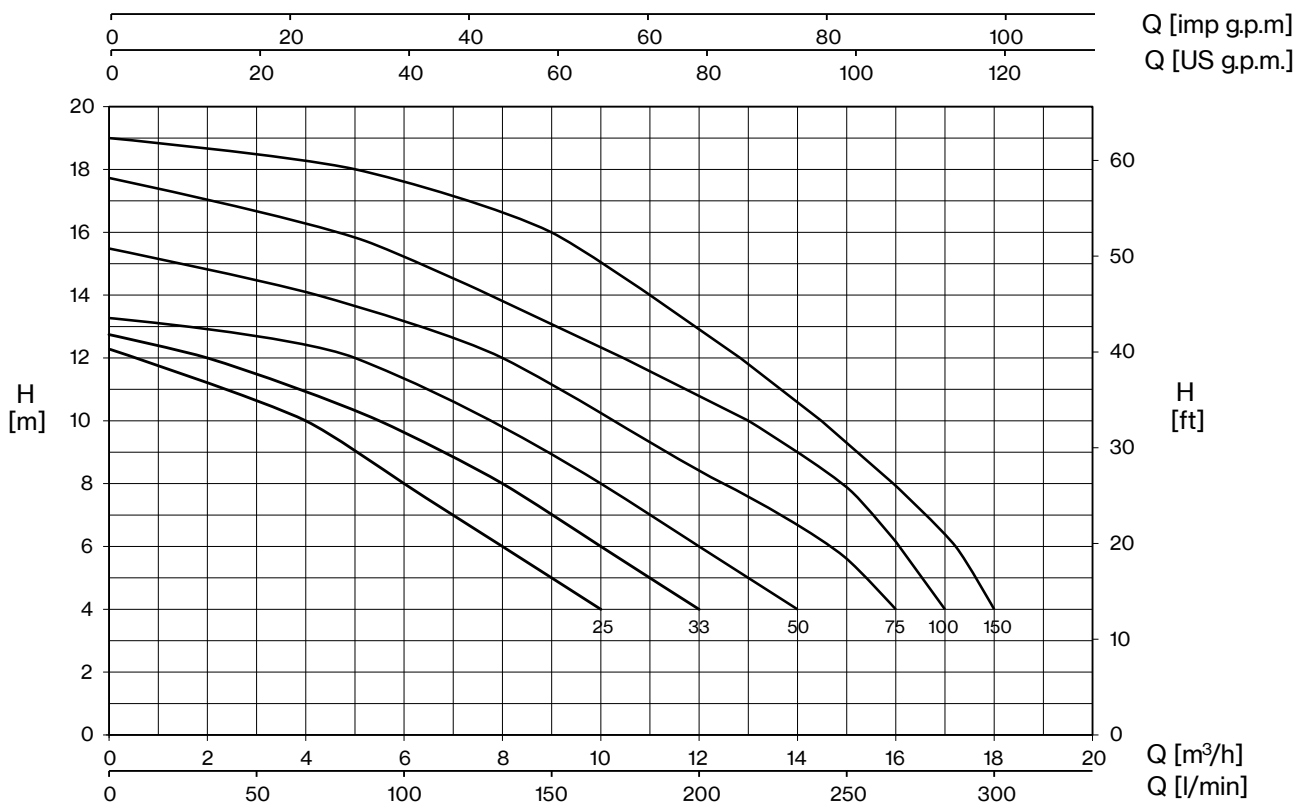
<b>Painting</b>	cataphoresis
<b>Pump body, seal housing, diffuser</b>	polypropylene + fiberglass
<b>Motor bracket</b>	aluminum
<b>Impeller</b>	Noryl®
<b>Mechanical seal</b>	ceramic-graphite-AISI 316
<b>Motor shaft</b>	stainless steel AISI 316
<b>Liquid temperature</b>	max 40 °C
<b>Pre-filter cover</b>	polycarbonate

## Motor

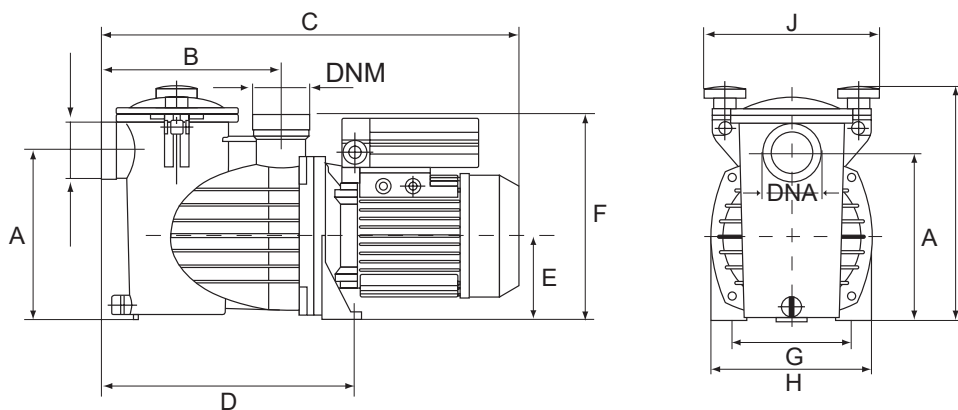
<b>2 poles induction motor</b>	1~ 230V - 50Hz
<b>Insulation class</b>	F
<b>Protection degree</b>	IP55



# POOL1 EASY



TYPE - 50 Hz	P2		CURRENT	H (m)									
				1- 230V	4	6	8	10	12	14	16	18	
1-	HP	kW	A	Q (m³/h)									
POOL1 EASY 25M	0,25	0,16	2,6	10,0	8,0	6,0	4,0	0,5					
POOL1 EASY 33M	0,33	0,25	2,9	12,0	10,0	8,0	5,5	2,0					
POOL1 EASY 50M	0,5	0,37	3,3	14,0	12,0	10,0	7,0	5,0					
POOL1 EASY 75M	0,75	0,55	3,8	16,0	15,0	12,5	10,0	8,0	4,2				
POOL1 EASY 100M	1	0,75	4,2	17,0	16,0	15,3	13,0	10,5	7,6	5,5			
POOL1 EASY 150M	1,5	1,1	7,3	18,0	17,3	15,9	14,5	12,8	11,0	9,0	5,0		



TYPE	DIMENSIONS (mm)															Kg
	A	B	C	D	E	F	G	H	I	J	DNA	DNM	L1	A1	H1	
POOL1 EASY 25M	191	205	470	285	95	233	140	180	265	197	1" 1/2 Ø 50 PVC		630	230	360	9,5
POOL1 EASY 33M	191	205	470	285	95	233	140	180	265	197			630	230	360	9,5
POOL1 EASY 50M	191	205	470	285	95	233	140	180	265	197			630	230	360	9,5
POOL1 EASY 75M	191	205	470	285	95	233	140	180	265	197			630	230	360	10,9
POOL1 EASY 100M	191	205	470	285	95	233	140	180	265	197			630	230	360	10,9
POOL1 EASY 150M	191	205	470	285	95	233	140	180	265	197			630	230	360	11,6



Self-priming pumps for pools with a large built-in pre-filter, which, together with the excellent hydraulic performance of the pump, generates a very high filtration capacity. Includes a transparent polycarbonate pre-filter lid with opening key for effortless opening and easy inspection of the sieve. Pump body, seal housing and diffuser reinforced with glass fibre polypropylene are resistant to chemical products used for pools and guarantee excellent duration.

### Construction features

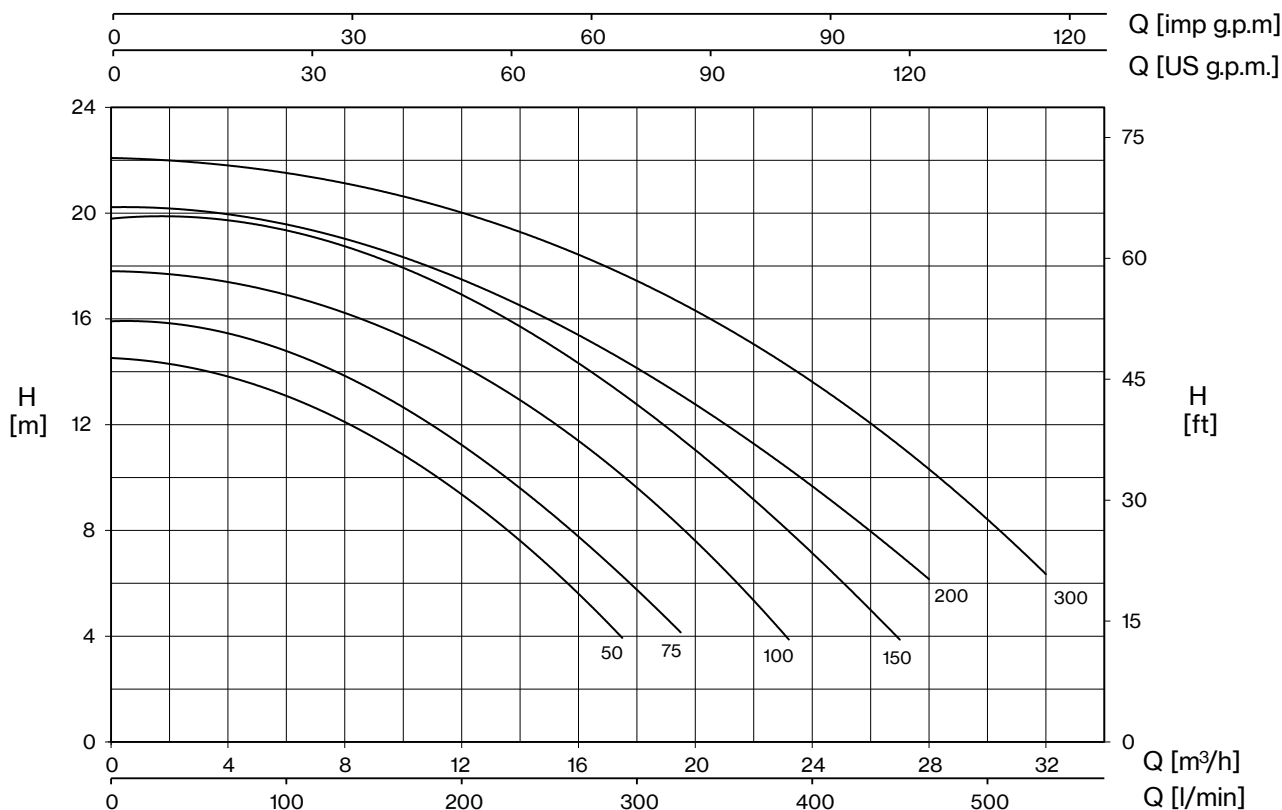
<b>Painting</b>	cataphoresis
<b>Pump body, seal housing, diffuser</b>	polypropylene + fiberglass
<b>Motor bracket</b>	aluminum
<b>Impeller</b>	Noryl®
<b>Mechanical seal</b>	ceramic-graphite-AISI 316
<b>Motor shaft</b>	stainless steel AISI 316
<b>Liquid temperature</b>	max 40 °C
<b>Pre-filter cover</b>	polycarbonate
<b>Opening key for pre-filter lid</b>	polypropylene

### Motor

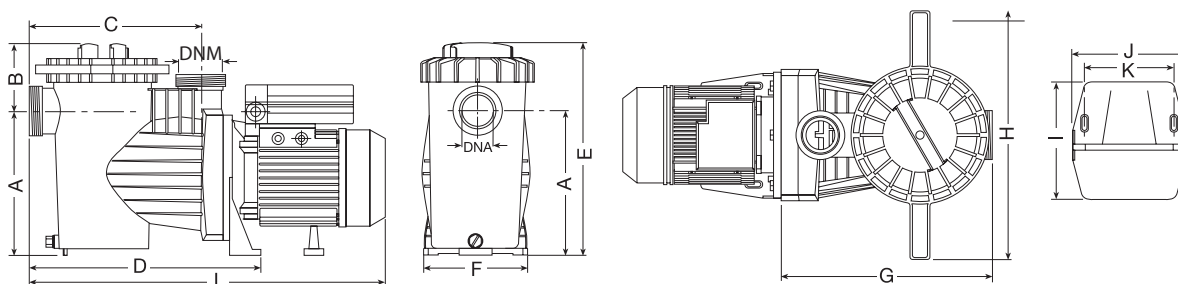
<b>2 poles induction motor</b>	1~ 230V - 50Hz
	3~ 230/400V - 50Hz
<b>Insulation class</b>	F
<b>Protection degree</b>	IP55





# POOL2



TYPE - 50 Hz		P2		CURRENT			H (m)									
1-	3-			1- 230V	3- 230V	3- 400V	4	6	8	10	12	14	16	18	21	
		HP	kW	A			Q (m³/h)									
<b>POOL2 50M</b>	<b>POOL2 50T</b>	0,5	0,37	4,4	2,4	1,4	17,5	15,6	13,5	11,1	8,4					
<b>POOL2 75M</b>	<b>POOL2 75T</b>	0,75	0,55	4,75	3,1	1,8	19,5	18,0	15,7	13,5	10,8	7,9				
<b>POOL2 100M</b>	<b>POOL2 100T</b>	1	0,75	5,5	3,8	2,2	23,2	21,1	19,7	18,0	15,0	12,3	8,7			
<b>POOL2 150M</b>	<b>POOL2 150T</b>	1,5	1,1	7,3	5,0	2,9	27,0	25,0	23,0	21,0	19,0	17,0	13,0	10,0		
<b>POOL2 200M</b>	<b>POOL2 200T</b>	2	1,5	9,2	6,0	3,5		28,0	26,0	24,0	21,0	18,0	14,0	12,0		
<b>POOL2 300M</b>	<b>POOL2 300T</b>	3	2,2	12,2	8,6	5,0		32,0	30,0	29,0	27,0	23,0	20,0	15,0	12,0	



TYPE		DIMENSIONS (mm)																		
1-	3-	A	B	C	D	E	F	G	H	I	J	K	L	DNA	DNM	L1	A1	H1	1-	3-
<b>POOL2 50M</b>	<b>POOL2 50T</b>	216	109	265	370	325	206	325	400	220	205	160	550	2" Ø 63 PVC		630	230	360	12,7	12,7
<b>POOL2 75M</b>	<b>POOL2 75T</b>	216	109	265	370	325	206	325	400	220	205	160	550			630	230	360	12,9	12,5
<b>POOL2 100M</b>	<b>POOL2 100T</b>	216	109	265	370	325	206	325	400	220	205	160	550			630	230	360	14,1	13,9
<b>POOL2 150M</b>	<b>POOL2 150T</b>	216	109	265	370	325	206	325	400	220	205	160	580			630	230	360	16,5	14,9
<b>POOL2 200M</b>	<b>POOL2 200T</b>	216	109	265	370	325	206	325	400	220	205	160	580			630	230	360	18,1	15,9
<b>POOL2 300M</b>	<b>POOL2 300T</b>	216	109	265	370	325	206	325	400	220	205	160	630			705	230	360	22	18,4

# POOL2 EASY

Swimming Pool



POOL2 pumps with electronic EASY control panel for an intuitive setting of the pool. It includes dry running and overload protection, security for people, filtration timers and input / outputs for the management of the lighting system, salt chlorinator, heat pump, temperature probe.



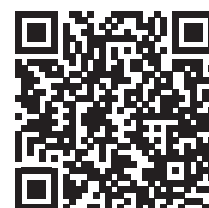
EASY control panel

## Construction features

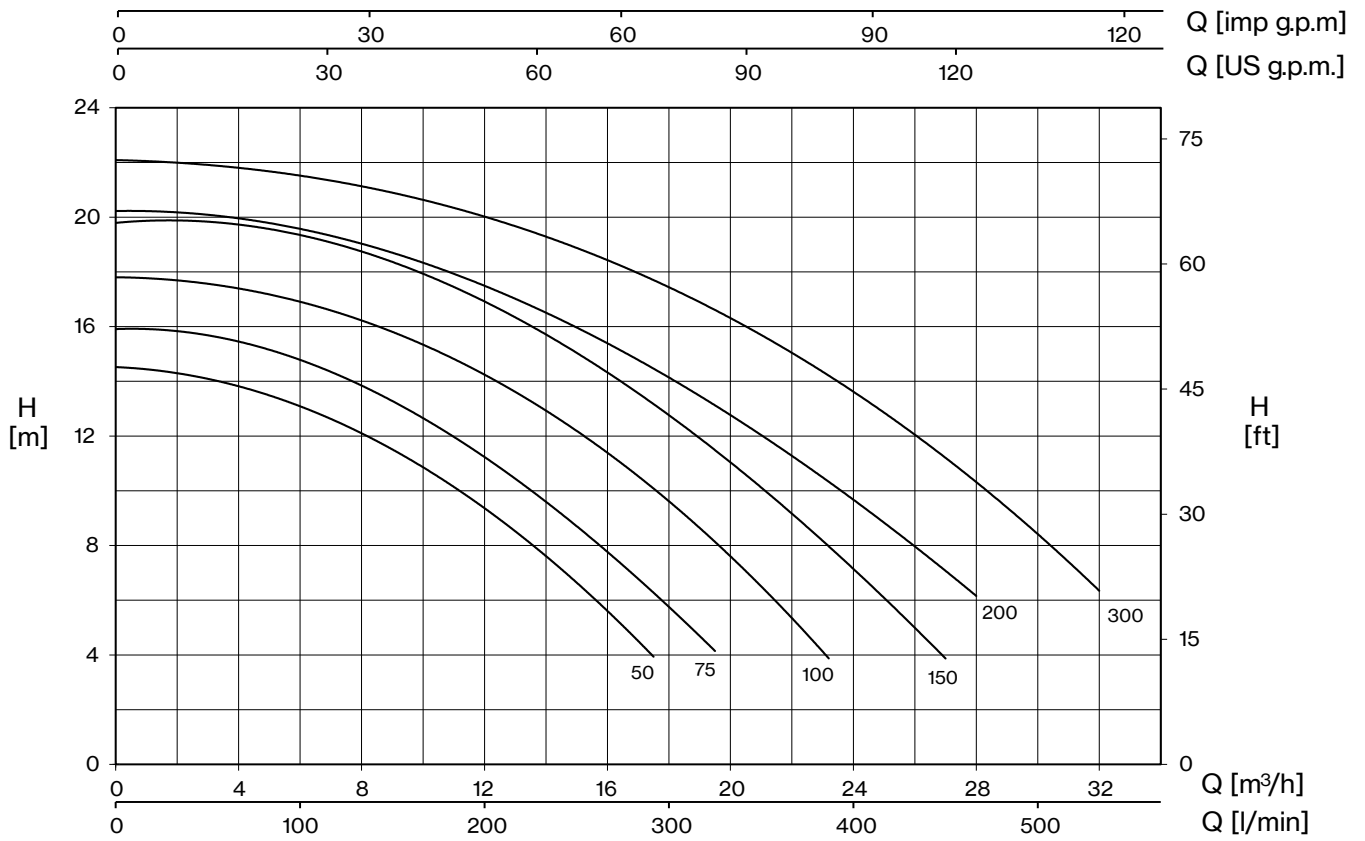
<b>Painting</b>	cataphoresis
<b>Pump body, seal housing, diffuser</b>	polypropylene + fiberglass
<b>Motor bracket</b>	aluminum
<b>Impeller</b>	Noryl®
<b>Mechanical seal</b>	ceramic-graphite-AISI 316
<b>Motor shaft</b>	stainless steel AISI 316
<b>Liquid temperature</b>	max 40 °C
<b>Pre-filter cover</b>	polycarbonate
<b>Opening key for pre-filter lid</b>	polypropylene

## Motor

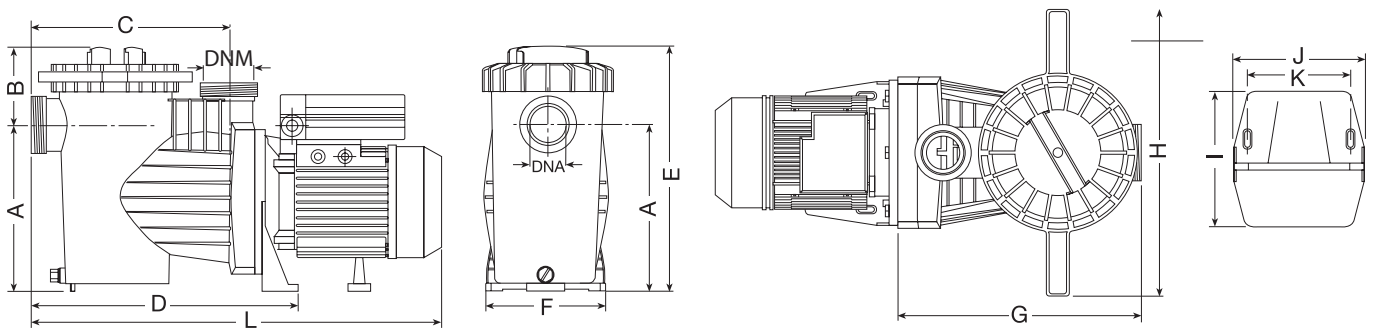
<b>2 poles induction motor</b>	1~ 230V - 50Hz
<b>Insulation class</b>	F
<b>Protection degree</b>	IP55



# POOL2 EASY



TYPE - 50 Hz	P2		CURRENT	H (m)														
				1- 230V	4	6	8	10	12	14	16	18	21					
	HP	kW	A	Q (m³/h)														
<b>POOL2 EASY 50M</b>	0,5	0,37	4,4	17,5	15,6	13,5	11,1	8,4										
<b>POOL2 EASY 75M</b>	0,75	0,55	4,75	19,5	18,0	15,7	13,5	10,8	7,9									
<b>POOL2 EASY 100M</b>	1	0,75	5,5	23,2	21,1	19,77	18,0	15,0	12,3	8,7,0								
<b>POOL2 EASY 150M</b>	1,5	1,1	7,3	27,0	25,0	23,0	21,0	19,0	17,0	13,0	10,0							
<b>POOL2 EASY 200M</b>	2	1,5	9,2		28,0	26,0	24,0	21,0	18,0	14,0	12,0							
<b>POOL2 EASY 300M</b>	3	2,2	12,2		32,0	30,0	29,0	27,0	23,0	20,0	15,0	12,0						



TYPE	DIMENSIONS (mm)																	
	A	B	C	D	E	F	G	H	I	J	K	L	DNA	DNM	L1	A1	H1	
<b>POOL2 EASY 50M</b>	216	109	265	370	325	206	325	400	220	205	160	550	2" Ø 63 PVC		630	230	360	12,7
<b>POOL2 EASY 75M</b>	216	109	265	370	325	206	325	400	220	205	160	550						12,9
<b>POOL2 EASY 100M</b>	216	109	265	370	325	206	325	400	220	205	160	550						14,1
<b>POOL2 EASY 150M</b>	216	109	265	370	325	206	325	400	220	205	160	580						16,5
<b>POOL2 EASY 200M</b>	216	109	265	370	325	206	325	400	220	205	160	580						18,1
<b>POOL2 EASY 300M</b>	216	109	265	370	325	206	325	400	220	205	160	630						22

# POOL2-I

Swimming Pool



The pumps include a variable speed drive with 3 configurable speeds for greater comfort and minimized energy costs. In addition: 4 configurable daily filtration cycles, filter cleaning program, pool lighting control, function for water surface cleaning, 2 outputs for activating saline chlorinator and pump status, protection for over voltage, against dry running and pipe breakage.



Variable speed drive

## Construction features

<b>Painting</b>	cataphoresis
<b>Pump body, seal housing, diffuser</b>	polypropylene + fiberglass
<b>Motor bracket</b>	aluminum
<b>Impeller</b>	Noryl®
<b>Mechanical seal</b>	ceramic-graphite-AISI 316
<b>Motor shaft</b>	stainless steel AISI 316
<b>Liquid temperature</b>	max 40 °C
<b>Pre-filter cover</b>	polycarbonate
<b>Opening key for pre-filter lid</b>	polypropylene

## VSD

**Power supply** 1~ 230V - 50Hz

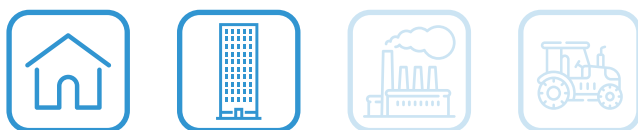
## Motor

**2 poles induction motor** 3~ 230V - 50Hz

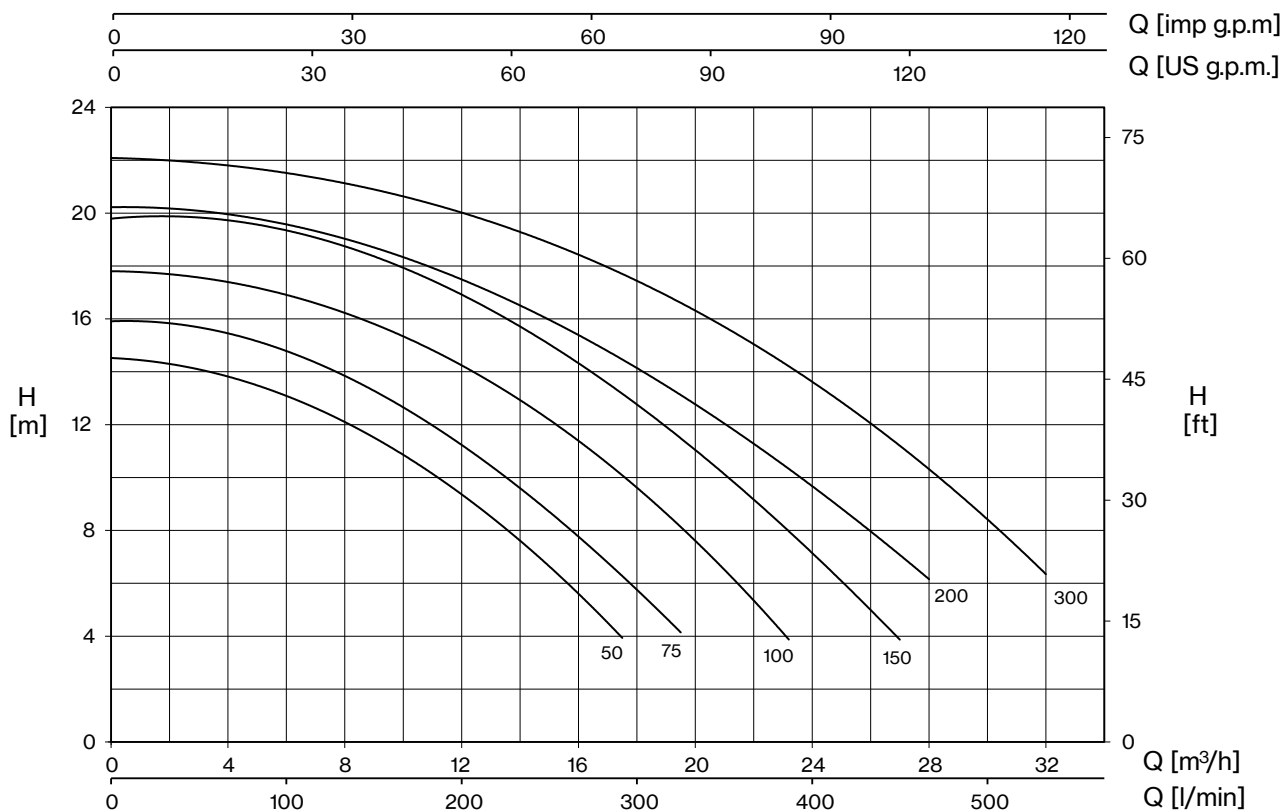
**Insulation class** F

**Protection degree** IP55

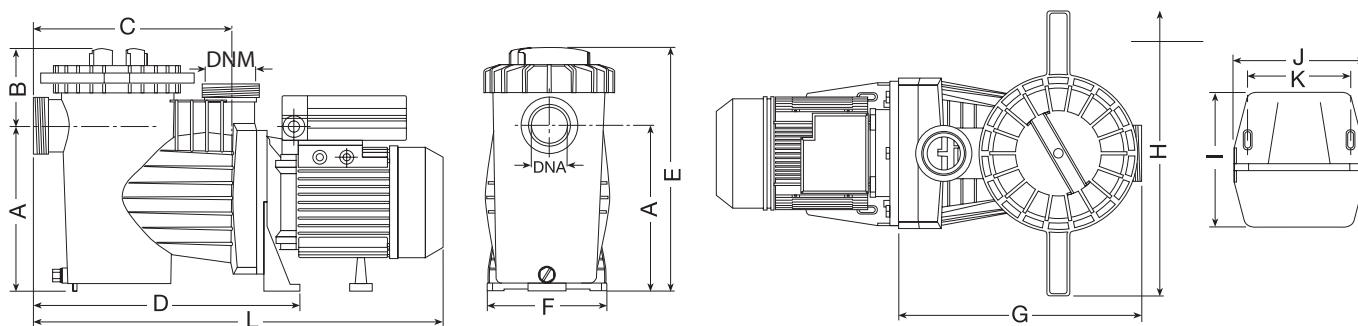
UP TO  
**65%**  
ENERGY SAVING



# POOL2-I



TYPE - 50 Hz	P2		CURRENT	H (m)									
				230V	4	6	8	10	12	14	16	18	21
1-	HP	kW	A	Q (m³/h)									
POOL2-I 50M	0,5	0,37	2,4	17,5	15,6	13,5	11,1	8,4					
POOL2-I 75M	0,75	0,55	3,1	19,5	18,0	15,7	13,5	10,8	7,9				
POOL2-I 100M	1	0,75	3,8	23,2	21,1	19,7	18,0	15,0	12,3	8,7			
POOL2-I 150M	1,5	1,1	5,0	27,0	25,0	23,0	21,0	19,0	17,0	13,0	10,0		
POOL2-I 200M	2	1,5	6,0	28,0	26,0	24,0	21,0	21,0	18,0	14,0	12,0		
POOL2-I 300M	3	2,2	8,6		32,0	30,0	29,0	27,0	23,0	20,0	15,0	12,0	



TYPE	DIMENSIONS (mm)																Kg	
	A	B	C	D	E	F	G	H	I	J	K	L	DNA	DNM	L1	A1		H1
POOL2-I 50M	216	109	265	370	325	206	325	400	220	205	160	550	2" Ø 63 PVC		630	230	360	12,7
POOL2-I 75M	216	109	265	370	325	206	325	400	220	205	160	550			630	230	360	12,9
POOL2-I 100M	216	109	265	370	325	206	325	400	220	205	160	550			630	230	360	14,1
POOL2-I 150M	216	109	265	370	325	206	325	400	220	205	160	580			630	230	360	16,5
POOL2-I 200M	216	109	265	370	325	206	325	400	220	205	160	580			630	230	360	18,1
POOL2-I 300M	216	109	265	370	325	206	325	400	220	205	160	630			705	230	360	22



# POOL2-IM

Swimming Pool



POOL2 300M pump with permanent magnets synchronous motor and variable speed drive. The combination of these two innovative technologies, assure IE5 efficiency and energy savings up to 80%. The system allows the programming of 4 daily filtration cycles with different operating speed for each cycle. In installations with several pumps they automatically communicate and alternate to work the same amount of hours.



Variable speed drive

## Construction features

<b>Painting</b>	cataphoresis
<b>Pump body, seal housing, diffuser</b>	polypropylene + fiberglass
<b>Motor bracket</b>	aluminum
<b>Impeller</b>	Noryl®
<b>Mechanical seal</b>	ceramic-graphite-AISI 316
<b>Motor shaft</b>	stainless steel AISI 316
<b>Liquid temperature</b>	max 40 °C
<b>Pre-filter cover</b>	polycarbonate
<b>Opening key for pre-filter lid</b>	polypropylene

## VSD

**Power supply** 1~ 230V - 50Hz

## Motor

**2 poles induction motor** 3~ 230V - 50Hz

**Insulation class** F

**Protection degree** IP55

**Construction** permanent magnets

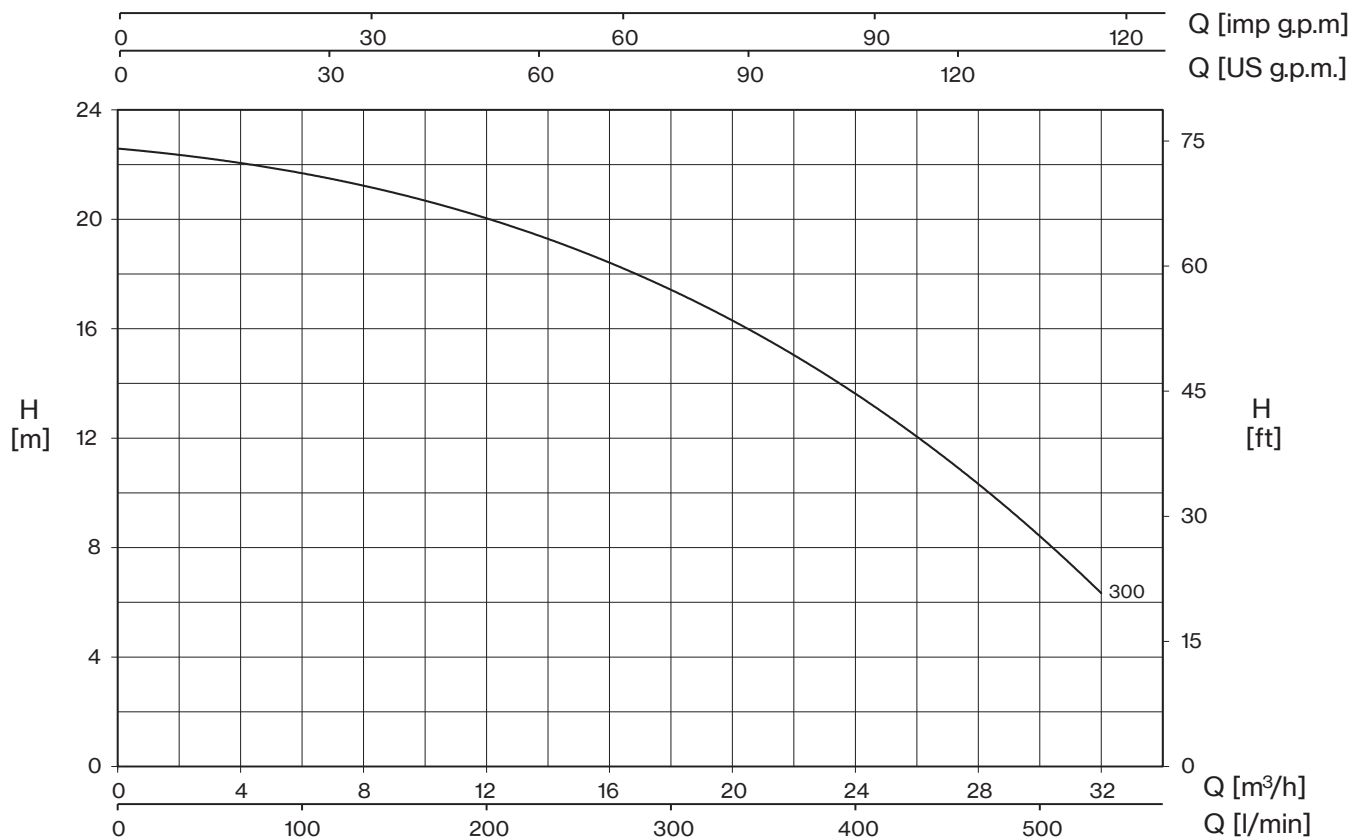
UP TO  
**80%**  
ENERGY SAVING

efficiency class

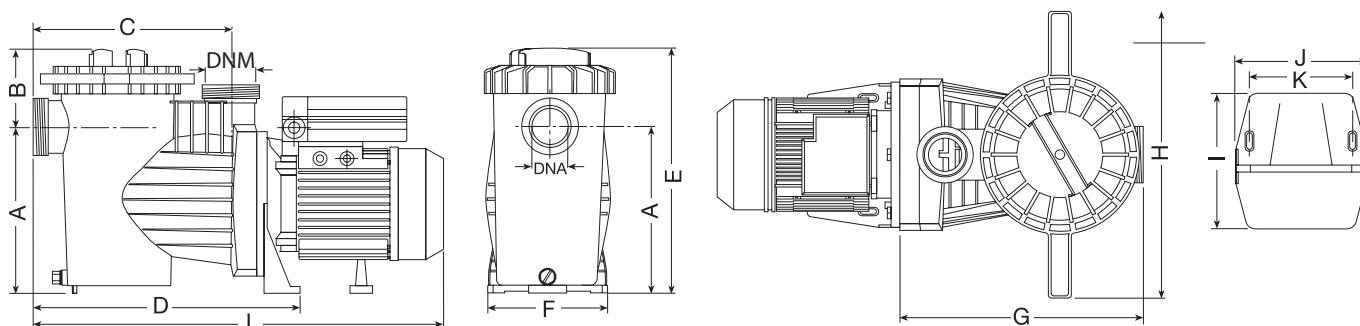
**IE5**



# POOL2-IM



TYPE - 50 Hz	P2		CURRENT	H (m)							
				230V	6	8	10	12	14	16	18
1-	HP	kW	A	Q (m³/h)							
<b>POOL2-IM 300M</b>	3	2,2	8,6	32,0	30,0	29,0	27,0	23,0	20,0	15,0	12,0



TYPE	DIMENSIONS (mm)																		Kg
	A	B	C	D	E	F	G	H	I	J	K	L	DNA	DNM	L1	A1	H1		
<b>POOL2-IM 300M</b>	216	109	265	370	325	206	325	400	220	205	160	630	2"	Ø 63 PVC	705	230	360	22	



Self-priming pumps with high filtration capacity. The pump body in polypropylene with fiberglass and the screws in AISI316 steel give a remarkable resistance to corrosion.

### Construction features

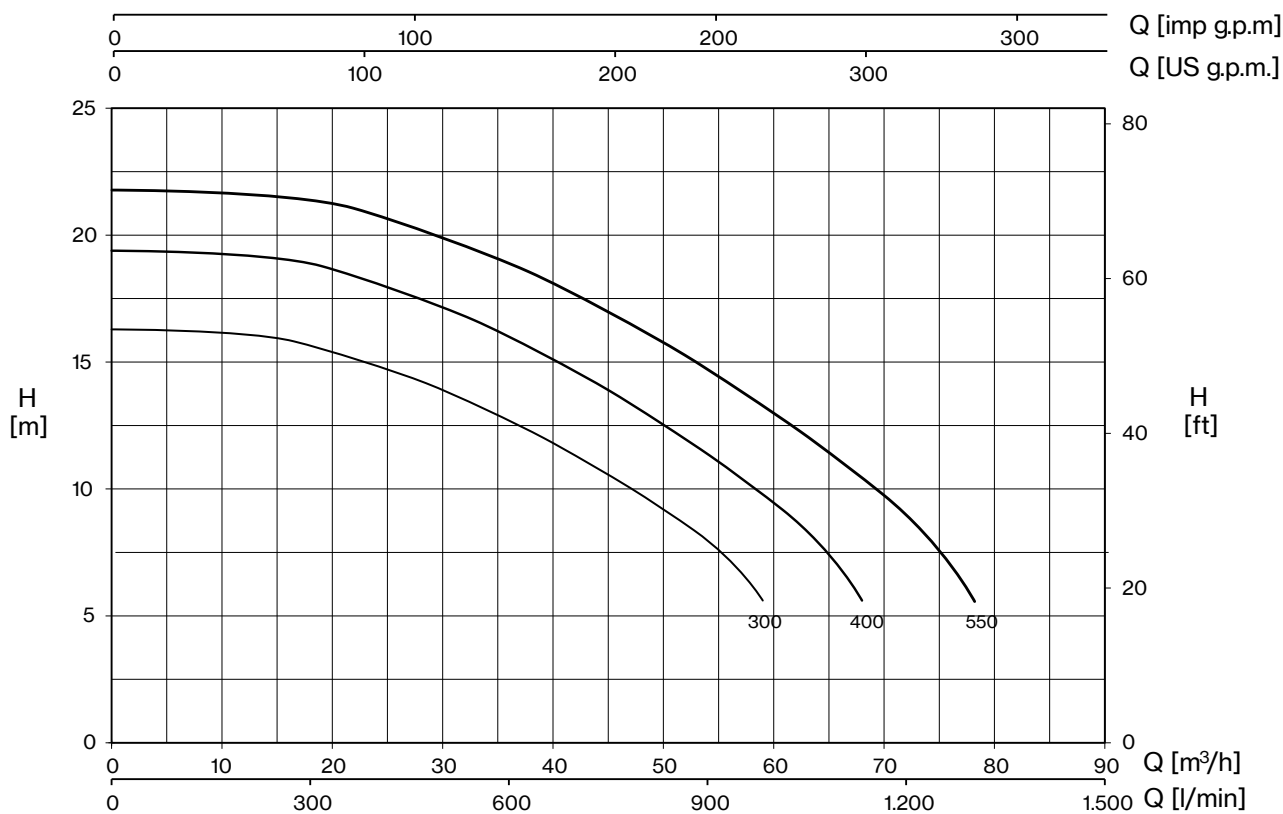
<b>Painting</b>	cataphoresis
<b>Pump body, seal housing, diffuser</b>	polypropylene + fiberglass
<b>Motor bracket</b>	aluminum
<b>Impeller</b>	Noryl®
<b>Mechanical seal</b>	ceramic-graphite-AISI 316
<b>Motor shaft</b>	stainless steel AISI 316
<b>Liquid temperature</b>	max 40 °C
<b>Pre-filter cover</b>	polycarbonate

### Motor

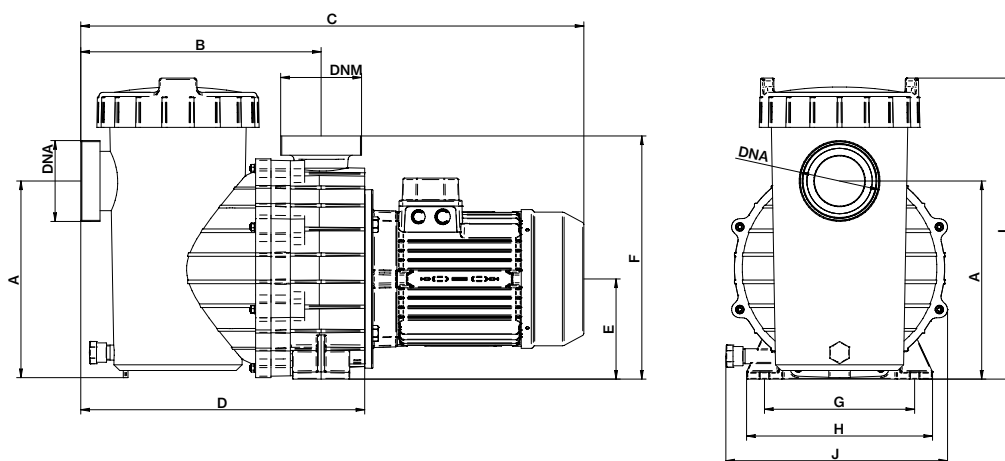
	1~ 230V - 50Hz
<b>2 poles induction motor</b>	3~ 230/400V - 50Hz
<b>Insulation class</b>	F
<b>Protection degree</b>	IP55



# POOL3



TYPE - 50 Hz		P2		CURRENT			H (m)						
1~	3~	HP	kW	1- 230V	3~ 230V	3~ 400V	6	8	10	12	14	16	18
				A			Q (m³/h)						
<b>POOL3 300M</b>	<b>POOL3 300T</b>	3	2,2	16	9,4	5,3	59,0	54,0	47,0	39,0	28,0	16,0	
-	<b>POOL3 400T</b>	4	3	-	12,5	6,9	68,0	63,0	58,0	52,0	45,0	36,0	23,0
-	<b>POOL3 550T</b>	5,5	4	-	-	8,8	78,0	74,0	70,0	65,0	59,0	50,0	39,0



TYPE		DIMENSIONS (mm)												Kg	
1~	3~	A	B	C	D	E	F	G	H	I	J	DNA	DNM	1~	3~
<b>POOL3 300M</b>	<b>POOL3 300T</b>	277	336	704	397	140	340	210	260	420	310	3" Ø 90 PVC		28	28
-	<b>POOL3 400T</b>	277	336	704	397	140	340	210	260	420	310			-	30
-	<b>POOL3 550T</b>	277	336	704	397	140	340	210	260	420	310			-	40



High-flow self-priming pool pumps at 4 poles up to 10 HP ideal for quiet operation and larger filtration. Cataphoresis painting, screws in AISI316 and pump body in polypropylene with glass fiber give a remarkable resistance to corrosion. In addition, a large support base make the whole system particularly robust.



Bronze impeller on request

### Construction features

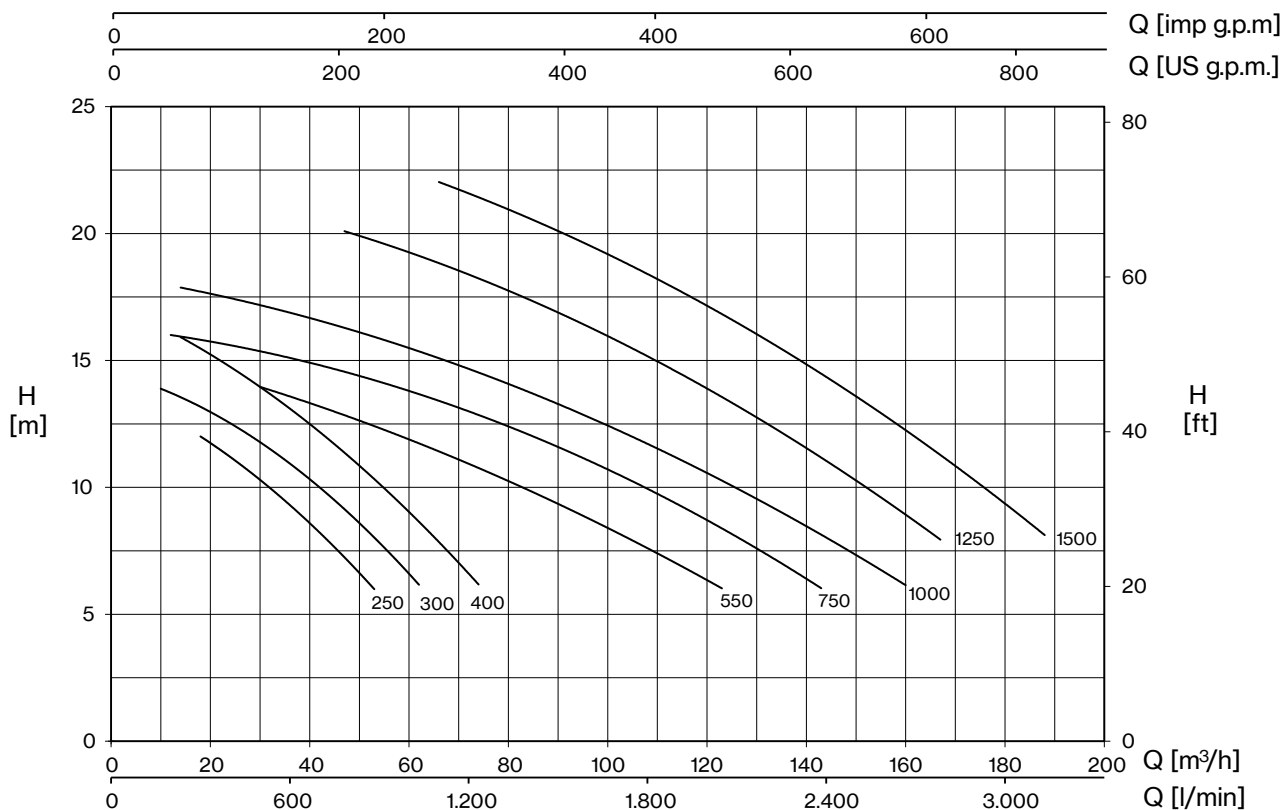
<b>Painting</b>	cataphoresis
<b>Pump body, seal housing, diffuser</b>	polypropylene + fiberglass
<b>Motor bracket</b>	aluminum
<b>Impeller</b>	Noryl®, marine bronze on request
<b>Mechanical seal</b>	ceramic-graphite-AISI 316
<b>Motor shaft</b>	stainless steel AISI 316
<b>Liquid temperature</b>	max 40 °C
<b>Pre-filter cover</b>	polycarbonate
<b>Support base</b>	Noryl®

### Motor

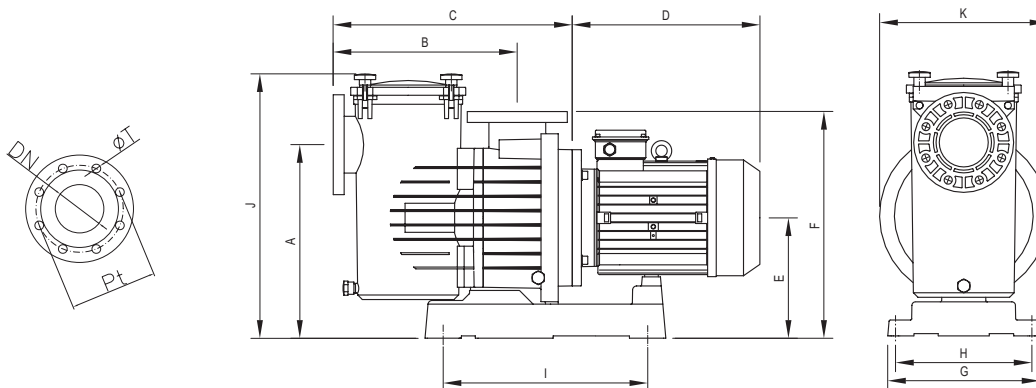
<b>4 or 2 poles induction motor</b>	3~ 230V/400V - 50Hz 3~ 400V/690V - 50Hz
<b>Insulation class</b>	F
<b>Protection degree</b>	IP55



# POOL4



TYPE - 50 Hz	P2		CURRENT		rpm	H (m)												Minimum size of suction pipe	
			3- 230V	3- 400V		6	8	10	12	14	16	18	20	22					
	HP	kW	A			Q (m³/h)													
<b>POOL4 4-250</b>	2,5	1,8	8,5	4,9	1450	53	43	32	18										110
<b>POOL4 4-300</b>	3	2,2	9,4	5,3	1450	62	54	43	26	10									125
<b>POOL4 4-400</b>	4	3	12,5	6,9	1450	74	66	56	42	29	14								140
<b>POOL4 4-550</b>	5,5	4	15,3	8,8	1450	123	104	84	57	30									160
<b>POOL4 4-750</b>	7,5	5,5	-	12	1450	143	127	107	85	57	12								180
<b>POOL4 4-1000</b>	10	7,5	-	15,8	1450	160	145	126	107	80	48	14							180
<b>POOL4 2-1250</b>	12,5	9,2	-	18,5	2850		167	152	136	118	99	80	47						180
<b>POOL4 2-1500</b>	15	11	-	20,9	2850		188	177	162	146	130	112	92	66					200



TYPE	DIMENSIONS (mm)															Kg			
	A	B	C	D	E	F	G	H	I	J	K	DNA	DNM	ØT	Pt		A1	H1	L1
<b>POOL4 4-250</b>	420	405	530	310	265	495	335	300	450	590	370	110	16	180		385	595	840	42
<b>POOL4 4-300</b>	420	405	530	310	265	495	335	300	450	590	370					385	595	840	42,5
<b>POOL4 4-400</b>	420	405	530	310	265	495	335	300	450	590	370					385	595	840	44,5
<b>POOL4 4-550</b>	420	405	530	335	265	495	335	300	450	590	370					385	715	1170	53,4
<b>POOL4 4-750</b>	420	405	508	380	265	495	335	300	450	590	370					385	715	1170	66
<b>POOL4 4-1000</b>	420	405	508	380	265	495	335	300	450	590	370					385	715	1170	76
<b>POOL4 2-1250</b>	420	405	508	380	265	495	335	300	450	590	370					385	715	1170	84,5
<b>POOL4 2-1500</b>	420	405	508	380	265	495	335	300	450	590	370					385	715	1170	85,5



High-flow self-priming vertical pool pumps at 4 poles up to 10 HP ideal for quiet operation and larger filtration. Cataphoresis painting, pre-filter in AISI316 and pump body in polypropylene with glass fiber give a remarkable resistance to corrosion. In addition, a large support base make the whole system particularly robust.



Bronze impeller on request

### Construction features

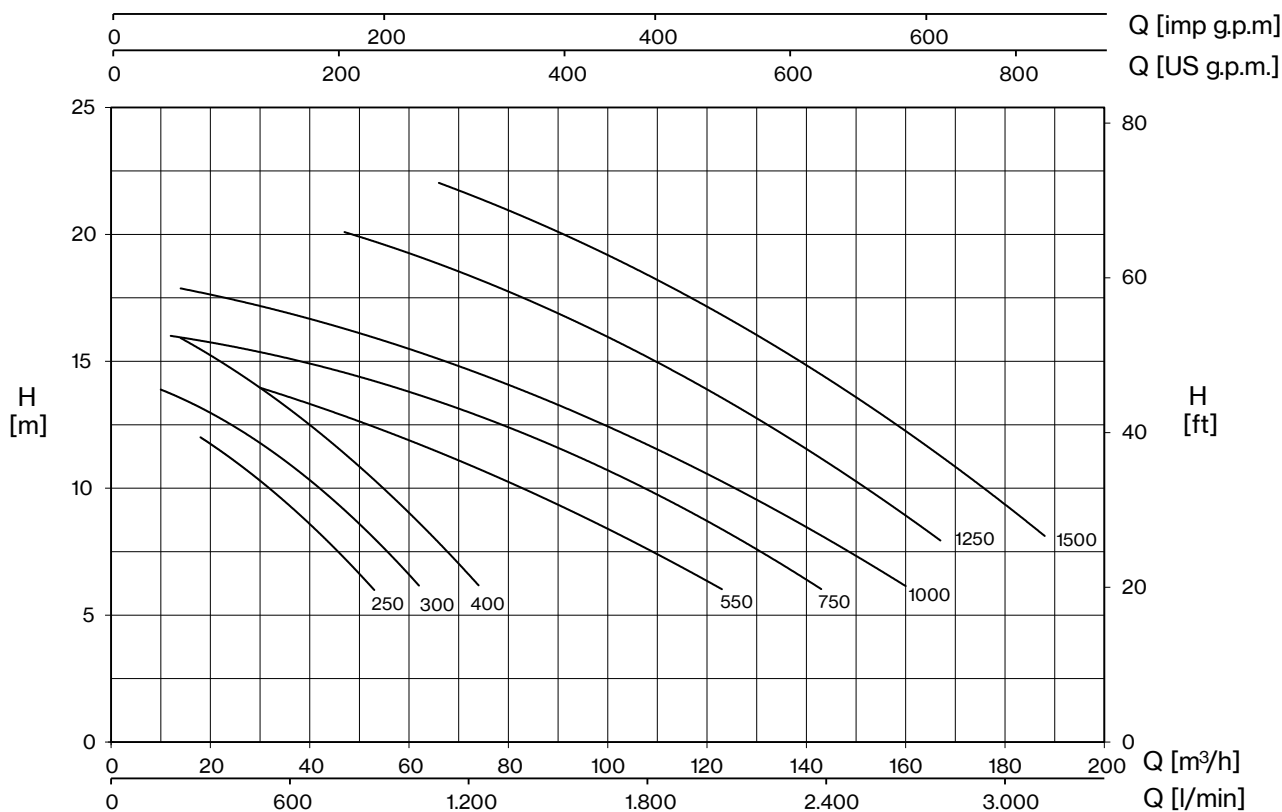
<b>Painting</b>	cataphoresis
<b>Pump body, seal housing, diffuser</b>	polypropylene + fiberglass
<b>Motor bracket</b>	aluminum
<b>Impeller</b>	Noryl®, marine bronze on request
<b>Mechanical seal</b>	ceramic-graphite-AISI 316
<b>Motor shaft</b>	stainless steel AISI 316
<b>Liquid temperature</b>	max 40 °C
<b>Pre-filter</b>	stainless steel AISI 316L

### Motor

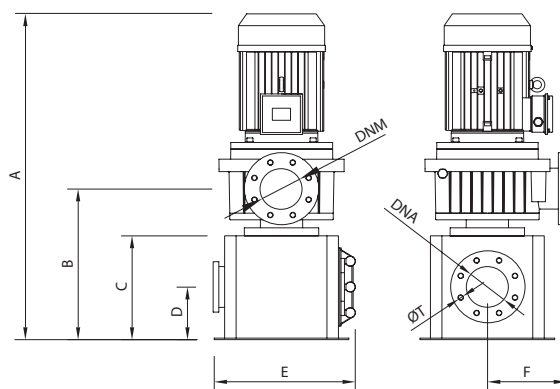
<b>4 or 2 poles induction motor</b>	3~ 230V/400V - 50Hz 3~ 400V/690V - 50Hz
<b>Insulation class</b>	F
<b>Protection degree</b>	IP55



# V-POOL4



TYPE - 50 Hz	P2		CURRENT		rpm	H (m)											Minimum size of suction pipe	
			3- 230V	3- 400V		6	8	10	12	14	16	18	20	22				
	HP	kW	A			Q (m³/h)												
V-POOL4 4-250	2,5	1,8	8,5	4,9	1450	53	43	32	18									110
V-POOL4 4-300	3	2,2	9,4	5,3	1450	62	54	43	26	10								125
V-POOL4 4-400	4	3	12,5	6,9	1450	74	66	56	42	29	14							140
V-POOL4 4-550	5,5	4	15,3	8,8	1450	123	104	84	57	30								160
V-POOL4 4-750	7,5	5,5	-	12	1450	143	127	107	85	57	12							180
V-POOL4 4-1000	10	7,5	-	15,8	1450	160	145	126	107	80	48	14						180
V-POOL4 2-1250	12,5	9,2	-	18,5	2850		167	152	136	118	99	80	47					180
V-POOL4 2-1500	15	11	-	20,9	2850		188	177	162	146	130	112	92	66				200



TYPE	DIMENSIONS (mm)												Kg
	A	B	C	D	E	F	DNA	DNM	ØT	A1	H1	L1	
V-POOL4 4-250	903	503	338	169	410	325	125	100	16	700	923	840	85
V-POOL4 4-300	903	503	338	169	410	325				700	923	840	85,5
V-POOL4 4-400	903	503	338	169	410	325				700	923	840	87,5
V-POOL4 4-550	923	503	338	169	410	325				700	943	1170	96,5
V-POOL4 4-750	923	503	338	169	410	325				700	943	1170	109
V-POOL4 4-1000	923	503	338	169	410	325				700	943	1170	119
V-POOL4 2-1250	923	503	338	169	410	325				700	943	1170	127,5
V-POOL4 2-1500	923	503	338	169	410	325				700	943	1170	128,5



# POOL4-I

Swimming Pool



POOL4-I commercial pool pumps integrate a variable speed drive with 3 configurable speeds for a greater comfort and minimized energy costs. The system allows the programming of 4 daily filtration cycles with different operating speed for each cycle. In installations with several POOL4-I the pumps automatically communicate and alternate to work the same amount of hours. Capable to work more than one pump at the same time.



Variable speed drive

## Construction features

<b>Painting</b>	cataphoresis
<b>Pump body, seal housing, diffuser</b>	polypropylene + fiberglass
<b>Motor bracket</b>	aluminum
<b>Impeller</b>	Noryl®, marine bronze on request
<b>Mechanical seal</b>	ceramic-graphite-AISI 316
<b>Motor shaft</b>	stainless steel AISI 316
<b>Liquid temperature</b>	max 40 °C
<b>Pre-filter cover</b>	polycarbonate
<b>Support base</b>	Noryl®

## VSD

**Power supply** 3~ 400V - 50Hz

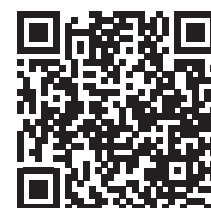
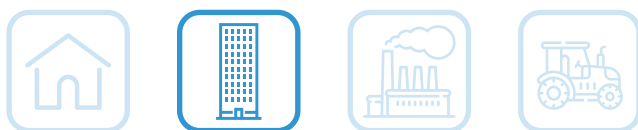
## Motor

**4 or 2 poles induction motor** 3~ 230V/400V - 50Hz  
3~ 400V/690V - 50Hz

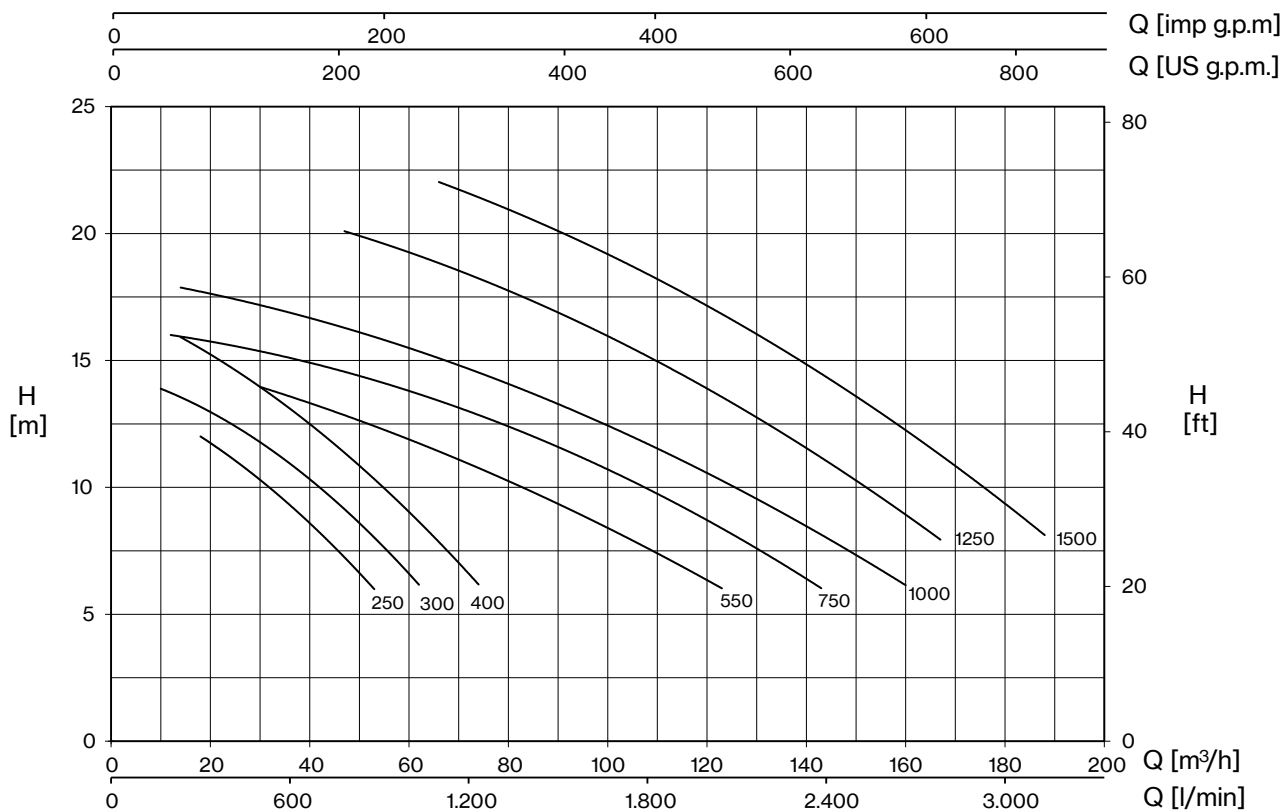
**Insulation class** F

**Protection degree** IP55

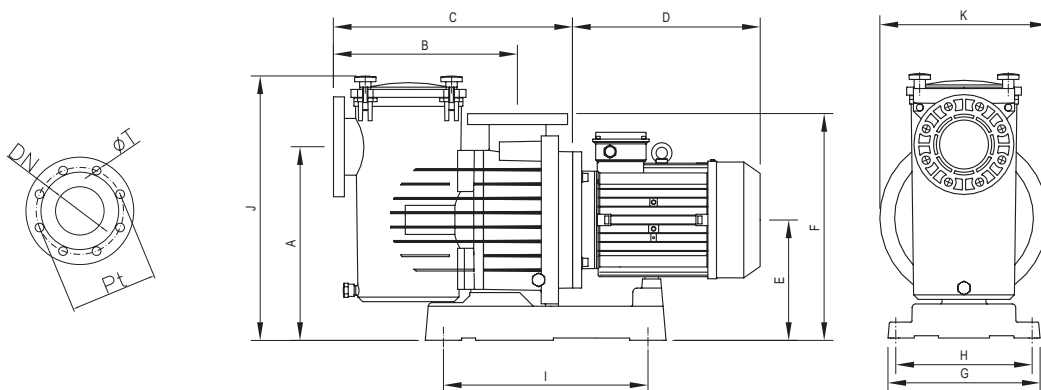
UP TO  
**65%**  
ENERGY SAVING



# POOL4-I



TYPE - 50 Hz	P2		CURRENT	rpm	H (m)											Minimum size of suction pipe	
					Q (m³/h)												
	HP	kW	400V A		6	8	10	12	14	16	18	20	22				
POOL4-I 4-250	2,5	1,8	4,9	1450	53	43	32	18									110
POOL4-I 4-300	3	2,2	5,3	1450	62	54	43	26	10								125
POOL4-I 4-400	4	3	6,9	1450	74	66	56	42	29	14							140
POOL4-I 4-550	5,5	4	8,8	1450	123	104	84	57	30								160
POOL4-I 4-750	7,5	5,5	12	1450	143	127	107	85	57	12							180
POOL4-I 4-1000	10	7,5	15,8	1450	160	145	126	107	80	48							180
POOL4-I 2-1250	12,5	9,2	18,5	2850		167	152	136	118	99	80	47					180
POOL4-I 2-1500	15	11	20,9	2850		188	177	162	146	130	112	92	66				200



TYPE	DIMENSIONS (mm)																			Kg
	A	B	C	D	E	F	G	H	I	J	K	DNA	DNM	ØT	Pt	A1	H1	L1		
POOL4-I 4-250	420	405	530	310	265	495	335	300	450	590	370	110	16	180		385	595	840	42	
POOL4-I 4-300	420	405	530	310	265	495	335	300	450	590	370				385	595	840	42,5		
POOL4-I 4-400	420	405	530	310	265	495	335	300	450	590	370				385	595	840	44,5		
POOL4-I 4-550	420	405	530	335	265	495	335	300	450	590	370				385	715	1170	53,4		
POOL4-I 4-750	420	405	508	380	265	495	335	300	450	590	370				385	715	1170	66		
POOL4-I 4-1000	420	405	508	380	265	495	335	300	450	590	370				385	715	1170	76		
POOL4-I 2-1250	420	405	508	380	265	495	335	300	450	590	370				385	715	1170	84,5		
POOL4-I 2-1500	420	405	508	380	265	495	335	300	450	590	370				385	715	1170	85,5		

# POOL4-IM

Swimming Pool



POOL4 4-550 pump with permanent magnets synchronous motor and variable speed drive. The combination of these two innovative technologies, assure IE5 efficiency and energy savings up to 80%. The system allows the programming of 4 daily filtration cycles with different operating speed for each cycle. In installations with several pumps they automatically communicate and alternate to work the same amount of hours.



Variable speed drive

## Construction features

<b>Painting</b>	cataphoresis
<b>Pump body, seal housing, diffuser</b>	polypropylene + fiberglass
<b>Motor bracket</b>	aluminum
<b>Impeller</b>	Noryl®
<b>Mechanical seal</b>	ceramic-graphite-AISI 316
<b>Motor shaft</b>	stainless steel AISI 316
<b>Liquid temperature</b>	max 40 °C
<b>Pre-filter cover</b>	polycarbonate
<b>Support base</b>	Noryl®

## VSD

**Power supply** 3~ 400V - 50Hz

## Motor

**4 poles induction motor** 3~ 230V/400V - 50Hz

**Insulation class** F

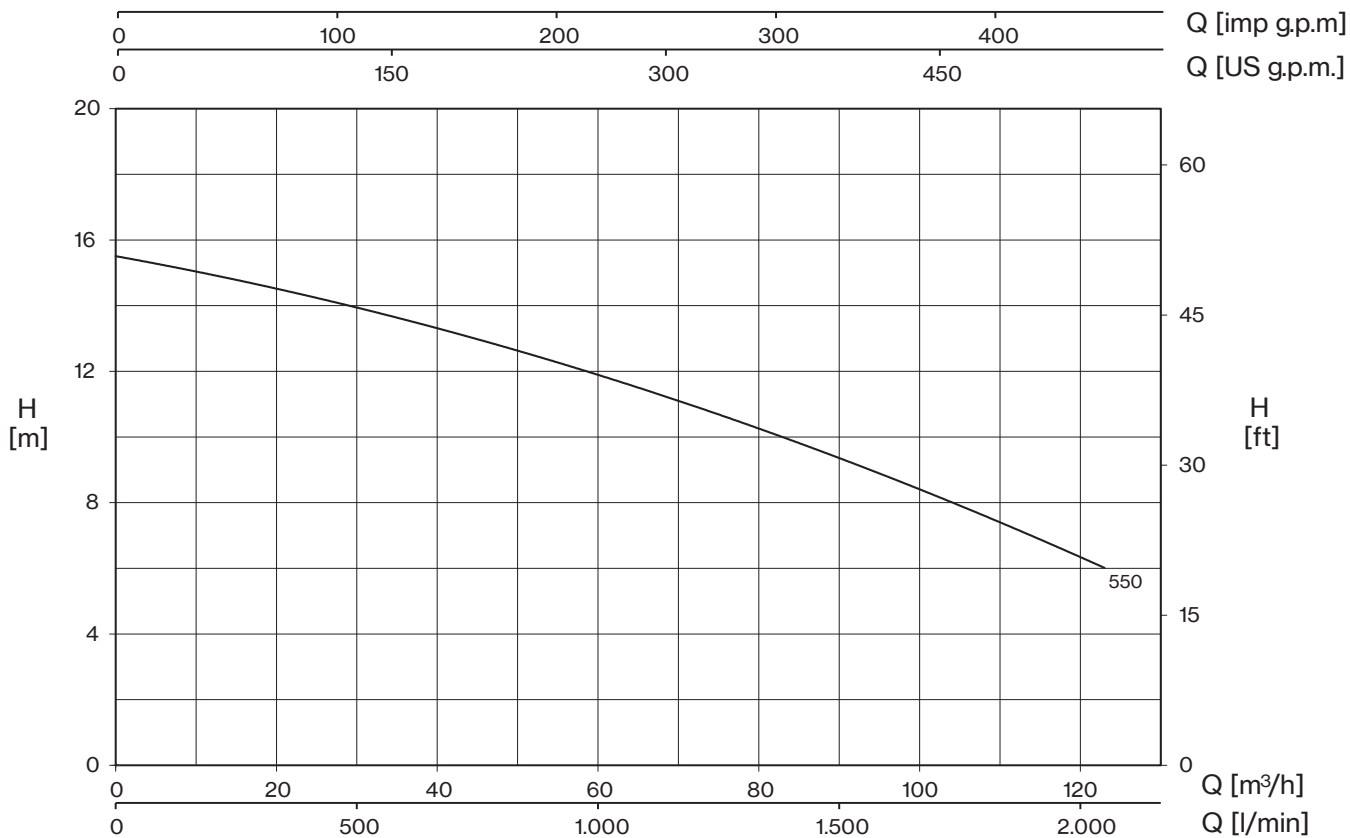
**Protection degree** IP55

UP TO  
**80%**  
ENERGY SAVING

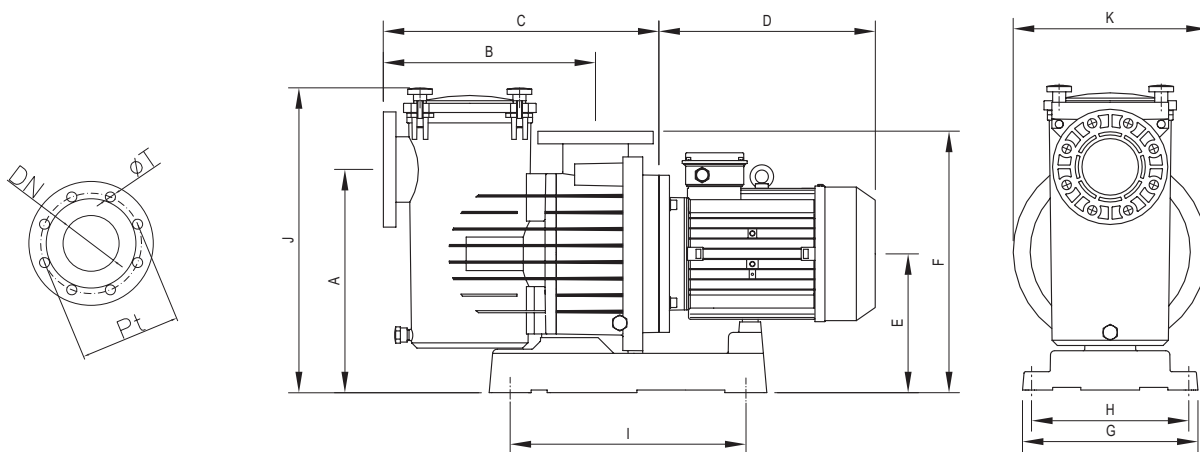
efficiency class  
**IE5**



# POOL4-IM



TYPE - 50 Hz	P2		rpm	H (m)					Minimum size of suction pipe
				6	8	10	12	14	
3-	HP	kW		Q (m³/h)					
<b>POOL4-IM 4-550</b>	5,5	4	1450	123	104	84	57	30	160



TYPE	DIMENSIONS (mm)																	
	A	B	C	D	E	F	G	H	I	J	K	DNA	DNM	ØT	Pt	A1	H1	L1
<b>POOL4-IM 4-550</b>	420	405	530	335	265	495	335	300	450	590	370	110	16	180	385	715	1170	53,4



Pumps ideal for counter-current swimming, water parks, fountains, waterfalls, etc. The pump body in polypropylene reinforced with glass fiber allows to resist the chemicals of the pools and guarantee excellent durability.

### Construction features

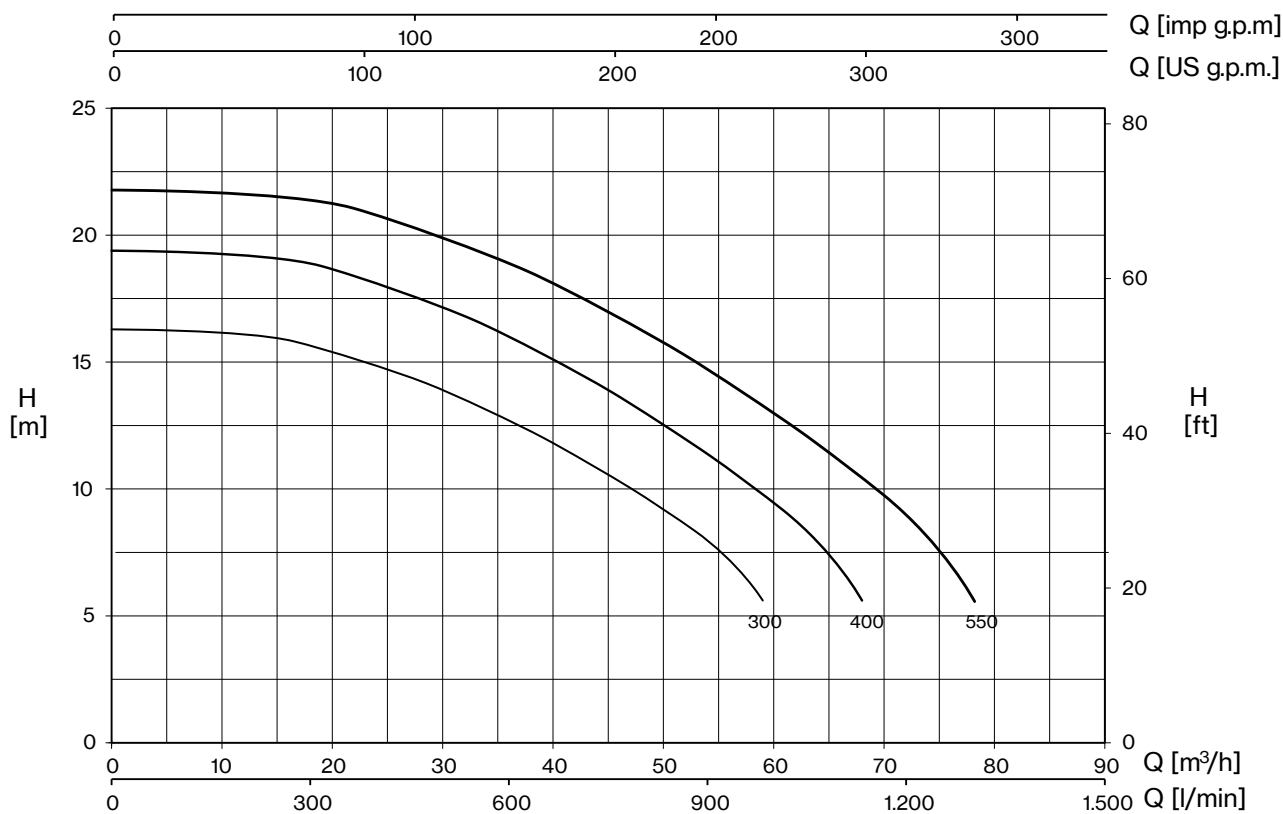
<b>Painting</b>	cataphoresis
<b>Pump body, seal housing, diffuser</b>	polypropylene + fiberglass
<b>Motor bracket</b>	aluminum
<b>Impeller</b>	Noryl®, marine bronze on request
<b>Mechanical seal</b>	ceramic-graphite-AISI 316
<b>Motor shaft</b>	stainless steel AISI 316
<b>Liquid temperature</b>	max 40 °C

### Motor

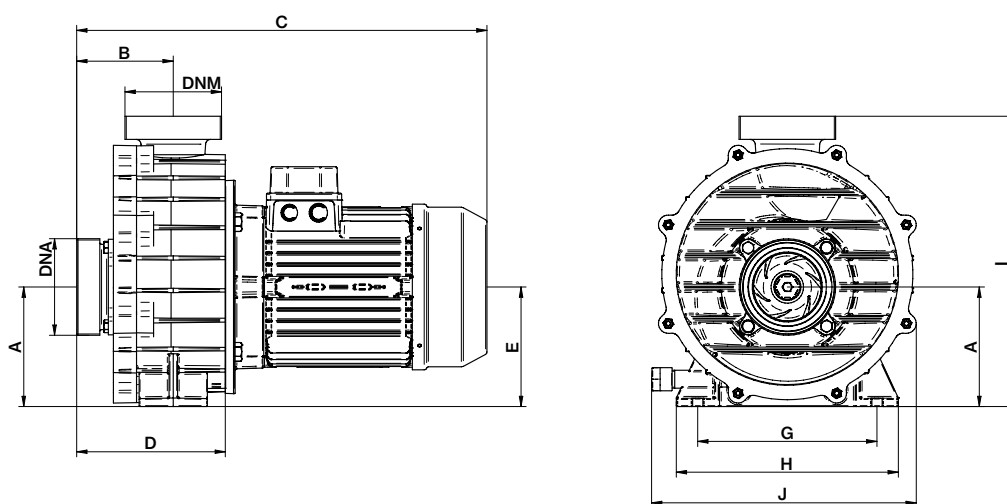
<b>2 poles induction motor</b>	1~ 230V - 50Hz 3~ 230/400V - 50Hz
<b>Insulation class</b>	F
<b>Protection degree</b>	IP55



# POOL5



TYPE - 50 Hz		P2		CURRENT			H (m)						
1-	3-	HP	kW	1- 230V	3- 230V	3- 400V	6	8	10	12	14	16	18
				A			Q (m³/h)						
<b>POOL5 300M</b>	<b>POOL5 300T</b>	3	2,2	16	9,4	5,3	59,0	54,0	47,0	39,0	28,0	16,0	
-	<b>POOL5 400T</b>	4	3	-	12,5	6,9	68,0	63,0	58,0	52,0	45,0	36,0	23,0
-	<b>POOL5 550T</b>	5,5	4	-	-	8,8	78,0	74,0	70,0	65,0	59,0	50,0	39,0



TYPE		DIMENSIONS (mm)										DNA	DNM	Kg
1-	3-	A	B	C	D	E	G	H	I	J				
<b>POOL5 300M</b>	<b>POOL5 300T</b>	140	113	480	174	140	210	260	420	310	3" Ø 90 PVC	23		
-	<b>POOL5 400T</b>	140	113	480	174	140	210	260	420	310		28		
-	<b>POOL5 550T</b>	140	113	480	174	140	210	260	420	310		37		



Pumps ideal for counter-current swimming, water parks, fountains, waterfalls, etc. The pump body in polypropylene reinforced with glass fiber allows it to resist the chemicals of the pools and guarantee excellent durability.



Bronze impeller on request

### Construction features

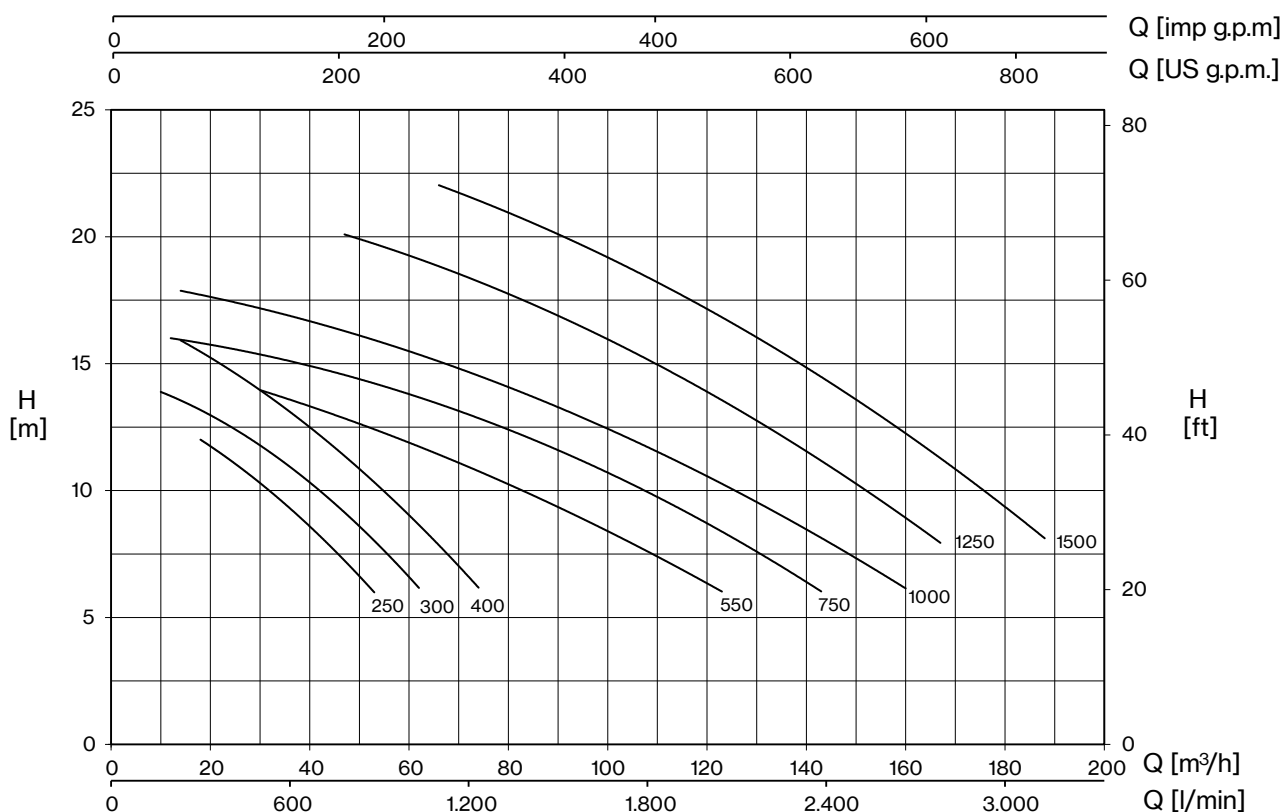
<b>Painting</b>	cataphoresis
<b>Pump body, seal housing, diffuser</b>	polypropylene + fiberglass
<b>Motor bracket</b>	aluminum
<b>Impeller</b>	Noryl®, marine bronze on request
<b>Mechanical seal</b>	ceramic-graphite-AISI 316
<b>Motor shaft</b>	stainless steel AISI 316
<b>Liquid temperature</b>	max 40 °C

### Motor

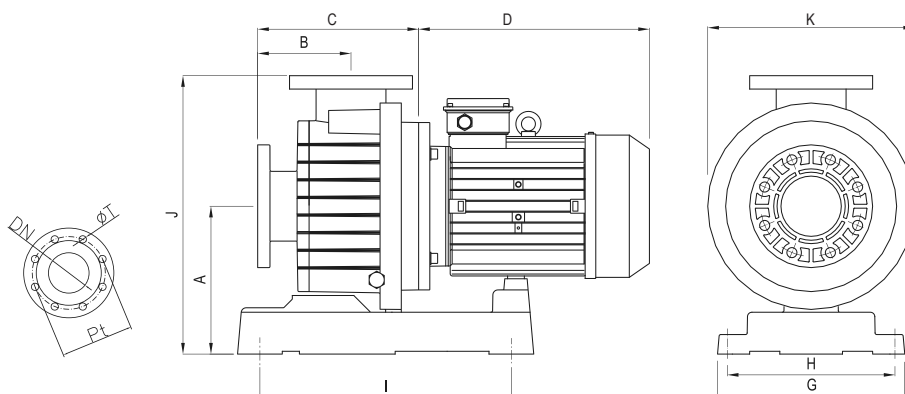
<b>4 or 2 poles induction motor</b>	3~ 230/400V - 50Hz 3~ 400/690V - 50Hz
<b>Insulation class</b>	F
<b>Protection degree</b>	IP55



# POOL6



TYPE - 50 Hz	P2		CURRENT		rpm	H (m)												Minimum size of suction pipe
			3- 230V	3- 400V		6	8	10	12	14	16	18	20	22				
	HP	kW	A			Q (m³/h)												
POOL6 4-250	2,5	1,8	8,5	4,9	1450	53	43	32	18									110
POOL6 4-300	3	2,2	9,4	5,3	1450	62	54	43	26	10								125
POOL6 4-400	4	3	12,5	6,9	1450	74	66	56	42	29	14							140
POOL6 4-550	5,5	4	15,3	8,8	1450	123	104	84	57	30								160
POOL6 4-750	7,5	5,5	-	12	1450	143	127	107	85	57	12							180
POOL6 4-1000	10	7,5	-	15,8	1450	160	145	126	107	80	48	14						180
POOL6 2-1250	12,5	9,2	-	18,5	2850		167	152	136	118	99	80	47					180
POOL6 2-1500	15	11	-	20,9	2850		188	177	162	146	130	112	92	66				200



TYPE	DIMENSIONS (mm)																	Kg	
	A	B	C	D	E	F	G	H	I	J	K	DNA	DNM	ØT	Pt	A1	H1		L1
POOL6 4-250	265	165	255	310	335	300	450	495	370	385	370	110		16	180	385	595	840	37
POOL6 4-300	265	165	255	310	335	300	450	495	370	385	370					385	595	840	37,5
POOL6 4-400	265	165	255	310	335	300	450	495	370	385	370					385	595	840	39,5
POOL6 4-550	265	165	255	330	335	300	450	495	370	385	370					385	595	840	48,5
POOL6 4-750	265	165	255	380	335	300	450	495	370	385	370					385	595	840	61
POOL6 4-1000	265	165	255	380	335	300	450	495	370	385	370					385	595	840	71
POOL6 2-1250	265	165	255	380	335	300	450	495	370	385	370					385	595	840	79,5
POOL6 2-1500	265	165	255	380	335	300	450	495	370	385	370					595	715	840	80,5



# DOMESTIC FILTER

Swimming Pool



Laminated polyester filters with manual side mounted valve, indicated for private and commercial pools, including multiport 6 way valve (filtration, backwash, rinse, recycle, drain and closed), manometer and airbleased system.



Transparent screw cover  
(on request)

MODEL	Ø mm	Connection	Filtering surface m <sup>2</sup>	Flow V=50 m <sup>3</sup> /h	Sand Kg	Weight Kg
PFIL 400	400	1,5"	0,13	6,5	50	12
PFIL 510	510	1,5"	0,20	10,2	100	18
PFIL 620	620	1,5"	0,30	15,1	150	23,5
PFIL 680	680	2"	0,36	18,14	175	27
PFIL 750	750	2"	0,44	22	225	33
PFIL 900	900	2"	0,64	31,8	325	42

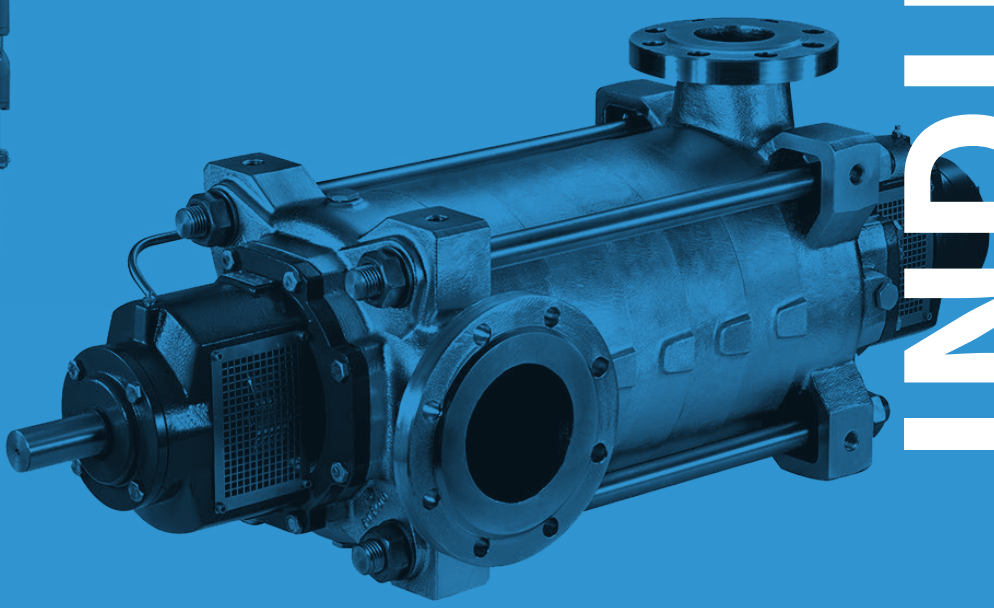
# FILTRATION KIT

Swimming Pool



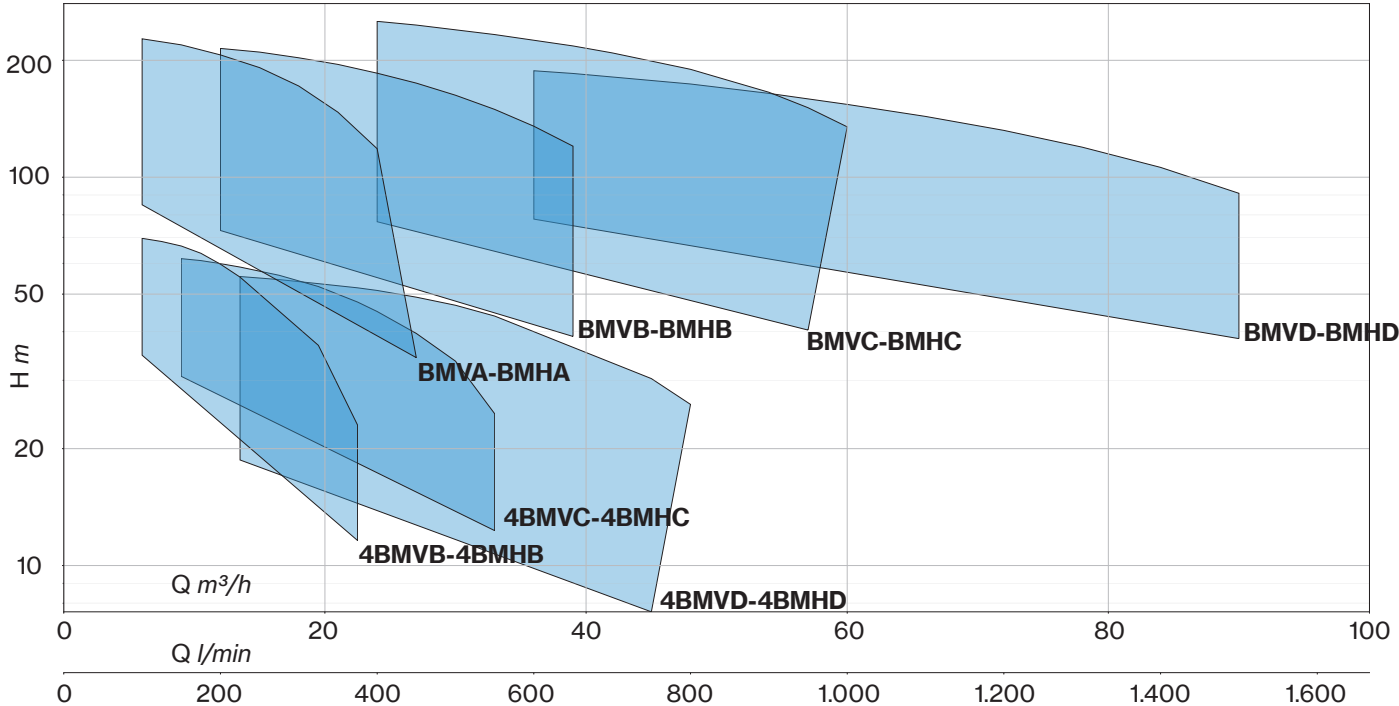
Filtration kit including a laminated filter with 6 way valve + swimming pool pump POOL1, ideal for private pool, all mounted on a common base.

MODEL	Ø mm	Connection	Filtering surface m <sup>2</sup>	Flow V=50 m <sup>3</sup> /h	Pump HP	Sand Kg	Weight Kg
PFIL EASY KIT 25	400	1,5"	0,13	6,5	0,25	50	19
PFIL EASY KIT 33	400	1,5"	0,13	7,5	0,33	50	19
PFIL EASY KIT 50	510	1,5"	0,20	8,5	0,50	100	26
PFIL EASY KIT 75	510	1,5"	0,20	10,2	0,75	100	26
PFIL EASY KIT 100	620	1,5"	0,30	15,1	0,95	150	29



# INDUSTRIAL LINE

# BM-4BM



# BMV-4BMV

Industrial Line

Multi-stage centrifugal pumps that guarantee high pressure. Particularly suitable for civil and industrial applications - in particular pressurisation systems, fire fighting systems and washing plant.

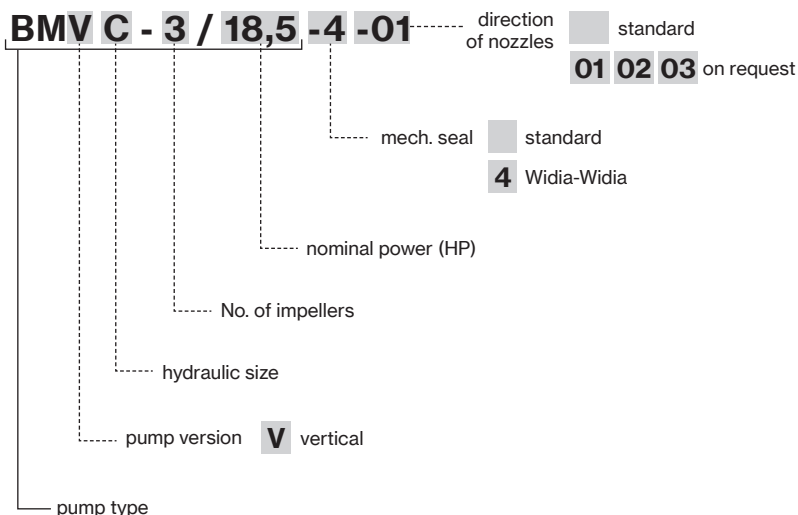


## Construction features

<b>Pump body</b>	cast iron
<b>Motor bracket</b>	cast iron
<b>Impeller</b>	brass
<b>Mechanical seal</b>	ceramic-graphite-NBR
<b>Motor shaft</b>	stainless steel AISI 304
<b>Liquid temperature</b>	-10 ÷ +90 °C
<b>Operating pressure</b>	max 30 bar

## Motor

<b>2 and 4 poles induction motor</b>	3- 230/400V - 50Hz P ≤ 4kW 3- 400/690V - 50Hz P > 4kW
<b>Insulation class</b>	F
<b>Protection degree</b>	IPX5



# BMV ~2900 rpm

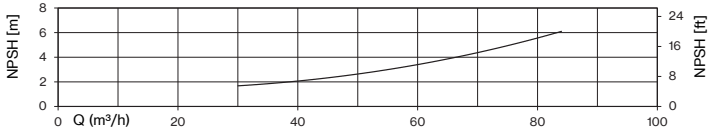
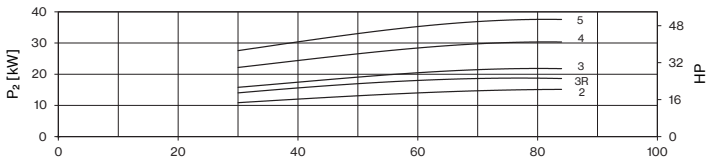
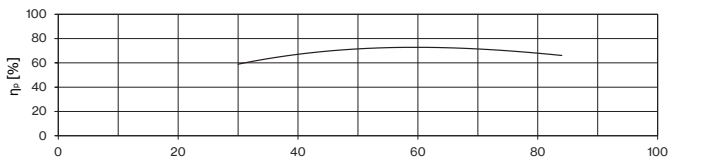
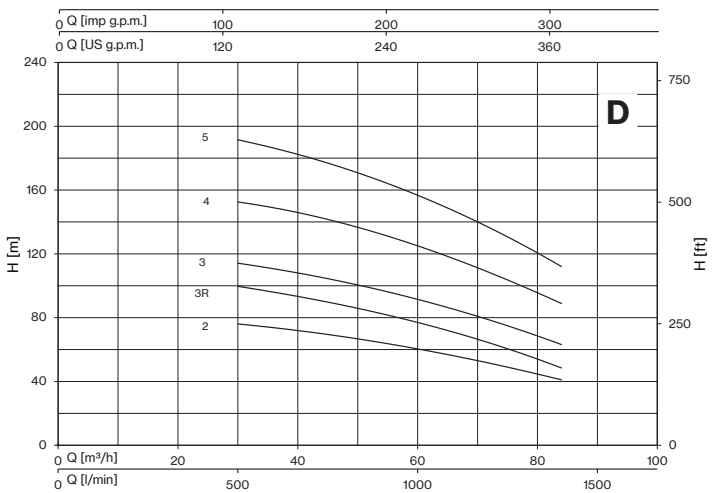
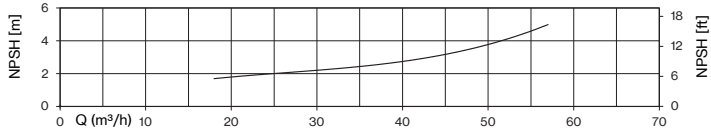
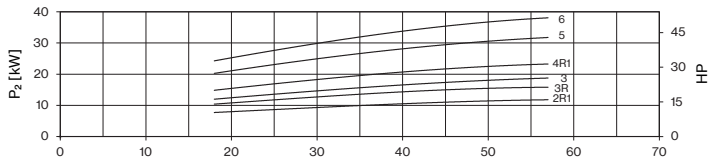
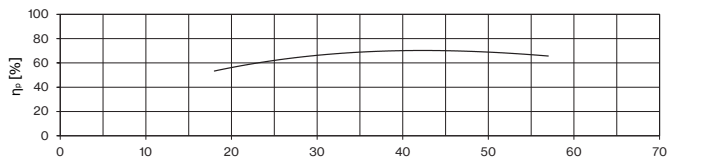
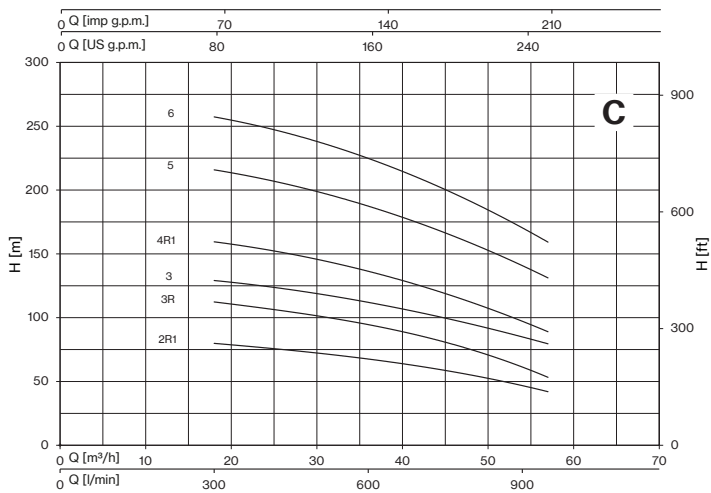
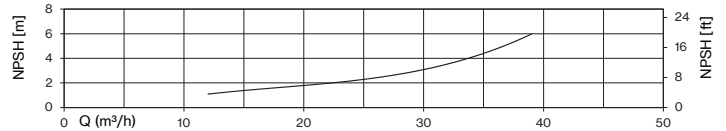
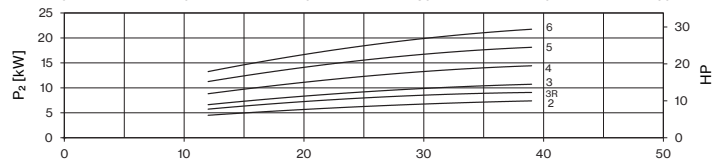
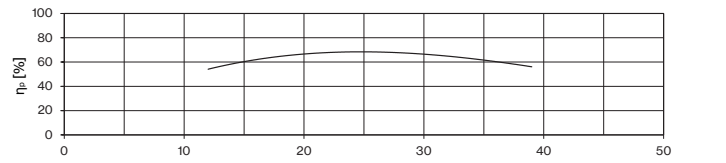
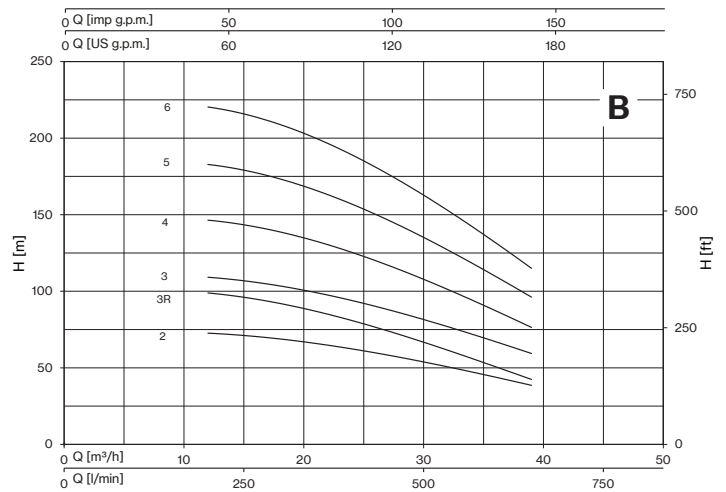
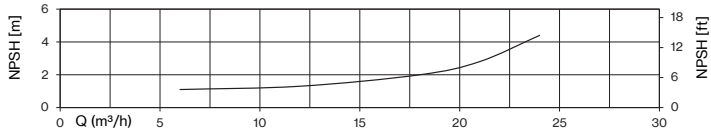
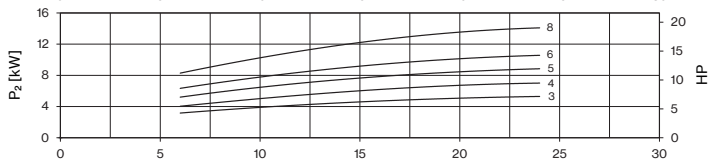
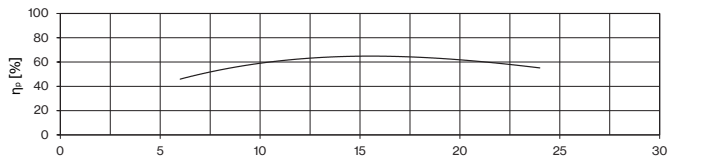
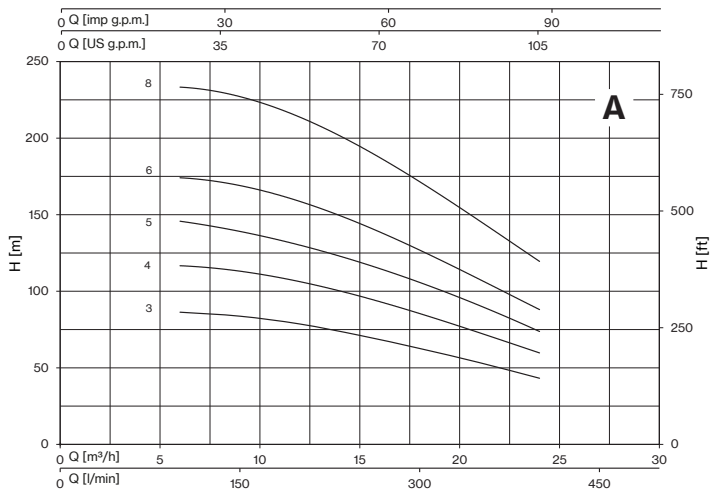
TYPE - 50 Hz	P2		P1	CURRENT	Q (m³/h - l/min - l/s)							
				3- 400V	0	6	9	12	15	18	21	24
					0	100	150	200	250	300	350	400
	0	1,67	2,5		3,33	4,17	5	5,83	6,67			
HP	kW	kW	A	H (m)								
BMVA-3/5,5	7,5	5,5	6,0	10,1	88,2	86,3	83,7	78,6	71,2	62,6	53,4	43,2
BMVA-4/7,5	10	7,5	7,8	13,0	118,0	116,7	113,0	106,5	96,8	85,2	73,1	59,7
BMVA-5/9,2	12,5	9,2	9,8	16,4	148,2	145,9	138,8	130,0	119,8	105,2	90,7	73,8
BMVA-6/11	15	11	11,8	19,6	177,5	174,2	168,9	158,9	144,2	126,7	107,9	88,0
BMVA-8/15	20	15	15,5	26,3	237,8	233,4	227,0	213,8	194,8	171,4	146,0	119,5

TYPE - 50 Hz	P2		P1	CURRENT	Q (m³/h - l/min - l/s)										
				3- 400V	0	12	15	18	21	24	27	30	33	36	39
					0	200	250	300	350	400	450	500	550	600	650
	0	3,33	4,17		5	5,83	6,67	7,5	8,33	9,17	10	10,83			
HP	kW	kW	A	H (m)											
BMVB-2/7,5	10	7,5	8,2	13,4	74,5	72,7	71,1	68,7	66,1	62,4	58,3	53,8	49,0	43,9	38,6
BMVB-3R/9,2	12,5	9,2	10,0	16,7	101,8	98,9	96,2	91,4	87,4	81,0	74,3	66,5	58,8	50,8	42,4
BMVB-3/11	15	11	11,8	19,6	112,7	109,2	106,9	102,9	99,6	94,1	88,1	81,3	74,5	67,2	59,3
BMVB-4/15	20	15	15,9	26,5	149,7	146,5	143,4	138,2	133,4	125,4	117,1	107,4	97,8	87,7	76,2
BMVB-5/18,5	25	18,5	19,8	33,0	187,7	182,9	179,2	172,3	166,7	157,2	146,7	134,9	122,7	109,9	96,2
BMVB-6/22	30	22	23,6	38,8	225,9	220,4	216,3	207,1	201,1	189,6	176,6	162,5	147,5	131,7	115,1

TYPE - 50 Hz	P2		P1	CURRENT	Q (m³/h - l/min - l/s)								
				3- 400V	0	18	24	30	36	42	48	54	57
					0	300	400	500	600	700	800	900	950
	0	5	6,67		8,33	10	11,67	13,33	15	15,83			
HP	kW	kW	A	H (m)									
BMVC-2R1/11	15	11	13,0	21,4	78,4	79,5	76,3	72,3	67,6	61,8	55,2	46,9	41,8
BMVC-3R/15	20	15	17,4	28,9	110,4	111,9	107,2	101,5	94,5	85,8	75,3	61,5	53,0
BMVC-3/18,5	25	18,5	20,5	34,0	127,6	128,8	124,7	118,8	111,9	104,0	95,1	85,3	79,2
BMVC-4R1/22	30	22	25,3	41,5	159,5	159,0	153,6	145,7	136,3	125,0	112,2	98,1	88,3
BMVC-5/30	40	30	34,6	59,4	214,7	215,7	208,6	198,9	187,2	173,9	158,5	141,2	130,9
BMVC-6/37	50	37	41,2	72,8	256,5	257,1	249,2	238,2	224,6	209,0	191,3	170,7	158,9

TYPE - 50 Hz	P2		P1	CURRENT	Q (m³/h - l/min - l/s)										
				3- 400V	0	30	36	42	48	54	60	66	72	78	84
					0	500	600	700	800	900	1000	1100	1200	1300	1400
	0	8,33	10		11,67	13,33	15	16,67	18,33	20	21,67	23,33			
HP	kW	kW	A	H (m)											
BMVD-2/15	20	15	16,6	27,6	75,9	75,9	73,8	71,0	67,8	64,3	60,4	56,1	51,5	46,4	41,0
BMVD-3R/18,5	25	18,5	20,3	33,7	99,6	99,6	96,0	91,7	87,5	82,7	77,1	70,8	64,0	56,6	48,5
BMVD-3/22	30	22	23,7	39,3	113,1	113,9	110,8	106,7	102,0	96,9	91,4	85,4	78,8	71,2	63,0
BMVD-4/30	40	30	33,0	57,2	152,0	152,5	148,9	144,1	138,7	132,4	125,1	117,0	108,1	98,8	89,0
BMVD-5/37	50	37	40,6	71,9	189,6	191,4	186,4	179,9	173,3	165,7	157,0	147,0	136,0	124,5	112,3

# BMV ~2900 rpm



## 4BMV ~1450 rpm

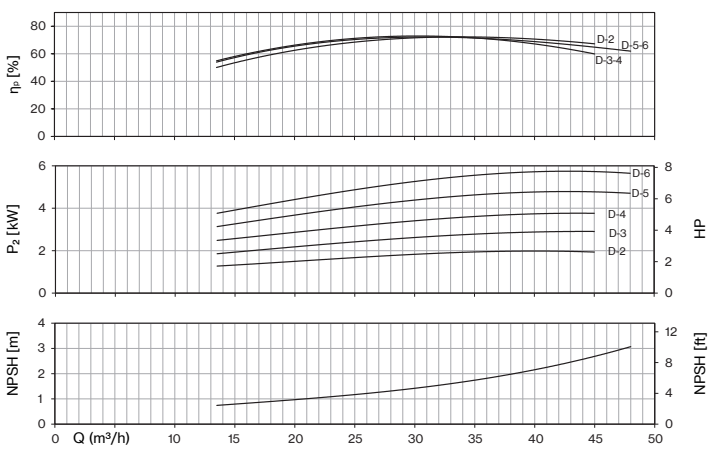
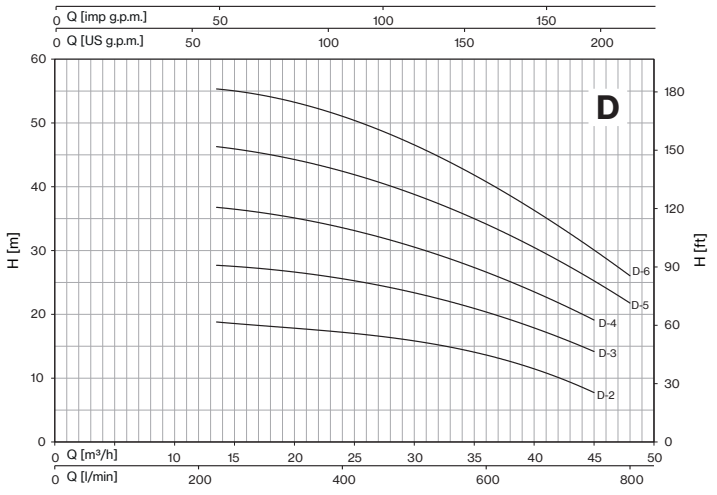
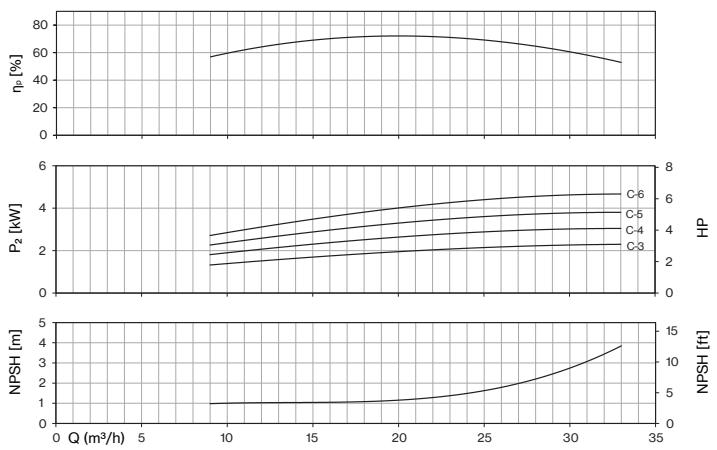
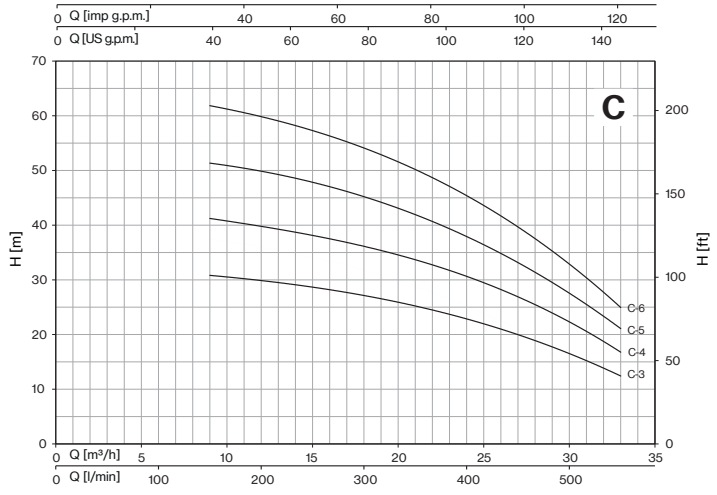
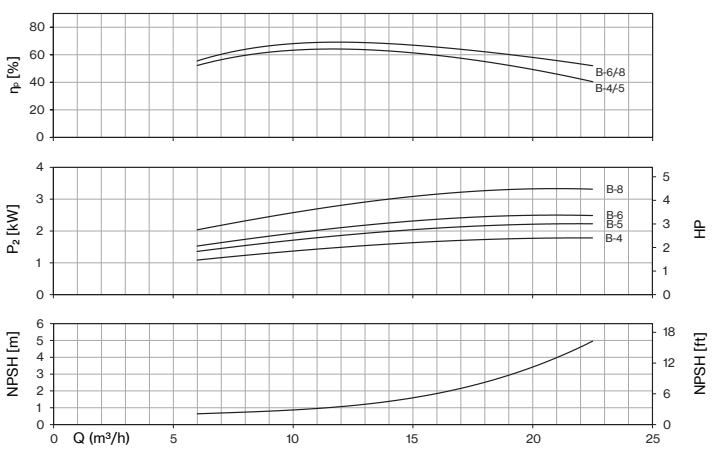
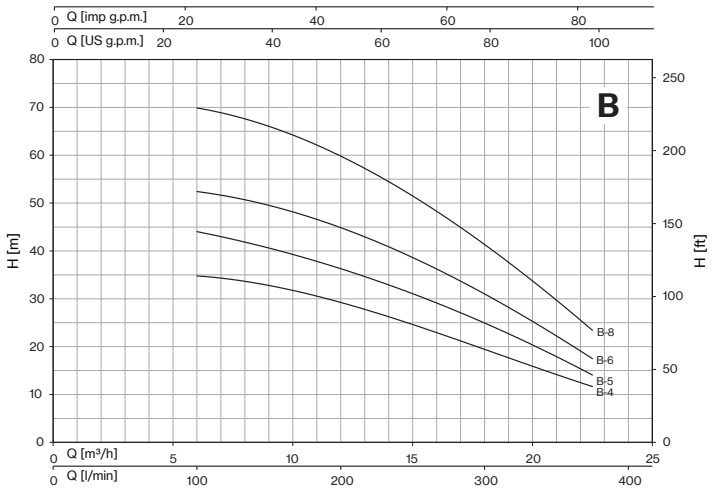
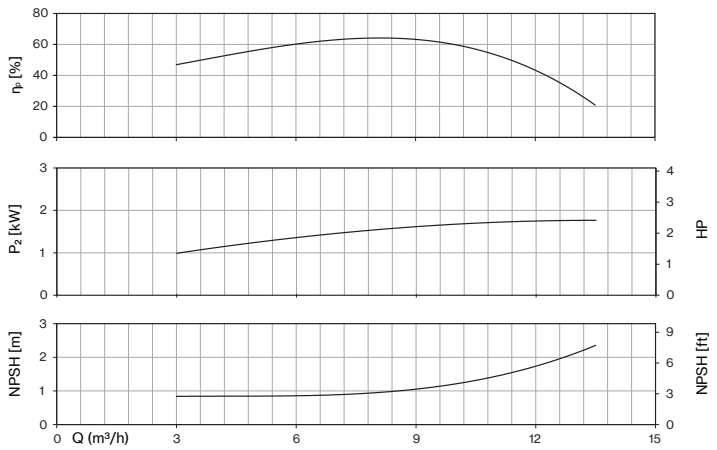
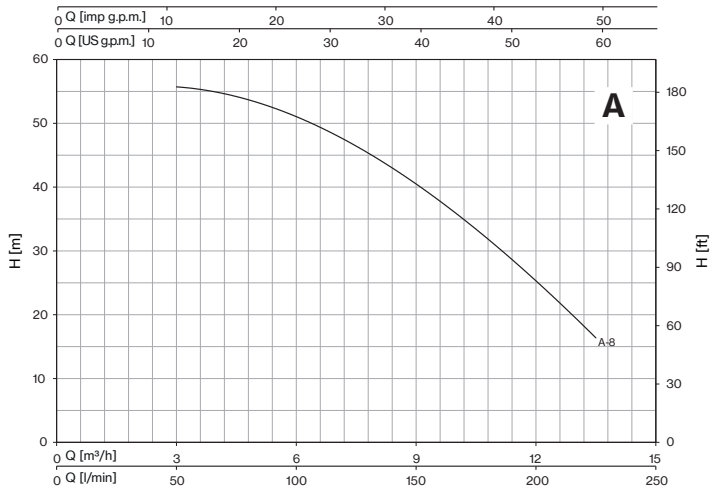
TYPE - 50 Hz	P2		Q (m³/h - l/min - l/s)								
			0	3	4,5	6	7,5	9	10,5	12	13,5
			0	50	75	100	125	150	175	200	225
	0	0,83	1,25	1,67	2,08	2,50	2,92	3,33	3,75		
HP		kW	H (m)								
<b>4BMVA-8/2,2</b>	3	2,2	56,0	55,7	54,2	51,3	46,3	40,2	33,4	25,7	16,2

TYPE - 50 Hz	P2		Q (m³/h - l/min - l/s)									
			0	6	7,5	9	10,5	12	13,5	16,5	19,5	22,5
			0	100	125	150	175	200	225	275	325	375
	0	1,67	2,08	2,50	2,92	3,33	3,75	4,58	5,42	6,25		
HP		kW	H (m)									
<b>4BMVB-4/2,2</b>	3	2,2	35,4	34,8	34,0	32,8	31,2	29,3	27,0	22,0	16,9	11,6
<b>4BMVB-5/2,2</b>	3	2,2	44,3	43,5	42,5	41,0	39,0	36,6	33,8	27,5	21,1	14,6
<b>4BMVB-6/3</b>	4	3	53,2	52,2	51,3	49,9	47,8	44,7	41,5	34,4	27,7	17,2
<b>4BMVB-8/4</b>	5,5	4	70,9	69,6	68,3	66,5	63,7	59,7	55,3	45,9	36,9	23,0

TYPE - 50 Hz	P2		Q (m³/h - l/min - l/s)											
			0	9	10,5	12	13,5	16,5	19,5	22,5	24	27	30	33
			0	150	175	200	225	275	325	375	400	450	500	550
	0	2,50	2,92	3,33	3,75	4,58	5,42	6,25	6,67	7,50	8,33	9,17		
HP		kW	H (m)											
<b>4BMVC-3/2,2</b>	3	2,2	30,2	30,7	30,5	30,0	29,4	27,9	26,2	24,0	22,8	20,0	16,7	12,3
<b>4BMVC-4/3</b>	4	3	40,1	41,0	40,6	39,9	39,1	37,3	35,0	32,0	30,3	26,9	23,1	16,4
<b>4BMVC-5/4</b>	5,5	4	50,1	51,3	50,8	49,9	48,8	46,6	43,8	40,0	37,8	33,0	27,8	21,0
<b>4BMVC-6/5,5</b>	7,5	5,5	60,3	61,7	61,0	59,9	58,7	55,9	52,3	47,7	45,1	39,6	33,6	24,6

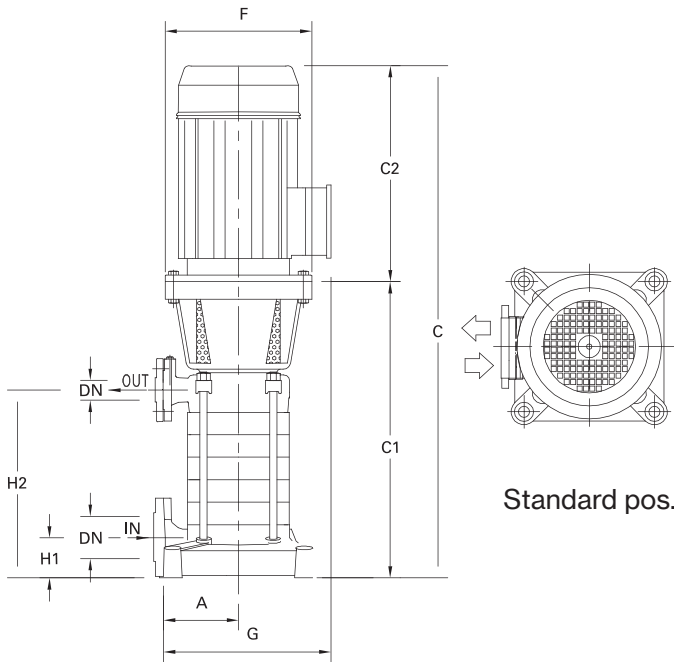
TYPE - 50 Hz	P2		Q (m³/h - l/min - l/s)											
			0	13,5	16,5	19,5	22,5	24	27	30	33	39	45	48
			0	225	275	325	375	400	450	500	550	650	750	800
	0	3,75	4,58	5,42	6,25	6,67	7,50	8,33	9,17	10,83	12,50	13,33		
HP		kW	H (m)											
<b>4BMVD-2/2,2</b>	3	2,2	18,3	18,7	18,4	18,0	17,5	17,2	16,5	15,7	14,7	12,3	7,6	
<b>4BMVD-3/3</b>	4	3	27,1	27,7	27,3	26,7	26,0	25,6	24,6	23,5	22,0	18,4	14,2	
<b>4BMVD-4/4</b>	5,5	4	36,2	36,8	36,1	35,2	34,1	33,6	32,3	30,6	28,7	24,2	19,2	
<b>4BMVD-5/5,5</b>	7,5	5,5	45,2	46,3	45,4	44,4	43,2	42,6	41,0	39,0	36,6	30,9	25,3	22,0
<b>4BMVD-6/7,5</b>	10	7,5	54,2	55,5	54,5	53,2	51,9	51,1	49,1	46,8	43,9	37,0	30,3	26,0

# 4BMV ~1450 rpm





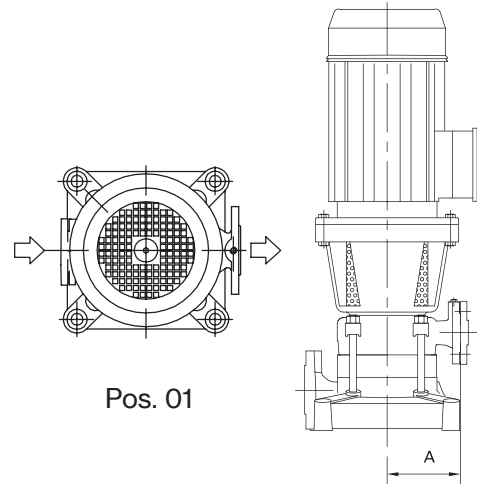
# BMV-4BMV



## STANDARD

Not available for pump type: MSVB 2/7.5, MSVC-2R1/11, MSVD-2/15, 4MSVD-2/2.2

Standard pos.

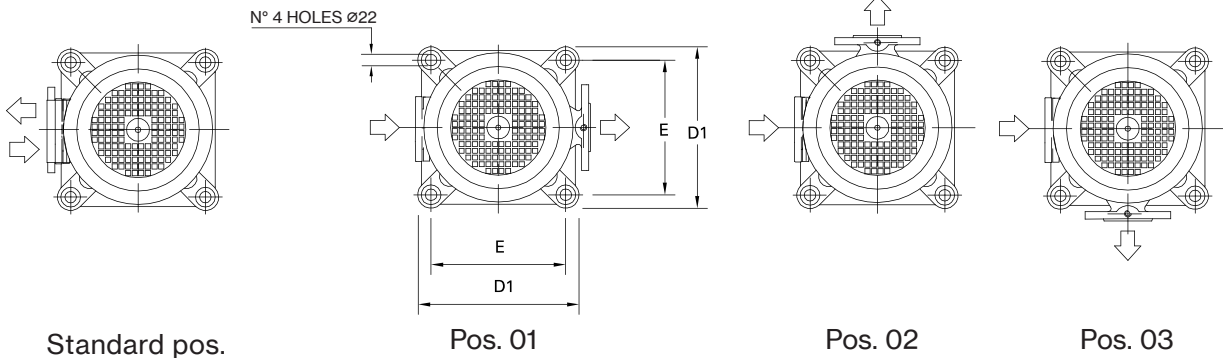


Pos. 01

STANDARD FOR:

MSVB-2/7.5  
MSVC-2R1/11  
MSVD-2/15  
4MSVD-2/2.2

## Direction of nozzles



Standard pos.

Not available for pump type: MSVB 2/7.5, MSVC-2R1/11, MSVD-2/15, 4MSVD-2/2.2

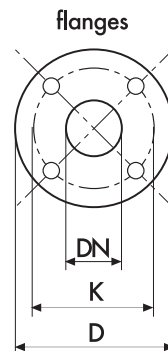
Pos. 01

Pos. 02


Pos. 03

## DIMENSIONS (mm)


DN	D	K	holes	
			n°	ø
40	150	110	4	18
50	165	125	4	18
65	185	145	4	18
80	200	160	8	18




## BMV ~2900 rpm


TYPE	DN IN	DN OUT	N. STAGE	DIMENSIONS (mm)													Kg
				A	C	C1	C2	D1	E	F	G	H1	H2	I	L	M	
<b>BMVA -3/5,5</b>	(UNI PN 16) 50	(UNI PN 40) 40	3	175	921,5	544,5	377	306	256	300	355	82	255,5	1100	400	500	139,5
<b>BMVA -4/7,5</b>			4		972,5	595,5	377			300	355		306,5	1100	400	500	156
<b>BMVA -5/9,2</b>			5		1062,5	646,5	416			300	355		357,5	1100	400	500	173
<b>BMVA -6/11</b>			6		1113,5	697,5	416			300	355		408,5	1100	400	500	192
<b>BMVA -8/15</b>			8		1297,5	799,5	498			350	410		510,5	1400	500	500	259
<b>BMVB -2/7,5</b>	(UNI PN 16) 50	(UNI PN 40) 40	2	175	870,5	493,5	377	306	256	300	355	82	204,5	1100	400	500	136,5
<b>BMVB -3R/9,2</b>			3		931	515	416			300	335		255,5	1100	400	500	153,5
<b>BMVB -3/11</b>			3		931	515	416			300	355		255,5	1100	400	500	157,5
<b>BMVB -4/15</b>			4		1013	515	498			350	410		306,5	1400	500	500	220,5
<b>BMVB -5/18,5</b>			5		1056	515	541			350	410		357,5	1400	500	500	245
<b>BMVB -6/22</b>			6		1056	515	541			350	410		408,5	1400	500	500	265
<b>BMVC -2R1/11</b>	(UNI PN 16) 65	(UNI PN 40) 50	2	200	944	528	416	332	282	300	380	95	233	1100	400	500	167
<b>BMVC -3R/15</b>			3		1086	588	498			350	435		293	1100	400	500	234
<b>BMVC -3/18,5</b>			3		1129	588	541			350	435		293	1400	500	500	249
<b>BMVC -4R1/22</b>			4		1189	648	541			350	435		353	1400	500	500	273
<b>BMVC -5/30</b>			5		1276	708	568			350	450		413	1400	500	500	321,5
<b>BMVC -6/37</b>			6		1376	768	608			350	450		473	1400	500	500	360,5
<b>BMVD -2/15</b>	(UNI PN 16) 65	(UNI PN 40) 50	2	200	1026	528	498	332	282	350	435	95	233	1400	400	500	219
<b>BMVD -3R/18,5</b>			3		1129	588	541			350	435		293	1400	500	500	247
<b>BMVD -3/22</b>			3		1129	588	541			350	435		293	1400	500	500	257,5
<b>BMVD -4/30</b>			4		1216	648	568			350	450		353	1400	500	500	305
<b>BMVD -5/37</b>			5		1316	708	608			350	450		413	1400	500	500	342,5

## 4BMV ~1450 rpm

TYPE	DN IN	DN OUT	N. STAGE	DIMENSIONS (mm)													Kg
				A	C	C1	C2	D1	E	F	G	H1	H2	I	L	M	
<b>4BMVA -8/2,2</b>	(UNI PN 16) 50	(UNI PN 40) 40	8	175	1078	762,5	315	306	256	250	345	82	510,5	1100	400	500	183
<b>4BMVB -4/2,2</b>			4		874	558,5	315			250	345		306,5	1100	400	500	136
<b>4BMVB -5/2,2</b>			5		925	609,5	315			250	345		357,5	1400	500	500	140
<b>4BMVB -6/3</b>			6		976	660,5	315			250	345		408,5	1400	500	500	171
<b>4BMVB -8/4</b>			8		1103	762,5	340			250	368		511	1400	500	500	200
<b>4BMVC -3/2,2</b>	(UNI PN 16) 65	(UNI PN 40) 50	3	200	866	551	315	332	282	250	370	95	293	1100	400	500	192
<b>4BMVC -4/3</b>			4		926	611	315			250	370		353	1100	400	500	194
<b>4BMVC -5/4</b>			5		1011	671	340			250	393		413	1100	400	500	202
<b>4BMVC -6/5,5</b>			6		1116	731	385			300	423		473	1400	500	500	206
<b>4BMVD -2/2,2</b>	(UNI PN 16) 65	(UNI PN 40) 50	2	200	806	491	315	332	282	250	370	95	233	1100	400	500	135
<b>4BMVD -3/3</b>			3		866	551	315			250	370		293	1100	400	500	167
<b>4BMVD -4/4</b>			4		951	611	340			250	393		353	1100	400	500	189
<b>4BMVD -5/5,5</b>			5		1056	671	385			300	423		413	1100	400	500	194
<b>4BMVD -6/7,5</b>			6		1156	731	425			300	423		473	1400	500	500	218

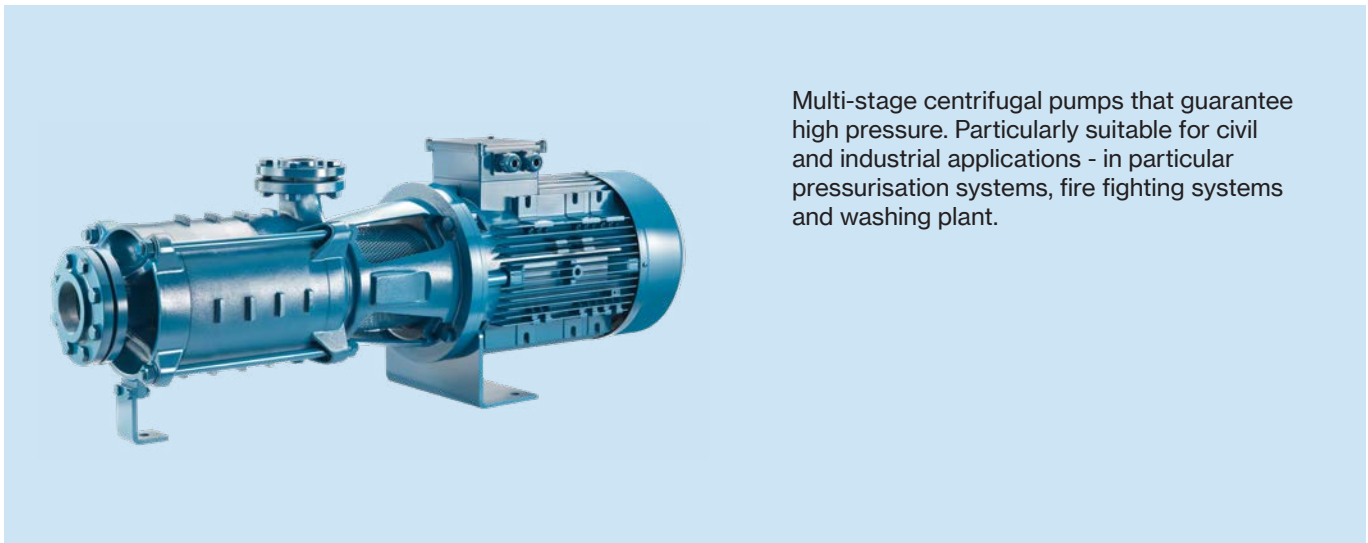
# BMV-4BMV Serie-Mechanical seal and bearings

MECHANICAL SEAL	PUMP MODEL	SHAFT		STANDARD MATERIAL	OPTIONAL
					4
	BMVA-3/5,5-132S   BMVB-2/7,5-132S   4BMVA-8/2,2   4BMVB-4/2,2   4BMVB-5/2,2   4BMVB-6/3   4BMVB-8/4	25mm	<b>Rotating face</b> <b>Stationary face</b> <b>Elastomer</b>	Ceramic Graphite NBR	Widia Widia NBR
	BMVC-2R1/11-132M   BMVD-2/15-160M   4BMVC-3/2,2   4BMVC-4/3   4BMVC-5/4   4BMVC-6/5,5-132S   4BMVD-2/2,2   4BMVD-3/3   4BMVD-4/4   4BMVD-5/5,5-132S   4BMVD-6/7,5-132St	35mm	<b>Rotating face</b> <b>Stationary face</b> <b>Elastomer</b>	Ceramic Graphite NBR	Widia Widia NBR
	BMVA-4/7,5-132S   BMVA-5/9,2-132M   BMVA-6/11-132M   BMVA-8/15-160M   BMVB-3R/9,2-132M   BMVB-3/11-132M   BMVB-4/15-160M   BMVB-5/18,5-160L   BMVB-6/22-160L	25mm / Balanced seal	<b>Rotating face</b> <b>Stationary face</b> <b>Elastomer</b>	Widia Graphite NBR	Widia Widia NBR
	BMVC-3R/15-160M   BMVC-3/18,5-160L   BMVC-4R1/22-160L   BMVC-5/30-180M   BMVC-6/37-180L   BMVD-3R/18,5-160L   BMVD-3/22-160L   BMVD-4/30-180M   BMVD-5/37-180L	35mm / Balanced seal	<b>Rotating face</b> <b>Stationary face</b> <b>Elastomer</b>	Widia Graphite NBR	Widia Widia NBR

BEARINGS	PUMP MODEL	TYPE	
	4BMVA-8/2,2   4BMVB-4/2,2   4BMVB-5/2,2   4BMVC-3/2,2   4BMVD-2/2,2	6205-ZZ C3	6205-ZZ C3
	4BMVB-6/3   4BMVB-8/4   4BMVC-4/3   4BMVC-5/4   4BMVD-3/3   4BMVD-4/4	6206-ZZ C3	6206-ZZ C3
	BMVA-3/5,5-132S   BMVA-4/7,5-132S   BMVA-5/9,2-132M   BMVA-6/11-132M   BMVB-2/7,5-132S   BMVB-3R/9,2-132M   BMVB-3/11-132M   BMVC-2R1/11-132M	6206-ZZ C3	6308-ZZ C3
	4BMVC-6/5,5-132S   4BMVD-5/5,5-132S   4BMVD-6/7,5-132S	6208-ZZ C3	6208-ZZ C3
	BMVA-8/15-160M   BMVB-4/15-160M   BMVB-5/18,5-160L   BMVB-6/22-160L   BMVC-3R/15-160M   BMVC-3/18,5-160L   BMVC-4R1/22-160L   BMVD-2/15-160M   BMVD-3R/18,5-160L   BMVD-3/22-160L	6308-ZZ C3	6309-ZZ C3
	BMVC-5/30-180M   BMVC-6/37-180L   BMVD-4/30-180M   BMVD-5/37-180L	6309-ZZ C3	3310-ZZ C3

# BMH-4BMH

Industrial Line



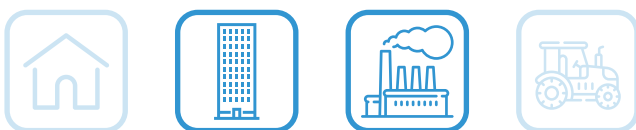
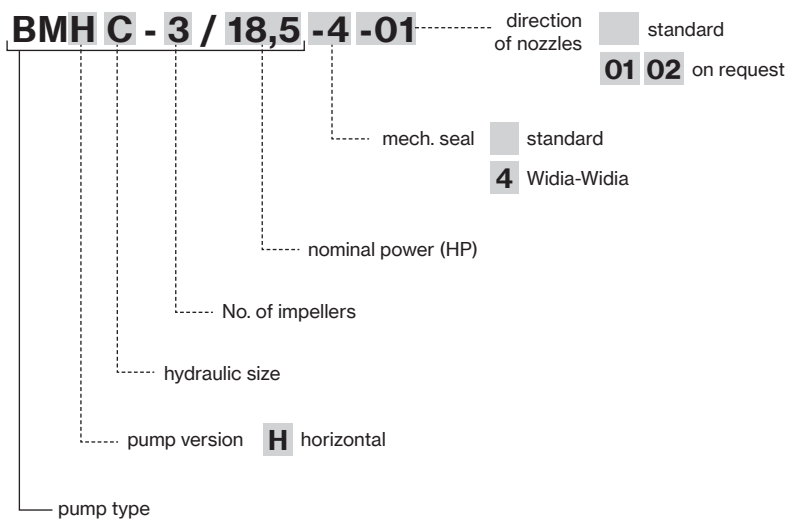
Multi-stage centrifugal pumps that guarantee high pressure. Particularly suitable for civil and industrial applications - in particular pressurisation systems, fire fighting systems and washing plant.

## Construction features

<b>Pump body</b>	cast iron
<b>Motor bracket</b>	cast iron
<b>Impeller</b>	brass
<b>Mechanical seal</b>	ceramic-graphite
<b>Motor shaft</b>	stainless steel AISI 304
<b>Liquid temperature</b>	-10 ÷ +90 °C
<b>Operating pressure</b>	max 30 bar

## Motor

<b>2 and 4 poles induction motor</b>	3~ 230/400V - 50Hz P ≤ 4kW 3~ 400/690V - 50Hz P > 4kW
<b>Insulation class</b>	F
<b>Protection degree</b>	IPX5



## BMH ~2900 rpm

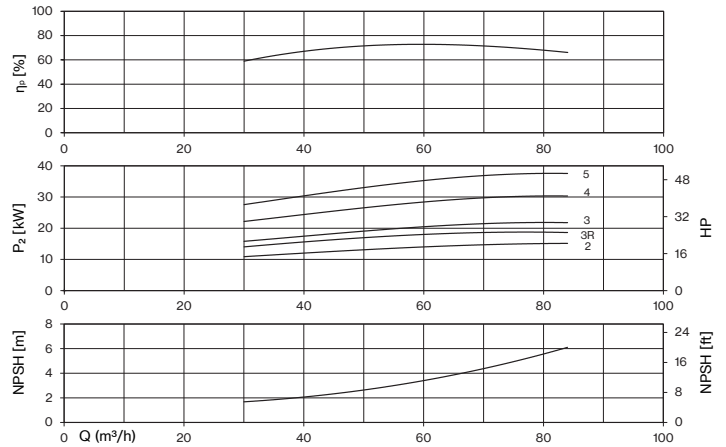
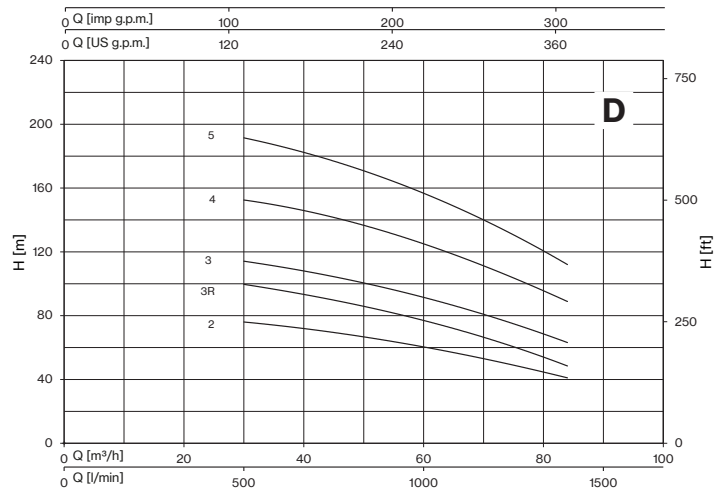
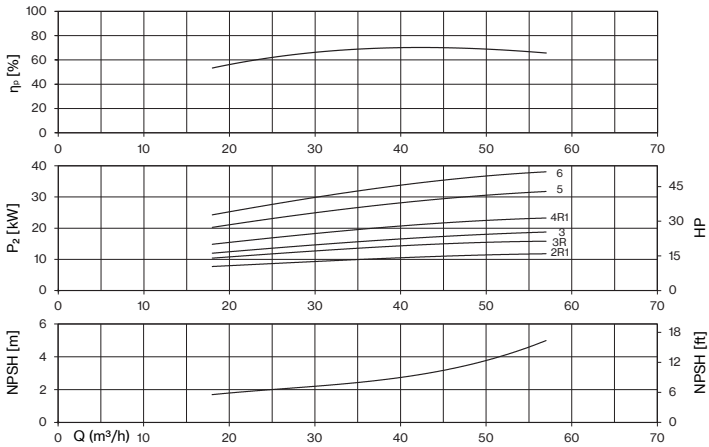
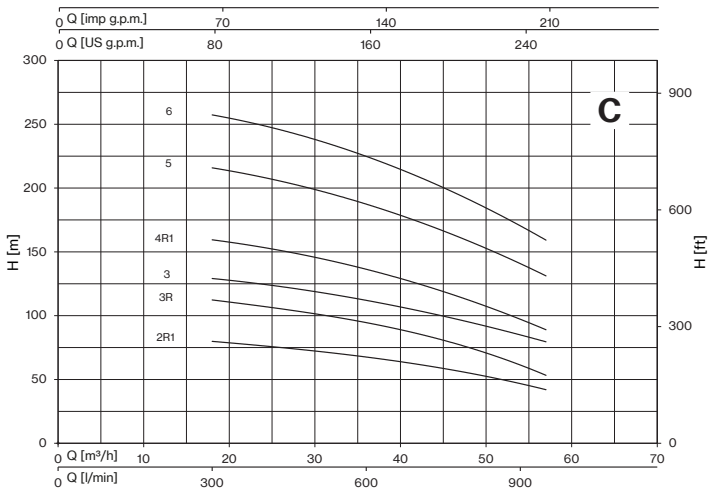
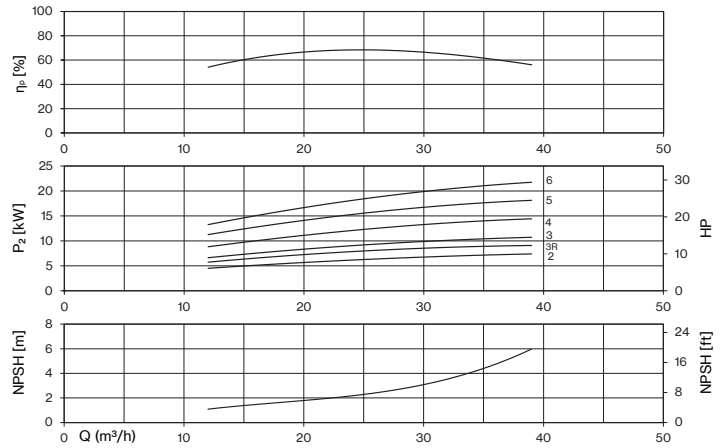
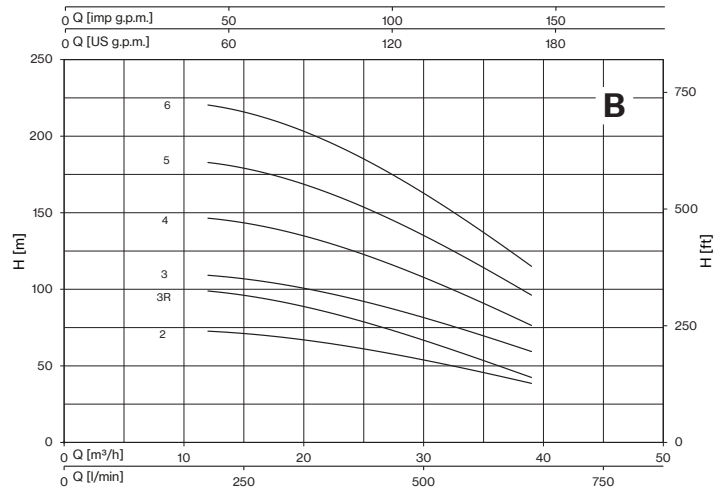
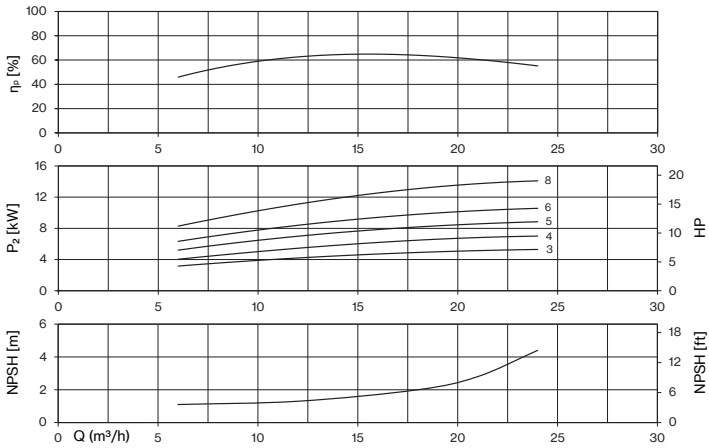
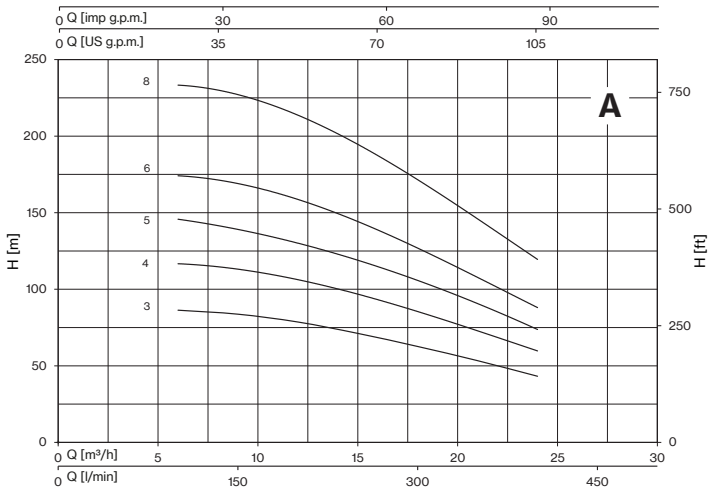
TYPE - 50 Hz	P2		P1	CURRENT	Q (m³/h - l/min - l/s)							
				3- 400V	0	6	9	12	15	18	21	24
					0	100	150	200	250	300	350	400
	0	1,67	2,5		3,33	4,17	5	5,83	6,67			
HP	kW	kW	A	H (m)								
BMHA-3/5,5	7,5	5,5	6,0	10,1	88,2	86,3	83,7	78,6	71,2	62,6	53,4	43,2
BMHA-4/7,5	10	7,5	7,8	13,0	118,0	116,7	113,0	106,5	96,8	85,2	73,1	59,7
BMHA-5/9,2	12,5	9,2	9,8	16,4	148,2	145,9	138,8	130,0	119,8	105,2	90,7	73,8
BMHA-6/11	15	11	11,8	19,6	177,5	174,2	168,9	158,9	144,2	126,7	107,9	88,0
BMHA-8/15	20	15	15,5	26,3	237,8	233,4	227,0	213,8	194,8	171,4	146,0	119,5

TYPE - 50 Hz	P2		P1	CURRENT	Q (m³/h - l/min - l/s)										
				3- 400V	0	12	15	18	21	24	27	30	33	36	39
					0	200	250	300	350	400	450	500	550	600	650
	0	3,33	4,17		5	5,83	6,67	7,5	8,33	9,17	10	10,83			
HP	kW	kW	A	H (m)											
BMHB-2/7,5	10	7,5	8,2	13,4	74,5	72,7	71,1	68,7	66,1	62,4	58,3	53,8	49,0	43,9	38,6
BMHB-3R/9,2	12,5	9,2	10,0	16,7	101,8	98,9	96,2	91,4	87,4	81,0	74,3	66,5	58,8	50,8	42,4
BMHB-3/11	15	11	11,8	19,6	112,7	109,2	106,9	102,9	99,6	94,1	88,1	81,3	74,5	67,2	59,3
BMHB-4/15	20	15	15,9	26,5	149,7	146,5	143,4	138,2	133,4	125,4	117,1	107,4	97,8	87,7	76,2
BMHB-5/18,5	25	18,5	19,8	33,0	187,7	182,9	179,2	172,3	166,7	157,2	146,7	134,9	122,7	109,9	96,2
BMHB-6/22	30	22	23,6	38,8	225,9	220,4	216,3	207,1	201,1	189,6	176,6	162,5	147,5	131,7	115,1

TYPE - 50 Hz	P2		P1	CURRENT	Q (m³/h - l/min - l/s)								
				3- 400V	0	18	24	30	36	42	48	54	57
					0	300	400	500	600	700	800	900	950
	0	5	6,67		8,33	10	11,67	13,33	15	15,83			
HP	kW	kW	A	H (m)									
BMHC-2R1/11	15	11	13,0	21,4	78,4	79,5	76,3	72,3	67,6	61,8	55,2	46,9	41,8
BMHC-3R/15	20	15	17,4	28,9	110,4	111,9	107,2	101,5	94,5	85,8	75,3	61,5	53,0
BMHC-3/18,5	25	18,5	20,5	34,0	127,6	128,8	124,7	118,8	111,9	104,0	95,1	85,3	79,2
BMHC-4R1/22	30	22	25,3	41,5	159,5	159,0	153,6	145,7	136,3	125,0	112,2	98,1	88,3
BMHC-5/30	40	30	34,6	59,4	214,7	215,7	208,6	198,9	187,2	173,9	158,5	141,2	130,9
BMHC-6/37	50	37	41,2	72,8	256,5	257,1	249,2	238,2	224,6	209,0	191,3	170,7	158,9

TYPE - 50 Hz	P2		P1	CURRENT	Q (m³/h - l/min - l/s)										
				3- 400V	0	30	36	42	48	54	60	66	72	78	84
					0	500	600	700	800	900	1000	1100	1200	1300	1400
	0	8,33	10		11,67	13,33	15	16,67	18,33	20	21,67	23,33			
HP	kW	kW	A	H (m)											
BMHD-2/15	20	15	16,6	27,6	75,9	75,9	73,8	71,0	67,8	64,3	60,4	56,1	51,5	46,4	41,0
BMHD-3R/18,5	25	18,5	20,3	33,7	99,6	99,6	96,0	91,7	87,5	82,7	77,1	70,8	64,0	56,6	48,5
BMHD-3/22	30	22	23,7	39,3	113,1	113,9	110,8	106,7	102,0	96,9	91,4	85,4	78,8	71,2	63,0
BMHD-4/30	40	30	33,0	57,2	152,0	152,5	148,9	144,1	138,7	132,4	125,1	117,0	108,1	98,8	89,0
BMHD-5/37	50	37	40,6	71,9	189,6	191,4	186,4	179,9	173,3	165,7	157,0	147,0	136,0	124,5	112,3

# BMH ~2900 rpm



## 4BMH ~1450 rpm

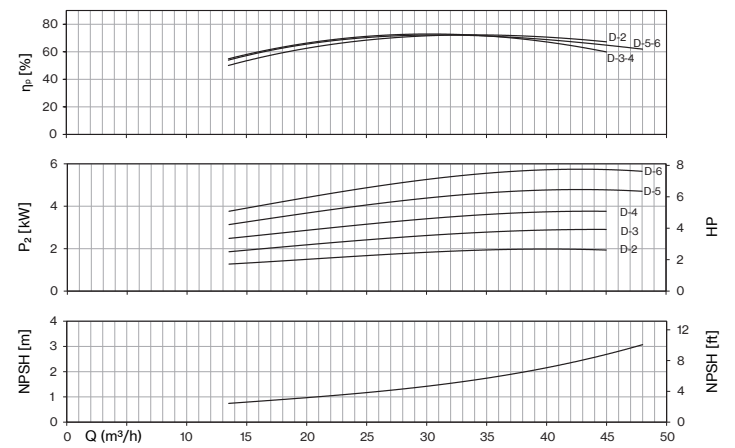
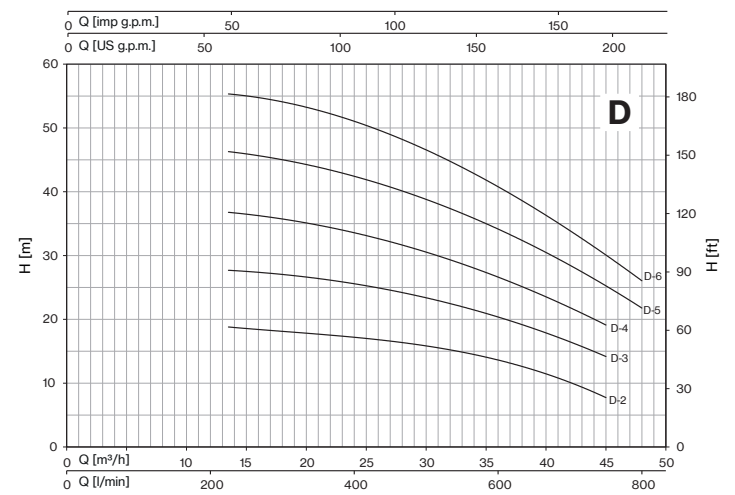
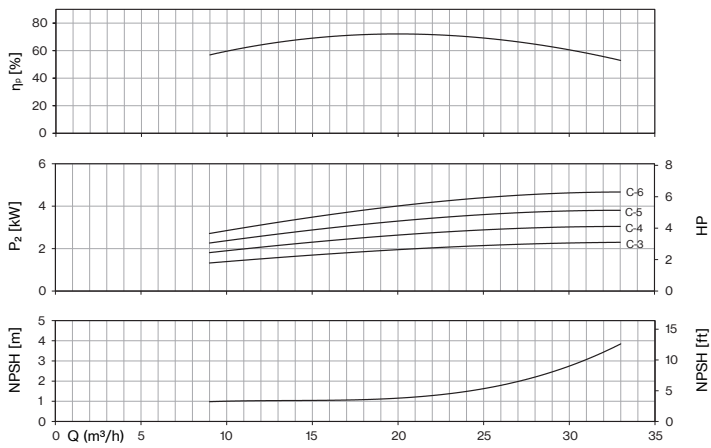
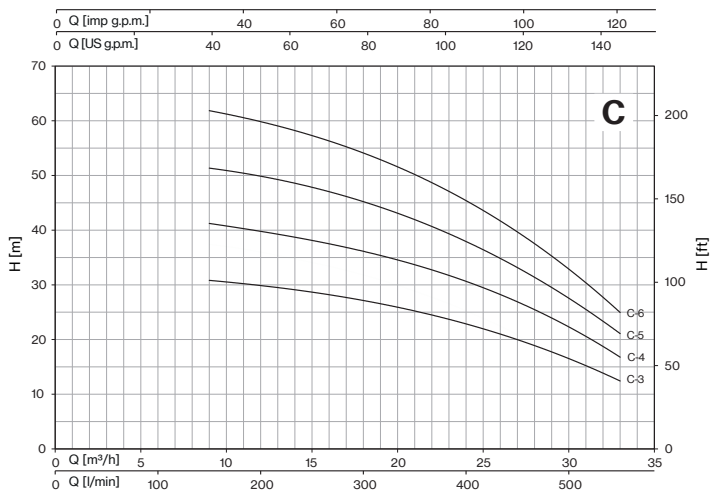
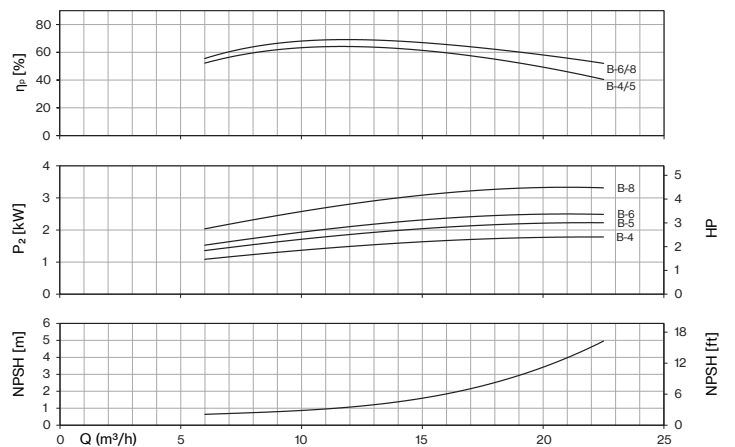
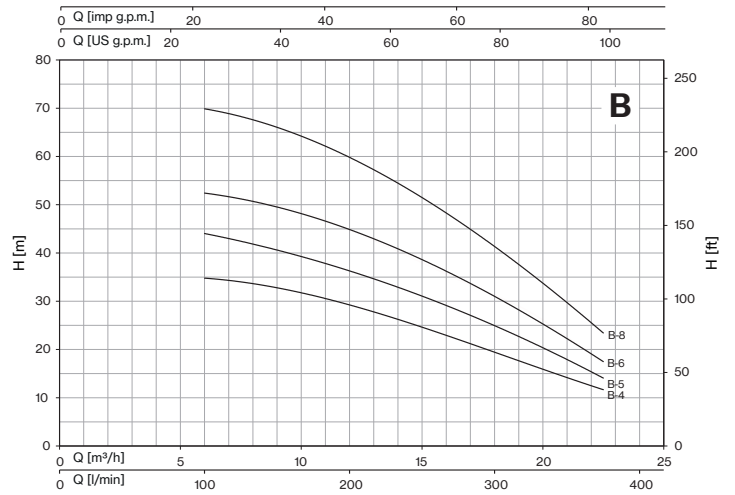
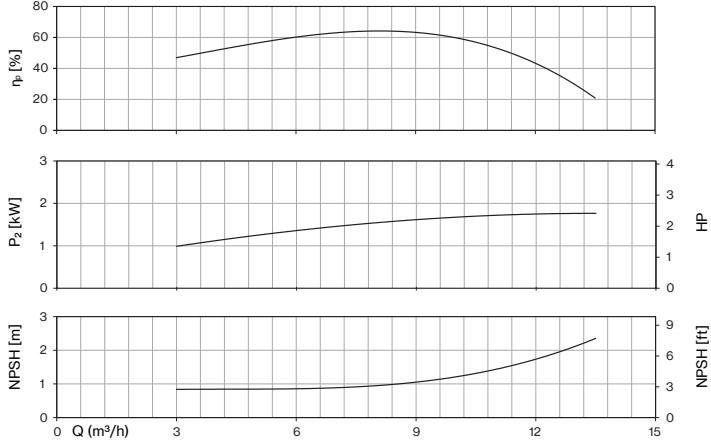
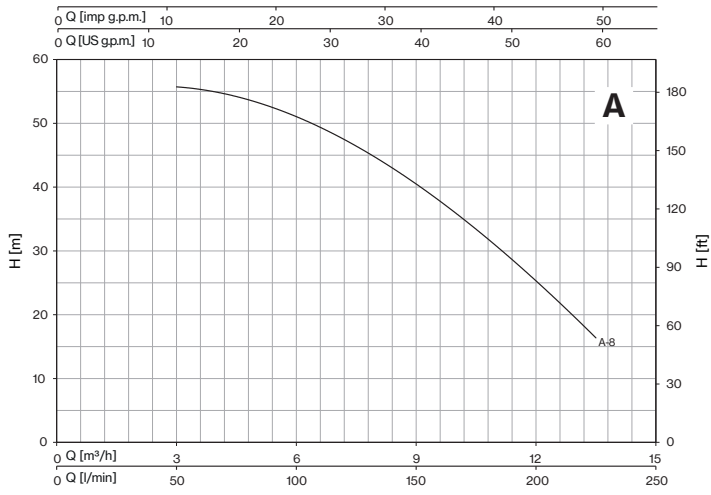
TYPE - 50 Hz	P2		Q (m³/h - l/min - l/s)								
			0	3	4,5	6	7,5	9	10,5	12	13,5
			0	50	75	100	125	150	175	200	225
	0	0,83	1,25	1,67	2,08	2,50	2,92	3,33	3,75		
HP		kW	H (m)								
4BMHA-8/2,2	3	2,2	56,0	55,7	54,2	51,3	46,3	40,2	33,4	25,7	16,2

TYPE - 50 Hz	P2		Q (m³/h - l/min - l/s)									
			0	6	7,5	9	10,5	12	13,5	16,5	19,5	22,5
			0	100	125	150	175	200	225	275	325	375
	0	1,67	2,08	2,50	2,92	3,33	3,75	4,58	5,42	6,25		
HP		kW	H (m)									
4BMHB-4/2,2	3	2,2	35,4	34,8	34,0	32,8	31,2	29,3	27,0	22,0	16,9	11,6
4BMHB-5/2,2	3	2,2	44,3	43,5	42,5	41,0	39,0	36,6	33,8	27,5	21,1	14,6
4BMHB-6/3	4	3	53,2	52,2	51,3	49,9	47,8	44,7	41,5	34,4	27,7	17,2
4BMHB-8/4	5,5	4	70,9	69,6	68,3	66,5	63,7	59,7	55,3	45,9	36,9	23,0

TYPE - 50 Hz	P2		Q (m³/h - l/min - l/s)											
			0	9	10,5	12	13,5	16,5	19,5	22,5	24	27	30	33
			0	150	175	200	225	275	325	375	400	450	500	550
	0	2,50	2,92	3,33	3,75	4,58	5,42	6,25	6,67	7,50	8,33	9,17		
HP		kW	H (m)											
4BMHC-3/2,2	3	2,2	30,2	30,7	30,5	30,0	29,4	27,9	26,2	24,0	22,8	20,0	16,7	12,3
4BMHC-4/3	4	3	40,1	41,0	40,6	39,9	39,1	37,3	35,0	32,0	30,3	26,9	23,1	16,4
4BMHC-5/4	5,5	4	50,1	51,3	50,8	49,9	48,8	46,6	43,8	40,0	37,8	33,0	27,8	21,0
4BMHC-6/5,5	7,5	5,5	60,3	61,7	61,0	59,9	58,7	55,9	52,3	47,7	45,1	39,6	33,6	24,6

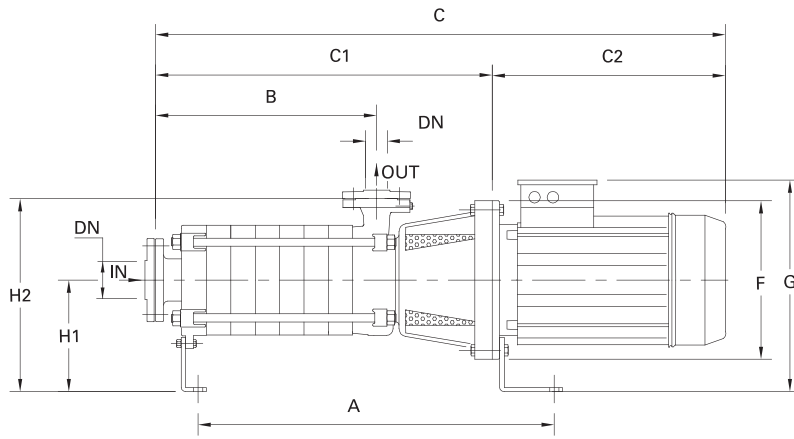
TYPE - 50 Hz	P2		Q (m³/h - l/min - l/s)											
			0	13,5	16,5	19,5	22,5	24	27	30	33	39	45	48
			0	225	275	325	375	400	450	500	550	650	750	800
	0	3,75	4,58	5,42	6,25	6,67	7,50	8,33	9,17	10,83	12,50	13,33		
HP		kW	H (m)											
4BMHD-2/2,2	3	2,2	18,3	18,7	18,4	18,0	17,5	17,2	16,5	15,7	14,7	12,3	7,6	
4BMHD-3/3	4	3	27,1	27,7	27,3	26,7	26,0	25,6	24,6	23,5	22,0	18,4	14,2	
4BMHD-4/4	5,5	4	36,2	36,8	36,1	35,2	34,1	33,6	32,3	30,6	28,7	24,2	19,2	
4BMHD-5/5,5	7,5	5,5	45,2	46,3	45,4	44,4	43,2	42,6	41,0	39,0	36,6	30,9	25,3	22,0
4BMHD-6/7,5	10	7,5	54,2	55,5	54,5	53,2	51,9	51,1	49,1	46,8	43,9	37,0	30,3	26,0

# 4BMH ~1450 rpm

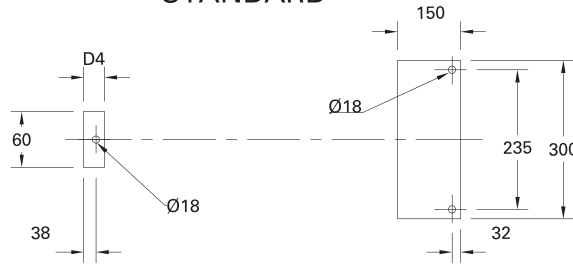




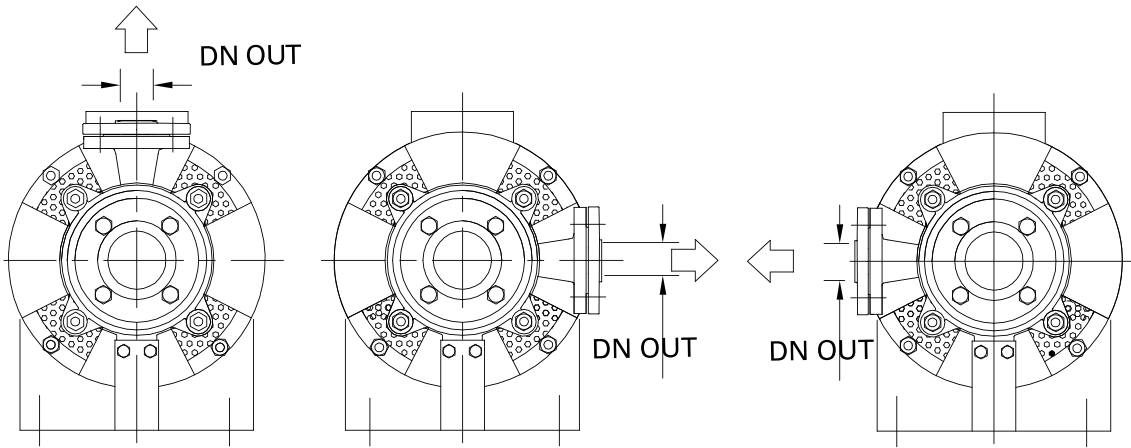
# BMH-4BMH



STANDARD



Direction of nozzles

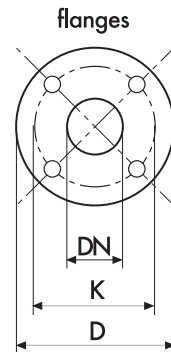


STANDARD



Pos. 01

Pos. 02



DIMENSIONS (mm)				
DN	D	K	holes	
			n°	∅
40	150	110	4	18
50	165	125	4	18
65	185	145	4	18
80	200	160	8	18




## BMH ~2900 rpm


TYPE	DN IN	DN OUT	N. STAGE	DIMENSIONS (mm)													
				A	B	C	C1	C2	F	G	H1	H2	D4	I	L		M
BMHA -3/5,5	(UNI PN 16) 65	(UNI PN 40) 40	3	604	256,5	922,5	545,5	377	300	425	245	420	70	1100	400	500	140,5
BMHA -4/7,5			4	655	307,5	973,5	596,5	377	300	425				1100	400	500	157
BMHA -5/9,2			5	706	358,5	1063,5	647,5	416	300	425				1100	400	500	173,5
BMHA -6/11			6	757	409,5	1114,5	698,5	416	300	425				1100	400	500	192,5
BMHA -8/15			8	859	511,5	1298,5	800,5	498	350	480				1400	500	500	259,5
BMHB -2/7,5	(UNI PN 16) 65	(UNI PN 40) 40	2	553	205,5	531,5	494,5	37	300	425	245	420	70	1100	400	500	137
BMHB -3R/9,2			3	604	256,5	961,5	545,5	416	300	425				1100	400	500	154
BMHB -3/11			3	604	256,5	961,5	545,5	416	300	425				1100	400	500	158
BMHB -4/15			4	655	307,5	1094,5	596,5	498	350	480				1400	500	500	220,5
BMHB -5/18,5			5	706	358,5	1188,5	647,5	541	350	480				1400	500	500	245
BMHB -6/22	6	757	409,5	1239,5	698,5	541	350	480	1400	500	500	265					
BMHC -2R1/11	(UNI PN 16) 80	(UNI PN 40) 50	2	596	243	954	538	416	300	425	245	445	60	1100	400	500	165
BMHC -3R/15			3	656	303	1096	598	498	350	480				1100	400	500	231,5
BMHC -3/18,5			3	656	303	1139	598	541	350	480				1400	500	500	246,5
BMHC -4R1/22			4	716	363	1199	658	541	350	480				1400	500	500	270,5
BMHC -5/30			5	776	423	1286	718	568	350	495				1400	500	500	319
BMHC -6/37	6	836	483	1386	778	608	350	495	1400	500	500	358					
BMHD -2/15	(UNI PN 10) 80	(UNI PN 40) 50	2	596	243	1036	538	498	350	480	245	445	60	1400	400	500	217
BMHD -3R/18,5			3	656	303	1139	598	541	350	480				1400	500	500	245
BMHD -3/22			3	656	303	1139	598	541	350	480				1400	500	500	255,5
BMHD -4/30			4	716	363	1226	658	568	350	495				1400	500	500	303
BMHD -5/37			5	776	423	1326	718	608	350	495				1400	500	500	340,5

## 4BMH ~1450 rpm

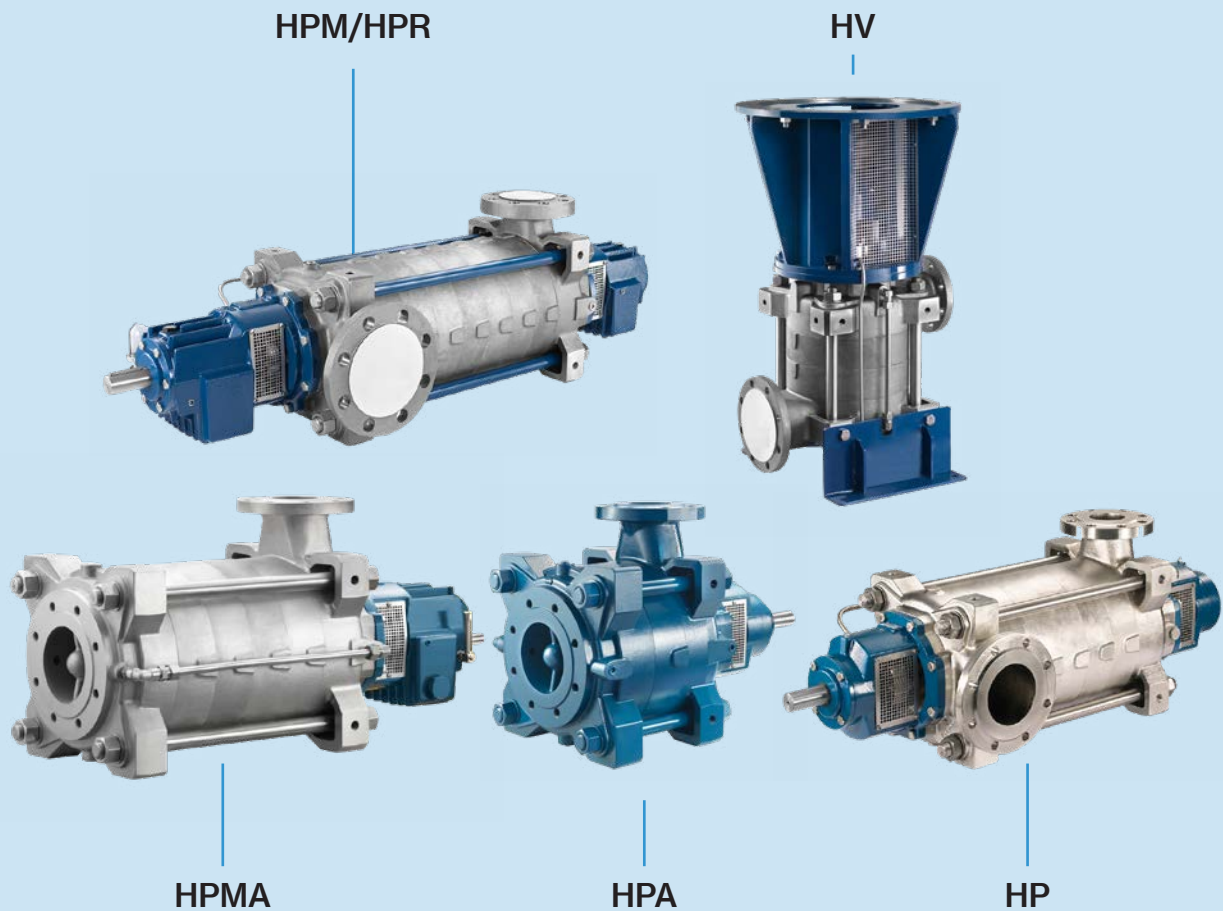
TYPE	DN IN	DN OUT	N. STAGE	DIMENSIONS (mm)													
				A	B	C	C1	C2	F	G	H1	H2	D4	I	L		M
4BMHA -8/2,2	(UNI PN 16) 65	(UNI PN 40) 40	8	822	511,5	1079	763,5	315	250	415	245	420	70	1100	400	500	183
4BMHB -4/2,2			4	618	511,5	875	559,5	315	250	415				1100	400	500	136
4BMHB -5/2,2			5	670	307,5	926	610,5	315	250	415				1400	500	500	140
4BMHB -6/3			6	720	358,5	977	661,5	315	250	415				1400	500	500	171
4BMHB -8/4			8	720	409,5	1104	763,5	340	250	438				1400	500	500	200
4BMHC -3/2,2	(UNI PN 16) 80	(UNI PN 40) 50	3	620	303	876	561	315	250	415	245	445	60	1100	400	500	192
4BMHC -4/3			4	680	363	936	621	315	250	415				1100	400	500	194
4BMHC -5/4			5	740	423	1021	681	340	250	438				1100	400	500	202
4BMHC -6/5,5			6	800	483	1126	741	385	300	468				1400	500	500	206
4BMHD -2/2,2	(UNI PN 10) 80	(UNI PN 40) 50	2	560	243	816	501	315	250	415	245	445	60	1100	400	500	135
4BMHD -3/3			3	620	303	876	561	315	250	415				1100	400	500	167
4BMHD -4/4			4	680	363	961	621	340	250	438				1100	400	500	189
4BMHD -5/5,5			5	740	423	1066	681	385	300	468				1100	400	500	194
4BMHD -6/7,5	6	887	483	1166	741	425	300	468	1400	500	500	218					

# BMH-4BMH Serie-Mechanical seal and bearings

MECHANICAL SEAL	PUMP MODEL	SHAFT		STANDARD MATERIAL	OPTIONAL
					4
	BMHA-3/5,5-132S   BMHB-2/7,5-132S   4BMHA-8/2,2   4BMHB-4/2,2   4BMHB-5/2,2   4BMHB-6/3   4BMHB-8/4	25mm	<b>Rotating face</b> <b>Stationary face</b> <b>Elastomer</b>	Ceramic Graphite NBR	Widia Widia NBR
	BMHC-2R1/11-132M   BMHD-2/15-160M   4BMHC-3/2,2   4BMHC-4/3   4BMHC-5/4   4BMHC-6/5,5-132S   4BMHD-2/2,2   4BMHD-3/3   4BMHD-4/4   4BMHD-5/5,5-132S   4BMHD-6/7,5-132St	35mm	<b>Rotating face</b> <b>Stationary face</b> <b>Elastomer</b>	Ceramic Graphite NBR	Widia Widia NBR
	BMHA-4/7,5-132S   BMHA-5/9,2-132M   BMHA-6/11-132M   BMHA-8/15-160M   BMHB-3R/9,2-132M   BMHB-3/11-132M   BMHB-4/15-160M   BMHB-5/18,5-160L   BMHB-6/22-160L	25mm / Balanced seal	<b>Rotating face</b> <b>Stationary face</b> <b>Elastomer</b>	Widia Graphite NBR	Widia Widia NBR
	BMHC-3R/15-160M   BMHC-3/18,5-160L   BMHC-4R1/22-160L   BMHC-5/30-180M   BMHC-6/37-180L   BMHD-3R/18,5-160L   BMHD-3/22-160L   BMHD-4/30-180M   BMHD-5/37-180L	35mm / Balanced seal	<b>Rotating face</b> <b>Stationary face</b> <b>Elastomer</b>	Widia Graphite NBR	Widia Widia NBR

BEARINGS	PUMP MODEL	TYPE	
	4BMHA-8/2,2   4BMHB-4/2,2   4BMHB-5/2,2   4BMHC-3/2,2   4BMHD-2/2,2	6205-ZZ C3	6205-ZZ C3
	4BMHB-6/3   4BMHB-8/4   4BMHC-4/3   4BMHC-5/4   4BMHD-3/3   4BMVD-4/4	6206-ZZ C3	6206-ZZ C3
	BMHA-3/5,5-132S   BMHA-4/7,5-132S   BMHA-5/9,2-132M   BMHA-6/11-132M   BMHB-2/7,5-132S   BMHB-3R/9,2-132M   BMHB-3/11-132M   BMHC-2R1/11-132M	6206-ZZ C3	6308-ZZ C3
	4BMHC-6/5,5-132S   4BMHD-5/5,5-132S   4BMHD-6/7,5-132S	6208-ZZ C3	6208-ZZ C3
	BMHA-8/15-160M   BMHB-4/15-160M   BMHB-5/18,5-160L   BMHB-6/22-160L   BMHC-3R/15-160M   BMHC-3/18,5-160L   BMHC-4R1/22-160L   BMHD-2/15-160M   BMHD-3R/18,5-160L   BMHD-3/22-160L	6308-ZZ C3	6309-ZZ C3
	BMHC-5/30-180M   BMHC-6/37-180L   BMHD-4/30-180M   BMHD-5/37-180L	6309-ZZ C3	3310-ZZ C3

# HP SERIES



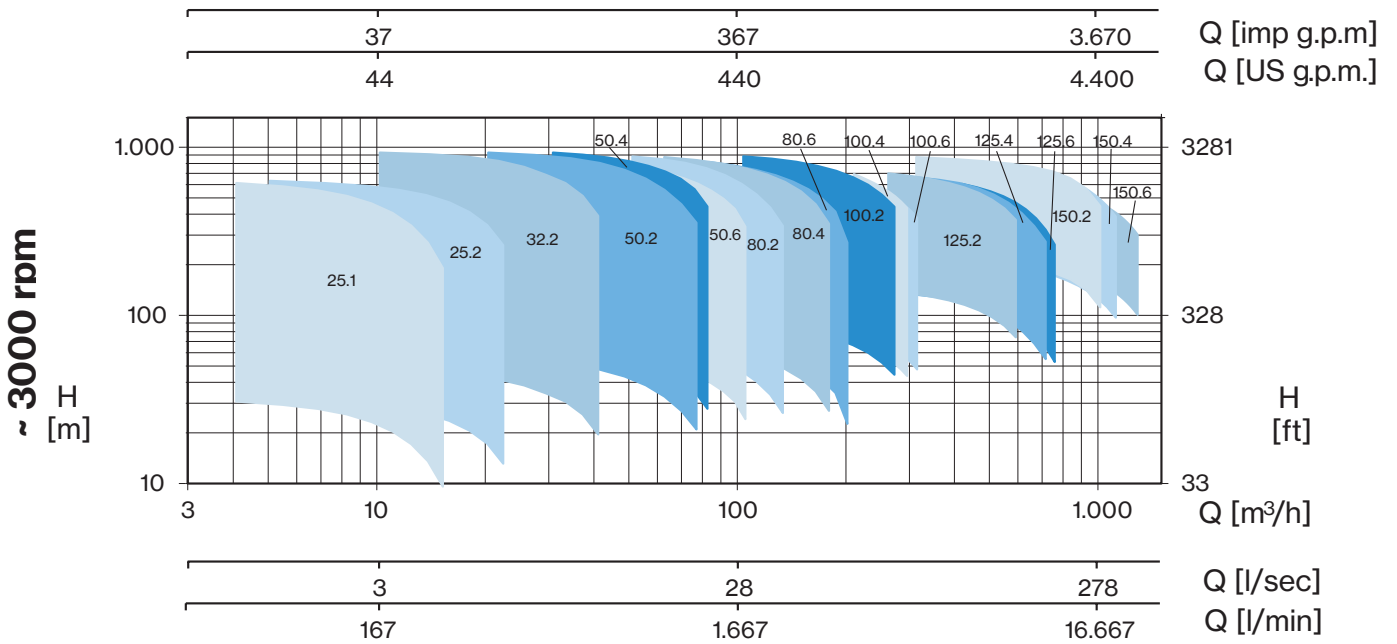
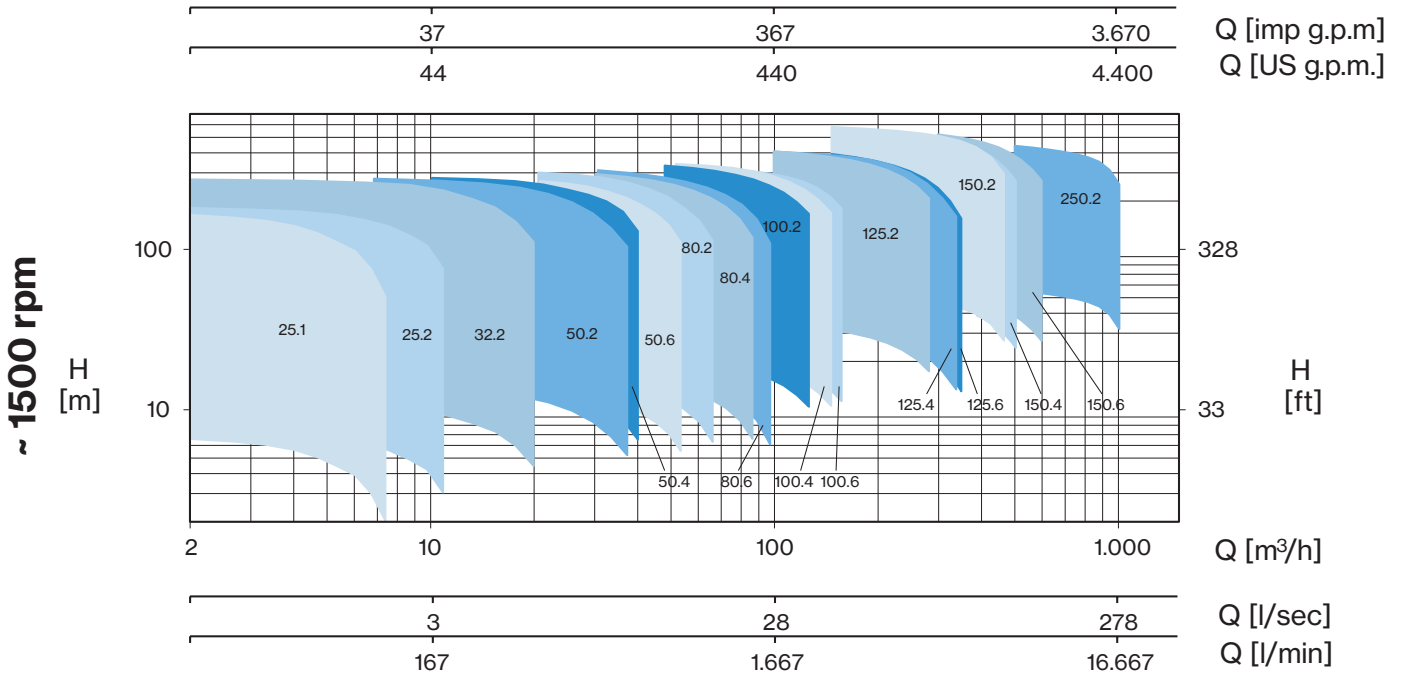
The multistage centrifugal pumps belonging to the HP series have a radial cross section, allowing an horizontal or vertical installation. The flanges of the suction and discharge ports are according to the EN or ANSI standards, these ports can operate radially and can be rotated 90°, in the HP, HPM and HPR models, or have an axial suction port for the HPA and HPMA models. This family of pumps is designed to operate in heavy duty conditions and with very high pressures (up to 100 Bar for the HPR versions) and with temperatures up to 180°C. The great choice of materials, the different kinds of sealing on the shaft and the various lubrication solutions for the pump's bearings, make this line very versatile and ideal for many uses in the industrial, energy and water processing fields.

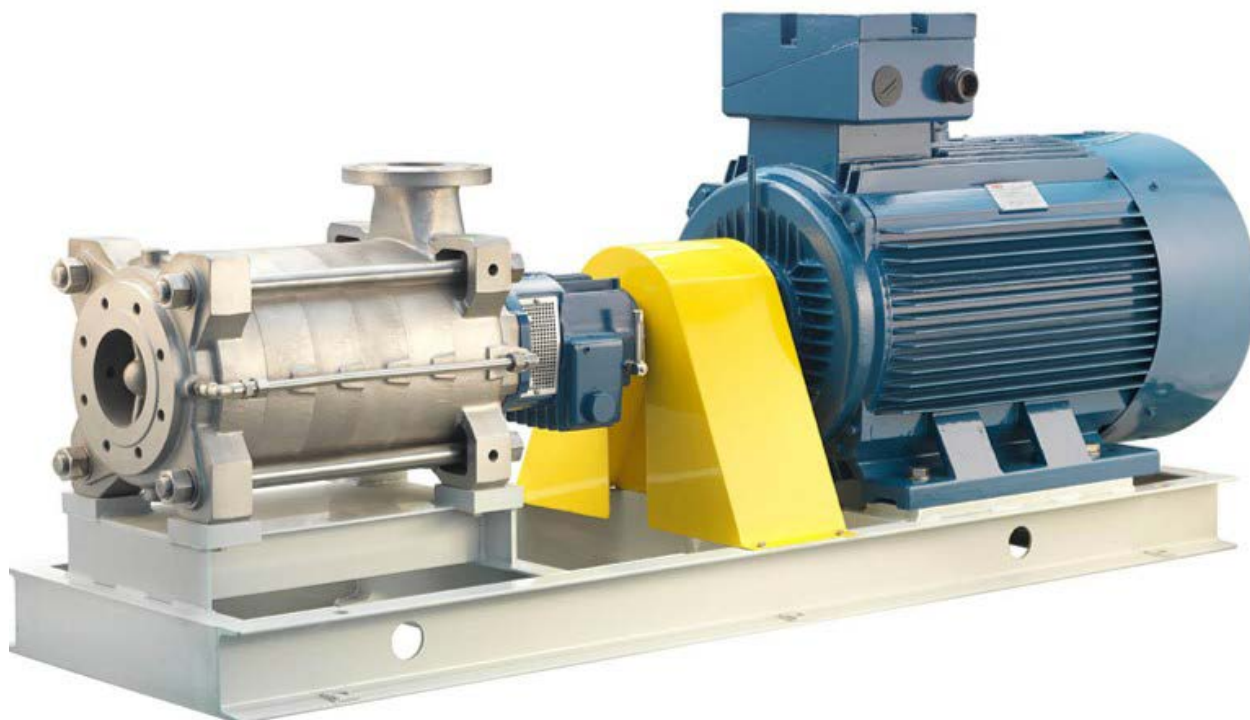
## Applications:

- Boiler feeding
- Water desalination by Reverse Osmosis
- Geothermal plants
- Service installations in the petrochemical sector

# HP SERIES

## PERFORMANCE RANGE





## Main characteristics

- Flow rates up to 1200 m<sup>3</sup>/h
- Pressure up to 1000 m
- High hydraulic efficiency, up to 80%
- Balancing drum, placed on the discharge casing, which effectively compensates the axial thrust produced by the impellers
- Versatile sealing system: which is available as packing, single Mechanical or Balanced Mechanical, other special types upon request
- The pumps' bearings are available with grease or oil lubrication in order to assure a long operating life
- Wear rings: they are available both fixed as well as rotating, in various materials, with hardening treatments

## General function data

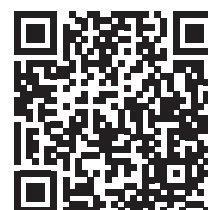
- Pressure up to 100 bar
- Temperatures from -20°C to +180°C
- Rotational speed up to 3600 rpm.
- Standard flanges: UNI/EN
- Suction port: DN 40-300 - PN 16-25
- Discharge port: DN 25-250 - PN 64-100
- Performance tolerances: ISO9906-3B

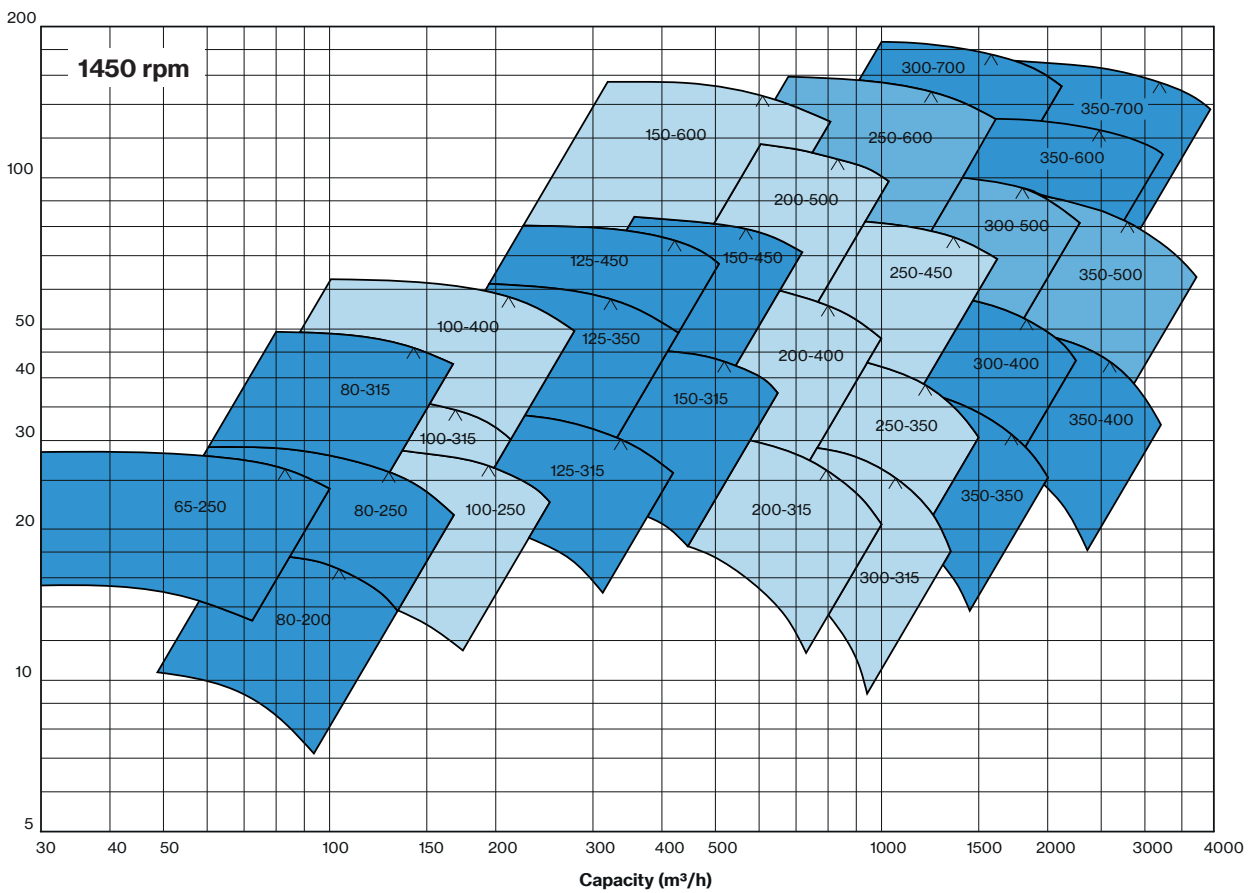
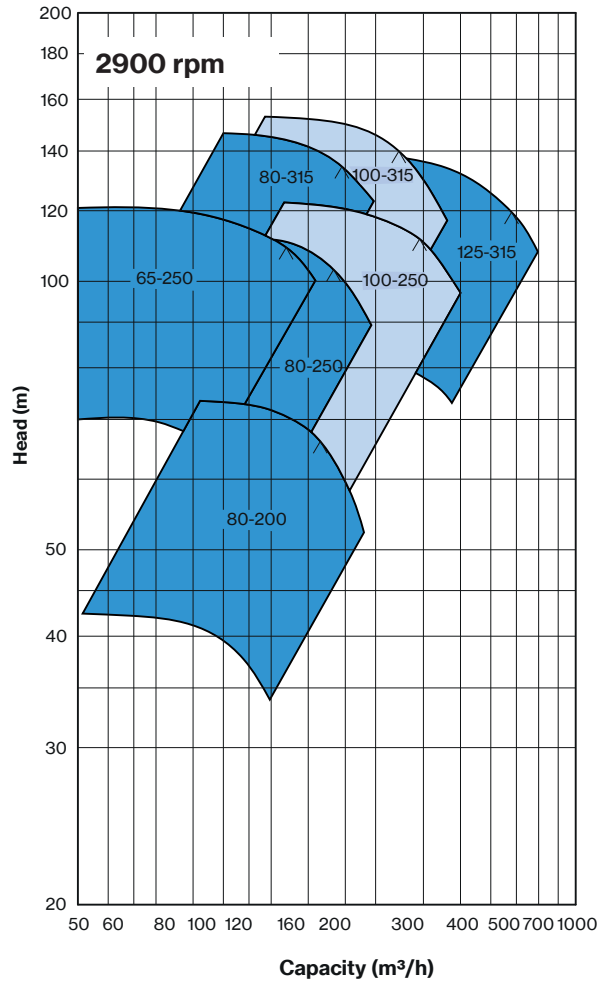


Horizontal axial split case single stage centrifugal pumps with in-line inlet and outlet. The double suction impeller design provides hydraulic balance to enhance bearing life span.

### Construction features

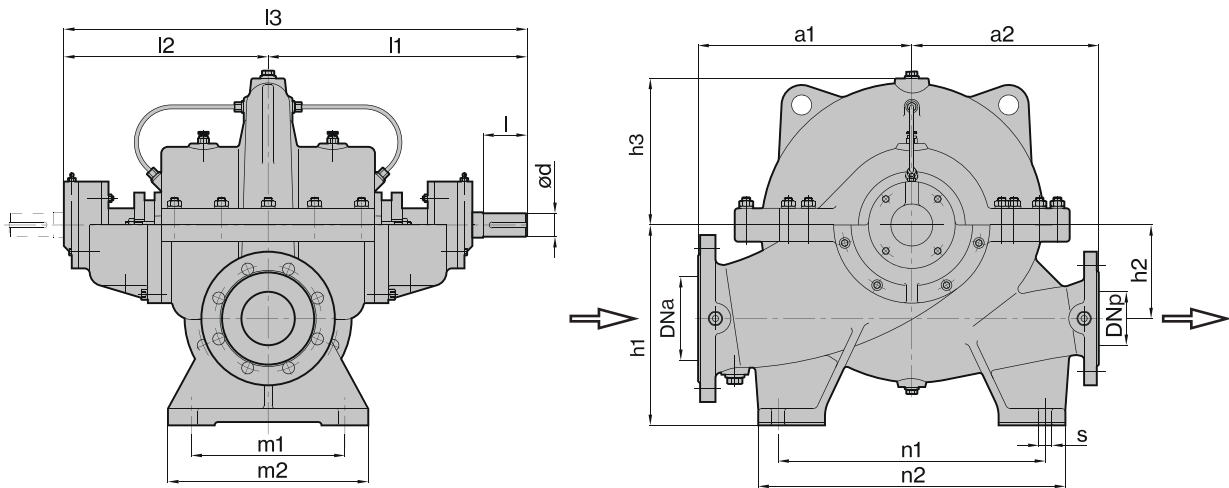
<b>Flow rate</b>	up to 4000 m <sup>3</sup> /h
<b>Pressure</b>	up to 180 m
<b>Temperature</b>	from -10 °C to +110 °C
<b>Rotation</b>	1450 - 2900 rpm
<b>Standard flanges</b>	conform to EN 1092-2/ PN 16 or PN 25
<b>Discharge port</b>	DN65-350 PN 16-25
<b>Bearing lubrication</b>	grease
<b>Sealing</b>	gland packing; also available with mechanical seal
<b>Impeller, casing and wear rings</b>	cast iron, also available in bronze or stainless steel
<b>Performance tolerance</b>	ISO 9906-3B







# PSC



TYPE	DIMENSIONS (mm)																			Kg
	PNa	PNp	DNa	DNp	ød	l	l1	l2	l3	a1	a2	h1	h2	h3	n1	n2	m1	m2	s	
65-250	16	16	100	65	35	80	400	310	710	320	280	300	140	200	400	460	230	300	20	165
80-200	16	16	125	80	35	80	400	310	710	320	280	300	140	200	400	460	230	300	20	165
80-250	16	16	125	80	35	80	400	310	710	320	280	300	140	200	400	460	230	300	20	175
80-315	16	16	125	80	35	80	400	310	710	360	300	300	140	260	400	460	230	300	20	197
100-250	16	16	150	100	42	90	450	350	800	360	310	355	170	235	400	480	280	340	20	220
100-315	16	16	150	100	42	90	450	350	800	360	310	355	170	250	400	480	280	340	20	230
100-400	16	16	150	100	42	90	450	350	800	420	370	355	170	300	460	540	280	340	20	290
125-315	16	16	200	125	55	120	555	420	975	420	370	400	200	280	460	540	320	380	22	330
125-350	16	16	200	125	55	120	555	420	975	470	450	400	200	300	540	660	320	380	22	380
125-450	16	16	200	125	55	120	555	420	975	500	450	400	200	350	540	640	320	380	22	410
150-315	16	16	200	150	55	120	555	420	975	470	400	400	200	310	540	640	320	380	22	395
150-450	16	16	200	150	55	120	555	420	975	500	450	400	200	365	540	640	320	380	22	430
150-600	25	25	250	150	65	130	645	500	1145	550	500	560	300	445	540	640	360	420	22	800
200-315	16	16	250	200	65	130	645	500	1145	500	450	500	240	315	540	640	360	420	22	570
200-400	16	16	250	200	65	130	645	500	1145	500	450	500	240	360	540	640	360	420	22	575
200-500	16	16	250	200	65	130	645	500	1145	550	500	560	300	380	620	720	360	420	22	700
250-350	16	16	300	250	65	130	645	500	1145	600	500	600	300	390	620	720	360	420	22	682
250-450	16	16	300	250	65	130	645	500	1145	600	500	600	300	415	620	720	360	420	22	780
250-600	25	25	300	250	80	170	720	540	1260	650	550	600	300	430	620	710	415	485	26	1190
300-315	16	16	350	300	65	130	645	500	1145	600	500	630	300	400	620	700	360	420	22	700
300-400	16	16	400	300	75	140	770	615	1385	700	550	710	350	450	720	800	420	520	26	1125
300-500	16	16	400	300	85	170	755	585	1340	700	750	710	350	425	700	800	420	520	26	1500
300-700	25	25	400	300	100	180	865	675	1540	750	800	710	350	470	720	880	420	520	26	1650
350-350	16	16	400	350	75	140	770	615	1385	700	550	670	350	450	720	800	420	520	26	1100
350-400	16	16	500	350	75	140	770	615	1385	800	600	800	380	500	800	960	500	600	26	1400
350-500	16	16	500	350	80	170	755	585	1340	800	600	800	400	435	740	900	500	600	26	1435
350-600	25	25	500	350	80	170	825	650	1475	800	600	800	400	510	800	900	500	600	26	1435
350-700	25	25	500	350	100	180	865	675	1540	850	750	850	450	525	720	880	500	600	26	2000

# VP SERIES

VP



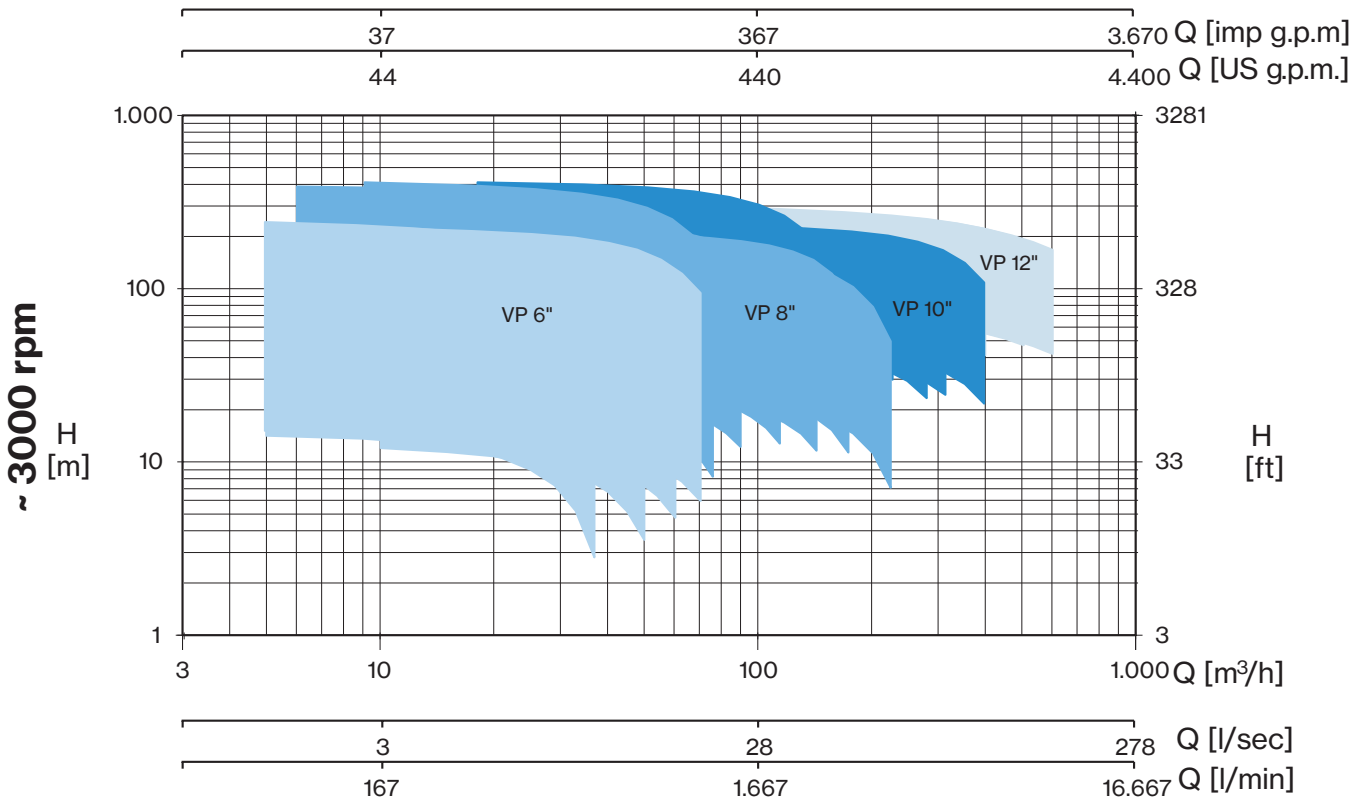
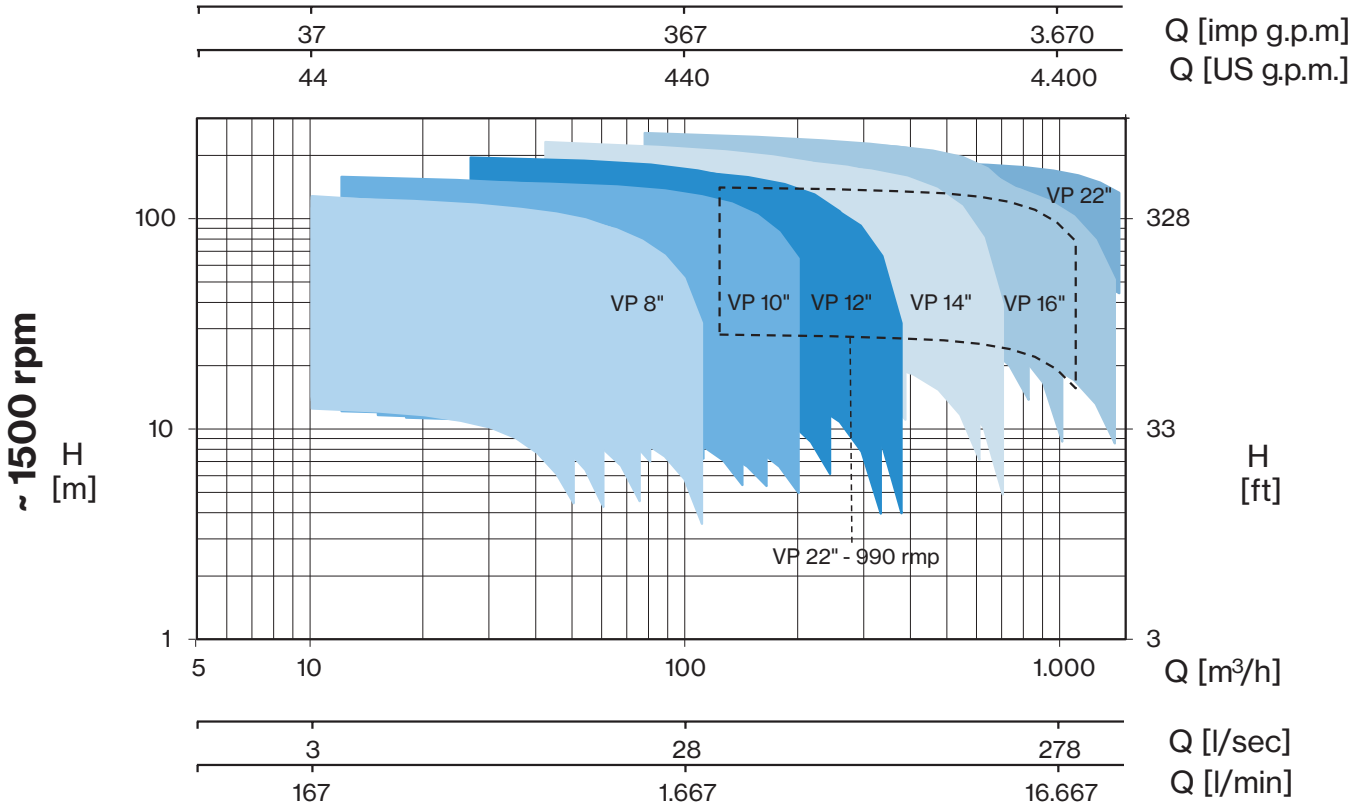
Vertical lineshaft pumps with submerged pump bowl specifically developed for the industrial sectors, irrigation, waterworks and fire-fighting systems. Extremely versatile for the use in areas not served by electricity, as emergency or back-up units. Available in different materials and versions with drive head and electric motor or gear box for diesel engine.

## **Applications:**

- Pumping units for fire-fighting systems
- Aqueducts
- Condensate extraction in power plants
- Geothermal plants
- Water treatment on Reverse Osmosis plants

**VP SERIES**

**PERFORMANCE RANGE**



## Main characteristics

- Capacity up to 1.600 m<sup>3</sup>/h
- Pressure up to 400 m
- High hydraulic efficiency, up to 82%
- Thrust bearing (grease or oil with optional external cooling) for use of standard motors
- Axis lines with tapered joints for reliable and durable connection of the shaft
- Special bushings resistant to the wear of abrasive liquids and temperatures up to 140°C
- Control unit for electric motor, transmission angle on request
- AISI 420 stainless steel shaft for standard versions
- The pump part of VPL models is produced in the standard execution in AISI 304 stainless steel
- The pump part of VP models is produced in the standard execution in cast iron



## Technical operational specifics for standard versions

- All the hydraulic performance values below are guaranteed in accordance with standard ISO 9906-Grade 3B
- The allowable content of solids in the pumped liquid is 100 g/m<sup>3</sup>
- All the components wetted with liquid are available in various types of steel and bronze alloy





# ACCESSORIES

# ELECTRONIC FLOW CONTROL



**SERVOPRESS S2**

- Complete replacement of the traditional water system set consisting on pressure switch and pressure tank
- Control the starting of the electric pump after a pressure decrease (taps opening) and stopping when the fluid flow interrupt at the maximum pressure level of the electric pumps (taps closing)
- Protection against dry running
- Starting pressure adjustable during the installation
- Standard 1" M hydraulic connections
- Installation in any position - both vertical and horizontal according to the flow direction
- Easily replaceable electronic printed circuit board
- No need of maintenance

TECHNICAL DATA	
<b>Power supply</b>	110-230V ac $\pm$ 10% 50/60Hz
<b>Max rated current</b>	12 A
<b>Starting pressure range</b>	1 - 3,5 bar
<b>Max pressure</b>	10 bar
<b>Protection degree</b>	IP65
<b>Max fluid temperature</b>	55 °C
<b>Max ambient temperature</b>	55 °C



**HIDROTANK H2**

- Automatic start and stop operations of single-phases electric pumps up to 2 HP
- Replacement of the traditional water system set consisting on pressure switch and pressure tank
- Control the starting of the electric pump after a pressure decrease (taps opening) and stopping when the fluid flow interrupt at the maximum pressure level of the electric pumps (taps closing)
- Protection against dry running
- Starting pressure adjustable during the installation
- Standard 1" M hydraulic connections
- Installation in any position-both vertical and horizontal - according to the flow direction
- Easily replaceable electronic printed circuit board.
- No need of maintenance
- Thanks to the 0,4 lt. tank it protects from the frequent start-stop required by small request of water and from any losses into the system
- Protection of the electronic board thanks to the new watertight compartment
- Protection from water-hammer
- New design and new concept
- Built in 0,4 lt. tank
- Built in pressure gauge
- Watertight electronic part

TECHNICAL DATA	
<b>Power supply</b>	230Vac $\pm$ 15% 50/60Hz
<b>Max rated current</b>	12 A (2HP) - 1500 W
<b>Starting pressure range</b>	1 $\div$ 3,5 bar (1,5 bar factory setting)
<b>Max pressure</b>	10 bar
<b>Protection degree</b>	IP65
<b>Fluid temperature</b>	5°C $\div$ 35 °C
<b>Ambient temperature</b>	5°C $\div$ 45°C
<b>Hydraulic connection</b>	1" M



# VARIABLE SPEED DRIVE

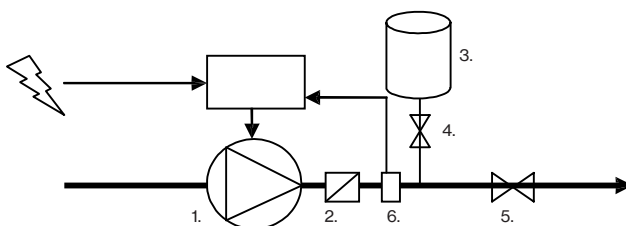


EPIC is a single-phase variable speed drive for horizontal and vertical three-phase pumps, designed to maintain the set pressure and protect a pumping system against dry running, over/under voltage and overcurrent.

It is possible to realize a booster set up to 2 pumps in parallel, using 2 EPIC connected together.

- Constant pressure control
- Easy initial configuration
- Installed directly on motor terminal box of horizontal or vertical pumps
- Soft start and soft stop
- Alternance for uniform pump wearing when connected to another EPIC
- Protection against dry running (adjustable power factor  $\cos\phi$ ), overload, overcurrent
- Automatic restart in case of stop for dry running
- Fuse for input protection of the device
- Led indicator for standby, run and alarm conditions
- Compatibility for residential environment thanks to an integrated electronic power factor corrector in compliance to EN61000-3-2
- 2 digital inputs (N.O. or N.C.) for motor run/stop
- 2 analog inputs: 4-20 mA and 0-10 VDC
- 1 digital output (N.O. or N.C.) for alarm signal

Input rated voltage	Output rated voltage	Output rated current	Max electric pump current	Weight
1 × 230 V	3 × 230 V	7,5 A	6,8 A	2,5 Kg



1. Pump
2. Non return valve
3. Pressure tank (*Volume suggested: 10% of the pump flow rate*)
4. Valve-Tap
5. Valve
6. Pressure sensor

VSD	3- PUMP TYPE	max nominal power P2	
		HP	kW
EPIC (1- V-in 3- V-out)	JXM	1,2	0,88
	JXF, SE, P 3, P 3S	1,5	1,1
	P 18S, P 18V, P 18SV, P 18L, P 18SL	1,8	1,3
	JA, JAM, JA 150-300, KM, KBJ, KB, SD 2", P 5, P 5S, P 9, P 9S, P 9V, P 9SV, P 9L, P 9SL, P 18S	2	1,5
	P 3V, P 3SV, P 3L, P 3SL, P 5V, P 5SV, P 5L, P 5SL, P7, P7 S, P 7V, P 7SV, P 7L, P 7SL	2,5	1,85



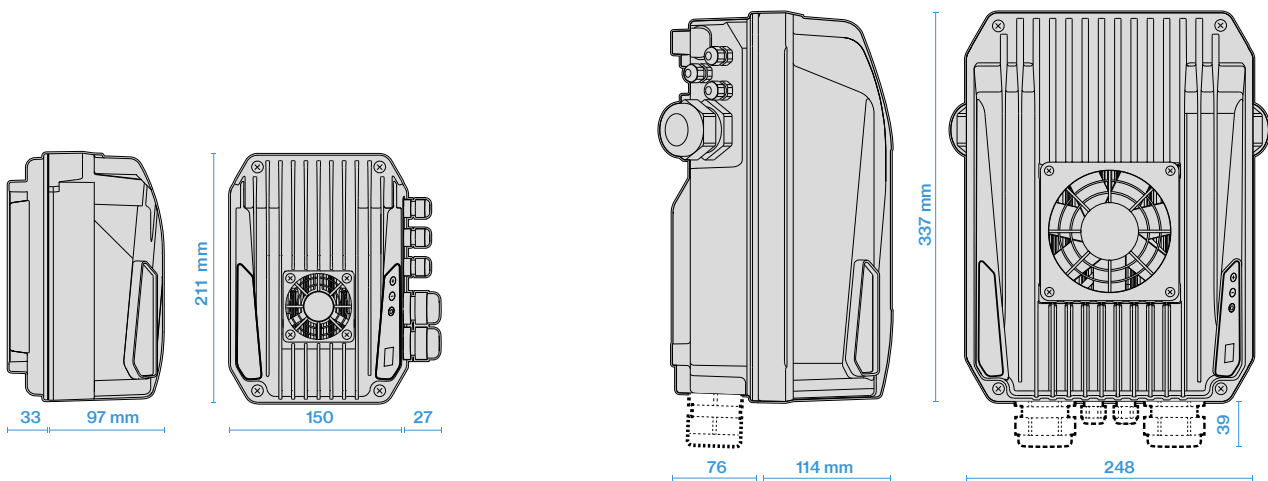
# VARIABLE SPEED DRIVE



EPIC-A (Advanced) is a three-phase variable speed drive for horizontal and vertical three-phase pumps designed to maintain the set pressure and protect pumping systems up to 8 pumps connected in parallel.

- Constant pressure control
- Easy initial configuration
- Simplified installation on motor terminal box of horizontal or vertical pumps
- Soft start and soft stop
- Alternance for uniform pump wearing when connected to others EPIC-A
- Built-in protections against overvoltage and undervoltage, overcurrent and no load, dry running, overtemperature
- Led indicator for standby, run and alarm conditions
- Compatibility for residential environment thanks to an integrated electronic power factor corrector in compliance to EN61000-3-2
- Integrated input filter for category C2 (EN61800-3), class A (EN55011)
- 4 digital inputs (N.O. or N.C.) for motor run/stop
- 4 analog inputs: two 4-20 mA and two 0-10 VDC
- 2 digital outputs (N.O. or N.C.) for alarm signal

EPIC-A	304	306	309	314	318	325	330	338	344
<b>Input rated voltage</b>	3 × 400 V ± 15%								
<b>Output rated voltage</b>	3 × 400 V								
<b>Output rated current</b>	4 A	6 A	9 A	14 A	18 A	25 A	30 A	38 A	44 A
<b>Max electric pump current</b>	3,6 A	5,4 A	8,1 A	12,6 A	16,2 A	22,5 A	27 A	34,2 A	39,6 A



EPIC-A 304 - 306 - 309  
max weight 2,5 kg

EPIC-A 314 - 318 - 325 - 330 - 338 - 344  
max weight 10 kg

## VARIABLE SPEED DRIVE



IPFC is a variable speed drive for vertical pumps designed to control and protect pumping systems up to 8 pumps connected in parallel.

IPFC maintains the set pressure ensuring energy savings and extended lifespan of the system.

- Constant pressure control
- Energy and cost saving
- Protection against overload and dry running
- Greater reliability and longevity of pumping system
- Installed directly on the motor fan cover of vertical pumps
- Indication of input current and supply voltage
- Soft start and soft stop
- Recording running hours and loggings errors and alarms reported by the system
- Connect to other devices to get combined operation with cascade control and pump alteration
- OLED display
- Settable digital outputs, N.O. or N.C.
- Protection and analog/digital inputs

IPFC	109	114	306	309	311	314	318	325	330	338	348	365	375	385
<b>Input rated voltage (V)</b>	1 × 230 ± 15%		3 × 400 ± 15%											
<b>Output rated voltage (V)</b>	1 × 230 3 × 230		3 × 400											
<b>Output rated current (A)</b>	(1-) 9 (3-) 7	(1-) 9 (3-) 11	(3-) 6	(3-) 9	(3-) 11	(3-) 14	(3-) 18	(3-) 25	(3-) 30	(3-) 38	(3-) 48	(3-) 65	(3-) 75	(3-) 85
<b>Output rated power (kW)</b>	(1-) 1,1 (3-) 1,5	(1-) 1,1 (3-) 3	(3-) 2,2	(3-) 4	(3-) 4	(3-) 5,5	(3-) 7,5	(3-) 11	(3-) 15	(3-) 18,5	(3-) 22	(3-) 30	(3-) 37	(3-) 45
<b>Max electric pump current (A)</b>	(1-) 7,2 (3-) 6,3	(1-) 7,2 (3-) 9,9	(3-) 5,4	(3-) 8,1	(3-) 9,9	(3-) 12,6	(3-) 16,2	(3-) 22,5	(3-) 27	(3-) 34,2	(3-) 43,2	(3-) 58,5	(3-) 67,5	(3-) 76,5
<b>Input frequency (Hz)</b>	50 - 60													
<b>PWM frequency (kHz)</b>	2,5 - 4 - 6 - 8 - 10 - 12													
<b>Control panel</b>	backlight LCD with 2 x 16 characters and buzzer / Bluetooth® SMART 4,0													
<b>Input analogical signals (mA)</b>	no.4 4-20													
<b>Input digital signals</b>	no.2													
<b>Communication</b>	RS485 / Bluetooth SMART 4,0													
<b>2 DOL auxiliary pump contacts</b>	clean, N.O., 230 V, I <sub>max</sub> , 6 A													
<b>Cooling</b>	auxiliar built-in cooling fan /mot fan													
<b>Protection degree</b>	IP55 (IP54 for IPFC 338 < > IPFC 385)													
<b>Assembly</b>	on motor fan cover with kit / hanged on wall with kit										on motor feet / hanged on wall with kit			
<b>Max ambient temperature (C)</b>	40° C													
<b>Max ambient altitude</b>	1000 m slm / de-rate 2% each 100 m													
<b>Input / Output feeding cable</b>	2 × PG 13,5 + 3 × PG 9													
<b>Dimension (mm)</b>	205 × 205 × h180					260 × 260 × h180					410 × 260 × h680			



SPD pressure transducer

TYPE	Output signal	Input voltage	Working pressure	Maximum pressure
SPD	4... 20 mA	9... 28 V	0 - 16 bar 0 - 25 bar	32 bar



Dedicated APP for control and programming of Aquadomus and variable speed drives EPIC-A and IPFC

## APP FUNCTIONALITY

- **Monitor:** monitoring several operative parameters. Obtaining energy consumption statistics and check alarm history

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- **Program:** create programs, save them in the archive, copy them to other devices and share them among multiple users

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- **Archive:** create reports with the ability to insert notes, images and send them by e-mail or keep them in the digital archive

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- **Remote:** remotely control an Aquadomus via wi-fi or GSM by using a nearby smartphone as a modem

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- **Manuals:** access manuals and supplementary technical documentation

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- **Guide:** receive online assistance on parameters and alarms



# PROTECTION/CONTROL PANEL

## Legend

SERIES	ELECTRICITY SUPPLY		N. PUMPS			PUMP TYPE			POWER P2	SPEED		MOTOR STARTER			FEATURE			
	1~	3~	1	2	3	Borehole	Submersible	Surface	Kw	Fixed	Variable	DOL	Y/Δ	Soft start	Impedance start	Switch with overload protection	Electromechanical control panel	Electronic control panel
PML	■	-	■	-	-	■	-	■	0,37 ÷ 2,2	■	-	■	-	-	-	■	-	-
PMC	■	-	■	-	-	■	■	-	1,1 ÷ 1,5	■	-	■	-	-	-	■	-	-
PMLD	■	-	■	-	-	-	-	-	1,1 ÷ 1,5	■	-	■	-	-	-	■	-	-
PT	-	■	■	-	-	■	■	■	0,37 ÷ 15	■	-	■	-	-	-	■	-	-
EQSM	■	-	■	-	-	■	■	■	0,37 ÷ 2,2	■	-	■	-	-	-	-	-	■
EQSMT	-	■	■	-	-	■	■	■	0,55 ÷ 15	■	-	■	-	-	-	-	-	■
QST	-	■	■	-	-	■	■	■	4,5 ÷ 220	■	-	-	■	-	-	-	■	-
QSS	-	■	■	-	-	■	-	■	7,5 ÷ 220	■	-	-	-	■	-	-	■	-
QRS	-	■	■	-	-	■	-	-	4,5 ÷ 220	■	-	-	-	-	■	-	■	-
EQ2SM	■	-	-	■	-	■	■	■	0,37 ÷ 15	■	-	■	-	-	-	-	-	■
EQ2SMT	-	■	-	■	-	■	■	■	0,55 ÷ 15	■	-	■	-	-	-	-	-	■
Q2ST	-	■	-	■	-	■	■	■	4,5 ÷ 220	■	-	-	■	-	-	-	■	-
EQ3SM	■	-	-	-	■	■	■	■	0,37 ÷ 2,2	■	-	■	-	-	-	-	-	■
EQ3SMT	-	■	-	-	■	■	■	■	0,55 ÷ 15	■	-	■	-	-	-	-	-	■

## Overload protection unit for 1 single-phase pump with run capacitor



- Power supply 1x230V-50/60Hz
- Electrical switch
- Run capacitor
- Externally resettable thermal relay
- Illuminated 0-1 main switch
- IP55 rated thermoplastic enclosure
- Outputs with cable gland

TYPE	A	RUN CAPACITOR (μF)	POWER	
			HP	kW
PML 5/16-4	4	16	0,5	0,37
PML 5/20-4	4	20	0,5	0,37
PML 7/20-6	6	20	0,75	0,55
PML 7/25-6	6	25	0,75	0,55
PML 10/30-7	7	30	1	0,75
PML 10/35-7	7	35	1	0,75
PML 15/40-10	10	40	1,5	1,1
PML 20/50-13	13	50	2	1,5
PML 20/60-13	13	60	2	1,5
PML 30/75-18	18	75	3	2,2
PML 30/80-18	18	80	3	2,2
PMC 15/35-15	15	35	1,5	1,1
PMC 20/50-18	18	50	2	1,5

## PROTECTION/CONTROL PANEL

### Overload protection unit for 1 single-phase pump with run capacitor + start capacitor with disjunctor



PMLD

- Power supply 1x230V-50/60Hz
- Electrical switch
- Run + start capacitor with disjunctor
- Externally resettable thermal relay
- Green illuminated main switch
- IP55 rated thermoplastic enclosure
- Outputs with cable gland

TYPE	A	RUN CAPACITOR (μF)	START CAPACITOR (μF)	POWER	
				HP	kW
PMLD 15-35-13	13	35	80	1,5	1,1
PMLD 20/50-15	15	50	80	2	1,5

### Overload protection unit for 1 three-phase pump



PT

- Power supply 3x400V-50/60Hz
- ON/OFF switch
- Protective device with thermal relay for motor overload or phase failure
- Thermoplastic enclosure
- IP55 protection level

TYPE	A	POWER	
		HP	kW
PT 5/0,9-1,3	0,9-1,3	0,5	0,37
PT 7/1,3-2,1	1,3-2,1	0,75	0,55
PT 10/1,9-3	1,9-3	1	0,75
PT 15-20/2,9-4,5	2,9-4,5	1,5-2	1,1-1,5
PT 20-30-40/4,3-6,8	4,3-6,8	2-3-4	2,2-3
PT 40-50/5,7-9,1	5,7-9,1	4-5,5	3-4
PT 55-75/8,6-13,5	8,6-13,5	5,5-7,5	4-5,5
PT 100/12,5-16,5	12,5-16,5	10	7,5
PT 125-150-16-21	16-21	12,5-15	9,2-11
PT 200/22-29	22-29	20	15

## Electronic control panel for 1-2-3 pumps with direct start-up



- Single-phase version 100-240Vac 50/60Hz
- Three-phase version 310-450Vac 50/60Hz
- LCD display for voltage, current, power factor, hours of operation, number of starts, motor status, alarms, analogue signal and thresholds
- AUTOMATIC - 0 - MANUAL operation buttons
- Voltage and current minimum and maximum electronic control, failure or incorrect phase sequence control on power supply input
- Programmable anti-seize autotest
- Dry running protection through level probes/ floats/ pressure switches and minimum current
- Up to 6 control inputs: floats/pressure switches
- Input for 4-20 mA or 0-10V analogue signal
- Analogue signal cm - m - bar
- Emergency start and stop inputs with analogue signal
- Clickson thermal pad inputs with automatic reset
- Inversion of inputs (from normally open to normally closed)
- Activation delay from mains return
- Manual button operation (fixed or pulse)
- Programmable alarms for voltage, levels, motor overload, minimum motor current, clicson, output contacts, starts/hour
- Automatic reset for minimum current alarm with 4 programmable times
- Auxiliary and motor protection fuses, isolator protection, duty standby protection
- ABS box IP55. Metallic box IP55 for EQ3SMT
- Duty-standby and motor changeover in the case of a fault for two-pump and three-pump control panels
- Predisposition for capacitors for single-phase versions (capacitors are available separately)

TYPE	VERSION	PUMPS N.	A	POWER		WEIGHT (Kg)
				HP	kW	
EQSM	1-	1	0-18	0,5-3	0,37-2,2	1,5
EQSMT 10	3-	1	0-18	0,75-10	0,55-7,5	2,3
EQSMT 15	3-	1	16-25	10-15	7,5-11	2,5
EQSMT 20	3-	1	16-32	15-20	11-15	3
EQ2SM	1-	2	0-18	0,5-3	0,37-2,2	1,5
EQ2SMT 10	3-	2	0-16	0,75-10	0,55-7,5	2,5
EQ2SMT 15	3-	2	16-25	10-15	7,5-11	3
EQ2SMT 20	3-	2	16-32	15-20	11-15	3,5
EQ3SM	1-	3	0-18	0,5-3	0,37-2,2	5
EQ3SMT 10	3-	3	0-18	0,75-10	0,55-7,5	15
EQ3SMT 15	3-	3	16-25	10-15	7,5-11	15
EQ3SMT 20	3-	3	16-32	15-20	11-15	15



RUN CAPACITOR	POWER
	HP
20µF	0,5
25µF	0,75
35µF	1-1,5
40µF	1,5
50µF	2
80µF	3

RUN CAPACITOR + START CAPACITOR WITH DISJUNCTOR	POWER
	HP
35µF + 80µF	1,5
50µF + 80µF	2

## PROTECTION/CONTROL PANEL

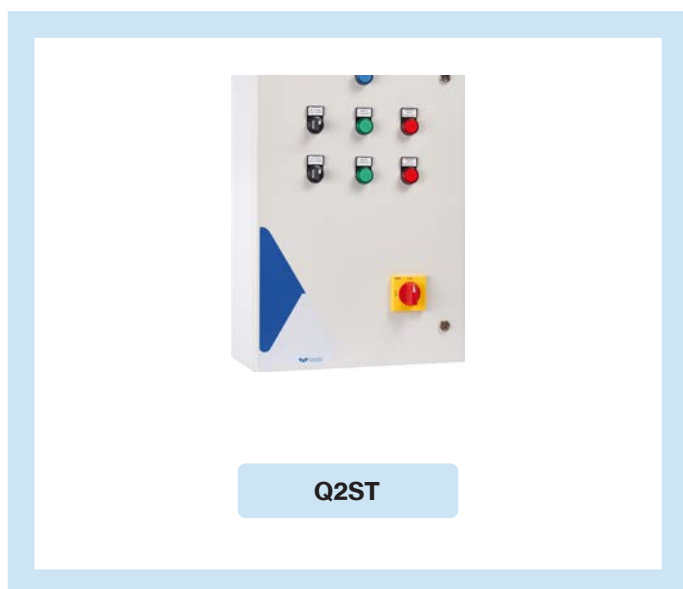
### Star/delta control panel for 1 three-phase pump



- Power supply 3x400V-50/60Hz
- 24V transformer for auxiliary circuit
- Low voltage inputs and circuit
- Blue mains supply LED
- Green motor running LED
- Red motor overload alarm LED
- Star/delta line contactors in AC3
- Auxiliary and motor protective devices with fuses
- Main door interlock switch disconnecter
- ABS box up to 11kW, metal box from 15kW

TYPE	A	POWER	
		HP	kW
QST 5	13	5,5	4
QST 7	15	7,5	5,5
QST 10	17	10	7,5
QST 15	24	15	11
QST 20	31	20	15
QST 25	38	25	18,5
QST 30	50	30	22
QST 40	60	40	30
QST 50	75	50	37
QST 60	100	60	45
QST 75	124	75	55
QST 100	135	100	75
QST 125	155	125	92
QST 150	200	150	110
QST 180	241	180	132
QST 220	300	220	162
QST 300	410	300	220

### Star/delta control panel for 2 three-phase pumps



- Power supply 3x400V-50/60Hz
- 24V transformer for auxiliary circuit
- Low voltage inputs and circuits
- Blue mains supply LED
- Green motor running LED
- Red motor overload alarm LED
- Star/delta line contactors in AC3
- Auxiliary and motor protective devices with fuses
- Main door interlock switch disconnecter
- Metal box (whole range)

TYPE	A	POWER	
		HP	kW
Q2ST 3	8,5	3	2,2
Q2ST 5	13	5,5	4
Q2ST 7	15	7,5	5,5
Q2ST 10	17	10	7,5
Q2ST 15	24	15	11
Q2ST 20	31	20	15
Q2ST 25	38	25	18,5
Q2ST 30	50	30	22
Q2ST 40	60	40	30
Q2ST 50	75	50	37
Q2ST 60	100	60	45
Q2ST 75	124	75	55
Q2ST 100	135	100	75
Q2ST 125	155	125	92
Q2ST 150	200	150	110
Q2ST 180	241	180	132
Q2ST 220	300	220	162
Q2ST 300	410	300	220



## PROTECTION/CONTROL PANEL

### Soft start control panel for 1 three-phase pump



- Power supply 3x400V-50/60Hz
- Blue mains supply LED
- Green motor running LED
- Red motor overload alarm LED
- NA input for start control
- Auxiliary motor protective devices with fuse
- Main door interlock switch disconnecter
- Forced ventilation kit
- IP54 rated metal box
- Ambient temperature  $-5 \div +40^{\circ}\text{C}$

TYPE	A	POWER	
		HP	kW
QSS 10	18	10	7,5
QSS 15	25	15	11
QSS 20	30	20	15
QSS 25	37	25	18,5
QSS 30	45	30	22
QSS 40	60	40	30
QSS 50	72	50	37
QSS 60	85	60	45
QSS 75	105	75	55
QSS 80	125	80	59
QSS 100	142	100	75
QSS 125	170	125	92
QSS 150	210	150	110
QSS 180	250	180	132
QSS 220	300	220	162
QSS 300	370	300	220

### Control panel with impedance start for 1 three-phase pump



- Power supply 3x400V-50/60Hz
- Blue mains supply LED
- Green motor running LED
- Red motor overload alarm LED
- NA input for start control
- Stator reactance with 4 starts/hour, 2 of which are consecutive
- Adjustable reactance timer
- Line and impedance starter contactors in AC3
- Main door interlock switch disconnecter
- Ambient temperature  $-5 \div +40^{\circ}\text{C}$

TYPE	A	POWER	
		HP	kW
QRS 5	13	5,5	4
QRS 7	16	7,5	5,5
QRS 10	20	10	7,5
QRS 15	29	15	11
QRS 20	35	20	15
QRS 25	52	25	18,5
QRS 30	63	30	22
QRS 40	80	40	30
QRS 50	90	50	37
QRS 60	110	60	45
QRS 75	135	75	55
QRS 90	150	90	66
QRS 100	175	100	75
QRS 125	200	125	92
QRS 150	235	150	110
QRS 180	310	180	132
QRS 220	360	220	162
QRS 300	410	300	220



# TANKS



## UTILIZATION

Interchangeable membrane expansion tanks; the pre-charge pressure in the tank guarantees a water reserve but also reduces the number of startups of the connected pump; the membranes are certified for use with foodstuffs; they may be in EPDM or butyl depending on the model.

## CONSTRUCTION CHARACTERISTICS

Flanges in galvanised steel or AISI 304 stainless steel. Tanks in carbon steel coated with powder paint or in AISI 304 stainless steel.

Pre-charge valve with protective cover.

TYPE	DESCRIPTION
AS 24	24 lt. Spherical tank
ACV 24	24 lt. Horizontal tank
ACZ 24	24 lt. Horizontal tank
ACA 24 SS	24 lt. Stainless steel tank
AC 50	50 lt. Horizontal tank
AC 60	60 lt. Horizontal tank
AC 80	80 lt. Horizontal tank
AC 100	100 lt. Horizontal tank
AC 200	200 lt. Horizontal tank
AC 300	300 lt. Horizontal tank
AV 50	50 lt. Vertical tank
AV 60	60 lt. Vertical tank
AV 80	80 lt. Vertical tank
AV 100	100 lt. Vertical tank
AV 200	200 lt. Vertical tank
AV 300	300 lt. Vertical tank
AV 500	500 lt. Vertical tank
AV 750	750 lt. Vertical tank
AV 1000	1000 lt. Vertical tank

# MEMBRANES



TYPE	DESCRIPTION
MZ 24	EPDM membrane for ACZ 24 lt.
M 24	membrane for AS 24 - ACV 24
M 50	membrane for AC 50 - AV 50
M 100	membrane for AC 100 - AV 100
M 200	membrane for AC 200 - AV 200
M 300	membrane for AC 300 - AV 300
M 500	membrane for AV 500
M 750 - 2000	membrane for AV 750 - AV 2000

# PRESSURE SWITCHES



TYPE	DESCRIPTION	RANGE AT RISING PRESSURE (bar)
PP5	1- / 3-	1-5
PP12	1- / 3-	3-12

# PRESSURE GAUGES



TYPE	PHASE
PR 6	0-6 bar rear connection
PR 6 R	0-6 bar radial connection
PR 12	0-12 bar rear connection
PR 10 G	0-10 bar glycerine
PR 12 G	0-12 bar glycerine

# FLEXIBLE HOSES



TYPE	DESCRIPTION
FL 530	Flexible hose with bend 1"x530x1"
FL 600	Flexible hose with bend 1"x600x1"
FL 700	Flexible hose with bend 1"x700x1"
FL 850	Flexible hose with bend 1"x850x1"

# CONNECTORS



TYPE	DESCRIPTION
R3	3 way 1" brass connector
R5	5 way 1" brass connector



TYPE	DESCRIPTION
R5X 1"	5 way 1" Aisi 304 connector with built-in no return valve
R5X 1" 1/4	5 way 1" 1/4 Aisi 304 connector with built-in no return valve
R5X 1" 1/2	5 way 1" 1/2 Aisi 304 connector with built-in no return valve

# VALVES



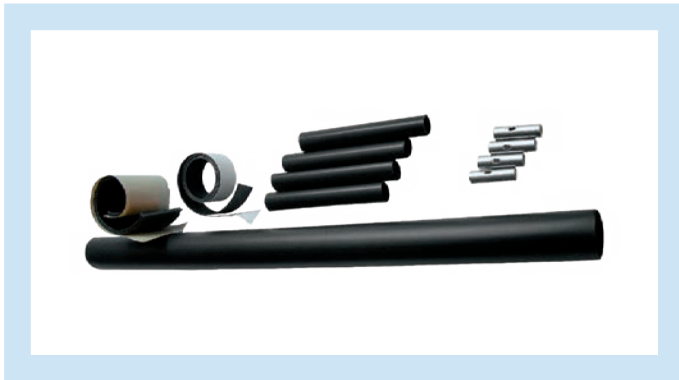
TYPE	DESCRIPTION
VF 1"	foot valve 1"
VF 1" 1/4	foot valve 1" 1/4
VF 1" 1/2	foot valve 1" 1/2
VF 2"	foot valve 1" 1/2
VR1"	check valve 1"
VR 1" 1/4	check valve 1" 1/4
VR 1" 1/2	check valve 1" 1/2
VR 2"	check valve 1"

# FLOAT SWITCHES



TYPE	DESCRIPTION
GK 2	Key 2 mt. cable length
GK 3	Key 3 mt. cable length
GK 5	Key 5 mt. cable length
GK 10	Key 10 mt. cable length

# CABLES JOINTS



## Kit GC series

Junction cable kit with heat - shrinkable tubing.

For a professionally made junction it is recommended to use the "Kit GC", it has excellent requirements in terms of electric, mechanical and water resistance. This kit is composed of: crimp wire connectors in tinplated copper, thin wall heat-shrinkable tubing to cover the conductor of the cable, a strip of Scotch 2547, one of Scotchfil and medium wall heat-shrinkable tubing to cover the junction. It is recommended to seal the two end points of the sheath with a PVC textured insulating tape.

TYPE	Cables section mm <sup>2</sup>	Cable number
Kit GC 4/2,5	1/2,5	4
Kit GC 4/6	4/6	4
Kit GC 4/10	10	4
Kit GC 4/16	16	4
Kit GC 4/25	25	4
Kit GC 4/35	35	4
Kit GC 4/50	50	4
Kit GC 1/50	50	1
Kit GC 1/70	70	1
Kit GC 1/95	95	1
Kit GC 1/120	120	1
Kit GC 1/150	150	1

# LEVEL PROBES



## Kit K3SL series

Level Probes Kit consist of 3 electrodes model K3SL.

Single pole probe used for level control in wells or storage tanks.

It made of an AISI 303 stainless steel electrode, a plastic (PPOX) holder and a cable gland.

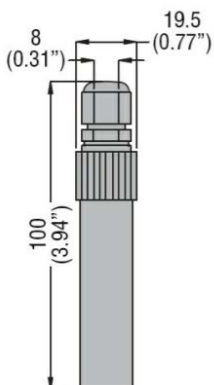
A seal ring and the tightening of the cable gland PG7 prevent water from entering the cable terminal connector and causing its oxidation.

Cable connection: screw.

The external cable diameter must be 2.5 to 6mm/Ø0.1 to 0.24" to warrant perfect sealing.

Maximum connection cable section: 2.5mm<sup>2</sup>.

Maximum operating temperature: +60°C.



# GENERAL SALES CONDITIONS

1) ORDERS: Any order sent to us, whether by our representatives or by letter, telephone or fax, will be considered definite only after our regular acceptance in writing. 2) DELIVERY: The terms indicated for delivery are not binding but subject to manufacturing factors and unforeseeable circumstances (trade unions unrest, breakdown of machinery, late delivery by our suppliers, general unavailability of raw materials, fire, flood or other forces majeures). Any delay which might occur will not give rise on the part of the purchaser of the right to annul the order or to claim damages. 3) TRANSPORT: Goods travel at the customer's risk even if the price is stated as carriage free. The vendor will not be liable for the underweight goods or damage caused during transit as the carrier is exclusively liable in such cases and it is to him that the receiving party must promptly address a right informative notice in writing to this to the dealer. After 8 days have passed from receipt of the goods, no claims are in any case ammissible. 4) PRICES: The prices are to be understood as net of tax duties and may be changed without notice. 5) RIGHT OF PROPERTY: The goods property belongs to the manufacturer and it is not acquired by the customer until the complete payment is made for the goods, and for any interest and costs involved. In case of payment not honoured, goods will, on the manufacturer's express request, be promptly sent back to the stores in free port indicated by the manufacturer. In any case the manufacturer reserves the right to charge the customer with the cost of restoration and renewal of returned goods. 6) PAYMENTS: Payments must be effected at due dates and in the terms agreed at our Headquarters. Payments made to agents, representatives or others are not recognized even by bills unless there is an express written authority by the manufacturer. In case of payment by instalments the failure to pay even one instalment allows the manufacturer to require the balance immediately plus the interest accrued at the average rate in force for the period. 7) BLOCKAGE OF CLAIMS: The customer may not, for any reason, delay or suspend payments owed on any account even if claims or disputes have arisen, nor may he start or take legal action of any kind if he has not first paid by the terms and in the terms agreed. 8) TECHNICAL CHARACTERISTICS: The technical data and characteristics stated in all the manufacturer's official publications refer to indicative nominal values. For specific needs and on explicit demand, the manufacturer can provide detailed technical sheets from which the internal acceptance criteria of the product can be deduced. The manufacturer reserves the right to make any modification without prior notice. Therefore weights, dimensions, performances and any other stated issues are indicative only and not binding. 9) GUARANTEE: The manufacturer gives the guarantees provided by the Law. The guarantee covers every manufacturing defect only for the components/parts produced by the manufacturer: the Company also limits itself to the repair or replacement of the electric pump, or of the part recognized as being faulty, at the manufacturer's premises or other authorized premises. In no case however does the guarantee imply the possibility of claiming an indemnity and any liability is denied for damage to things or to the person caused by the manufacturer machines, whether directly or indirectly. The guarantee does not apply: - If the machine has been repaired, dismantled or tampered by persons not authorized by the manufacturer. - If the breakdown has been caused by errors in connecting the electrical or hydraulic systems, or by the failure to provide protection or the provision of inadequate protection. - If the setting up of the machine or its electrical or hydraulic systems has not been correctly carried out. - If the machine has been subject to loads exceeding the ones within the label specifications. - If materials have been damaged due to contact with abrasive or corrosive liquids or which are in any way incompatible with the materials used in the manufacture of the pumps. - If the materials have deteriorated due to natural wear. The defective machine must be taken to the manufacturer's premises in free port. The manufacturer reserves the indisputable right to impute the cause of the defect and to ascertain whether it falls within the warrant cases at his full expences. When the machine has been repaired it will be returned to the customer. 10) COMPETENT COURT: In case of any dispute the competent Court will be the one of Verona even if the payment is by Bill of Exchange. 11) RECOURSE TO OTHER NORMS: As regard to other matters not expressly stated in the above points, the laws, norms and commercial customs in force at the place, where the manufacturer has its premises, will be applied.

**The manufacturer assumes no responsibility for errors and omissions and reserves the right of changes without notice.**





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