



Product catalog

*PUMPS, MOTORS, HYDROPHORES,
INVERTERS, CONTROLLERS*



DAMBAT IS A DYNAMICALLY DEVELOPING POLISH MANUFACTURER OF WATER PUMPS AND FITTINGS SOLD UNDER IBO BRAND.

The company started its activities in 1999 and from the very beginning it based its development on understanding clients' needs providing them with high quality products. With experience and knowledge of qualified personnel and regular product development, Dambat became a significant manufacturer of water pumps in the European market.

In order to continue constant development, we cooperate with world-renowned manufacturers of water devices and equipment, while making our offer more attractive.

In cooperation with our Italian partners, we sell top quality

tanks, pumps and deep well motors. Benefiting from the latest technology and high-quality materials, IPRO products ensure long-lasting, safe and faultless operation. The range of products with such features and individual approach enabled us to acquire distributors of our devices in the majority of European countries and beyond.

With the experience gained over the years in line with knowledge and understanding of the importance of reliability, Dambat delivers top quality products to all customers who decide to choose our offer.

PRODUCER & IPRO BRAND OWNER:

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USEFUL INFORMATION

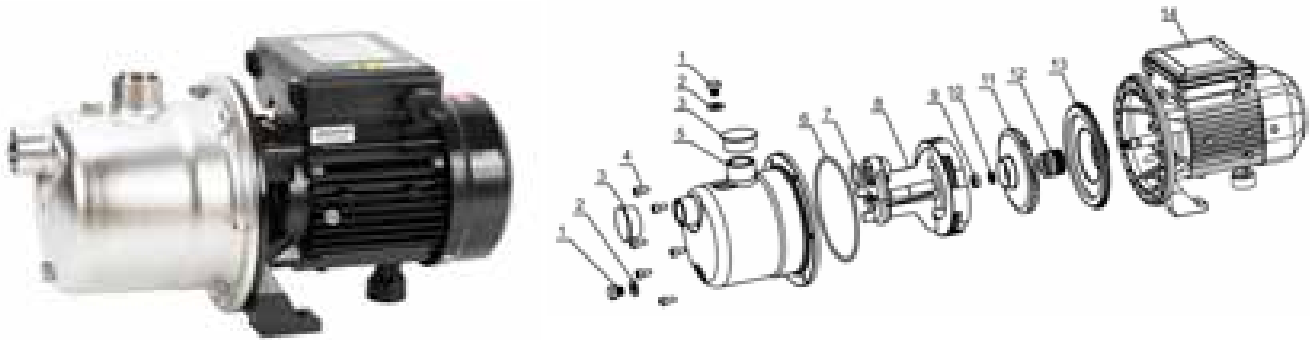
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Surface pumps

BJ
IWH
JET PRO
S-MCI
MH PRO

BJ



Single-stage, self-priming, centrifugal surface pump, equipped with a system increasing the suction capacity thanks to the use of a Venturi tube. Designed for pumping clean, cold water from own intakes and for increasing pressure. This pump model is used for water supply to houses, recreational plots and for irrigation.

CHARACTERISTICS:

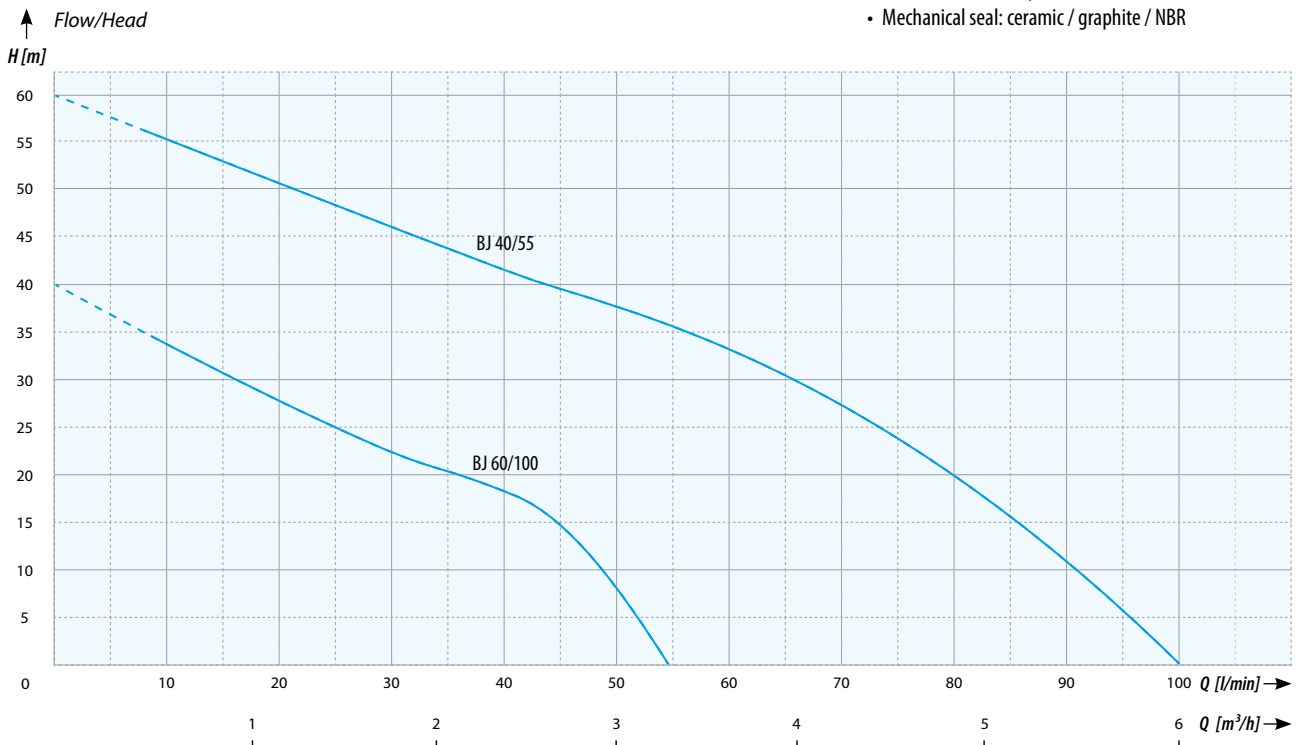
- Suction capacity from a depth of max. 9m
- Small dimensions of the pump
- The highest quality materials
- Possibility to work with a vessel or hydrophore automats (e.g. PC, SK)
- Thermal protection built into the motor winding
- 24-month warranty
- Warranty and post-warranty service

TECHNICAL DATA:

- Maximum liquid temperature: 70°C
- Maximum ambient temperature: 50°C
- Insulation class: F
- Mode of operation: continuous
- Ingress protection: IP55
- Motor speed: 2850 RPM
- Maximum pressure: 1.0 MPa

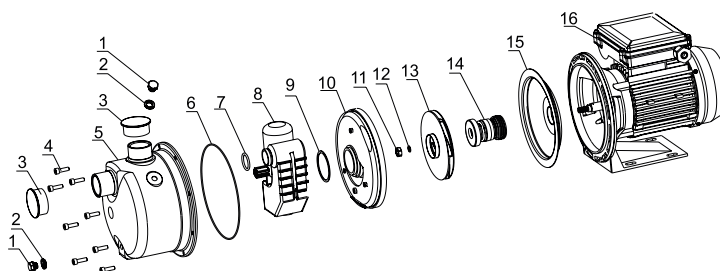
MATERIALS:

- Pump housing: AISI 304 stainless steel
- Shaft and rotor: AISI 304 stainless steel
- Impeller: noryl
- Inter-wall: AISI 304 stainless steel
- Diffuser / blade: noryl
- Mechanical seal: ceramic / graphite / NBR



NAME	Head (m)	Flow (l/min)	Motor power (W)	Voltage (V)	Suction lift (m)	Amperage (A)	Inlet/outlet [inch]	Dimensions L/H/W (cm)	Weight (kg)
BJ 40/55	40	55	550	230	9	3.8	1x1	36/20/18,5	8.5
BJ 60/100	60	100	1300	230	9	8,4	1¼x1	43/23/21	15

IWH



The pump for pumping of clean cold water from own intakes and for increasing pressure. IWH is a single-stage self-priming centrifugal surface pump equipped with the Venturi tube system for increased suction capacity. Sections of pump body and shaft that come in contact with water are made of stainless steel (INOX). The pump is manufactured to the highest quality standards in terms of the design and materials used. The pump has a power cable with a plug, and the pump motor is provided with thermal protection.

CHARACTERISTICS:

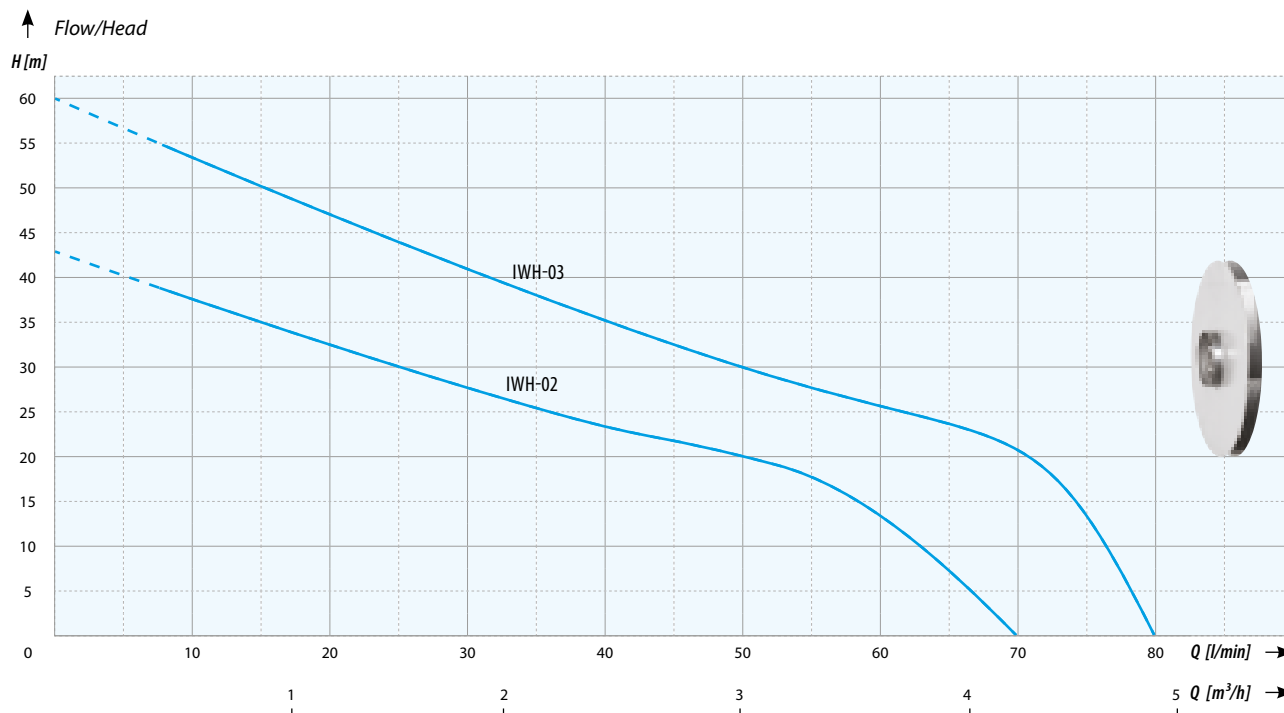
- Suction capacity from a depth of max. 9m
- Small dimensions of the pump
- The highest quality materials
- Possibility to work with a tank or hydrophore automats (e.g. PC, SK)
- Thermal protection built into the motor winding
- Warranty and post-warranty service

SPECIFICATIONS:

- Maximum liquid temperature: 70°C
- Maximum ambient temperature: 50°C
- Insulation class: F
- Mode of operation: continuous
- Ingress protection: IP55
- Motor speed: 2850 RPM
- Maximum pressure: 1.0 MPa

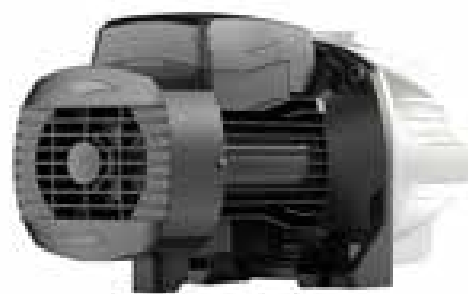
MATERIALS:

- Pump housing: AISI 304 stainless steel
- Impeller: AISI 316 stainless steel
- Inter-wall: AISI 304 stainless steel
- Diffuser / blade: noryl
- DMechanical seal: ceramic / graphite / NBR



NAME	Head (m)	Flow (l/min)	Motor power (W)	Voltage (V)	Suction lift (m)	Amperage (A)	Inlet/outlet [inch]	Dimensions L/H/W (cm)	Weight (kg)
IWH2-03	43	70	750	230	9	5,2	1x1	37/20/19	10
IWH4-03	60	80	1000	230	9	6,2	1x1	42/22/20	11,8

JET PRO



A single-stage, self-priming, centrifugal surface pump characterized by the highest quality standards, equipped with a system increasing the suction capacity thanks to the use of a Venturi tube. The pump is designed to pumping clean, cold water from own intakes and for increase the pressure in installation. Single stage construction increase capability of suction, what is especially important during first start. The pumps are used for water supply to houses, recreational plots, farms, industry and irrigation.

CHARACTERISTICS:

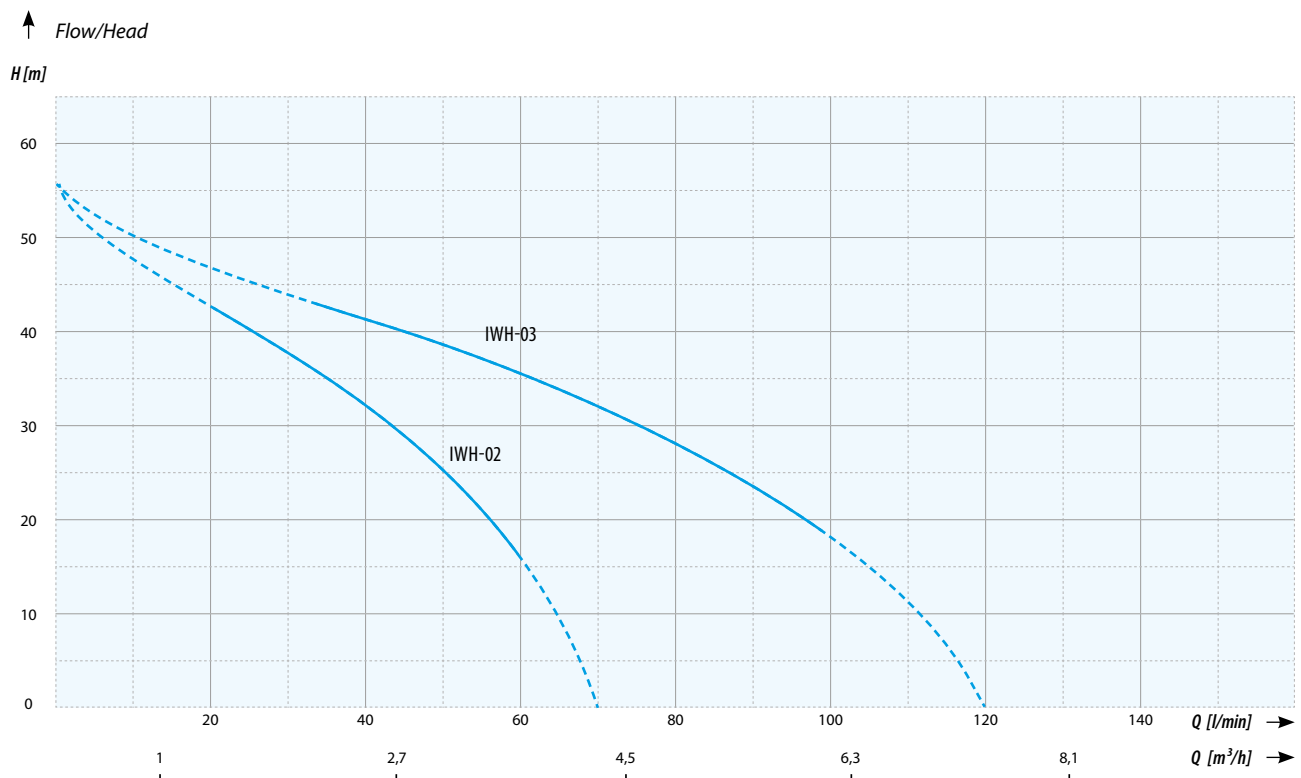
- Suction lift max. 9m
- Made of the highest quality materials
- Silence opre
- Possibility to work with a tank or hydrophore automats (e.g. PC, SK)
- Thermal protection built into the motor winding
- 36-month warranty
- Warranty and post-warranty service

TECHNICAL DATA:

- **Maximum liquid temperature: 60°C**
- **Maximum ambient temperature: 40°C**
- Power supply: 230V
- Insulation class: F.
- Operating mode: continuous
- Ingress protection: IP44
- Motor rotation speed: 2850 RPM
- Maximum pressure: 1.0MPa

MATERIALS:

- Pump housing: cast iron
- Shaft: AISI 304 stainless steel
- Impeller: AISI 304 stainless steel
- Diffuser: noryl
- Pump end plate: AISI 304 stainless steel
- Mechanical seal: ceramic / graphite / NBR



NAME	Head (m)	Flow (l/min)	Motor power (W)	Voltage (V)	Suction lift (m)	Amperage (A)	Inlet/outlet [inch]	Dimensions L/H/W (cm)	Weight (kg)
JET 1000 PRO	55	70	1100	230	9	6,8	1x1	45/22/19	17,5
JET 1500 PRO	55	120	1500	230	9	9,3	1½ x 1½	45/22/19	24,5

S-MCI

A multistage, self-priming, centrifugal surface pump characterized by the highest quality standards, equipped with a system increasing the suction capacity thanks to the use of a Venturi tube. The pump is designed to pump clean, cold water from own intakes and for increase the pressure in installation. The multi-stage design of the pump allowed to reduce the noise level so that the pump can be installed at home. The pumps are used for water supply to houses, recreational plots, farms, industry and irrigation.



CHARACTERISTICS:

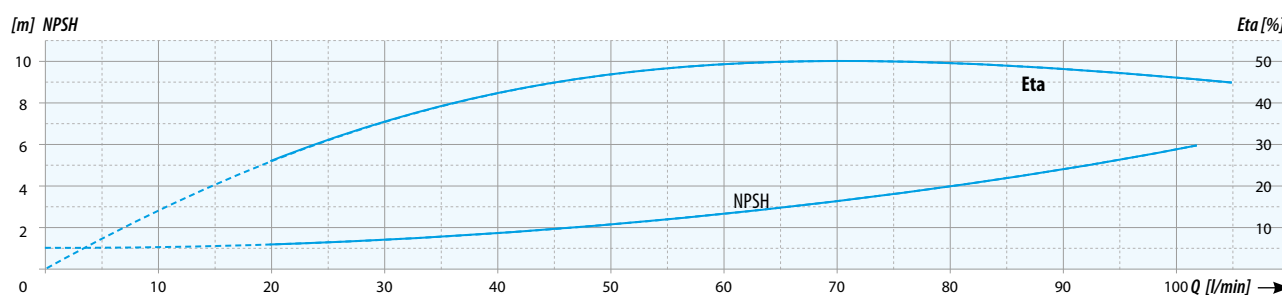
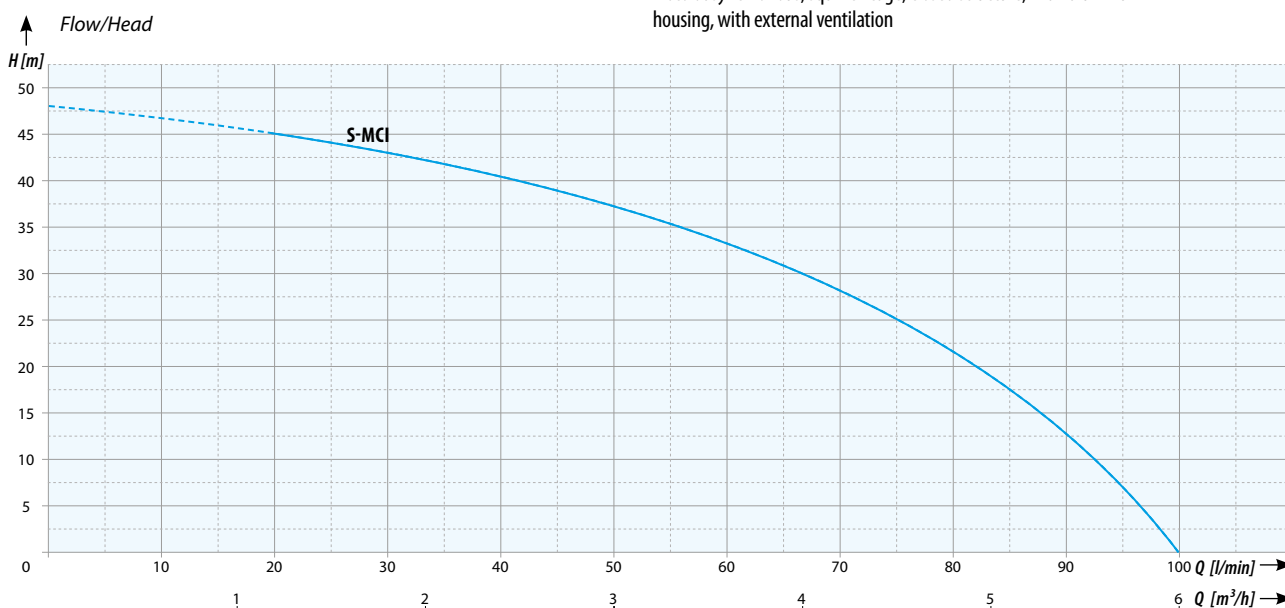
- Suction lift max. 8m
- High capacity and high pressure
- Made of the highest quality materials
- Silence operation
- Possibility to work with a tank or hydrophore controllers and inverters
- Thermal protection built into the motor winding
- 36-month warranty
- Warranty and post-warranty service

TECHNICAL DATA:

- Maximum liquid temperature: 70°C
- Maximum ambient temperature: 40°C
- Power supply: 230V
- Insulation class: F.
- Operating mode: continuous
- Ingress protection: IP55
- Motor rotation speed: 2850 RPM
- Maximum pressure: 1.0MPa

MATERIALS:

- Pump housing: AISI 304 stainless steel
- Shaft: AISI 304 stainless steel
- Impellers and diffusers: AISI 304 stainless steel
- Suction diffuser: noryl
- Pump end plate: AISI 304 stainless steel
- Mechanical seal: SIC / SIC / EPDM
- Motor: asynchronous, squirrel-cage, closed structure, in an aluminum housing, with external ventilation



NAME	Head (m)	Flow (l/min)	Motor power (W)	Voltage (V)	Suction lift (m)	Amperage (A)	Inlet/outlet (inch)	Dimensions L/H/W (cm)	Weight (kg)
S-MCI	47	100	1000	230	9	8,2	1 x 1	36/30/18,5	11,5

MH PRO

A series of multistage, self-priming, centrifugal surface pumps characterized by the highest quality of used materials and the ratio between price, parameters and quality. MH PRO are equipped with a system increasing the suction capacity thanks to the use of a Venturi tube. They are designed for pumping clean, cold water from own intakes and for increasing pressure. The pumps are used both in households (water supply, irrigation, rainwater) and in industry (car washes, air-conditioning systems, refrigeration).

CHARACTERISTICS:

- Suction lift 9m
- High flow and high pressure
- Made of the highest quality materials
- Silence operation
- Possibility to work with a tank or hydrophore controllers and inverters
- Thermal protection built into the motor winding
- 36-month warranty
- Warranty and post-warranty service

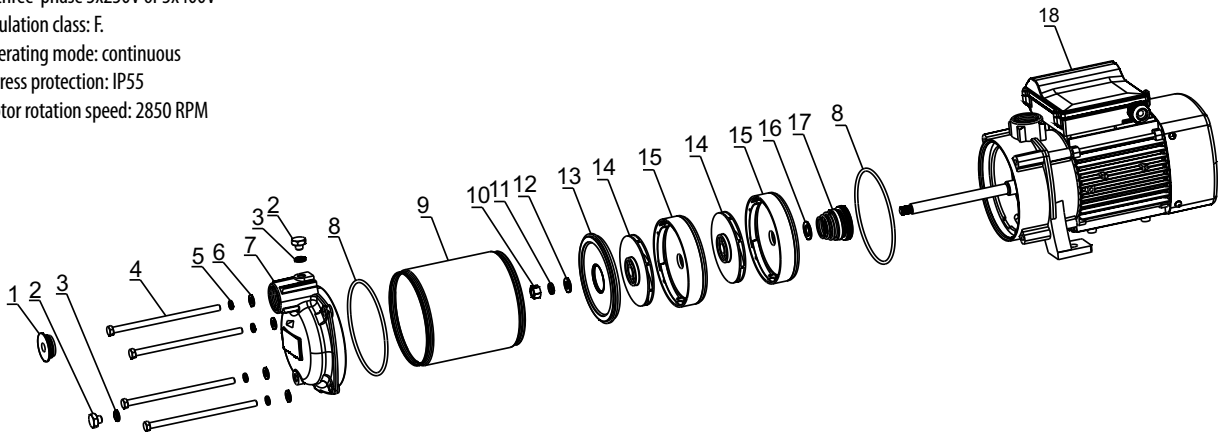
TECHNICAL DATA:

- Maximum liquid temperature: 70°C
- Maximum ambient temperature: 50°C
- Power supply: single-phase 1x 230V or three-phase 3x230V or 3x400V
- Insulation class: F.
- Operating mode: continuous
- Ingress protection: IP55
- Motor rotation speed: 2850 RPM

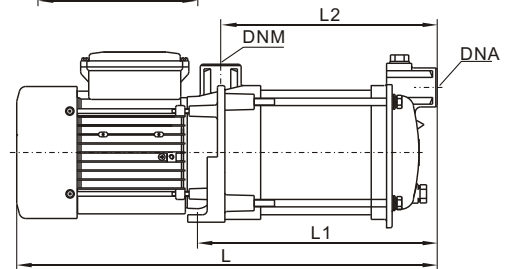
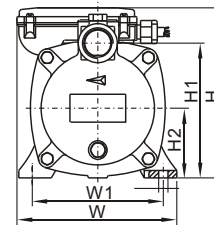


MATERIALS:

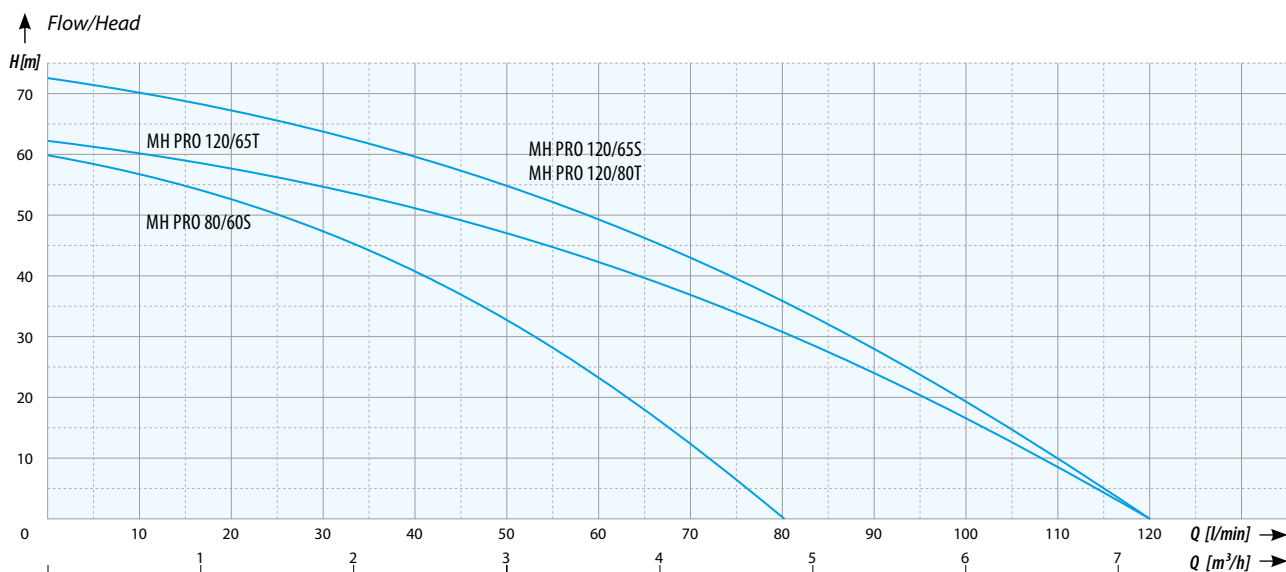
- Pump body: AISI 304 stainless steel.
- Shaft: AISI 304 stainless steel.
- Mechanical stuffing box: SIC / SIC / EPDM
- Connections: cast iron
- Rotor: noryl
- Diffuser: noryl
- Base: cast iron
- Motor: asynchronous squirrel-cage motor, closed design, in an aluminum housing, with internal ventilation.



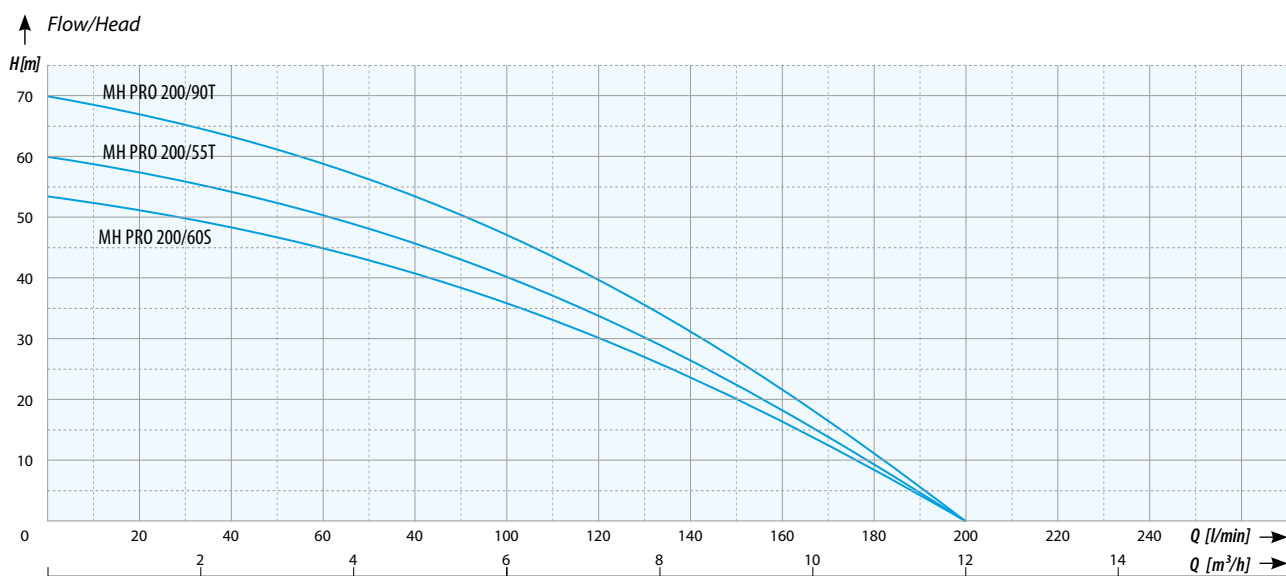
NAME	Dimensions (mm)							Three-phase		DNA	DNM
	L	L1	L2	W1	H1	H2	W	H			
MH PRO 80/60S	455	260	233	141	145	75	172	184	G1	G1	
MH PRO 120/65S	489	264	239	120,5	155	85	169	211	G1	G1	
MH PRO 200/60S	490	254	229	120,5	158	85	177	211	G1¼	G1¼	
MH PRO 120/65T	489	264	239	120,5	155	85	152	189	G1	G1	
MH PRO 120/80T	513	288	263	120,5	155	85	152	189	G1	G1	
MH PRO 200/55T	518	282	257	120,5	158	85	152	189	G1¼	G1¼	
MH PRO 200/90T	546	310	285	120,5	158	85	152	189	G1¼	G1¼	



MH PRO



NAME	Head (m)	Flow (l/min)	Motor power (W)	Voltage (V)	Suction lift (m)	Amperage (A)	Inlet/outlet [inch]	Dimensions L/H/W (cm)	Weight (kg)
MH PRO 80/60S	60	80	1000	1x230	9	6,2	1 x 1	45/19/21	10,8
MH PRO 120/65S	73	120	1500	1x230	9	9,2	1 x 1	49/21/17	13,1
MH PRO 120/65T	62	120	1500	3x230 3x400	9	3,3	1 x 1	49/16/19	11,6
MH PRO 120/80T	73	120	1500	3x230 3x400	9	3,3	1 x 1	52/16/19	12,7



NAME	Head (m)	Flow (l/min)	Motor power (W)	Voltage (V)	Suction lift (m)	Amperage (A)	Inlet/outlet [inch]	Dimensions L/H/W (cm)	Weight (kg)
MH PRO 200/60S	53	200	2200	1x230	9,2	9,2	1¼ x 1¼	49/21/18	41,0
MH PRO 200/55T	60	200	1850	3x230 3x400	4,0	4,0	1¼ x 1¼	52/16/19	17,9
MH PRO 200/90T	70	200	2200	3x230 3x400	5,5	5,5	1¼ x 1¼	55/16/19	18,2

Industrial pumps



*COLP
PMC INOX
F-CPM
2CPM
MCI
VMH
CV, CVI INOX*

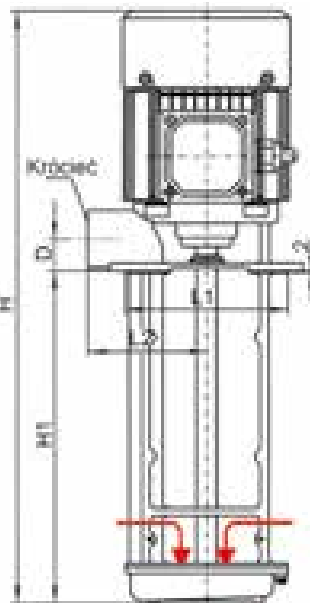
COLP

Submersible pumps for pumping coolants. Extended shaft design makes the pumps suitable for pumping liquids, coolants and oils that could have a negative impact on motor sealing in conventional pumps. The pump impeller and shaft are made of stainless steel.

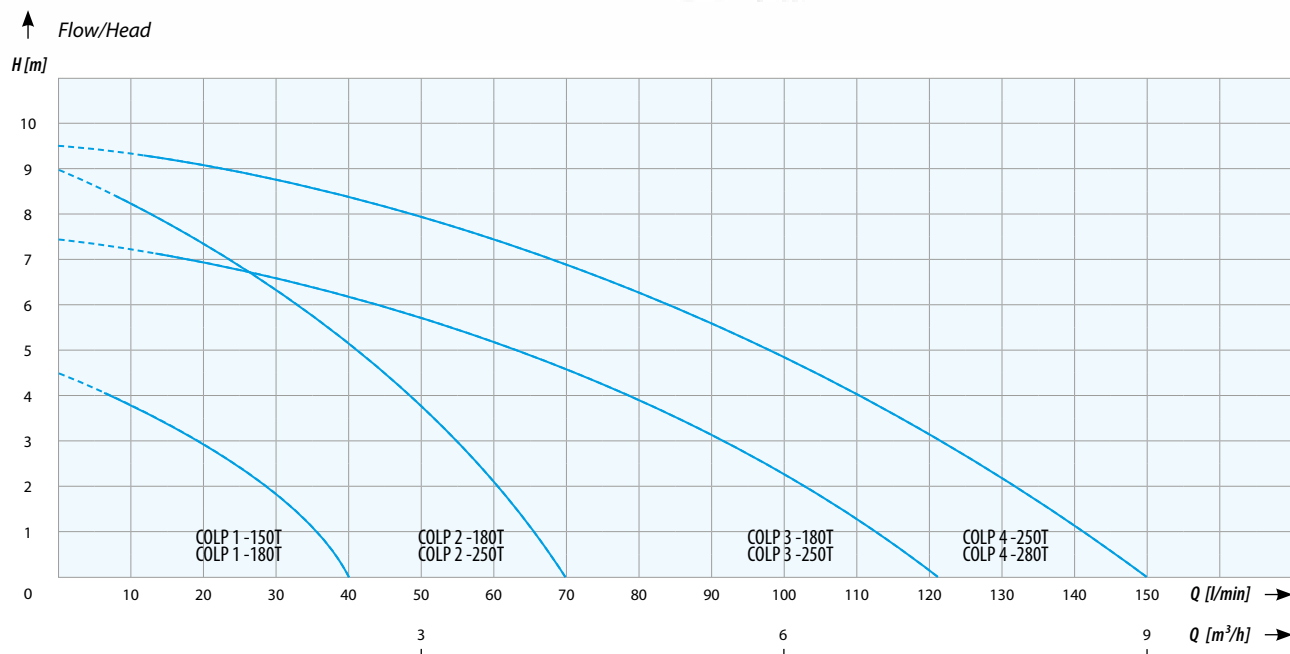
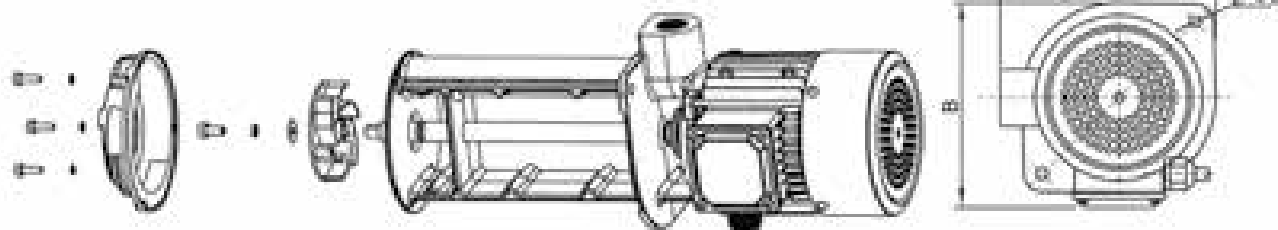
The top quality materials used make the pumps suitable for mediums with temperatures of 0 to 90°C and a maximum viscosity of $150\text{mm}^2\text{ s}^{-1}$, at the maximum ambient temperature of 50°C. The maximum operating pressure of the pump is 0.3 MPa. The maximum diameter of impurities is 0.5 mm.

APPLICATIONS:

Pumping coolants, cutting fluids, oils in machine tools and all machines that require circulation of coolant



FOT.COLP



NAME	Power (W)	Amperage (A)	Head (m)	Flow (m³/h)	Inlet/outlet	Voltage
COLP 1-150T	60	0,3	4,5	2,5	G ½	400V/50Hz
COLP 1-180T	60	0,3	4,5	2,5	G ½	400V/50Hz
COLP 2-180T	100	0,4	9	4	G ½	400V/50Hz
COLP 2-250T	100	0,4	9	4	G ½	400V/50Hz
COLP 3-180T	150	0,5	7,5	7	G ¾	400V/50Hz
COLP 3-250T	150	0,5	7,5	7	G ¾	400V/50Hz
COLP 4-250T	250	0,7	9,5	9	G 1	400V/50Hz
COLP 4-280T	250	0,7	9,5	9	G 1	400V/50Hz

Dimensions							
A	B	D	L1	L2	H	H1	d
139	161	20	ø 90	70	369	153	ø 8
139	161	20	ø 90	70	399	183	ø 8
150	162	20	ø 115	80	398	182	ø 10
150	162	20	ø 115	80	468	252	ø 10
178	172	26,5	ø 135	98	398	180	ø 10
178	172	26,5	ø 135	98	468	250	ø 10
178	172	26,5	ø 135	98	468	250	ø 10
178	172	26,5	ø 135	98	498	280	ø 10

PMC INOX



CENTRIFUGAL, SINGLE-STAGE OPEN IMPELLER PUMPS

The pumps are designed for pumping contaminated liquids and substances containing solids with a diameter not exceeding 18 mm. The pumps are used in industry and agriculture. The pumps can work in a horizontal and vertical position.

APPLICATION:

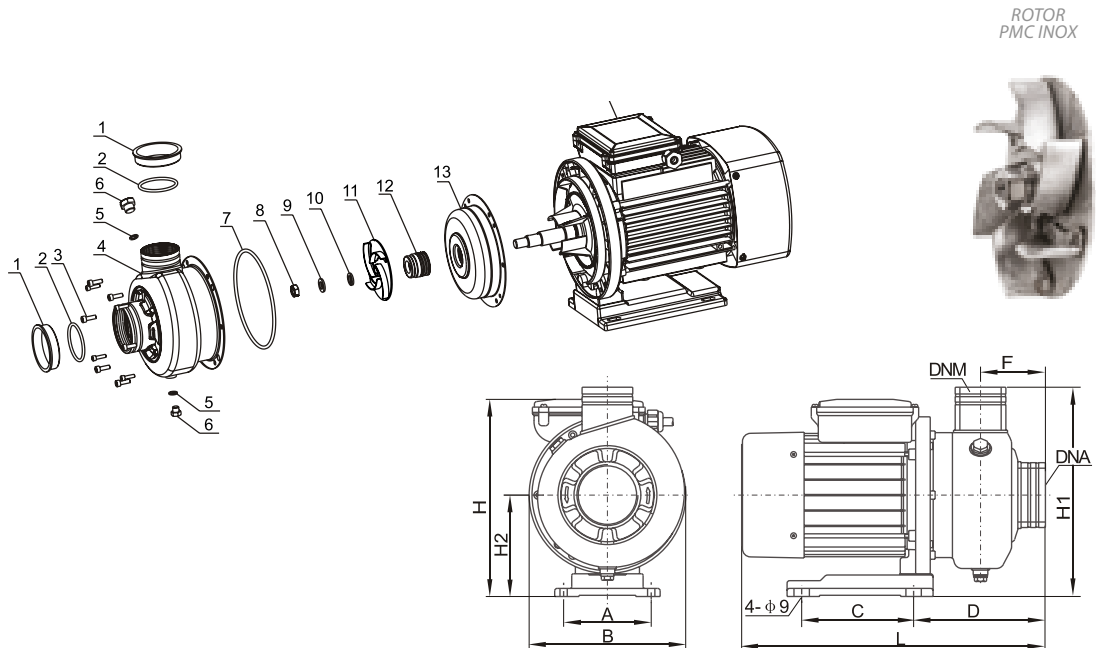
- Food industry: in washing and washing machines, for the transport of food liquids, transport of slurry in processing, transport of vegetable food, fish farms,
- Metallurgical industry: material treatment, process water systems
- Textile industry: they are used in dye houses, industrial laundries
- Manufacturing industry: cleaning bottles, cans, glass, transfer of painting fluids, dosing and mixing, complex machines
- Agriculture: pumps can be used for the transfer of moderately viscous liquids with low aggressiveness can be used for pumping fertilizers. They are also used in irrigation and drainage.
- Public utility units: air-conditioning systems, purification systems, heating systems, cooling systems, swimming pools, water treatment systems,
- Washing and cleaning: nano, micro and ultrafiltration systems, softening, ionizing, demineralizing systems, desalination systems, distillation systems, separators
- Chemical and pharmaceutical industries

TECHNICAL DATA:

- Liquid temperature: 5-104°C
- Ambient temperature: up to 50°C
- Maximum system pressure: up to 10 bar
- Operating mode: continuous
- Ingress protection: IP55
- Winding insulation class: 155 (F)
- Motor rotation speed: 2850 RPM

MATERIALS:

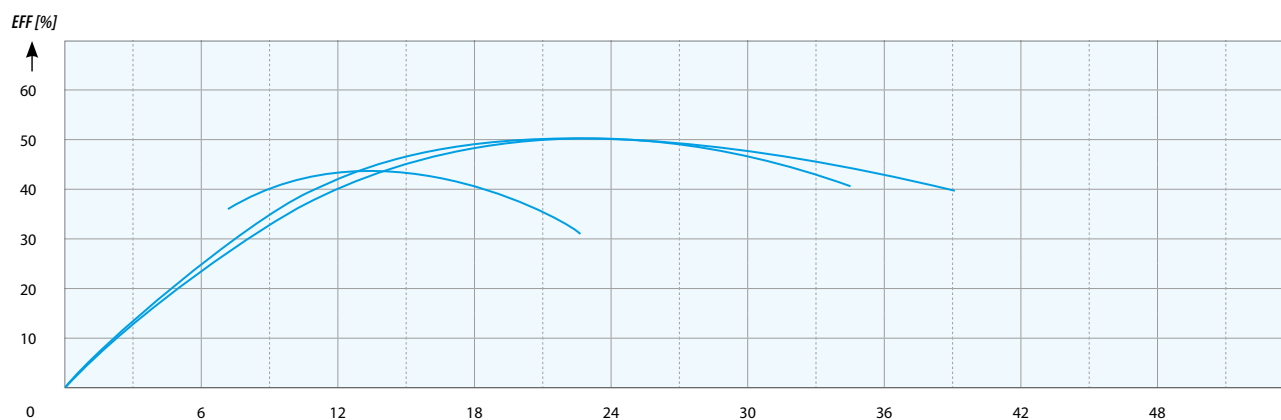
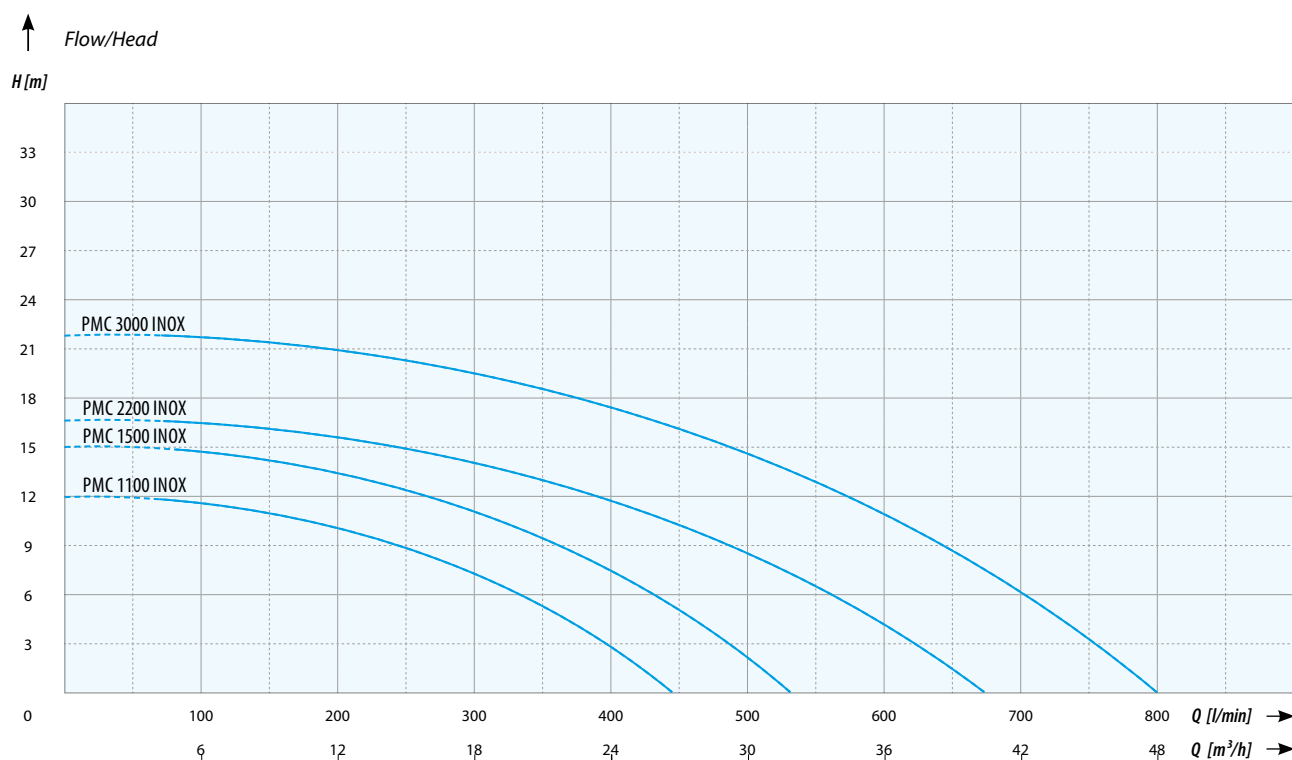
- Motor: closed-frame asynchronous squirrel-cage motor, aluminum housing, external ventilation.
- Shaft: AISI 304 stainless steel
- Housing: AISI 304 stainless steel
- Open Impeller: AISI 304 stainless steel
- Pump end plate: AISI 304 stainless steel
- Mechanical seal: graphite / silicon carbide / NBR



NAME	A	B	C	D	F	L	H	H1	H2	DNM	DNA
PMC 1100 INOX	108	193	138	165	82	378	242	258	125	G2	G2
PMC 1500 INOX	108	193	138	165	82	378	242	258	125	G2	G2
PMC 2200 INOX	108	193	138	165	82	413	242	258	125	G2½	G2
PMC 3000 INOX	108	193	138	165	82	430	242	258	125	G2½	G2

PMC INOX

Name	Power P2 (kW)	Flow	I/min	0	100	200	300	400	500	550	600	700	800
			m ³ /h	0	6	12	18	24	30	33	36	42	48
PMC 1100 INOX	1.1	H (m)	12	11.5	10	7.5	5						
PMC 1500 INOX	1.5		15	14	13	10.5	9	6					
PMC 2200 INOX	2.2		17	16.5	16	15	13.5	11	10.5	10	9		
PMC 3000 INOX	3.0		21	20	19	17.5	16.5	15	14	13	12	11	



NAME	Head (m)	Flow (l/min)	Motor power (W)	Voltage (V)	Amperage (A)	Inlet/outlet [inch]	Weight (kg)
PMC 1100 INOX	12	500	1100	230	7	2 x 2	16
PMC 1500 INOX	15	600	1500	230	9,2	2 x 2	17,4
PMC 2200 INOX	17	770	2200	230	14	2½ x 2	22
PMC 3000 INOX	22	930	3000	230	10/6,3	2½ x 2	23

F-CPM



F-CPM INOX CENTRIFUGAL SINGLE STAGE PUMPS WITH CLOSED IMPELLER

Pumps are designed for pumping slightly contaminated liquids and substances containing solids with maximum particle diameter of 1 mm. The pump can work with water, with a maximum content of non-absorbent, free solids up to 0.26 kg / m³ and a maximum dissolved solids content of up to 51 kg / m³, provided that the total content of gaseous substances in the water does not exceed the saturation volume.

APPLICATION:

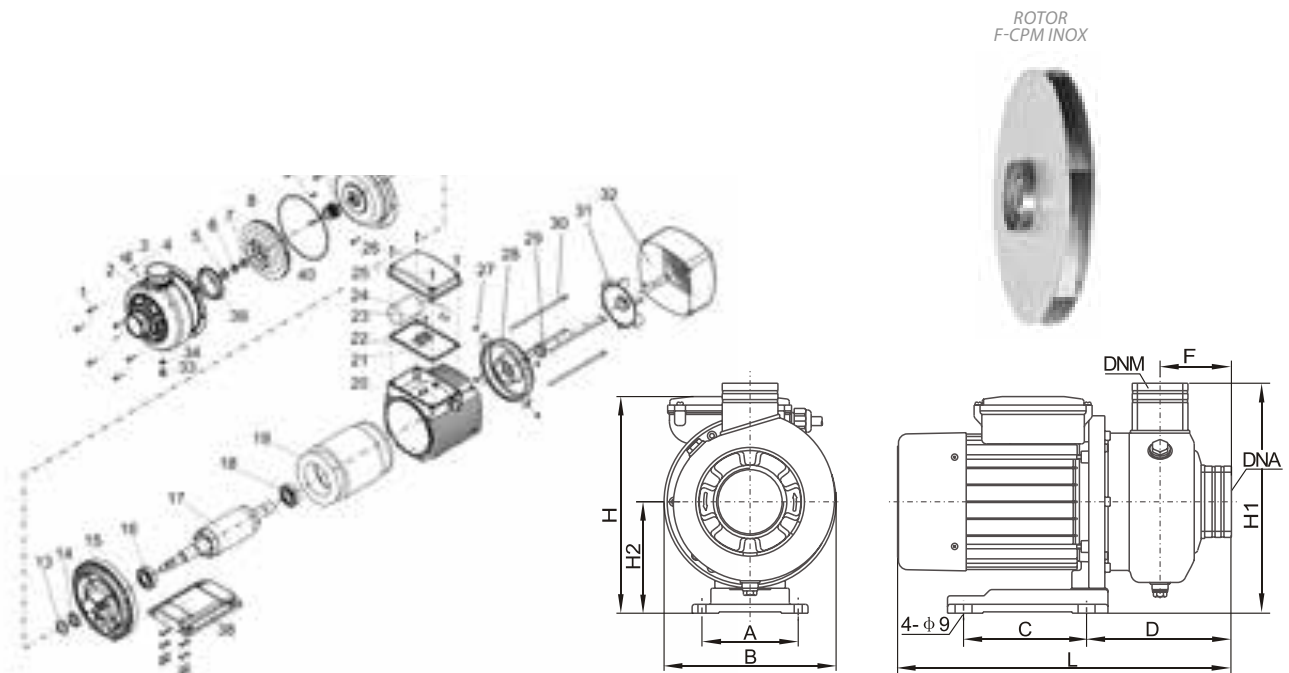
- Food industry: in washing and washing machines, for the transport of food liquids, transport of water in processing, fish farms, wineries
- Metallurgical industry
- Textile industry: they are used in dye works
- Manufacturing industry: cleaning of bottles, cans, glass
- Agriculture: pumps can be used for conveying moderately viscous slightly corrosive liquids, they can be used for pumping fertilizers. Pumps are also used for irrigation and drainage.
- Pool systems
- Heating industry: in air conditioning and heating systems
- Public utility units: air-conditioning systems, purification systems, heating systems, pressure boosting, swimming pools

TECHNICAL DATA:

- Liquid temperature: 5-90°C
- Ambient temperature: up to 50°C
- Maximum system pressure: up to 10 bar
- Operating mode: continuous
- Ingress protection: IP55
- Winding insulation class: 155 (F)
- Motor rotation speed: 2850 RPM

MATERIALS:

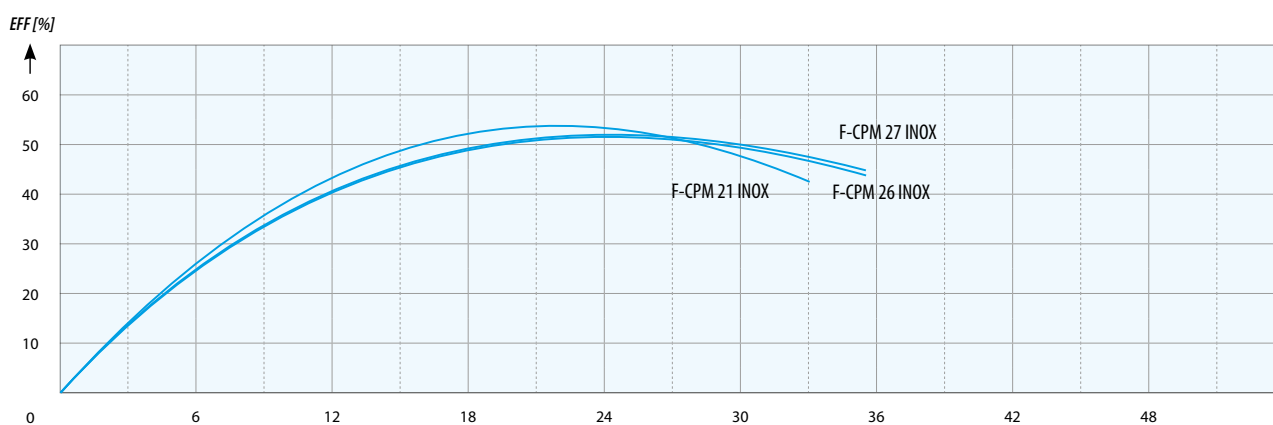
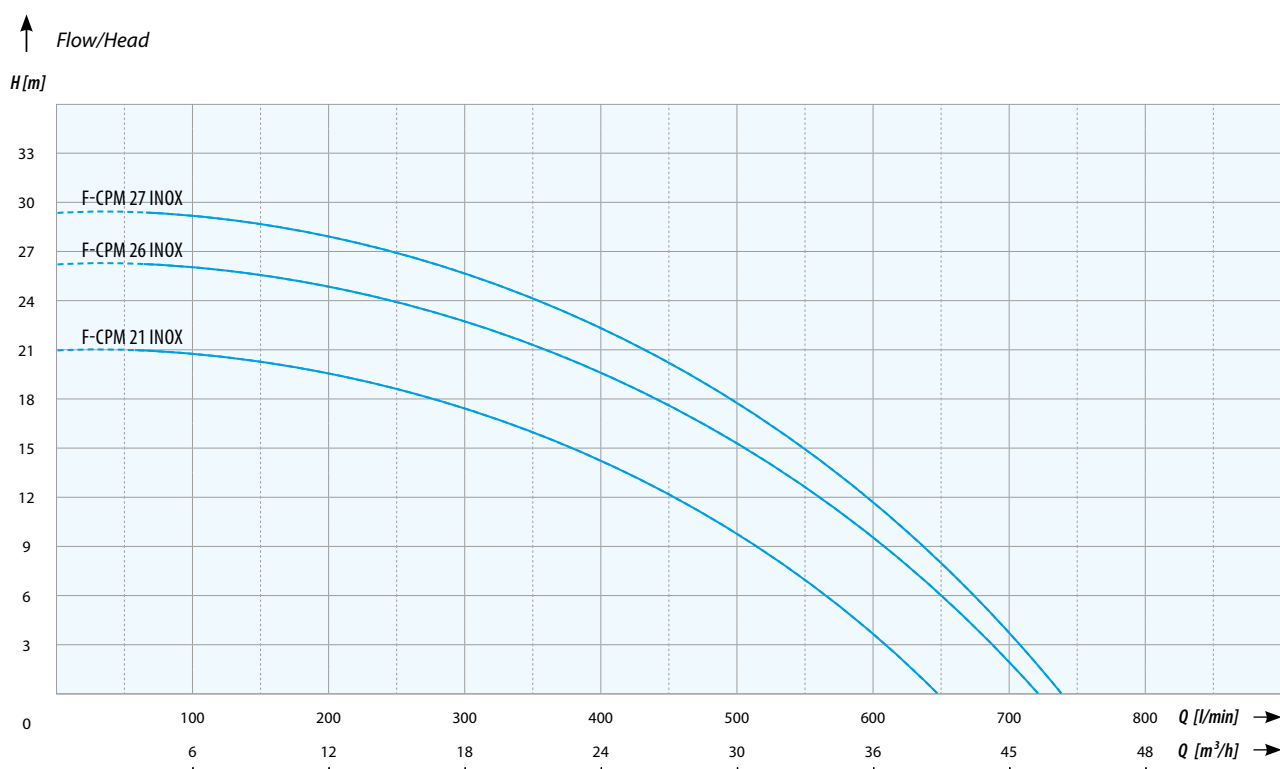
- Motor: closed-frame asynchronous squirrel-cage motor, aluminum housing, external ventilation.
- Shaft: AISI 304 stainless steel
- Housing: AISI 304 stainless steel
- Closed Impeller: AISI 304 stainless steel
- Pump end plate: AISI 304 stainless steel
- Mechanical seal: graphite / silicon carbide / NBR



NAME	A	B	C	D	F	L	H	H1	H2	DNM	DNA
F-CPM 21 INOX	108	193	138	165	82	378	243	258	125	G2	G2
F-CPM 26 INOX	108	193	138	165	82	415	242	258	125	G2	G2
F-CPM 27 INOX	108	193	138	165	82	432	242	258	125	G2	G2

F-CPM

Name	Power P2 (kW)	Flow	I/min	0	100	150	200	250	300	350	400	500	600	
			m ³ /h	0	6	9	12	15	18	21	24	30	36	
F-CPM 21 INOX	1.5	H (m)		21	20	19.5	18.5	17.5	16	15	13	10		
F-CPM 26 INOX	2.2			25	24	23	22.5	21	20	18.5	17	15	12	
F-CPM 27 INOX	2.2			29	28	27	26	25	24	22	21	17.5	13	



NAME	Head (m)	Flow (l/min)	Motor power (W)	Voltage (V)	Amperage (A)	Inlet/outlet [inch]	Weight (kg)
F-CPM 21 INOX	21	650	1500	230	9,2	2 x 2	18
F-CPM 26 INOX	26	710	2200	230	14	2 x 2	22
F-CPM 27 INOX	29	740	3000	400	11,3/6,5	2 x 2	23,4

2CPM

CENTRIFUGAL TWO-STAGE CLOSED IMPELLER PUMPS



The pumps are designed for pumping slightly contaminated liquids and substances containing solids with maximum particle diameter of 1 mm. Pumps can work with a water containing maximum level of non-absorbent free solids content of up to 0.26 kg / m³ and a maximum dissolved solids content of up to 51 kg / m³, provided that the total content of gaseous substances in the water does not exceed the degree of saturation. The double mechanical seal and the double impeller, characterized by high efficiency, make the pumps widely used in industry and agriculture, as well as in horticulture.

APPLICATION:

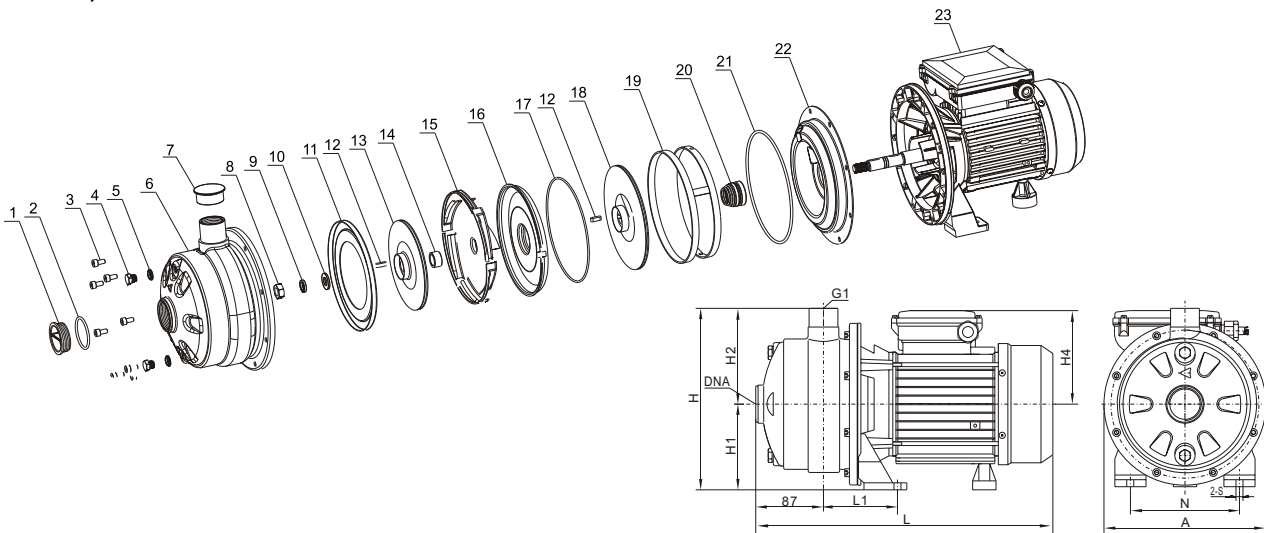
- Food industry: in washing and washing machines, for the transport of food liquids, transport of water in processing, fish farms,
- Metallurgical industry
- Textile industry: they are used in dye works.
- Manufacturing industry: cleaning of bottles, cans, glass
- Heating industry: in air conditioning and heating systems
- Agriculture: the pumps can be used for the transfer of moderately viscous liquids with low aggressiveness. They can be used for pumping fertilizers. They are also used in irrigation and drainage.
- Pool systems

TECHNICAL DATA:

- Liquid temperature: 0-70°C
- Ambient temperature: up to 50°C
- Maximum system pressure: up to 10 bar
- Operating mode: continuous
- Ingress protection: IP55
- Winding insulation class: 155 (F)
- Motor rotation speed: 2850 RPM

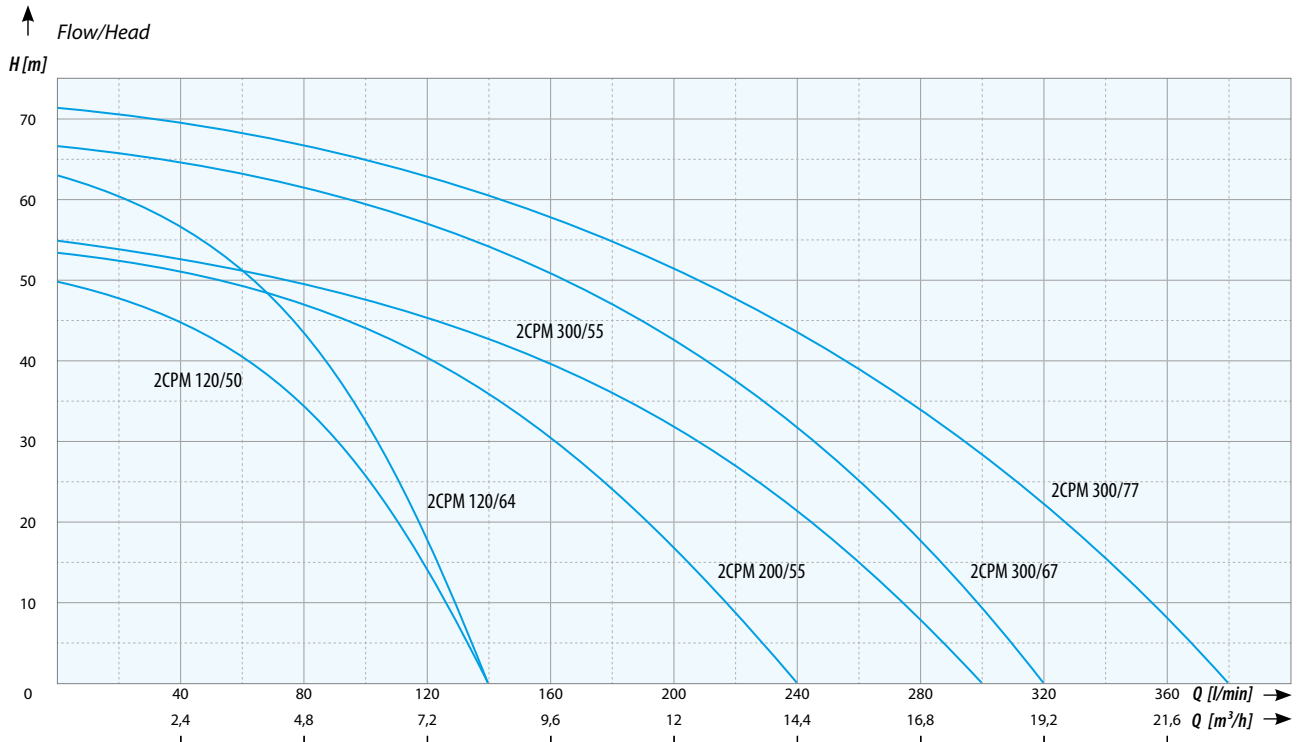
MATERIALS:

- Motor: asynchronous, squirrel-cage, closed structure, in an aluminum housing, with external ventilation.
- Shaft: AISI 304 stainless steel
- Housing: AISI 304 stainless steel
- Impeller: AISI 304 stainless steel
- Pump end plate: AISI 304 stainless steel
- Mechanical seal: graphite / silicon carbide / NBR.



NAME	A	L1	N	H	H1	H2	S	Single-phase		Three-phase		DNA
								L	H4	L	H4	
2CPM 120/50	208	95	140	229	106	123	9	382	120	382	111	G1¼
2CPM 120/64	230	109	140	249	118	131	9	397	132	382	111	G1¼
2CPM 200/55	208	109	140	229	106	123	9	397	132	382	118	G1¼
2CPM 300/55	208	109	140	229	106	123	9			415	118	G1½
2CPM 300/67	230	109	140	249	118	131	9			437	118	G1½
2CPM 300/77	230	109	160	249	118	131	12			469	148	G1½

2CPM



NAME	Power P2 (kW)	Flow m ³ /h	1.2	2.4	3.6	4.8	7.2	9.0	10.8	12.6	15	17
2CPM 120/50	1.5	H (m)	46	43	39	35	22	12				
2CPM 120/64	2.25		60	55.5	50.5	45	18					
2CPM 200/55	2.25		52	49	46	45	38	33	27	20		
2CPM 300/55	3.6		55	53	53	48	46	41	38	32	26	
2CPM 300/67	4.7		66	65	63.5	62	58	55	52	47	39	31
2CPM 300/77	4.7		75	72	71	69	66	63	56	53	47	40

NAME	Head (m)	Flow (l/min)	Motor power (W)	Voltage (V)	Amperage (A)	Inlet/outlet (inch)	Weight (kg)
2CPM 120/50	50	140	900	1x230	6,7	1¼ x 1	15,2
2CPM 120/64	63	140	1500	1x230	11,5	1¼ x 1	19,3
2CPM 200/55	54	240	1500	1x230	11,5	1¼ x 1	24,3
2CPM 300/55	55	300	2200	3x230 / 3x400	6,1	1½ x 1	25,6
2CPM 300/67	67	320	2200	3x230 / 3x400	8	1½ x 1	26,1
2CPM 300/77	72	370	3700	3x230 / 3x400	9	1½ x 1	34,3

MCI



MCI - a group of the top quality multi-stage non-self-priming centrifugal pumps. MCI pumps are powerful and robust units designed for a wide range of applications, from small home installations to continuous operation in large industrial systems. Hydraulic components are entirely made of AISI 304 (DIN 1.4301) stainless steel and reinforced mechanical seal allows to use liquids with temperatures of up to 70 degrees. MCI pumps provide flow of 3 m³ to 30 m³ per hour, and as a result they can be used in a wide range of applications.

MAIN ADVANTAGES OF MCI SERIES PUMPS:

- High reliability
- Wide range of flow
- Low noise level
- High hydraulic efficiency
- Thermal protection for single-phase motor

APPLICATION:

Households:

- supply of water
- irrigation (including cooperation with sprinklers)
- increasing pressure
- utilizing rainwater

Industrial applications:

- Jet washers
- Air conditioning systems
- Cooling systems: refrigerant pumping
- Heating systems: hot water and glycol pumping
- Maintaining pressure in livestock buildings
- Systems increasing humidity and temperature
- Increasing pressure in building utility systems
- Pumping of moderately viscous slightly corrosive liquids
- Food industry: in washers and cleaning machines, for conveying food liquids

Agriculture:

- Agriculture:
- pumping and dosing fertilizers (not corrosive to AISI 304 steel)
- Maintaining pressure in livestock buildings

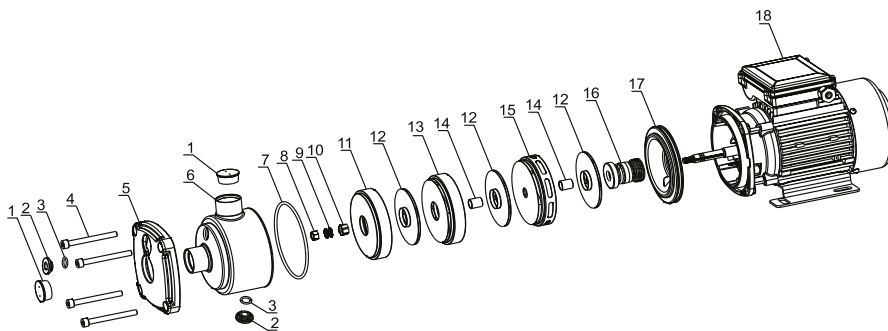
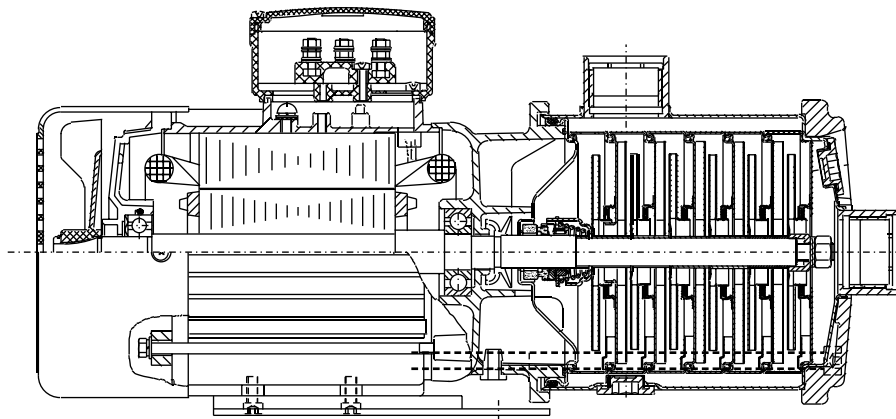
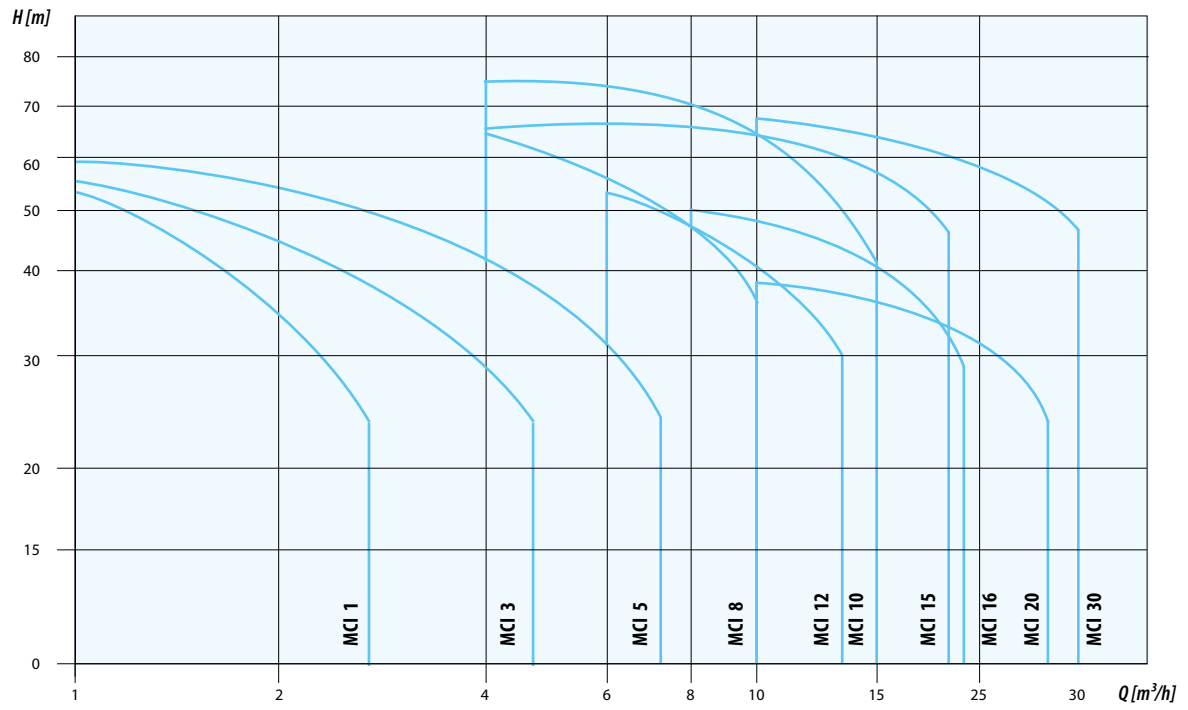
TECHNICAL DATA:

- Liquid temperature: ≤70°C
- Ambient temperature: ≤50°C
- Maximum pressure in the system: up to 8 bar
- Ingress protection: IP55
- Insulation class: F

MATERIALS:

- Body - Stainless steel AISI 304.
- Shaft - Stainless steel AISI 304.
- Mechanical seal – SIC/SIC/EPDM
- Inlet/outlet: Stainless steel AISI 304
- Impellers, Venturi tubes, Venturi tube coverplates - Stainless steel AISI 304.
- Pump end plate: Stainless steel AISI 304
- Base plate: Steel
- Motor: asynchronous enclosed squirrel-cage with aluminium housing and external cooling





NAME	Power		Amperage	Flow l/min m ³ /h	7	10	14	17	20	24	27	30	34	37	40
	kW	Hp	A		H (m)	0,4	0,6	0,8	1	1,2	1,4	1,6	1,8	2	2,2
MCI 1-2	0,25	0,3	2	H (m)	19,5	19	18,5	18	17,5	17	16	15	14	13	12
MCI 1-3	0,25	0,3	2		29	28,5	26	25	24,5	23,5	22	21	19	17	16
MCI 1-4	0,37	0,5	2,4		37	36	35	33	32	30	28	27	26	22	20
MCI 1-5	0,37	0,5	2,4		43	42	41	38	36	34	32	29	27	25	22
MCI 1-6	0,37	0,5	2,4		51	50	49	46	44	45	40	36	32	30	26
MCI 1-7	0,55	0,75	3,8		60	58	56	53	51	49	45	42	38	34	30

NAME	Power		Amperage	Flow l/min m ³ /h	14	20	27	33	40	47	50	53	60	67
	kW	Hp	A		H (m)	0,8	1,2	1,6	2	2,4	2,8	3	3,2	3,6
MCI 3-2	0,25	0,3	2	H (m)	19,5	19	18,5	18	17	16,5	15	14,5	13,5	12
MCI 3-3	0,37	0,3	2,4		27	26	25	24	23	22	21	20	17	15
MCI 3-4	0,55	0,5	3,8		36	35	34	32	31	29	28	27	23	20
MCI 3-5	0,55	0,5	3,8		44	43	42	40	38	36	34	33	28,5	24
MCI 3-6	0,75	0,5	5,2		53	51,5	49	47	44	41	38	37	32	27
MCI 3-7	1	1,35	6,2		63	61	59	56	54	51	49	47	41	35

NAME	Power		Amperage	Flow l/min m ³ /h	17	25	33	41	50	58	67	75	83	91	100
	kW	Hp	A		H (m)	1 <th>1,5</th> <th>2</th> <th>2,5</th> <th>3</th> <th>3,5</th> <th>4</th> <th>4,5</th> <th>5</th> <th>5,5</th> <th>6</th>	1,5	2	2,5	3	3,5	4	4,5	5	5,5
MCI 5-2	0,37	0,5	2,4	H (m)	18,5	18	17,5	17	16	15,5	15	13,5	13	11	10
MCI 5-3	0,55	0,75	3,8		29	28,5	28	27	26,5	25,5	25	23	22	20	18
MCI 5-4	0,75	1	5,2		38	37	36	34	35,5	32	30	28	27	24	20
MCI 5-5	1	1,35	6,2		47	46	45	44	42,5	41	40	36	35	32	27
MCI 5-6	1,3	1,7	8,4		56,5	55	54	53	52,5	51	49	45	44	42	36
MCI 5-7	1,5	2	9,2		67	65	64	61	59	57	55	51	49	44	38

NAME	Power		Amperage	Flow l/min m ³ /h	67	83	100	117	134	150	167
	kW	Hp	A		H (m)	4	5	6	7	8	9
MCI 8-10	0,55	0,75	3,8	H (m)	15	14	13	12,5	10	9	8
MCI 8-15	0,75	1	5,2		25	23	22	21	17	14	12
MCI 8-20	1	1,35	6,2		32	29	27	25	20	21	17
MCI 8-25	1,5	2	9,2		43	40	38	34	30	25	20
MCI 8-30	1,85	2,5	13		50	46	44	40	32	30	26
MCI 8-35	2,2	3	14		56	51	48	55	42	35	28
MCI 8-40	2,2	3	14		65	57,5	57	50	43	42	34

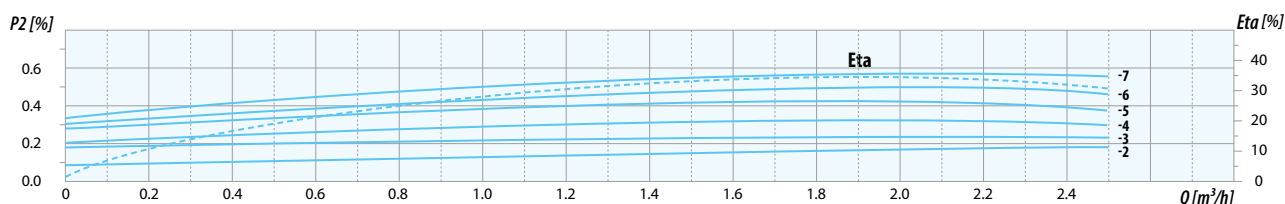
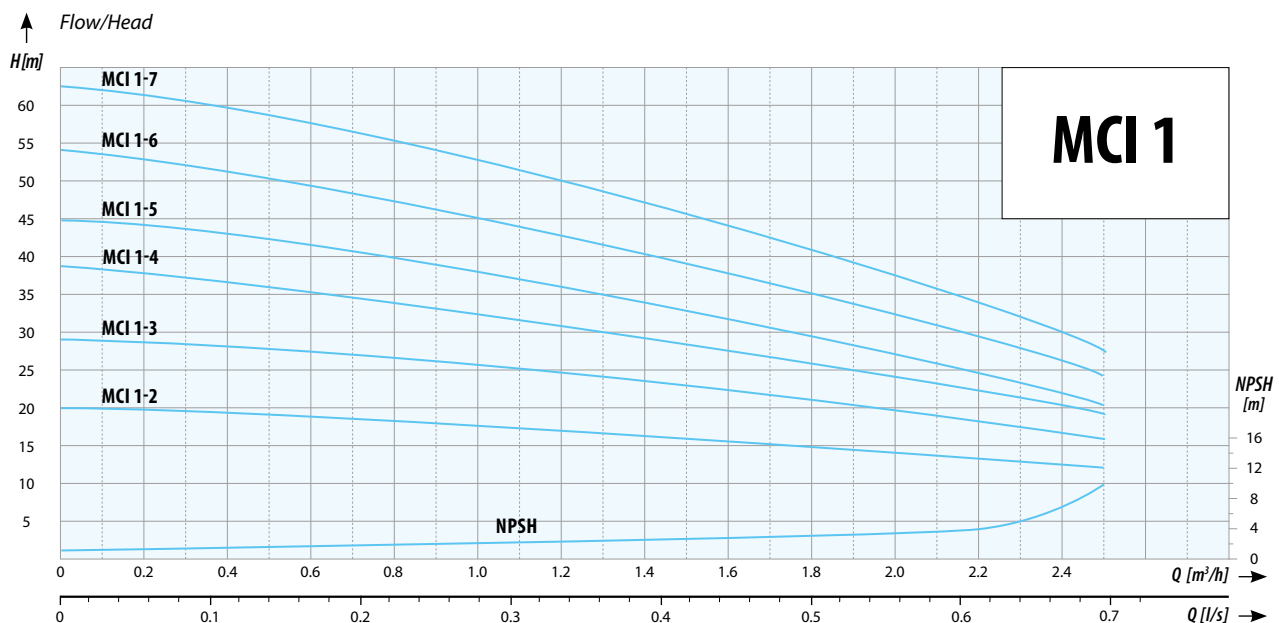
NAME	Power		Amperage	Flow l/min m ³ /h	67	84	100	117	134	150	167	184	200	217	234
	kW	Hp	A		H (m)	4	5	6	7	8	9	10	11	12	13
MCI 10-1	0,75	1	4,4	H (m)	14,5	14	13,5	13	12,5	12	11	10	9	8	7
MCI 10-2	1,25	1,75	8,1		30	29,5	29	28	27	26	24	23	21	19	16
MCI 10-3	2,2	3	14		45,5	45	44	43	42	40	38	36	33	30	26
MCI 10-4	3	4	6,3		61	60,5	60	58	56	54	52	48	45	41	36
MCI 10-5	3	4	6,3		76,5	76	75	74	71	68	63	61	57	52	46

NAME	Power		Amperage	Flow l/min m ³ /h	100	117	134	150	167	184	200	217	234
	kW	Hp	A		H (m)	6	7	8	9	10	11	12	13
MCI 12-10	1	1,35	6,2	H (m)	19	18	17,5	16	15,5	14	13,5	12	10,5
MCI 12-15	1,5	2	9,2		28	27	26	25	24	22	19	18	15
MCI 12-20	1,85	2,5	4,1		34	36	32	32	29	29	26	24	22
MCI 12-25	2,2	3	4,9		47	45	43	41,5	39	36	32	30,5	27
MCI 12-30	3	4	6,3		52,5	52	49	47,5	45	42	40	35	30,5

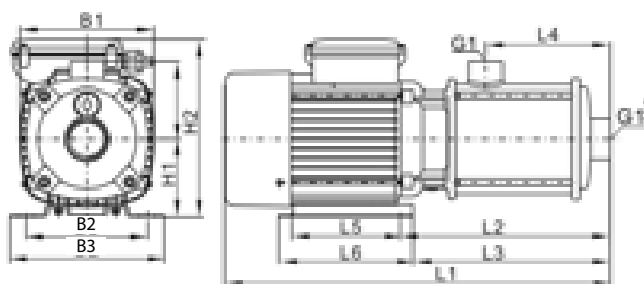
NAME	Power		Amperage	Flow l/min m ³ /h	134	167	200	234	267	300	334	367	400
	kW	Hp	A		H (m)	8	10	12	14	16	18	20	22
MCI 16-10	1	1,35	6,2	H (m)	12	11,5	11	10,5	10	9	8	7	6
MCI 16-20	1,5	2	9,2		24	23	22	21	20	19	16	14	12
MCI 16-30	2,2	3	4,9		38	36	34	33	30	28	26	23	20
MCI 16-40	3	4	6,3		50	48	46	44	40	38	36	32	28

NAME	Power		Amperage	Flow l/min m ³ /h	167	200	234	267	300	334	367	400	434	467
	kW	Hp	A		H (m)	10 <th>12 <th>14 <th>16 <th>18 <th>20 <th>22 <th>24 <th>26 <th>28 </th></th></th></th></th></th></th></th></th>	12 <th>14 <th>16 <th>18 <th>20 <th>22 <th>24 <th>26 <th>28 </th></th></th></th></th></th></th></th>	14 <th>16 <th>18 <th>20 <th>22 <th>24 <th>26 <th>28 </th></th></th></th></th></th></th>	16 <th>18 <th>20 <th>22 <th>24 <th>26 <th>28 </th></th></th></th></th></th>	18 <th>20 <th>22 <th>24 <th>26 <th>28 </th></th></th></th></th>	20 <th>22 <th>24 <th>26 <th>28 </th></th></th></th>	22 <th>24 <th>26 <th>28 </th></th></th>	24 <th>26 <th>28 </th></th>	26 <th>28 </th>
MCI 20-10	1	1,35	2,4	H (m)	13	12,5	12	11,5	11	8	10	9	8,5	7,5
MCI 20-20	1,85	2,5	4,1		25	24	23	22	21	18	18	16	14	12
MCI 20-30	3	4	6,3		39	38	36	35	33	28	30	27	24	21
MCI 20-40	4	5,5	9,6		52	50	48	47	44	42	39	35	31	27

NAME	Power		Amperage	Flow l/min m ³ /h	134	167	200	234	267	300	334	367	400	434	467
	kW	Hp	A		H (m)	8	10	12	14	16	18	20	22	24	26
MCI 30-1	2,2	3	2,4	H (m)	15,5	15	15	14,5	14	13,5	13	12	11,5	11	10
MCI 30-2	4	5,5	3,5		33	32,5	32	31,5	31	30,5	30	28	27	26	24
MCI 30-3	5,5	7,5	4,9		50	50	50	49	48	47	46	45	43	41	38
MCI 30-4	7,5	10	6,3		66	66	66	66	66	65	64	62	58	56	52

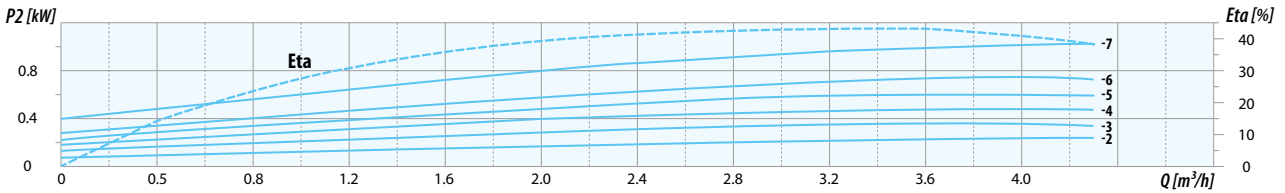
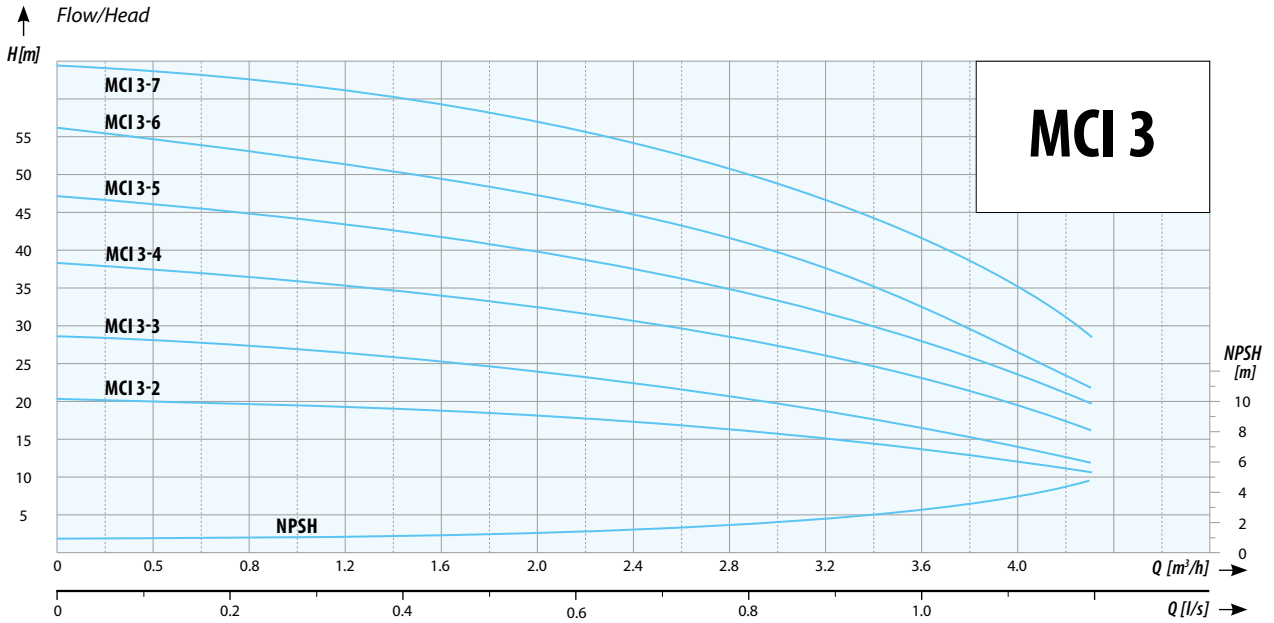


NAME	Dimensions (mm)							
	B2	B3	H1	H2	L1	L2	L3	L4
MCI 1-2	158	125	75	170	318	131	113	72
MCI 1-3	158	125	75	170	318	131	113	72
MCI 1-4	158	125	75	170	336	149	131	90
MCI 1-5	158	125	75	170	354	167	149	108
MCI 1-6	158	125	75	170	390	203	185	144
MCI 1-7	158	125	75	170	390	203	185	144

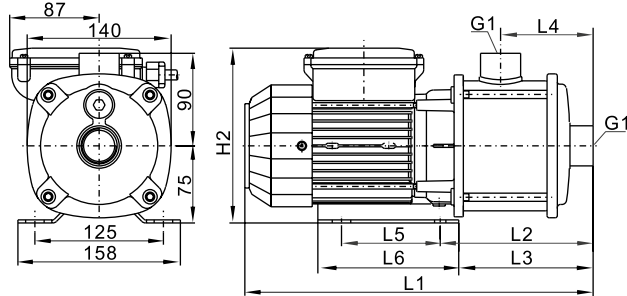


NAME	Power P2 (kW)	Flow m³/h	0.4	0.6	0.8	1.0	1.2	1.4	1.6	1.8	2.0	2.2	2.4
MCI 1-2	0.25	H (m)	19.5	19	18.5	18	17.5	17	16	15	14	13	12
MCI 1-3	0.25		29	28.5	26	25	24.5	23.5	22	21	19	17	16
MCI 1-4	0.37		37	36	35	33	32	30	28	27	26	22	20
MCI 1-5	0.37		43	42	41	38	36	34	32	29	27	25	22
MCI 1-6	0.37		51	50	49	46	44	42	40	36	32	30	26
MCI 1-7	0.55		60	58	56	53	51	49	45	42	38	34	30

NAME	Head (m)	Flow (l/min)	Motor power (W)	Voltage (V)	Amperage (A)	Inlet/outlet (inch)	Weight (kg)
MCI 1-2	20	50	250	230 / 50	1,6	1 x 1	7,6
MCI 1-3	29	50	250	230 / 50	1,6	1 x 1	8
MCI 1-4	38	50	370	230 / 50	2,4	1 x 1	8,3
MCI 1-5	45	50	370	230 / 50	2,4	1 x 1	8,6
MCI 1-6	54	50	370	230 / 50	2,4	1 x 1	9
MCI 1-7	63	50	550	230 / 50	3,8	1 x 1	10

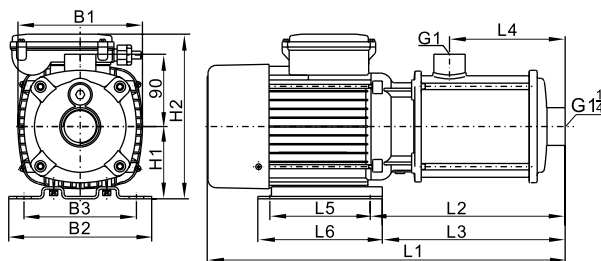
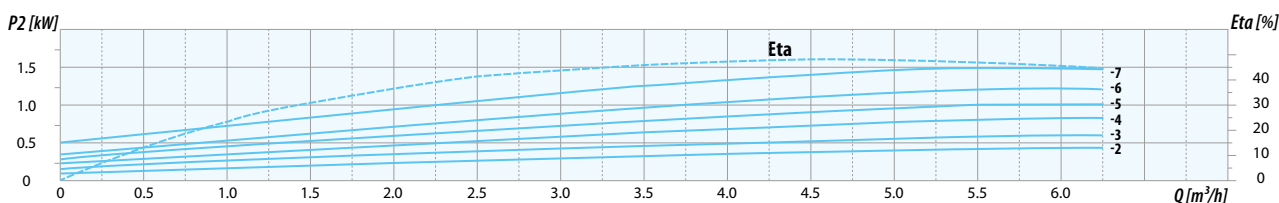
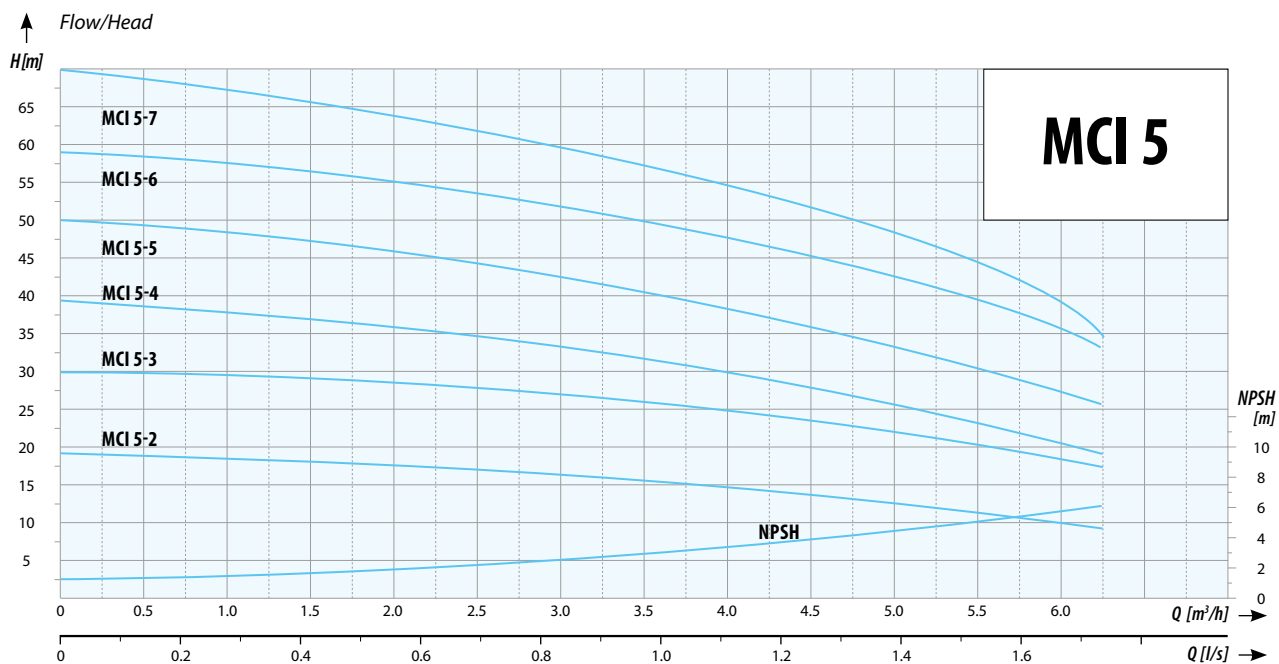


NAME	Dimensions (mm)							
	B2	B3	H1	H2	L1	L2	L4	L5
MCI 3-2	158	125	75	170	318	131	72	96
MCI 3-3	158	125	75	170	318	131	72	96
MCI 3-4	158	125	75	170	336	149	90	96
MCI 3-5	158	125	75	170	383	167	108	96
MCI 3-6	158	125	75	170	416	203	144	96
MCI 3-7	158	125	75	170	416	203	144	96



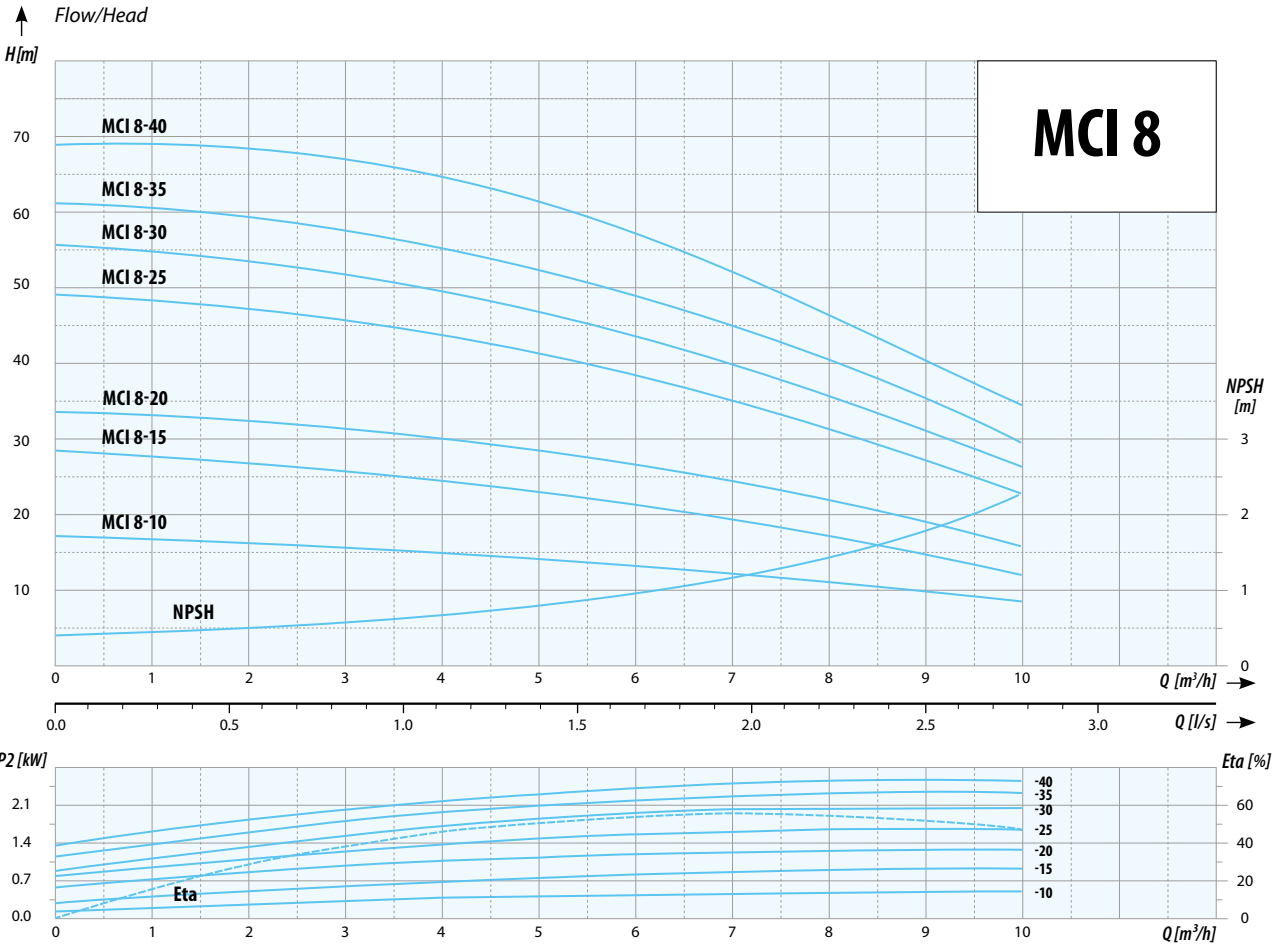
NAME	Power P2 (kW)	Flow m³/h	0.8	1.2	1.6	2.0	2.4	2.8	3.0	3.2	3.6	4.0
MCI 3-2	0.25	H (m)	19.5	19	18.5	18	17	16.5	15	14.5	13.5	12
MCI 3-3	0.37		27	26	25	24	23	22	21	20	17	15
MCI 3-4	0.55		36	35	34	32	31	29	28	27	23	20
MCI 3-5	0.55		44	43	42	40	38	36	34	33	28.5	24
MCI 3-6	0.75		53	51.5	49	47	44	41	38	37	32	27
MCI 3-7	1.0		63	61	59	56	54	51	49	47	41	35

NAME	Head (m)	Flow (l/min)	Motor power (W)	Voltage (V)	Amperage (A)	Inlet/outlet (inch)	Weight (kg)
MCI 3-2	21	85	250	230 / 50	1,6	1 x 1	7,4
MCI 3-3	28,5	85	370	230 / 50	2,4	1 x 1	7,5
MCI 3-4	38	85	550	230 / 50	3,8	1 x 1	10
MCI 3-5	47,5	85	550	230 / 50	3,8	1 x 1	10,5
MCI 3-6	56,5	85	750	230 / 50	5,2	1 x 1	12
MCI 3-7	67	85	1000	230 / 50	6,2	1 x 1	13

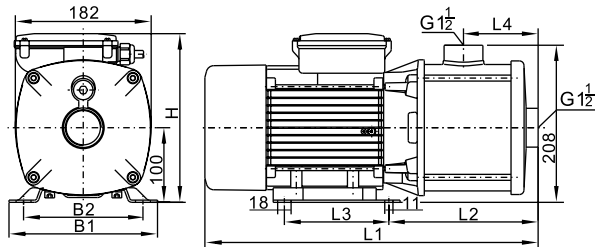


NAME	Power P2 (kW)	Flow m³/h	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
MCI 5-2	0.37	H (m)	18.5	18	17.5	17	16	15.5	15	13.5	13	11	10
MCI 5-3	0.55		29	28.5	28	27	26.5	25.5	25	23	22	20	18
MCI 5-4	0.75		38	37	36	34	33.5	32	30	28	27	24	20
MCI 5-5	1.0		47	46	45	44	42.5	41	40	36	35	32	27
MCI 5-6	1.3		56.5	55	54	53	52.5	51	49	45	44	42	36
MCI 5-7	1.5		67	65	64	61	59	57	55	51	49	44	38

NAME	Head (m)	Flow (l/min)	Motor power (W)	Voltage (V)	Amperage (A)	Inlet/outlet (inch)	Weight (kg)
MCI 5-2	19,5	130	370	230 / 50 Hz	2,4	1¼ x 1	8
MCI 5-3	30	130	550	230 / 50 Hz	3,8	1¼ x 1	10
MCI 5-4	39,5	130	750	230 / 50 Hz	5,2	1¼ x 1	11,5
MCI 5-5	50	130	750	230 / 50 Hz	5,2	1¼ x 1	12,5
MCI 5-6	58,5	130	1300	230 / 50 Hz	8,8	1¼ x 1	15
MCI 5-7	70	130	1500	230 / 50 Hz	9,2	1¼ x 1	17

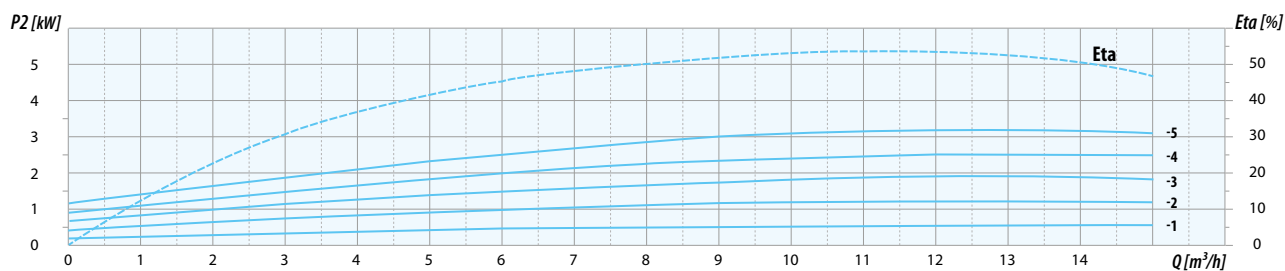
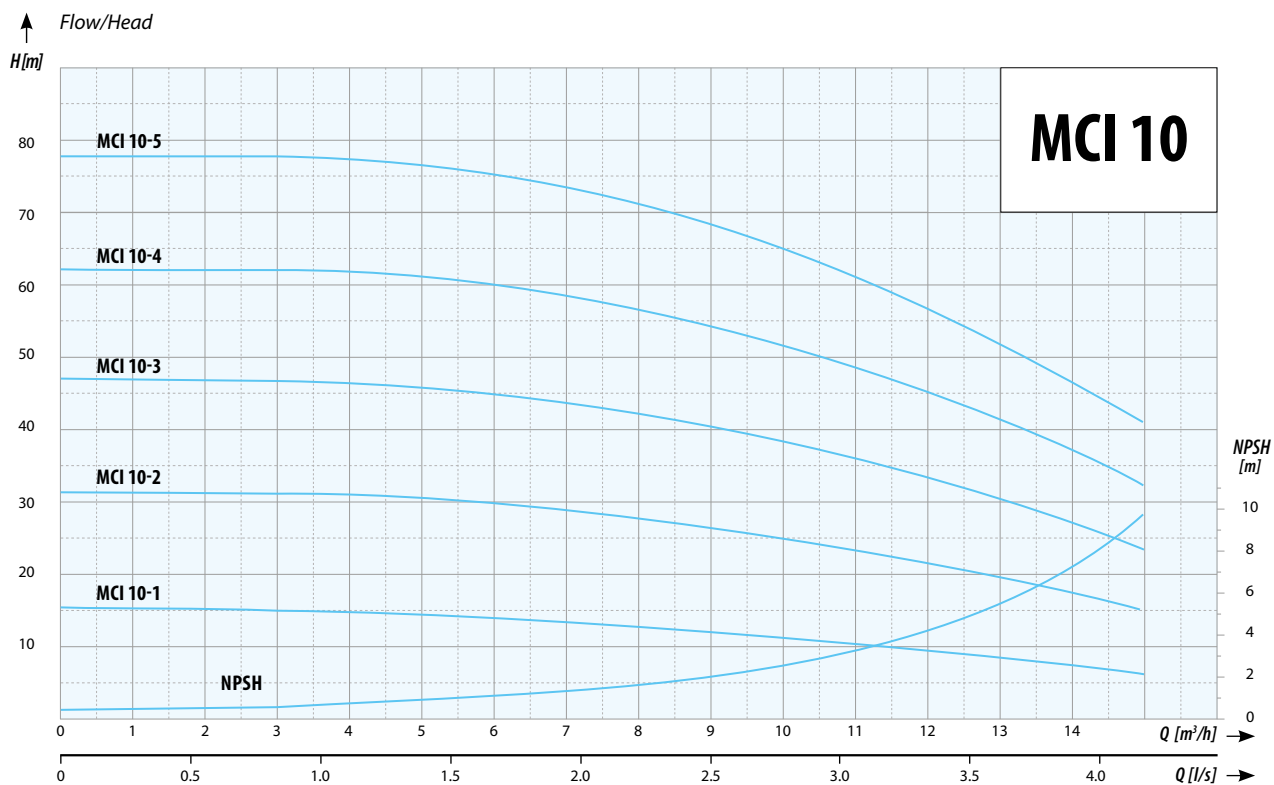


NAME	Dimensions (mm)							
	B2	B3	H1	H2	L1	L2	L4	L5
MCI 8-10	158	125	100	206	377	185	100	96
MCI 8-15	158	125	100	206	377	185	100	96
MCI 8-20	158	125	100	206	377	185	100	96
MCI 8-25	158	125	100	232	408	200	100	96
MCI 8-30	199	160	100	244	449	200	100	140
MCI 8-35	199	160	100	244	479	230	130	140
MCI 8-40	199	160	100	244	479	230	130	140

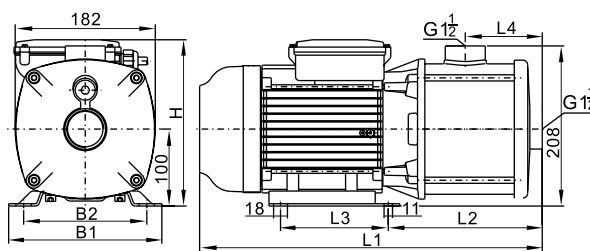


NAME	Power P2 (kW)	Flow m³/h	4.0	5.0	6.0	7.0	8.0	9.0	10
MCI 8-10	0.55	H (m)	15	14	13	12.5	10	9	8
MCI 8-15	0.75		25	23	22	21	17	14	12
MCI 8-20	1.0		32	29	27	25	20	21	17
MCI 8-25	1.5		43	40	38	34	30	25	20
MCI 8-30	1.85		50	46	44	40	32	30	26
MCI 8-35	2.2		56	51	48	44	42	35	28
MCI 8-40	2.2		65	57.5	57	50	43	42	34

NAME	Head (m)	Flow (l/min)	Motor power (W)	Voltage (V)	Amperage (A)	Inlet/outlet [inch]	Weight (kg)
MCI 8-10	4	200	550	230 / 50 Hz	3,8	1 ½ x 1 ½	10
MCI 8-15	17,5	200	750	230 / 50 Hz	5,2	1 ½ x 1 ½	11
MCI 8-20	29	200	1000	230 / 50 Hz	6,2	1 ½ x 1 ½	13
MCI 8-25	34,5	200	1500	230 / 50 Hz	9,2	1 ½ x 1 ½	16
MCI 8-30	54	200	1850	230 / 50 Hz	12,2	1 ½ x 1 ½	21
MCI 8-35	62	200	2200	230 / 50 Hz	14	1 ½ x 1 ½	22
MCI 8-40	70	200	2200	230 / 50 Hz	14	1 ½ x 1 ½	23

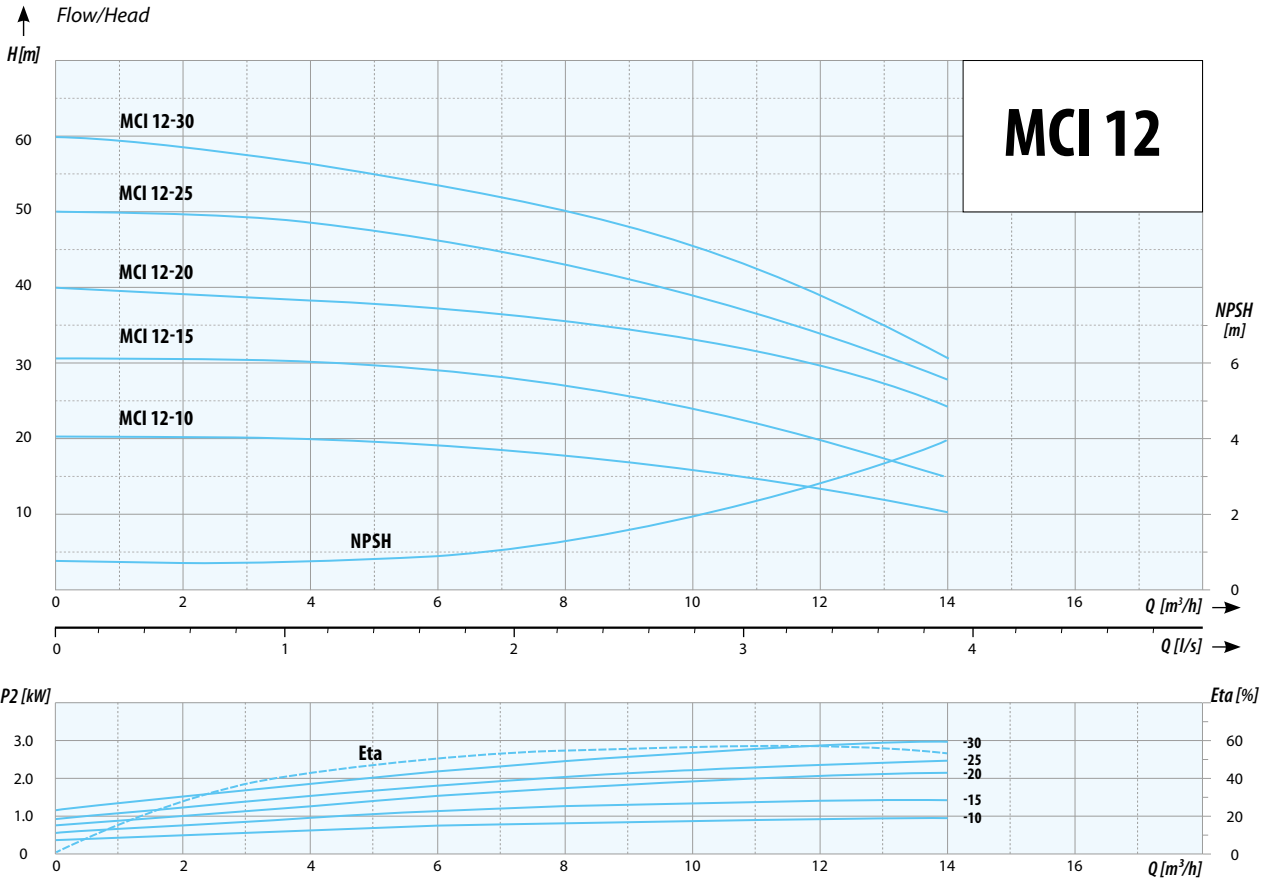


NAME	Dimensions (mm)							
	B2	B3	H1	H2	L1	L2	L4	L5
MCI 10-1	158	125	100	206	383	185	100	96
MCI 10-2	158	125	100	214	412	200	100	96
MCI 10-3	199	160	100	244	448	200	100	140
MCI 10-4	199	160	100	212	498	230	130	140
MCI 10-5	199	160	100	212	558	290	190	140

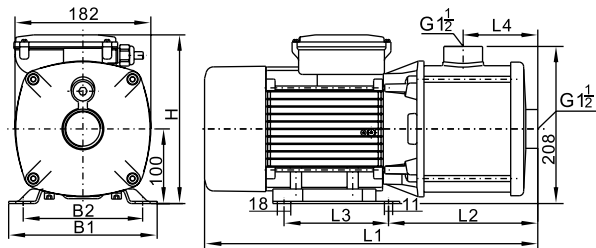


NAME	Power P2 (kW)	Flow m³/h	Head H (m)											
			4	5	6	7	8	9	10	11	12	13	14	
MCI 10-1	0.75	H (m)	14.5	14	13.5	13	12.5	12	11	10	9	8	7	
MCI 10-2	1.25		30	29.5	29	28	27	26	24	23	21	19	16	
MCI 10-3	2.2		45.5	45	44	43	42	40	38	36	33	30	26	
MCI 10-4	3.0		61	60.5	60	58	56	54	52	48	45	41	36	
MCI 10-5	3.0		76.5	76	75	74	71	68	63	61	57	52	46	

NAME	Head (m)	Flow (l/min)	Motor power (W)	Voltage (V)	Amperage (A)	Inlet/outlet (inch)	Weight (kg)
MCI 10-1	15,5	300	650	230 / 50 Hz	4,4	1 ½ x 1 ½	10
MCI 10-2	31,5	300	1200	230 / 50 Hz	8,1	1 ½ x 1 ½	12
MCI 10-3	46,5	300	2200	230 / 50 Hz	14	1 ½ x 1 ½	22
MCI 10-4	62,5	300	3000	400 / 50 Hz	6,3	1 ½ x 1 ½	25
MCI 10-5	78	300	3000	400 / 50 Hz	6,3	1 ½ x 1 ½	26

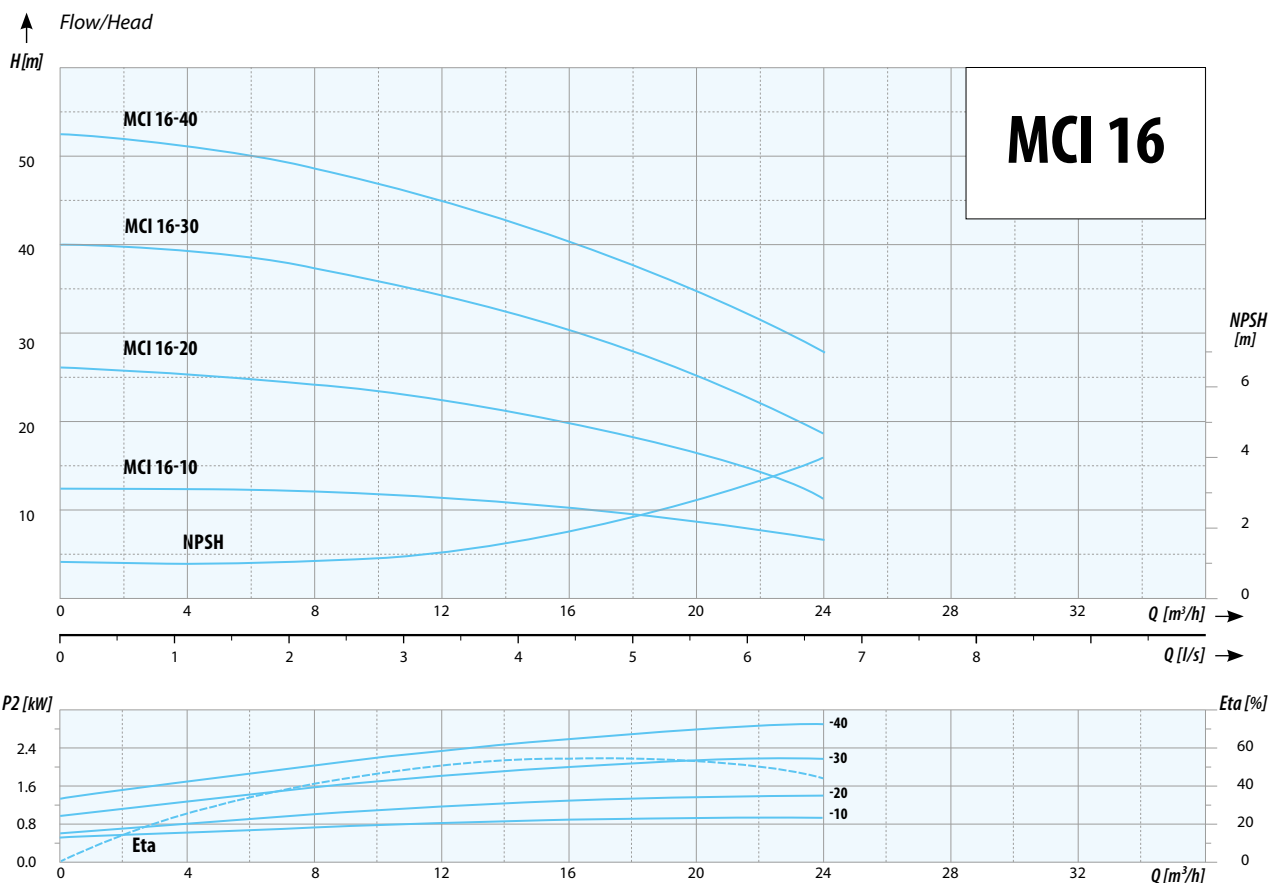


NAME	Dimensions (mm)							
	B2	B3	H1	H2	L1	L2	L4	L5
MCI 12-10	158	125	100	206	377	185	100	96
MCI 12-15	158	125	100	232	408	200	100	96
MCI 12-20	158	160	100	244	449	200	100	140
MCI 12-25	158	125	100	212	409	200	100	96
MCI 12-30	199	160	100	212	469	200	100	140

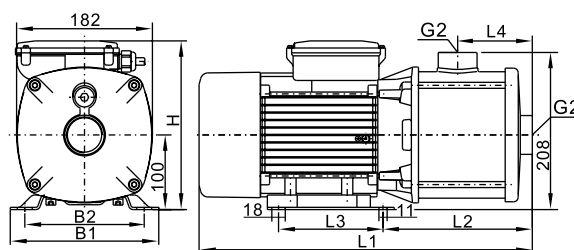


NAME	Power P2 (kW)	Flow m³/h	6.0	7.0	8.0	9.0	10	11	12	13	14
MCI 12-10	1.0	H (m)	19	18	17.5	16	15.5	14	13.5	12	10.5
MCI 12-15	1.5		28	27	26	25	24	22	19	18	15
MCI 12-20	1.85		34	36	32	32	29	29	26	24	22
MCI 12-25	2.2		47	45	43	41.5	39	36	32	30.5	27
MCI 12-30	3.0		52.5	52	49	47.5	45	42	40	35	35.5

NAME	Head (m)	Flow (l/min)	Motor power (W)	Voltage (V)	Amperage (A)	Inlet/outlet [inch]	Weight (kg)
MCI 12-10	20	285	1000	230 / 50 Hz	6,2	1 ½ x 1 ½	11
MCI 12-15	31	285	1500	230 / 50 Hz	9,2	1 ½ x 1 ½	13
MCI 12-20	40	285	1850	400 / 50 Hz	4,1	1 ½ x 1 ½	20
MCI 12-25	50	285	2200	400 / 50 Hz	4,9	1 ½ x 1 ½	23
MCI 12-30	60	285	3000	400 / 50 Hz	6,3	1 ½ x 1 ½	26

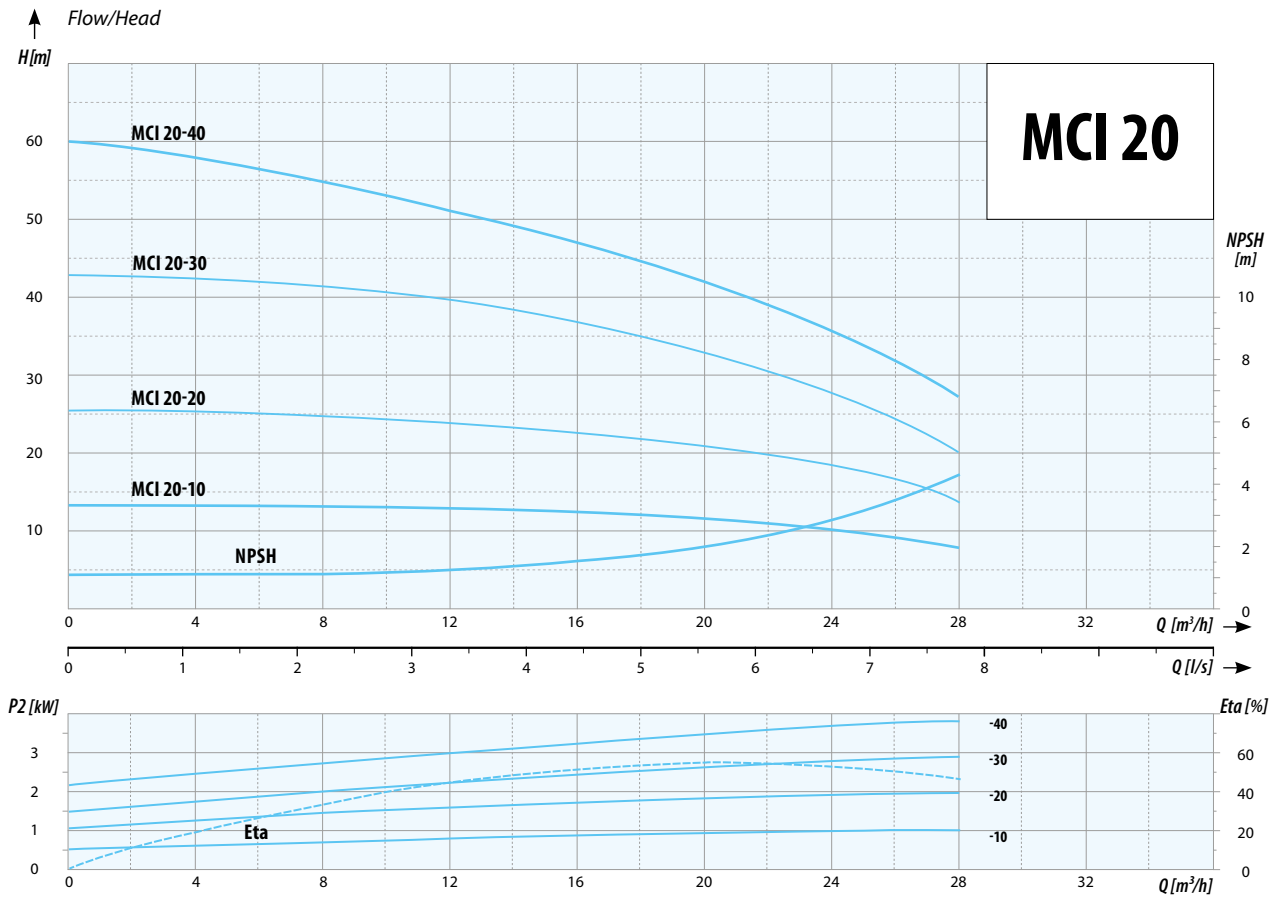


NAME	Dimensions (mm)							
	B2	B3	H1	H2	L1	L2	L4	L5
MCI 16-10	158	125	100	212	408	215	130	96
MCI 16-20	158	125	100	217	439	230	130	96
MCI 16-30	199	160	100	212	580	230	130	140
MCI 16-40	199	160	100	212	545	275	175	140

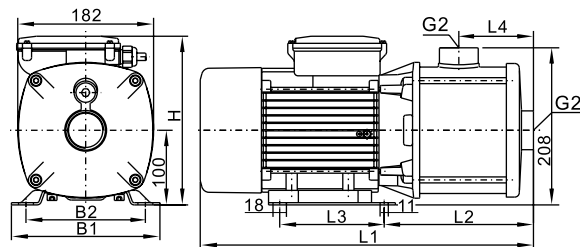


NAME	Power P2 (kW)	Flow m³/h	4	5	6	7	8	9	10	11	12	13	14
MCI 16-10	1	H (m)	14.5	14	13.5	13	12.5	12	11	10	9	8	7
MCI 16-20	1.5		30	29.5	29	28	27	26	24	23	21	19	16
MCI 16-30	2.2		45.5	45	44	43	42	40	38	36	33	30	26
MCI 16-40	3.0		61	60.5	60	58	56	54	52	48	45	41	36

NAME	Head (m)	Flow (l/min)	Motor power (W)	Voltage (V)	Amperage (A)	Inlet/outlet [inch]	Weight (kg)
MCI 16-10	12,5	450	1000	400 / 50 Hz	2,4	2 x 2	13
MCI 16-20	27	450	1500	230 / 50 Hz	3,5	2 x 2	16
MCI 16-30	40	450	2200	400 / 50 Hz	4,9	2 x 2	22
MCI 16-40	53	450	3000	400 / 50 Hz	6,3	2 x 2	27

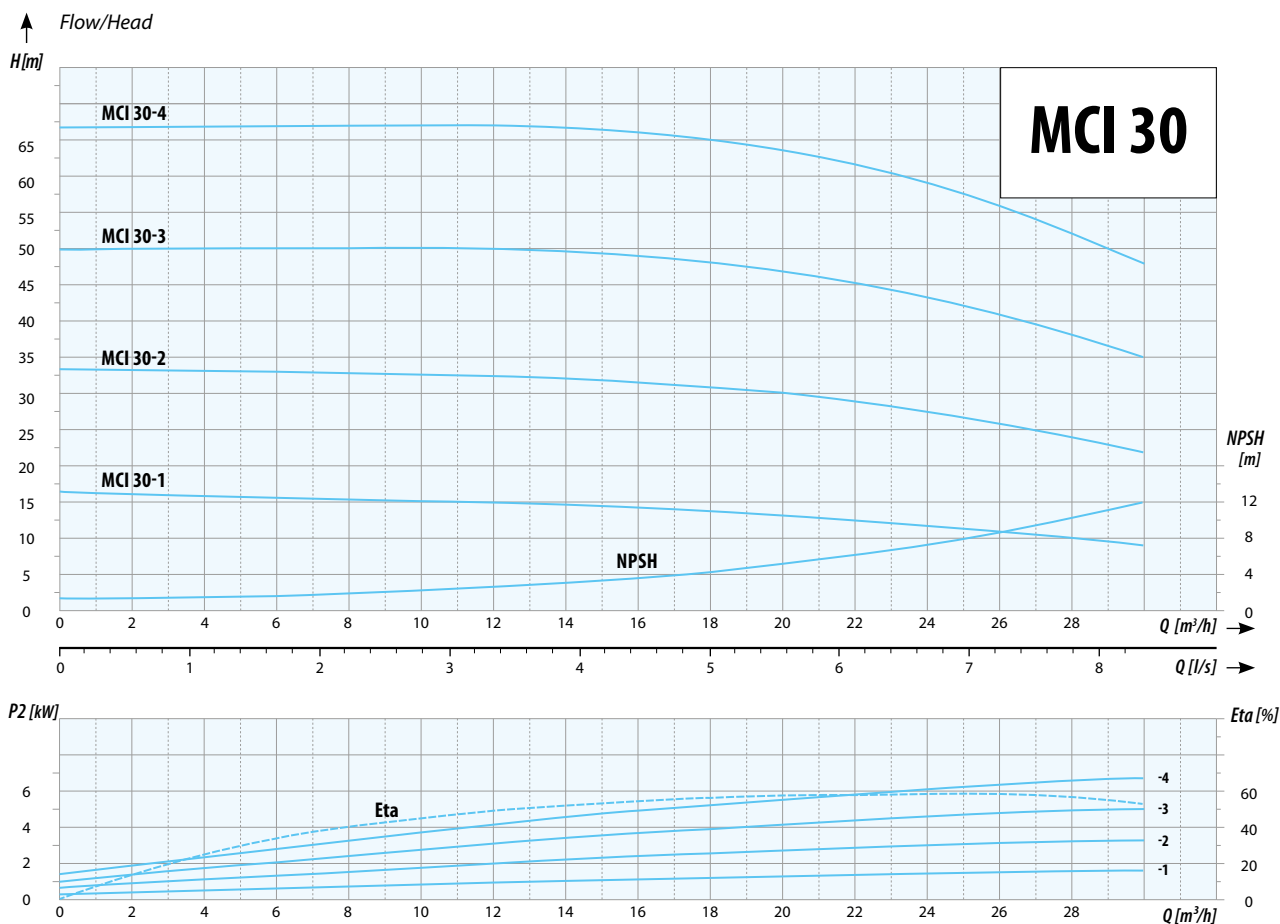


NAME	Dimensions (mm)							
	B2	B3	H1	H2	L1	L2	L4	L5
MCI 20-10	158	125	100	212	408	215	130	96
MCI 20-20	158	125	100	217	439	230	130	96
MCI 20-30	199	160	100	212	500	230	130	140
MCI 20-40	199	160	100	252	561	297	175	140

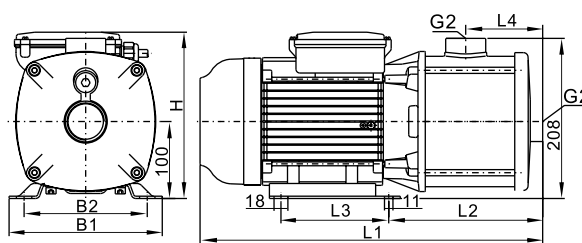


NAME	Power P2 (kW)	Flow m³/h	10	12	14	16	18	20	22	24	26	28
MCI 20-10	1.0	H (m)	13	12.5	12	11.5	11	8	10	9	8.5	7.5
MCI 20-20	1.85		25	24	23	22	21	18	18	16	14	12
MCI 20-30	3.0		39	38	36	35	33	28	30	27	24	21
MCI 20-40	4.0		52	50	48	47	44	42	39	35	31	27

NAME	Head (m)	Flow (l/min)	Motor power (W)	Voltage (V)	Amperage (A)	Inlet/outlet [inch]	Weight (kg)
MCI 20-10	14	500	1000	400 / 50 Hz	2,4	2 x 2	19
MCI 20-20	26	500	1850	400 / 50 Hz	4,1	2 x 2	21
MCI 20-30	43	500	3000	400 / 50 Hz	6,3	2 x 2	24
MCI 20-40	60	500	4000	400 / 50 Hz	9,6	2 x 2	28



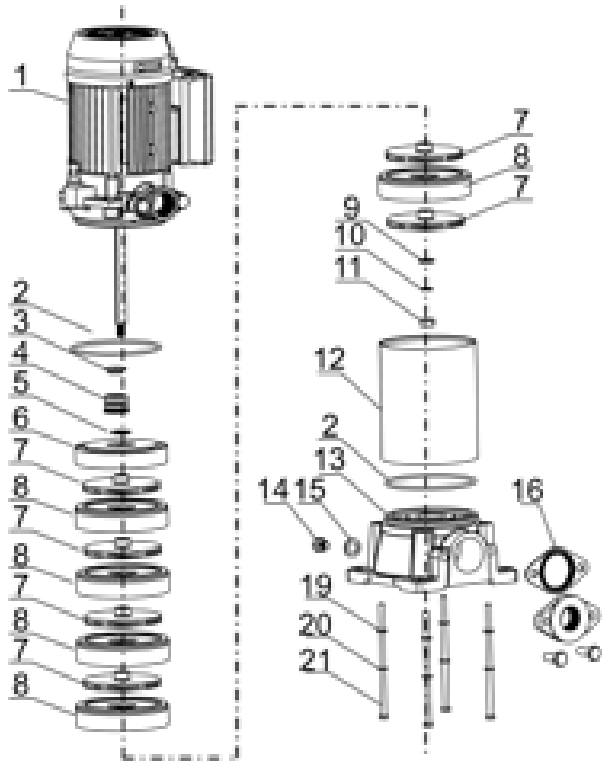
NAME	Dimensions (mm)							
	B2	B3	H1	H2	L1	L2	L4	L5
MCI 30-1	199	160	100	217	448	200	100	140
MCI 30-2	199	160	100	260	510	235	100	140
MCI 30-3	228	190	100	295	560	235	100	140
MCI 30-4	228	190	100	295	620	288	130	140



NAME	Power P2 (kW)	Flow m³/h	8	10	12	14	16	18	20	22	24	26	28
MCI 30-1	2.2	H (m)	15.5	15	15	14.5	14	13.5	13	12	11.5	11	10
MCI 30-2	4.0		33	32.5	32	31.5	31	30.5	30	28	27	26	24
MCI 30-3	5.5		50	50	50	49	48	47	46	45	43	41	38
MCI 30-4	7.5		65	65	66	66	66	65	64	62	58	56	52

NAME	Head (m)	Flow (l/min)	Motor power (W)	Voltage (V)	Amperage (A)	Inlet/outlet [inch]	Weight (kg)
MCI 30-1	16,5	600	2200	400 / 50 Hz	4,9	2 x 2	21
MCI 30-2	33	600	4000	400 / 50 Hz	9,6	2 x 2	29
MCI 30-3	50	600	5500	400 / 50 Hz	11,1	2 x 2	35
MCI 30-4	67	600	7500	400 / 50 Hz	14,9	2 x 2	38

VMH



The pumps are designed to work in pressure boosting systems in civil engineering, industrial applications and agriculture. They are designed for pumping clean water or other non-corrosive, non-flammable and non-explosive liquids of consistency similar to water. Due to compact design, the pump to be installed in various machines that require high pressure water supply. High temperature resistant and reinforced hydraulic components, mechanical seal and thrust bearing allow to pump liquids with temperatures of up to 70°C, as well as to operate in high pressure systems.

APPLICATION:

Industrial applications:

- Air conditioning systems
- Cooling systems
- Heating systems
- Industrial washing facilities
- Fire extinguishing system
- Water treatment (purification)
- Increasing pressure in building utility systems
- Fish-keeping

Households:

- Supply of water
- Irrigation (including cooperation with sprinklers)

Agriculture:

- Irrigation
- Maintaining pressure in livestock buildings

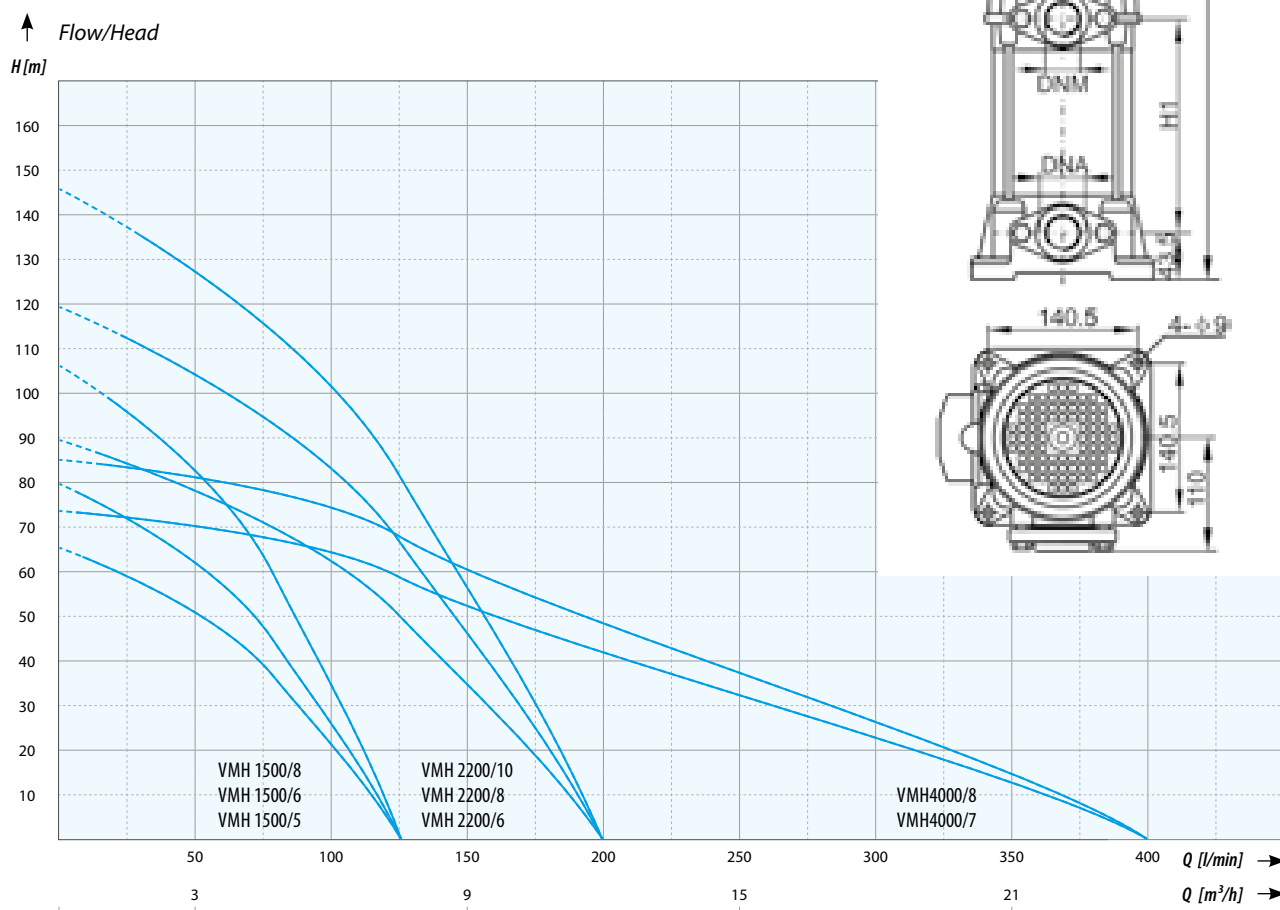
SPECIFICATIONS:

- Liquid temperature: 0-70°C
- Ambient temperature: up to 50°C
- Maximum pressure in the system: up to 1.5 MPa
- Ingress protection: IP55
- Winding insulation class: 155 (F)

MATERIALS:

- Motor: asynchronous enclosed squirrel-cage with aluminium housing and external cooling. Motors of 3-phase pumps can operate in star (3x400V) or delta (3x230V) connection. Single-phase motors are equipped with a thermal protection mounted in the motor winding.
- Shaft: Stainless steel AISI 304
- Housing: Stainless steel AISI 304
- Impeller: Noryl with increased fibre content in the polymer / Stainless steel AISI 304
- Inlet/outlet: Grey cast iron
- Mechanical seal: graphite/silicon carbide/NBR

VMH



NAME	Head (m)	Flow (l/min)	Motor power (W)	Voltage (V)	Amperage (A)	Inlet/outlet [inch]	Dimensions (mm)			Weight (kg)
							L1	H	H1	
VMH 1500/5	66	125	1500	230	9,2	1 x 1	140	490	201	20
VMH 1500/6	80	125	1500	230	9,2	1 x 1	140	514	225	23
VMH 1500/8	106	125	2200	230	14	1 x 1	140	562	273	26
VMH2200/6	90	200	2200	230	14	1½ x 1¼	116	555	239	20
VMH2200/8	120	200	3000	400	10,5/6	1½ x 1¼	142	668	288	30
VMH2200/10	148	200	4000	400	15,9/9,2	1½ x 1¼	142	718	337	32
VMH4000/7	74	400	4000	400	13,6/7,8	1½ x 1¼	148	720	350	32
VMH4000/8	85	400	4700	400	15,9/9,2	1½ x 1¼	148	760	410	33

CV, CVI INOX

VERTICAL, MULTI-STAGE, CENTRIFUGAL STAINLESS STEEL PUMPS WITH IN LINE CONNECTIONS

CV

The CV and CVI INOX series, characterised by high efficiency, low noise level and reliable sealing, have been designed for a wide range of applications. For pumping of clean, chemically non-aggressive liquids. CVI INOX pumps, in the part which is in contact with water, are made entirely of stainless steel. Both pump versions are available with IE-3 energy efficient motors.

APPLICATION:

1. Potable and utility water supply systems, including:
 - waterworks
 - hydrophore plants
 - hydrophore plants and systems
 - pressure boosting in building installations
 - water treatment plants
2. Industry, including:
 - industrial treatment systems: washing/rinsing systems,
 - high pressure circulation systems,
 - boiler room supply
 - AC systems
 - cooling systems
 - fire systems
 - machine lubrication systems
 - water supply in high-rise buildings
 - oil, glycol and coolant transfer
 - golf courses
3. Agriculture, including:
 - watering systems
 - rainwater units
 - irrigation systems
 - fish farms
 - pressure maintenance in livestock buildings
4. Services, including:
 - laundries
 - car wash

TECHNICAL DATA:

- Flow range: 0,7-120 m³/h
- Maximum pressure: 32 bar
- Temperature of liquids: -20°C / +104°C
- Ambient temperature: +40°C
- pH value range: pH 3~9

MATERIALS:

- Three-phase, two-pole, asynchronous motor with a squirrel-cage rotor
- Insulation class: F
- Protection rating: IP55
- Impellers: stainless steel AISI304 (EN/DIN 1.4301)
- Diffusers: stainless steel AISI304 (EN/DIN 1.4301)
- Pump shaft: stainless steel - for CV pumps AISI420, for CVI INOX pumps AISI431 (EN/DIN 1.4057)
- Pump housing - stainless steel AISI304 (EN/DIN 1.4301)
- Suction/discharge body of the pump - for CV pumps: cast iron ASTM25B (EN/DIN EN-JL1030), for CVF pumps: cast AISI304 (EN/DIN 1.4301), for CVL pumps, pressed sheet AISI304 (EN/DIN 1.4301)
- Package mechanical gland for basic versions from + 10°C to + 90°C: silicon carbide/tungsten carbide/EPDM

FREQUENCY OF STARTUPS AND STOPS:

- Motor with a power of up to 4kW incl.: Maximum 100 times per hour.
- 5.5kW engines and higher: Maximum 20 times per hour



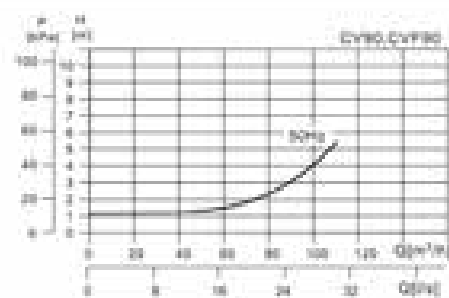
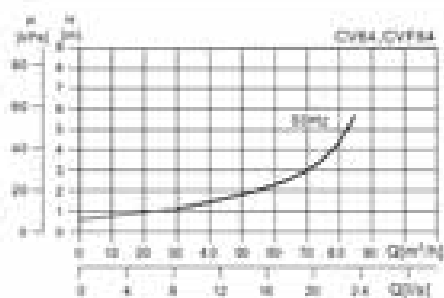
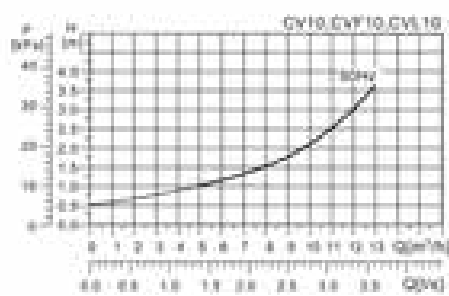
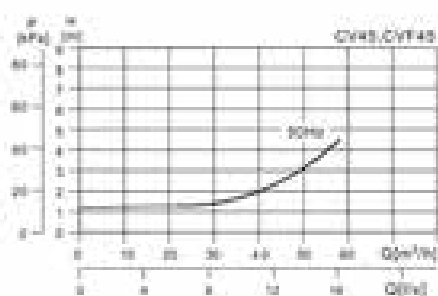
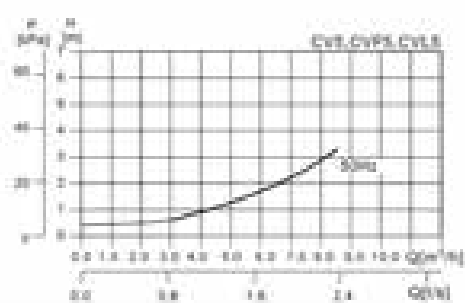
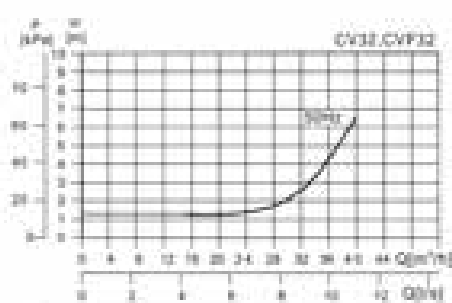
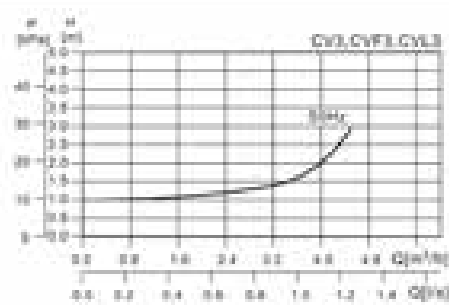
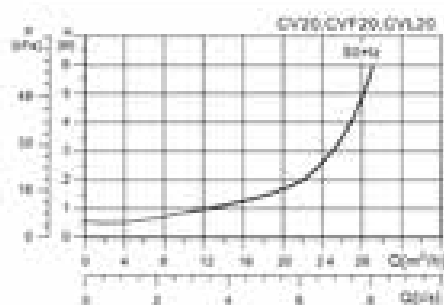
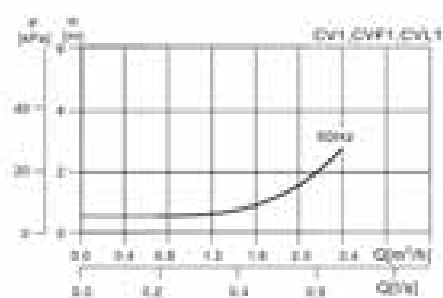
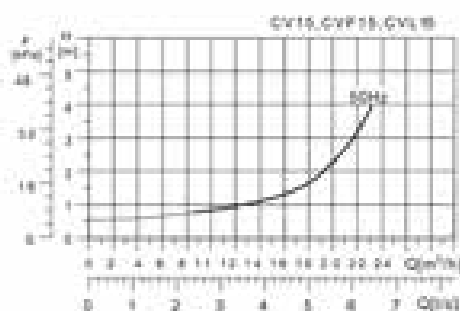
Silnik (kW)	50 Hz/ LpA (dB(A))
0,37	53
0,55	53
0,75	53
1,1	55
1,5	58
2,2	58
3,0	59
4,0	66
5,5	73
7,5	73
11	75
15	70
18,5	70
22	69
30	73
37	73
45	73

APPLICATION	CVI	CV
Water supply		
Filtration and transfer at waterworks	•	•
Distribution from waterworks	•	•
Pressure boosting in mains	•	•
Pressure boosting in high-rise buildings, hotels, etc	•	•
Pressure boosting for industrial water supply	•	•
Industry		
Pressure boosting	•	•
Process water systems	•	•
Washing and cleaning systems	•	•
Vehicle washing tunnels	•	•
Fire fighting systems	•	•
Liquid transfer		
Cooling and air-conditioning systems (refrigerants)	•	•
Boilerfeed and condensate systems	•	•
Machine tools (cooling lubricants)	•	•
Aquafarming	•	•
Transfer		
Oil and alcohol	•	•
Glycol and coolants	•	•
Water treatment		
Ultra-filtration systems	•	
Reverse osmosis systems	•	
Softening, ionising, demineralizing systems	•	
Distillation systems	•	
Separators	•	
Irrigation		
Field irrigation (flooding)	•	•
Sprinkler irrigation	•	•
Drip-feed irrigation	•	•

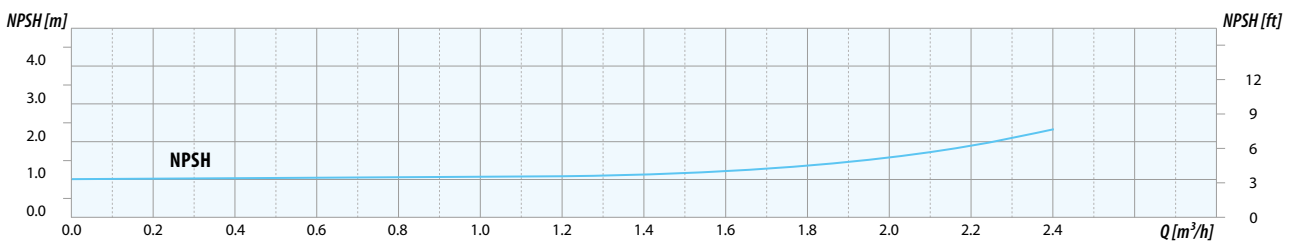
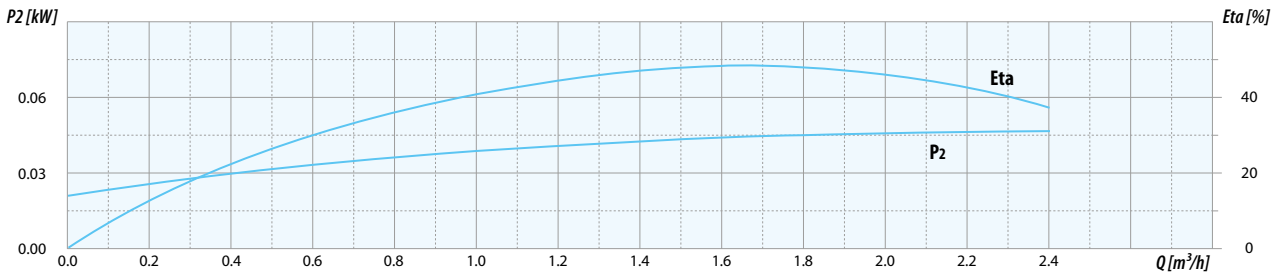
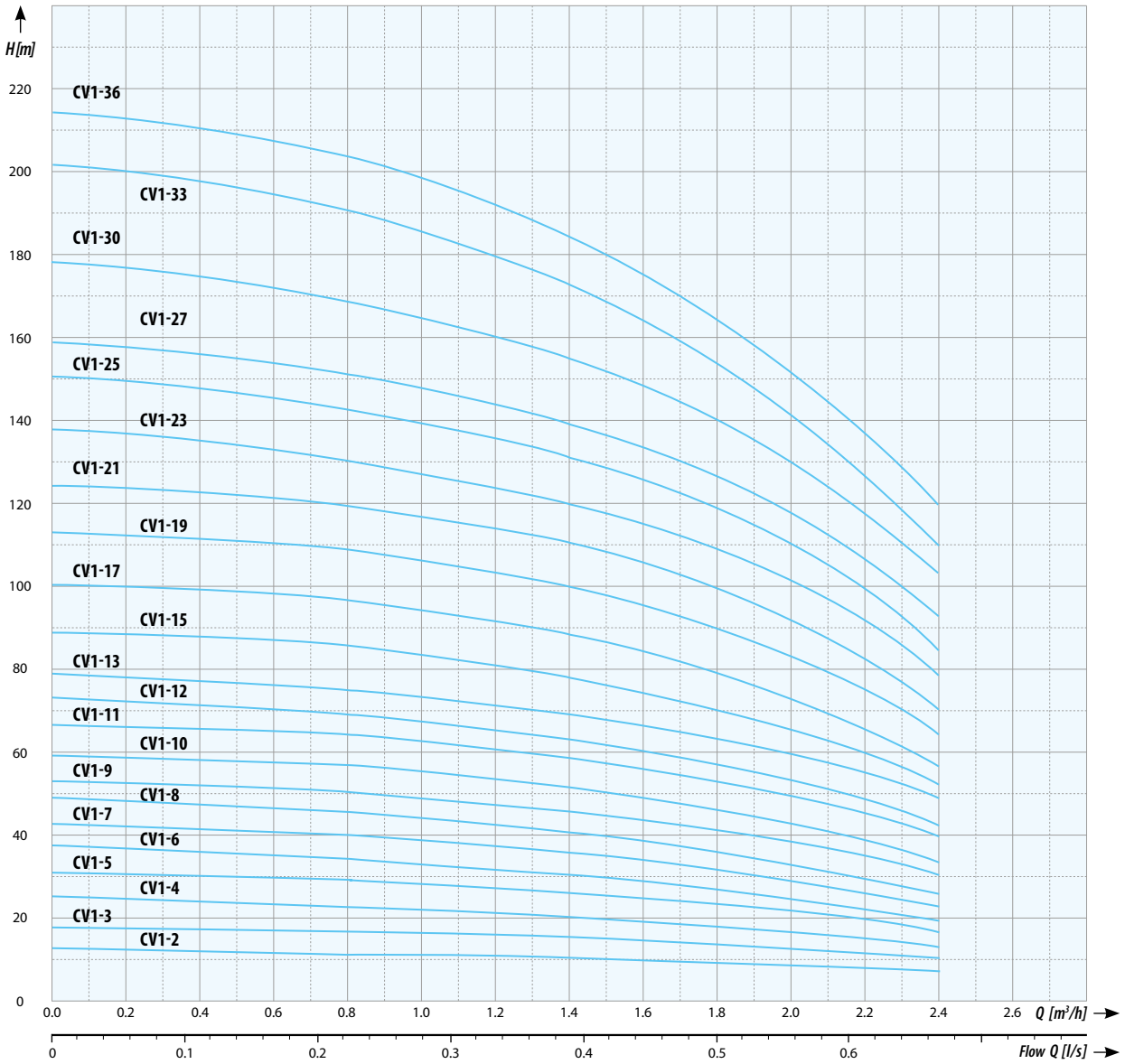
Range	CV / CVI1	CV / CVI2	CV / CVI3	CV / CVI4	CV / CVI5	CV / CVI10	CV / CVI15	CV / CVI20	CV / CVI32	CV / CVI45	CV / CVI64	CV / CVI90
Flow [m ³ /h]	1	2	3	4	5	10	15	20	32	45	64	90
Temperature [C°]	(-20) – (+104)											
Maks. efficiency [%]	44	45	56	58	65	66	68	69	77	78	80	81
Flow range [m ³ /h]	0.7-2.4	1.0-3.2	1.2-4.5	2.0-4.8	2.5-8.0	5.0-13.0	9.0-24.0	10.0-29.0	14.0-40.0	20.0-56.0	30.0-85.0	40.0-120.0
Max pressure [bar]	22	25	24	25	24	22	23	25	28	26	20	20
High Pressure on request [bar]	47	47	47	47	47	47	47	47	39	40	39	39
Motor power [kW]	0.37-2.2	0.37-3.0	0.37-3.0	0.37-4.0	0.37-5.5	0.37-7.5	1.1-15.0	1.1-18.5	1.5-30.0	3.0-45.0	4.0-45.0	5.5-45.0
Material of flange	Material of flange											
CV	Cast iron / ASTM25B											
CVI	Stainless steel / AISI 304											
Flange Connection	DN25	DN25	DN25	DN25	DN25	DN40	DN50	DN50	DN65	DN80	DN100	DN100
	DN32	DN32	DN32	DN32	DN32							

MAXIMUM SYSTEM PRESSURE		MAXIMUM INLET PRESSURE	
CV, CVF, CVL 1 / 2 / 3 / 4 / 5	25 bar	CV, CVF, CVL 1 CV, CVF, CVL 1 - 2 > CV, CVF, CVL 1 - 36	10 bar
		CV, CVF, CVL 2 CV, CVF, CVL 2 - 2 > CV, CVF, CVL 2 - 26	10 bar
		CV, CVF, CVL 3 CV, CVF, CVL 3 - 2 > CV, CVF, CVL 3 - 29 CV, CVF, CVL 3 - 31 > CV, CVF, CVL 3 - 36	10 bar 15 bar
		CV, CVF, CVL 4 CV, CVF, CVL 4 - 2 > CV, CVF, CVL 4 - 22	15 bar
		CV, CVF, CVL 5 CV, CVF, CVL 5 - 2 > CV, CVF, CVL 5 - 16 CV, CVF, CVL 5 - 18 > CV, CVF, CVL 5 - 36	10 bar 15 bar
CV, CVF, CVL 10 - 1 > CV, CVF, CVL 10 - 12 CV, CVF, CVL 10 - 14 > CV, CVF, CVL 10 - 22	16 bar 25 bar	CV, CVF, CVL 10 CV, CVF, CVL 10 - 1 > CV, CVF, CVL 10 - 6 CV, CVF, CVL 10 - 7 > CV, CVF, CVL 10 - 22	8 bar 10 bar
CV, CVF, CVL 15 - 1 > CV, CVF, CVL 15 - 10 CV, CVF, CVL 15 - 12 > CV, CVF, CVL 15 - 17	16 bar 25 bar	CV, CVF, CVL 15 CV, CVF, CVL 15 - 1 > CV, CVF, CVL 15 - 3 CV, CVF, CVL 15 - 4 > CV, CVF, CVL 15 - 17	8 bar 10 bar
CV, CVF, CVL 20 - 1 > CV, CVF, CVL 20 - 10 CV, CVF, CVL 20 - 12 > CV, CVF, CVL 20 - 17	16 bar 25 bar	CV, CVF, CVL 20 CV, CVF, CVL 20 - 1 > CV, CVF, CVL 20 - 3 CV, CVF, CVL 20 - 4 > CV, CVF, CVL 20 - 17	8 bar 10 bar
CV, CVF 32 - 1 - 1 > CV, CVF 32 - 7 CV, CVF 32 - 8 - 2 > CV, CVF 32 - 12 CV, CVF 32 - 13 - 2 > CV, CVF 32 - 14	16 bar 25 bar 30 bar	CV, CVF, CVL 32 CV, CVF 32 - 1 - 1 > CV, CVF 32 - 4 CV, CVF 32 - 5 - 2 > CV, CVF 32 - 10 CV, CVF 32 - 11 - 2 > CV, CVF 32 - 14	4 bar 10 bar 15 bar
CV, CVF 45 - 1 - 1 > CV, CVF 45 - 5 CV, CVF 45 - 6 - 2 > CV, CVF 45 - 9 CV, CVF 45 - 10 - 2 > CV, CVF 32 - 13 - 2	16 bar 25 bar 33 bar	CV, CVF, CVL 45 CV, CVF 45 - 1 - 1 > CV, CVF 45 - 2 CV, CVF 45 - 3 - 2 > CV, CVF 45 - 5 CV, CVF 45 - 6 - 2 > CV, CVF 45 - 13 - 2	4 bar 10 bar 15 bar
CV, CVF 64 - 1 - 1 > CV, CVF 64 - 5 CV, CVF 64 - 6 - 2 > CV, CVF 64 - 8 - 1	16 bar 25 bar	CV, CVF, CVL 64 CV, CVF 64 - 1 - 1 > CV, CVF 64 - 2 - 2 CV, CVF 64 - 2 - 1 > CV, CVF 64 - 4 - 2 CV, CVF 64 - 4 - 1 > CV, CVF 64 - 8 - 1	4 bar 10 bar 15 bar
CV, CVF 90 - 1 - 1 > CV, CVF 90 - 4 CV, CVF 90 - 5 - 2 > CV, CVF 90 - 6	16 bar 25 bar	CV, CVF, CVL 90 CV, CVF 90 - 1 - 1 > CV, CVF 90 - 1 CV, CVF 90 - 2 - 2 > CV, CVF 90 - 2 - 3 CV, CVF 90 - 3 > CV, CVF 90 - 6	4 bar 10 bar 15 bar

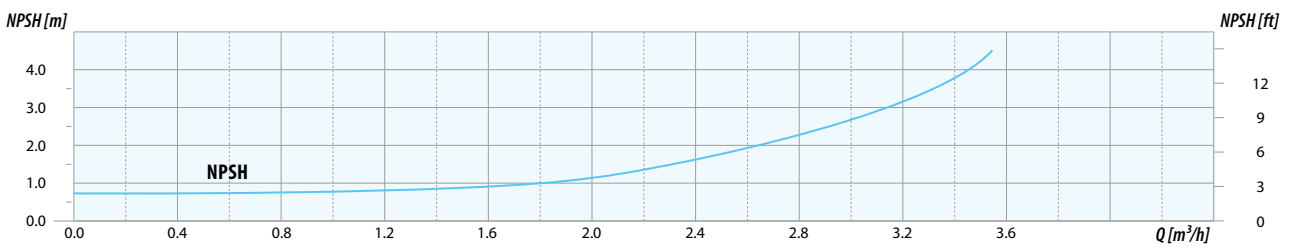
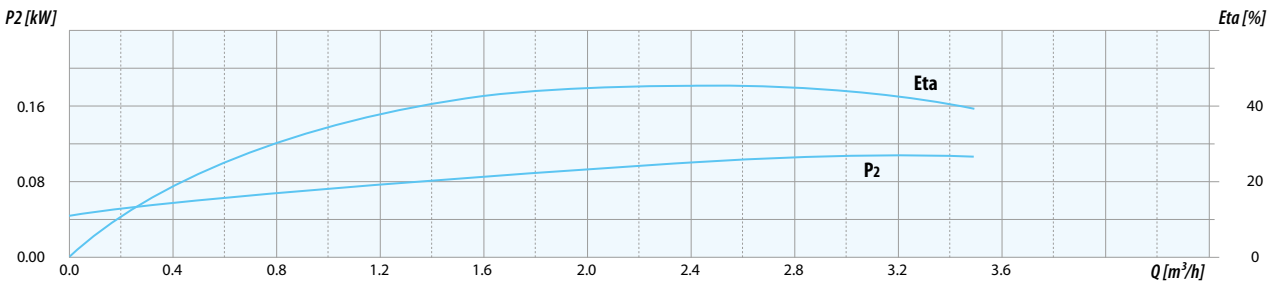
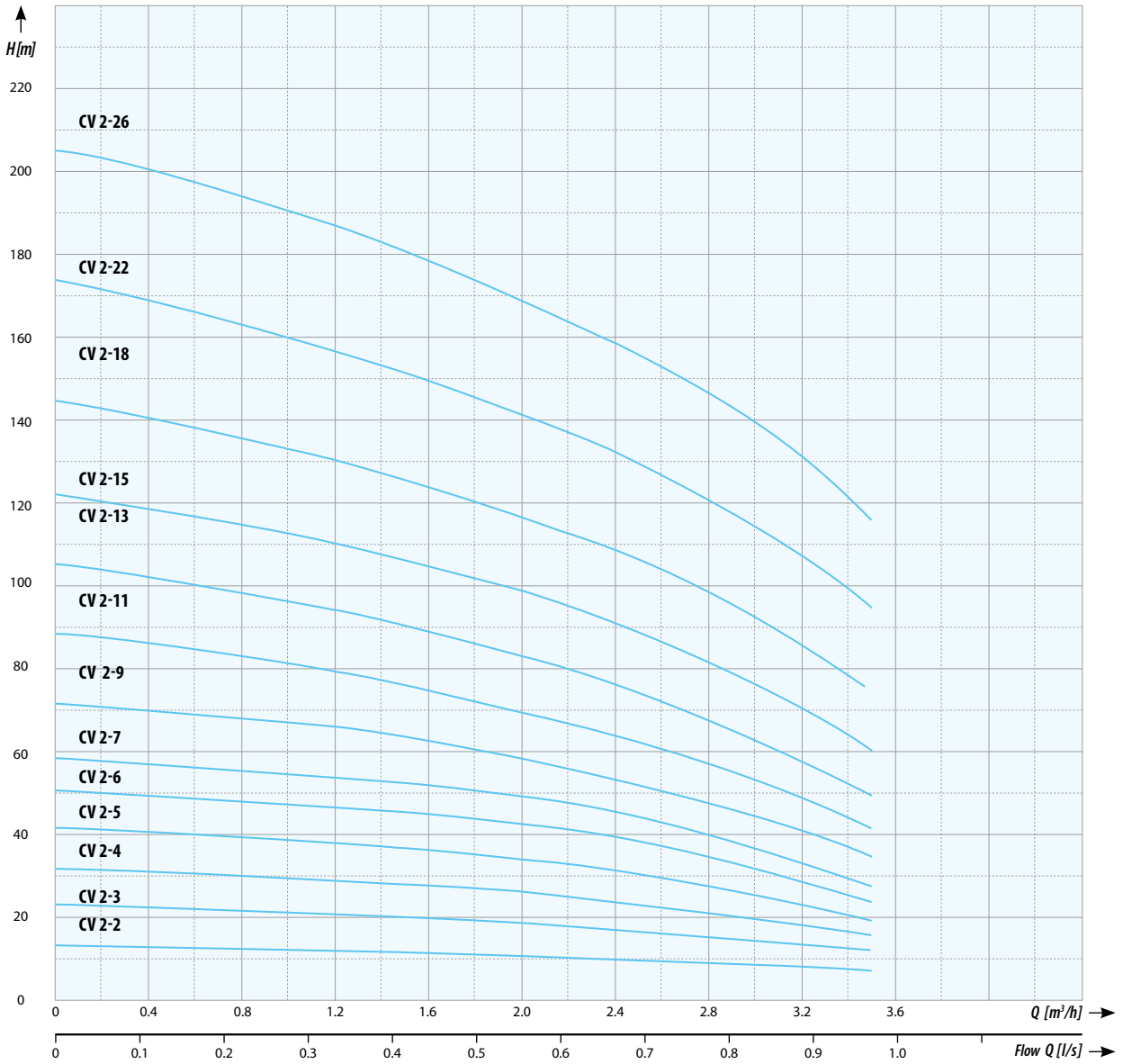
CV, CVI, CV INOX

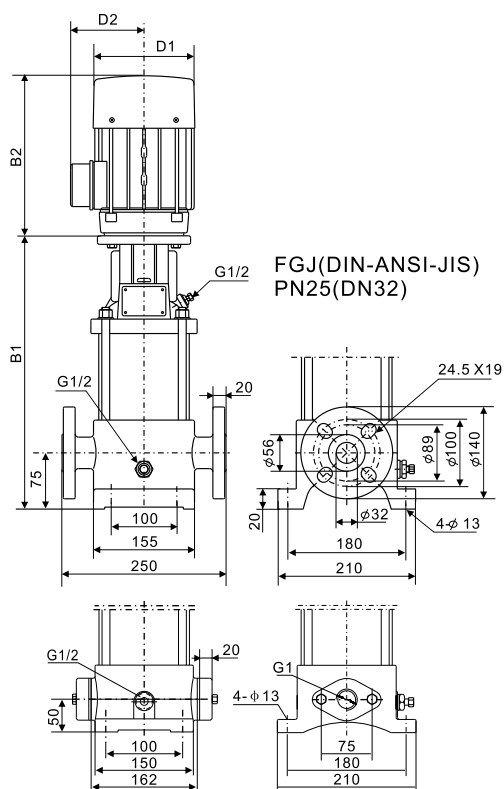


CV 1/CVI 1 INOX



CV 2/CVI 2 INOX

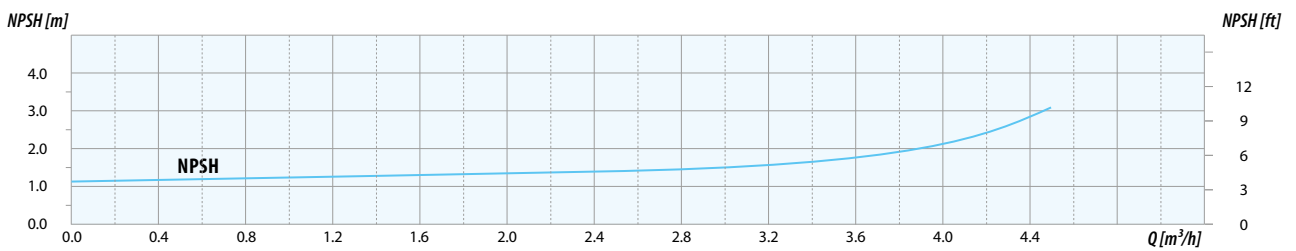
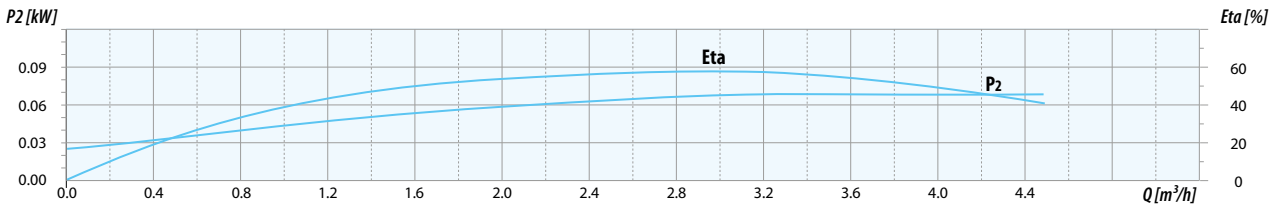
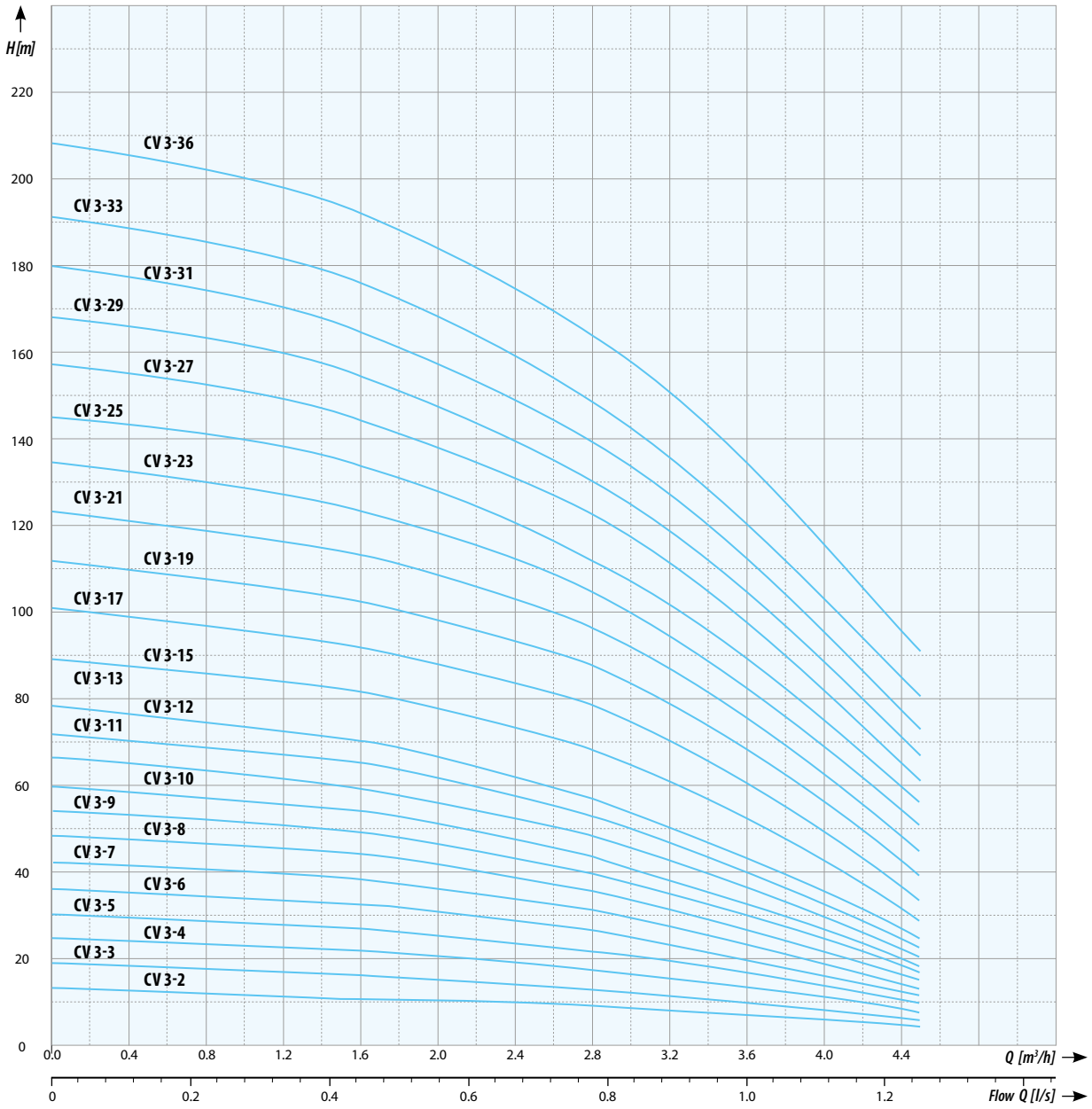


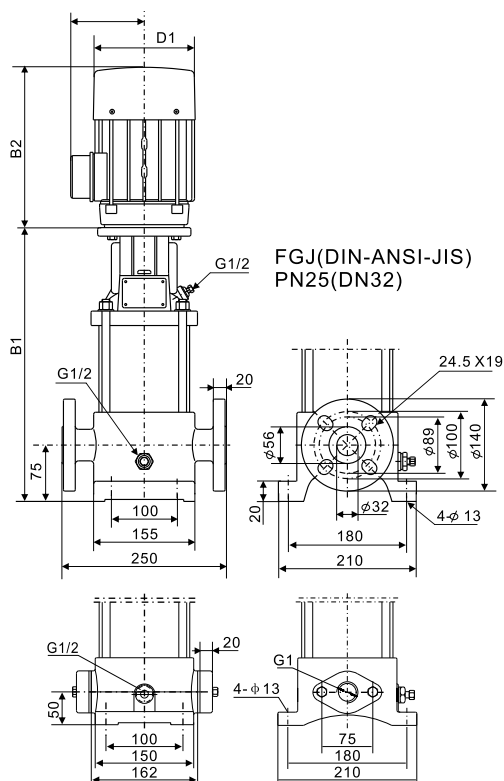


NAME	Power (kW)	Dimension (mm)					Weight (kg)
		B1	B2	B1+B2	D1	D2	
CVI / CV 2-2	0,37	259	205	464	133	102/124	21
CVI / CV 2-3	0,37	277	205	482	133	102/124	21
CVI / CV 2-4	0,55	295	205	500	133	102/124	23
CVI / CV 2-5	0,55	313	205	518	133	102/124	23
CVI / CV 2-6	0,75	331	205	536	133	102/124	25
CVI / CV 2-7	0,75	349	205	554	133	102/124	25
CVI / CV 2-9	1,1	391	241	632	154	111/133	27
CVI / CV 2-11	1,1	427	241	668	154	111/133	27
CVI / CV 2-13	1,5	463	241/293	704/756	154/177	111/144.5	29
CVI / CV 2-15	1,5	499	241/293	740/792	154/177	111/144.5	29
CVI / CV 2-18	2,2	565	275/293	840/858	177	116/144.5	35
CVI / CV 2-22	2,2	637	275/293	912	177	116/144.5	38
CVI / CV 2-26	3,0	709	293	1002	177	116	45

NAME	Power P2(kW)	(m ³ /h)	1.0	1.2	1.6	2.0	2.4	2.8	3.2	3.5
CVI / CV 2-2	0.37	H (m)	16	15.5	14.5	14	12.5	11	9.5	8
CVI / CV 2-3	0.37		23	22.5	21	20	18.5	16	14	12
CVI / CV 2-4	0.55		32	31	30	28	26	23	20	16
CVI / CV 2-5	0.55		42.5	42	40	37	34.5	30	25	20
CVI / CV 2-6	0.75		51	50	47	44	41	36	30	24
CVI / CV 2-7	0.75		59	57	55	52	47	41	35	28
CVI / CV 2-9	1.1		72	71	67	63	58	51	44	36
CVI / CV 2-11	1.1		87	85	80	74	67	59	50	42
CVI / CV 2-13	1.5		106	104	99	90	81	71	60	51
CVI / CV 2-15	1.5		121	119	112	105	96	85	72	61
CVI / CV 2-18	2.2		143	139	133	125	116	105	91	78
CVI / CV 2-22	2.2		173	169	162	152	140	126	110	95
CVI / CV 2-26	3.0		206	201	191	180	170	155	133	118

CV 3/CVI 3 INOX

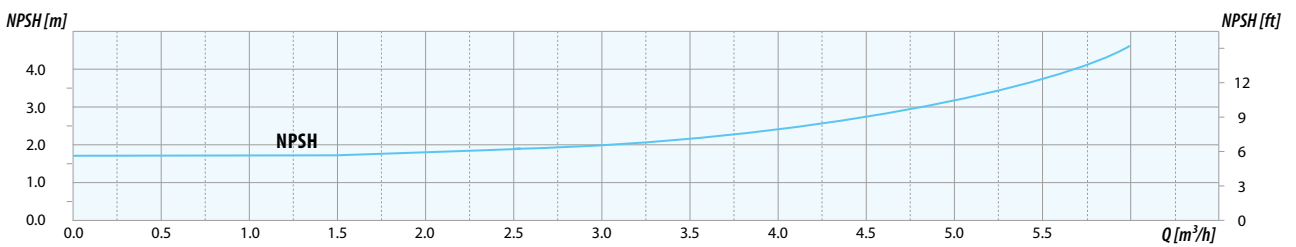
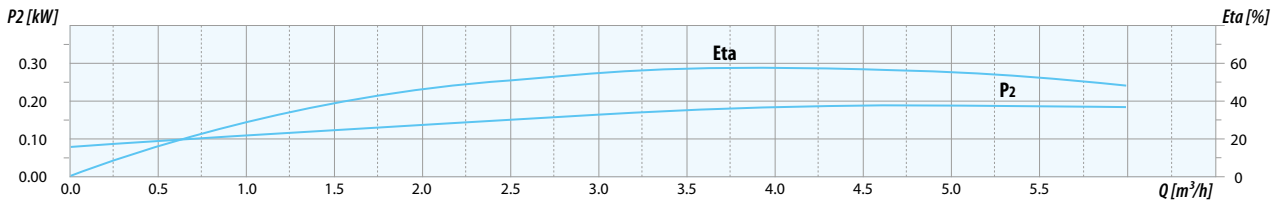
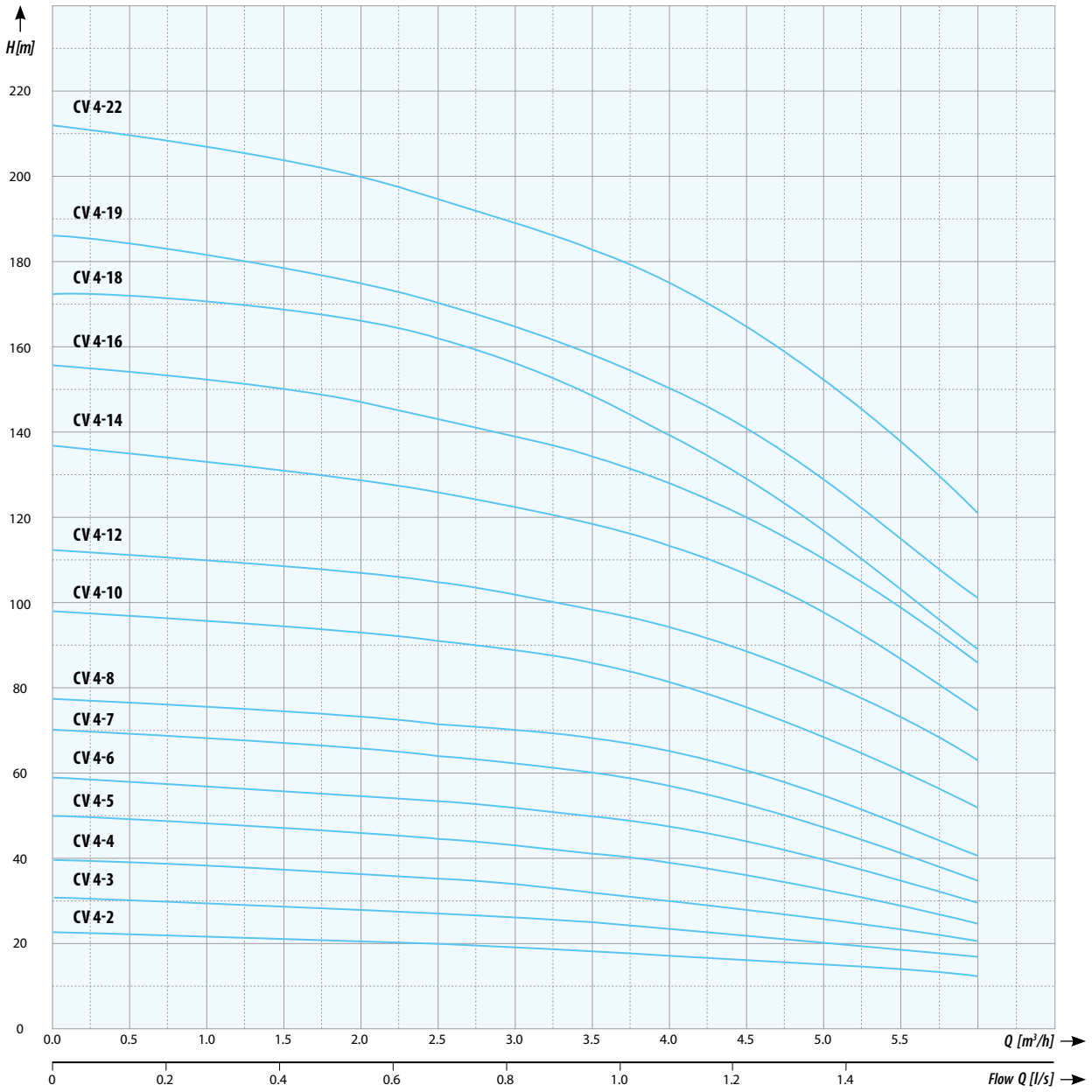


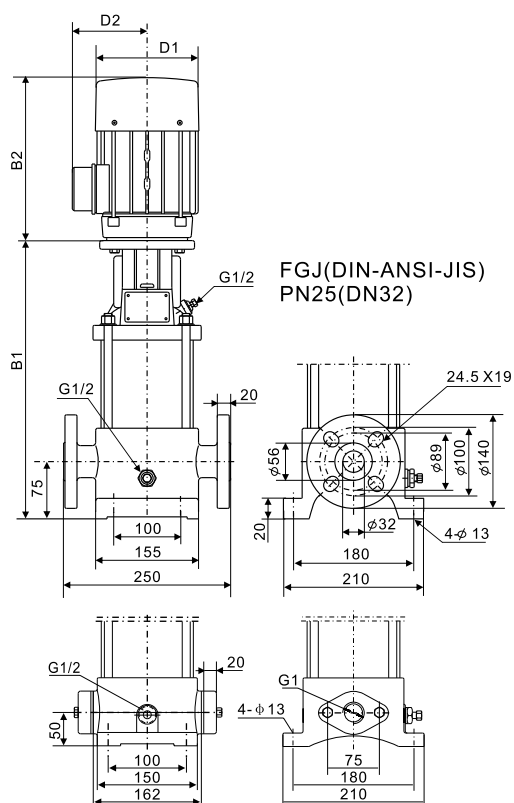


NAME	Power (kW)	Dimension (mm)					Weight (kg)
		B1	B2	B1+B2	D1	D2	
CVI 3-2	0.37	259	205	464	133	102	20
CVI 3-3	0.37	277	205	482	133	102	20
CVI 3-4	0.37	295	205	500	133	102	21
CVI 3-5	0.37	313	205	518	133	102	21
CVI 3-6	0.55	331	205	536	133	102	22
CVI 3-7	0.55	349	205	554	133	102	22
CVI 3-8	0.75	367	205	572	133	102	23
CVI 3-9	0.75	385	205	590	133	102	24
CVI 3-10	0.75	403	205	608	133	102	25
CVI 3-11	1.1	427	241	668	154	111	27
CVI 3-12	1.1	445	241	686	154	111	27
CVI 3-13	1.1	463	241	704	154	111	28
CVI 3-15	1.1	499	241	740	154	111	29
CVI 3-17	1.5	535	241/293	776/828	154	111	34
CVI 3-19	1.5	571	241/293	812/864	154	111	35
CVI 3-21	2.2	615	275/293	890/908	177	116	38
CVI 3-23	2.2	651	275/293	926/944	177	116	39
CVI 3-25	2.2	687	275/293	962/980	177	116	40
CVI 3-27	2.2	723	275/293	998/1016	177	116	41
CVI 3-29	2.2	759	275/293	1034/1052	177	116	42
CVI 3-31	3.0	795	275/293	1070/1080	177	116	47
CVI 3-33	3.0	831	275/293	1106/1124	177	116	48
CVI 3-36	3.0	885	275/293	1160/1178	177	116	50

NAME	Power P2(kW)	(m ³ /h)	H (m)											
			1.2	1.6	2.0	2.4	2.8	3.0	3.2	3.4	3.6	4.0		
CVI / CV 3-2	0.37		12	11.3	10.5	10	9	8.5	8	7.5	7	6		
CVI / CV 3-3	0.37		18	17	16	15	14	13	12	11	10	8		
CVI / CV 3-4	0.37		24	23	21.5	20	18.5	17.5	16.5	15	13.5	11		
CVI / CV 3-5	0.37		30	28.5	27	25	23	22	20.5	19	17.5	14		
CVI / CV 3-6	0.55		36	34	32	30	28	26	24	22	20	16.5		
CVI / CV 3-7	0.55		42	40.5	39	36	33	30.5	28.5	26	24	19.5		
CVI / CV 3-8	0.75		48	46	44	41	37	35	32.5	30	27	22.5		
CVI / CV 3-9	0.75		53	51	49	46	41.5	39	37	34	32	26		
CVI / CV 3-10	0.75		59	57	55	51	46	43	41	37	34	28		
CVI / CV 3-11	1.1		65	62.5	60	56	51	48	45	42	38	30.5		
CVI / CV 3-12	1.1		71	68	66	61	55	52	49	45.5	42	34		
CVI / CV 3-13	1.1		77	74	71	66	60	57	53	50	46	37		
CVI / CV 3-15	1.1		88	85	82	77	72	68.5	64	60	55	44		
CVI / CV 3-17	1.5		100	97	93	88	83	79	74	69	64	52		
CVI / CV 3-19	1.5		112	108	104	98	92	88	83	77	71	58		
CVI / CV 3-21	2.2		123	119	115	108	102	94	92	86	79	65		
CVI / CV 3-23	2.2		134	130	125	119	110	105	100	94	86	72		
CVI / CV 3-25	2.2		146	141	135	128	118	113	108	102	94	79		
CVI / CV 3-27	2.2		158	152	146	138	129	123	117	110	103	86		
CVI / CV 3-29	2.2		169	163	156	147	137	132	125	118	111	93		
CVI / CV 3-31	3.0		180	174	167	157	147	141	134	126	118	100		
CVI / CV 3-33	3.0		191	186	178	168	157	150	143	135	127	108		
CVI / CV 3-36	3.0		209	203	194	184	173	166	159	151	143	122		

CV 4/CVI 4 INOX

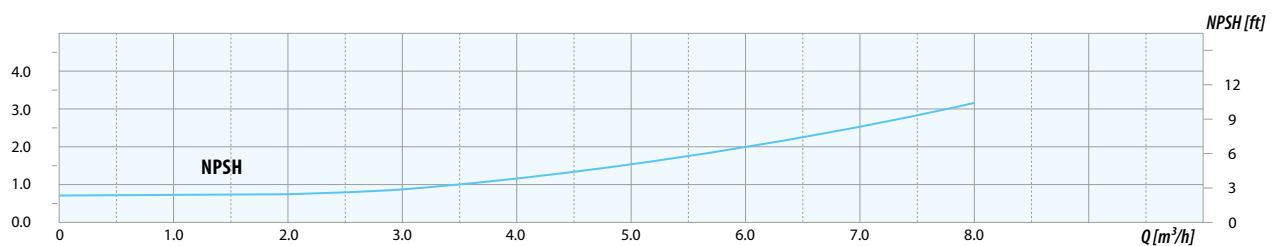
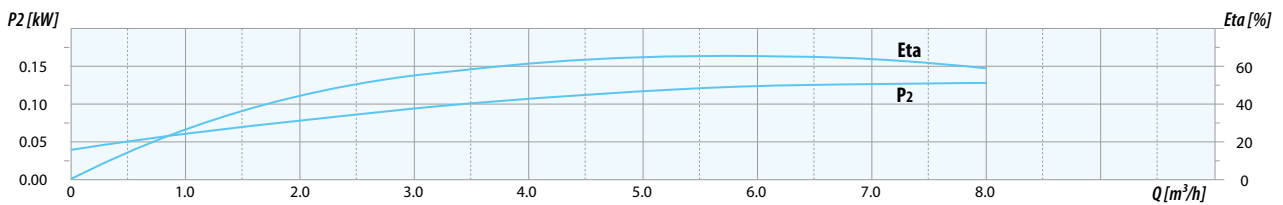
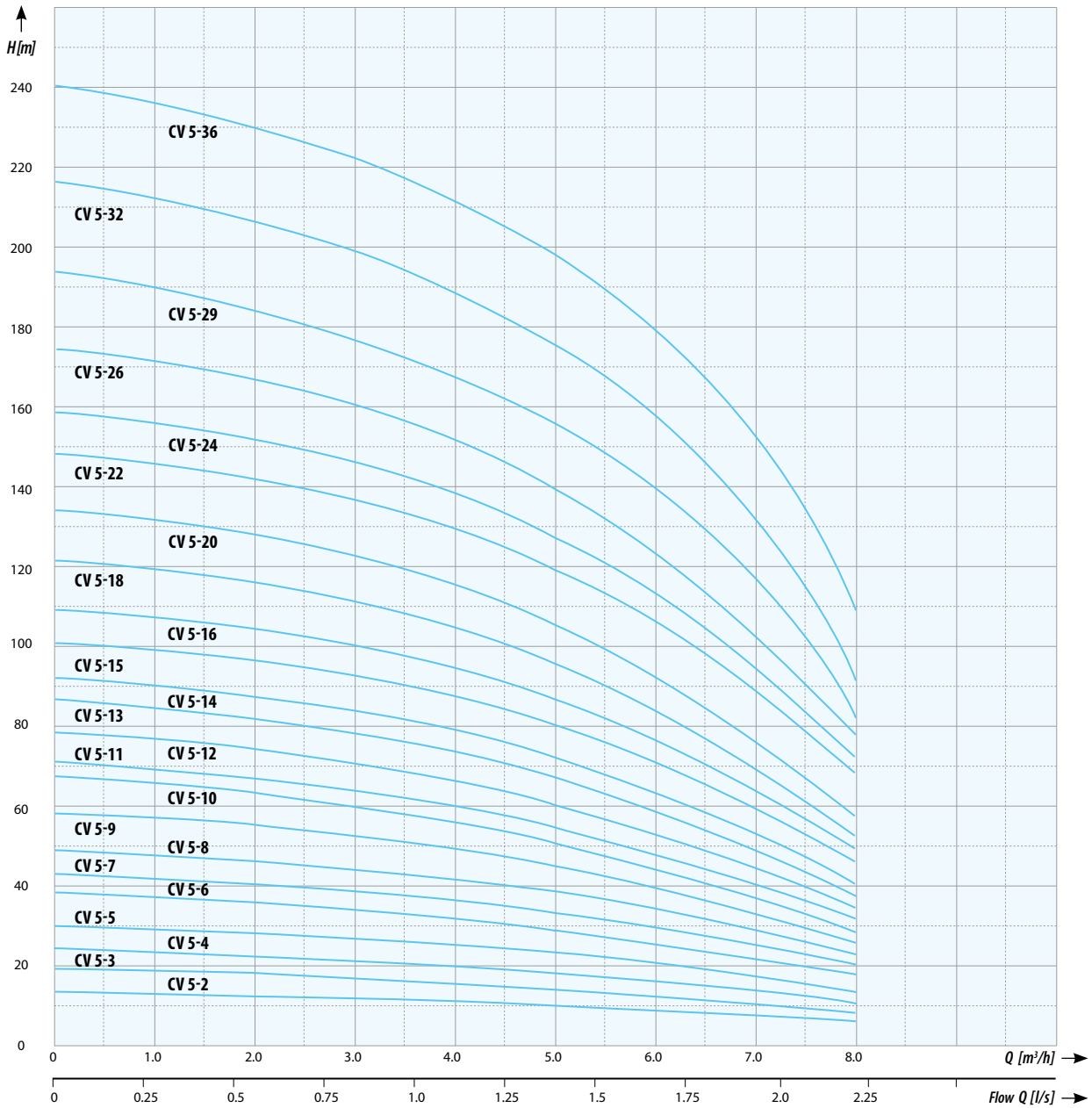


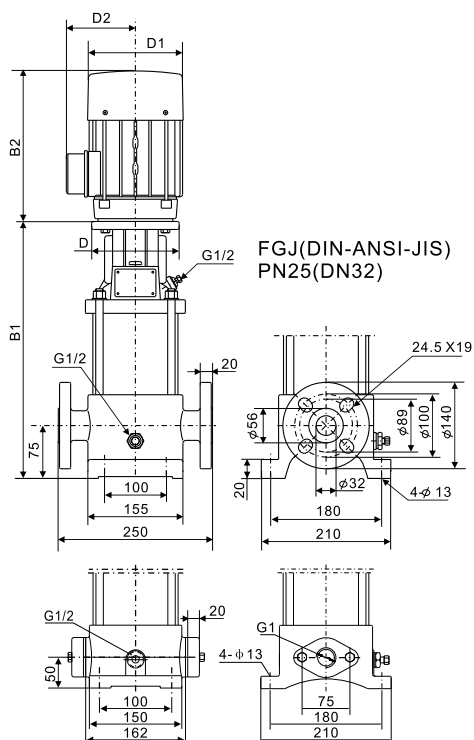


NAME	Power (kW)	Dimension (mm)					Weight (kg)
		B1	B2	B1+B2	D1	D2	
CVI / CV 4-2	0.37	259	205	464	133	102	22
CVI / CV 4-3	0.55	277	205	482	133	102	22
CVI / CV 4-4	0.75	295	205	500	133	102	23
CVI / CV 4-5	1.1	319	241	560	154	111	23
CVI / CV 4-6	1.1	337	241	578	154	111	25
CVI / CV 4-7	1.5	355	241/293	596/648	154	111	30
CVI / CV 4-8	1.5	373	241/293	614/666	154	111	30
CVI / CV 4-10	2.2	417	275/293	692/710	170	117	32
CVI / CV 4-12	2.2	453	275/293	728/746	170	117	32
CVI / CV 4-14	3.0	489	275/293	764/782	170	117	35
CVI / CV 4-16	3.0	525	275/293	800/818	170	117	39
CVI / CV 4-18	4.0	581	323	904	200	142	42
CVI / CV 4-19	4.0	599	323	922	200	142	45
CVI / CV 4-22	4.0	653	323	976	200	142	49

NAME	Power P2(kW)	(m ³ /h)	1.0	2.0	3.0	4.0	4.5	5.0	5.5	6.0
CVI / CV 4-2	0.37	H (m)	21	20	18	16	15	14	13	12
CVI / CV 4-3	0.55		31	29.5	28	24	22	21	19	18
CVI / CV 4-4	0.75		40	38	35	31	29	27	24	22
CVI / CV 4-5	1.1		50	48	44	40	38	34	30	26
CVI / CV 4-6	1.1		59	57	53	49	45	41	36	30
CVI / CV 4-7	1.5		71	69	65	59	55	50	43	36
CVI / CV 4-8	1.5		76	74	71	65	60	56	51	42
CVI / CV 4-10	2.2		95	93	90	84	78	72	65	58
CVI / CV 4-12	2.2		115	110	105	98	91	84	76	68
CVI / CV 4-14	3.0		139	134	128	118	111	102	90	79
CVI / CV 4-16	3.0		158	153	145	134	126	116	103	89
CVI / CV 4-18	4.0		176	173	164	148	135	118	108	94
CVI / CV 4-19	4.0		186	180	170	155	145	133	117	98
CVI / CV 4-22	4.0		216	208	197	182	172	159	143	126

CV 5/CVI 5 INOX

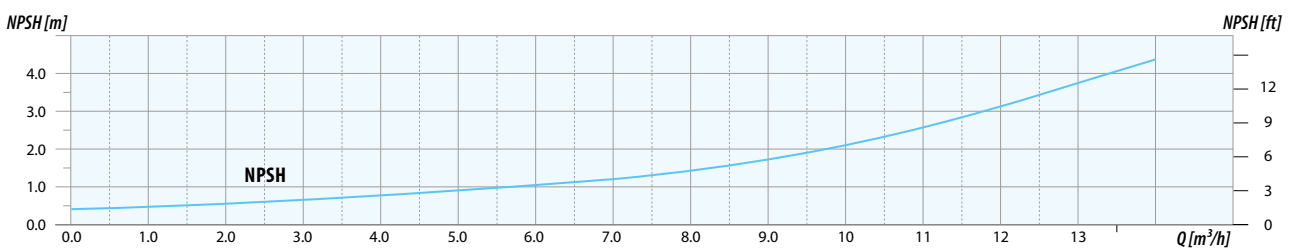
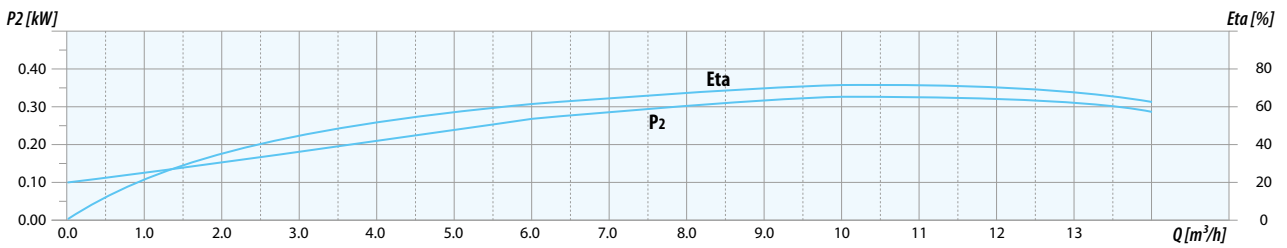
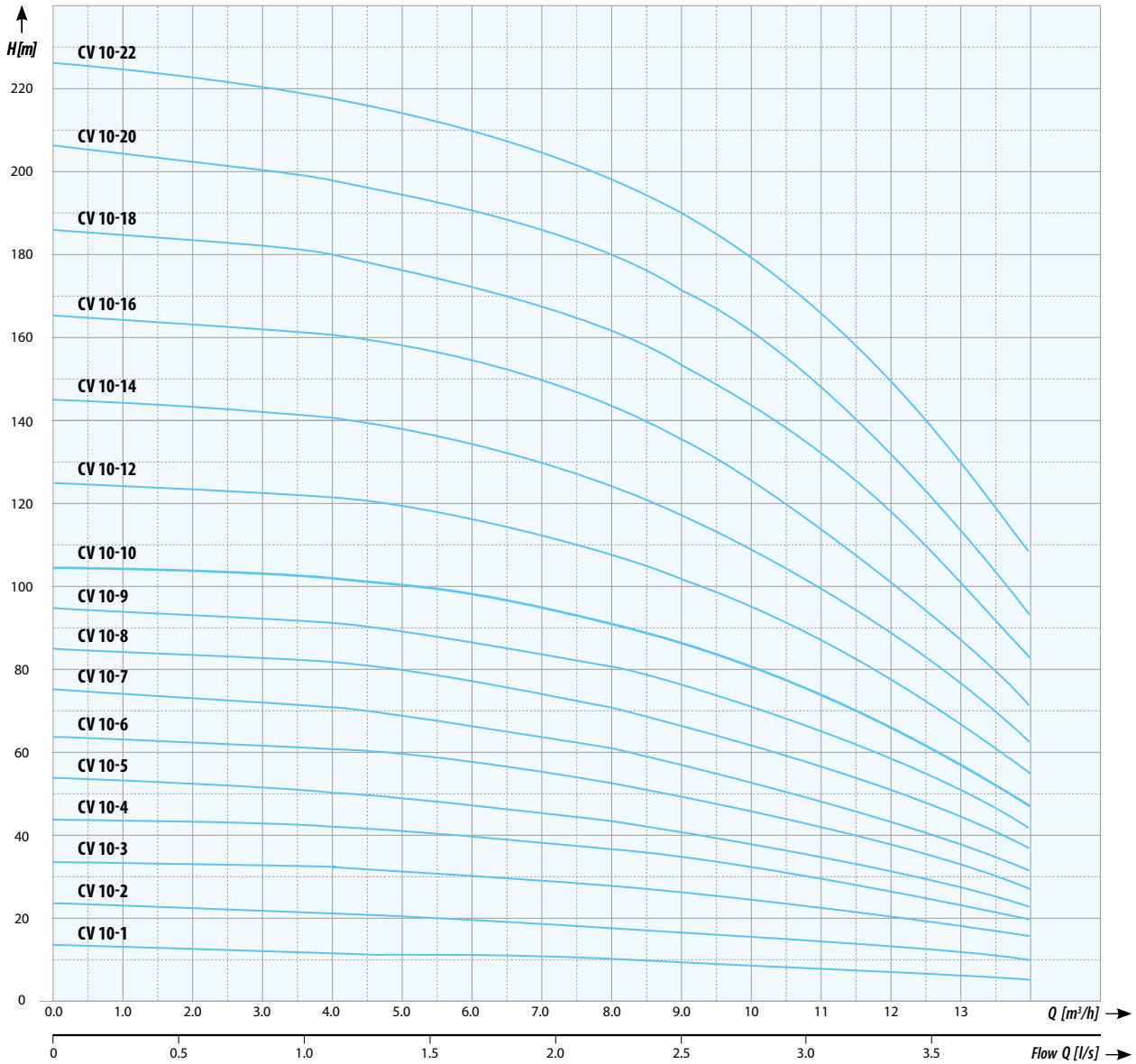


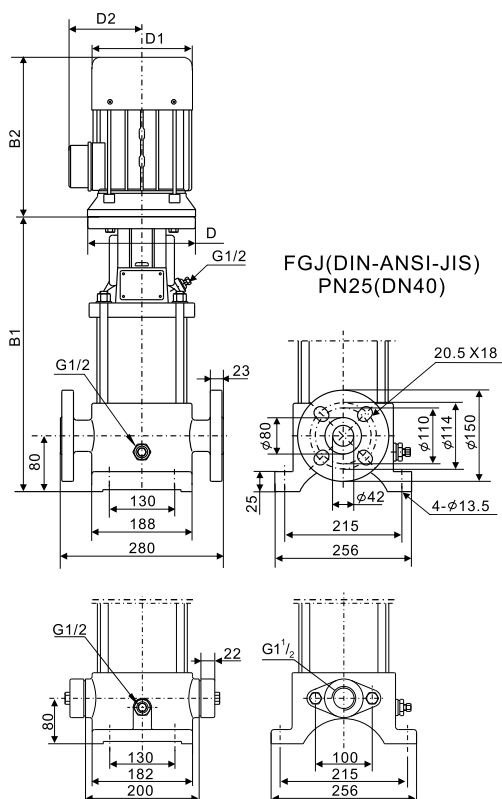


NAME	Power (kW)	Dimension (mm)						Weight (kg)
		B1	B2	B1+B2	D	D1	D2	
CVI / CV 5-2	0,37	277	205	482	-	133	102	21
CVI / CV 5-3	0,55	304	205	509	-	133	102	21
CVI / CV 5-4	0,55	331	205	536	-	133	102	22
CVI / CV 5-5	0,75	358	205	563	-	133	102	24
CVI / CV 5-6	1,1	391	241	632	-	154	111	27
CVI / CV 5-7	1,1	418	241	659	-	154	111	28
CVI / CV 5-8	1,1	445	241	686	-	154	111	29
CVI / CV 5-9	1,5	472	241/293	713/765	-	154	111	35
CVI / CV 5-10	1,5	499	241/293	740/792	-	154	111	36
CVI / CV 5-11	2,2	534	275/293	809/827	-	177	116	37
CVI / CV 5-12	2,2	561	275/293	836/854	-	177	116	38
CVI / CV 5-13	2,2	588	275/293	863/881	-	177	116	39
CVI / CV 5-14	2,2	615	275/293	890/908	-	177	116	40
CVI / CV 5-15	2,2	642	275/293	917/935	-	177	116	41
CVI / CV 5-16	2,2	669	275/293	944/962	-	177	116	42
CVI / CV 5-18	3,0	723	293	982	-	177	116	45
CVI / CV 5-20	3,0	m	293	1052	-	177	116	46
CVI / CV 5-22	4,0	851	305	1156	-	197	148	58
CVI / CV 5-24	4,0	905	305	1210	-	197	148	59
CVI / CV 5-26	4,0	959	305	1264	-	197	148	61
CVI / CV 5-29	4,0	1040	305	1345	-	197	148	63
CVI / CV 5-32	5,5	1146	390	1536	300	275	210	78
CVI / CV 5-36	5,5	1254	390	1644	300	275	210	80

NAME	Power P2(kW)	(m ³ /h)	2.0	3.0	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
CVI / CV 5-2	0,37	H (m)	14	13	12	11.5	11	10	9	8	7.5	6.5	6
CVI / CV 5-3	0,55		19	18	16.5	15.5	15	14	13	12	11	9	8
CVI / CV 5-4	0,55		24.5	23	22.5	21	20	18.5	17	15.5	14	12.5	11
CVI / CV 5-5	0,75		30.5	29	27	26	24.5	23	21.5	20	17.5	16	14
CVI / CV 5-6	1,1		37	35	33	31.5	30	28	26	24	22	20	18
CVI / CV 5-7	1,1		43	41	39	37	35	33	31	28	26	24	21
CVI / CV 5-8	1,1		49	47	44	42	40	38	36	32	30	27	24
CVI / CV 5-9	1,5		56	53	50	47.5	45	42.5	40	37	33.5	30.5	27
CVI / CV 5-10	1,5		62	59	55	53	50	47	44	41	37	34	30
CVI / CV 5-11	2,2		68.5	65.5	61.5	59	56	52	49	45	41	37	33
CVI / CV 5-12	2,2		75	72.5	68	65	62	58	54	49	45	40.5	36
CVI / CV 5-13	2,2		81.5	79	74	71	68	64	59.5	54	49	44	39
CVI / CV 5-14	2,2		89	85	81	77	74	69	65	59	54	48	42
CVI / CV 5-15	2,2		96	93	88	84	80	75	70	64	59	52	45
CVI / CV 5-16	2,2		103	100	94	90	85	80	75	69	63	56	48
CVI / CV 5-18	3,0		115	110	104	100	96	90	85	78	71	63	54
CVI / CV 5-20	3,0		129	122	115	109	105	99	94	86	78	70	60
CVI / CV 5-22	4,0		139	134	126	121	116	110	103	95	87	77	66
CVI / CV 5-24	4,0		152	146	138	133	127	120	113	105	96	84	72
CVI / CV 5-26	4,0		164	158	150	144	138	131	122	114	104	91	78
CVI / CV 5-29	4,0		185	177	168	164	157	150	141	132	119	103	87
CVI / CV 5-32	5,5		205	197	189	183	176	166	158	147	134	114	96
CVI / CV 5-36	5,5		230	222	212	205	198	188	177	166	154	133	108

CV 10/CVI 10 INOX

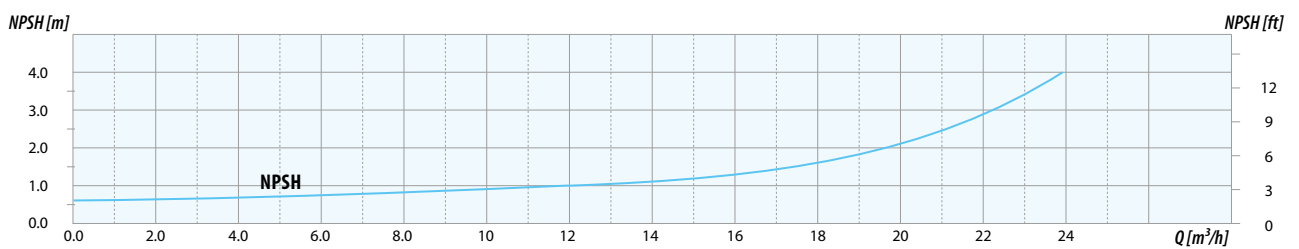
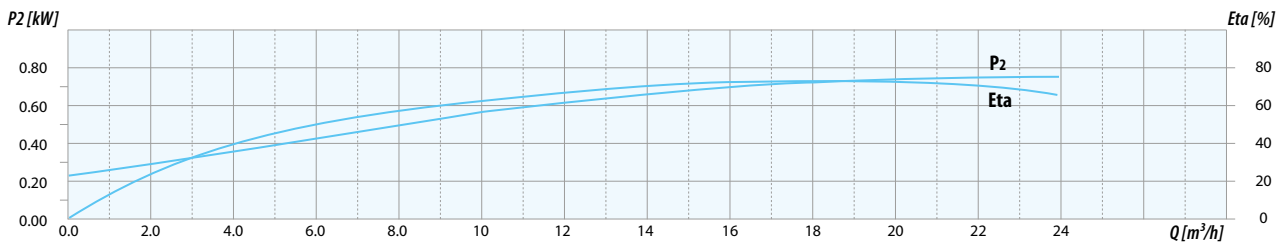
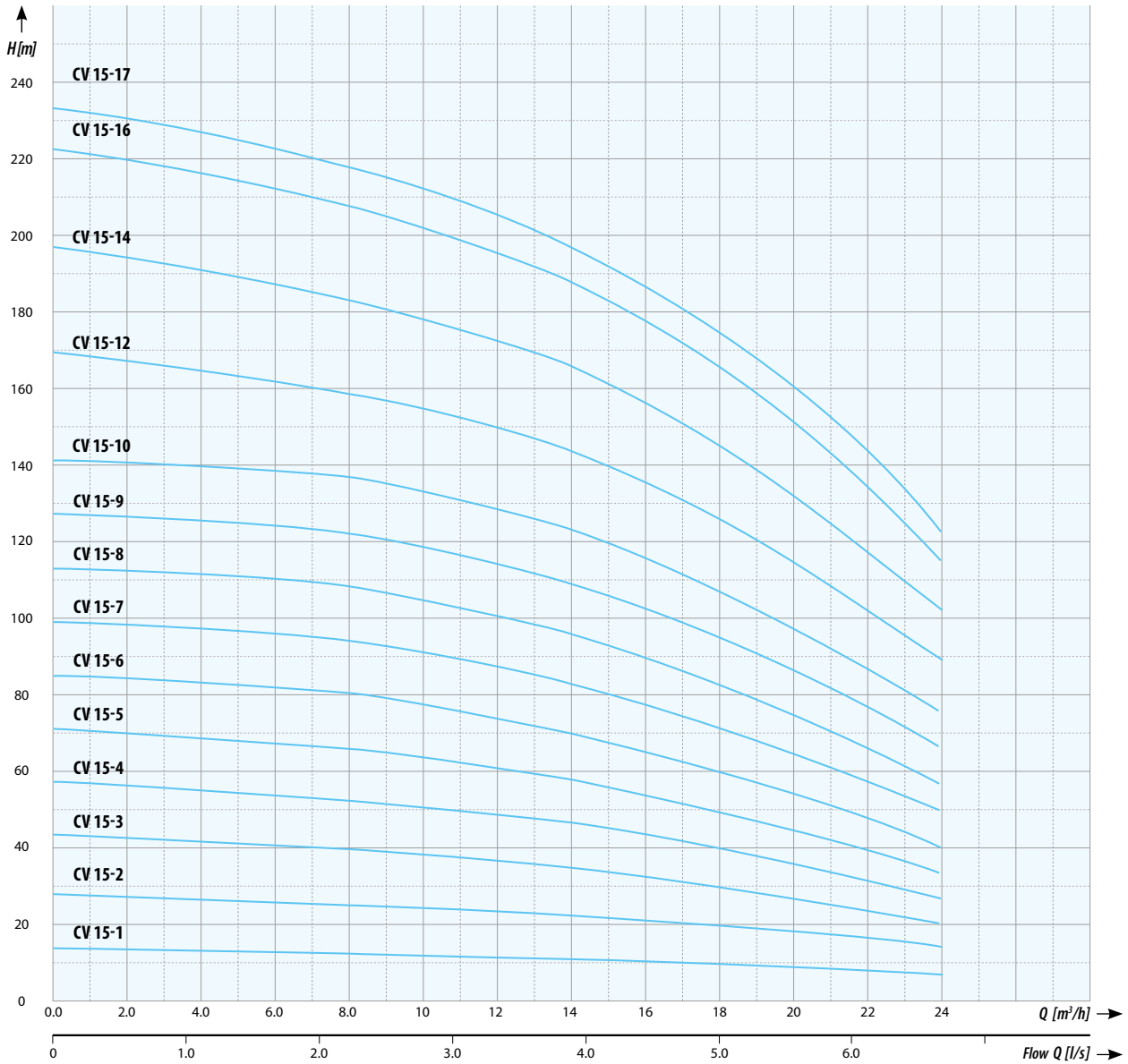


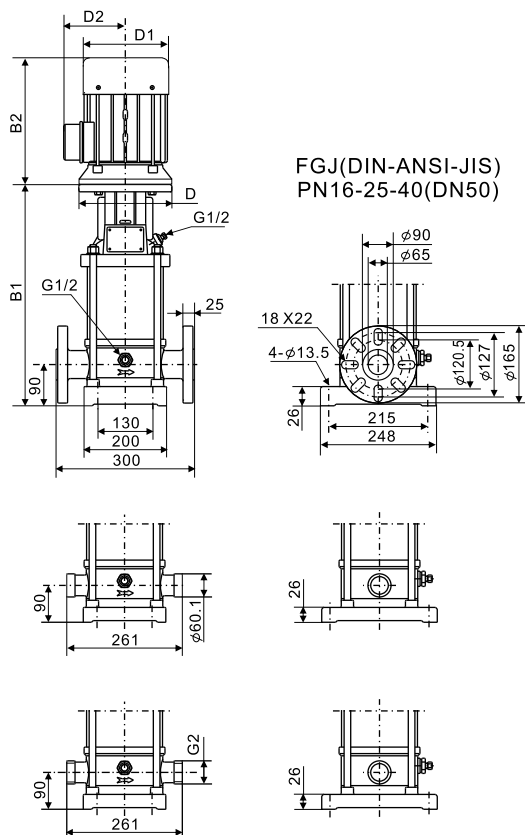


NAME	Power (kW)	Dimension (mm)						Weight (kg)
		B1	B2	B1+B2	D	D1	D2	
CVI 10-1	0.37	13	12	11	9.5	8.5	7	6
CVI 10-2	0.75	23	22	20	18	16	13	10
CVI 10-3	1.1	33	32	31	28	25	21	16
CVI 10-4	1.5	43	42	40	37	32	27	20
CVI 10-5	2.2	53	51	48	44	39	32	24
CVI 10-6	2.2	62	61	58	53	46	38	28
CVI 10-7	3.0	73	72	67	61	54	43	32
CVI 10-8	3.0	83	81	78	71	62	51	37
CVI 10-9	3.0	93	91	87	81	71	59	42
CVI 10-10	4.0	104	101	98	91	81	67	47
CVI 10-12	4.0	123	121	117	108	95	78	55
CVI 10-14	5.5	143	141	136	124	110	90	63
CVI 10-16	5.5	163	161	154	143	125	102	71
CVI 10-18	7.5	183	179	173	161	144	118	82
CVI 10-20	7.5	202	198	191	180	160	133	93
CVI 10-22	7.5	222	217	209	198	178	149	106

NAME	Power P2(kW)	(m ³ /h)	2.0	4.0	6.0	8.0	10	12	14
CVI / CV 10-1	0.37	H (m)	13	12	11	9.5	8.5	7	6
CVI / CV 10-2	0.75		23	22	20	18	16	13	10
CVI / CV 10-3	1.1		33	32	31	28	25	21	16
CVI / CV 10-4	1.5		43	42	40	37	32	27	20
CVI / CV 10-5	2.2		53	51	48	44	39	32	24
CVI / CV 10-6	2.2		62	61	58	53	46	38	28
CVI / CV 10-7	3.0		73	72	67	61	54	43	32
CVI / CV 10-8	3.0		83	81	78	71	62	51	37
CVI / CV 10-9	3.0		93	91	87	81	71	59	42
CVI / CV 10-10	4.0		104	101	98	91	81	67	47
CVI / CV 10-12	4.0		123	121	117	108	95	78	55
CVI / CV 10-14	5.5		143	141	136	124	110	90	63
CVI / CV 10-16	5.5		163	161	154	143	125	102	71
CVI / CV 10-18	7.5		183	179	173	161	144	118	82
CVI / CV 10-20	7.5		202	198	191	180	160	133	93
CVI / CV 10-22	7.5		222	217	209	198	178	149	106

CV 15/CVI 15 INOX



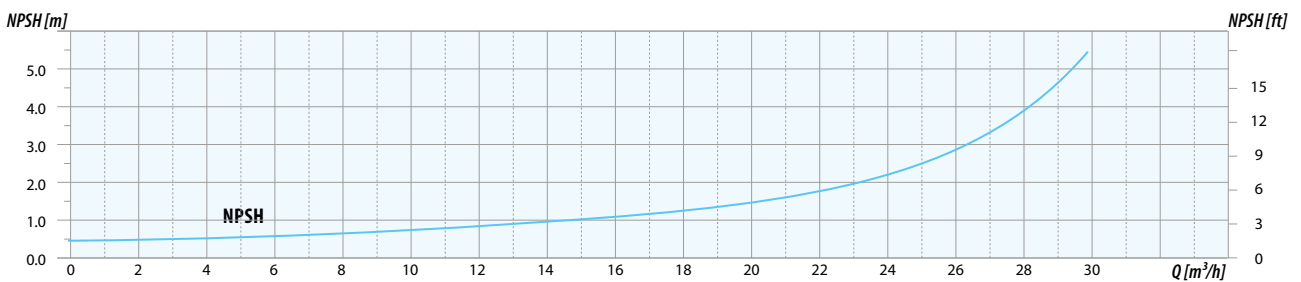
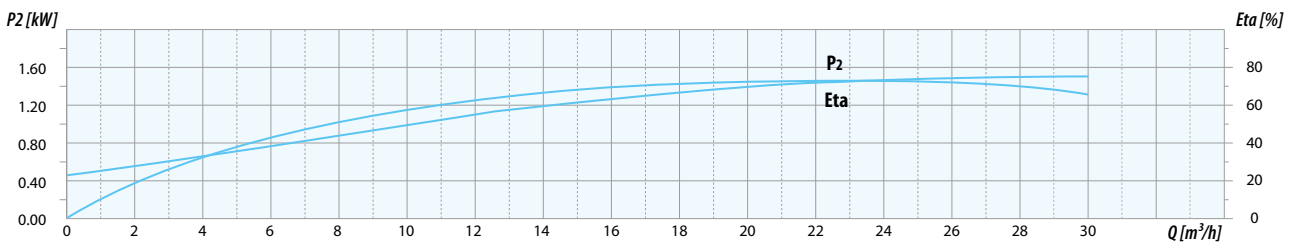
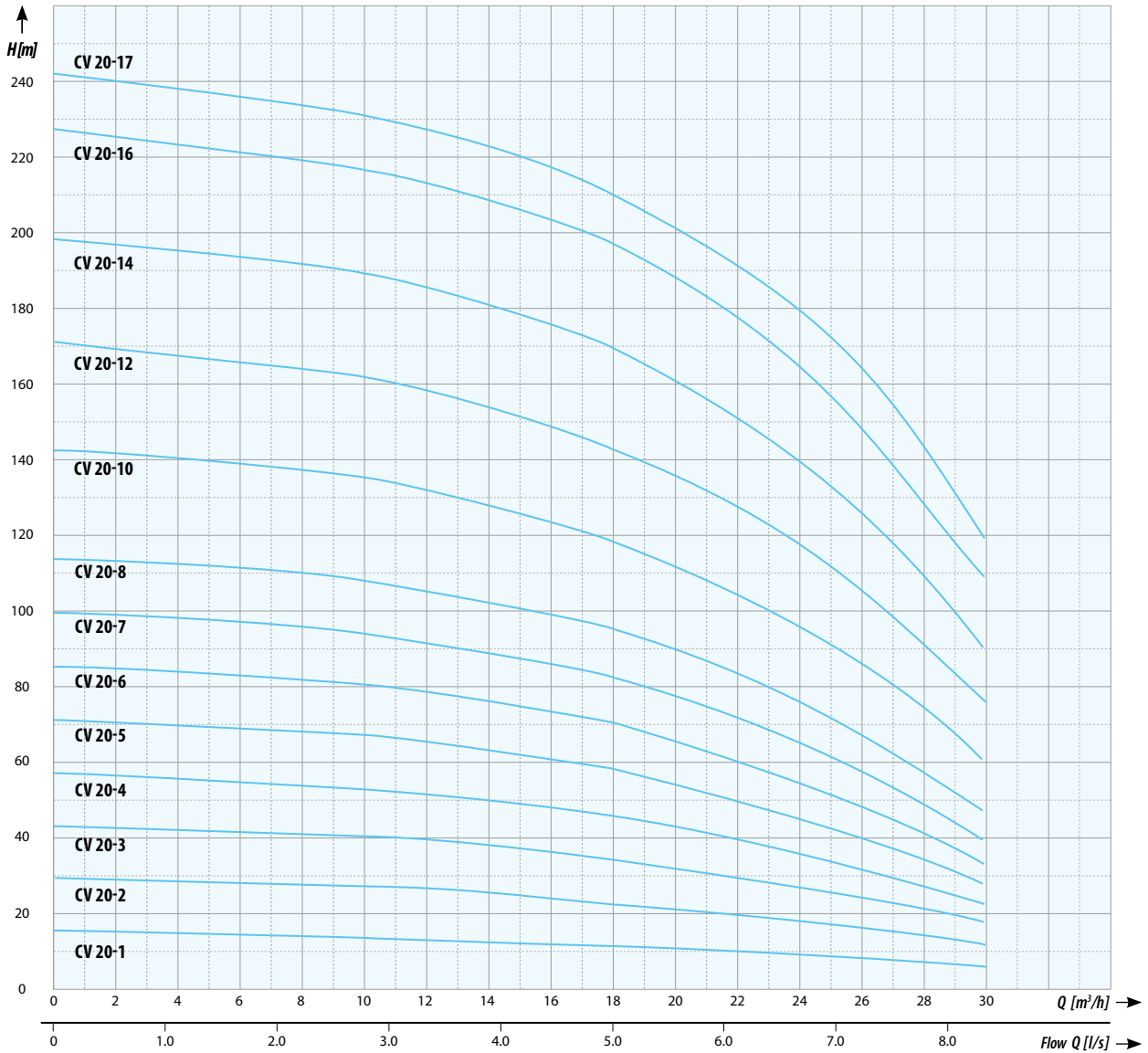


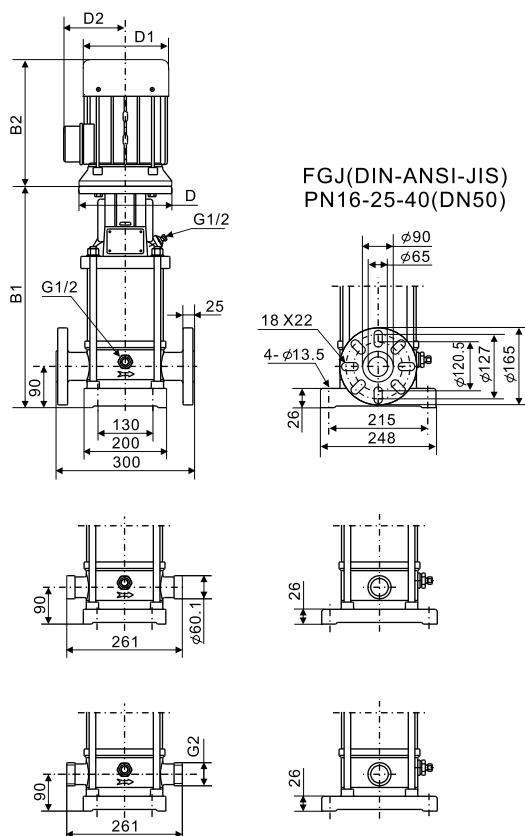
FGJ(DIN-ANSI-JIS)
PN16-25-40(DN50)

NAME	Power (kW)	Dimension (mm)						Weight (kg)
		B1	B2	B1+B2	D	D1	D2	
CVI / CV 15-1	1,1	350	241	591	-	154	111	40
CVI / CV 15-2	2,2	403	275/293	678/696	-	177	116	45
CVI / CV 15-3	3,0	448	293	723	-	177	116	50
CVI / CV 15-4	4,0	513	305	768	-	197	148	55
CVI / CV 15-5	4,0	558	305	863	-	197	148	58
CVI / CV 15-6	5,5	624	390	1014	300	275	210	90
CVI / CV 15-7	5,5	669	390	1059	300	275	210	93
CVI / CV 15-8	7,5	714	390	1104	300	275	210	97
CVI / CV 15-9	7,5	759	390	1149	300	275	210	98
CVI / CV 15-10	11	824	505	1325	350	330	255	140
CVI / CV 15-12	11	914	505	1415	350	330	255	144
CVI / CV 15-14	11	1004	505	1505	350	330	255	147
CVI / CV 15-16	15	1094	505	1595	350	330	255	148
CVI / CV 15-17	15	1139	505	1640	350	330	255	160

NAME	Power P2(kW)	(m ³ /h)	8.0	10	12	14	15	16	18	20	22	24
CVI / CV 15-1	1,1	H (m)	14	13	12	11.5	11	10.5	10	9	8	7
CVI / CV 15-2	2,2		26	25	24	23	22	21	20	18	16	14
CVI / CV 15-3	3,0		39	38	37	34	33	31	29	27	24	20
CVI / CV 15-4	4,0		52	50	48	46	44	43	40	36	31	26
CVI / CV 15-5	4,0		66	64	61	58	56	54	50	45	39	33
CVI / CV 15-6	5,5		80	78	75	70	67	65	60	54	47	41
CVI / CV 15-7	5,5		94	92	88	83	80	78	71	64	56	50
CVI / CV 15-8	7,5		108	105	101	96	93	90	83	75	66	57
CVI / CV 15-9	7,5		122	119	115	109	104	98	93	87	77	66
CVI / CV 15-10	11		136	133	128	123	120	116	107	98	86	76
CVI / CV 15-12	11		158	155	150	144	140	135	126	116	102	89
CVI / CV 15-14	11		183	178	172	165	162	156	145	133	118	103
CVI / CV 15-16	15		210	204	197	190	185	179	168	153	137	118
CVI / CV 15-17	15		218	212	203	198	193	188	171	155	136	125

CV 20/CVI 20 INOX



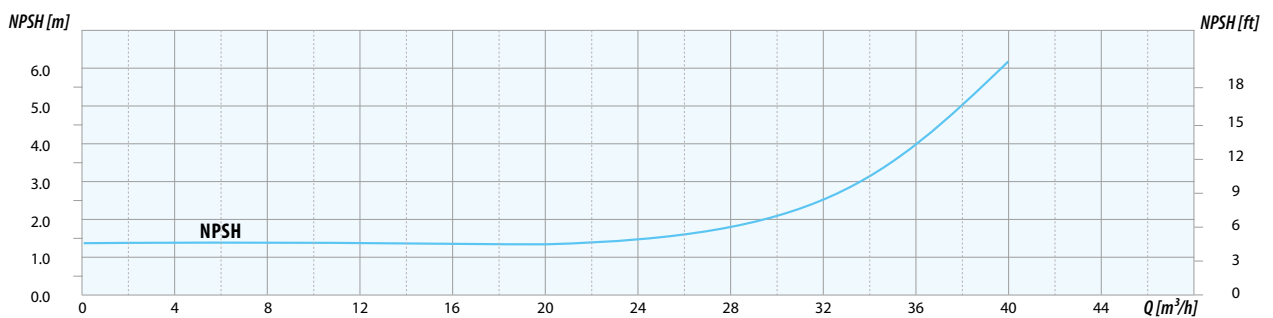
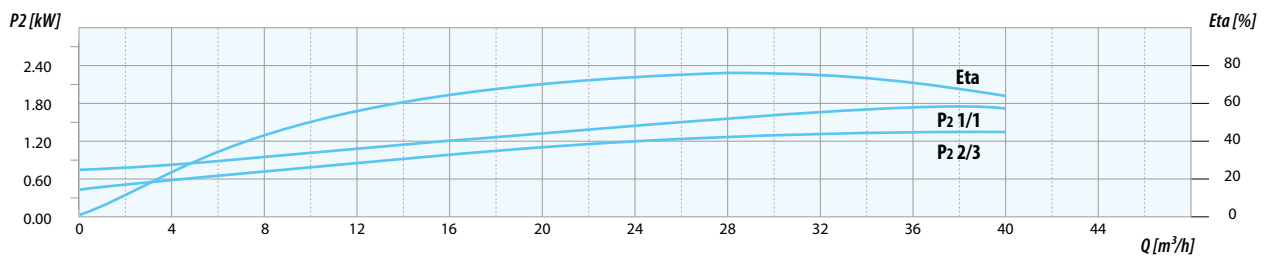
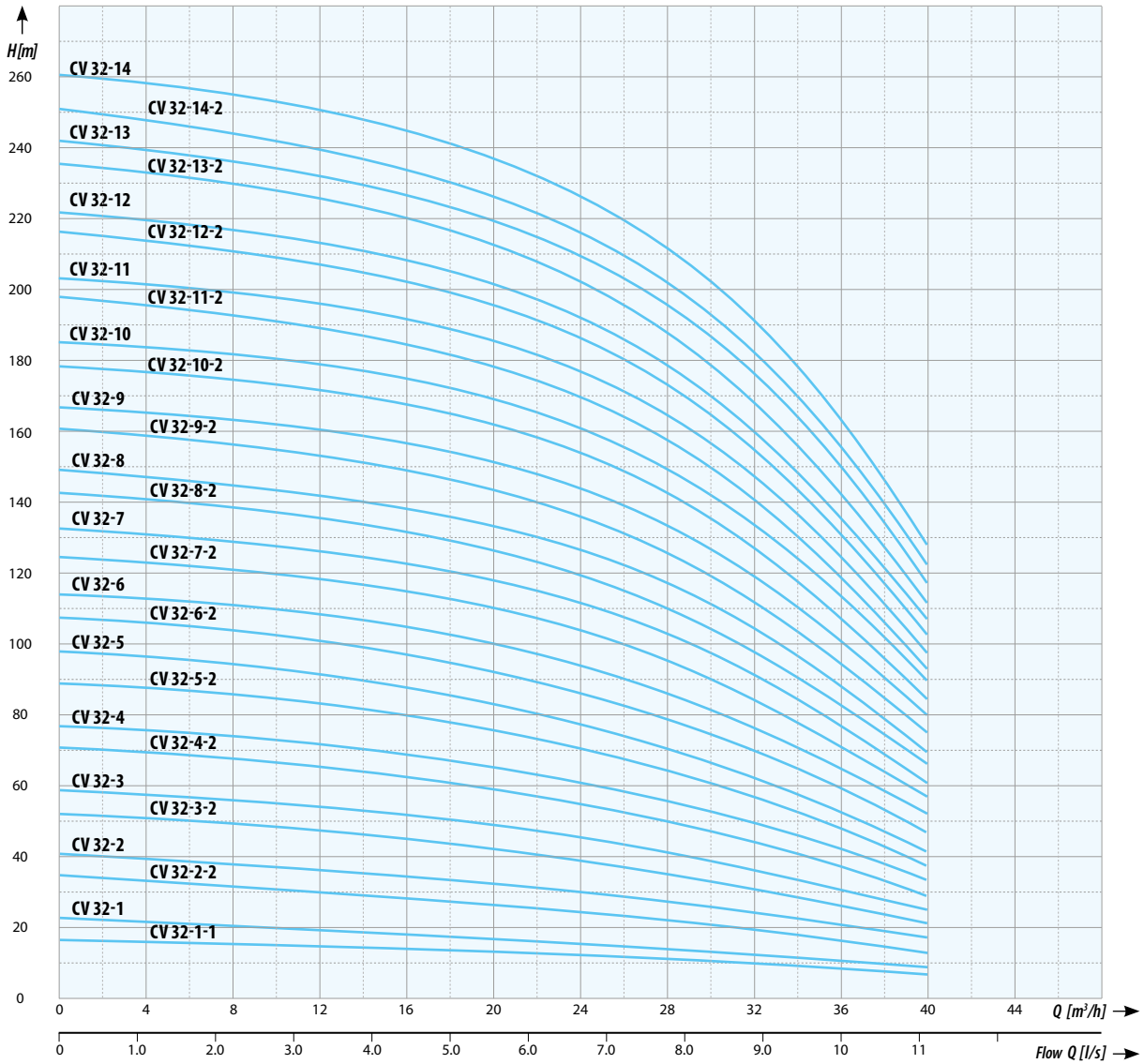


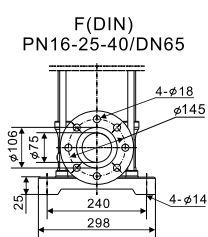
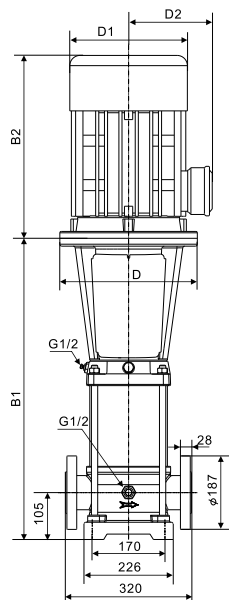
FGJ(DIN-ANSI-JIS)
PN16-25-40(DN50)

NAME	Power (kW)	Dimension (mm)						Weight (kg)
		B1	B2	B1+B2	D	D1	D2	
CVI 20-1	1.1	350	241	591	-	154	111	40
CVI 20-2	2.2	403	275/293	678/696	-	177	116	45
CVI 20-3	4.0	468	305	773	300	197	148	55
CVI 20-4	5.5	534	305	839	300	197	148	80
CVI 20-5	5.5	579	390	969	300	275	210	83
CVI 20-6	7.5	624	390	1014	300	275	210	87
CVI 20-7	7.5	669	390	1059	300	275	210	90
CVI 20-8	11	734	505	1239	350	330	255	130
CVI 20-10	11	824	505	1329	350	330	255	136
CVI 20-12	15	914	505	1419	350	330	255	145
CVI 20-14	15	1004	505	1509	350	330	255	148
CVI 20-16	18.5	1094	560	1654	350	330	255	168
CVI 20-17	18.5	1139	560	1699	350	330	255	170

NAME	Power P2(kW)	(m ³ /h)	8	10	12	14	16	18	20	24	26	28
CVI / CV 20-1	1.1	H (m)	14	13.5	13	12.5	12	11.5	10.5	9	8	7
CVI / CV 20-2	2.2		28	27	26	25	24	22.5	21	18	16	14
CVI / CV 20-3	4.0		41	40	39	38	36	34	32	27	24	21
CVI / CV 20-4	5.5		54	53	52	51	50	46	43	36	32	27
CVI / CV 20-5	5.5		68	67	65	63	61	58	55	45	40	33
CVI / CV 20-6	7.5		82	80	78	77	73	70	66	55	48	40
CVI / CV 20-7	7.5		96	94	92	89	86	82	77	65	58	47
CVI / CV 20-8	11		110	107	104	102	99	95	89	76	67	56
CVI / CV 20-10	11		137	135	132	127	124	118	112	98	86	73
CVI / CV 20-12	15		164	162	158	154	149	142	136	118	106	90
CVI / CV 20-14	15		191	189	186	181	176	169	161	140	126	110
CVI / CV 20-16	18.5		219	217	214	208	203	198	186	164	147	129
CVI / CV 20-17	18.5		234	231	228	223	217	210	202	178	162	142

CV 32/CVI 32 INOX

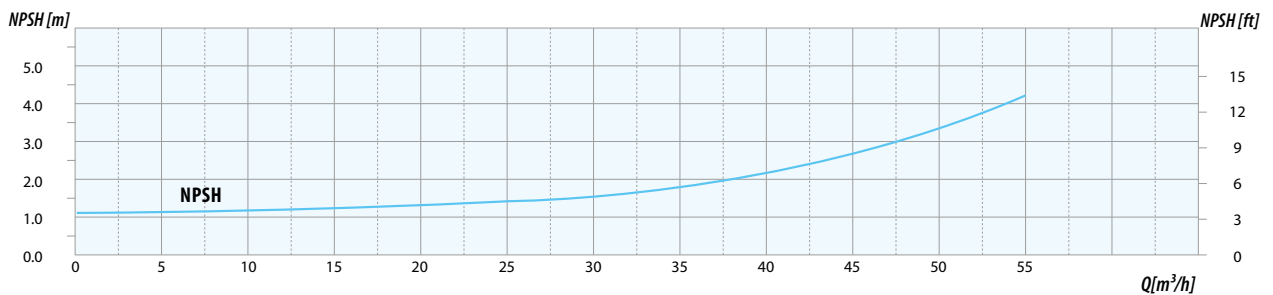
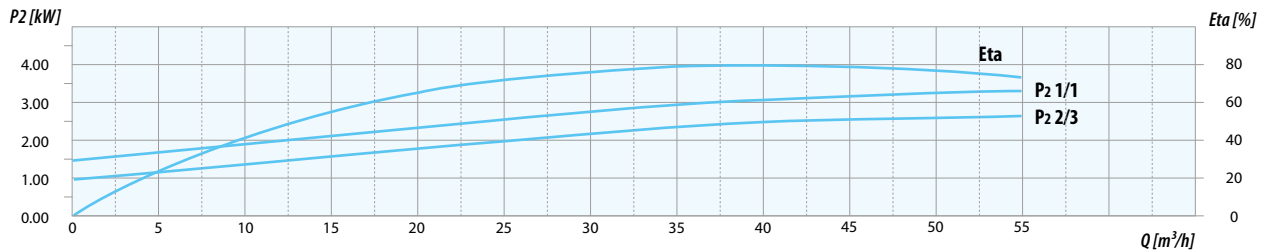
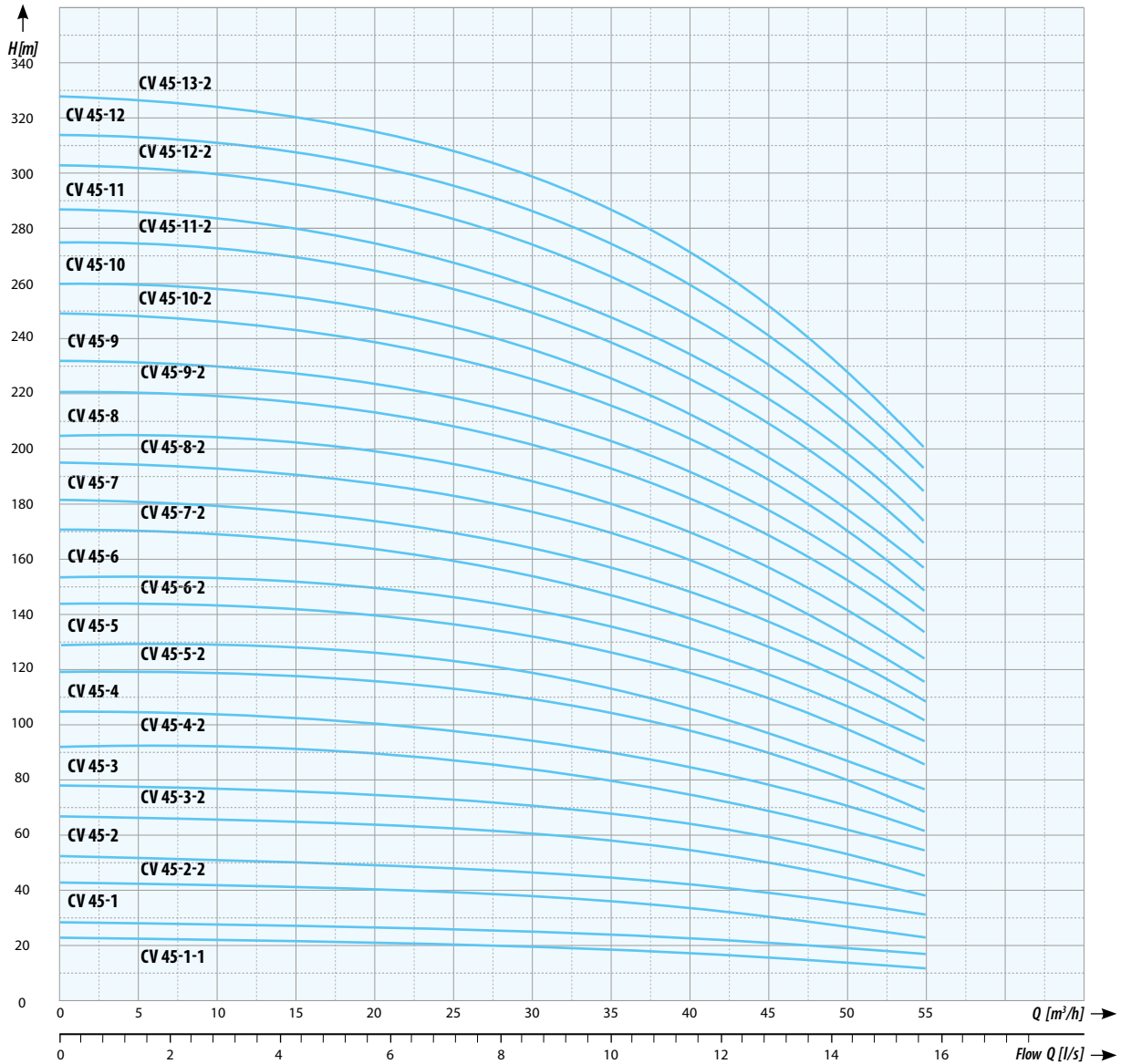


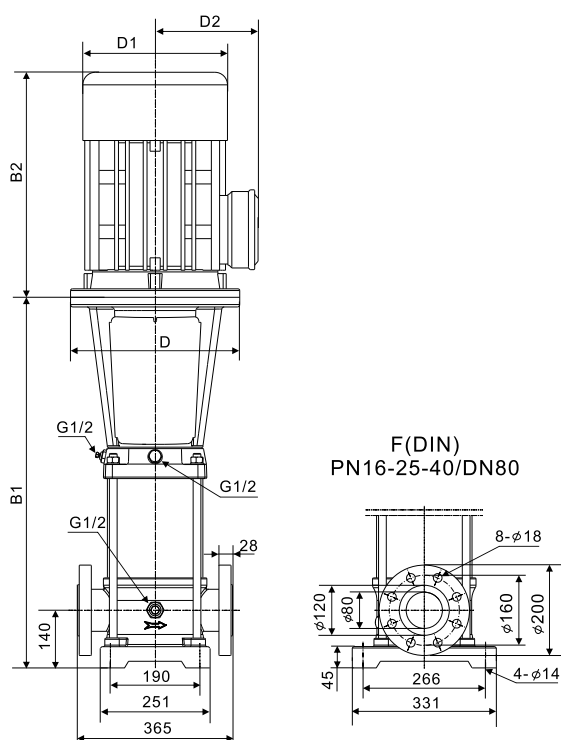


NAME	Power (kW)	Dimension (mm)						Weight (kg)
		B1	B2	B1+B2	D	D1	D2	
CVI / CV 32-1-1	1,5	455	241/293	696/748	-	154	111	60
CVI / CV 32-1	2,2	455	275/293	730/748	—	177	116	61
CVI / CV 32-2-2	3,0	525	293	800	—	177	116	75
CVI / CV 32-2	4,0	525	305	830	—	197	148	86
CVI / CV 32-3-2	4,0	595	305	900	—	197	148	105
CVI / CV 32-3	5,5	620	390	1010	300	275	210	105
CVI / CV 32-4-2	7,5	690	390	1080	300	275	210	116
CVI / CV 32-4	7,5	690	390	1080	300	275	210	117
CVI / CV 32-5-2	11	915	505	1420	350	330	255	170
CVI / CV 32-5	11	915	505	1420	350	330	255	171
CVI / CV 32-6-2	11	985	505	1490	350	330	255	176
CVI / CV 32-6	11	985	505	1490	350	330	255	176
CVI / CV 32-7-2	15	1055	505	1560	350	330	255	206
CVI / CV 32-7	15	1055	505	1560	350	330	255	207
CVI / CV 32-8-2	15	1125	505	1630	350	330	255	208
CVI / CV 32-8	15	1125	505	1630	350	330	255	209
CVI / CV 32-9-2	18,5	1195	560	1750	350	330	255	225
CVI / CV 32-9	18,5	1195	560	1750	350	330	255	226
CVI / CV 32-10-2	18,5	1265	560	1820	350	330	255	230
CVI / CV 32-10	18,5	1265	560	1820	350	330	255	231
CVI / CV 32-11-2	22	1335	590	1925	350	380	280	270
CVI / CV 32-11	22	1335	590	1925	350	380	280	271
CVI / CV 32-12-2	22	1405	590	1995	350	380	280	275
CVI / CV 32-12	22	1405	590	1995	350	380	280	276
CVI / CV 32-13-2	30	1475	660	2135	400	420	305	395
CVI / CV 32-13	30	1475	660	2135	400	420	305	395
CVI / CV 32-14-2	30	1525	660	2185	400	420	305	400
CVI / CV 32-14	30	1525	660	2185	400	420	305	400

NAME	Power P2(kW)	(m ³ /h)	12	16	20	24	28	30	32	36	40
CVI / CV 32-1-1	1.5	H (m)	14.5	14	13	12	11	10.5	10	9	7
CVI / CV 32-1	2.2		19	18	16.5	15.5	14.5	14	13	11.5	9.5
CVI / CV 32-2-2	3.0		30	28	26	24	22	21	19	16	14
CVI / CV 32-2	4.0		36	34	32	30	27	26	24	21	17
CVI / CV 32-3-2	4.0		48	45	42	39	36	34	32	27	21
CVI / CV 32-3	5.5		54	52	49	46	42	39	37	31	25
CVI / CV 32-4-2	7.5		66	63	59	55	50	47	44	38	29
CVI / CV 32-4	7.5		72	69	66	62	56	53	50	42	34
CVI / CV 32-5-2	11		84	80	76	71	64	61	57	48	37
CVI / CV 32-5	11		91	87	83	78	71	66	62	53	42
CVI / CV 32-6-2	11		101	97	92	87	79	75	70	59	47
CVI / CV 32-6	11		109	105	101	95	87	83	77	65	52
CVI / CV 32-7-2	15		119	115	110	105	96	90	84	71	57
CVI / CV 32-7	15		127	123	118	112	103	97	91	78	61
CVI / CV 32-8-2	15		136	132	127	120	110	104	97	82	66
CVI / CV 32-8	15		143	139	134	126	117	111	104	88	70
CVI / CV 32-9-2	18.5		153	149	144	137	126	119	112	95	75
CVI / CV 32-9	18.5		161	157	152	145	134	126	119	102	80
CVI / CV 32-10-2	18.5		172	168	162	154	143	135	127	108	84
CVI / CV 32-10	18.5		179	174	169	162	149	142	134	114	88
CVI / CV 32-11-2	22	189	184	178	170	158	149	141	120	93	
CVI / CV 32-11	22	197	192	186	178	165	157	148	126	97	
CVI / CV 32-12-2	22	207	202	196	187	174	165	155	132	102	
CVI / CV 32-12	22	214	210	203	194	180	171	161	137	107	
CVI / CV 32-13-2	30	225	220	213	203	188	179	169	143	112	
CVI / CV 32-13	30	232	227	220	210	197	187	177	150	118	
CVI / CV 32-14-2	30	243	238	230	220	206	197	185	156	124	
CVI / CV 32-14	30	250	245	237	227	212	203	192	163	130	

CV 45/CVI 45 INOX

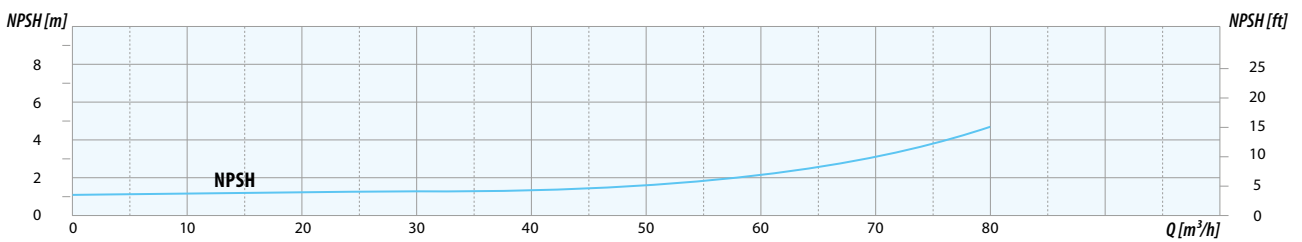
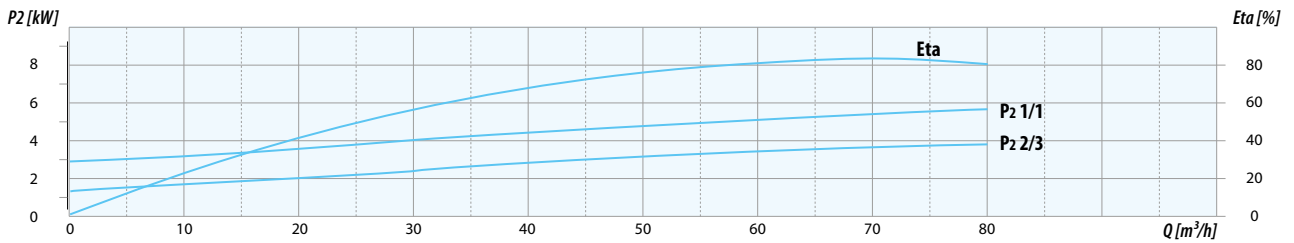
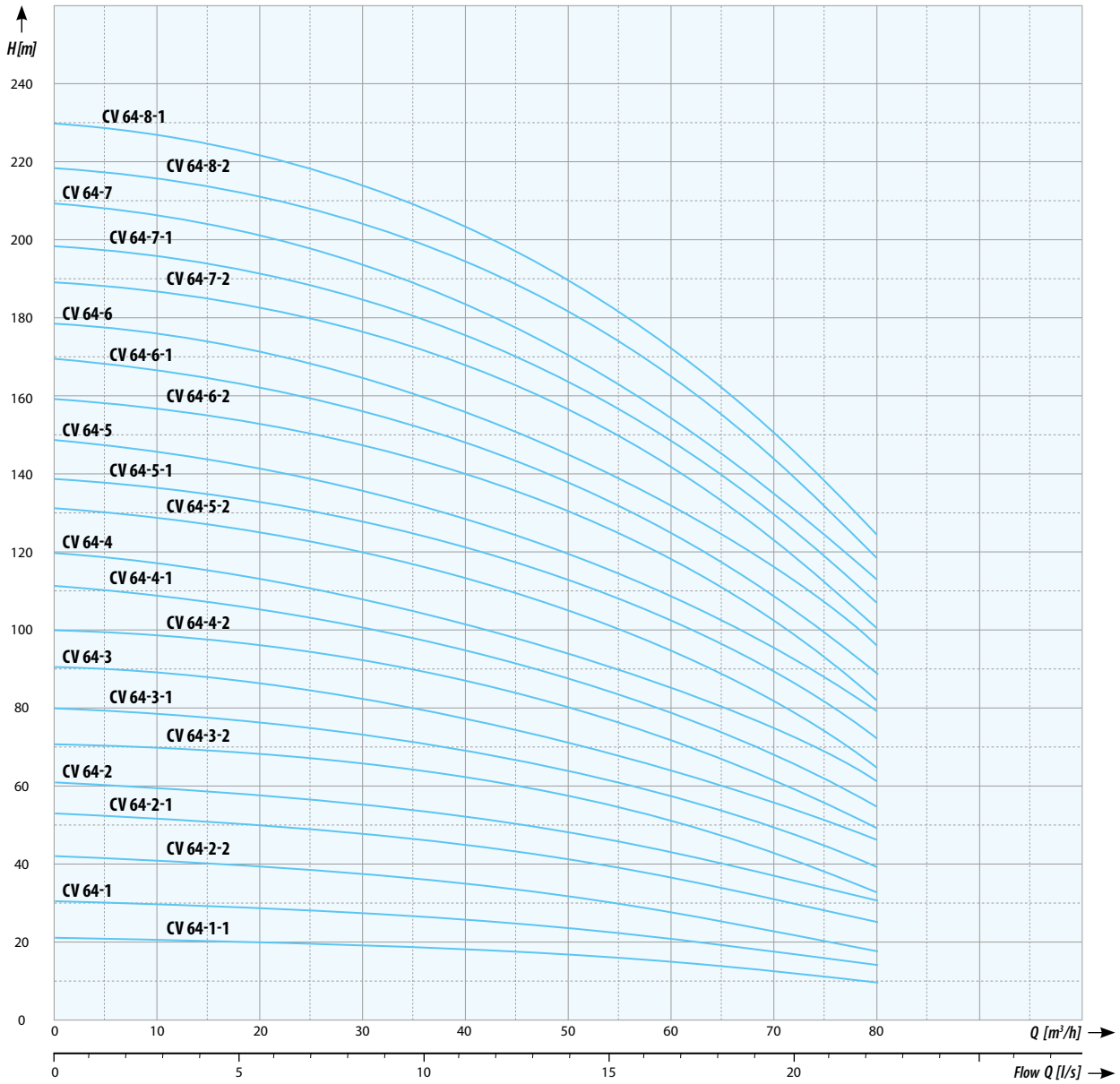


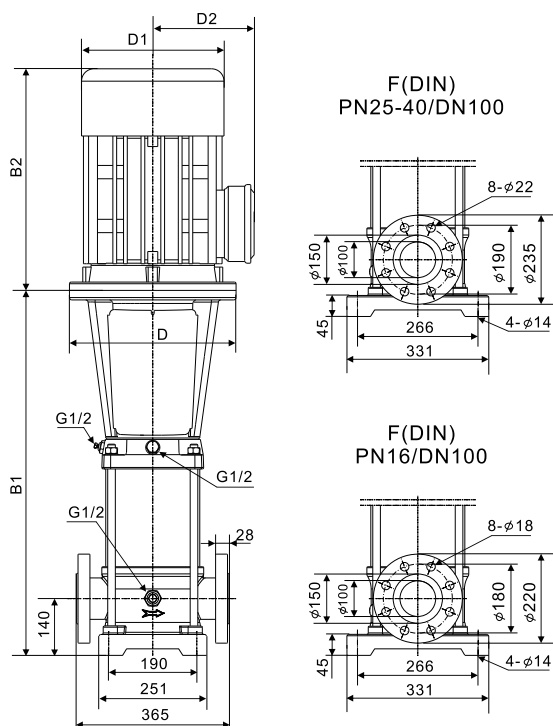


NAME	Power (kW)	Dimension (mm)						Weight (kg)
		B1	B2	B1+B2	D	D1	D2	
CVI 45-1-1	3,0	561	293	876	—	197	165	86
CVI 45-1	4,0	561	315	876	—	260	165	86
CVI 45-2-2	5,5	641	430	1071	300	260	208	102
CVI 45-2	7,5	641	430	1071	300	330	208	102
CVI 45-3-2	11	826	490	1316	350	330	255	175
CVI 45-3	11	826	490	1316	350	330	255	175
CVI 45-4-2	15	906	490	1396	350	330	255	187
CVI 45-4	15	906	490	1396	350	330	255	187
CVI 45-5-2	18,5	986	550	1536	350	330	255	208
CVI 45-5	18,5	986	550	1536	350	330	255	208
CVI 45-6-2	22	1066	590	1656	350	360	285	251
CVI 45-6	22	1066	590	1656	350	360	285	251
CVI 45-7-2	30	1146	660	1806	400	420	310	315
CVI 45-7	30	1146	660	1806	400	420	310	315
CVI 45-8-2	30	1226	660	1886	400	420	310	319
CVI 45-8	30	1226	660	1886	400	420	310	319
CVI 45-9-2	30	1306	660	1966	400	420	310	323
CVI 45-9	37	1306	660	1966	400	420	310	323
CVI 45-10-2	37	1386	660	2046	400	420	310	347
CVI 45-10	37	1386	660	2046	400	420	310	347
CVI 45-11-2	45	1466	700	2166	450	470	345	413
CVI 45-11	45	1466	700	2166	450	470	345	413
CVI 45-12-2	45	1546	700	2246	450	470	345	417
CVI 45-12	45	1546	700	2246	450	470	345	417
CVI 45-13-2	45	1626	700	2326	450	470	345	421

NAME	Power P2(kW)	(m ³ /h)	25	30	35	40	45	50	55
CVI / CV 45-1-1	3.0	H (m)	20	19	18	17	15	13	11
CVI / CV 45-1	4.0		24	23	22	21	19	18	16
CVI / CV 45-2-2	5.5		40	38	36	33	30	27	23
CVI / CV 45-2	7.5		48	46	44	42	39	35	31
CVI / CV 45-3-2	11		63	61	58	54	50	44	38
CVI / CV 45-3	11		72	70	67	63	58	53	45
CVI / CV 45-4-2	15		87	84	80	75	69	62	54
CVI / CV 45-4	15		98	94	87	84	77	70	61
CVI / CV 45-5-2	18.5		113	108	102	96	88	80	69
CVI / CV 45-5	18.5		123	118	112	105	97	88	77
CVI / CV 45-6-2	22		137	132	125	118	109	98	86
CVI / CV 45-6	22		147	141	135	127	118	107	94
CVI / CV 45-7-2	30		160	154	147	139	128	116	101
CVI / CV 45-7	30		169	164	156	147	136	124	109
CVI / CV 45-8-2	30		184	178	169	160	147	132	116
CVI / CV 45-8	30		194	189	180	168	155	141	124
CVI / CV 45-9-2	30		209	202	193	182	169	152	133
CVI / CV 45-9	37		219	212	203	191	177	161	141
CVI / CV 45-10-2	37		233	225	215	203	188	170	148
CVI / CV 45-10	37		245	236	225	212	196	179	156
CVI / CV 45-11-2	45	259	250	239	226	209	191	166	
CVI / CV 45-11	45	267	259	248	235	217	198	174	
CVI / CV 45-12-2	45	284	274	263	248	230	209	183	
CVI / CV 45-12	45	295	286	273	259	239	219	192	
CVI / CV 45-13-2	45	309	300	286	270	250	227	199	

CV 64/CVI 64 INOX

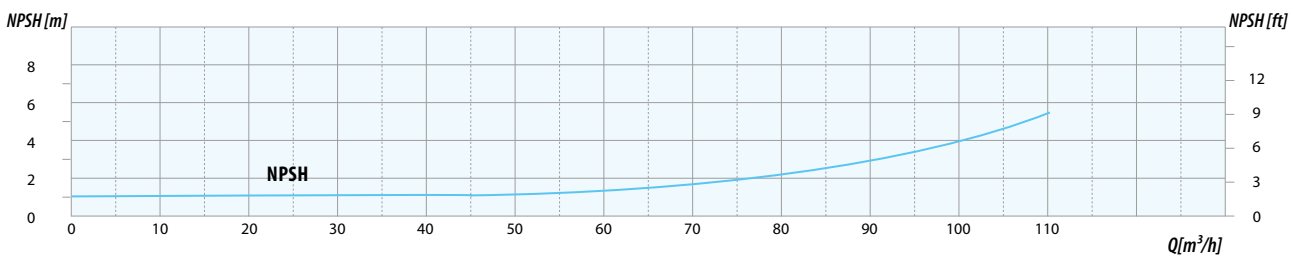
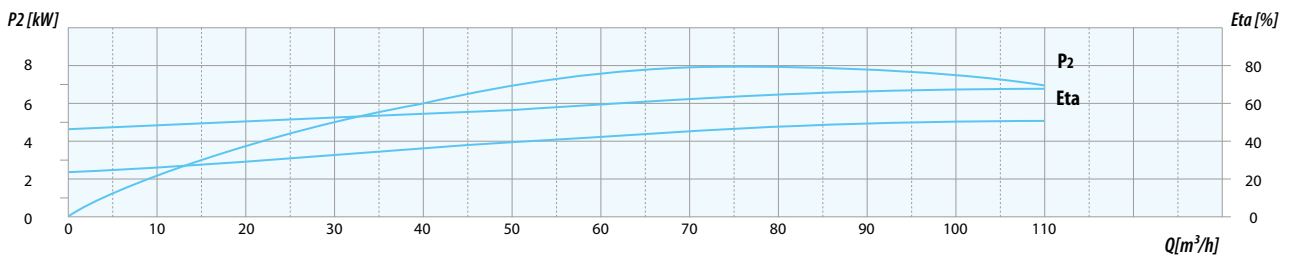
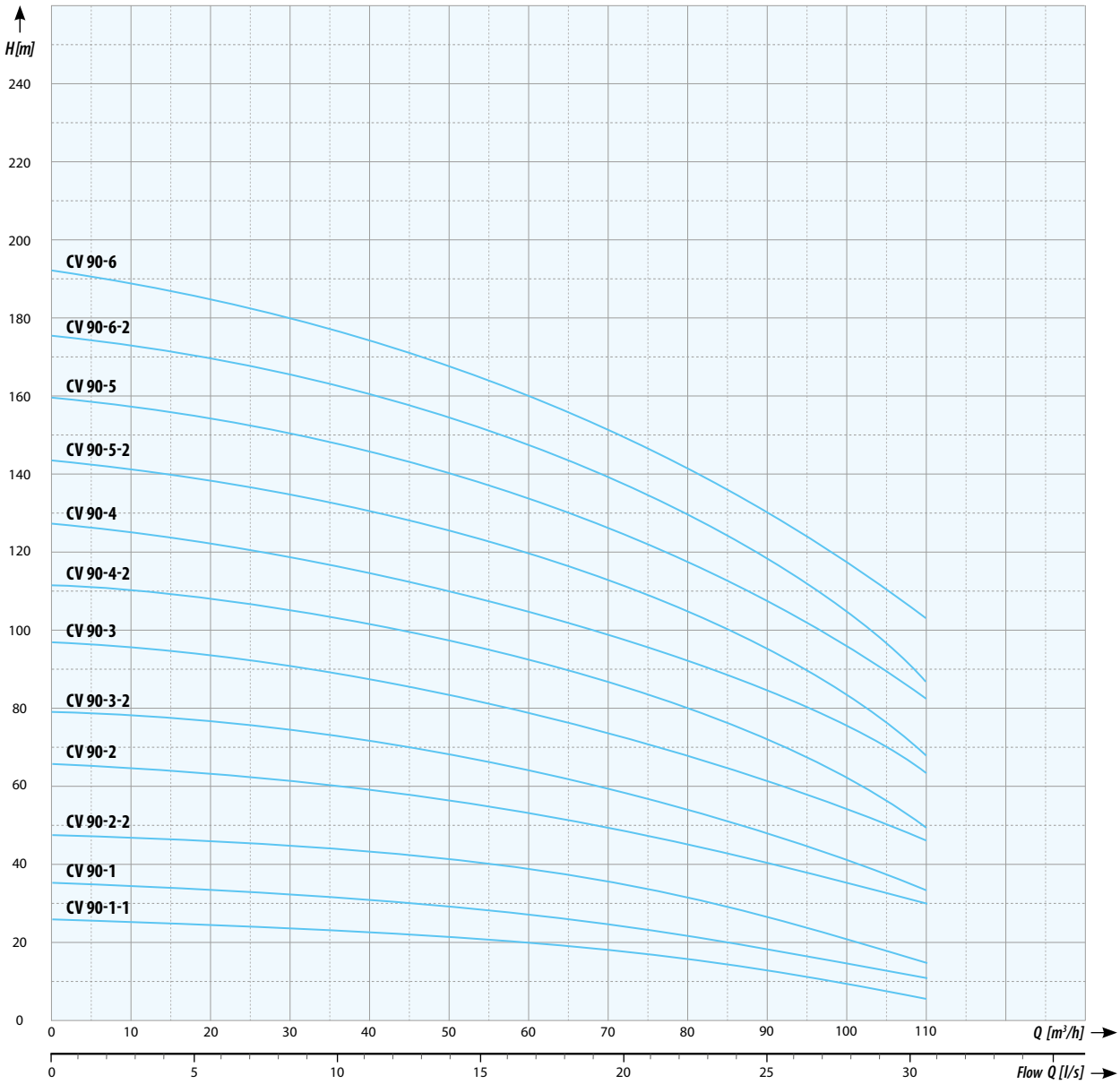


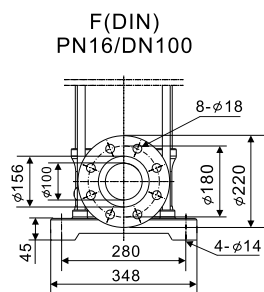
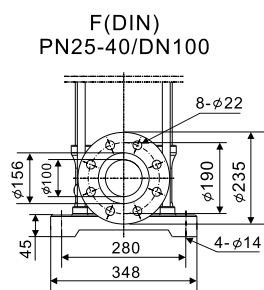
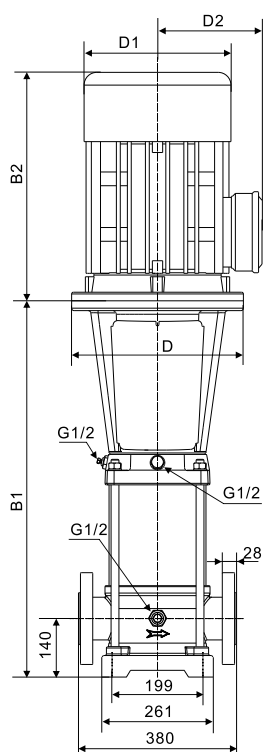


NAME	Power (kW)	Dimension (mm)						Weight (kg)
		B1	B2	B1+B2	D	D1	D2	
CVI 64-1-1	4.0	561	335	896	-	230	188	105
CVI 64-1	5.5	561	430	991	300	260	208	110
CVI 64-2-2	7.5	644	430	1074	300	260	208	120
CVI 64-2-1	11	754	490	1244	350	330	255	155
CVI 64-2	11	754	490	1244	350	330	255	155
CVI 64-3-2	15	836	490	1326	350	330	255	195
CVI 64-3-1	15	836	490	1326	350	330	255	195
CVI 64-3	18.5	836	550	1386	350	330	255	205
CVI 64-4-2	18.5	919	550	1469	350	330	255	208
CVI 64-4-1	22	919	590	1509	350	360	285	260
CVI 64-4	22	919	590	1509	350	360	285	260
CVI 64-5-2	30	1001	660	1661	400	420	310	345
CVI 64-5-1	30	1001	660	1661	400	420	310	345
CVI 64-5	30	1001	660	1661	400	420	310	345
CVI 64-6-2	30	1084	660	1744	400	420	310	350
CVI 64-6-1	37	1084	660	1744	400	420	310	370
CVI 64-6	37	1084	660	1744	400	420	310	370
CVI 64-7-2	37	1166	660	1826	400	420	310	375
CVI 64-7-1	37	1166	660	1826	400	420	310	375
CVI 64-7	45	1166	700	1866	450	420	310	435
CVI 64-8-2	45	1248	700	1948	450	470	345	440
CVI 64-8-1	45	1248	700	1948	450	470	345	440

NAME	Power P2(kW)	(m ³ /h)	30	40	50	60	64	70	80
CVI / CV 64-1-1	4.0	H (m)	19	18	16	14	13	11.5	9
CVI / CV 64-1	5.5		27	25	23	20	19	17	14
CVI / CV 64-2-2	7.5		37	35	32	28	26	23	17
CVI / CV 64-2-1	11		47	44	40	36	34	30	24
CVI / CV 64-2	11		55	51	47	42	40	37	30
CVI / CV 64-3-2	15		66	62	56	50	46	41	32
CVI / CV 64-3-1	15		73	69	63	56	53	48	39
CVI / CV 64-3	18.5		81	76	70	64	60	55	46
CVI / CV 64-4-2	18.5		92	87	80	71	66	60	49
CVI / CV 64-4-1	22		100	94	87	78	73	67	54
CVI / CV 64-4	22		107	101	94	85	80	74	61
CVI / CV 64-5-2	30		119	113	105	95	89	80	64
CVI / CV 64-5-1	30		128	121	112	102	96	87	71
CVI / CV 64-5	30		136	129	119	109	103	94	78
CVI / CV 64-6-2	30		147	140	130	118	112	101	81
CVI / CV 64-6-1	37		157	149	138	125	118	108	88
CVI / CV 64-6	37		164	156	145	132	125	115	95
CVI / CV 64-7-2	37		176	167	156	140	133	121	99
CVI / CV 64-7-1	37		185	176	163	147	140	128	106
CVI / CV 64-7	45		193	183	170	155	147	135	112
CVI / CV 64-8-2	45	204	194	181	164	155	142	116	
CVI / CV 64-8-1	45	214	203	189	170	162	149	123	

CV 90/CVI 90 INOX





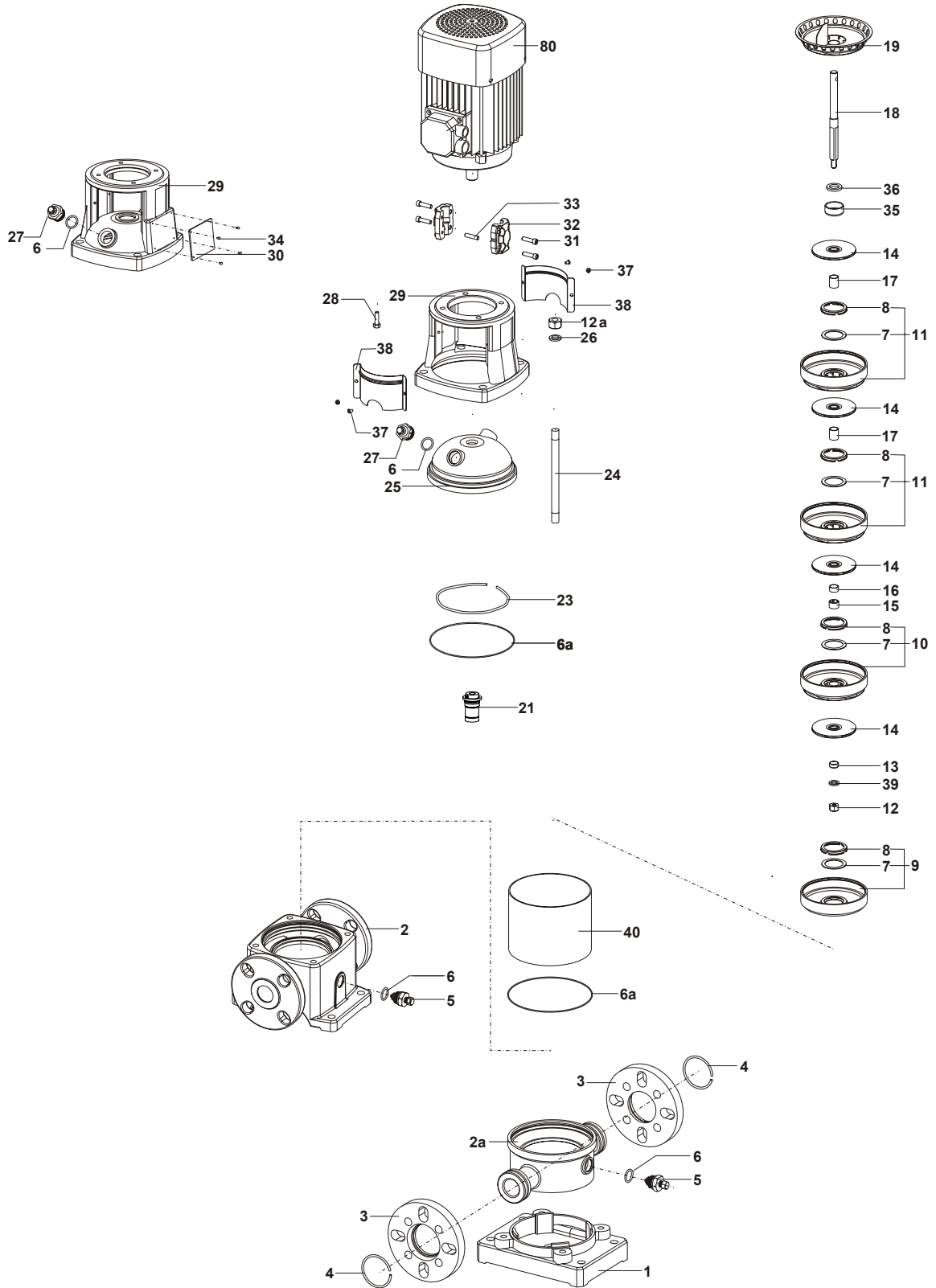
NAME	Power (kW)	Dimension (mm)						Weight (kg)
		B1	B2	B1+B2	D	D1	D2	
CVI 90-1-1	5,5	571	430	1001	300	260	208	120
CVI 90-1	7,5	571	430	1001	300	260	208	122
CVI 90-2-2	11	773	490	1263	350	330	255	165
CVI 90-2	15	773	490	1263	350	330	255	198
CVI 90-3-2	18,5	865	550	1415	350	330	255	212
CVI 90-3	22	865	590	1455	350	360	285	265
CVI 90-4-2	30	957	660	1417	400	420	310	348
CVI 90-4	30	957	660	1617	400	420	310	348
CVI 90-5-2	37	1049	660	1709	400	420	310	375
CVI 90-5	37	1049	660	1709	400	420	310	375
CVI 90-6-2	45	1141	700	1841	450	470	345	438
CVI 90-6	45	1141	700	1841	450	470	345	438

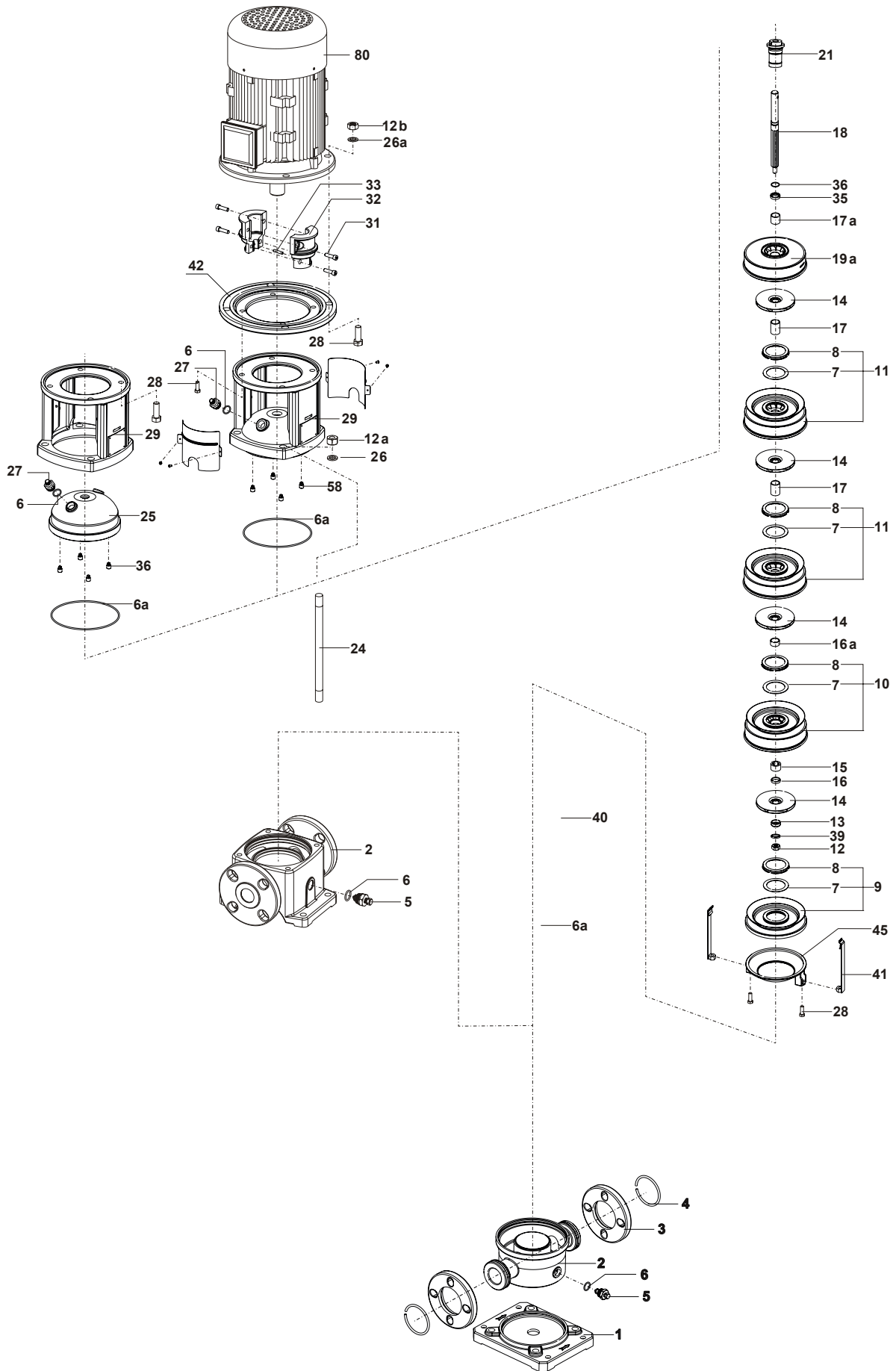
NAME	Power P2(kW)	(m ³ /h)	50	60	70	80	85	90	100	110
CVI / CV 90-1-1	5.5	H (m)	22	20	18	16	15	13	10	6
CVI / CV 90-1	7.5		30	27	25	23	21	19	15	11
CVI / CV 90-2-2	11		41	39	36	32	30	28	22	15
CVI / CV 90-2	15		56	53	49	45	43	40	35	30
CVI / CV 90-3-2	18.5		68	65	60	55	52	49	41	33
CVI / CV 90-3	22		83	79	73	67	64	61	54	47
CVI / CV 90-4-2	30		98	93	87	80	76	72	62	50
CVI / CV 90-4	30		110	105	100	92	88	84	75	65
CVI / CV 90-5-2	37		126	120	113	105	100	95	83	68
CVI / CV 90-5	37		140	133	126	117	113	107	95	83
CVI / CV 90-6-2	45		155	148	139	129	124	118	104	87
CVI / CV 90-6	45		168	160	151	141	135	130	117	103

NR	OPIS	MATERIAŁ
1	Base plate	Cast iron
2	Pump housing	Cast iron
2a	Pump housing	SUS304
3	Flange	Cast iron
4	Circlip	SUS201
5	Drainage	SUS304
6	O-ring seal	NBR
6a	O-ring seal	NBR
6b	O-ring seal	NBR
7	Sealing	Ptfe
7a	Sealing	Ptfe
8	Sealing plate	SUS304
9	Inlet section	SUS304
9a	Inlet section	SUS304
10	Supporting Venturi tube	SUS304
10a	Supporting Venturi tube	SUS304
11	Venturi tube	SUS304
11a	Venturi tube	SUS304
12	Nut	Zinc
12a	Nut	Zinc
12b	Nut	Zinc
13	Driven impeller sleeve	SUS304
14	Driven impeller	SUS304
15	Bearing sleeve	Tungsten carbide
15a	Bearing sleeve	Tungsten carbide
16	Short sleeve I	SUS304
16a	Short sleeve II	SUS304
17	Long sleeve	SUS304
17a	Long sleeve	SUS304
18	Shaft	SUS431
19	Outlet section	SUS304
19a	Outlet section	SUS304
19b	Outlet section	SUS304
20	Fixed sealing ring	Węgiel
21	Rotating ring	Tungsten carbide
22	Mechanical seal	Carbon/Tungsten carbide/ viton
23	Flexible ring	SUS304
24	Stud bolt	Zinc
25	Pump cover	SUS304
26	Washer	SUS304

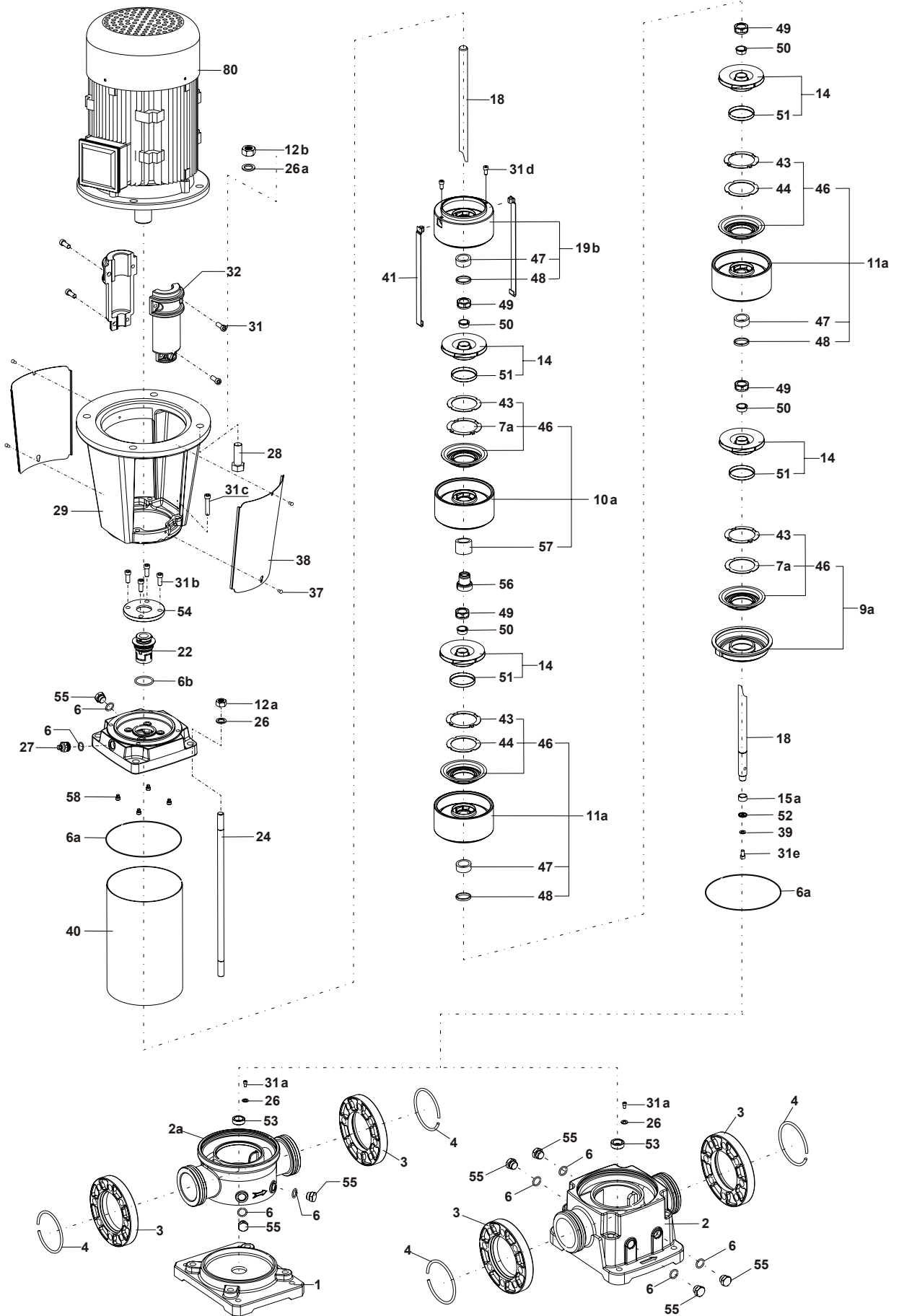
NR	OPIS	MATERIAŁ
27	Air plug	SUS304
28	Bolt	Zinc
28a	Bolt	Zinc
29	Motor frame	HT200
30	Nameplate	Aluminium
31	Threaded pin	Zinc
31a	Threaded pin	Zinc
31b	Threaded pin	Zinc
31c	Threaded pin	Zinc
31d	Threaded pin	Zinc
31e	Threaded pin	Zinc
32	Shaft coupling	QT450-10
33	Screw	Zinc
34	Pin	H62
35	Clip sleeve	SUS304
36	Clip ring	SUS304
37	Screw	SUS304
38	Coupling guard	SUS304
39	Spring pad	SUS304
40	Outer sleeve	SUS304
41	C-link set	SUS304
42	Motor flange	Cast iron
43	Seal	NBR
44	Oval flange	Cast iron
45	Mounting cover	SUS304
46	Neck ring	SUS304
47	Liner	PTFE
48	Support ring	SUS304
49	Nut	SUS304
50	Cone	SUS304
51	Wear ring for driven impeller	SUS304
52	Clip sleeve	SUS304
53	Plain bearing	Tungsten carbide
54	Gland cover	Stal zlewna
55	Drain	SUS304
56	Bearing sleeve	Tungsten carbide +SUS304
57	Plain bearing	Tungsten carbide
58	Rubber foot	Viton
80	Motor	SUS304

CV/CVI: 1/2/3/4/5

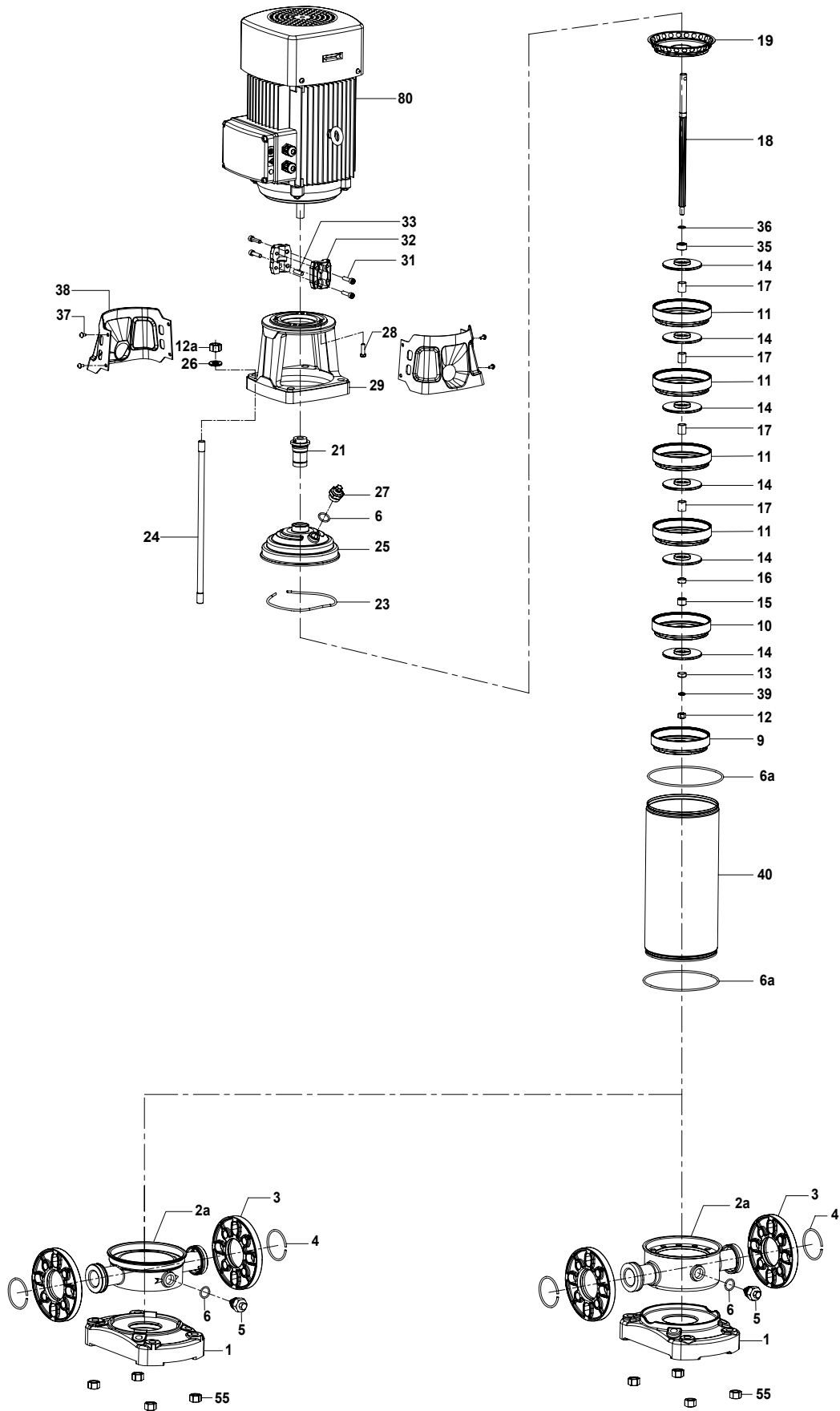




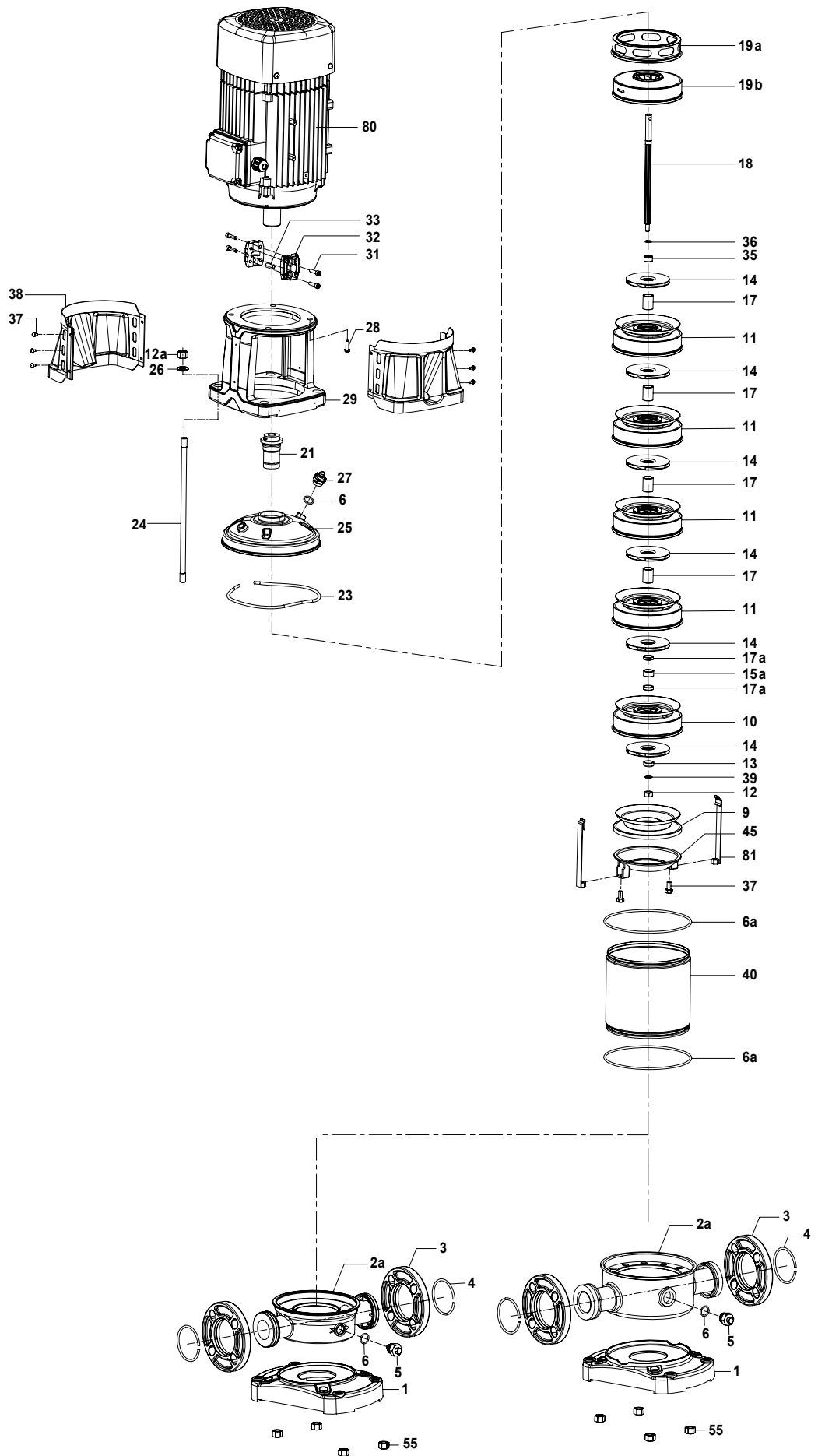
CV / CVI: 32 / 45 / 64 / 90



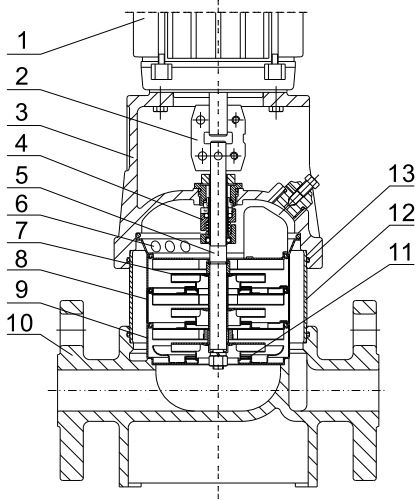
CVI - IE3: 1/2/3/4/5



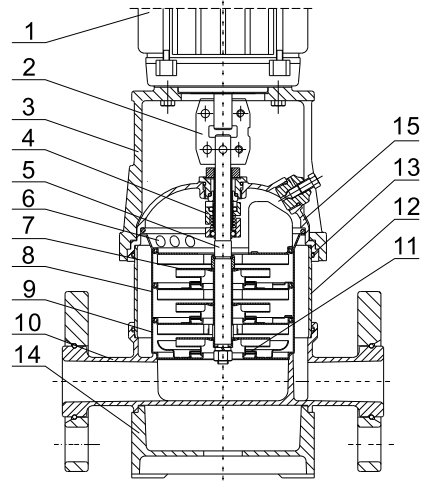
CVI - IE3: 10 / 15 / 20



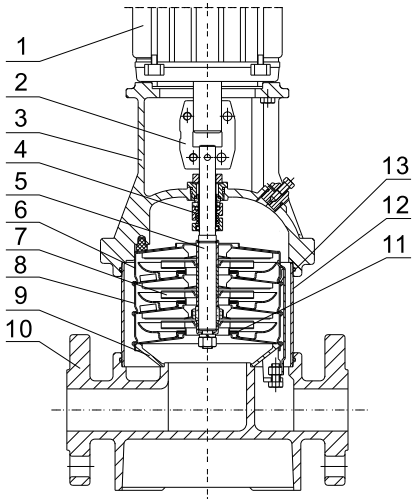
CV 1, 2, 3, 4, 5



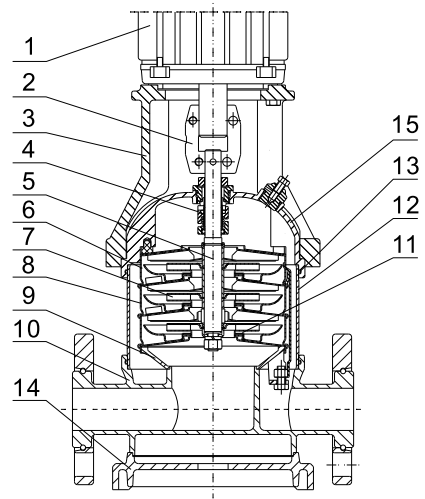
CVI 1, 2, 3, 4, 5



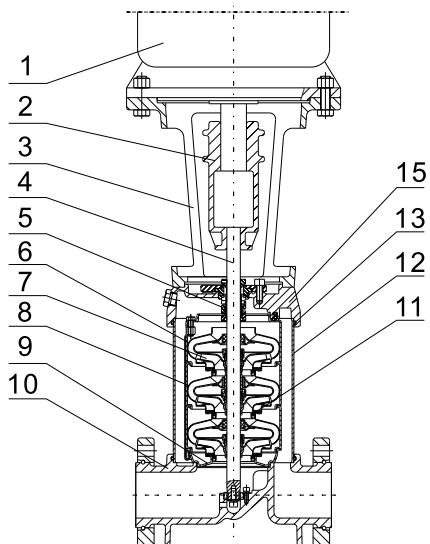
CV 10, 15, 20



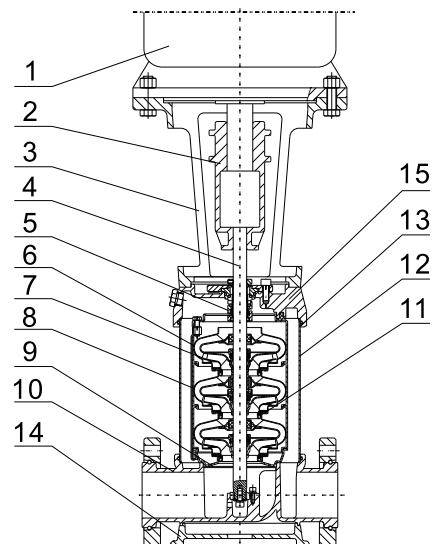
CVI 10, 15, 20



CV 32, 64, 90



CVI 32, 64, 90



	Part	CVI		CV	
		Material	AISI/ASTM	Material	AISI/ASTM
1	Motor	-	-	-	-
2	Shaft connector	-	-	-	-
3	Pump head	Cast iron	ASTM25B	Cast iron	ASTM25B
4	Mechanical seal	-	-	-	-
5	Shaft	S.S	AISI431	S.S	AISI420
6	Outlet	S.S	AISI304	S.S	AISI304
7	Impeller	S.S	AISI304	S.S	AISI304
8	Hydraulic stack	S.S	AISI304	S.S	AISI304
9	Inlet	S.S	AISI304	S.S	AISI304
10	Pump body	S.S	AISI304	Cast iron	ASTM25B
11	Neck ring	PTFE	-	PTFE	-
12	Outer sleeve	S.S	AISI304	S.S	AISI304
13	O-ring	EPDM/FKM	-	EPDM/FKM	-
14	Bottom base	Cast iron	ASTM25B	-	-
15	Pump cover	S.S	AISI304	Cast iron	ASTM25B

STANDARD MOTOR				
Power P2 (kW)	Voltage (V)	Current IN (A)	Power fsctor cos φ	Efficiency (%)
0.37	△ 220/Y380	△ 1.7/Y1.0	0.81	70.0
0.55	△ 220/Y380	△ 2.4/Y1.4	0.82	73.0
0.75	△ 220/Y380	△ 3.2/Y1.8	0.83	75.0
1.1	△ 220/Y380	△ 4.5/Y2.6	0.84	76.2
1.5	△ 220/Y380	△ 6/Y3.5	0.84	78.5
2.2	△ 220/Y380	△ 8.4/Y4.9	0.85	81.0
3.0	△ 220/Y380	△ 11/Y6.3	0.87	82.6
4.0	△ 380/Y660	△ 8.2/Y4.7	0.88	84.2
5.5	△ 380/Y660	△ 11.1/Y6.4	0.88	85.7
7.5	△ 380/Y660	△ 14.9/Y8.6	0.88	87.0
11	△ 380/Y660	△ 21.2/Y12.2	0.89	88.4
15	△ 380/Y660	△ 28.6/Y16.5	0.89	89.4
18.5	△ 380/Y660	△ 34.7/Y20.0	0.90	90.0
22	△ 380/Y660	△ 41.0/Y23.6	0.90	90.5
30	△ 380/Y660	△ 55.4/Y31.9	0.90	91.4
37	△ 380/Y660	△ 67.9/Y39.1	0.90	92.0
45	△ 380/Y660	△ 82.1/Y47.3	0.90	92.5

STANDARD MOTOR				
Power P2 (kW)	Voltage (V)	Current IN (A)	Power fsctor cos φ	Efficiency (%)
0.75	△ 220/Y380	△ A3.1/Y1.8	0.82	77.4
1.1	△ 220/Y380	△ 4.4/Y2.5	0.83	79.6
1.5	△ 220/Y380	△ 5.8/Y3.3	0.84	81.3
2.2	△ 220/Y380	△ 8.2/Y4.7	0.85	83.2
3.0	△ 220/Y380	△ 10.7/Y6.2	0.87	84.6
4.0	△ 380/Y660	△ 8.0/Y4.6	0.88	85.8
5.5	△ 380/Y660	△ 10.9/Y6.3	0.88	87
7.5	△ 380/Y660	△ 14.5/Y8.4	0.89	88.1
11	△ 380/Y660	△ 21/Y12.1	0.89	89.4
15	△ 380/Y660	△ 28.4/Y16.3	0.89	90.3
18.5	△ 380/Y660	△ 34.7/Y20	0.89	90.9
22	△ 380/Y660	△ 41.1/Y23.7	0.89	91.3
30	△ 380/Y660	△ 55.7/Y32.1	0.89	92
37	△ 380/Y660	△ 68.3/Y39.3	0.89	92.5
45	△ A380/Y660	△ 82.7/Y47.6	0.89	92.9

Submersible pumps



RQE AUTO RAIN

RQE AUTO

QBO

SUBMERSIBLE PUMPS FOR SEWAGE WE

SUBMERSIBLE SEWAGE PUMPS INCL. SHREDDER

SUBMERSIBLE SEWAGE PUMPS INCL. CUTTING ROTOR

RQE AUTO RAIN

SUBMERSIBLE HIGH PRESSURE PUMPS

RQE AUTO RAIN is a series of the high pressure submersible pumps designed for irrigation systems. Pumps are equipped with a built-in automatic pump control. Opening the valve or tap turns on the pump and when the valve or outlet tap is closed, the pump goes into standby mode and turns off, keeping the pressure in the system constant. RQE pumps use a cooling jacket, which means that the pumps do not have to be completely submerged. Instead of a filter mesh, the RQE around the pump is equipped a 1-inch suction port dedicated for connecting suction hose with a check valve. The advantage of this solution is protection against sedimentation - the pump does not suck the water from the bottom of the tank which usually can be contaminated with sediments. The RQE pump is also equipped with thermal protection in the motor winding.

The RQE AUTO RAIN pump has an anti-blocking system. If the pump is not used for more than a 24 hours, the pump will be automatically started for 2 minutes every 24 hours, eliminating the risk of blocking the pump by sediment.

APPLICATION:

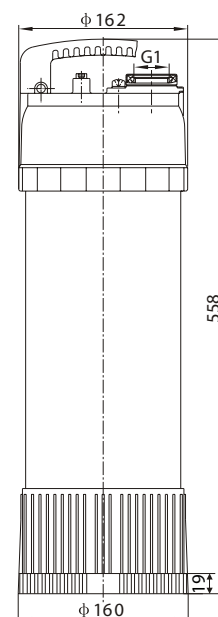
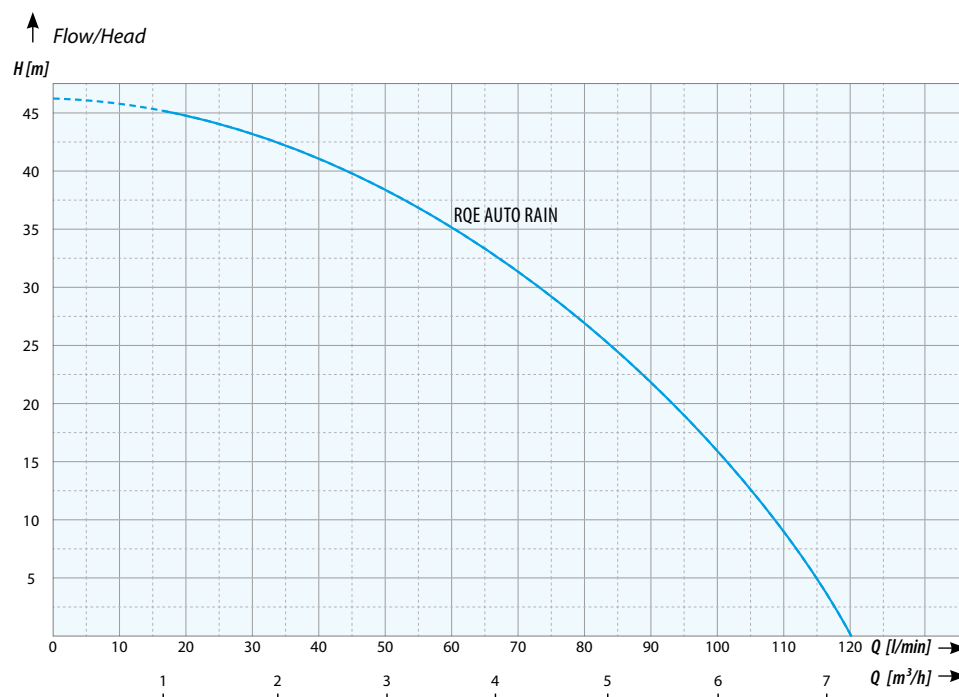
Installation in rainwater tanks to supply rainwater to gardens. Water supply for houses from wells and garden watering installations. The pumps can be used in ponds and for obtaining water from sources like lake or river.

TECHNICAL DATA:

- Maximum liquid temperature 40 °C
- Maximum ambient temperature 50 °C
- Thermal protection: yes
- Operating mode: continuous
- Protection: IP68
- Winding insulation class: 155 (F)
- Motor rotation speed: 2850 RPM

MATERIALS:

- Motor housing: AISI 304 stainless steel
- Shaft and rotor: AISI 304 stainless steel
- Impeller: noryl
- Mechanical seal: ceramic / carbon / NBR
- Motor speed: 2860 RPM
- Electric cable: 10m H07-RNF



NAME	Head (m)	Flow (l/min)	Motor power (W)	Voltage (V)	Impeller passage (mm)	Amperage (A)	Inlet/outlet [inch]	Impeller passage (cm)	Weight (kg)
RQE AUTO RAIN	47	120	1000	230	5	5,8	1	18/56	13

RQE AUTO

SUBMERSIBLE HIGH PRESSURE PUMPS

RQE AUTO is a series of the high pressure submersible pumps designed for irrigation systems which are equipped with a built-in automatic pump control. Opening the valve or tap turns on the pump and when the valve or outlet tap is closed, the pump goes into standby mode and turns off, keeping the pressure in the system constant. RQE pumps use a cooling jacket, which means that the pumps do not have to be completely submerged. The base of the pump is finished with a filtering screen that allows water to be pumped out to the level of 5 cm. All pumps have thermal protection installed in the motor winding. The flow sensor protects the pump: if the sensor detects no water in the tank, the pump will be automatically turned off.

The RQE AUTO pump has an anti-blocking system. If the pump is not used for more than a 24 hours, the pump will be automatically started for 2 minutes every 24 hours, eliminating the risk of blocking the pump by sediment.

APPLICATION:

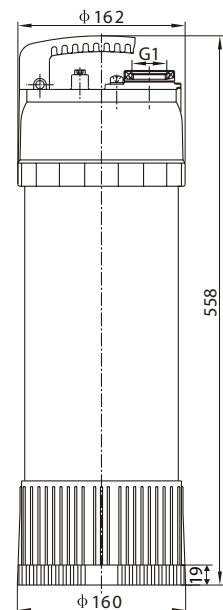
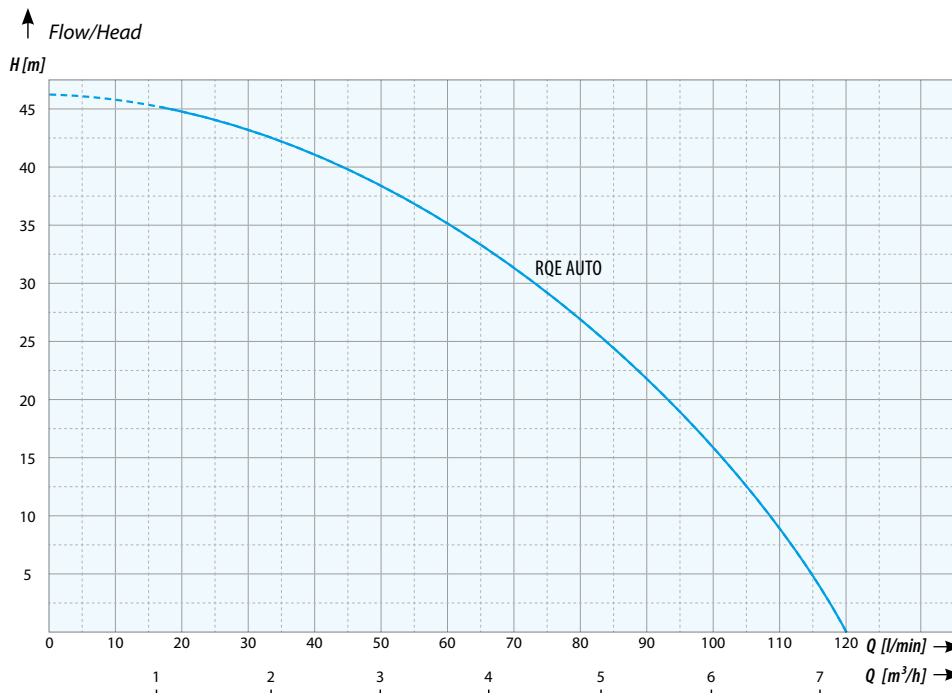
Installation in rainwater tanks to supply the gardens with rainwater. Supply of houses with water from whirlpool wells and irrigation systems for gardens. The pumps can be used in water pockets and to extract water from springs whose water level is at the surface.

TECHNICAL DATA:

- Maximum liquid temperature 40 °C
- Maximum ambient temperature 50 °C
- Thermal protection: yes
- Operating mode: continuous
- Protection: IP68
- Winding insulation class: 155 (F)
- Motor rotation speed: 2850 RPM

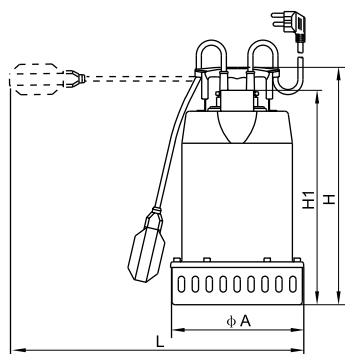
MATERIALS:

- Motor housing: AISI 304 stainless steel
- Shaft and rotor: AISI 304 stainless steel
- Impeller: noryl
- Mechanical seal: ceramic / carbon / NBR
- Motor speed: 2860 RPM
- Electric cable: 10m H07-RNF



NAME	Head (m)	Flow (l/min)	Motor power (W)	Voltage (V)	Impeller passage (mm)	Amperage (A)	Inlet/outlet [inch]	Impeller passage (cm)	Weight (kg)
RQE AUTO	47	120	1000	230	5	5,8	1 x 1	18/59	13

QBO



NAME	H	H1	L	L1	A
QBO 45	273	231	380	242	167
QBO 100	360	324	485	285	211
QBO 200	375	339	500	285	211



Stainless steel submersible pumps for pumping clean and slightly contaminated water. Due to the highest-quality standards and made of stainless steel, the pumps ensure many years of maintenance-free operation. The motor is equipped with thermal protection installed in the winding. The pumps are designed with a cooling jacket, which means that they do not have to be completely submerged in water. The pumps are entirely made of stainless steel and the double mechanical seal guarantees reliability.

APPLICATION:

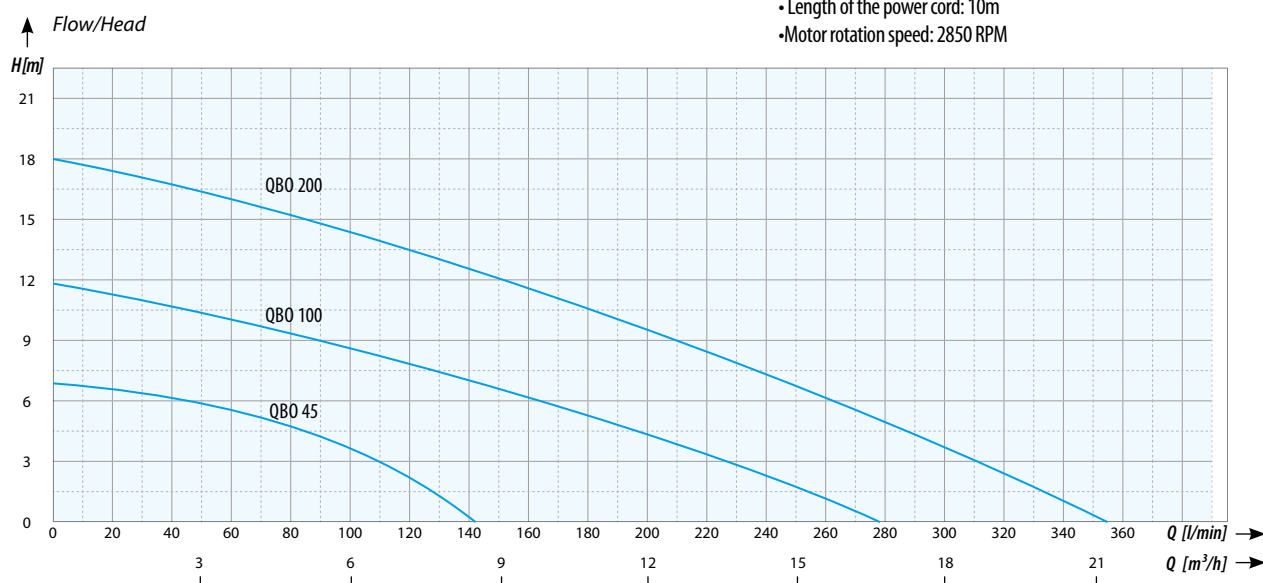
Pumping rainwater and surface water from ponds, lakes and rivers, supplying ponds. Drainage of flooded rooms, houses, garages and premises, use in fish farms. Thanks to the material, the pump can pump sea water.

WORKING CONDITIONS:

- Maximum liquid temperature 50 °C
- Maximum ambient temperature 40 °C
- Thermal protection: yes (one phase)
- Winding insulation class: 155 (F)
- Operation mode - continuous
- Ingress protection - IP68
- pH of the water: 4-10

MATERIALS:

- Motor housing: AISI 304 stainless steel
- Shaft and rotor: AISI 304 stainless steel
- Impeller: AISI 304 stainless steel (for QBO45 - noryl)
- Mechanical seal: ceramic / carbon / NBR
- Length of the power cord: 10m
- Motor rotation speed: 2850 RPM



NAME	Head (m)	Flow (l/min)	Motor power (W)	Voltage (V)	Suction lift (m)	Amperage (A)	Inlet/outlet (inch)	Impeller passage (cm)	Weight (kg)
QBO 45	7	140	250	230	2	1,9	1¼	12/16	5,5
QBO 100	12	275	750	230	5	4,5	1½	18/38	10,5
QBO 200	18	350	1100	230	5	7,8	1½	17/40	13

SUBMERSIBLE PUMPS FOR SEWAGE WE

- The wide impeller channels allow unobstructed flow that is hard to block
- The unique combination of mechanical seals and bearings allows the use of a short shaft with high stiffness
- Pumps adapted to various installation versions
- Perfect combination of mechatronics, safety and reliability, and easy maintenance
- Two independent humidity sensors in the oil chamber and in the motor, and a thermal sensor in the stator winding
- Innovative sludge mixing system around the pump inlet for suction of even larger amounts of impurities
- S1 submerged motor for continuous operation, winding insulation class F, device protection IPX8



The presented WE sewage pumps with an motor power of up to 7.5kW combine the advantages of many other products. Years of experience in the use of hydraulic models, mechanical structures and various aspects of seals have allowed us to develop a comprehensive design that can boast high efficiency, energy saving properties and high reliability. Simpler structure, easier disassembly and maintenance, more economical and practical pump.

The WE type submersible pump is suitable for the following applications: raw water and waste water supply, irrigation systems, drainage of groundwater, fountains and drainage of trenches.

TECHNICAL DATA:

1. 400V 50Hz 3-phase power supply
2. Ambient temperature up to 40°C
3. pH range of 4-10
4. Density $\leq 1050\text{kg/m}^3$
5. Minimum level of the utility in the drawing as s
6. Permitted continuous operation S1 when fully submerged.
7. Maximum number of startups per hour: 15
8. Do not use in highly corrosive environments and for utilities containing corrosive or abrasive particles.

Use for clear, thin, non-aggressive liquids without solid particles or fibres longer than 80% of the pump passage diameter.



Product names

1	2	3		4	5	6	7
WE	65	25	-	4	2	L	Z*

Eg. WE6515-42L

Pump type: WE (two-channel closed), WES (inlet chopper) and ZWE (chopping impeller)

1. Connection diameter DN (40, 50, 65, 80, 100)
2. Approximate passage through the impeller (from 15 to 50)
3. Pump power e.g. 4 kW
5. Lifting range L-low, H-high, - no symbol means one model in the series
6. Installation version:

Z - With an attachment for the coupling foot,

Y - Portable with a rigid discharge pipeline,

R - Portable with a flexible discharge hose,

* - No symbol means the pump itself is prepared for a standard attachment

Tabela pomp

Lp.	Name	Outlet mm	Power kW	RPM n	H _N m	Q _N m ³ /h	I _N A	Cos φ	η %	Z _S * A	Passage mm	Weight kg
1	WE4015-032	40	0,37	2825	8	5	1	0,82	70	1-4	15	18
2	WE4015-052	40	0,55	2825	12	6	1,4	0,84	73	1-4	15	20
3	WE5015-072	50	0,75	2825	12	10	1,8	0,84	75	1-4	15	22
4	WE5015-12L	50	1,1	2825	16	10	2,5	0,86	77	4-6,3	15	23
5	WE5015-12H	50	1,5	2840	20	10	3,4	0,85	82	4-6,3	14	26
6	WE5015-22	50	2,2	2840	25	10	4,7	0,86	78	4-6,3	14	30
7	WE5020-072	50	0,75	2825	6	20	1,8	0,83	75	1-4	21	22
8	WE5020-12	50	1,1	2825	10	20	2,5	0,86	77	4-6,3	21	23
9	WE5020-32	50	3,0	2880	30	15	6,4	0,87	82	6,3-10	21	40
10	WE5020-42	50	4,0	2890	31	20	8,2	0,87	85,5	10-16	21	42
11	WE5020-52	50	5,5	2920	42	20	11,1	0,88	85,5	10-16	20	65
12	WE5025-12L	50	1,5	2840	10	30	3,4	0,85	78	4-6,3	25	29
13	WE5025-12H	50	1,5	2840	14	20	3,4	0,85	78	4-6,3	24	26
14	WE5030-22	50	2,2	2840	14	30	4,7	0,86	82	4-6,3	28	32
15	WE6525-32	65	3,0	2880	18	30	6,4	0,87	82	6,3-10	26	42
16	WE6525-42	65	4,0	2890	22	40	8,2	0,87	85,5	10-16	26	44
17	WE6525-52	65	5,5	2920	30	40	11,1	0,88	85,5	10-16	26	63
18	WE6525-72	65	7,5	2920	38	40	15	0,88	86,2	14-20	26	73
19	WE8030-22	80	2,2	2840	10	50	4,7	0,86	82	4-6,3	28	35
20	WE8030-32	80	3,0	2880	11	55	6,4	0,87	82	6,3-10	32	44
21	WE8030-42	80	4,0	2890	16	55	8,2	0,87	85,5	10-16	32	45
22	WE8030-52	80	5,5	2920	20	55	11,1	0,88	85,5	10-16	31	65
23	WE8030-72	80	7,5	2920	25	55	15	0,88	85,5	14-20	31	73
24	WE10050-34	100	3,0	1420	9	75	6,8	0,81	82,5	6,3-10	48	61
25	WE10050-44	100	4,0	1440	11	80	8,8	0,82	84,5	10-16	48	65
26	WE10050-54	100	5,5	1440	10	130	11,6	0,84	85,5	10-16	51	101
27	WE10050-74	100	7,5	1440	11	150	15,4	0,85	87	14-20	51	113

* Overload protection of the engine

PARTS

Motor and pump housing, impeller, engine compartment, oil chamber

Pump shaft

Screw connections

Bearings

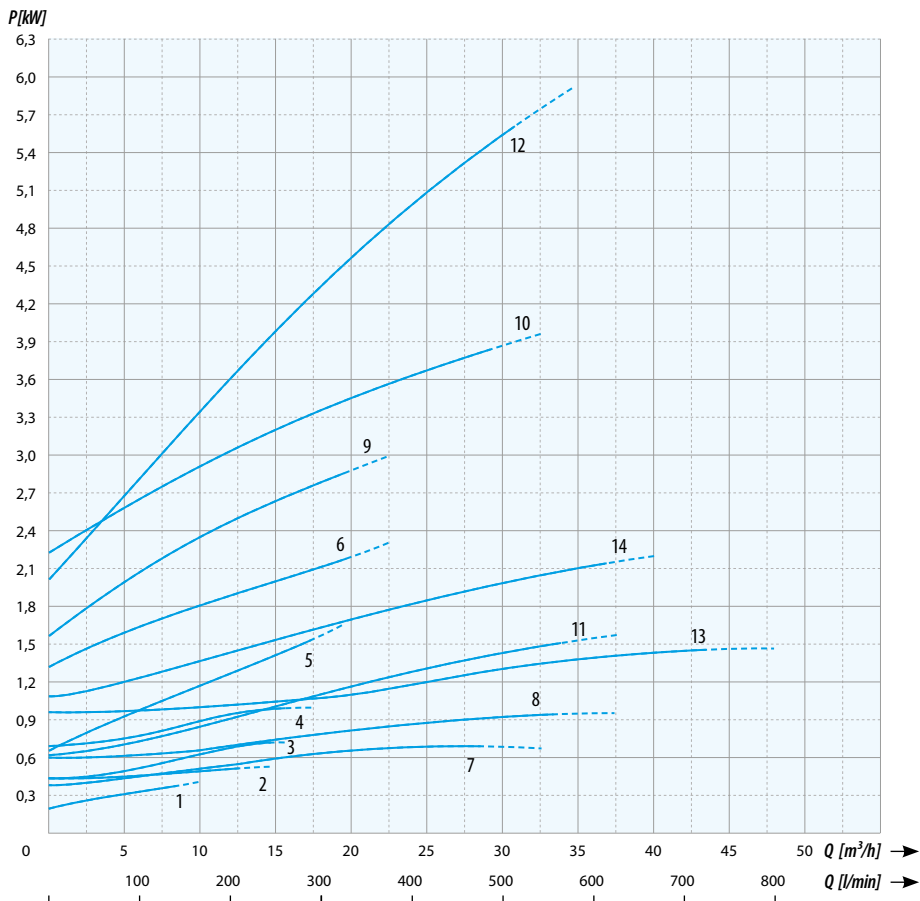
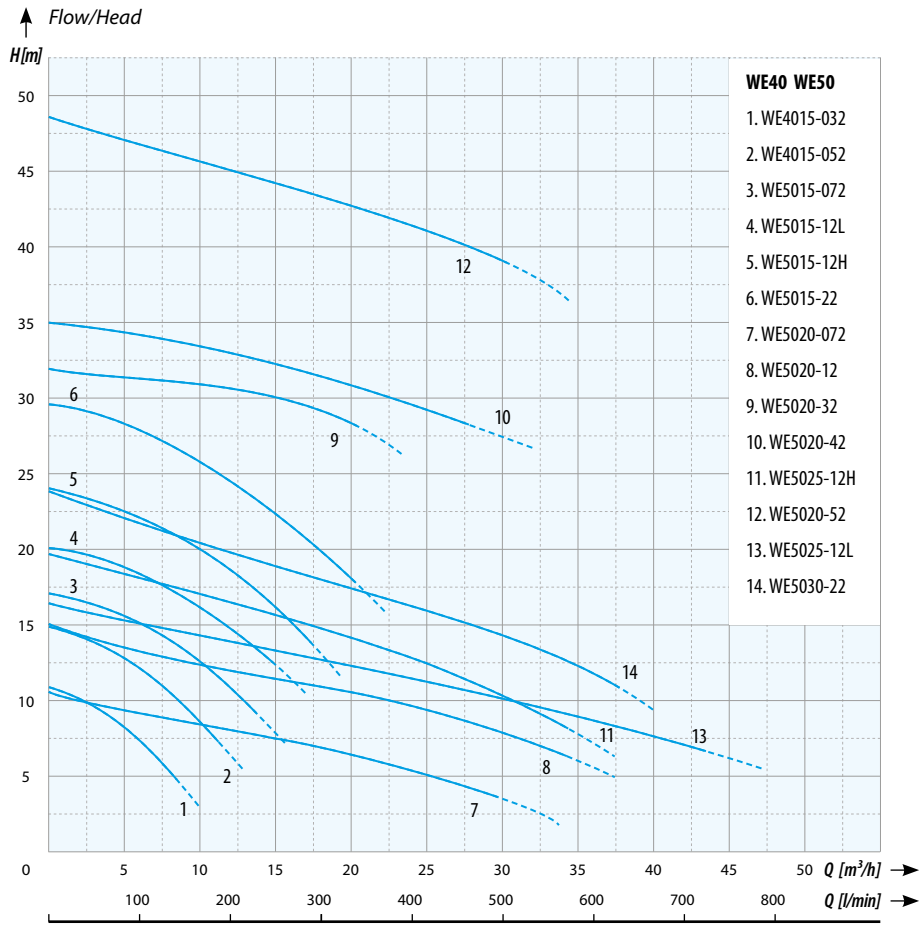
MATERIAL

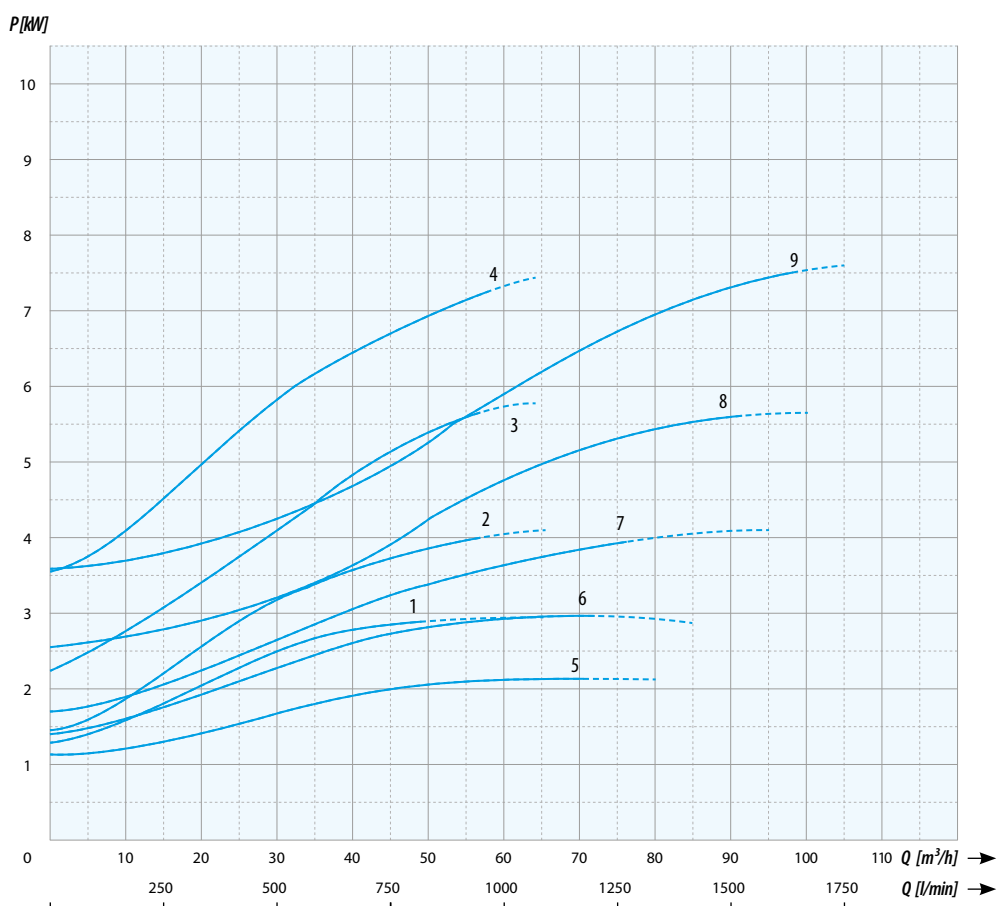
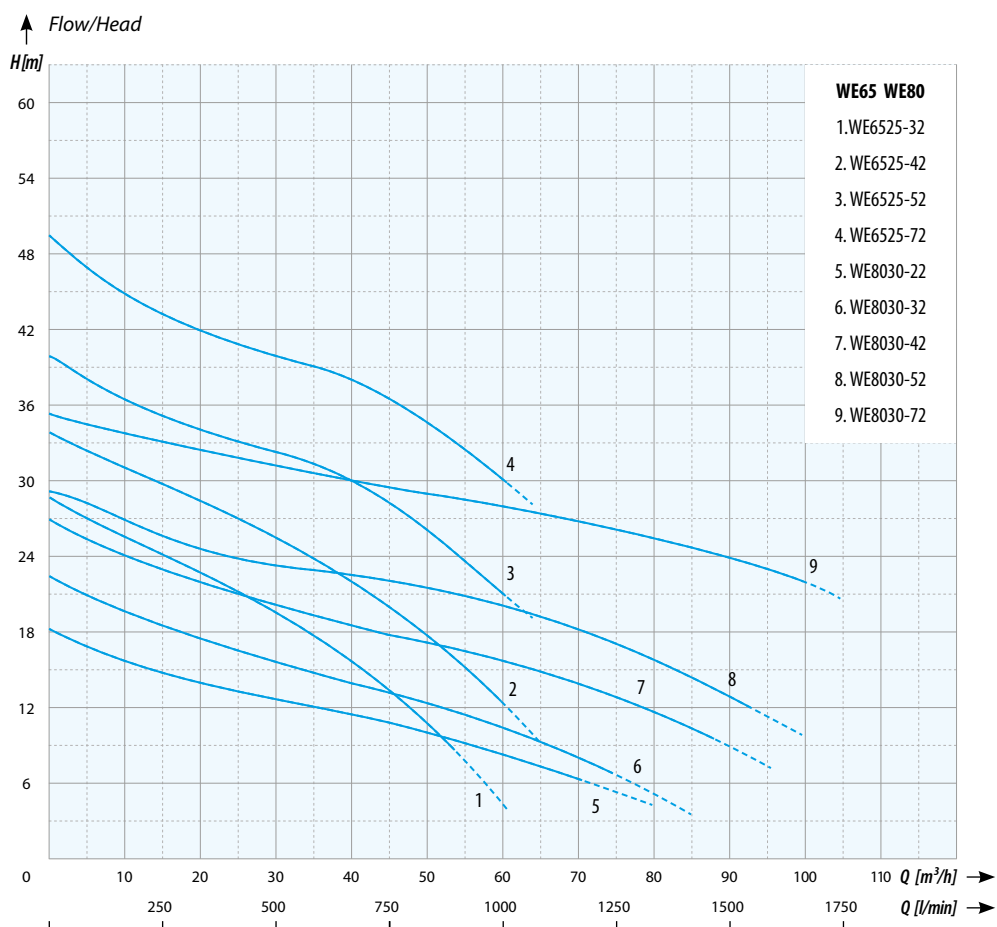
Cast iron ŽL200

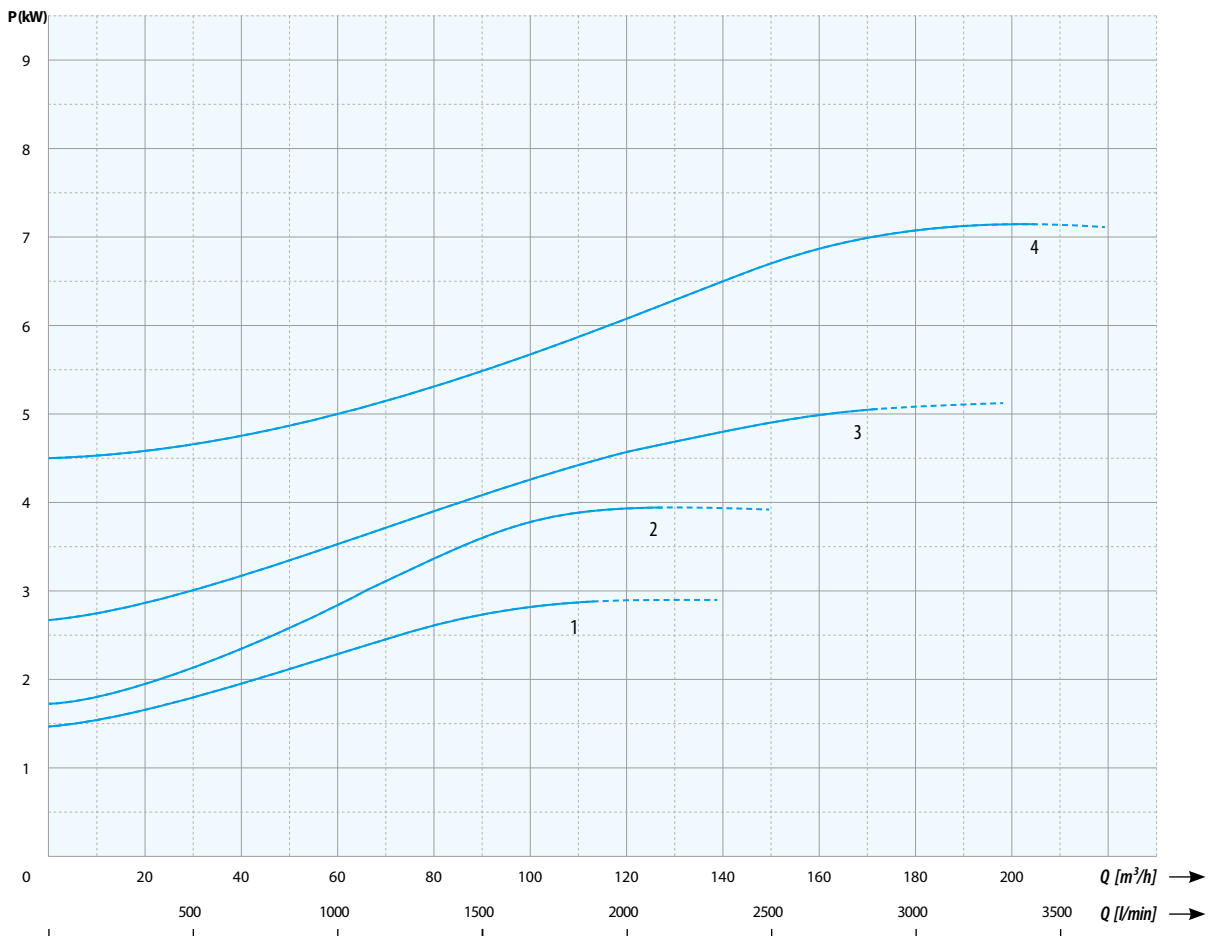
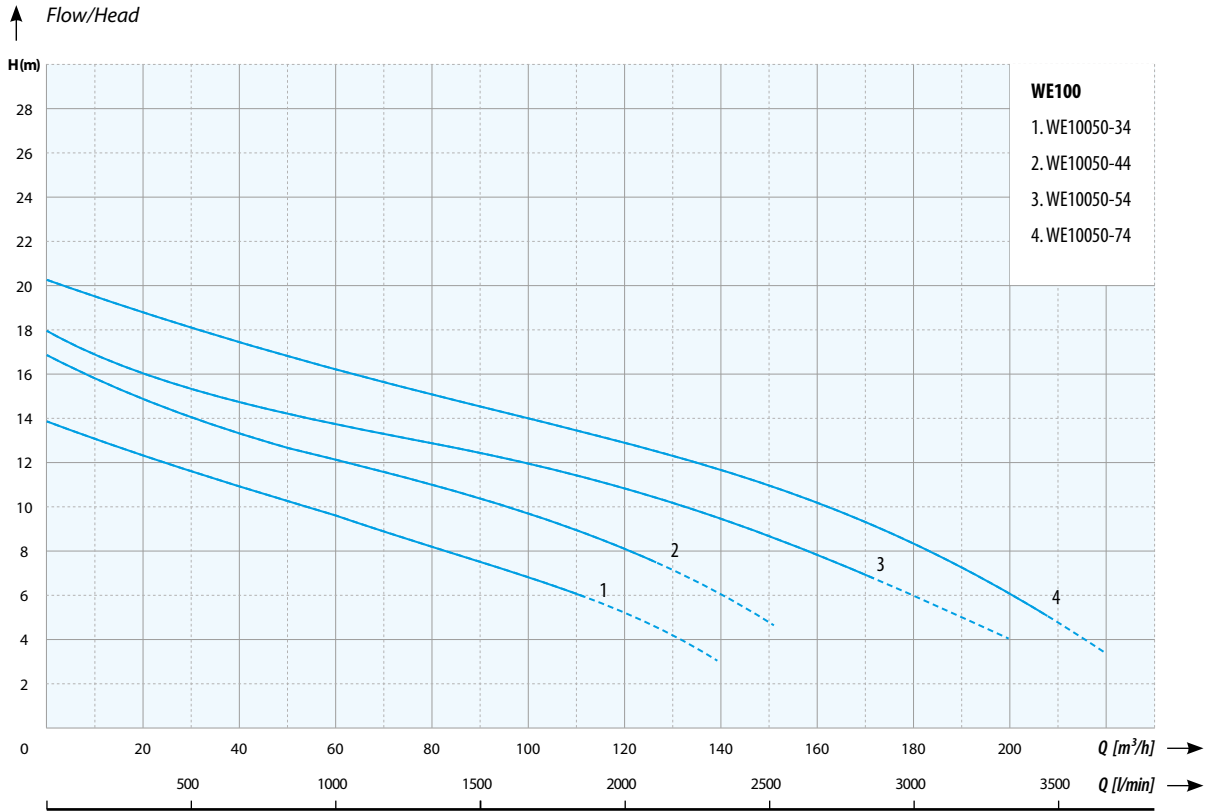
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Stainless steel,

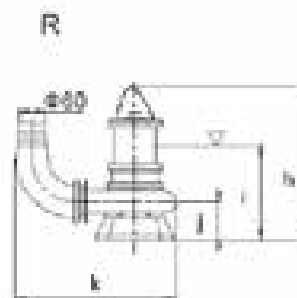
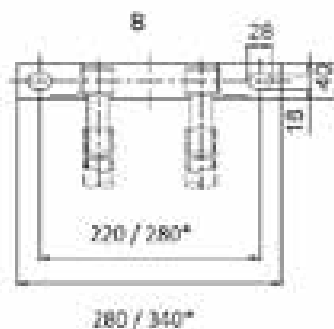
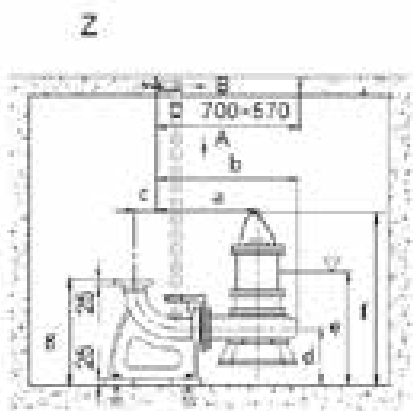
Single row ball bearings ZZ



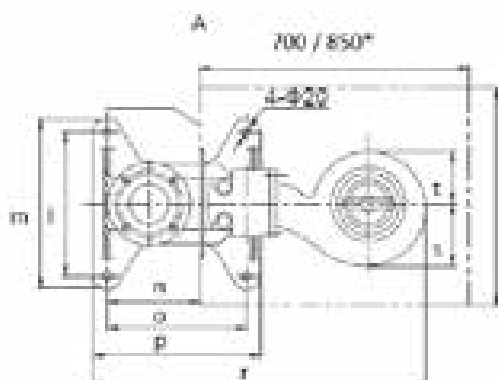
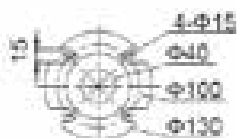




MOUNTING AND INSTALLATION DIMENSIONS

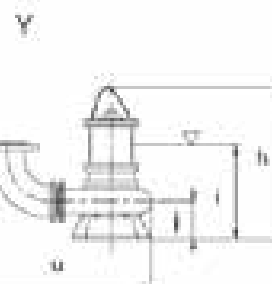


WE40



570 / 650*

WE50



WE65



WE80

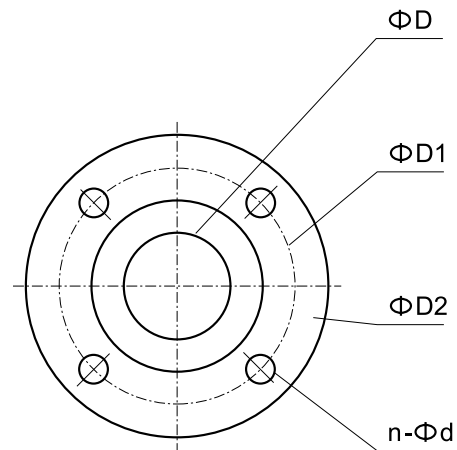
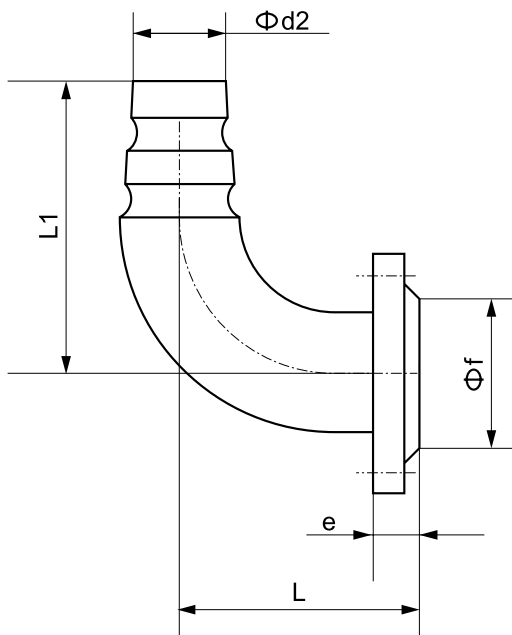
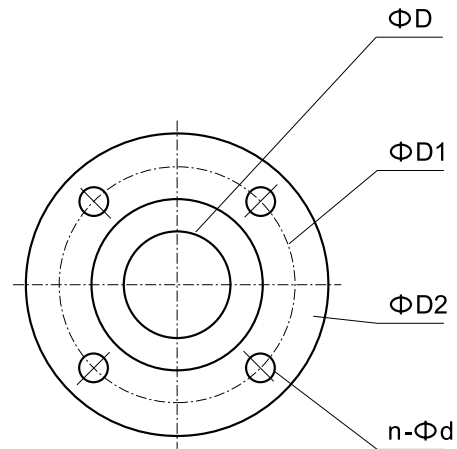
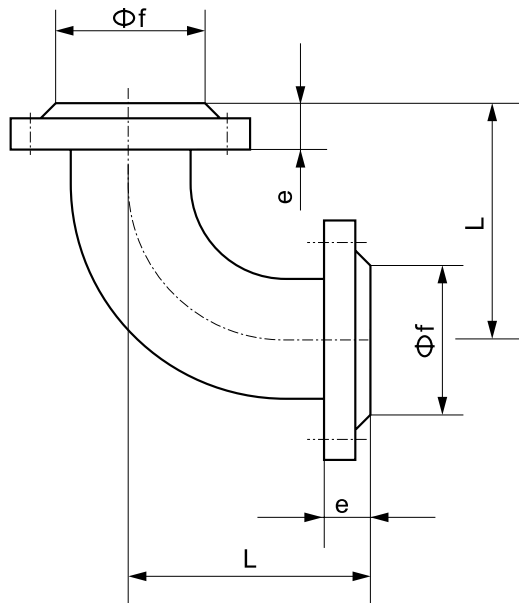


WE100



NAME	a	b	c	d	e	f	g	h	i	j	k	l	m
WE4015-032	310	398	108	215	345	544	400	428	229	99	381	320	370
WE4015-052	310	398	108	215	345	544	400	428	229	99	381	320	370
WE5015-072	266	349	75	150	340	560	250	500	280	90	388	130	180
WE5015-12L	266	349	75	150	340	560	250	500	280	90	388	130	180
WE5015-12H	276	372	75	150	385	584	250	528	330	94	408	130	180
WE5015-22	276	372	75	150	385	584	250	528	330	94	408	130	180
WE5020-072	261	354	75	150	345	566	250	505	280	89	393	130	180
WE5020-12	261	354	75	150	345	566	250	505	280	89	393	130	180
WE5020-32	291	403	75	150	395	633	250	589	352	107	435	130	180
WE5020-42	291	403	75	150	395	633	250	589	352	107	435	130	180
WE5020-52	321	454	75	150	455	705	250	655	405	100	486	130	180
WE5025-12L	281	389	75	150	360	565	250	511	320	96	425	130	180
WE5025-12H	271	372	75	150	350	559	250	495	305	86	412	130	180
WE5030-22	271	375	75	150	375	591	250	535	334	94	415	130	180
WE6525-32	303	424	95	150	395	633	280	592	353	109	470	130	180
WE6525-42	303	424	95	150	395	633	280	592	353	109	470	130	180
WE6525-52	324	449	95	150	500	733	280	715	480	132	495	130	180
WE6525-72	324	449	95	150	500	733	280	715	480	132	495	130	180
WE8030-22	309	421	140	170	410	606	320	550	365	117	476	175	220
WE8030-32	309	431	140	170	425	660	320	606	365	116	486	175	220
WE8030-42	309	431	140	170	425	660	320	606	365	116	486	175	220
WE8030-52	329	460	140	170	465	760	320	725	450	135	509	175	220
WE8030-72	329	460	140	170	465	760	320	725	450	135	509	175	220
WE10050-34	389	558	130	210	482	740	360	678	420	148	635	175	220
WE10050-44	389	558	130	210	482	740	360	678	420	148	635	175	220
WE10050-54	414	593	130	210	560	850	360	830	540	190	670	175	220
WE10050-74	414	593	130	210	560	850	360	830	540	190	670	175	220

NAME	200 n	o	p	r	s	t	u	W1	W2	WX	WY	n x Ø
WE4015-032	200	320	370	623	89	87	398	220	280	570	700	4xØ20
WE4015-052	200	320	370	623	89	87	398	220	280	570	700	4xØ20
WE5015-072	140	200	266	494	87	78	403	75	132	570	700	4xØ20
WE5015-12L	140	200	266	494	87	78	403	75	132	570	700	4xØ20
WE5015-12H	140	200	266	517	99	90	426	75	132	570	700	4xØ20
WE5015-22	140	200	266	517	99	90	426	75	132	570	700	4xØ20
WE5020-072	140	200	266	499	102	82	407	75	132	570	700	4xØ20
WE5020-12	140	200	266	499	102	82	407	75	132	570	700	4xØ20
WE5020-32	140	200	266	548	119	117	457	75	132	570	700	4xØ20
WE5020-42	140	200	266	548	119	117	457	75	132	570	700	4xØ20
WE5020-52	140	200	266	599	135	130	508	75	132	570	700	4xØ20
WE5025-12L	140	200	266	534	122	98	443	75	132	570	700	4xØ20
WE5025-12H	140	200	266	517	107	94	426	75	132	570	700	4xØ20
WE5030-22	140	200	266	520	112	96	426	75	132	570	700	4xØ20
WE6525-32	170	230	299	599	123	110	510	75	132	570	700	4xØ20
WE6525-42	170	230	299	599	123	110	510	75	132	570	700	4xØ20
WE6525-52	170	230	299	624	130	119	535	75	132	570	700	4xØ20
WE6525-72	170	230	299	624	130	119	535	75	132	570	700	4xØ20
WE8030-22	200	280	364	657	124	102	543	75	132	650	800	4xØ24
WE8030-32	200	280	364	667	131	106	553	75	132	650	800	4xØ24
WE8030-42	200	280	364	667	131	106	553	75	132	650	800	4xØ24
WE8030-52	200	280	364	965	143	120	581	75	132	650	800	4xØ24
WE8030-72	200	280	364	965	143	120	581	75	132	650	800	4xØ24
WE10050-34	200	290	374	793	184	153	684	75	135	650	850	4xØ24
WE10050-44	200	290	374	793	184	153	684	75	135	650	850	4xØ24
WE10050-54	200	290	374	828	198	160	719	75	135	650	850	4xØ24
WE10050-74	200	290	374	828	198	160	719	75	135	650	850	4xØ24



NAME	D	$\Phi D1$	$\Phi D2$	n- Φd	L	L1	e	Φf	$\Phi d2$
WE40-WE50	50	110	140	4-13,5	120	140	16	90	60
WE65	65	130	160	4-13,5	130	160	16	110	74
WE80	80	150	190	4-17,5	135	190	18	128	86
WE100	100	170	210	4-17,5	160	240	18	148	100

SUBMERSIBLE SEWAGE PUMPS WES INCL. GRINDER

- High-quality hardened steel knife for cutting impurities at the pump inlet
- Adjustable hardened steel cutting plate for precise positioning of the cutting blade.
- The unique combination of mechanical seals and bearings allows the use of a short shaft with high stiffness
- Pumps adapted to various installation versions
- Perfect combination of mechatronics, safety and reliability, and easy maintenance
- Two independent humidity sensors in the oil chamber and in the motor, and a thermal sensor in the stator winding
- S1 submerged motor for continuous operation, winding insulation class F, device protection IPX8



The presented WES sewage pumps with an motor power of up to 4kW combine the advantages of many other products. Years of experience in the use of hydraulic models, mechanical structures and various aspects of seals have allowed us to develop a comprehensive design that can boast high efficiency, energy saving properties and high reliability. Simpler structure, easier disassembly and maintenance, more economical and practical pump.

Light submersible sewage pump WES is mainly used in municipal engineering, construction, domestic and industrial sewage, sewage treatment plants and pumping rainwater.

WORKING CONDITIONS:

1. 400V 50Hz 3-phase power supply
2. Ambient temperature up to 40°C
3. pH range of 4-10
4. Density of the utility $\leq 1050\text{kg/m}^3$
5. Minimum level of the utility in the drawing as s
6. Permitted continuous operation S1 when fully submerged.
7. Maximum number of startups per hour 15
8. Do not use in highly corrosive environments and for utilities containing corrosive or abrasive particles.
9. Use for raw sewage and liquids containing solid or fibrous particles not longer than 80% of the diameter of the pump outlet.



Product names

1	2		3	4	5	6
WES	50	-	1	2	L	Z*

Eg. WES50-12L



Pump type: WES (two-channel closed), WES (inlet chopper) and ZWE (chopping impeller)

1. Connection diameter DN (40, 50, 65, 80, 100)
2. Approximate passage through the impeller (.15 to .50)
3. Pump power e.g. 1 kW
4. Number of poles (2, 4 or 6)
5. Lifting range L-low, H-high, - no symbol means one model in the series
6. Installation version:

Z - With an attachment for the coupling foot,

Y - Portable with a rigid discharge pipeline,

R - Portable with a flexible discharge hose,

* - No symbol means the pump itself is prepared for a standard attachment

Pump table

Lp.	Name	Outlet mm	Power kW	RPM RPM n	H _N m	Q _N m ³ /h	I _N A	Cos φ	η %	Z _S * A	Passage mm	Weight kg
1	WES50-12L	50	1,1	2825	9,5	15	2,5	0,86	77	4-6,3	15	18
2	WES50-12H	50	1,5	2840	12	15	3,4	0,85	78	4-6,3	15	20
3	WES50-22	50	2,2	2840	15	20	4,7	0,86	82	1-4	15	22
4	WES50-42	50	4,0	2890	25	22	8,2	0,87	85,5	4-6,3	15	23

* Overload protection of the engine

PARTS

Motor and pump housing, impeller,
motor compartment, oil chamber

Pump shaft

Screw connections

Bearings

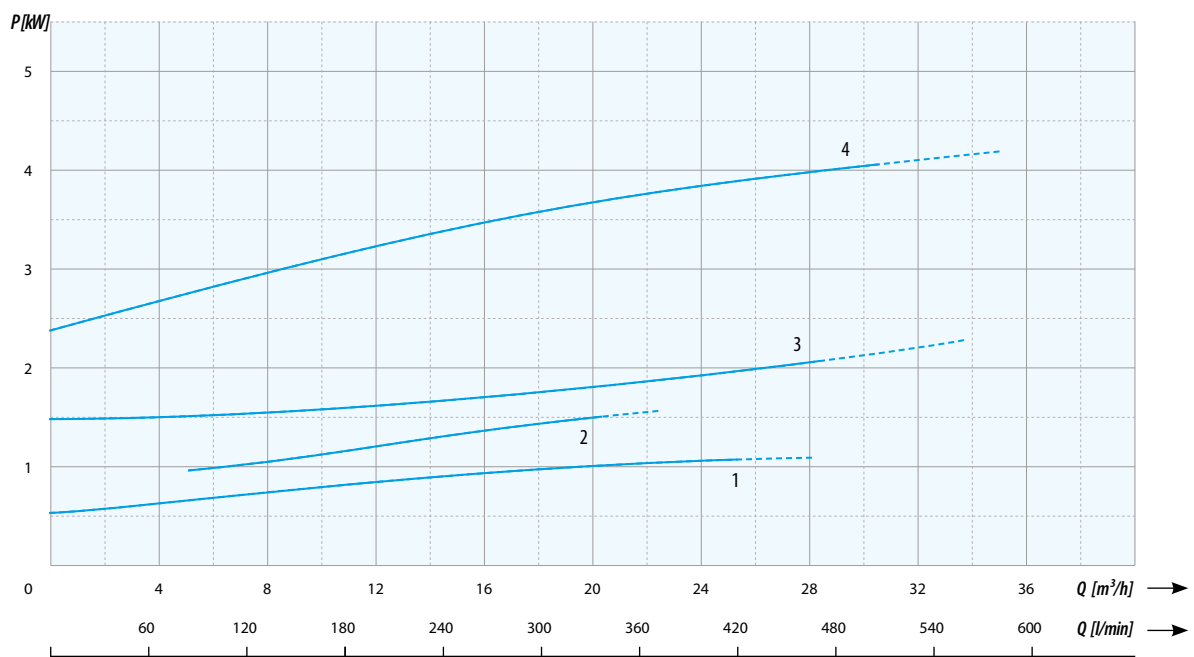
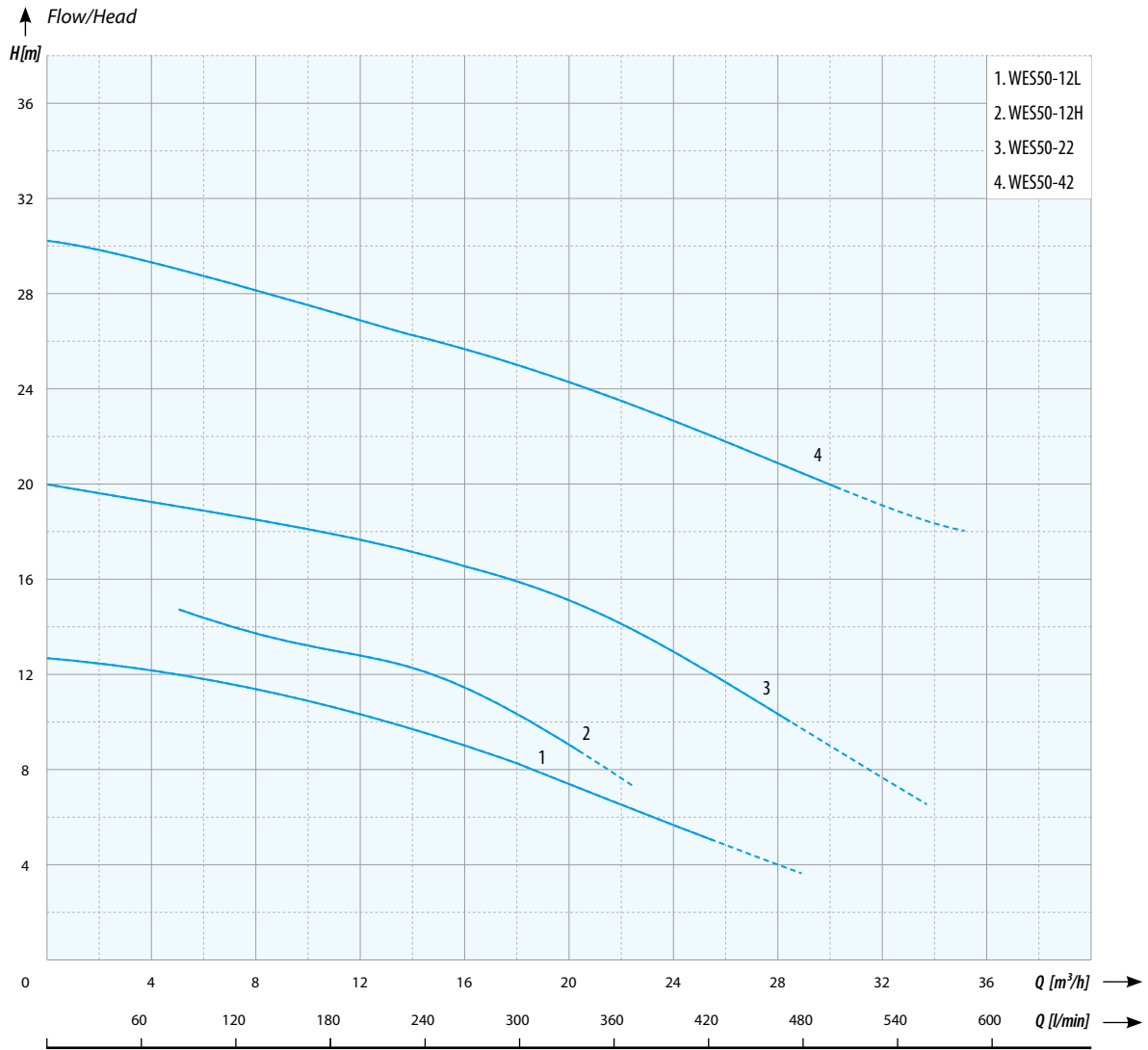
MATERIAL

Cast iron

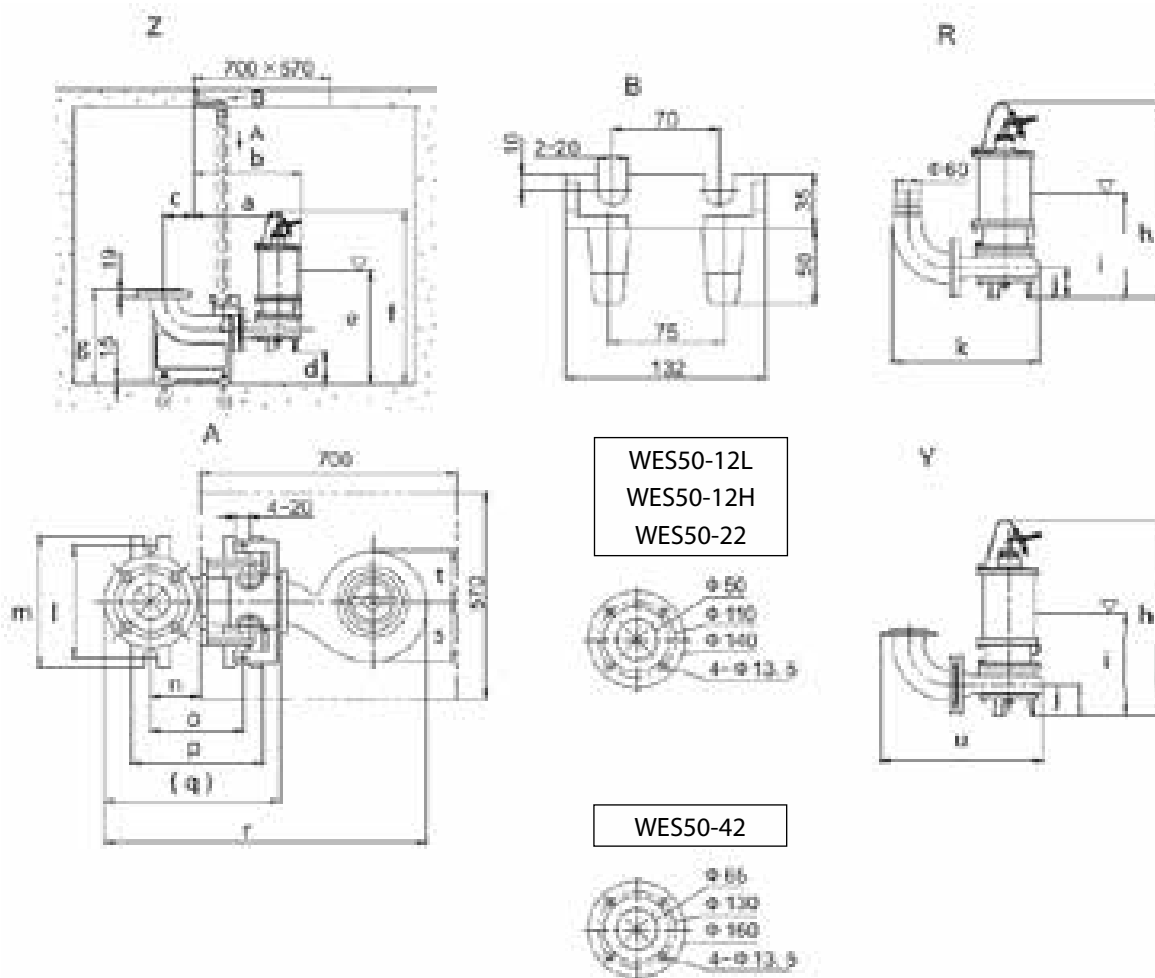
Stainless steel,

Stainless steel,

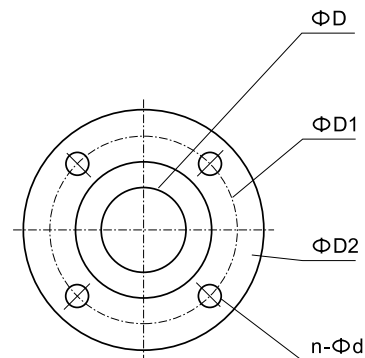
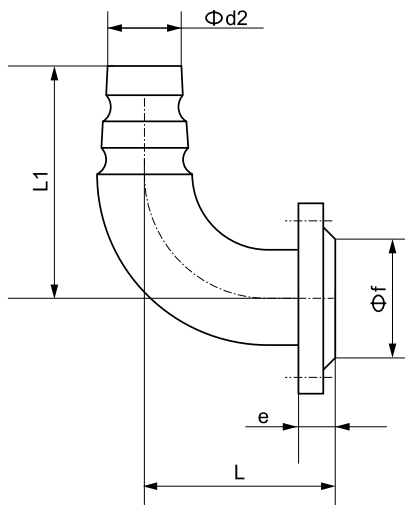
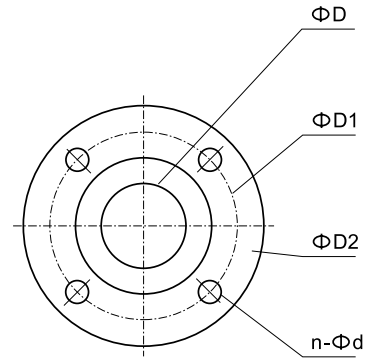
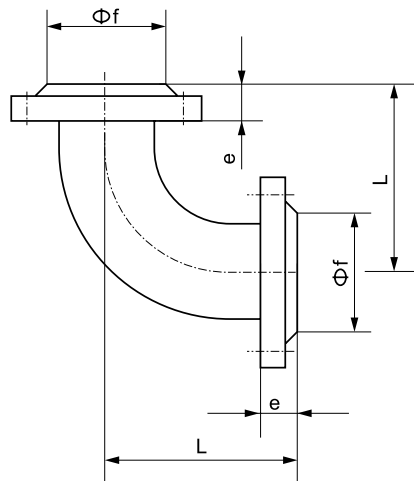
Single row ball bearings ZZ



MOUNTING AND INSTALLATION DIMENSIONS



NAME	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	U
WES50-12L	251	334	75	76	350	556	250	480	270	74	366	130	180	75	140	200	266	479	89	76	388
WES50-12H	266	361	75	74	360	552	250	478	280	76	390	130	180	75	140	200	266	506	101	87	415
WES50-22	261	355	75	75	370	580	250	505	295	75	387	130	180	75	140	200	266	500	99	86	409
WES50-42	294	404	95	65	385	633	280	568	320	85	151	130	180	105	170	230	299	579	117	102	490



NAME	D	ØD1	ØD2	n-Ød	L	L1	e	Øf	Ød2
WESS0	50	110	140	4-13,5	120	140	16	90	60

SUBMERSIBLE SEWAGE PUMPS ZWE INCL. CUTTING IMPELLER

- High-quality hardened steel rotor for cutting impurities at the pump inlet.
- Unique cutting disc structure with grooves and scraper for the removal of particulate solids.
- High resistance of the grinding system to abrasion and corrosion in an aggressive environment.
- Pumps adapted to various installation versions.
- Perfect combination of mechatronics, safety and reliability, and easy maintenance.
- Two independent humidity sensors in the oil chamber and in the motor, and a thermal sensor in the stator winding.
- S1 submerged motor for continuous operation, winding insulation class F, device protection IPX8.



The presented ZWE sewage pumps with an engine power of up to 37kW combine the advantages of many other products. Years of experience in the use of hydraulic models, mechanical structures and various aspects of seals have allowed us to develop a comprehensive design that can boast high efficiency, energy saving properties and high reliability. Simpler structure, easier disassembly and maintenance, more economical and practical pump.

ZWE submersible sewage pump is suitable for the following applications:
raw water and dirty water supply, domestic sewage, irrigation and drainage systems of excavations.

WORKING CONDITIONS:

1. 400V 50Hz 3-phase power supply
 2. Ambient temperature up to 40°C
 3. pH range of 4-10
 4. Density of the utility $\leq 1050\text{kg/m}^3$
 5. Minimum level of the utility in the drawing as s
 6. Permitted continuous operation S1 when fully submerged.
 7. Maximum number of startups per hour 15
 8. Do not use in highly corrosive environments and for utilities containing corrosive or abrasive particles.
- Use for raw sewage and liquids containing solid or fibrous particles not longer than 80% of the diameter of the pump outlet.



Product names

1	2	3	4	5	
ZWE	65	-	4	2	Z*

Eg. ZWE65-42

Pump type: WE (two-channel closed), WES (inlet chopper) and ZWE (chopping impeller)

1. Connection diameter DN (40, 50, 65, 80, 100)
2. Approximate passage through the impeller (from 15 to 50)
3. Pump power e.g. 4 kW
5. Lifting range L-low, H-high, - no symbol means one model in the series
6. Installation version:
 Z - With an attachment for the coupling foot,
 Y - Portable with a rigid discharge pipeline,
 R - Portable with a flexible discharge hose,
 * - No symbol means the pump itself is prepared for a standard attachment

Pump table

Lp.	Typ pompy	Wylot mm	Power kW	Obroty RPM n	H _n m	Q _n m ³ /h	I _N A	Cos φ	η %	Z _s [*] A	Weight kg
1	ZWE50-12	50	1,5	2840	9	20	3,4	0,85	78	4-6,3	32
2	ZWE50-22	50	2,2	2840	12	20	4,7	0,86	82	4-6,3	36
3	ZWE50-32	50	3,0	2880	17	25	6,4	0,87	82	6,3-10	52
4	ZWE50-42	50	4,0	2880	19	30	8,2	0,87	85,5	10-14	56
5	ZWE65-22	65	2,2	2840	8	40	4,7	0,86	82	4-6,3	46
6	ZWE65-52	65	5,5	2920	21	40	11	0,88	85,5	10-16	80
7	ZWE65-72	65	7,5	2920	24	50	15	0,88	86,2	14-20	90
8	ZWE65-112	65	11	2935	26	65	22	0,89	87,6	25	128
9	ZWE65-152	65	15	2935	30	80	29	0,90	88,8	32	136
10	ZWE80-34	80	3	1410	9	50	6,8	0,81	82,5	6,3-10	115
11	ZWE80-44	80	4	1410	10	60	8,8	0,82	84,5	10-16	120
12	ZWE100-54	100	5,5	1445	10	90	11,6	0,84	85,5	10-16	150
13	ZWE100-74	100	7,5	1445	12	100	15,4	0,85	87	14-20	160
14	ZWE100-114	100	11	1460	14	120	23	0,85	88	25	225
15	ZWE100-154	100	15	1460	17	140	30	0,85	89,4	32	245
16	ZWE100-184	100	18,5	1470	18	160	36	0,87	90,7	40	294
17	ZWE100-224	100	22	1470	20	170	42	0,87	91,2	63	308
18	ZWE100-304	100	30	1475	24	190	58	0,86	92	80	428
19	ZWE100-374	100	37	1475	27	220	70	0,87	92,5	80	452

* Overload protection of the engine

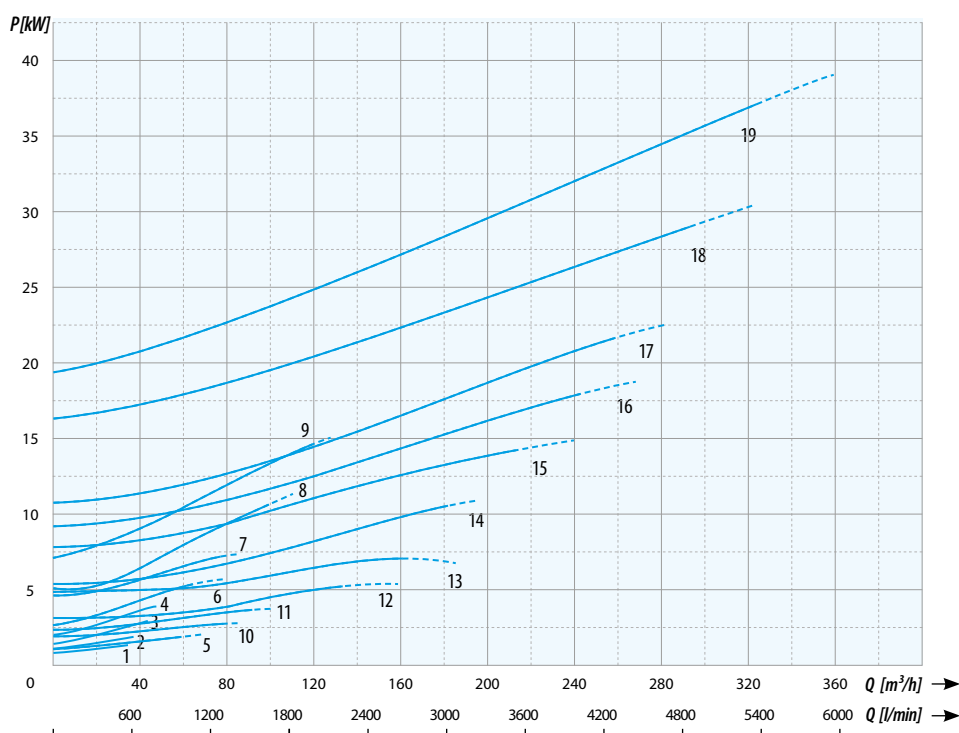
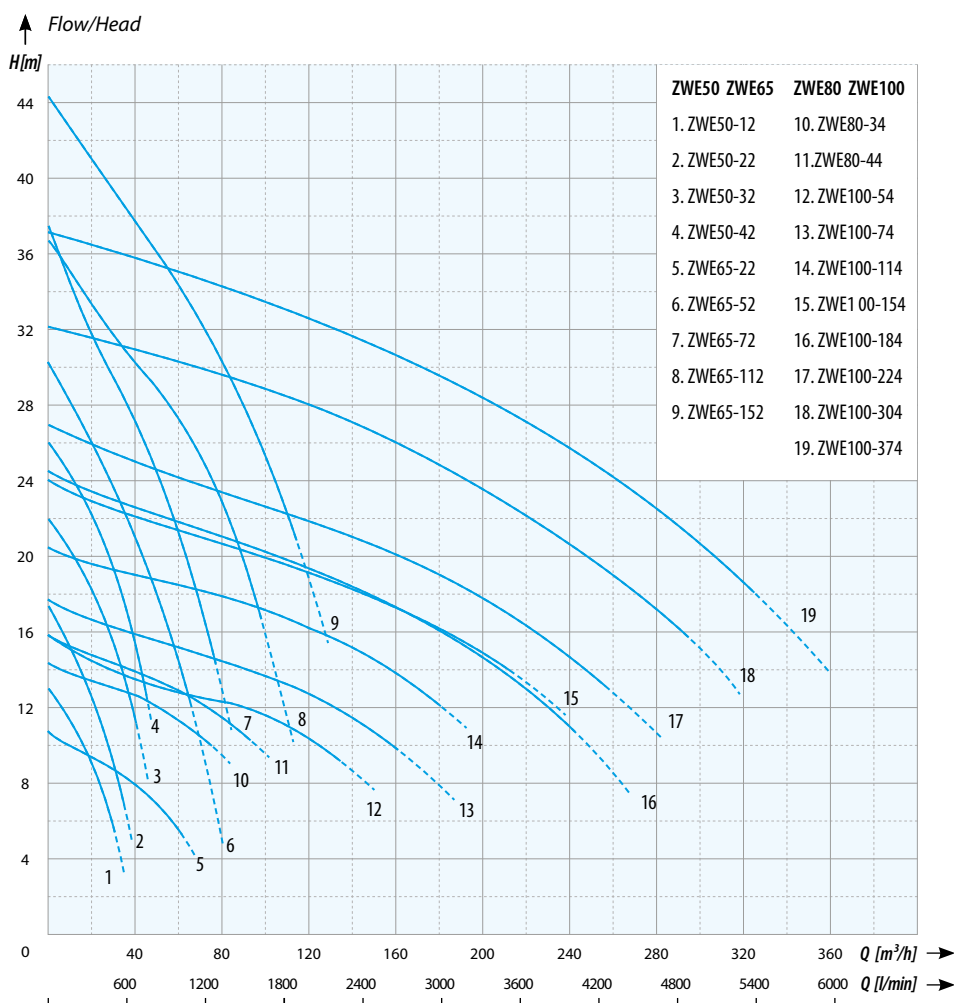
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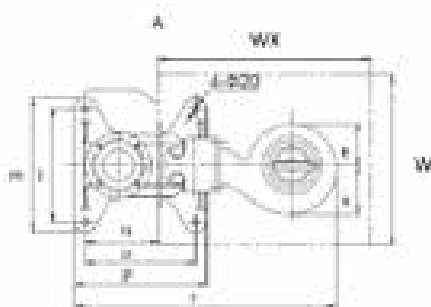
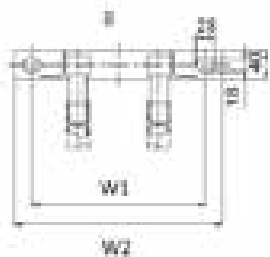
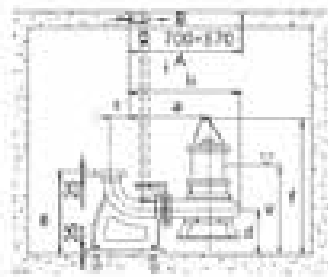
Motor and pump housing, impeller,
 motor compartment, oil chamber
 Pump shaft
 Screw connections
 Bearings

MATERIAL

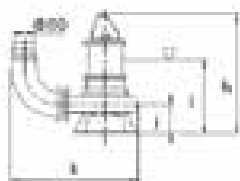
Cast iron

 Stainless steel,
 Stainless steel,
 Single row ball bearings ZZ

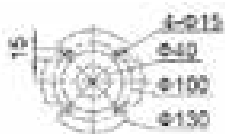
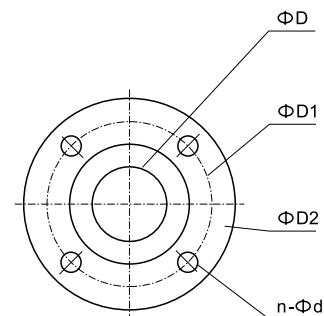
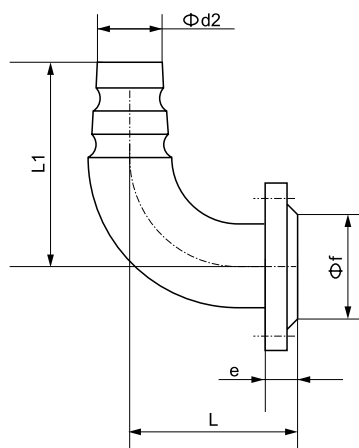
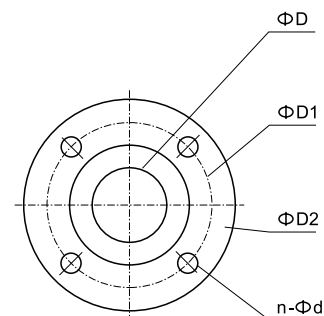
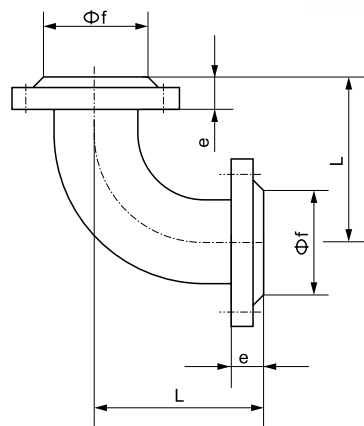
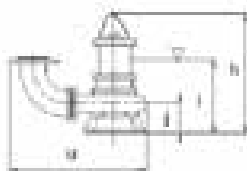




R



Y



NAME	D	ØD1	ØD2	n-Ød	L	L1	e	Øf	Ød2
ZWE50	50	110	140	4-13,5	120	140	16	90	60
ZWE65	65	130	160	4-13,5	130	160	16	110	74
ZWE80	80	150	190	4-17,5	135	190	18	128	86
ZWE100	100	170	210	4-17,5	160	240	18	148	100

NAME	a	b	c	d	e	f	g	h	i	j	k	l	m
ZWE50-12	325	414	108	215	430	647	400	527	310	95	397	320	370
ZWE50-22	325	414	108	215	430	647	400	527	310	95	397	320	370
ZWE50-32	350	454	108	215	470	689	400	603	375	120	437	320	370
ZWE50-42	350	454	108	215	470	689	400	603	375	120	437	320	370
ZWE65-22	365	478	108	215	440	651	400	551	340	115	473	320	370
ZWE65-52	385	506	108	215	530	804	400	714	440	125	501	320	370
ZWE65-72	385	506	108	215	530	804	400	714	440	125	501	320	370
ZWE65-112	410	550	108	215	586	928	400	902	560	189	545	320	370
ZWE65-152	410	550	108	215	586	928	400	902	560	189	545	320	370
ZWE80-34	460	636	108	325	589	843	480	664	410	146	639	360	430
ZWE80-44	460	636	108	325	589	843	480	664	410	146	639	360	430
ZWE100-54	495	690	128	300	653	938	480	795	510	157	721	360	430
ZWE100-74	495	690	128	300	653	938	480	795	510	157	721	360	430
ZWE100-114	525	741	128	300	697	1032	480	955	620	233	772	360	430
ZWE100-154	525	741	128	300	697	1032	480	955	620	233	772	360	430
ZWE100-184	535	777	128	300	735	1148	480	1103	690	255	808	360	430
ZWE100-224	535	777	128	300	735	1148	480	1103	690	255	808	360	430
ZWE100-304	555	820	128	300	840	1569	480	1519	790	250	851	360	430
ZWE100-374	555	820	128	300	840	1569	480	1519	790	250	851	360	430

NAME	200 n	o	p	r	s	t	u	W1	W2	WX	WY	n x Ø
ZWE50-12	200	320	370	639	97	80	410	220	280	570	700	4 x Ø20
ZWE50-22	200	320	370	639	97	80	410	220	280	570	700	4 x Ø20
ZWE50-32	200	320	370	679	112	96	459	220	280	570	700	4 x Ø20
ZWE50-42	200	320	370	679	112	96	459	220	280	570	700	4 x Ø20
ZWE65-22	200	320	370	703	124	101	513	250	310	570	700	4 x Ø20
ZWE65-52	200	320	370	731	132	115	541	250	310	570	700	4 x Ø20
ZWE65-72	200	320	370	731	132	115	541	250	310	570	700	4 x Ø20
ZWE65-112	200	320	370	775	152	140	585	250	310	650	850	4 x Ø20
ZWE65-152	200	320	370	775	152	140	585	250	310	650	850	4 x Ø20
ZWE80-34	200	350	420	871	187	151	706	250	310	650	850	4 x Ø20
ZWE80-44	200	350	420	871	187	151	706	250	310	650	850	4 x Ø20
ZWE100-54	233	350	420	958	198	160	770	280	340	650	850	4 x Ø20
ZWE100-74	233	350	420	958	198	160	770	280	340	650	850	4 x Ø20
ZWE100-114	233	350	420	1009	247	202	821	280	340	650	850	4 x Ø20
ZWE100-154	233	350	420	1009	247	202	821	280	340	650	850	4 x Ø20
ZWE100-184	233	350	420	1045	265	214	857	280	340	650	900	4 x Ø20
ZWE100-224	233	350	420	1045	265	214	857	280	340	650	900	4 x Ø20
ZWE100-304	233	350	420	1088	288	237	900	280	340	700	900	4 x Ø20
ZWE100-374	233	350	420	1088	288	237	900	280	340	700	900	4 x Ø20



Inverters

EASY FLOW

IVR-11

INVERTER SYSTEM - IVR-400T

DELIVERY/SUCTION SIDE MANIFOLDS

MH PRO SET - IVR-11

MULTI SET IVR



INVERTER SYSTEM – SMARTFLOW

IVR-10 S/T Smartflow Pump Controller first all-in-one & in-line inverter pump manager to upgrade and manage most of the water pumps. It provides constant water pressure, and saves energy for most kinds of water usage. The product is integrated with all the required functionalities of a conventional inverter booster pump. With this design, the assembly time & cost of an inverter booster pump are significantly reduced, which sets up a new industry standard.

Device is dedicated for: deep well pumps, surface pumps, submersible pumps, etc., maintaining a constant, set water pressure by changing the rotational speed of the pump motor.

The S

martFlow model provides many operating modes by adapting to various electrical systems.

Its important feature that distinguishes it from popular on/off control devices is:

1. Energy efficiency. Compared to the traditional water supply method, the constant pressure water supply system with frequency converter saves up to 30%-60% of energy.

2. Simple operation: easy to use, all functions can be terminated by pressing a button, without the need to hire programming specialists.

3. Long-term reliability of the co-operating pumps: the average torque and shaft wear are reduced due to decreasing the average rotational speed, which increases the pump operational lifetime. Due to the built-in soft start and stop function, the device allows to eliminate the water hammer (the hydraulic stroke is a sudden pressure increase that occurs at rapid stopping or starting of liquid flow.)

4. Fully protected: the system incorporates the most versatile:

- overcurrent / overvoltage / undervoltage
- short-circuit
- impeller blocking
- dry-running protection technology without the need to install probes/sensors in the well
- excess temperature protection
- leakage warning
- over pressure protection
- anti-freezing protection

FEATURES:

Front panel: intuitiv interface for smarter setting, and indication for pressure & error status.

Flow switch: Precise flow switch to achieve stable operation even at 2L/min water usage.

Check valve: Durable non-return check valve to prevent back flowing and hydraulic stroke damage.

Pressure tank: Rechargeable 0.6L SS304 pressure tank to prevent pump short cycling and hydraulic stroke damage.

APPLICATION:

SmartFlow can be used in all applications where maintaining a constant water pressure in the system, as well as control and protection of a single pump that controls automatic switching on and off by various electrical systems is required.

Union pipe connectors: Standard M1" (25mm), 1-1/4" (32mm), 1-1/2" (38mm), and a longer M1" (25mm) for taller junction box

Inverter & pump protector

Provide variable speed, constant water pressure, soft start & stop Convert 1ph to 3ph for energy saving All-around protection for water pump and piping.

Pressure sensor: High-quality pressure sensor for precise + longevity operation.

TYPICAL APPLICATION:

- houses / apartments / holiday houses,
- agricultural holdings,
- supply of water from the well,
- irrigation of growing houses, gardens, agricultural land,
- collecting and using rainwater,
- industrial equipment.



INVERTER SYSTEM – SMARTFLOW

INSTALLATION DATA	
Permissible ambient temperature	-10°C – +50°C
Permissible ambient humidity	20% – 90% RH
Permissible liquid temperature	0°C – +50°C
Ingress Protection	IP55
Mounting orientation	Pion
Unit dimensions (L/W/H)	230 x 170 x 230 mm
Inlet/outlet	G 1 ¼" / G 1 ¼" or G 1½" / G 1½"
Capacity of pressure tank	0,6L
Max installation pressure	10 bar
Max Flow	300L/min
MAIN TECHNICAL DATA	
Rated output power	0,37 kW – 1,5 kW (0,5 HP – 2 HP)
Rated input voltage	AC200-240V/50-60HZ (single-phase)
Pump max. amp rating	8A
Rated output voltage	3x 230V / 30-60 Hz (single-phase)
Additional pump rated output voltage	1x 230V / 50 Hz (three-phase)
Response time under overload condition	5 s – 5 min.
Pressure setting range	1 – 6 bar
MAIN TECHNICAL DATA	
Protection	double flow control
	pressure control
Permissible ambient temperature	Manual / Automatic
Permissible ambient humidity	probe electrode pulse and flow switch
Permissible liquid temperature	Pressure sensor 24 V, 4–20 mA

IVR-11

The intelligent pump controller, IVR-11 model, is an easy-to-use control and safety device for direct connection of three-phase deep-well pumps, surface pumps, submersible pumps, etc. from 0.75 kW to 7.5 kW (1 HP to 10 HP) keeping constant, set water pressure by changing the rotational speed of the pump motor. The IVR-11 is a frequency converter drive, specifically designed to manage water pump performance which fits a wide range of water supply requirements and conditions.

The IVR-11 drive allows the pump to operate in a more efficient, safer, and smarter manner, reduce energy consumption, and extend the life of the pump. The IVR-11 drive is made of high-quality components and materials, and uses the latest microprocessor technology.

The IVR-11 model has many operating modes by adapting to various electrical installations. IVR-11 series controllers may be used in pump groups up to 5 pumps — maximum 1 master device and 4 auxiliary devices.

THE MOST IMPORTANT FEATURES WHICH DISTINGUISH IT FROM POPULAR ON/OFF CONTROL DEVICES ARE:

1. Increasing energy efficiency: compared with the traditional water supply method, the constant pressure water supply system with frequency converter saves energy by 30–60%.
2. Simple operation: easy operation, all functions can be completed by pressing a button, no need to hire specialists for programming.
3. Long-term reliability of associated pumps: average torque and shaft wear are reduced due to the drop in average speed, which ensures a longer pump life. Due to the built-in soft start and stop function, the device allows you to eliminate the hydraulic shock. (this phenomenon, sometimes called „water hammer“, is a sudden increase in pressure accompanying a quick stop or start of fluid flow.)
4. Comprehensive protection: the system has the most comprehensive protection technology against overcurrent, overvoltage, undervoltage, short-circuit, locked rotors, dry running without the need to install probes/sensors in the well.
5. You may connect controllers into pump groups, up to 5 pumps. Group control is carried out from the level selected by the user as the master controller, and the remaining pumps adjust the operation to the system requirements

APPLICATION:

The IVR-11 model is useful in all cases where it is necessary to maintain a constant water pressure in the system and to control and protect a single master pump, which handles automatic switching on and off by various electrical installations.

EXPECTED TYPICAL USAGE:

- farms
- water supply from wells
- irrigating greenhouses, gardens, fields
- collecting and using rain water



Input and output voltage	Type	Max Amperage	Power	Dimensions			Mounting hole (mm)
				L	W	H	
230 V single-phase input	IVR11-2S1R5A0	7A	1,5 kW	203	128	120	Ø4
230 V three-phase output							
400 V three-phase input	IVR11-4T2R2A0	5.1A	2,2 kW	203	128	120	Ø4
400 V three-phase output	IVR11-4T004A0	9A	4,0 kW	286	204	138	Ø6
	IVR11-4T7R5A0	17A	7,5 kW	286	204	138	Ø6

IVR-11

SPECIFICATIONS		
Control features	Control mode	V/F variable frequency control
	Starting torque	0.5 Hz ±100%
	Speed regulation range	1:100
	Precision in keeping speed	±1.0%
	Overload tolerance	150% of rated current for 60 s; 180% of rated current for 1 s
	Acceleration/deceleration time	0.1-3600 s
Input and output parameters	Starting frequency	0.01–10.00 Hz
	Input voltage	230 V AC od -18% do +10% 400 V AC od -18% do +10%
	Input frequency range	50/60 Hz, ±5% fluctuation
	Output voltage	0-rated input voltage
	Output frequency	0–200 Hz
External device interface	Programmable digital input	2-way digital output connector
	Programmable analogue input	V: 0–5 V V (remote pressure gauge): 0–10 V C (pressure transducer): 4–20 mA
	Relay output	Programmable 1-way output
	Open collector output	Programmable 1-way output
Basic functions	Command execution channel	Three kinds of channels: 1. Operation panel 2. Control terminal, 3. Serial communication port; select 1 and 2 for main drive and 3 for auxiliary devices
	Built-in PID controller	Advanced PID arithmetic for closed-loop control system operation
	Overrun speed control	Automatic current and voltage limitation during operation, preventing tripping due to frequent overcurrent or overvoltage
	Master and auxiliary drive connector	Expandable RS485 design, one drive in the system can be master and controls other auxiliary drives (up to four) for operating in a communication mode. The main drive sends PID feedback to the auxiliary drives and monitors their status in real time. Auxiliary drive faults do not affect the other drives.
	Protection against water shortage	If the drive detects that the pipe pressure is lower than the set water scarcity pressure value, the system automatically stops working. After the specified time has elapsed, it restarts automatically in certain cases. If the pressure is back to normal, the system is operating normally. Otherwise, the system stops automatically, which, if the pump is idle, extends its life to the maximum.
	High pressure alarm	When the pressure exceeds the set value, the system stops automatically, which avoids damaging the pipes due to overpressure.
	Automatic energy saving mode	This automatically lowers the output voltage under light load to save energy.
	Password setting	A 4-bit password can be set with non-zero numbers. After exiting the setting interface, the password will be valid in 1 minute.
Operating conditions	Locking parameters	Specify whether the parameter is locked in a running state or stopped from abnormal operation.
	Assembly	Installation should be performed in conditions devoid of direct sunlight, dust, corrosive, and flammable gases, oil mist, water vapour, and moisture.
	Height	Less than 1,000 m, more than 1,000 m guarantees full efficiency. Reduce the capacity by 1% every 100 m as the temperature increases.
	Ambient temperature	–10°C to +40°C operation at reduced capacity at 40°C to 50°C Reduce capacity by 4% in steps of 1°C as altitude increases.
	Humidity	≤95% RH, no water condensation.
Vibration	<5.9 m / S2 (0.6 G)	

INVERTER SYSTEM – IVR-400T

IVR-400T Intelligent Pump Controller is an easy-to-use control and protection device for direct connection of 11 kW to 37 kW (from 15 HP to 50 HP) three-phase submersible pumps, surface pumps, deep well pumps, etc., maintaining a constant, set water pressure by changing the rotational speed of the pump motor.

The IVR400T with a single-phase and three-phase frequency converter is designed specifically to manage pump performance in order to adapt it to various conditions and requirements of water supply systems.

The IVR400T makes the pump's operation more efficient, safe and intelligent, and allows to reduce energy consumption and extend the pump's lifespan.

The IVR400T is made of high quality components and materials, and it utilizes the latest microprocessor technology.

The IVR-400T provides many operating modes by adapting to various electrical systems. The IVR-400T controllers can be used in pump groups of up to 6 pumps - maximum 2 master devices and 4 auxiliary devices.



THE MOST IMPORTANT FEATURES THAT DISTINGUISH THE CONTROLLER FROM POPULAR ON/OFF CONTROL DEVICES ARE:

1. Increased energy efficiency. Compared to the traditional water supply method, the constant pressure water supply system with frequency converter saves up to 30%-60% of energy.

2. Simple operation: easy to use, all functions can be terminated by pressing a button without the need to hire programming specialists.

3. Long-term reliability of the co-operating pumps: the average torque and shaft wear are reduced due to decreasing the average rotational speed, which increases the pump operational lifetime.

Due to the built-in soft start and stop function, the hydraulic stroke can be eliminated (the water hammer is a sudden pressure increase that occurs at rapid stopping or starting of liquid flow.)

4. Fully protected: the system incorporates the most versatile overcurrent, overvoltage, undervoltage, short-circuit, impeller blocking and dry-running protection technology without the need to install probes/sensors in the well.

5. The controllers can be combined into pump groups of up to 6 pumps. The group is controlled by one or two controllers selected by the user as master devices while other controllers adjust the operation to the system requirements.

APPLICATION:

The IVR-400T can be used in all applications where maintaining a constant water pressure in the system, as well as control and protection of a single pump that controls automatic switching on and off by various electrical systems is required.

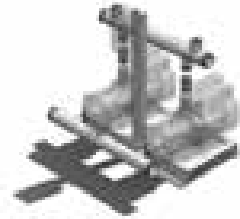
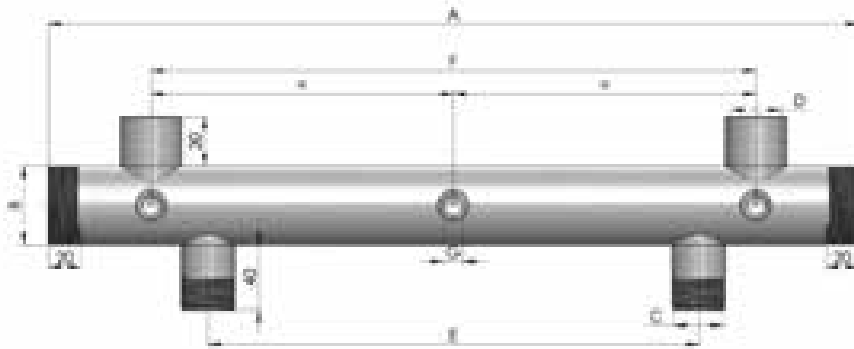
TYPICAL APPLICATION

- agriculture farms
- supply of water from the well
- irrigation of growing houses, gardens, agricultural land
- collecting and using rainwater
- industrial equipment

Input and output voltage	Type	Power	Output current	Dimensions			Mounting hole [mm]	
				L	W	H		
230 V single-phase on input	IVR400M-2SR75A0	0,75 kW	4 A	142	85,8	113	Ø2	
	IVR400M-2S1R5A0	1,5 kW	7 A	142	85,8	113	Ø2	
230 V 3-phase on output	IVR400M-2S2R2A0	2,2 kW	8,2 A	152	101	117	Ø2	
400 V 3-phase on input	IVR400T-4TR75A0	0,75 kW	2,1 A	152	101	117	Ø2	
	IVR400T-4T1R5A0	1,5 kW	3,8 A	152	101	117	Ø2	
	IVR400T-4T2R2A0	2,2 kW	5,1 A	152	101	117	Ø2	
	IVR400T-4T004A0	4,0 kW	9 A	221,6	113	166,5	Ø5	
	IVR400T-4T5R5A0	5,5 kW	13 A	221,6	113	166,5	Ø5	
	IVR400T-4T7R5A0	7,5 kW	16 A	221,6	113	166,5	Ø5	
	400 V 3-phase on output	IVR400T-4T011A0	11 kW	25 A	265	160	171,5	Ø6,5
		IVR400T-4T015A0	15 kW	32 A	265	160	171,5	Ø6,5
		IVR400T-4T18R5A0	18,5 kW	38 A	302,5	192	171,5	Ø8,5
		IVR400T-4T022A0	22 kW	45 A	302,5	192	171,5	Ø8,5
IVR400T-4T030A0		30 kW	60 A	348,5	227	171,5	Ø8,5	
IVR400T-4T037A0		37 kW	75 A	348,5	227	171,5	Ø8,5	

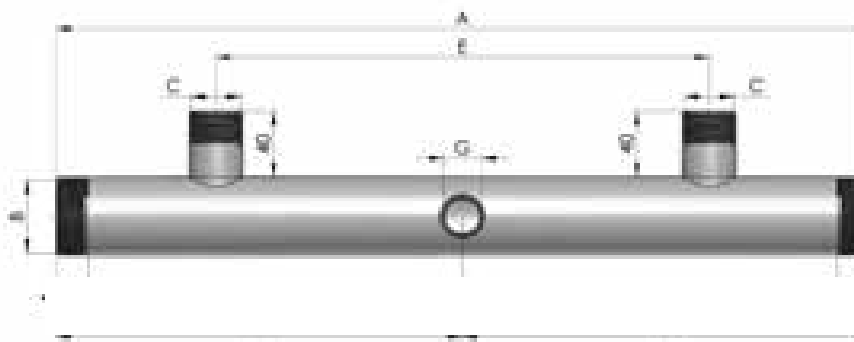
TECHNICAL PARAMETERS		
Control parameters	Control mode	V/F variable frequency control
	Starting torque	0.5 Hz ± 100%
	Speed adjustment range	1:100
	Speed holding accuracy	± 1.0%
	Overcurrent tolerance	150% of rated current for 60 s; 180% of rated current for 1 s
	Acceleration / deceleration time	0.1-3600s
Input and output parameters	Starting frequency	0.01–10.00 Hz
	Input voltage	400 V ± 15%
	Input frequency range	50 / 60 Hz, fluctuation ± 5%
	Output voltage	0-rated input voltage
	Output frequency	0–200Hz
Peripheral interface	Programmable digital input	2-way digital output connector
	Programmable analogue input	V: 0-5V V (remote pressure gauge): 0–10 V C (pressure transmitter): 4–20 mA
	Relay output	1-way output, programmable
	OC output	1-way output, programmable
Main functions	Command execution channel	Three types of channels: 1 Operation channel 2. Control terminal, 3. Serial communication port, select 1 and 2 for main drive, and 3 for auxiliaries
	Built-in PID controller	Advanced PID controller processing to operate the closed-loop control system
	Stall torque speed control	Automatic limitation of current and voltage during operation, which prevents tripping due to frequent overcurrent or overvoltage
	Master drive and auxiliary drives connector	Extensible RS485 design, one drive in the system can be master and control other auxiliary drives (up to four) to operate in communication mode. The master drive sends feedback from the PID controller to the auxiliary drives and monitors their status in real time. Faults of auxiliary drives do not affect other drives.
	Water shortage protection	If the drive detects that the pressure in the pipeline is lower than the set water shortage pressure, the system will automatically stop. After a certain period of time, it restarts automatically when specific conditions are met. If the pressure returns to normal, the system operates normally. Otherwise, the system stops automatically, which results in extending the idle pump's lifespan to a maximum.
	High pressure alarm	When the pressure exceeds the set value, the system stops automatically to prevent pipeline damage due to excessive pressure.
	Automatic power saving mode	To save energy, it automatically reduces output voltage at low load.
	Setting up password	A 4-bit password can be set using non-zero numbers. The password will be valid within 1 minute after leaving the setting interface.
	Locking the parameters	Specify whether the parameter is locked in the running or stopped condition in case of incorrect operation.
Operating conditions	Installation	Installation should be carried out in conditions free of direct sunlight, dust, corrosive and flammable gases, oil mist, water vapour and moisture.
	Height	Lower than 1 000 m; performance will decrease above 1 000 m. Reduce performance by 1% for every 100 m as temperature increases.
	Ambient temperature	–10°C to + 40°C operation with reduced performance at 40°C to 50°C. Reduce performance by 4% for every 1°C as height increases.
	Humidity	≤95% RH, non-condensing.
	Vibrations	<5,9 m / S2 (0,6 G)

2-PUMP DELIVERY SIDE MANIFOLD



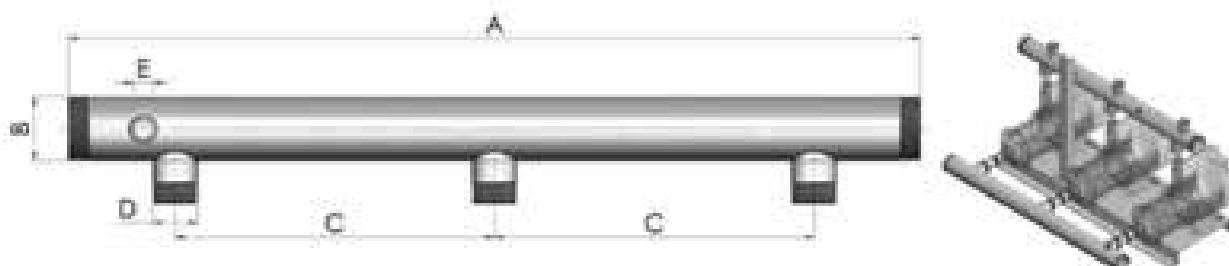
NAME	A Length (mm)	B Main pipe [inch]	C Inlet/outlet [inch]	D Inlet/outlet [inch]	E Distance between pumps (mm)	F Spacing (mm)	G Outlet [inch]	Weight (kg)
2500	500	1 ½	1 M	1 F	300	370	¼ F	1,92
2503	500	2	1 M	1 F	300	370	¼ F	2,41
2501	500	2	1 ¼ M	1 F	300	370	¼ F	2,45
2510	700	2	1 ¼ M	1 F	360	370	¼ F	2,60
2505	500	2	1 ½ M	1 F	300	370	¼ F	1,50
2511	700	2	1 ½ M	1 F	360	390	¼ F	3,34
2502	500	2 ½	1 ¼ M	1 F	300	370	¼ F	3,00
2513	700	2 ½	1 ¼ M	1 F	360	390	¼ F	3,30
2506	500	2 ½	1 ½ M	1 F	300	370	¼ F	3,10
2512	700	2 ½	1 ½ M	1 F	360	390	¼ F	3,30
2504	700	3	2 M	1 F	360	390	¼ F	5,8
2514	700	DN100*	3 M	1 F	360	390	¼ F	6,00
*flange	Collector thickness: 3mm							

2-PUMP SUCTION SIDE MANIFOLD



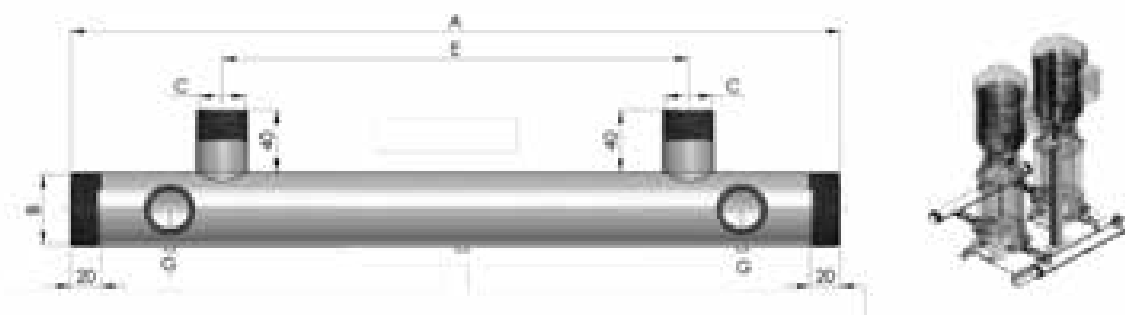
NAME	A Length (mm)	B Main pipe [inch]	C Inlet/outlet [inch]	D Inlet/outlet [inch]	E Distance between pumps (mm)	F Spacing (mm)	G Outlet [inch]	Weight (kg)
2600	500	1 ½	1 M	1 F	300	370	½ F	1,80
2603	500	2	1 M	1 F	300	370	½ F	2,20
2601	500	2	1 ¼ M	1 F	300	370	½ F	2,22
2605	500	2	1 ½ M	1 F	300	370	½ F	2,22
2611	700	2	1 ½ M	1 F	360	370	½ F	3,10
2609	500	2 ½	1 ¼ M	1 F	300	370	½ F	2,80
2613	700	2 ½	1 ¼ M	1 F	360	370	½ F	3,00
2602	500	2 ½	1 ½ M	1 F	300	370	½ F	2,80
2612	700	2 ½	1 ½ M	1 F	360	370	½ F	3,00
2512	700	2 ½	1 ½ M	1 F	360	390	½ F	3,30
2604	500	3	2 M	1 F	300	370	½ F	3,50
2610	700	3	2 M	1 F	360	390	½ F	3,80
2614	700	DN100*	3 M	1 F	360	390	½ F	6,00
*flange	Collector thickness: 3mm							

SUCTION SIDE MANIFOLD FOR 3-PUMP SETS



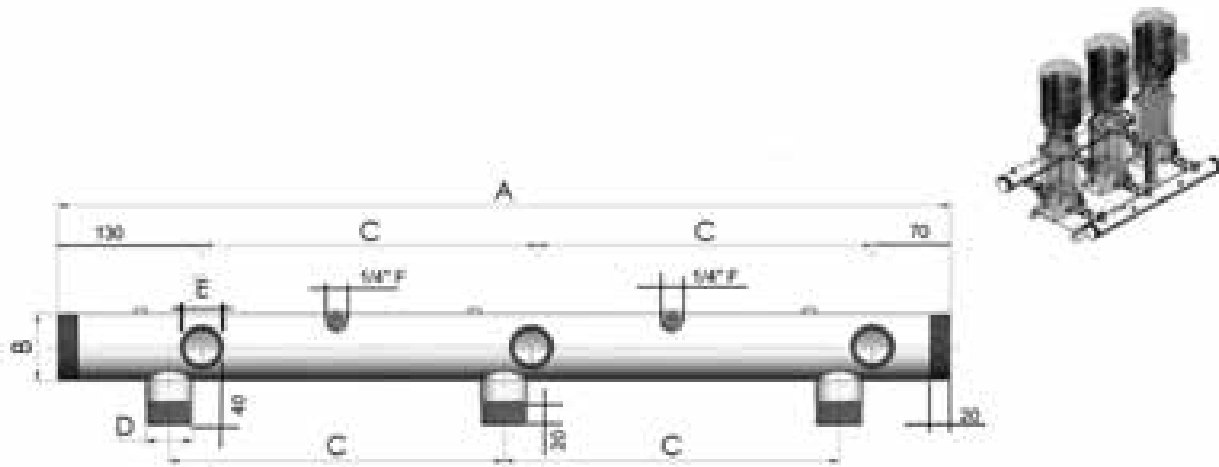
NAME	A Lenght (mm)	B Main pipe [inch]	C Distance between pumps (mm)	D Inlet/outlet [inch]	E Outlet [inch]	Weight (kg)
3642	800	2	300	1 M	½ F	3,50
3640	800	2	300	1 ¼ M	½ F	3,70
3643	800	2 ½	300	1 ¼ M	½ F	4,40
3641	800	2 ½	300	1 ½ M	½ F	4,60
3644	800	3	300	2 M	½ F	5,50
3645	800	DN100*	300	3 M	½ F	9,00
*flange	Collector thickness: 3mm					

DELIVERY SIDE MANIFOLD FOR 2-PUMP VERTICAL SETS



NAME	A Lenght (mm)	B Main pipe [inch]	C Inlet/outlet [inch]	E Distance between pumps (mm)	G Outlet [inch]	Weight (kg)
2500 90	500	1 ½	1 M	300	½ F	1,80
2503 90	500	2	1 M	300	½ F	2,20
2501 90	500	2	1 ¼ M	300	½ F	2,22
2510 90	700	2	1 ¼ M	360	½ F	2,22
2505 90	500	2	1 ½ M	300	½ F	3,10
2511 90	700	2	1 ½ M	360	½ F	2,80
2502 90	500	2 ½	1 ¼ M	300	½ F	3,00
2513 90	700	2 ½	1 ¼ M	360	½ F	2,80
2506 90	500	2 ½	1 ½ M	300	½ F	3,00
2512 90	700	2 ½	1 ½ M	360	½ F	3,50
2504 90	700	3	2 M	360	½ F	3,80
	Collector thickness: 3mm					

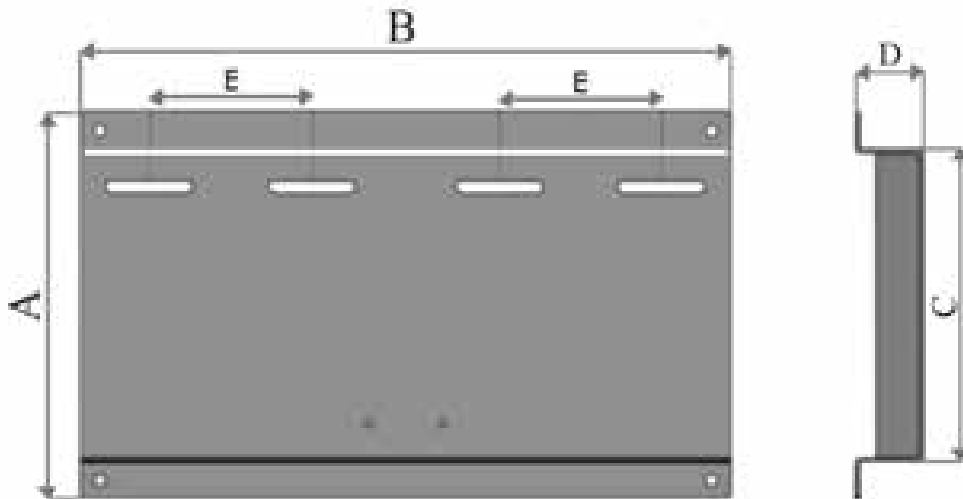
DELIVERY SIDE MANIFOLD FOR 3-PUMP VERTICAL SETS



Name	A Length (mm)	B Main pipe [inch]	C Distance between pumps (mm)	D Inlet/outlet [inch]	E Inlet/outlet [inch]	F Outlet [inch]	Weight (kg)
2500	800	2	300	1 M	1 F	¼ F	4,00
2503	800	2	300	1 ¼ M	1 F	¼ F	4,30
2501	800	2½	300	1 ¼ M	1 F	¼ F	4,80
2510	800	2½	300	1 ½ M	1 F	¼ F	5,00
2505	800	3	300	2	1 F	¼ F	5,90

Collector thickness: 3mm

PUMP GROUP BASE PLATE



NAME	Number of pumps	A (mm)	B (mm)	C (mm)
4805	1 Pompa	310	260	250
4800	2 Pompy	310	520	250
4802	2 Pompy	350	620	290
4813	2 Pompy	400	720	340
4803	3 Pompy	310	800	250
4806	3 Pompy	400	900	340
4804	4 Pompy	310	1080	250
4807	4 Pompy	400	1200	340

MH PRO SET – IVR-11

Hydrophore sets of a pump and an inverter. MH PRO pumps are self-priming centrifugal pumps of the highest quality. IVR-11 is an Intelligent Controller that controls the operation of the pump depending on the needs of the installation. The IVR-11 model is an easy-to-use control and protection device that maintains a constant set water pressure by changing the rotational speed of the pump motor. The main advantage of combining MH PRO series pumps with IVR-11 is the fact that they have 3x 230V power supply, compatible with IVR-11 series inverters. However, the set can be connected to a single-phase 1x 230V mains. Such a connection provides significant savings in electricity consumption.

The IVR-11 is a frequency converter drive, specially designed to manage the performance of a water pump. The unit can be adapted to a wide range of conditions and water supply requirements. The IVR-11 drive allows the pump to run more efficiently and safely, reduce energy consumption and extend the life of the pump. The IVR-11 drive is made of high-quality components and materials, and uses the latest microprocessor technology. MH PRO pumps is high quality device with a wide range of applications, from domestic installations to continuous operation in small industrial systems and agriculture. The pump shaft is made of AISI 304 stainless steel (DIN 1.4301), the rotor sleeves are made of brass, and the reinforced mechanical gland allows for use in liquids with a temperature of up to 70 degrees Celsius.

APPLICATION:

Household:

- water supply
- watering (including sprinkler operation)
- pressure boosting
- exploitation of rainwater

Farms:

- irrigation of greenhouses, gardens and fields
- collecting and using rainwater

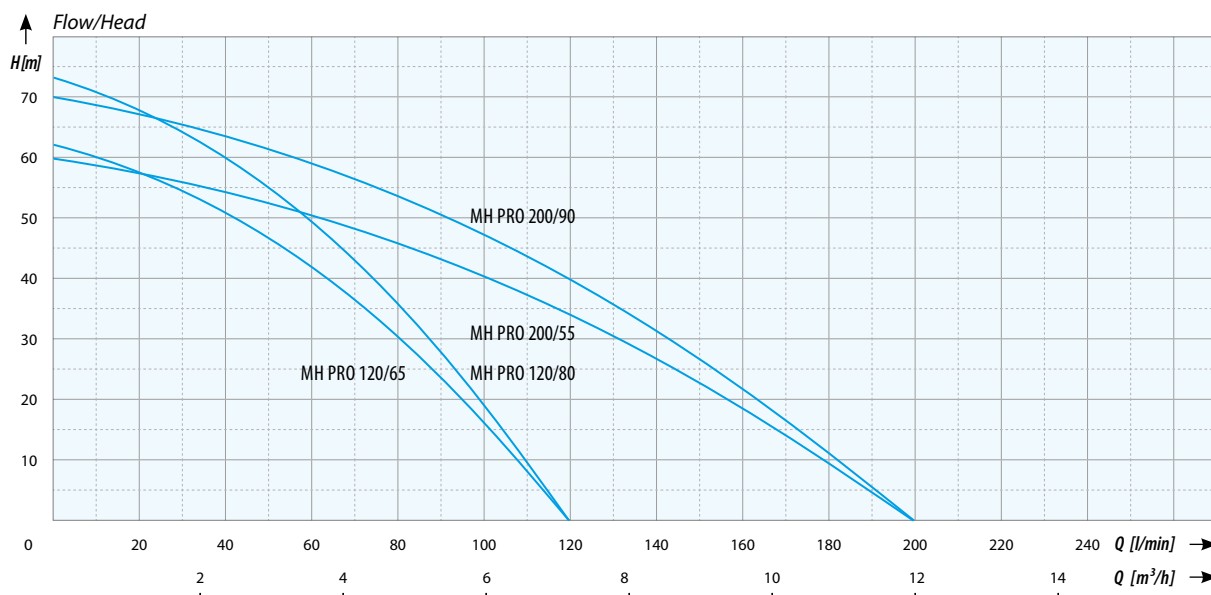


TECHNICAL DATA:

- Liquid temperature: $\leq 70^{\circ}\text{C}$
- Ambient temperature: $\leq 50^{\circ}\text{C}$
- Maximum system pressure: up to 10 bar
- Ingress protection: IP55
- Insulation class: F
- Possibility of alternating operation of the operated pumps
- Possibility to set up a standby pump in a multipump system

MATERIALS:

- Body: AISI 304 stainless steel.
- Shaft: AISI 304 stainless steel.
- Mechanical seal: SIC / SIC / EPDM
- Connections: cast iron
- Impellers, diffusers: noryl
- Base: cast iron
- Motor: closed-frame asynchronous squirrel-cage motor, aluminum housing, external ventilation.



NAME	Head [m]	Flow [l/min]	Motor power [W]	Voltage [V]	Suction lift [m]	Amperage [A]	Inlet/outlet [inch]	Dimensions L/H/W [cm]	Weight [kg]
MH PRO 120/65	62	120	1500	3x230 3x400	9	3,3	1 x 1	49/16/19	11,6
MH PRO 120/80	73	120	1500	3x230 3x400	9	3,3	1 x 1	52/16/19	12,7
MH PRO 200/55	60	200	1850	3x230 3x400	9	4,0	1¼ x 1¼	52/16/19	17,9
MH PRO 200/90	70	200	2200	3x230 3x400	9	5,5	1¼ x 1¼	55/16/19	18,2

MULTI SET IVR



The set is equipped with the IVR-09 (400V) / IVR-11(400V) frequency converter and the CV series pump/pumps. Multi-Set is an easy-to-use device designed for pumping of clean water in order to increase pressure in water supply systems, maintaining a constant, set water pressure by changing the rotational speed of the pump motor, with additional control and protection features.

CHARACTERISTICS:

- Energy efficiency: reduction of energy consumption by 30%–60%..
- Simple operation: all functions can be terminated by pressing a button.
- Reliability: the average torque and shaft wear are reduced due to decreasing the average rotational speed, which increases the pump operational lifetime. Due to the built-in soft start and stop function, the device allows to eliminate the water hammer.
- Fully protected: the system incorporates the overcurrent, overvoltage, undervoltage, short-circuit, impeller blocking and dry-running protection technology without the need to install probes/sensors in the well.
- The ability to control the operation of two pumps that supply the system.
- Low-noise operation.

TECHNICAL DATA:

- Pumps x 1/x 2/x 3/x 4/x 5/x 6 - (CV3 – Cv15)
- Frequency converter - IVR-09 (400V) / IVR-11 (400V)
- IBO ITALY steel fittings
- Check and water stop valves and fittings
- IBO ITALY pressure vessel

APPLICATION:

- Houses
- Apartments
- Holiday houses
- Agricultural holdings
- Supply of water from the well
- Irrigation of growing houses, gardens, agricultural land
- Collecting and using rainwater

NAME	Head [m]	Flow [m³/h]	Pressure (bar)	Temp body [°C]	Ambient temperature [°C]	Inlet [mm]	Outlet [mm]
MULTI SET IVR	220	5 - 84	16	+90	+40	40 - 50	40 - 50

SPINOX Deep well pumps

*4" SPINOX
6" SPINOX
8" SPINOX
10" SPINOX
12" SPINOX*



4"SPINOX

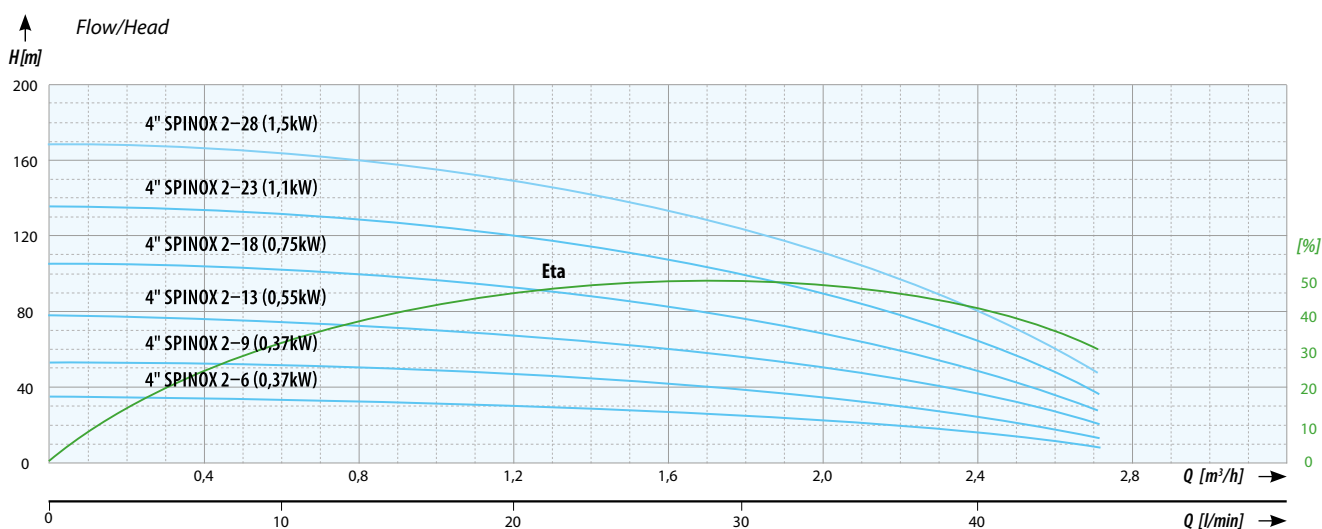
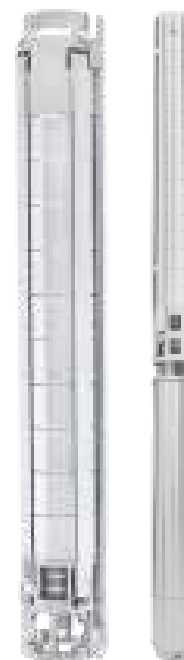
Multistage deep well pumps with a diameter of 98 mm, entirely made of stainless steel, are designed for installation in wells with a minimum internal diameter of 115 mm. The pumps are used to supply water to single- and multi-family houses, farms, and to supply irrigation systems (sprinklers, drip lines). The pumps are also used in industry and drainage.

CHARACTERISTICS:

- Pumps made entirely of stainless steel
- Increased wear resistance
- Built-in check valve
- Available with water motors - WMC by IPRO, oil - IOM by IPRO or IBO Italy
- Starting box (230V version) with built-in overcurrent protection and capacitor
- Thermal protection built into the motor winding (230V version)
- Possibility to attach a cable of a specific length (multiples of 5m)
- 24-month warranty
- Warranty and post-warranty service

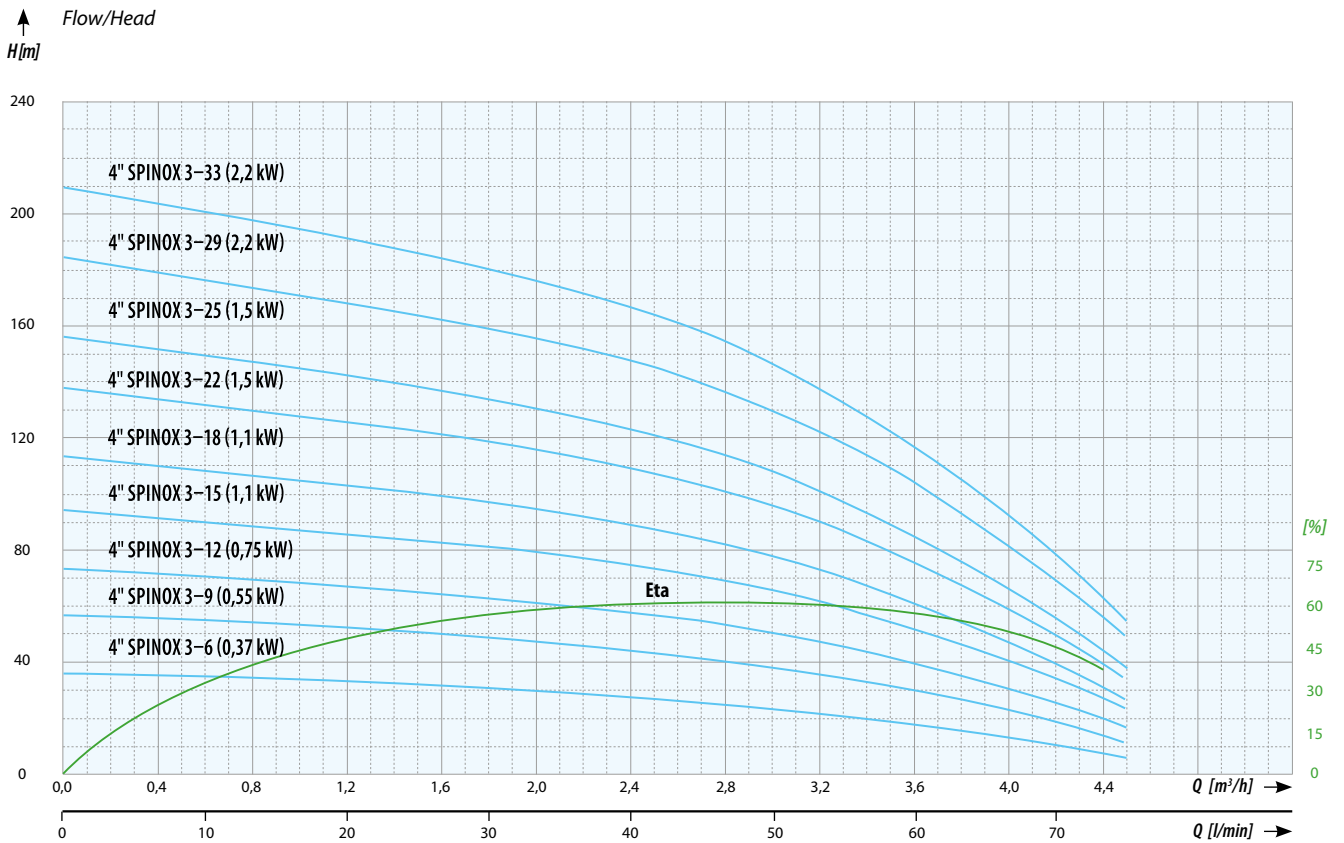
TECHNICAL DATA:

- Maximum liquid temperature: 35°C
- Power supply: 400V
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP68
- Length of the power cord: 1.5m
- Working position: vertical/horizontal
- Motor speed: 2850 RPM



4"SPINOX 2		Flow [Q]								
NAME	Flow [l/min]	Motor power [kW]	Head H [m]							
			m³/h	0	1	1,4	1,8	2	2,4	2,8
			l/min.	0	16,7	23,4	30,1	33,4	40,1	46,8
4"SPINOX 2-6	50	0,37		36	33	30	26	24	17	13
4"SPINOX 2-9	50	0,37		53	48	44	38	34	24	17
4"SPINOX 2-13	50	0,55		77	70	64	55	50	35	26
4"SPINOX 2-18	50	0,75		107	97	89	77	69	49	36
4"SPINOX 2-23	50	1,1		137	124	114	99	90	64	47
4"SPINOX 2-28	50	1,5		167	152	140	122	110	79	59

NAME	Power [kW]	Voltage [V]	Outlet [inch]	Amperage Water pumps [A]	Amperage Oil pumps [A]	The lenght of the hydraulics [mm]	Lenght with motor Water pump	Lenght with motor Oil pump	Pump diameter [mm]	Motor diameter Water Pump	Motor diameter Oil Pump	Weight Water pumps [kg]	Weight Oil pumps [kg]
4"SPINOX 2-6	0,37	230/400	1 ¼"	2,8 / 1,1	-	363	634	-	97	95	98	16,4	-
4"SPINOX 2-9	0,37	230/400	1 ¼"	2,8 / 1,1	-	462	697	-	97	95	98	17	-
4"SPINOX 2-13	0,55	230/400	1 ¼"	3,8 / 1,5	-	510	801	-	97	95	98	17,9	-
4"SPINOX 2-18	0,75	230/400	1 ¼"	4,9 / 2,2	-	615	906	-	97	95	98	20	-
4"SPINOX 2-23	1,1	230/400	1 ¼"	7,5 / 2,7	8,3 / 3,3	720	1059	1152,5	97	95	98	24,1	19,8
4"SPINOX 2-28	1,5	230/400	1 ¼"	10,3 / 4,1	11 / 4,3	825	1229	1297,5	97	95	98	27,2	22,8



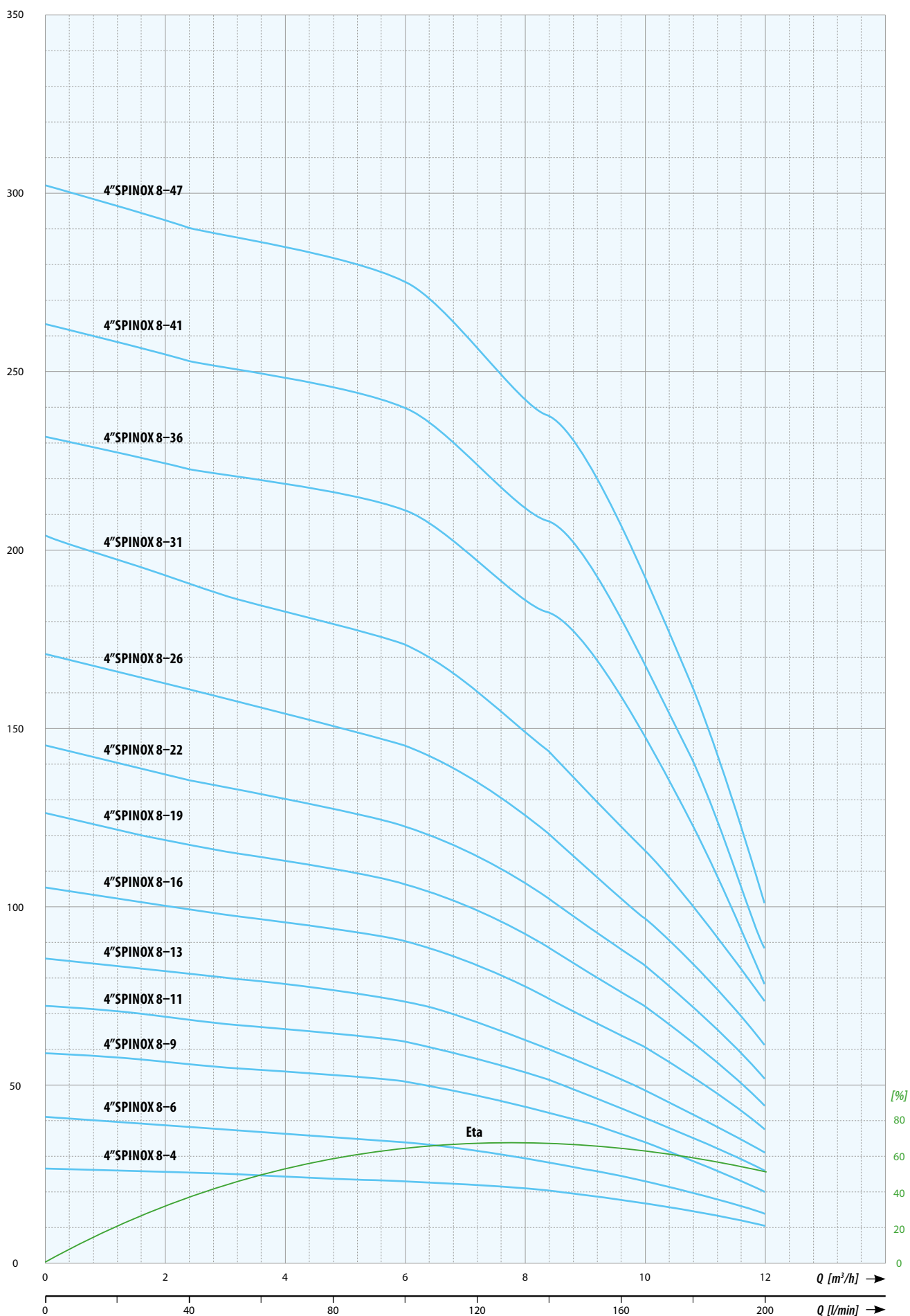
4"SPINOX 3			Flow [Q]										
NAME	Flow [l/min]	Motor power [kW]	Head H [m]										
			m³/h l/min.	0	1	1,4	1,8	2	2,4	2,8	3,4	4	4,4
4"SPINOX 3-6	75	0,37	38	35	34	32	31	30	27	22	15	12	
4"SPINOX 3-9	75	0,55	57	54	51	49	47	45	41	33	23	19	
4"SPINOX 3-12	75	0,75	76	70	68	65	64	60	55	45	31	26	
4"SPINOX 3-15	75	1,1	95	87	85	82	80	76	70	57	40	33	
4"SPINOX 3-18	75	1,1	113	105	101	97	95	89	82	67	46	38	
4"SPINOX 3-22	75	1,5	139	129	125	120	117	110	101	8	57	47	
4"SPINOX 3-25	75	1,5	157	145	140	135	131	124	113	9	63	52	
4"SPINOX 3-19	75	2,2	184	171	166	159	156	147	136	111	78	65	
4"SPINOX 3-33	75	2,2	209	194	187	180	176	166	152	125	87	72	

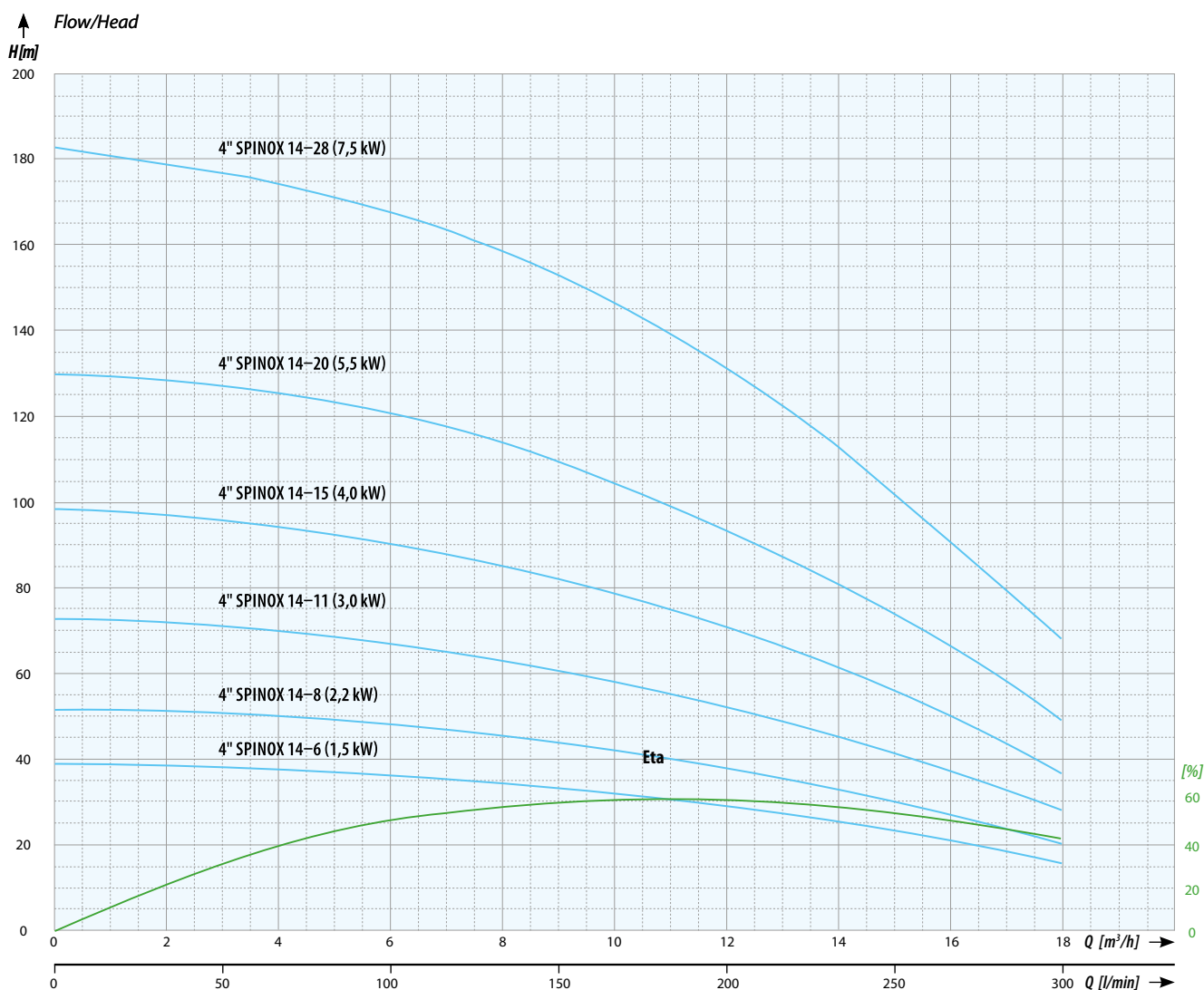
NAME	Power [kW]	Voltage [V]	Outlet [inch]	Amperage Water pumps [A]	Amperage Oil pumps [A]	The lenght of the hydraulics [mm]	Length with motor Water pumps	Length with motor Oil pumps	Pump diameter [mm]	Motor diameter Water pump	Motor diameter Oil pump	Weight Water pumps [kg]	Weight Oil pumps [kg]
4"SPINOX 3-6	0,37 kW	230/400 V	1 ¼"	2,8 / 1,1	–	363	634	–	97	95	98	16,4	–
4"SPINOX 3-9	0,55 kW	230/400 V	1 ¼"	3,8 / 1,5	–	426	717	–	97	95	98	17	–
4"SPINOX 3-12	0,75 kW	230/400 V	1 ¼"	4,9 / 2,2	–	489	780	–	97	95	98	18,7	–
4"SPINOX 3-15	1,1 kW	230/400 V	1 ¼"	7,5 / 2,7	8,3 / 3,3	552	891	984,5	97	95	98	22,4	18,1
4"SPINOX 3-18	1,1 kW	230/400 V	1 ¼"	7,5 / 2,7	8,3 / 3,3	615	954	1047,5	97	95	98	23	18,7
4"SPINOX 3-22	1,5 kW	230/400 V	1 ¼"	10,3 / 4,1	11 / 4,3	699	1103	1171,5	97	95	98	25,9	21,5
4"SPINOX 3-25	1,5 kW	230/400 V	1 ¼"	10,3 / 4,1	11 / 4,3	762	1166	1234,5	97	95	98	26,5	22,1
4"SPINOX 3-19	2,2 kW	230/400 V	1 ¼"	14,5 / 6,3	15,8 / 6	846	1384	1431	97	95	98	34,4	27,7
4"SPINOX 3-33	2,2 kW	230/400 V	1 ¼"	14,5 / 6,3	15,8 / 6	930	1468	1515	97	95	98	35,3	28,6

4"SPINOX 8			Flow [Q]							
NAME	Flow [l/min]	Motor power [kW]	m ³ /h	3	6	8	9	11	12	2,8
			l/min.	0	50	100	130	150	180	200
4"SPINOX 8-4	26	0.55	Head H [m]	26	24	22	20	17	13	9
4"SPINOX 8-6	39	1.1		39	36	33	29	26	19	14
4"SPINOX 8-9	59	1.5		59	54	50	44	39	29	21
4"SPINOX 8-11	72	1.5		72	66	61	54	47	35	26
4"SPINOX 8-13	85	2.2		85	78	72	63	56	42	31
4"SPINOX 8-16	105	2.2		105	96	89	78	69	52	38
4"SPINOX 8-19	124	3		124	114	105	93	81	61	45
4"SPINOX 8-22	144	4		144	132	122	107	94	71	52
4"SPINOX 8-26	170	4		170	156	144	127	111	84	61
4"SPINOX 8-31	203	5.5		203	186	172	151	133	100	73
4"SPINOX 8-36	231	5.5		231	220	210	188	173	123	77
4"SPINOX 8-41	263	7.5		263	251	239	214	197	140	88
4"SPINOX 8-47	302	7.5		302	288	274	245	226	161	101

NAME	Power [kW]	Voltage [V]	Outlet [inch]	Amperage Water pumps [A]	Amperage Oil pumps [A]	The lenght of the hydraulics [mm]	Length with motor Water pumps	Length with motor Oil pumps	Pump diameter [mm]	Motor diameter Water pump	Motor diameter Oil pump	Weight Water pumps [kg]	Weight Oil pumps [kg]
4"SPINOX 8-4	0.55	230/400	2"	3,8 / 1,5	-	418	709	-	97	95	98	17	-
4"SPINOX 8-6	1.1	230/400		7,5 / 2,7	8,3 / 3,3	518	858	950,5	97	95	98	21	16,7
4"SPINOX 8-9	1.5	230/400		10,3 / 4,1	11 / 4,3	668	1073	1140,5	97	95	98	24,5	20,6
4"SPINOX 8-11	1.5	230/400		10,3 / 4,1	11 / 4,3	768	1173	1240,5	97	95	98	25,5	21,1
4"SPINOX 8-13	2.2	230/400		14,5 / 6,3	15,8 / 6	868	1407	1453	97	95	98	33,5	26,8
4"SPINOX 8-16	2.2	230/400		14,5 / 6,3	15,8 / 6	1018	1557	1603	97	95	98	35	28,3
4"SPINOX 8-19	3	400		8,1	8	1168	1747	1728	97	95	98	38,5	28,5
4"SPINOX 8-22	4	400		10,4	10,4	1318	2010	1952	97	95	98	45	34,9
4"SPINOX 8-26	4	400		10,4	10,4	1518	2210	2152	97	95	98	47	36,9
4"SPINOX 8-31	5.5	400		13,4	13,9	1768	2537	2512	97	95	98	53,5	45,7
4"SPINOX 8-36	5.5	400		13,4	13,9	2018	2787	2762	97	95	98	56	48,2
4"SPINOX 8-41	7.5	400		18	18,7	2268	3096	3097	97	95	98	61,5	55,6
4"SPINOX 8-47	7.5	400		18	18,7	2568	3396	3397	97	95	98	64,5	58,6

Flow/Head





4"SPINOX 14			Flow [Q]							
NAME	Flow [l/min]	Motor power [kW]	m ³ /h	0	6	9	11	12	14	18
			l/min.	0	100,2	150	183,7	200,4	233,8	300,6
4"SPINOX 14-6	300	1,5	Head H [m]	39	36	32	29	28	24	14
4"SPINOX 14-8	300	2,2		52	48	42	39	37	32	19
4"SPINOX 14-11	300	3		72	66	58	54	51	44	26
4"SPINOX 14-15	300	4		98	90	80	74	70	60	36
4"SPINOX 14-20	300	5,5		130	120	106	98	93	80	48
4"SPINOX 14-28	300	7,5		182	168	148	137	131	112	67

NAME	Power [kW]	Voltage [V]	Outlet [inch]	Amperage Water pumps [A]	Amperage Oil pumps [A]	The lenght of the hydraulics [mm]	Length with motor Water pumps	Length with motor Oil pumps	Pump diameter [mm]	Motor diameter Water pump	Motor diameter Oil pump	Weight Water pumps [kg]	Weight Oil pumps [kg]
4"SPINOX 14-6	1,5	230/400	2"	10,3 / 4,1	11 / 4,3	625	1029	1097,5	97	95	98	24,8	20,4
4"SPINOX 14-8	2,2	230/400	2"	14,5 / 6,3	15,8 / 6	755	1293	1340	97	95	98	33,1	26,4
4"SPINOX 14-11	3	400	2"	8,1	8	950	1640	1510	97	95	98	37,1	27,1
4"SPINOX 14-15	4	400	2"	10,4	10,4	1210	1900	1844	97	95	98	44,7	34,6
4"SPINOX 14-20	5,5	400	2"	13,4	13,9	1535	2302	2279	97	95	98	52	44,2
4"SPINOX 14-28	7,5	400	2"	18	18,7	2055	2880	2884	97	95	98	60,3	54,4

6"SPINOX

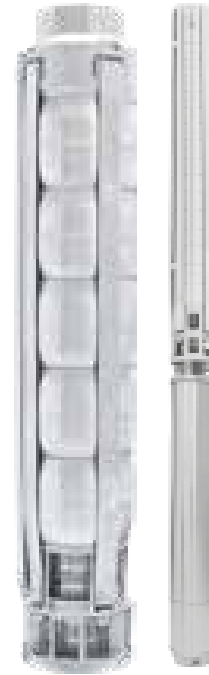
Multistage deep well pumps with a diameter of 145mm, made entirely of stainless steel, are designed for installation in wells with a minimum internal diameter of 160mm. The pumps are used to supply water to multi-family houses, farms, irrigation systems, sprinklers, and lowering the groundwater level. The pumps are also used in water supply and fire protection systems.

CHARACTERISTICS:

- Pumps made entirely of stainless steel
- Increased wear resistance
- Built-in check valve
- Available with water motors - WMC by IPRO, olejowymi - IOM by IPRO or IBO Italy
- Possibility to attach a cable of a specific length (multiples of 5m)
- 24-month warranty
- Warranty and post-warranty service

TECHNICAL DATA:

- Maximum liquid temperature: 35°C
- Power supply: 400V
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP68
- Length of the power cord: 1.5m
- Working position: vertical/horizontal
- Motor speed: 2850 RPM

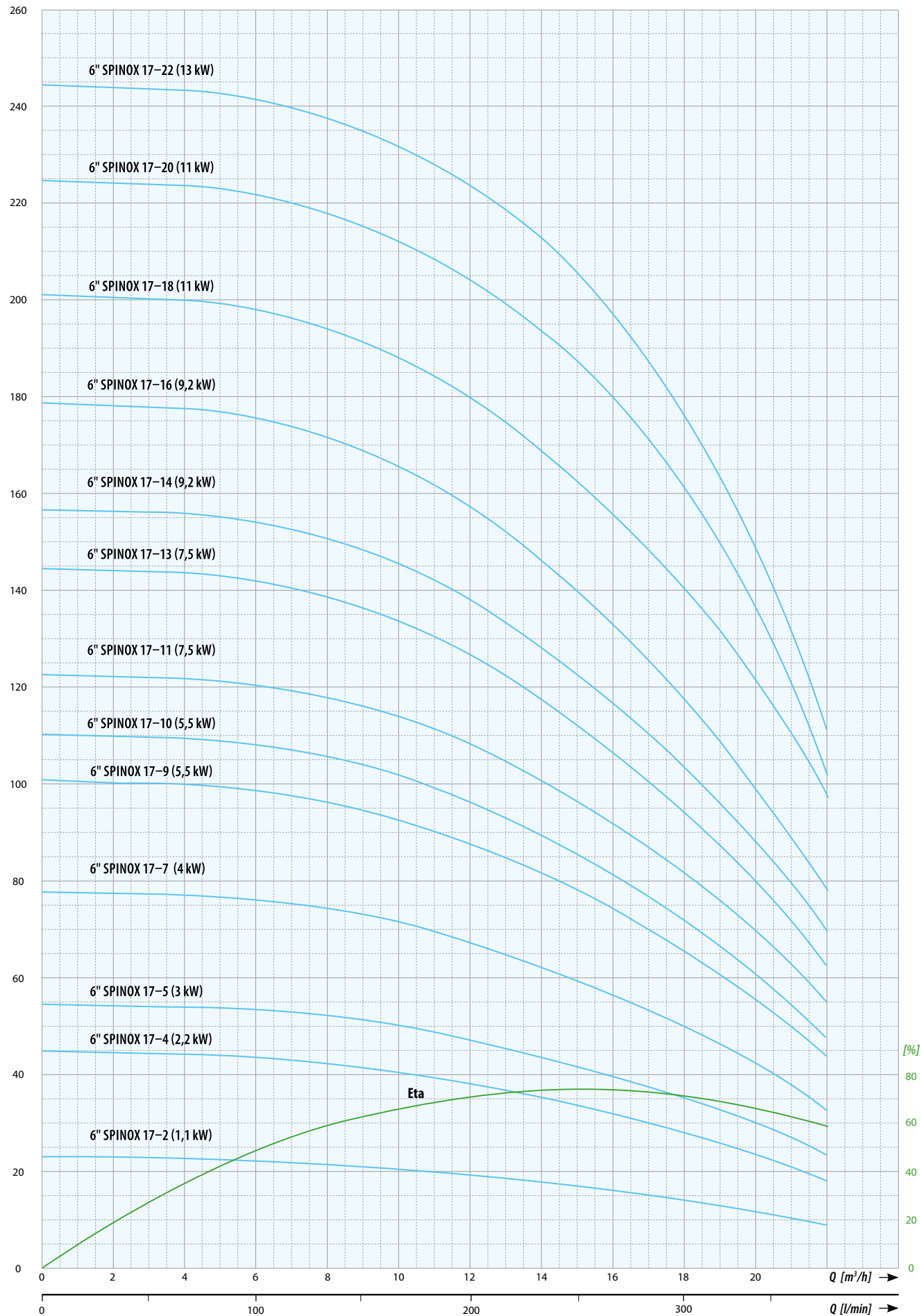


6"SPINOX 17			Flow [Q]								
NAME	Flow [l/min]	Motor power [kW]	m ³ /h l/min.	Head H [m]							
				0	4	8	12	16	18	20	22
6"SPINOX 17- 2	367	1.1	23	22	21	19	16	14	12	9	
6"SPINOX 17- 4	367	2.2	45	44	43	39	33	29	24	19	
6"SPINOX 17- 5	367	3	56	56	54	49	41	37	31	25	
6"SPINOX 17- 7	367	4	78	78	75	68	58	52	44	35	
6"SPINOX 17- 9	367	5.5	101	100	97	89	76	67	58	46	
6"SPINOX 17- 10	367	5.5	112	111	107	98	83	74	63	50	
6"SPINOX 17- 11	367	7.5	124	123	119	110	94	84	72	58	
6"SPINOX 17- 13	367	7.5	145	144	140	128	109	97	83	66	
6"SPINOX 17-14	367	9.3	157	156	152	139	119	106	91	74	
6"SPINOX 17-16	367	9.3	179	178	172	158	134	119	102	82	
6"SPINOX 17-18	367	11	202	200	194	178	152	136	116	94	
6"SPINOX 17- 20	367	11	223	221	214	196	167	148	126	101	
6"SPINOX 17- 22	367	13	246	245	237	218	186	166	142	114	

NAME	Power [kW]	Motor diameter [inch]	Voltage [V]	Outlet [inch]	Amperage Water pumps [A]	Amperage Oil pumps [A]	The length of the hydraulics [mm]	Length with motor Water pumps	Length with motor Oil pumps	Pump diameter [mm]	Weight Water pumps [kg]	Weight Oil pumps [kg]		
6"SPINOX 17-2	1.1	4"	230/400	2 1/2"	7,5 / 2,7	8,3 / 3,3	382	721	814,5	128	23	18,7		
6"SPINOX 17- 4	2.2		230/400		14,5 / 6,3	15,8 / 6	503	1041	975,5	128	34,6	27,9		
6"SPINOX 17- 5	3.0		400		8,1	8	563	1253	1123	128	42,9	27,9		
6"SPINOX 17- 7	4,0		400		10,4	10,4	684	1374	1318	128	45,5	35,4		
6"SPINOX 17- 9	5.5		400		13,4	13,9	805	1572	1549	128	52,1	44,3		
6"SPINOX 17- 10	5.5		400		13,4	13,9	866	1633	1610	128	53,9	46,1		
6"SPINOX 17- 11	7.5		400		18	18,7	926	1751	1755	128	57,7	51,8		
6"SPINOX 17- 13	7.5		400		18	18,7	1047	1872	1876	128	60,3	54,4		
6"SPINOX 17-7	5,5		6"		400	2 1/2"	13,7	-	684	1419	-	145	60,7	-
6"SPINOX 17-9	5,5				400		13,7	-	821	1556	-	145	65,1	-
6"SPINOX 17-10	7,5	400		17,9	18,4		881	1661	1576,5	145	70,9	55,7		
6"SPINOX 17-11	7,5	400		17,9	18,4		942	1722	1637,5	145	72,2	57		
6"SPINOX 17-13	7,5	400		17,9	18,4		1063	1843	1758,5	145	74,8	59,6		
6"SPINOX 17-14	9,2	400		21,5	22,4		1123	1933	1861,5	145	79,5	65,9		
6"SPINOX 17-16	9,2	400		21,5	22,4		1244	2054	1982,5	145	82,1	68,5		
6"SPINOX 17-18	11	400		25,6	26,1		1365	2205	2133,5	145	86,9	74,1		
6"SPINOX 17-20	11	400		25,6	26,1		1486	2326	2254,5	145	89,5	76,7		
6"SPINOX 17-22	13	400		30,9	30,9		1607	2497	2405,5	145	98,3	81,8		

↑ Flow/Head

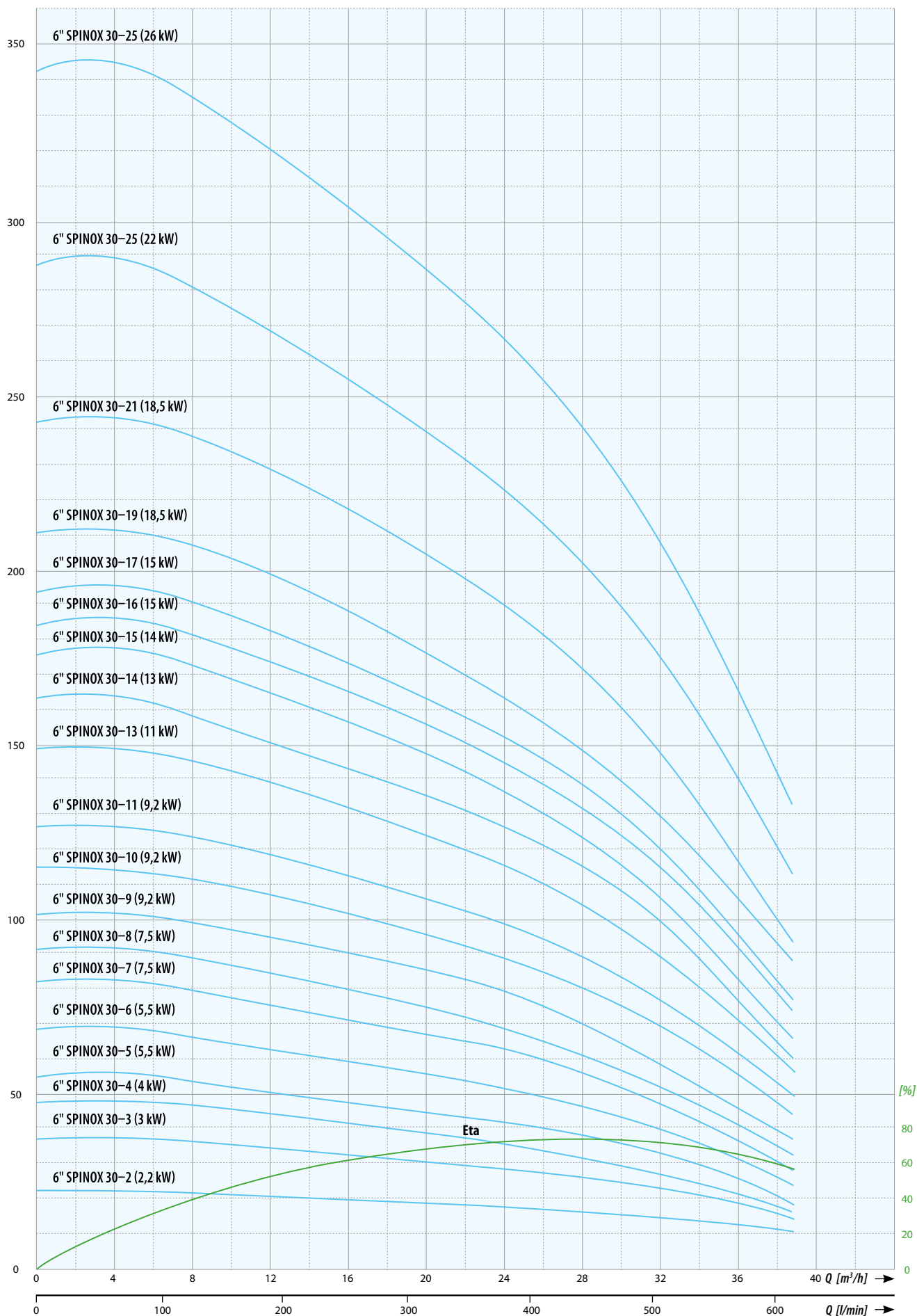
H[m]



6"SPINOX 30			Flow [Q]										
NAME	Flow [l/min]	Motor power [kW]	m ³ /h l/min.	Head H [m]									
				0	4	8	12	16	20	20	28	39	
				0	66.7	133.3	200	266.7	333.3	333.3	466.7	650	
6"SPINOX 30-2	650	2.2		23	23	23	21	20	19	16	16	8	
6"SPINOX 30-3	650	3		35	35	33	32	30	28	24	24	12	
6"SPINOX 30-4	650	4		46	46	45	43	40	38	32	32	16	
6"SPINOX 30-5	650	5.5		58	58	56	54	51	48	41	41	22	
6"SPINOX 30-6	650	5.5		69	69	67	64	60	57	48	48	25	
6"SPINOX 30-7	650	7.5		80	81	79	75	71	67	57	57	31	
6"SPINOX 30-8	650	7.5		91	92	89	85	80	76	64	64	34	
6"SPINOX 30-9	650	9.3		103	104	101	96	91	86	73	73	39	
6"SPINOX 30-10	650	9.3	Head H [m]	114	115	111	106	100	95	80	80	43	
6"SPINOX 30-11	650	9.3		125	125	122	116	110	103	87	87	46	
6"SPINOX 30-13	650	11		148	148	144	137	130	122	103	103	55	
6"SPINOX 30-14	650	13		160	161	156	149	141	133	113	113	61	
6"SPINOX 30-15	650	13		171	171	167	159	150	142	120	120	64	
6"SPINOX 30-16	650	15		183	184	179	171	162	153	130	130	70	
6"SPINOX 30-17	650	15		194	195	189	180	171	161	137	137	74	
6"SPINOX 30-19	650	18.5		218	219	213	203	193	182	156	156	85	
6"SPINOX 30-21	650	18.5		240	241	234	223	212	200	170	170	92	
6"SPINOX 30-25	650	22		285	286	278	265	251	237	201	201	108	
6"SPINOX 30-30	650	26		342	343	333	318	301	284	242	242	130	

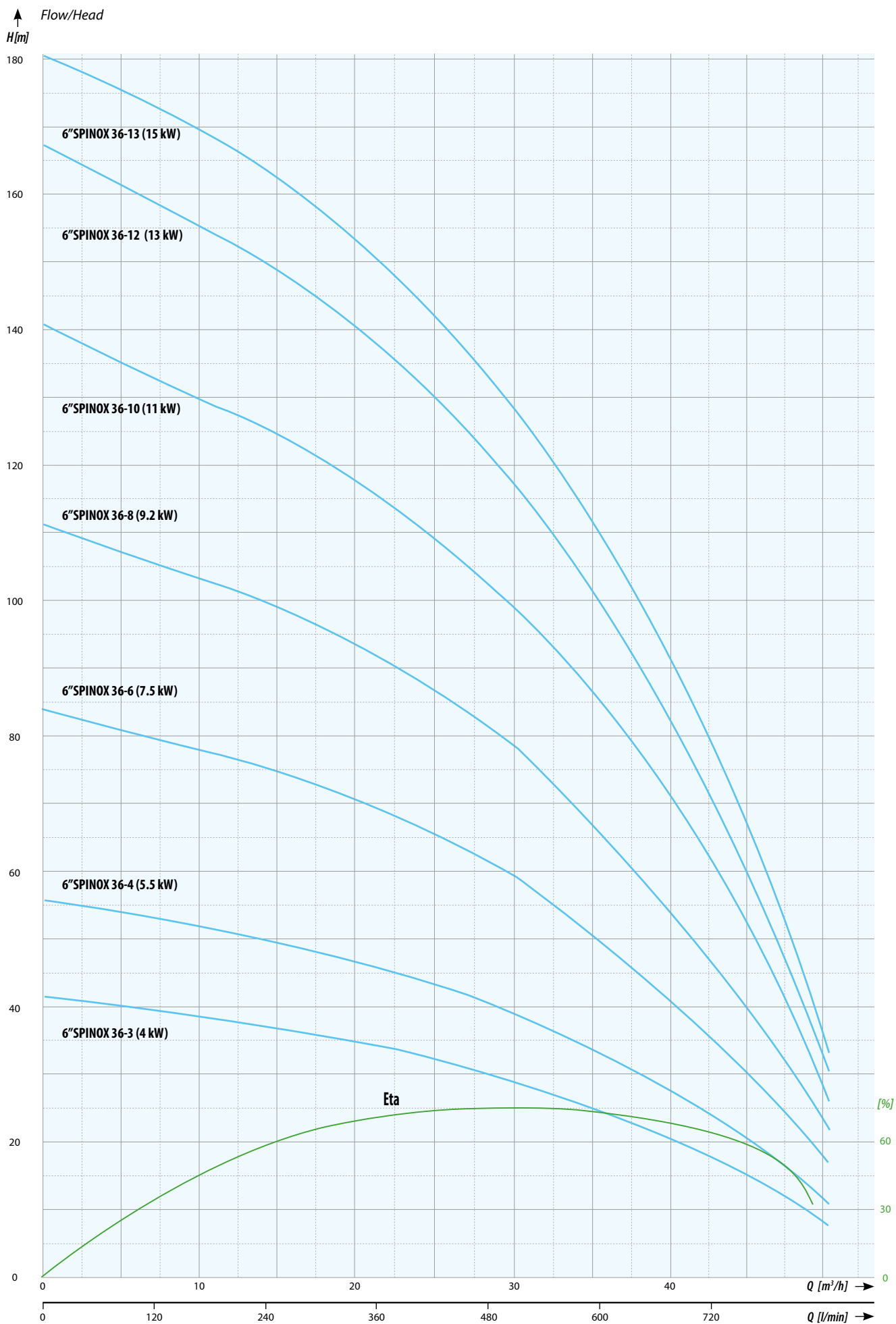
NAME	Power [kW]	Motor diameter [inch]	Voltage [V]	Outlet [inch]	Amperage Water pumps [A]	Amperage Oil pumps [A]	The lenght of the hydraulics [mm]	Length with motor Water pumps	Length with motor Oil pumps	Pump diameter [mm]	Weight Water pumps [kg]	Weight Oil pumps [kg]		
6"SPINOX 30-2	2,2	4"	230/400		14,5/6,3	15,8/6	458	997	1043/968	128	33,8	27,1/23,5		
6"SPINOX 30-3	3		400		8,1	8	554	1133	1114	128	37,7	27,7		
6"SPINOX 30-4	4		400		10,4	10,4	650	1342	1284	128	44,6	34,5		
6"SPINOX 30-5	5,5		400		13,4	13,9	746	1515	1490	128	50,5	42,7		
6"SPINOX 30-6	5,5		400		13,4	13,9	842	1611	1586	128	52,4	44,6		
6"SPINOX 30-7	7,5		400		18	18,7	938	1766	1767	128	57,3	51,4		
6"SPINOX 30-8	7,5		400		18	18,7	1034	1862	1863	128	59,2	53,3		
6"SPINOX 30-5	5,5		400		13,7	-	761	1496	-	145	62,7	-		
6"SPINOX 30-6	5,5		400		13,7	-	857	1592	-	145	64,6	-		
6"SPINOX 30-7	7,5		400		17,9	18,4	953	1733	1648,5	145	71,5	56,3		
6"SPINOX 30-8	7,5		400		17,9	18,4	1049	1829	1744,5	145	73,4	58,2		
6"SPINOX 30-9	9,2		6"		400	3"	21,5	22,4	1145	1955	1883,5	145	78,7	65,1
6"SPINOX 30-10	9,2				400		21,5	22,4	1241	2051	1979,5	145	80,6	67
6"SPINOX 30-11	9,2				400		21,5	22,4	1337	2147	2075,5	145	82,5	68,9
6"SPINOX 30-13	11				400		25,6	26,1	1529	2369	2297,5	145	88,5	75,7
6"SPINOX 30-14	13				400		30,9	30,9	1625	2515	2423,5	145	96,6	80,1
6"SPINOX 30-15	13				400		30,9	30,9	1721	2611	2519,5	145	98,5	82
6"SPINOX 30-16	15				400		34,9	34,8	1817	2747	2665,5	145	104,6	88,9
6"SPINOX 30-17	15	400		34,9	34,8		1913	2843	2761,5	145	106,5	90,8		
6"SPINOX 30-19	18,5	400		43,5	-		2105	3120	-	145	119,1	-		
6"SPINOX 30-21	18,5	400		43,5	-		2297	3312	-	145	122,9	-		
6"SPINOX 30-25	22	400		50,3	-		2681	3741	-	145	137,3	-		
6"SPINOX 30-30	26	400		59,2	-		3161	4326	-	145	158	-		

↑ Flow/Head
H[m]



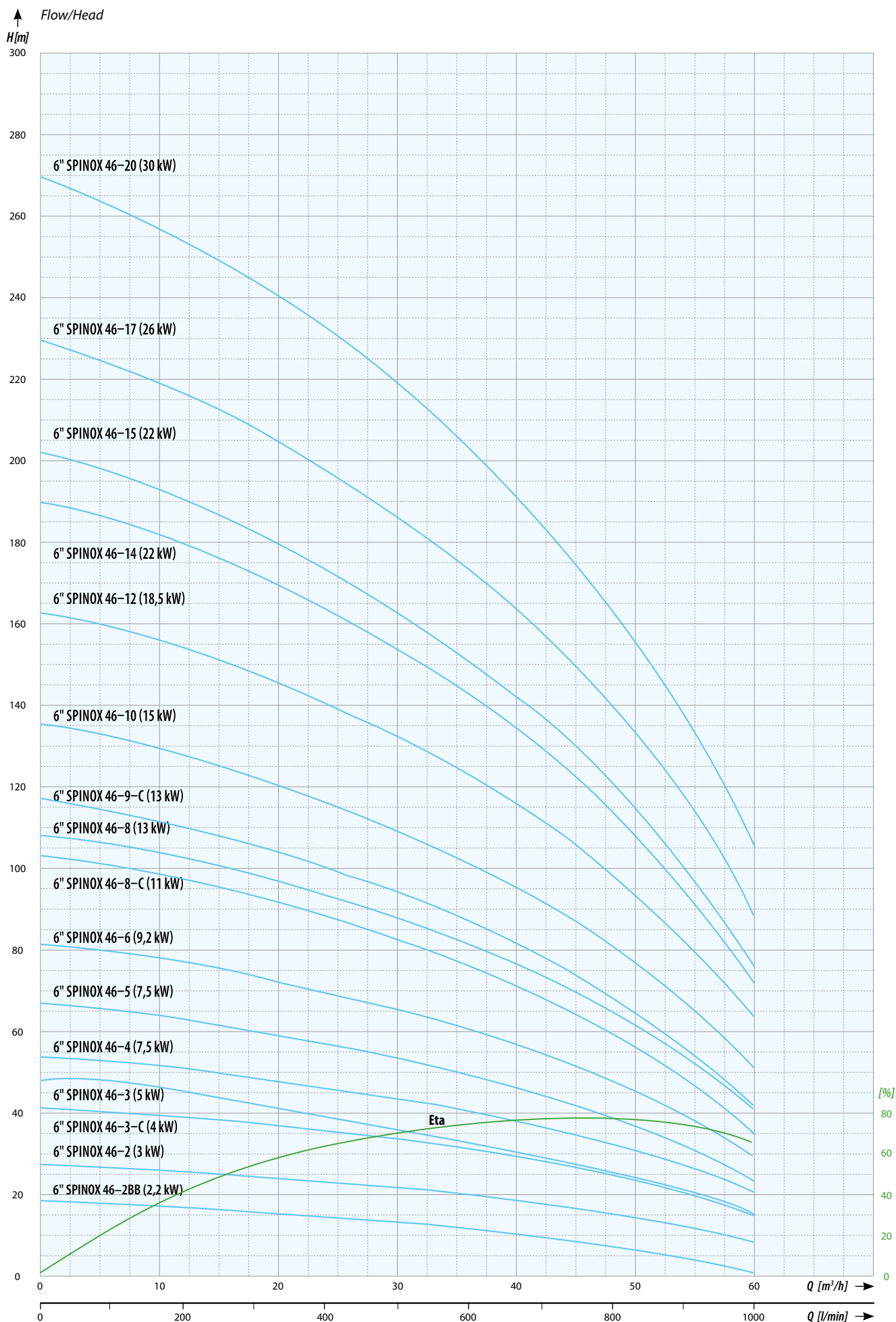
6"SPINOX 36			Flow [Q]								
NAME	Flow [l/min]	Motor power [kW]	m ³ /h l/min.	0	18	30	33	36	39	42	51
				0	300	500	550	600	650	700	850
6"SPINOX 36-3	835	4	Head H [m]	42	36	30	28	26	24	20	8
6"SPINOX 36-4	835	5.5		56	48	40	37	34	32	26	10
6"SPINOX 36-6	835	7.5		84	72	60	56	51	48	39	16
6"SPINOX 36-8	835	9.2		112	95	79	75	68	64	52	21
6"SPINOX 36-10	835	11		140	119	99	93	85	80	66	26
6"SPINOX 36-12	835	13		168	143	119	112	103	95	79	31
6"SPINOX 36-13	835	15		182	155	129	121	111	103	85	34

NAME	Power [kW]	Voltage [V]	Outlet [inch]	Amperage Water pumps [A]	Amperage Oil pumps [A]	The lenght of the hydraulics [mm]	Length with motor Water pumps	Length with motor Oil pumps	Pump diameter [mm]	Motor diameter Water pump	Motor diameter Oil pump	Weight Water pumps [kg]	Weight Oil pumps [kg]
6"SPINOX 36-3	4	400	3"	10,4	10,4	550	1240	1184	143	95	98	43	32,9
6"SPINOX 36-4	5.5	400		13,4	13,9	635	1402	1379	143	95	98	49	41,2
6"SPINOX 36-6	7.5	400		17,9	18,4	805	1524	1500,5	145	143	142	61	55
6"SPINOX 36-8	9.3	400		21,5	22,4	975	1724	1713,5	145	143	142	68	64
6"SPINOX 36-10	11	400		25,6	26,1	1148	1927	1916,5	145	143	142	74	71
6"SPINOX 36-12	13	400		30,9	30,9	1318	2147	2116,5	145	143	142	86	77,5
6"SPINOX 36-13	15	400		34,9	34,8	1403	2277	2251,5	145	143	142	94	84,5



6"SPINOX 46			Flow [Q]								
NAME	Flow [l/min]	Motor power [kW]	m ³ /h l/min.	0	15	20	30	40	45	55	59.8
				0	250	333.3	500	666.7	750	916.7	996.7
6"SPINOX 46-2BB	1000	2,2	Head H [m]	19	17	17	15	12	10	5	1
6"SPINOX 46-2	1000	3		27	24	23	21	18	16	11	9
6"SPINOX 46-3-C	1000	4		36	33	31	28	24	21	14	10
6"SPINOX 46-3	1000	5,5		41	38	36	32	28	26	20	15
6"SPINOX 46-4-C	1000	5,5		49	45	43	39	34	30	21	15
6"SPINOX 46-4	1000	7,5		54	50	48	44	38	35	26	20
6"SPINOX 46-5	1000	7,5		67	62	60	54	47	43	31	24
6"SPINOX 46-6	1000	9,3		81	75	72	65	57	51	38	30
6"SPINOX 46-8-C	1000	11		103	95	91	82	71	64	46	36
6"SPINOX 46-8	1000	13		108	100	96	88	77	70	52	41
6"SPINOX 46-9C	1000	13		117	108	104	94	82	74	54	42
6"SPINOX 46-10	1000	15		135	125	120	109	95	87	65	51
6"SPINOX 46-12	1000	18,5		162	150	145	132	115	105	79	63
6"SPINOX 46-14	1000	22		189	175	169	153	134	122	92	73
6"SPINOX 46-15	1000	22		202	187	180	163	143	130	97	77
6"SPINOX 46-17	1000	26		229	213	205	186	163	149	112	89
6"SPINOX 46-20	1000	30		270	251	241	219	192	175	132	105

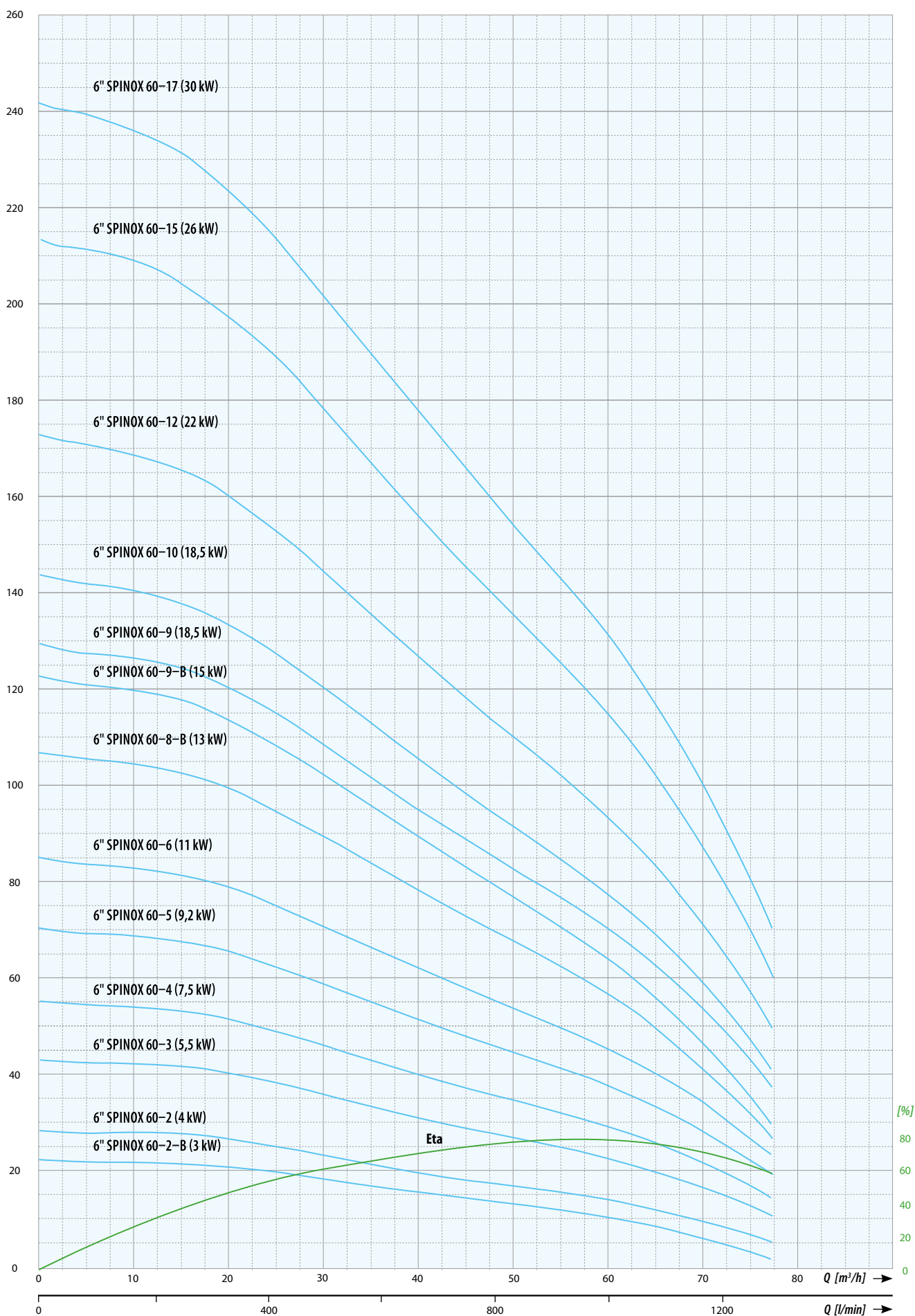
NAME	Power [kW]	Motor diameter [inch]	Voltage [V]	Outlet [inch]	Amperage Water pumps [A]	Amperage Oil pumps [A]	The lenght of the hydraulics [mm]	Length with motor Water pumps	Length with motor Oil pumps	Pump diameter [mm]	Weight Water pumps [kg]	Weight Oil pumps [kg]
6"SPINOX 46-2BB	2,2	4"	230/400	4"	14,5/6,3	15,8/6	489	1028	1074/999	138	34	27,3/23,7
6"SPINOX 46-2	3		400		8,1	8	489	1068	1049	138	36	26
6"SPINOX 46-3C	4		400		10,4	10,4	602	1294	1236	138	43,2	33,1
6"SPINOX 46-3	5,5		400		13,4	13,9	602	1371	1346	138	47,2	39,4
6"SPINOX 46-4C	5,5		400		13,4	13,9	715	1484	1459	138	49,4	41,6
6"SPINOX 46-4	7,5		400		18	18,7	715	1543	1544	138	52,4	46,5
6"SPINOX 46-4	7,5	6"	400		17,9	18,4	727	1507	1422,5	145	67,6	
6"SPINOX 46-5	7,5	400	17,9		18,4	840	1620	1535,5	145	69,8	54,6	
6"SPINOX 46-6	9,2	400	21,5		22,4	953	1763	1691,5	145	75,4	61,8	
6"SPINOX 46-8C	11	6"	400		25,6	26,1	1179	2019	1947,5	145	82	69,2
6"SPINOX 46-8	13		400		30,9	30,9	1179	2069	1977,5	145	88,2	71,7
6"SPINOX 46-9C	13		400		30,9	30,9	1292	2182	2090,5	145	90,4	73,9
6"SPINOX 46-10	15		400		34,9	34,8	1405	2335	2253,5	145	96,8	81,1
6"SPINOX 46-12	18,5		400		43,5	-	1631	2646	-	145	110	-
6"SPINOX 46-14	22		400		50,3	-	1857	2917	-	145	119,3	-
6"SPINOX 46-15	22		400		50,3	-	1970	3030	-	145	121,5	-
6"SPINOX 46-17	26		400		59,2	-	2196	3361	-	145	136,6	-
6"SPINOX 46-20	30		400		69,7	-	2535	3810	-	145	154,6	-



6"SPINOX 60			Flow [Q]								
NAME	Flow [l/min]	Motor power [kW]	m ³ /h l/min.	0	10	30	40	50	60	70	78
				0	166.7	500	666.7	833.3	1000	1166.7	1300
6"SPINOX 60-2-B	1285	3	Head H [m]	22	22	18	15	13	10	6	1
6"SPINOX 60-2	1285	4		28	27	23	19	17	14	10	5
6"SPINOX 60-3	1285	5.5		42	41	35	30	26	22	16	10
6"SPINOX 60-4	1285	7.5		56	55	47	41	35	30	22	14
6"SPINOX 60-5	1285	9.3		71	69	59	51	44	38	28	18
6"SPINOX 60-6	1285	11		85	83	71	62	54	45	34	22
6"SPINOX 60-8-B	1285	13		108	105	90	79	68	57	42	26
6"SPINOX 60-9-B	1285	15		122	119	102	90	78	65	48	30
6"SPINOX 60-9	1285	18.5		129	127	109	95	83	71	54	37
6"SPINOX 60-10	1285	18.5		143	140	120	105	92	78	60	41
6"SPINOX 60-12	1285	22		171	167	144	126	110	94	72	50
6"SPINOX 60-15	1285	26		214	209	179	157	136	116	89	60
6"SPINOX 60-17	1285	30		243	237	203	179	155	132	101	69

NAME	Power [kW]	Motor diameter [inch]	Voltage [V]	Outlet [inch]	Amperage Water pumps [A]	Amperage Oil pumps [A]	The lenght of the hydraulics [mm]	Length with motor Water pumps	Length with motor Oil pumps	Pump diameter [mm]	Weight Water pumps [kg]	Weight Oil pumps [kg]
6"SPINOX 60-2-B	3	4"	400	4"	8,1	8	489	1068	1049	138	36	26
6"SPINOX 60-2	4		400		10,4	10,4	489	1181	1123	138	41	30,9
6"SPINOX 60-3	5,5		400		13,4	13,9	603	1372	1347	138	47,2	39,4
6"SPINOX 60-4	7,5		400		18	18,7	715	1543	1544	138	52,4	46,5
6"SPINOX 60-4	7,5		400		17,9	18,4	727	1507	1422,5	145	67,6	52,4
6"SPINOX 60-5	9,2		400		21,5	22,4	840	1650	1578,5	145	73,2	59,6
6"SPINOX 60-6	11	6"	400		25,6	26,1	953	1793	1721,5	145	77,6	64,8
6"SPINOX 60-8-B	13		400		30,9	30,9	1179	2069	1977,5	145	88,2	71,7
6"SPINOX 60-9-B	15		400		34,9	34,8	1292	2222	2140,5	145	94,6	78,9
6"SPINOX 60-9	18,5		400		43,5	-	1292	2307	-	145	103,4	-
6"SPINOX 60-10	18,5		400		43,5	-	1405	2420	-	145	105,6	-
6"SPINOX 60-12	22		400		50,3	-	1631	2691	-	145	114,9	-
6"SPINOX 60-15	26		400		59,2	-	1970	3135	-	145	132,2	-
6"SPINOX 60-17	30		400		69,7	-	2196	3471	-	145	148	-

Flow/Head



8"SPINOX

Multistage deep well pumps with a diameter of 175mm, made entirely of stainless steel, are designed for installation in wells with a minimum internal diameter of 220mm. The pumps are used to supply water to multi-family houses, farms, irrigation systems, sprinklers, and lowering the groundwater level. The pumps are also used in water supply and fire protection systems.

CHARACTERISTICS:

- Pumps made entirely of stainless steel
- Increased wear resistance
- Built-in check valve
- Available with water motors - WMC by IPRO, oil - IOM by IPRO or IBO Italy
- Possibility to attach a cable of a specific length (multiples of 5m)
- 24-month warranty
- Warranty and post-warranty service

TECHNICAL DATA:

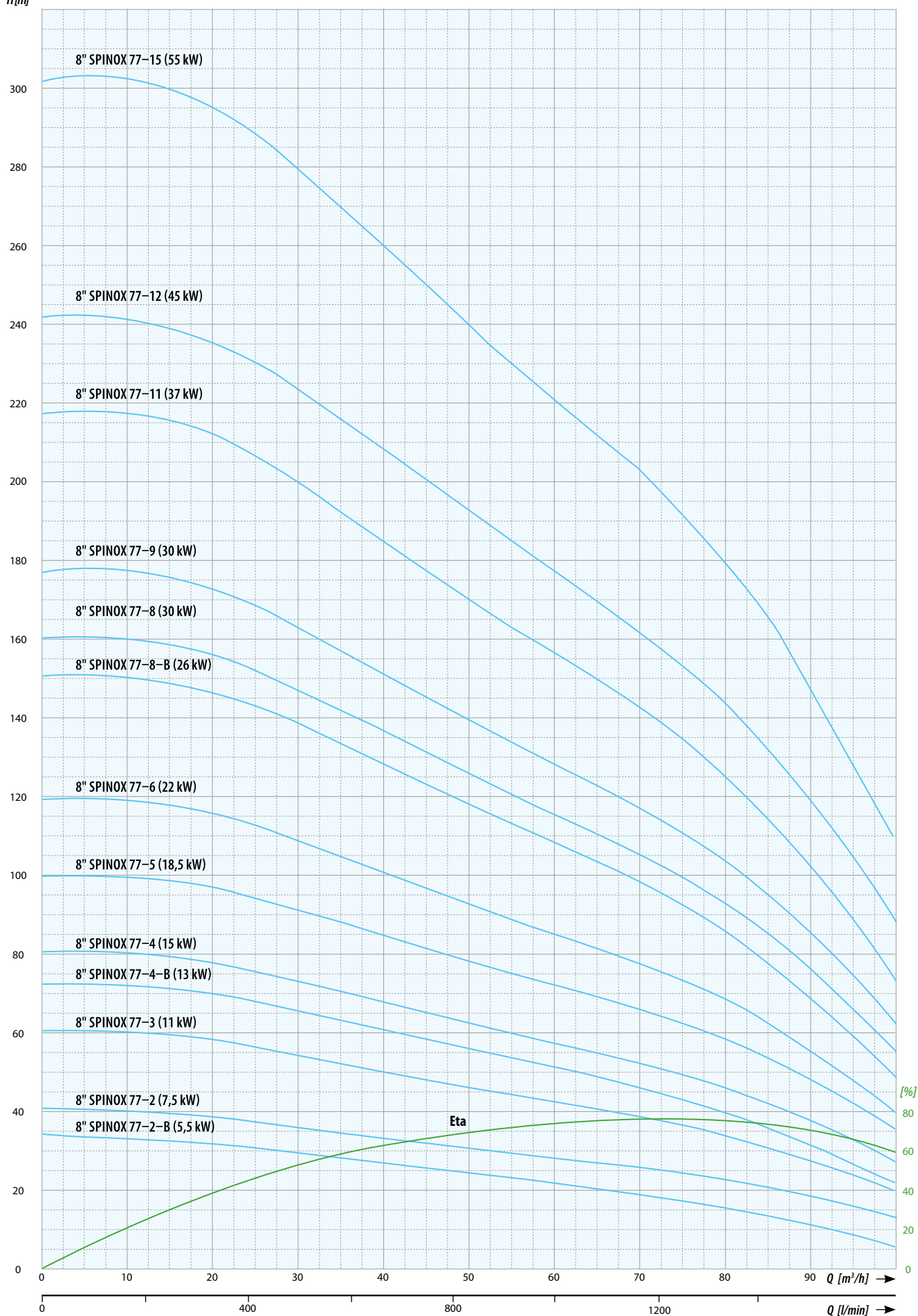
- Maximum liquid temperature: 35°C
- Power supply: 400V
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP68
- Length of the power cord: 1.5m
- Working position: vertical/horizontal
- Motor speed: 2850 RPM



8"SPINOX 77			Flow [Q]									
NAME	Flow [l/min]	Motor power [kW]	Head H [m]									
			m ³ /h l/min.	0	10	20	30	50	70	90	100	
			0	166.7	333.3	500	833.3	1166.7	1500	1666.7		
8"SPINOX 77- 2-B	1667	5,5	33	32	31	29	25	20	12	7		
8"SPINOX 77- 2	1667	7,5	41	40	39	36	31	26	18	13		
8"SPINOX 77- 3	1667	11	61	60	58	55	46	39	28	20		
8"SPINOX 77- 4-B	1667	13	73	72	70	66	56	46	31	21		
8"SPINOX 77- 4	1667	15	81	80	78	73	62	52	38	27		
8"SPINOX 77- 5	1667	18,5	100	100	97	92	78	66	47	34		
8"SPINOX 77- 6	1667	22	120	120	116	110	94	78	56	41		
8"SPINOX 77- 8-B	1667	26	152	151	147	139	118	98	68	48		
8"SPINOX 77- 8	1667	30	160	160	156	147	126	105	76	55		
8"SPINOX 77- 9	1667	30	179	179	174	164	140	117	85	61		
8"SPINOX 77- 11	1667	37	218	218	212	201	172	144	104	74		
8"SPINOX 77- 12	1667	45	242	243	237	225	193	163	120	88		
8"SPINOX 77- 15	1667	55	303	303	296	281	242	204	150	110		

NAME	Power [kW]	Motor diameter [inch]	Voltage [V]	Outlet [inch]	Amperage Water pumps [A]	Amperage Oil pumps [A]	The lenght of the hydraulics [mm]	Length with motor Water pumps	Length with motor Oil pumps	Pump diameter [mm]	Weight Water pumps [kg]	Weight Oil pumps [kg]
8"SPINOX 77-2-B	5,5	6"	400	5"	13,7	-	748	1483	-	168	70,6	-
8"SPINOX 77-2	7,5		400		17,9	18,4	748	1528	1443,5	168	75,6	60,4
8"SPINOX 77-3	11		400		25,6	26,1	876	1716	1644,5	168	84,8	72
8"SPINOX 77-4-B	13		400		30,9	30,9	1004	1894	1802,5	168	94,6	78,1
8"SPINOX 77-4	15		400		34,9	34,8	1004	1934	1852,5	168	98,8	83,1
8"SPINOX 77-5	18,5		400		43,5	-	1132	2147	-	168	111,2	-
8"SPINOX 77-6	22		400		50,3	-	1260	2320	-	168	119,7	-
8"SPINOX 77-8-B	26		400		59,2	-	1516	2681	-	168	137,6	-
8"SPINOX 77-8	30		400		69,7	-	1516	2791	-	168	149	-
8"SPINOX 77-9	30		400		69,7	-	1644	2919	-	168	152,6	-
8"SPINOX 77-11	37	8"	400	5"	73,3	-	1914	2940	-	194	206,6	-
8"SPINOX 77-12	45		400		90,2	-	2042	3118	-	194	219,2	-
8"SPINOX 77-15	55		400		108,2	-	2426	3582	-	194	245	-

↑ Flow/Head
H[m]



8"SPINOX 95			Flow [Q]								
NAME	Flow [l/min]	Motor power [kW]	m ³ /h	0	10	20	40	60	80	100	120
			l/min.	0	167	333	667	1000	1333	1667	2000
8"SPINOX 95 - 2-BB	2033	5.5	Head H [m]	27	27	26	23	21	17	10	0
8"SPINOX 95 - 2-A	2033	7.5		39	38	36	32	27	24	18	9
8"SPINOX 95 - 2	2033	9.3		44	43	41	36	31	27	22	13
8"SPINOX 95 - 3-BB	2033	9.3		49	47	46	40	35	29	20	8
8"SPINOX 95-3-B	2033	11		56	55	53	47	41	35	26	13
8"SPINOX 95 - 3	2033	13		65	64	62	55	47	42	33	20
8"SPINOX 95 - 4-B	2033	15		77	76	73	65	56	49	37	20
8"SPINOX 95-4	2033	18,5		86	84	82	73	63	55	44	26
8"SPINOX 95 - 5-AB	2033	18.5		94	92	89	79	69	60	45	24
8"SPINOX 95 - 5	2033	22		106	105	101	90	78	69	55	32
8"SPINOX 95 - 6	2033	26		129	127	123	110	96	84	68	41
8"SPINOX 95 - 7	2033	30		148	146	142	126	110	96	77	46
8"SPINOX 95 - 8	2033	37		170	167	163	145	127	112	90	54
8"SPINOX 95 - 10	2033	45		214	212	206	185	162	143	116	71
8"SPINOX 95 - 13	2033	55		278	275	267	240	210	185	150	92
8"SPINOX 95 - 14	2033	63		300	297	289	259	227	201	163	100
8"SPINOX 95 - 16	2033	75	342	338	329	296	259	229	186	114	

NAME	Power [kW]	Motor diameter [inch]	Voltage [V]	Outlet [inch]	Amperage Water pumps [A]	Amperage Oil pumps [A]	The lenght of the hydraulics [mm]	Length with motor Water pumps	Length with motor Oil pumps	Pump diameter [mm]	Weight Water pumps [kg]	Weight Oil pumps [kg]
8"SPINOX 95-2-BB	5,5	6"	400	5"	13,7	-	748	1483	-	168	70,6	-
8"SPINOX 95-2-A	7,5		400		17,9	18,4	748	1528	1443,5	168	75,6	60,4
8"SPINOX 95-2	9,2		400		21,5	22,4	748	1558	1486,5	168	79	65,4
8"SPINOX 95-3-BB	9,2		400		21,5	22,4	876	1686	1614,5	168	82,6	69
8"SPINOX 95-3-B	11		400		25,6	26,1	876	1716	1644,5	168	84,8	72
8"SPINOX 95-3	13		400		30,9	30,9	876	1766	1674,5	168	91	74,5
8"SPINOX 95-4-B	15		400		34,9	34,8	1004	1934	1852,5	168	98,8	83,1
8"SPINOX 95-4	18,5		400		43,5	-	1004	2019	-	168	107,6	-
8"SPINOX 95-5-AB	18,5		400		43,5	-	1132	2147	-	168	111,2	-
8"SPINOX 95-5	22		400		50,3	-	1132	2192	-	168	116,1	-
8"SPINOX 95-6	26		400		59,2	-	1260	2425	-	168	130,4	-
8"SPINOX 95-7	30		400		69,7	-	1388	2663	-	168	145,4	-
8"SPINOX 95-8	37		400		73,3	-	1530	2556	-	194	195,8	-
8"SPINOX 95-10	45		400		90,2	-	1786	2862	-	194	212	-
8"SPINOX 95-13	55		400		108,2	-	2170	3326	-	194	237,8	-
8"SPINOX 95-14	63		400		125,7	-	2298	3494	-	194	250,4	-
8"SPINOX 95-16	75	400	147,6	-	2554	3890	-	194	284,6	-		

10"SPINOX

Multistage deep well pumps with a diameter of 215mm, made entirely of stainless steel, are designed for installation in wells with a minimum internal diameter of 280mm. The pumps are used to supply water to multi-family houses, farms, irrigation systems, sprinklers, and lowering the groundwater level. The pumps are also used in water supply and fire protection systems.

CHARACTERISTICS:

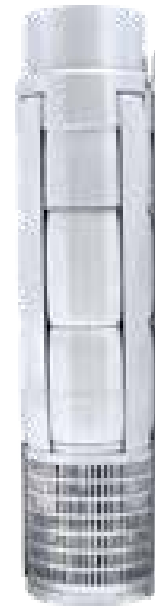
- Pumps made entirely of stainless steel
- Increased wear resistance
- Built-in check valve
- Available with water motors - WMC by IPRO or IBO ITALY
- Possibility to attach a cable of a specific length (multiples of 5m)
- 24-month warranty
- Warranty and post-warranty service

TECHNICAL DATA:

- Maximum liquid temperature: 35°C
- Power supply: 400V
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP68
- Length of the power cord: 1.5m
- Working position: vertical/horizontal
- Motor speed: 2850 RPM

MATERIALS:

- Suction / discharge port: AISI 304 stainless steel
- Housing: AISI 304 stainless steel
- Shaft and rotor: AISI 304 stainless steel
- Impeller: AISI 304 stainless steel
- Diffuser: AISI 304 stainless steel
- Mechanical seal: Ceramic / Sic / NBR

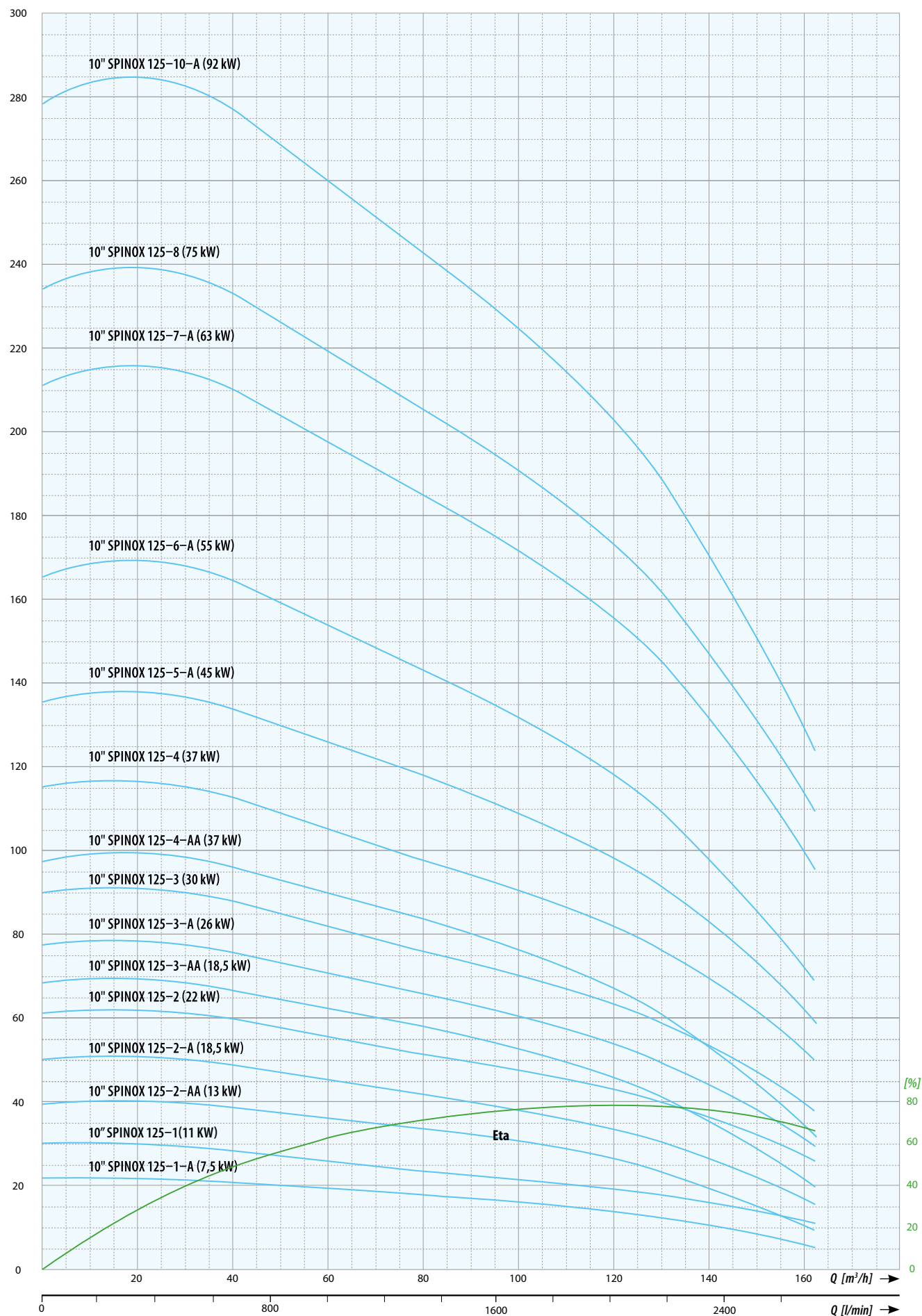


10"SPINOX 125			Flow [Q]									
NAME	Flow [l/min]	Motor power [kW]	Head H [m]									
			m ³ /h	0	60	80	100	120	140	160	162	
			l/min.	0	1000	1333	1667	2000	2333	2667	2700	
10"SPINOX 125-1-A	2700	7.5	21	19	17	16	14	10	6	5		
10"SPINOX 125-1	2700	11	30	27	24	22	20	17	13	12		
10"SPINOX 125-2-AA	2700	13	40	37	35	31	27	20	11	10		
10"SPINOX 125-2-A	2700	18.5	50	45	42	39	34	28	19	18		
10"SPINOX 125-2	2700	22	59	54	50	46	42	35	27	26		
10"SPINOX 125-3-AA	2700	22	69	63	59	54	47	36	22	21		
10"SPINOX 125-3-A	2700	26	78	72	67	61	54	45	31	30		
10"SPINOX 125-3	2700	30	88	80	74	69	62	53	40	39		
10"SPINOX 125-4-AA	2700	37	98	91	85	78	69	56	38	36		
10"SPINOX 125-4	2700	37	116	106	99	91	83	71	54	52		
10"SPINOX 125-5-A	2700	45	136	127	119	110	100	84	63	60		
10"SPINOX 125-6-A	2700	55	165	155	144	134	121	103	77	74		
10"SPINOX 125-7-A	2700	63	194	182	170	158	143	122	92	88		
10"SPINOX 125-8	2700	75	232	216	202	188	171	147	113	109		
10"SPINOX 125-10-A	2700	93	278	260	242	224	203	172	129	124		

NAME	Power [kW]	Motor diameter [inch]	Voltage [V]	Outlet [inch]	Amperage Water pumps [A]	Amperage Oil pumps [A]	The length of the hydraulics [mm]	Length with motor Water pumps	Length with motor Oil pumps	Pump diameter [mm]	Weight Water pumps [kg]	Weight Oil pumps [kg]
10"SPINOX 125-1-A	7,5	6"	400	6"	17,9	18,4	641	1421	1336,5	203	78,2	63
10"SPINOX 125-1	11		25,6		26,1	641	1481	1409,5	203	83,8	71	
10"SPINOX 125-2-AA	13		30,9		30,9	797	1687	1595,5	203	96	79,5	
10"SPINOX 125-2-A	18,5		43,5		-	797	1812	-	203	109	-	
10"SPINOX 125-2	22		50,3		-	797	1857	-	203	113,9	-	
10"SPINOX 125-3-AA	22		50,3		-	953	2013	-	203	119,9	-	
10"SPINOX 125-3-A	26		59,2		-	953	2118	-	203	130,6	-	
10"SPINOX 125-3	30		69,7		-	953	2228	-	203	142	-	
10"SPINOX 125-4-AA	37		73,3		-	1109	2135	-	205	191	-	
10"SPINOX 125-4	37		73,3		-	1109	2135	-	205	191	-	
10"SPINOX 125-5-A	45	90,2	-	1265	2341	-	205	206	-			
10"SPINOX 125-6-A	55	108,2	-	1421	2577	-	205	227	-			
10"SPINOX 125-7-A	63	125,7	-	1577	2773	-	205	242	-			
10"SPINOX 125-8	75	147,6	-	1733	3069	-	205	275	-			
10"SPINOX 125-10-A	93	181,6	-	2045	3581	-	205	324	-			

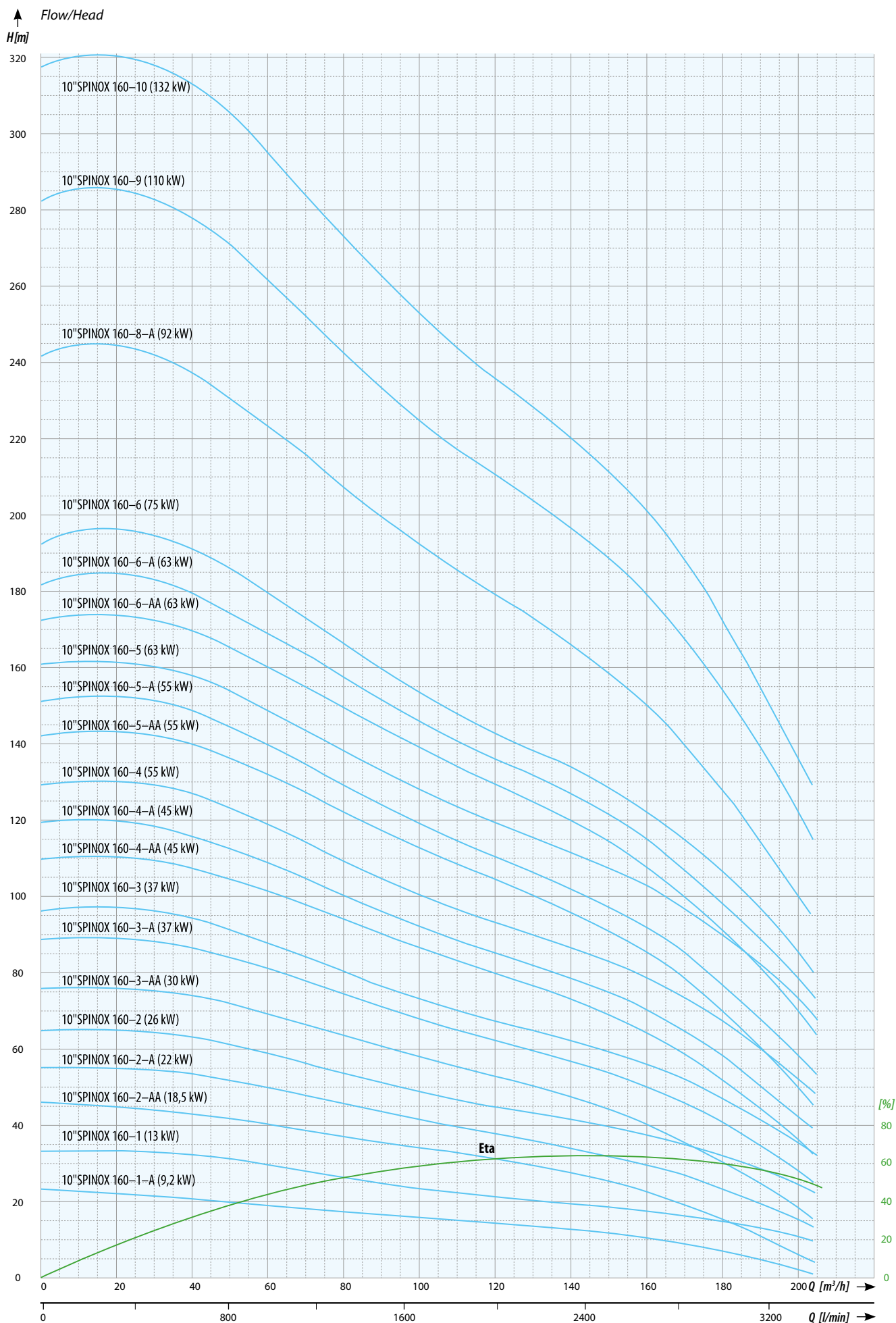
↑ Flow/Head

H[m]



10"SPINOX 160			Flow [Q]								
NAME	Flow [l/min]	Motor power [kW]	m ³ /h	0	90	110	130	150	170	190	208
			l/min.	0	1500	1833	2167	2500	2833	3167	3467
10"SPINOX 160 - 1-A	3420	9.3	Head H [m]	24	18	17	15	14	170	7	3
10"SPINOX 160 - 1	3420	13		34	26	24	22	21	2833	16	13
10"SPINOX 160 - 2-AA	3420	18.5		46	37	35	32	29	20	16	9
10"SPINOX 160 - 2-A	3420	22		55	45	41	38	35	28	24	17
10"SPINOX 160 - 2	3420	26		65	52	48	45	42	35	32	25
10"SPINOX 160 - 3-AA	3420	30		77	64	59	55	49	36	33	23
10"SPINOX 160 - 3-A	3420	37		87	72	66	62	57	45	41	31
10"SPINOX 160 - 3	3420	37		96	78	72	68	63	53	48	38
10"SPINOX 160 - 4-AA	3420	45		110	92	86	80	73	56	52	38
10"SPINOX 160 - 4-A	3420	45		119	99	92	86	80	71	59	45
10"SPINOX 160 - 4	3420	55		129	107	100	93	87	84	67	54
10"SPINOX 160 - 5-AA	3420	55		142	119	111	103	95	103	68	51
10"SPINOX 160 - 5-A	3420	55		151	126	117	109	101	122	75	58
10"SPINOX 160 - 5	3420	63		161	133	124	116	109	172	83	67
10"SPINOX 160 - 6-AA	3420	63		173	145	135	126	116	71	84	64
10"SPINOX 160 - 6-A	3420	75		183	153	142	133	123	84	92	72
10"SPINOX 160 - 6	3420	75		192	159	148	139	130	103	99	79
10"SPINOX 160 - 8-A	3420	92		243	202	188	176	163	122	121	94
10"SPINOX 160-9	3420	110		284	236	220	206	192	172	145	116
10"SPINOX 160-10	3420	132		316	262	244	229	213	172	161	129

NAME	Power [kW]	Motor diameter [inch]	Voltage [V]	Outlet [inch]	Amperage Water pumps [A]	Amperage Oil pumps [A]	The lenght of the hydraulics [mm]	Length with motor Water pumps	Length with motor Oil pumps	Pump diameter [mm]	Weight Water pumps [kg]	Weight Oil pumps [kg]
10"SPINOX 160-1-A	9,2	6"	400	6"	21,5	22,4	641	1451	1379,5	203	81,7	68,1
10"SPINOX 160-1	13		400		30,9	30,9	641	1531	1439,5	203	90,1	73,6
10"SPINOX 160-2-AA	18,5		400		43,5	-	797	1812	-	203	109,4	-
10"SPINOX 160-2-A	22		400		50,3	-	797	1857	-	203	114,3	-
10"SPINOX 160-2	26		400		59,2	-	797	1962	-	203	125	-
10"SPINOX 160-3-AA	30		400		69,7	-	953	2228	-	203	142,7	-
10"SPINOX 160-3-A	37		400		73,3	-	953	1979	-	205	185,7	-
10"SPINOX 160-3	37		400		73,3	-	953	1979	-	205	185,7	-
10"SPINOX 160-4-AA	45		400		90,2	-	1109	2185	-	205	201	-
10"SPINOX 160-4-A	45		400		90,2	-	1109	2185	-	205	201	-
10"SPINOX 160-4	55	400	108,2	-	1109	2265	-	205	216	-		
10"SPINOX 160-5-AA	55	6"	108,2	-	1265	2421	-	205	222,3	-		
10"SPINOX 160-5-A	55		400	108,2	-	1265	2421	-	205	222,3	-	
10"SPINOX 160-5	63		400	125,7	-	1265	2461	-	205	231,3	-	
10"SPINOX 160-6-AA	63		400	125,7	-	1421	2617	-	205	237,6	-	
10"SPINOX 160-6-A	75		400	147,6	-	1421	2757	-	205	264,6	-	
10"SPINOX 160-6	75	400	147,6	-	1421	2757	-	205	264,6	-		
10"SPINOX 160-8-A	92	400	181,6	-	1733	3269	-	205	314,2	-		
10"SPINOX 160-9	110	10"	218	-	1889	3335	-	222	396	-		
10"SPINOX 160-10	132		400	252,4	-	2045	3591	-	235	430,5	-	



12"SPINOX

Multistage deep well pumps with a diameter of 235mm, made entirely of stainless steel, are designed for installation in wells with a minimum internal diameter of 315mm. The pumps are used to supply water to multi-family houses, farms, irrigation systems, sprinklers, and lowering the groundwater level. The pumps are also used in water supply and fire protection systems.

CHARACTERISTICS:

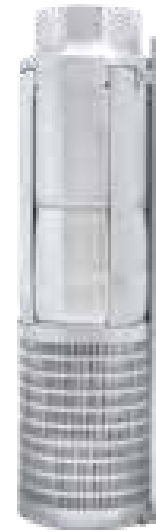
- Pumps made entirely of stainless steel
- Increased wear resistance
- Built-in check valve
- Available with water motors - WMC by IPRO
- Possibility to attach a cable of a specific length (multiples of 5m)
- 24-month warranty
- Warranty and post-warranty service

TECHNICAL DATA:

- Maximum liquid temperature: 35°C
- Power supply: 400V
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP68
- Length of the power cord: 1.5m
- Working position: vertical
- Motor speed: 2850 RPM

MATERIALS:

- Suction / discharge port: AISI 304 stainless steel
- Housing: AISI 304 stainless steel
- Shaft and rotor: AISI 304 stainless steel
- Impeller: AISI 304 stainless steel
- Diffuser: AISI 304 stainless steel
- Mechanical seal: Ceramic / Sic / NBR

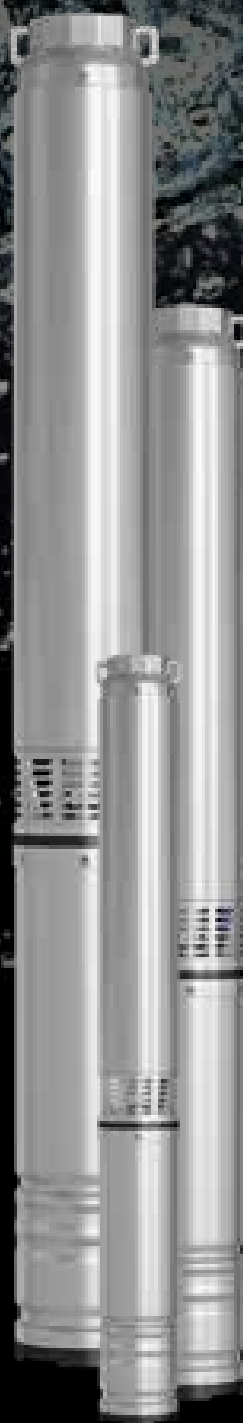


12"SPINOX 215			Flow [Q]										
NAME	Flow [l/min]	Motor power [kW]	Head H [m]										
			m ³ /h l/min.	0 0	90 1500	110 1833	150 2500	180 3000	240 4000	260 4333	280 4667		
12"SPINOX 215-1-A	4580	15	27	24	23	20	17	10	6	3			
12"SPINOX 215-1	4580	18,5	38	33	31	27	25	19	16	11			
12"SPINOX 215-2-AA	4580	30	55	50	48	43	39	25	18	11			
12"SPINOX 215-2-A	4580	37	66	59	57	51	47	35	28	18			
12"SPINOX 215-2	4580	45	79	70	66	59	55	44	37	19			
12"SPINOX 215-3-AA	4580	55	95	87	84	76	71	53	42	28			
12"SPINOX 215-3-A	4580	55	107	96	92	83	77	59	49	37			
12"SPINOX 215-3	4580	63	119	106	100	90	84	67	58	46			
12"SPINOX 215-4-AA	4580	75	135	123	117	107	99	75	62	45			
12"SPINOX 215-4-A	4580	75	146	132	125	113	105	82	69	53			
12"SPINOX 215-4	4580	75	158	140	133	119	111	88	76	62			
12"SPINOX 215-5-A	4580	92	184	165	157	141	131	102	86	67			
12"SPINOX 215-5	4580	92	195	173	164	148	137	108	93	76			
12"SPINOX 215-6-A	4580	110	223	200	190	172	159	124	105	83			
12"SPINOX 215-7-A	4580	132	265	239	227	205	191	151	129	104			

NAME	Power [kW]	Motor diameter [inch]	Voltage [V]	Outlet [inch]	Amperage Water pumps [A]	Amperage Oil pumps [A]	The lenght of the hydraulics [mm]	Length with motor Water pumps	Length with motor Oil pumps	Pump diameter [mm]	Weight Water pumps [kg]	Weight Oil pumps [kg]
12"SPINOX 215-1-A	15	6"	400	6"	34,9	34,8	718	1648	1566,5	227	105	89,3
12"SPINOX 215-1	18,5		400		43,5	-	718	1733	-	227	113,8	-
12"SPINOX 215-2-AA	30		400		69,7	-	894	2169	-	227	150,9	-
12"SPINOX 215-2-A	37		400		73,3	-	967	1993	-	233	203,1	-
12"SPINOX 215-2	45		400		90,2	-	967	2043	-	233	212,1	-
12"SPINOX 215-3-AA	55		400		108,2	-	1143	2299	-	233	237,3	-
12"SPINOX 215-3-A	55	400	108,2	-	1143	2299	-	233	237,3	-		
12"SPINOX 215-3	63	8"	400	6"	125,7	-	1143	2339	-	233	246,3	-
12"SPINOX 215-4-AA	75		400		147,6	-	1319	2655	-	233	283,4	-
12"SPINOX 215-4-A	75		400		147,6	-	1319	2655	-	233	283,4	-
12"SPINOX 215-4	75		400		147,6	-	1319	2655	-	233	283,4	-
12"SPINOX 215-5-A	92		400		181,6	-	1495	3031	-	233	330,6	-
12"SPINOX 215-5	92		400		181,6	-	1495	3031	-	233	330,6	-
12"SPINOX 215-6-A	110	10"	400	6"	218	-	1671	3117	-	235	415,9	-
12"SPINOX 215-7-A	132		400		252,4	-	1847	3393	-	235	454	-

Deep well pumps

3" IPRO
3,5" IPRO
4" IPRO



3" IPRO

increased resistance to sand

Multistage deep well pumps with a diameter of 76 mm, with increased sand resistance are designed for installation in wells with a minimum internal diameter of 90 mm. Power supply 230 V~/50 Hz. The effect of increased sand resistance was achieved thanks to the use of "floating rotors" and selecting wear-resistant materials: stainless steel and reinforced plastic. Pumps are equipped with thermal protection installed in the motor winding and 20 m power cord.

The pumps are used to supply water to single- and multi-family houses, farms, as well as to supply irrigation systems (sprinklers, drip lines) and drainage systems

CHARACTERISTICS:

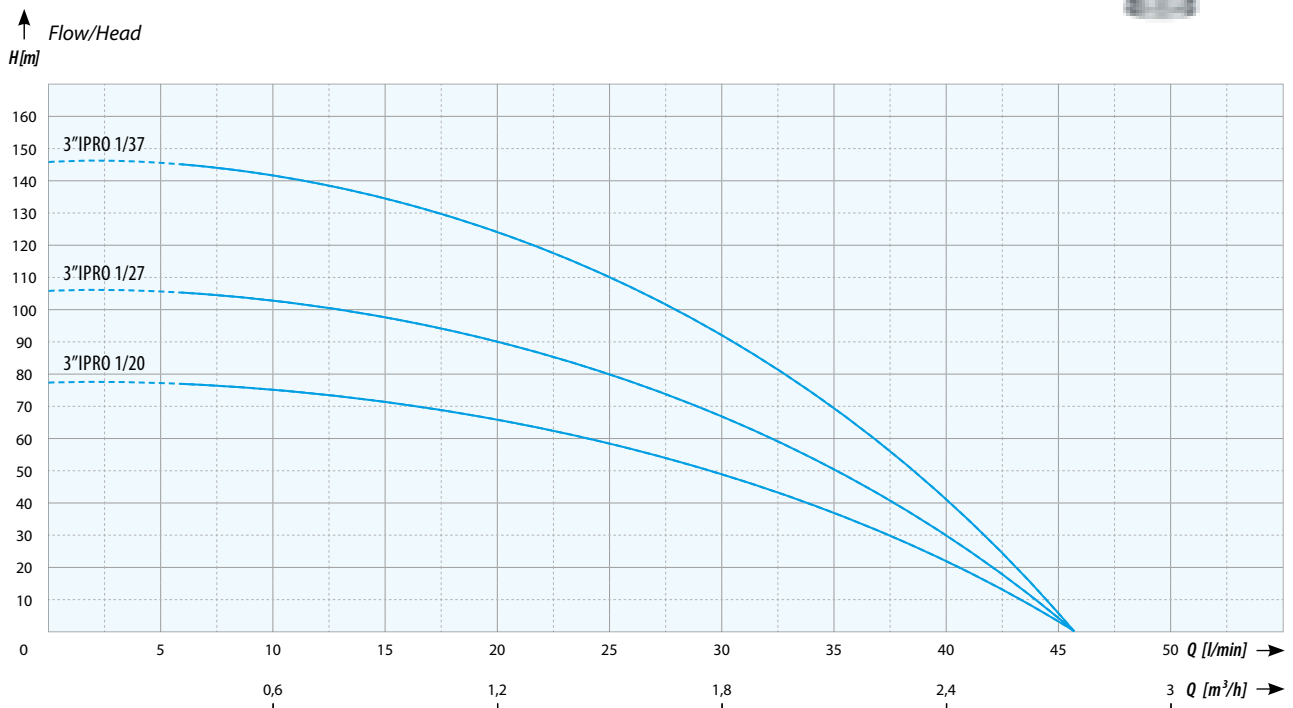
- Increased resistance to sand
- The highest quality materials
- Long failure-free operation based on Italian technology
- 20 m power cable with a plug
- Thermal protection built into the motor winding
- Capacitor built into the motor (no need for an external junction box)
- 36-month warranty
- Warranty and post-warranty service

TECHNICAL DATA:

- Maximum liquid temperature: 35°C
- Maximum ambient temperature: 35°C
- Power supply: 230 V
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP68
- Length of the power cord: 20 m
- Working position: vertical / horizontal
- Max. number of starts per 1h: 30
- Max. immersion depth: 100 m
- Motor speed: 2850 RPM

MATERIALS:

- Suction / discharge port: AISI 304 stainless steel
- Housing: AISI 304 stainless steel
- Shaft and rotor: AISI 304 stainless steel
- Impeller: PPO
- Diffuser: reinforced polycarbonate
- Mechanical seal: Ceramic / Sic / NBR
- Bearings: NSK
- Engine: Oil cooled



NAME	Head (m)	Flow (l/min)	Motor power (W)	Voltage (V)	Amperage (A)	Inlet/outlet [inch]	Impeller passage (mm)	Weight (kg)
3"IPRO 1/20	79	46	550	230	4,2	1	74/1210	12,3
3"IPRO 1/27	107	46	750	230	5,2	1	74/1470	14,2
3"IPRO 1/37	146	46	1100	230	6,7	1	74/1810	18,3

3,5" IPRO

increased resistance to sand

Multistage deep well pumps with a diameter of 90 mm, with increased sand resistance. are designed for installation in wells with a minimum internal diameter of 100 mm. Power supply 230 V~/50 Hz. The effect of increased sand resistance was achieved thanks to the use of "floating rotors" and selecting wear-resistant materials: stainless steel and reinforced plastic. Pumps are equipped with thermal protection installed in the motor winding and 20-metre power cord.

The pumps are used to supply water to single- and multi-family houses, farms, as well as to supply irrigation systems (sprinklers, drip lines) and drainage systems

CHARACTERISTICS:

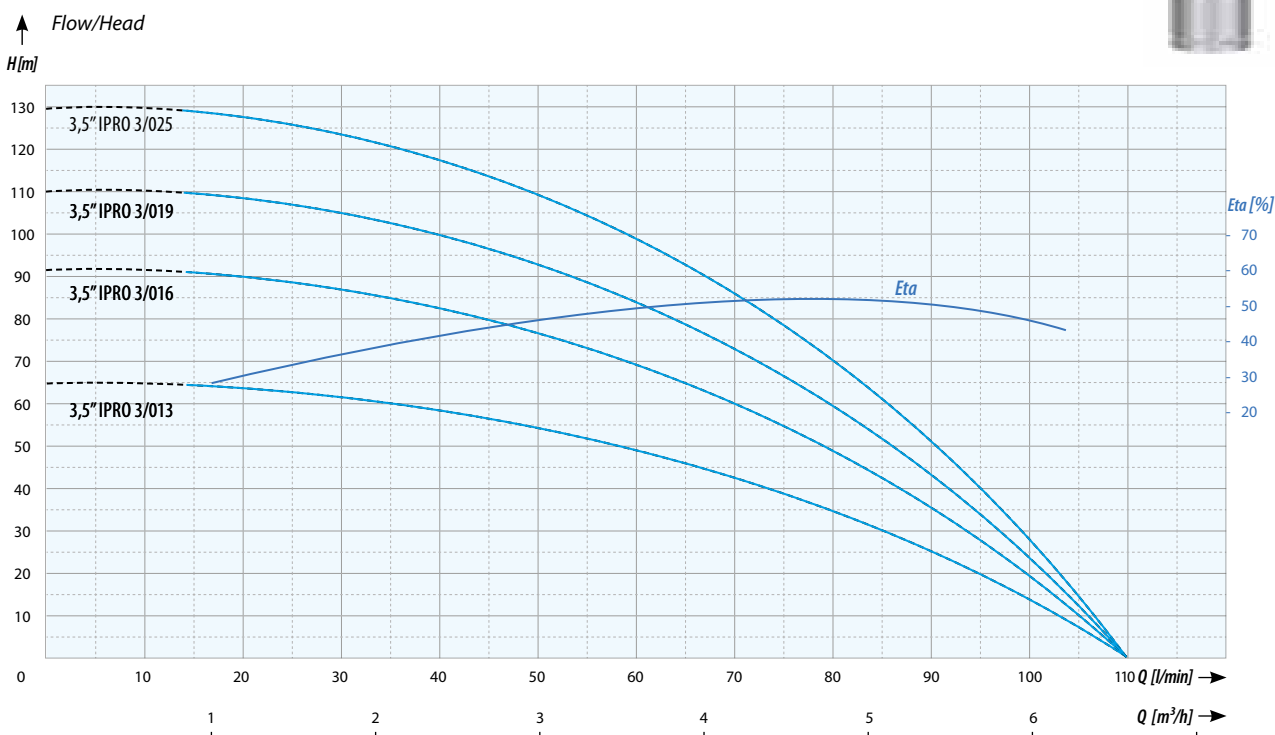
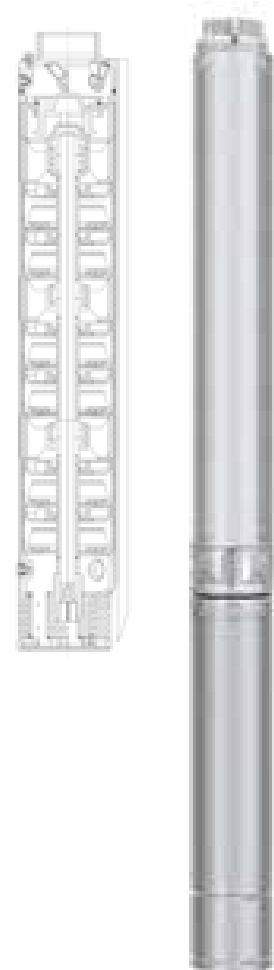
- Increased resistance to sand
- The highest quality materials
- Long failure-free operation based on Italian technology
- 20 m power cable with a plug
- Thermal protection built into the motor winding
- Capacitor built into the motor (no need for an external junction box)
- 36-month warranty
- Warranty and post-warranty service

TECHNICAL DATA:

- Maximum liquid temperature: 35°C
- Maximum ambient temperature: 35°C
- Power supply: 230 V
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP68
- Length of the power cord: 20 m
- Working position: vertical / horizontal
- Max. number of starts per 1h: 30
- Max. immersion depth: 150 m
- Motor speed: 2850 RPM

MATERIALS:

- Suction / discharge port: AISI 304 stainless steel
- Housing: AISI 304 stainless steel
- Shaft and rotor: AISI 304 stainless steel
- Impeller: PPO
- Diffuser: reinforced polycarbonate
- Mechanical seal: Ceramic / Sic / NBR
- Bearings: NSK
- Engine: Oil cooled



NAME	Head (m)	Flow (l/min)	Motor power (W)	Voltage (V)	Amperage (A)	Inlet/outlet [inch]	Impeller passage (mm)	Weight (kg)
3,5" IPRO 3/011	65	110	800	230	5,3	1½	90/1020	11,5
3,5" IPRO 3/015	92	110	1100	230	7,3	1½	90/1260	17,5
3,5" IPRO 3/020	110	110	1500	230	9,6	1½	90/1410	18,5
3,5" IPRO 3/025	131	110	1800	230	11,5	1½	90/1670	23,5

4" IPRO | 6" IPRO

increased resistance to sand

Multistage deep well pumps with a diameter of 99 mm, with increased sand resistance. are designed for installation in wells with a minimum internal diameter of 110 mm. Power supply 230 V~/50 Hz. The effect of increased sand resistance was achieved thanks to the use of "floating rotors" and selecting wear-resistant materials: stainless steel and reinforced plastic. Pumps are equipped with thermal protection installed in the motor winding and 20-metre power cord.

They are still one of the few on the market to have structures with such high resistance to sand. The maximum sand content in the water is up to 5%.

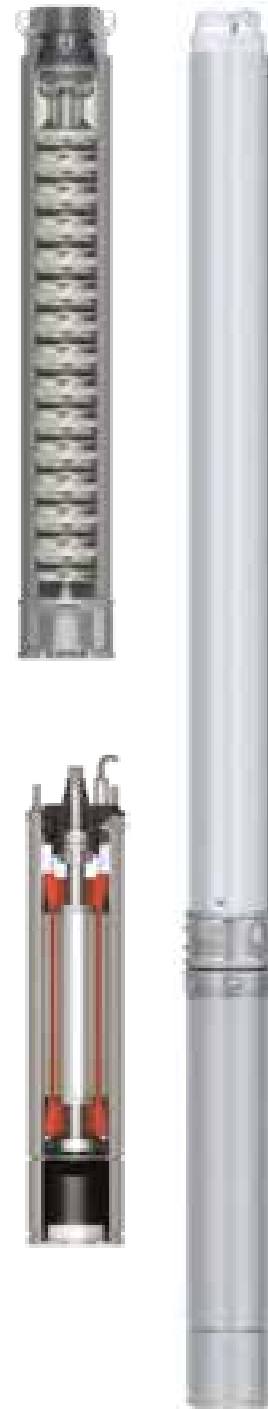
The pumps are used to supply water to single- and multi-family houses, farms, as well as to supply irrigation systems (sprinklers, drip lines) and drainage systems, water supply installations. Industry.

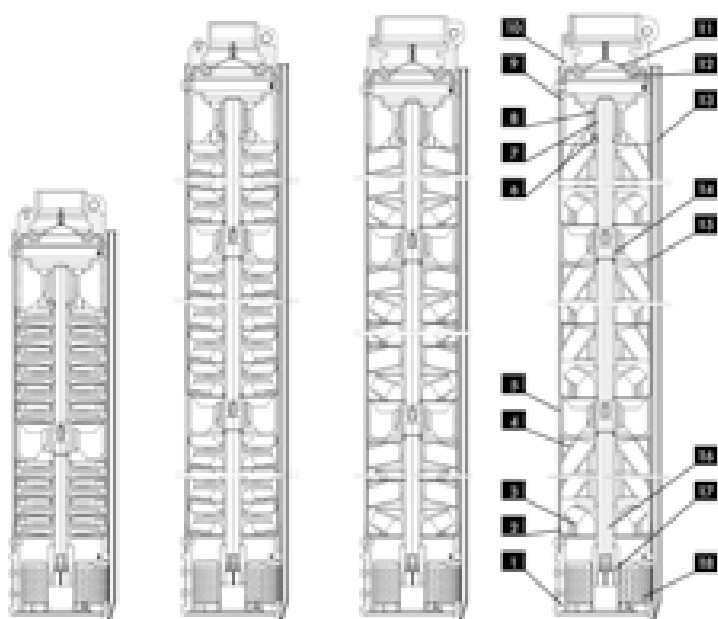
CHARACTERISTICS:

- Increased resistance to sand
- The highest quality materials
- Long failure-free operation based on Italian technology
- 20 m power cable with a plug
- Thermal protection built into the motor winding
- Capacitor built into the motor
(no need for an external junction box)
- 36-month warranty
- Warranty and post-warranty service

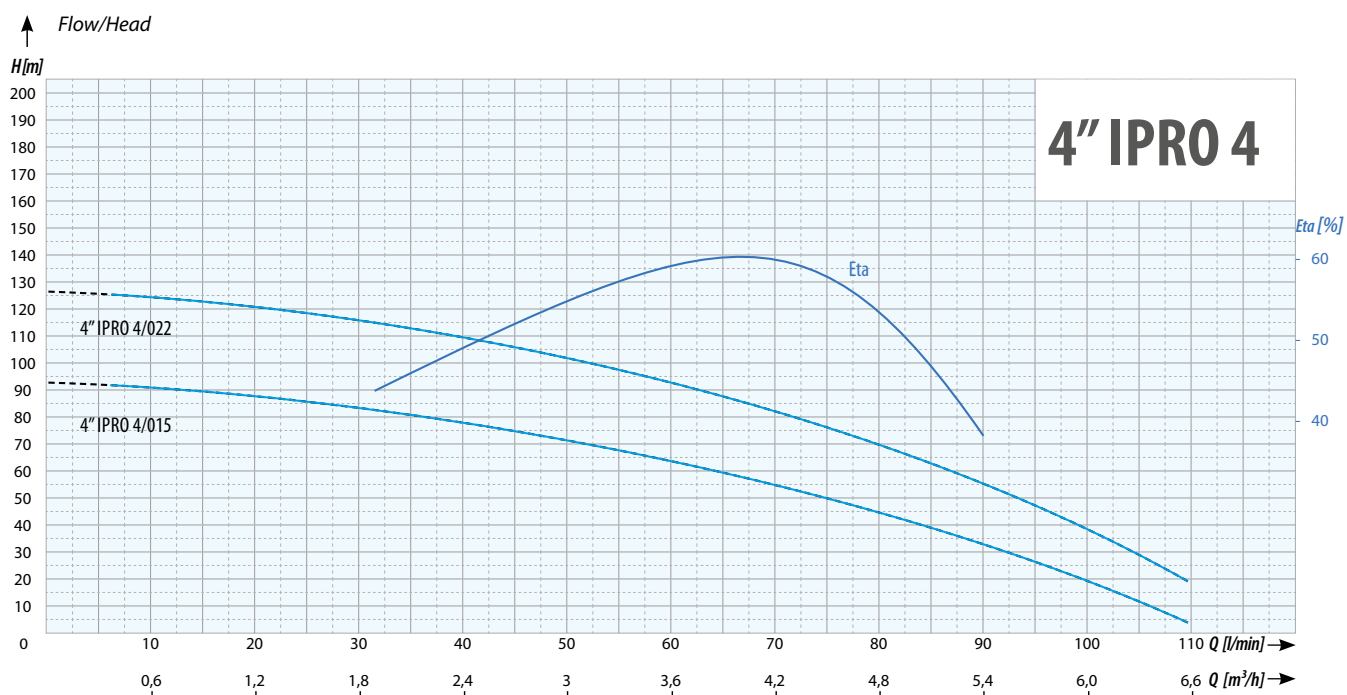
TECHNICAL DATA:

- Maximum liquid temperature: 35°C
- Maximum ambient temperature: 35°C
- Power supply: 230 V
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP68
- Length of the power cord: 20 m
- Working position: vertical / horizontal
- Max. number of starts per 1h: 30
- Max. immersion depth: 150 m
- Motor speed: 2850 RPM
- Shaft Connection: NEMA Standard

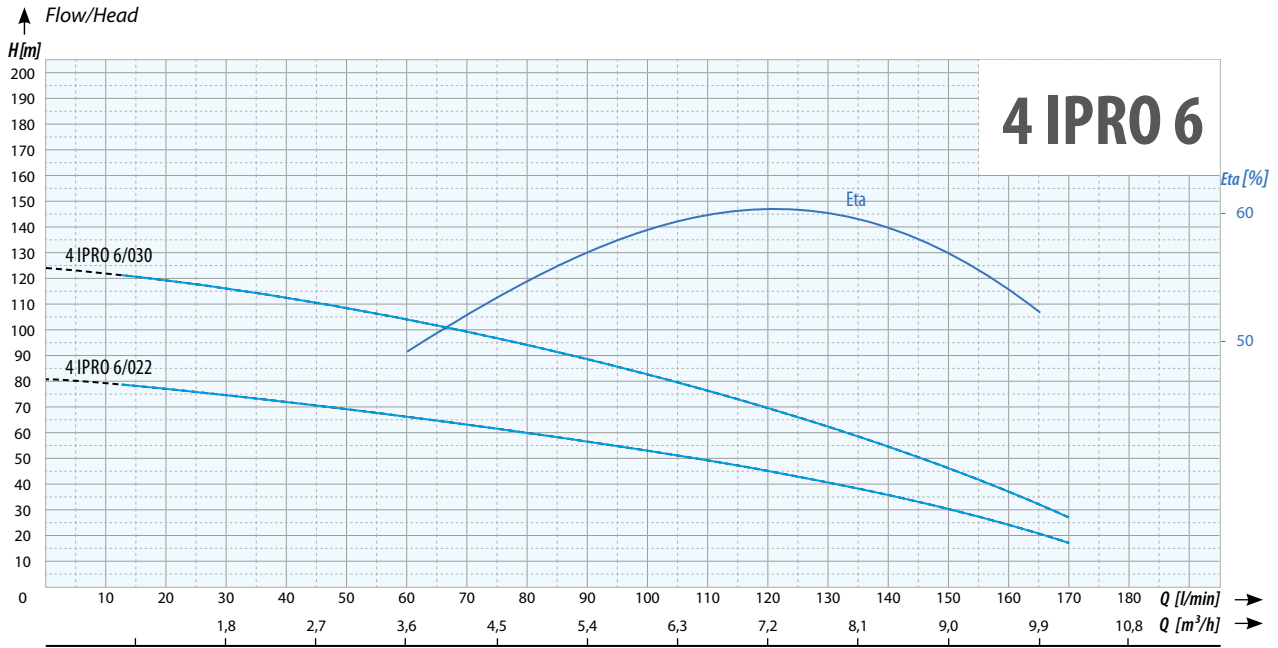




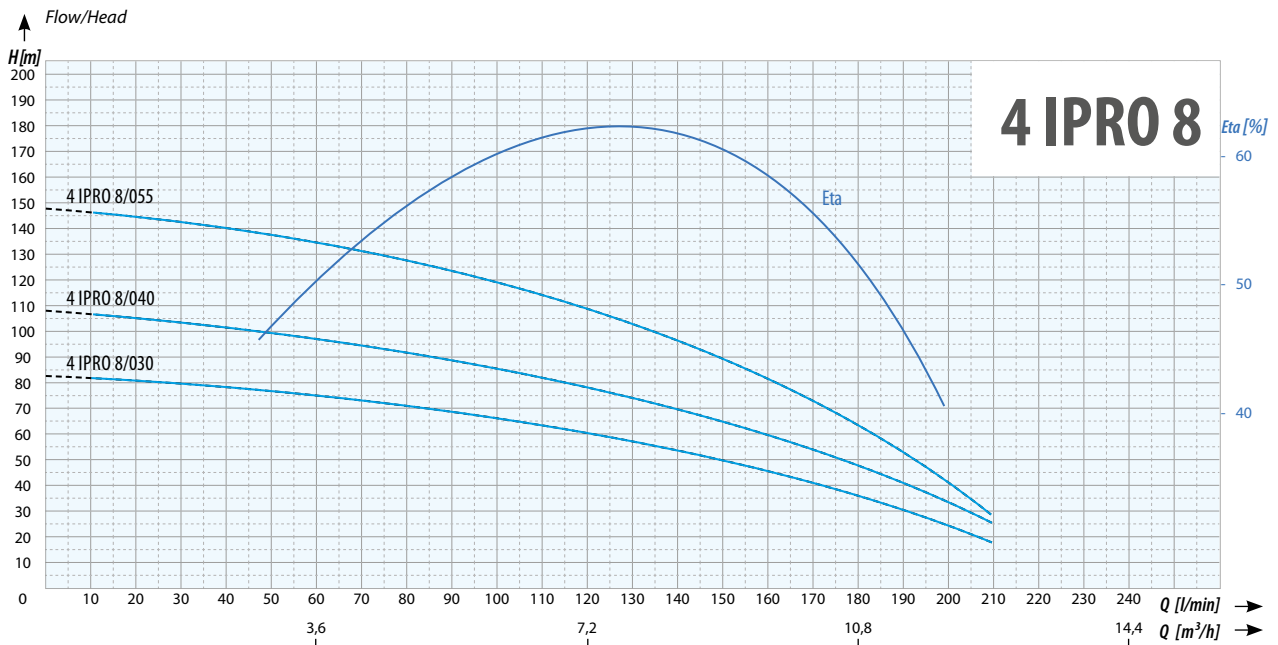
1	Suction body	AISI 304 stainless steel
2	Diffuser housing	AISI 304 stainless steel
3	Impeller	reinforced NORYL
4	Diffuser	reinforced NORYL
5	Tube	AISI 304 stainless steel
6	Thrust bearing	AISI 304 stainless steel
7	Sliding sleeve	AISI 304 stainless steel
8	Spacer sleeve	TPU
9	Upper bearing body	reinforced NORYL
10	Discharge body	AISI 304 stainless steel
11	Check valve	AISI 304 stainless steel
12	Valve seat	AISI 304 stainless steel
13	Cable strip	AISI 304 stainless steel
14	Centre sliding sleeve	AISI 304 stainless steel
15	Centre bearing body	AISI 304 stainless steel
16	Shaft	AISI 420 stainless steel
17	Coupling	AISI 304 stainless steel
18	Filter mesh	AISI 304 stainless steel



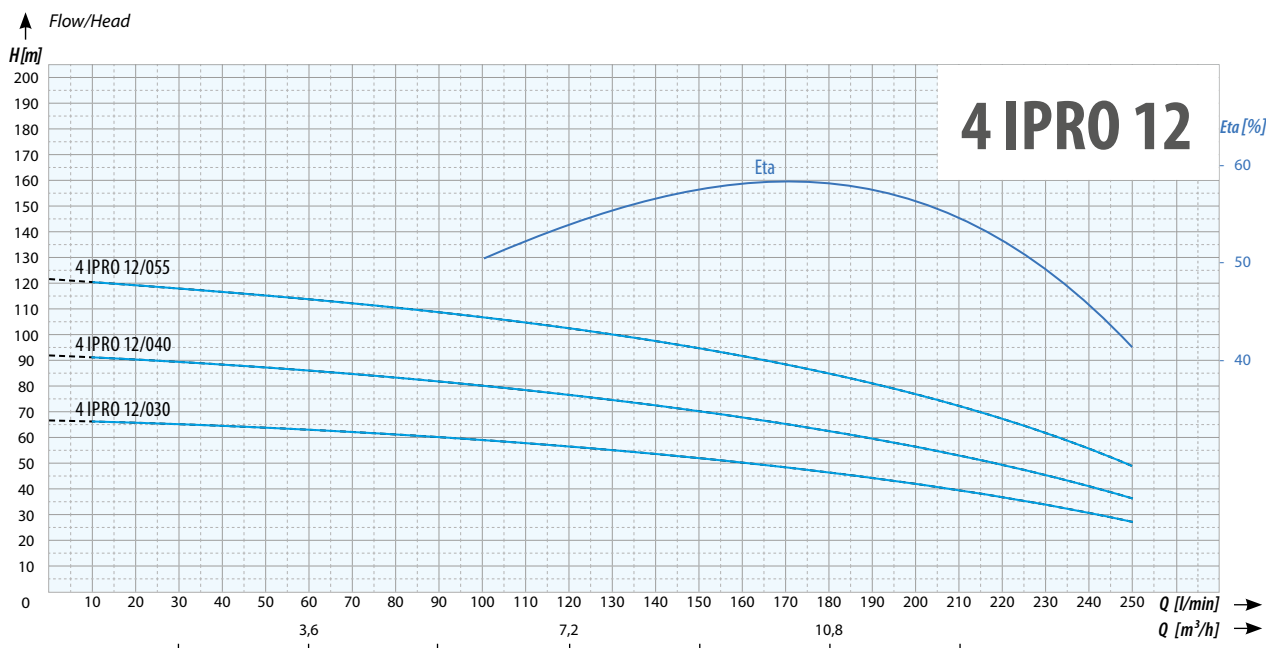
NAME	Number of stages	Outlet	Length (mm)	Weight (kg)	Voltage (V)	Amperage (A)	Power		Flow max. (l/min)	Lift max. (m)
							(kW)	(HP)		
4 IPRO 4/015S	14	1¼"	880	15,3	230	8,3	1,1	1,5	110	94
4 IPRO 4/015T			880	14,5	400	3,3				
4 IPRO 4/022S	19	1¼"	1028	18,2	230	11	1,5	2	110	127
4 IPRO 4/022T			1013	16,7	400	4,3				



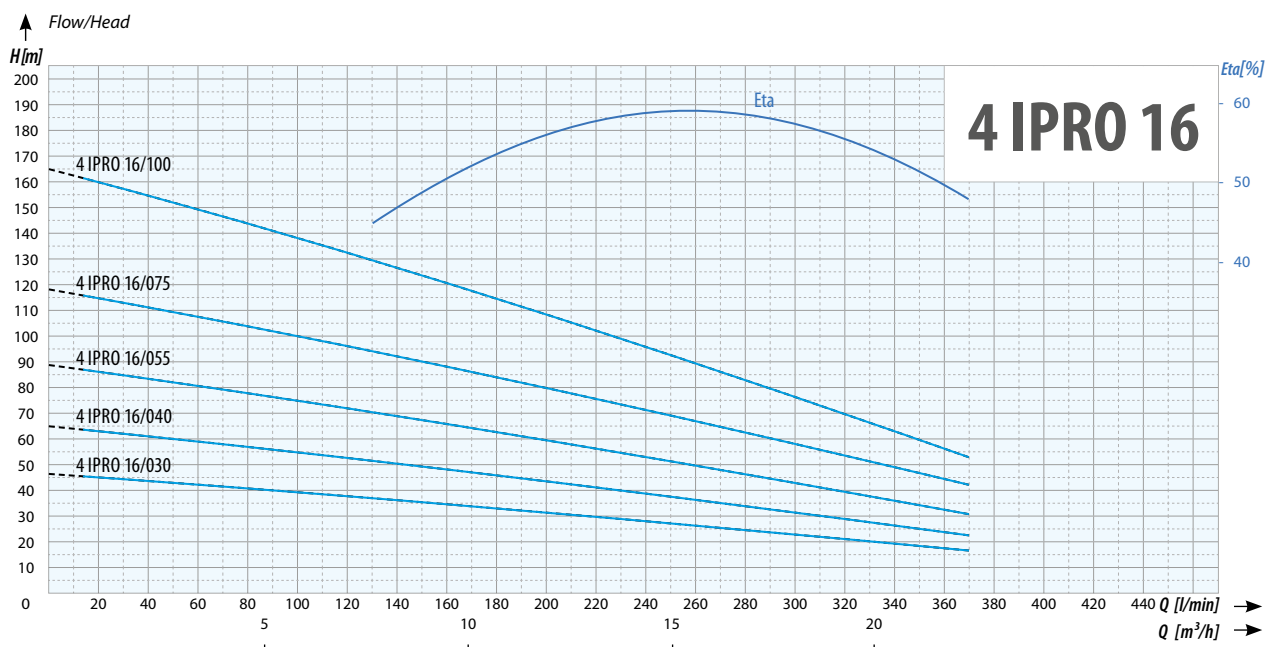
NAME	Number of stages	Outlet	Lenght (mm)	Weight (kg)	Voltage (V)	Amperage (A)	Power		Flow max. (l/min)	Lift max. (m)
							(kW)	(HP)		
4 IPRO 6/022S	14	1¼"	1050	18,2	230	11	1,5	2	185	85
4 IPRO 6/022T			1035	16,7	400	4,3				
4 IPRO 6/030S	21	1¼"	1418	25,3	230	15,8	2,2	3	185	128
4 IPRO 6/030T			1343	21,6	400	6,0				



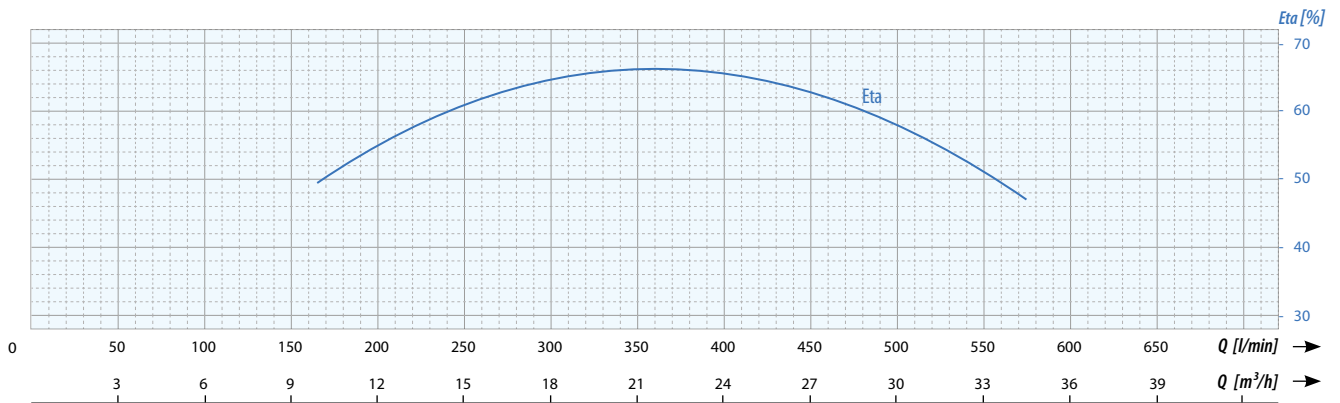
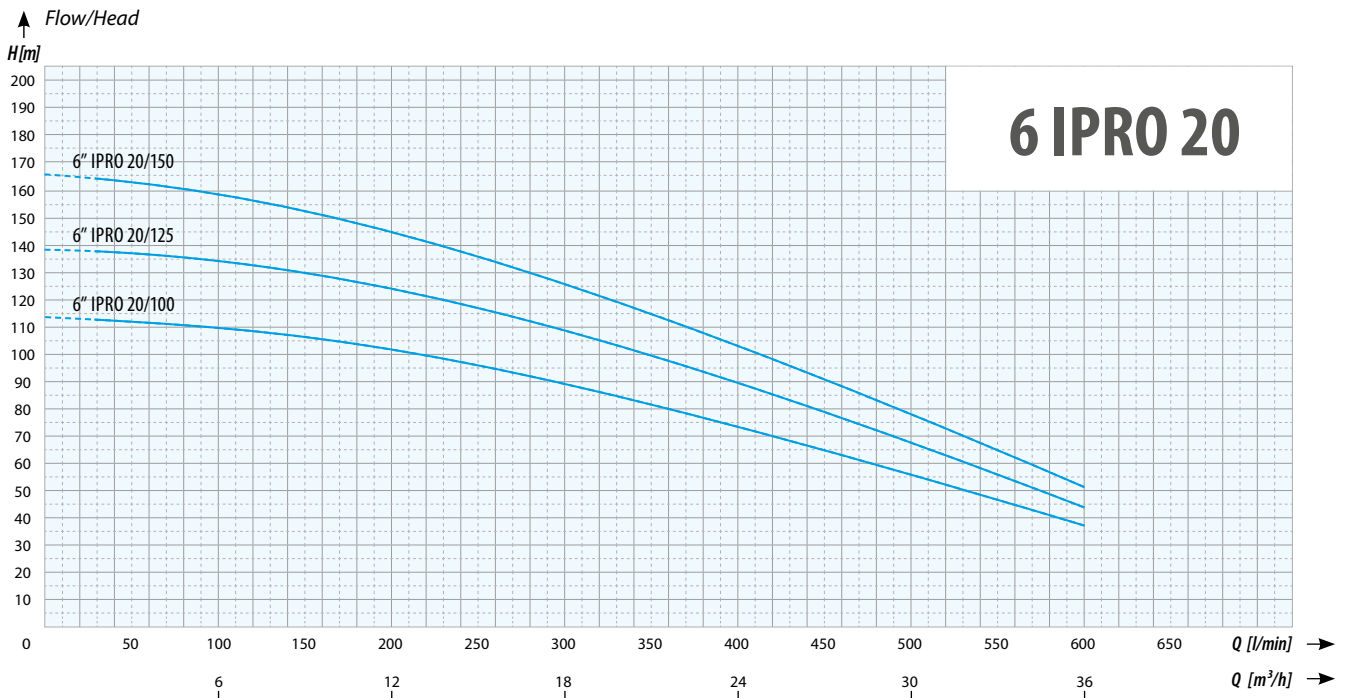
NAME	Number of stages	Outlet	Lenght (mm)	Weight (kg)	Voltage (V)	Amperage (A)	Power		Flow max. (l/min)	Lift max. (m)
							(kW)	(HP)		
4 IPRO 8/030S	13	2"	1142	22,9	230	15,8	2,2	3	230	85
4 IPRO 8/030T			1067	19,2	400	6,0				
4 IPRO 8/040T	17	2"	1231	22,8	400	8,0	3	4	230	111
4 IPRO 8/055T	23	2"	1539	29,8	400	10,4	4	5,5	230	150



NAME	Number of stages	Outlet	Lenght (mm)	Weight (kg)	Voltage (V)	Amperage (A)	Power		Flow max. (l/min)	Lift max. (m)
							(kW)	(HP)		
4 IPRO 12/030S	11	2"	1311	23,8	230	15,8	2,2	3	300	67
4 IPRO 12/030T			1236	20,1	400	6,0				
4 IPRO 12/040T	15	2"	1531	25,0	400	8,0	3	4	300	92
4 IPRO 12/055T	20	2"	1865	32,2	400	10,4	4	5,5	300	122

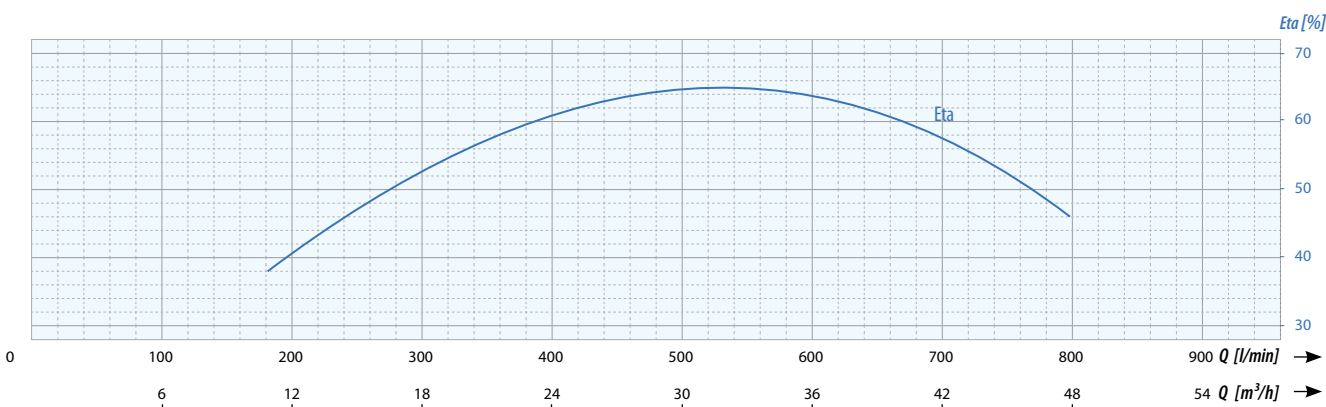
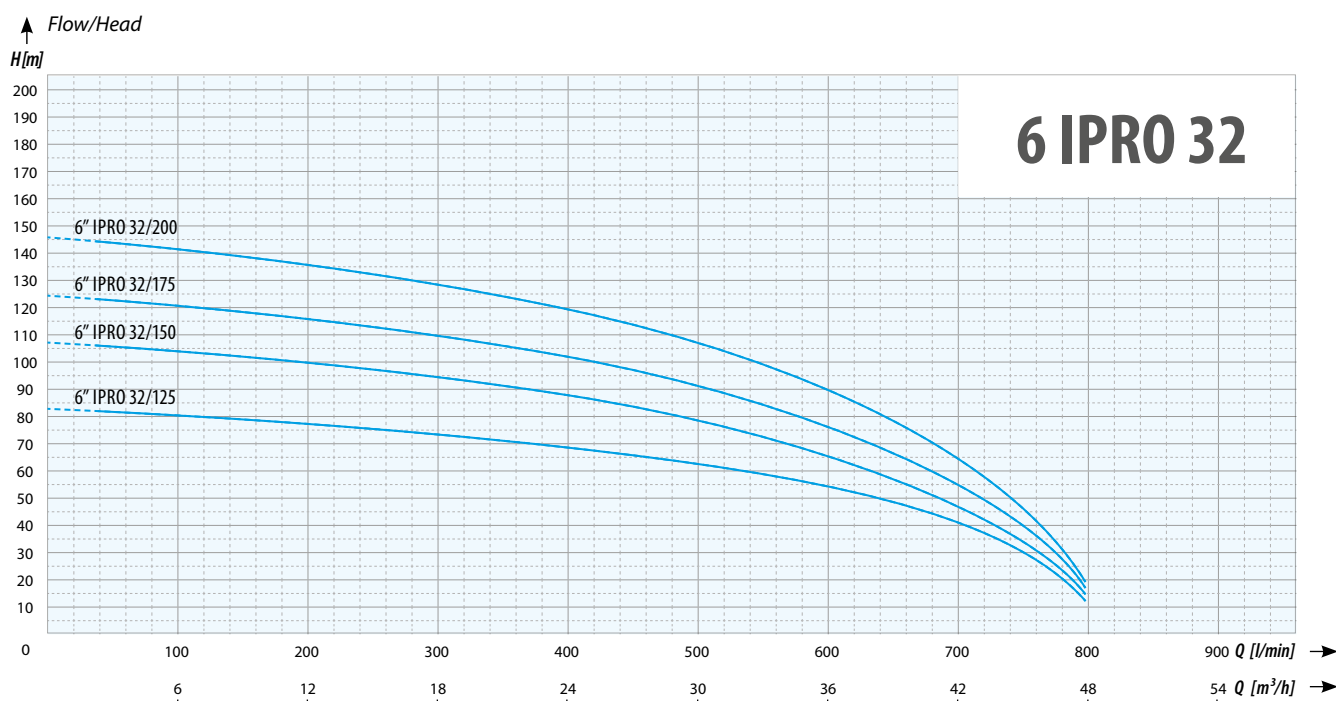


NAME	Number of stages	Outlet	Lenght (mm)	Weight (kg)	Voltage (V)	Amperage (A)	Power		Flow max. (l/min)	Lift max. (m)
							(kW)	(HP)		
4 IPRO 16/030S	8	2"	1283	23,7	230	15,8	2,2	3	430	47
4 IPRO 16/030T			1208	20,0	400	6,0				
4 IPRO 16/040T	11	2"	1489	24,9	400	8,0	3	4	430	65
4 IPRO 16/055T	15	2"	1845	32,3	400	10,4	4	5,5	430	89
4 IPRO 16/075T	20	2"	2332	41,4	400	13,9	5,5	7,5	430	118
4 IPRO 16/100T	28	2"	2961	51,4	400	18,7	7,5	10	430	165



NAME	Number of stages	Power (kW)	Power (Hp)	Q - FLOW					
				l/min 0	150	250	350	400	500
				H - WATER COLUMN INCREASE (m)					
				m³/h 0	9	15	21	24	30
6IPRO20-100	9	7,5	10	114	103	90	73	63	35
6IPRO20-125	11	9,2	12,5	139	126	110	89	77	42
6IPRO20-150	13	11	15	165	149	130	105	91	50

NAME	Number of stages	Outlet	Length (mm)	Weight (kg)	Power		Flow max. (l/min)	Lift max. (m)
					(kW)	(HP)		
6IPRO20-100	9	3"	1371,5	49	7,5	10	700	114
6IPRO20-125	11	3"	1514,5	57,5	9,2	12,5	700	139
6IPRO20-150	13	3"	1644,5	62,5	11	15	700	165



NAME	Power (kW)	Power (Hp)	Q - FLOW							
			l/min 0	200	300	400	500	600	700	800
			H - WATER COLUMN INCREASE							
			m³/h 0	12	18	24	30	36	42	48
6IPRO32-125	9,2	12,5	84	82	78	73	63	55	37	11
6IPRO32-150	11	15	107	100	95	89	77	67	45	14
6IPRO32-175	13	17,5	125	118	112	104	91	78	52	16
6IPRO32-200	15	20	146	136	129	120	105	90	60	19

NAME	Number of stages	Outlet	Lenght (mm)	Weight (kg)	Power		Flow max. (l/min)	Lift max. (m)
					(kW)	(HP)		
6IPRO32-125	9	3"	1981	63	9,2	12,5	920	84
6IPRO32-150	11	3"	2294	70	11	15	920	107
6IPRO32-175	13	3"	2550	76,5	13	17,5	920	125
6IPRO32-200	15	3"	2826	84,5	15	20	920	146

Motors

IPRO OIL MOTORS 4"

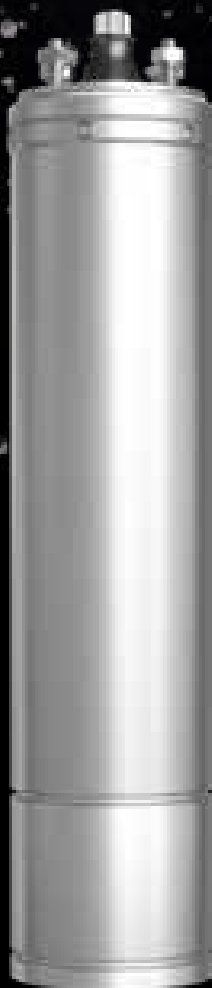
IPRO OIL MOTORS 6"

WATER IPRO MOTORS WMC 4"

WATER IPRO MOTORS WMC 6"

WATER IPRO MOTORS WMC 8"

WATER IPRO MOTORS WMC 10"



4" IPRO OIL MOTORS

High quality 4" deep well motors, cooled with white, highly refined mineral oil, approved for contact with drinking water (FFA approval) oil. Demanding tests at every stage of production, the expertise of engineers and premium materials ensure high quality, reliability and Italian technology ensure high mechanical resistance and very good electrical properties of the product. The durable construction allows it to operate for a long time without any maintenance. The electric cable ended with a detachable gland ensures perfect tightness. The motors have a diameter of 4" - 98 mm.

CHARACTERISTICS:

- Made according to the NEMA standard
- Top quality materials
- Long failure-free operation
- Can cooperate with a converter
- Possibility of connecting a cable of a specified length (a multiple of 5m)
- Starter box (in 230V version) with integrated overcurrent protection and capacitor
- Thermal protection built into the motor winding (230V version)
- **Warranty 36 months**
- Warranty and post-warranty service

TECHNICAL DATA:

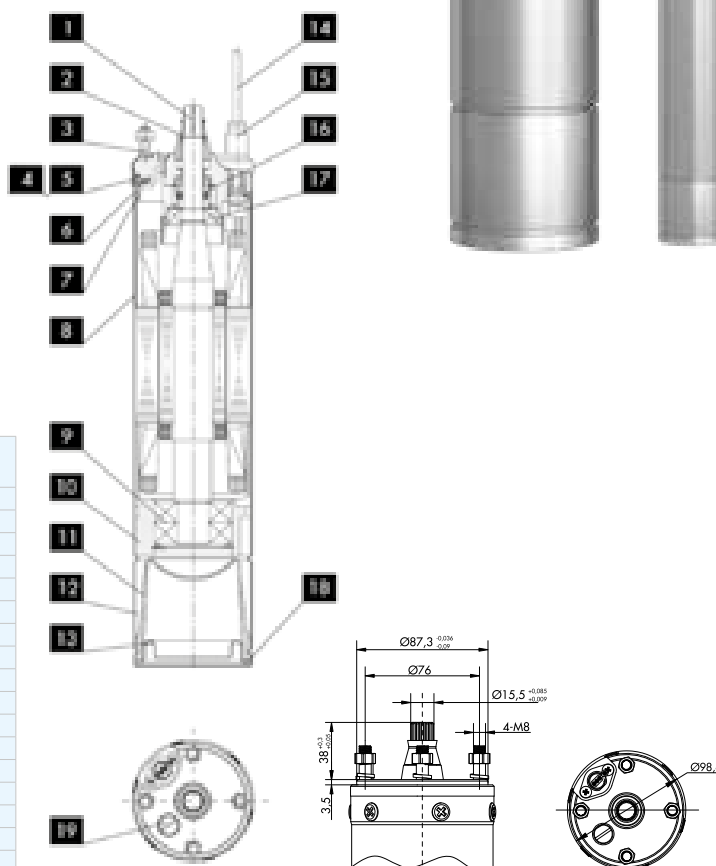
- Maximum liquid temperature: 35°C
- Power supply: 230V or 400V
- Insulation class: F
- Operation mode: continuous
- Ingress protection: IP68
- Power cable length: 1.5 m
- Operation position: vertical/horizontal
- Max. number of start-ups per 1h: 30
- Max. depth of immersion: 150 m
- Min. water flow around the motor: 0.15 m/s
- Motor speed: 2,850 RPM

1	Shaft	AISI 402 stainless steel ≤1.5 kW AISI 630 stainless steel ≥2.2 kW
2	Shaft sealing	NBR
3	Pins	AISI 304 stainless steel
4	Stud	AISI 304 stainless steel
5	Bolt	AISI 304 stainless steel
6	Upper body	Cast iron + stainless steel/brass
7	O-ring	NBR
8	Tube	AISI 304 stainless steel
9	Lower bearings	
10	Lower body	ASTM 200A cast iron
11	Diaphragm	NBR
12	Oil	Non-toxic
13	Bottom plate	AISI 304 stainless steel
14	Wire	
15	Cable gland	AISI 304 stainless steel
16	Gland	Ceramics/Sic/NBR
17	Upper bearings	
18	Ring	AISI 304 stainless steel
19	Filling screw	AISI 304 stainless steel

MATERIALS:

- Cooling agent: biodegradable, non-toxic oil
- Motor housing: stainless steel AISI 304
- Shaft: AISI 304SS Inner part of the rotor made of carbon steel alloy for improving the electrical properties of the motor. This combination gives ideal corrosion resistance and high mechanical resistance necessary for high dynamic loads.
- Mechanical seal: silicon carbide/carbon
- REPLACEABLE CABLE GLAND: Ensures a perfect seal under the toughest conditions and facilitates cable removal for maintenance. The electric cable ended with a detachable gland ensures perfect tightness.

100% TESTED: All motors are tested at the end of production. The testing includes electrical, mechanical, and tightness tests.



Name	Power (kW)	Voltage (V/Hz)	Shaft thrust (N)	Height (mm)	Weight (kg)	In[A] 230V/400V		cos φ
4 I0-S 150	1,1	1 ~ 230/50	4000	432,5	10,7	8,3	3,3	0,93
4 I0-T 150		3 ~ 400/50		432,5				
4 I0-S 200	1,5	1 ~ 230/50	4000	472,5	12,6	11	4,3	0,93
4 I0-T 200		3 ~ 400/50		457,5				
4 I0-S 300	2,2	1 ~ 230/50	5000	585	17,3	15,8	6,0	0,93
4 I0-T 300		3 ~ 400/50		510				
4 I0-T 400	3	3 ~ 400/50	5000	560	16		8,0	0,79
4 I0-S 550	4	3 ~ 400/50	6500	634	20,9		10,4	0,79
4 I0-S 750	5,5	3 ~ 400/50	6500	744	27,2		13,9	0,8
4 I0-S 1000	7,5	3 ~ 400/50	6500	829	32,1		18,7	0,8

6" IPRO OIL MOTORS

High quality 6" motors for deep-well pumps cooled with white, mineral, highly refined oil, approved for contact with drinking water (FFA approved). Demanding tests at every stage of production, the expertise of engineers and premium materials ensure high quality, reliability and very good electrical properties of the product. The durable construction allows it to operate for a long time without any maintenance.

CHARACTERISTICS:

- Made according to the NEMA standard
- Top quality materials
- Long failure-free operation
- Can cooperate with a converter
- Possibility of connecting a cable of a specified length (a multiple of 5m)
- **Warranty 36 months**
- Warranty and post-warranty service

TECHNICAL DATA:

- Maximum liquid temperature: 35°C
- Power supply: 400V
- Insulation class: F
- Operation mode: continuous
- Ingress protection: IP68
- Power cable length: 1.5 m
- Operation position: vertical/horizontal
- Max. number of start-ups per 1h: 30
- Max. depth of immersion: 150 m
- Min. water flow around the motor: 0.16 m/s
- Motor speed: 2,850 RPM

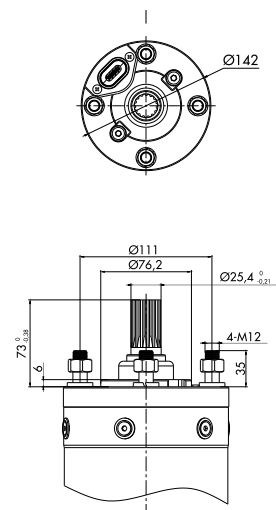
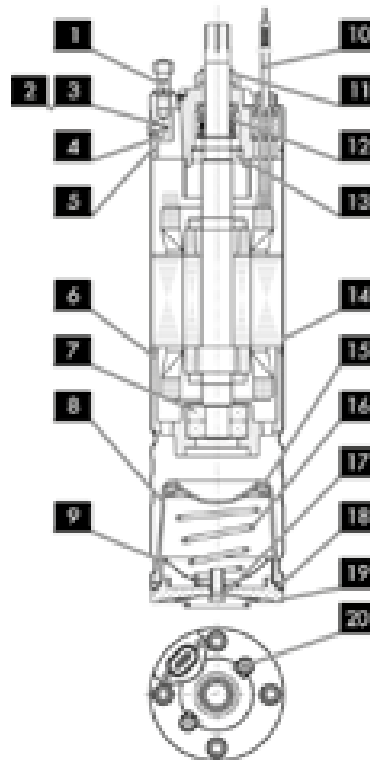
MATERIALS:

- Cooling agent: biodegradable, non-toxic oil
- Motor housing: stainless steel AISI 304
- Shaft: Inner part of the rotor made of carbon steel alloy to improve the electrical properties of the motor. The outer part of the shaft with a spline is made of stainless steel
- STATOR: specially designed to achieve maximum electrical performance. Filled with white, mineral, highly refined oil, approved for contact with drinking water (FFA approved).
- INTERCHANGEABLE CABLE GLAND: Ensures a perfect seal under the toughest conditions and facilitates cable removal for maintenance.
- Mechanical gland: silicon carbide/carbon

100% TESTED: All motors are tested at the end of production. The testing includes electrical, mechanical, and tightness tests.



1	Shaft	AISI 420 stainless steel ≤1.5 kW AISI 630 stainless steel ≥2.2kW
2	Shaft sealing	NBR
3	Pins	AISI 304 stainless steel
4	Stud	AISI 304 stainless steel
5	Bolt	AISI 304 stainless steel
6	Upper body	Cast iron + stainless steel/brass
7	O-ring	NBR
8	Tube	AISI 304 stainless steel
9	Lower bearings	
10	Lower body	ASTM 200A cast iron
11	Diaphragm	NBR
12	Oil	Non-toxic
13	Bottom plate	AISI 304 stainless steel
14	Wire	
15	Cable gland	AISI 304 stainless steel
16	Gland	Ceramics/Sic/NBR
17	Upper bearings	
18	Ring	AISI 304 stainless steel
19	Filling screw	AISI 304 stainless steel



Name	Power (kW)	Voltage (V/Hz)	Shaft thrust (N)	Height (mm)	Weight (kg)	In (A)	RPM	cos φ
6 10-T 1000	7,5	3 ~ 400/50	10000	695,5	36	18,4	2850	0,81
6 10-T 1250	9,2	3 ~ 400/50	10000	738,5	41	22,4	2880	0,81
6 10-T 1500	11	3 ~ 400/50	10000	768,5	44	26,1	2850	0,82
6 10-T 1750	13	3 ~ 400/50	10000	798,5	46,5	30,9	2860	0,82
6 10-T 2000	15	3 ~ 400/50	10500	848,5	51,5	34,8	2840	0,83

4" WMC WATER IPRO MOTORS

High-quality 4" water-cooled submersible motors. Demanding tests at every stage of production, expert knowledge of engineers and high-quality materials ensure high quality, reliability, and excellent electrical properties of this product. Durable construction for long and maintenance-free operation. The WMC motor series is designed to drive submersible pumps in accordance with the standard EN60034-1 (IEC 60034-1) in line with the supply voltage and frequency requirements indicated on the nameplate. Shaft height and flange dimensions in accordance with NEMA MG1: 2006 REV 1-2007.

All motors can be operated by a frequency inverter (30 Hz - 50/60 Hz).

Engine with optional equipment - SOFT START:
Maximum acceleration time (intermediate start) should not be longer than 3 seconds.

CHARACTERISTICS:

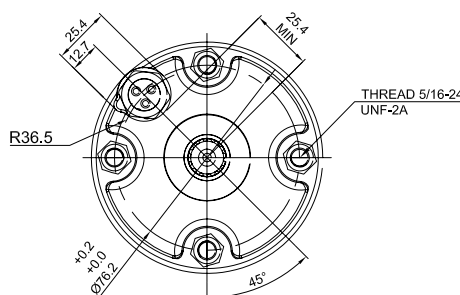
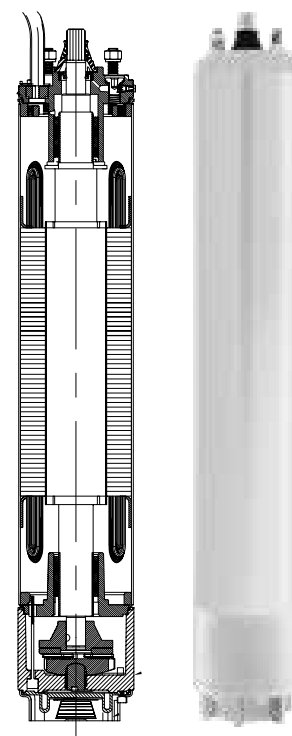
- Single-phase version from 0.37kW to 3.7kW
- Three-phase version from 0.37kW to 7.5kW
- Made in the NEMA standard
- The highest quality materials
- Sand protection system
- Long trouble-free operation
- Inverter compatible
- Possibility of attaching a cable of a specified length (multiples of 5m)
- Detachable power cord with waterproof plug for easy repair or replacement
- Starting box (230V version) with built-in overcurrent protection and capacitor
- Thermal protection incorporated into the motor winding (230V version)
- **Warranty 36 months**
- Warranty and post-warranty service

TECHNICAL DATA:

- Maximum liquid temperature: 35°C
- Power supply: 230V or 400V
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP68
- Power cord length: 1.5m
- Working position: vertical/horizontal
- Max. number of start-ups per 1h: 30
- Max. immersion depth: 150m
- Min. water flow around engine: 0.15m/s
- Motor speed: 2850 RPM
- Maximum supply voltage fluctuation: -10% / +6% of the nominal value
- Outer diameter: 98mm

MATERIALS:

- Coolant: water
- Motor housing: stainless steel AISI 304
- Shaft: stainless steel AISI 304
- Mechanical seal: silicon carbide/carbon
- Outer part of the shaft: DUPLEX
- Seals: NBR
- Membrane: EPDM



Diameter	Power		Height (mm)	cos φ	Efficiency η%	Amperage (A)	Weight (kg)	RPM	Number of starts [n/h]	Shaft thrust (N)
	(kW)	(HP)								
4" / 230V	0,75	1,0	292	0,96	69	4,9	12	2850	30	1500
	1,1	1,5	340	0,92	70	7,5	15	2880		
	1,5	2,0	405	0,90	72	10,3	17	2850		3000
	2,2	3,0	539	0,98	67	14,5	24	2860		
4" / 400V	0,75	1,0	292	0,72	68	2,3	17	2850	30	1500
	1,1	1,5	340	0,83	76	2,7	24	2880		
	1,5	2,0	405	0,74	74	4,1	26	2850		
	2,2	3,0	539	0,76	69	6,3	24	2860		6500
	3	4,0	579	0,75	73	8,1	26	2840		
	4	5,5	692	0,76	72	10,4	31	2860		
	5,5	7,5	769	0,76	79	13,4	35	2840		
7,5	10,0	828	0,77	80	18	38	2860			

6" WMC WATER IPRO MOTORS

The 6" WMC are submersible motors made in accordance with the standard EN60034-1 (IEC 60034-1). Shaft height and flange dimensions according to NEMA MG1: 2006 REV 1-2007. High-quality 6" water-cooled submersible motors with 143mm diameter and anti-freeze coolant. Demanding tests at every stage of production, expert knowledge of engineers and high-quality materials ensure high quality, reliability, and excellent electrical properties of this product. Durable construction for long and maintenance-free operation.

All motors can be powered by a frequency inverter (30 Hz - 50/60 Hz).
 Motor with optional equipment - SOFT START: Maximum acceleration time (intermediate start) should not be longer than 1.5 sec for 6" motors.

CHARACTERISTICS:

- Made in the NEMA standard
- The highest quality materials
- Long trouble-free operation
- Storage temperature up to (-15°C) - 60 °C
- Inverter compatible
- Possibility of attaching a cable of a specified length (multiples of 5m)
- **Warranty 36 months**
- Warranty and post-warranty service

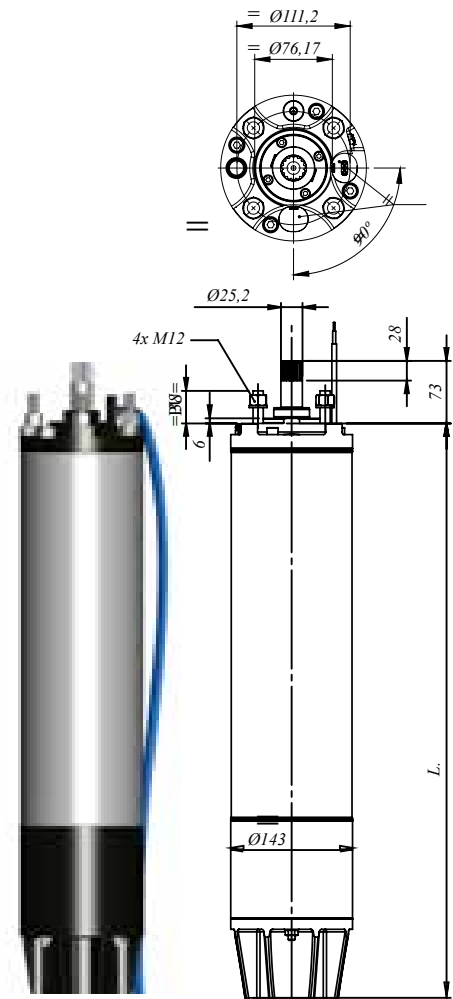
- Max. number of start-ups per 1h: 20
- Max. immersion depth: 150m
- Shaft load: 22000N for 5.5-7.5kW motors, 25000N for 9.2-18.5kW motors
- Min. water flow around motor: 0.5m/s
- Maximum supply voltage fluctuation: -10% / +6% of the nominal value

MATERIALS:

- Coolant: water + anti-freeze coolant.
- Stator housing: stainless steel AISI 304
- Shaft: stainless steel AISI 431
- Mechanical seal: silicon carbide/silicon carbide
- Bearing: carbon, resistant to heavy axial loads

TECHNICAL DATA:

- Maximum liquid temperature: 35°C
- Power supply: 400V
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP68
- Power cord length: 3.5m
- Working position: vertical/horizontal



Motor type	Power		Height (mm)	cos φ	Efficiency η%	Voltage (V)	Amperage (A)	Weight (kg)	Diameter [mm]	Number of starts [n/h]	RPM	Shaft thrust (N)	Ia/In	
	(kW)	(HP)											DOL	V/D
Three-phase 50Hz	WMC65	4	5,5	690	0,75	74,8	10,3	42,0	143	20	2895	22.000	3,5	1,15
	WMC67	5,5	7,5	735	0,75	77,2	13,7	46,2					4,0	1,35
	WMC610	7,5	10	780	0,77	78,4	17,9	51,2					5,1	1,7
	WMC612	9,2	12,5	810	0,77	80,2	21,5	54,6			2890	25.000	4,9	1,65
	WMC615	11	15	840	0,77	80,7	25,6	56,8			2890	5,4	1,8	
	WMC617	13	17,5	890	0,765	79,3	30,9	63,0			2885	4,6	1,55	
	WMC620	15	20	930	0,775	80,1	34,9	67,2			2890	5,0	1,65	
	WMC625	18,5	25	1015	0,75	81,9	43,5	76,0			2885	4,7	1,55	
	WMC630	22	30	1060	0,77	81,9	50,3	80,9			2880	5,0	1,65	
	WMC635	26	35	1165	0,76	83,4	59,2	91,6			2880	4,8	1,6	
	WMC640	30	40	1275	0,745	83,3	69,7	103,0			2885	28.000	5,7	1,9
	WMC650	37	50	1365	0,76	82,4	85,2	113,0			2875	6,0	2,0	

8" WMC WATER IPRO MOTORS

High-quality 8" water-cooled submersible pump motors with 191mm diameter and anti-freeze coolant. Demanding tests at every stage of production, expert knowledge of engineers and high-quality materials ensure high quality, reliability, and excellent electrical properties of this product. Durable construction for long and maintenance-free operation.

CHARACTERISTICS:

- Made in the NEMA standard
- The highest quality materials
- Long trouble-free operation
- Storage temperature (-15°C) - 60 °C
- Inverter compatible
- Possibility of attaching a cable of a specified length (multiples of 5m)
- **Warranty 36 months**
- Warranty and post-warranty service

TECHNICAL DATA:

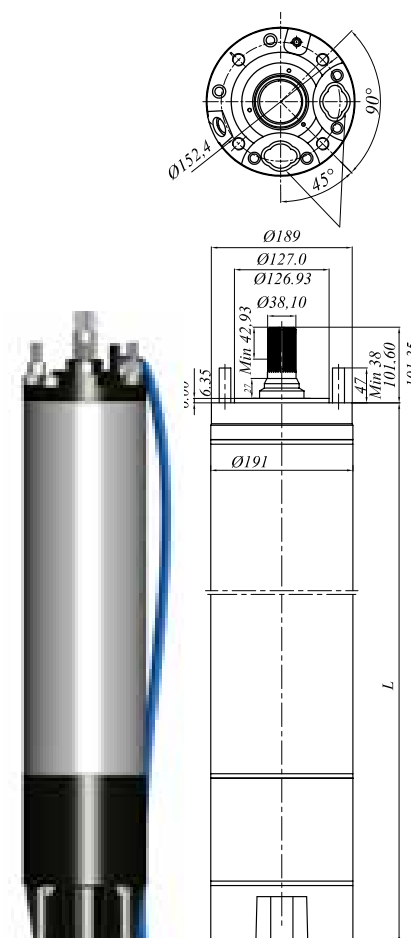
- Maximum liquid temperature: 35°C
- Power supply: 400V
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP68
- Power cord length: 4m
- Working position: vertical/horizontal

- Max. number of start-ups per 1h: 15
- Max. immersion depth: 150m
- Shaft load: 40000N
- Min. water flow around engine: 0.5m/s
- Maximum supply voltage fluctuation: -10% / +6% of the nominal value

Motor powered by a frequency converter.
All motors can be powered by a frequency converter (30 Hz - 50/60 Hz).
Engine with optional equipment - SOFT START:
Maximum acceleration time (intermediate start) should not be longer than 1.5 sec for 8" motors.

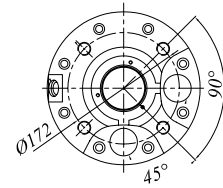
MATERIALS:

- Coolant: water
- Motor housing: stainless steel AISI 304
- Shaft: stainless steel AISI 431
- Mechanical seal: silicon carbide/silicon carbide
- bearing: carbon, resistant to heavy axial loads



Motor type	Power		Height (mm)	cos φ	Efficiency η%	Voltage (V)	Amperage (A)	Weight (kg)	Diameter [mm]	Number of starts [n/h]	RPM	Shaft thrust (N)	Ia/In		
	(kW)	(HP)											DOL	Y/D	
Three-phase 50Hz	WMC830	22	30	896	0,83	400	46,6	117	191	15	2885	22.000	4,80	1,58	
	WMC840	30	40	956	0,83		84	62,1					133	2885	4,80
	WMC850	37	50	1026	0,855		85,2	73,3			146	2880	4,90	1,62	
	WMC860	45	60	1076	0,84		85,5	90,2			155	2875	4,60	1,52	
	WMC875	55	75	1156	0,86		85,3	108,2			170	2865	4,90	1,62	
	WMC880	59	80	1166	0,845		85,6	117,4			175	2886	4,70	1,55	
	WMC885	63	85	1196	0,855		84,4	125,7		179	2850	4,70	1,55		
	WMC890	66	90	1266	0,84		85	133,5		194	2880	4,70	1,55		
	WMC895	70	95	1296	0,855		86,2	137,1		196	2870	5,20	1,72		
	WMC8100	75	100	1336	0,845		86,7	147,6		206	2875	5,20	1,72		
	WMC8110	81	110	1426	0,84		87	160		223	10	2880	28.000	5,22	1,73
	WMC8125	92	125	1536	0,84		87	181,6		243		2880		5,22	1,73

10" WMC WATER IPRO MOTORS



High-quality 10" water-cooled submersible motors with 236mm diameter and antifreeze coolant. Demanding tests at every stage of production, expert knowledge of engineers and high-quality materials ensure high quality, reliability, and excellent electrical properties of this product. Durable construction for long and maintenance-free operation.

Motor powered by a frequency converter.

All motors can be powered by a frequency inverter (30 Hz - 50/60 Hz). Engine with optional equipment - SOFT START: Maximum acceleration time (intermediate start) should not be longer than 1.5 sec for 10" motors.

CHARACTERISTICS:

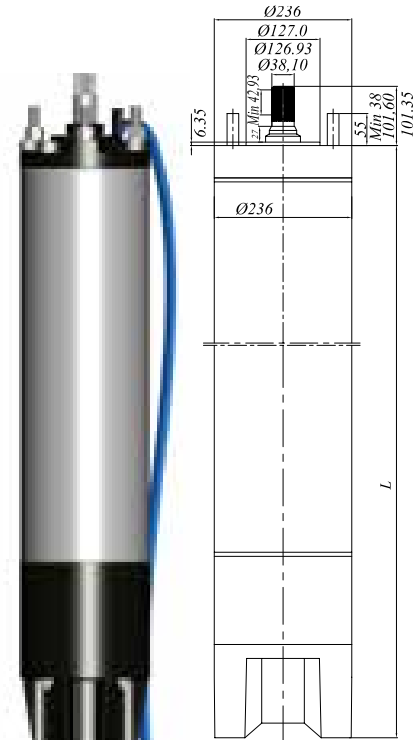
- Made in the NEMA standard
- The highest quality materials
- Long trouble-free operation
- Storage temperature (-15°C) - 60 °C
- Inverter compatible
- Possibility of attaching a cable of a specified length (multiples of 5m)
- **Warranty 36 months**
- Warranty and post-warranty service

TECHNICAL DATA:

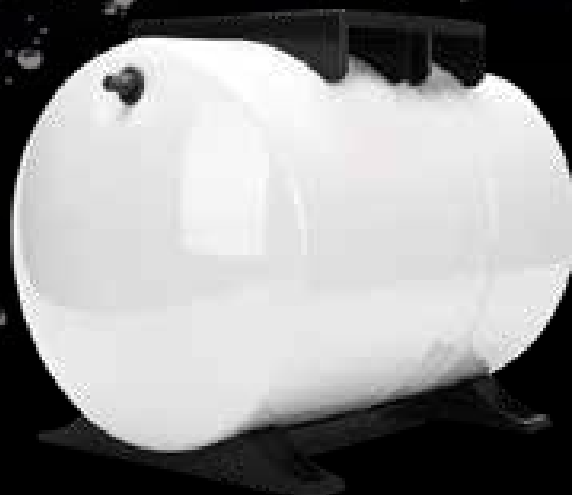
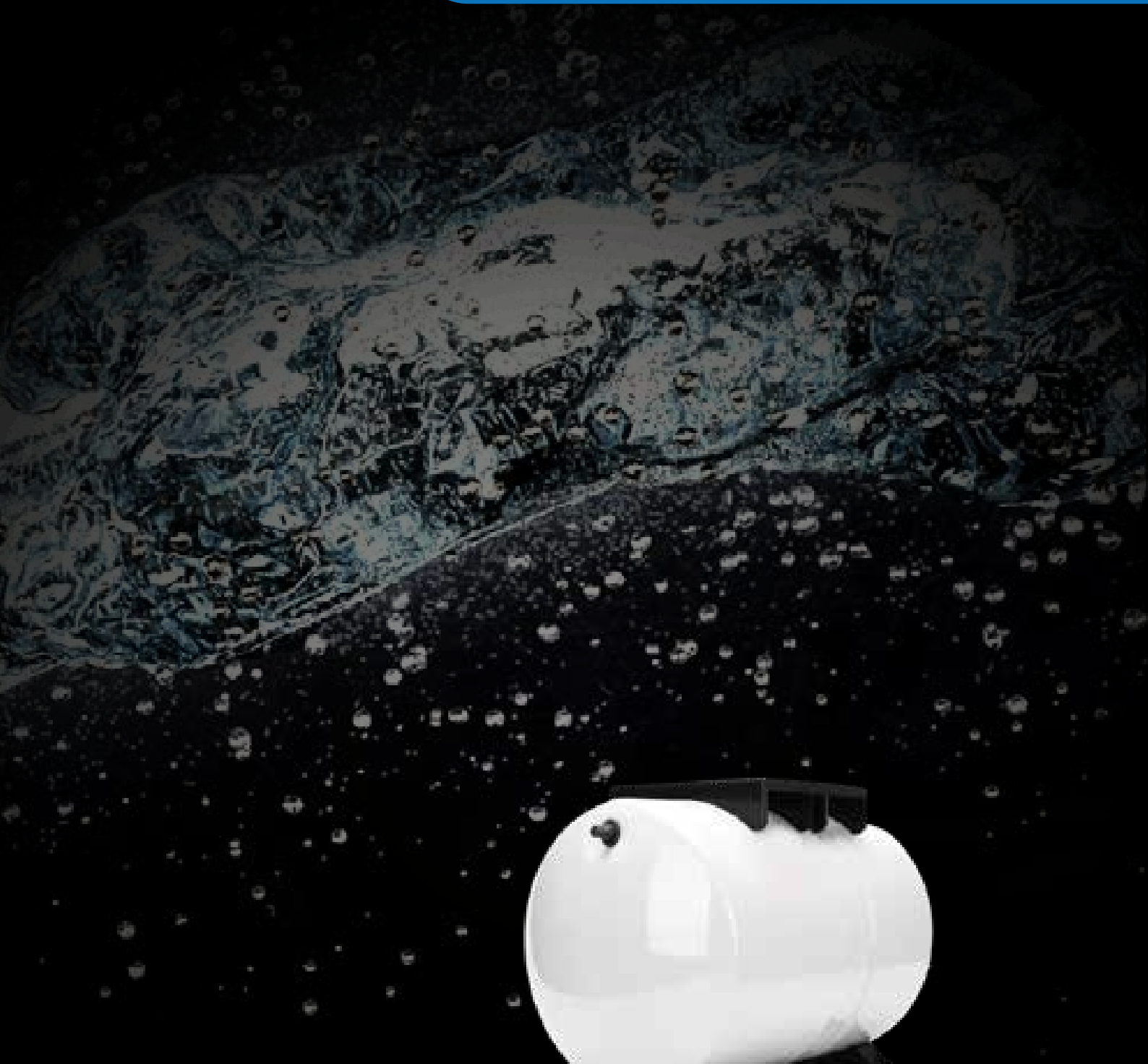
- Maximum liquid temperature: 35°C
- Power supply: 400V
- Insulation class: F
- Operating mode: continuous
- Ingress protection: IP68
- Power cord length: 4m
- Working position: vertical/horizontal
- Max. number of start-ups per 1h: 10
- Max. immersion depth: 150m
- Shaft load: 65000N
- Min. water flow around motor: 0.5m/s
- Maximum supply voltage fluctuation: -10% / +6% of the nominal value

MATERIALS:

- Coolant: water
- Motor housing: stainless steel AISI 304
- Shaft: stainless steel AISI 431
- Mechanical gland: silicon carbide/silicon carbide
- Bearing: carbon, resistant to heavy axial loads



Motor Type	Power		Height (mm)	cos φ	Efficiency η %	Voltage (V)	Amperage (A)	Weight (kg)	Diameter [mm]	Number of starts [n/h]	RPM	Shaft thrust (N)	Ia/In		
	(kW)	(HP)											DOL	V/D	
3-phase 50Hz	WMC10100	75	100	1226	0,75	74,8	380	157,3	242	236	10	65.000	4,60	1,51	
							400	150							4,80
	WMC10110	81	110	1266	0,75	77,2	380	170,4	263				2897	4,60	1,52
							400	163					2910	4,80	1,58
	WMC10125	92	125	1316	0,77	78,4	380	193,3	277				2882	4,80	1,57
							400	184,3					2900	5,00	1,65
	WMC10150	110	150	1446	0,77	80,2	380	226,1	317				2897	6,10	2,01
							400	218					2910	6,33	2,09
	WMC10175	129	175	1546	0,77	80,7	380	261,6	345				2914	5,70	1,89
							400	252,4					2925	5,95	1,96
	WMC10200	147	200	1736	0,775	80,1	380	301,0	368				2911	5,80	1,91
							400	291					2920	5,98	1,97
	WMC10225	165	225	1856	0,75	81,9	380	330,2	412				2916	6,03	1,99
							400	321,0					2925	6,20	2,05
	WMC101250	185	250	1956	0,77	81,9	380	368,5	442				2914	6,50	2,14
							400	357					2925	6,70	2,21



Vessels

*I PRO MEMBRANE VESSELS FIX MEMBRANE
I PRO MEMBRANE VESSELS FIX MEMBRANE
FIX DRAINAGE TANKS*

IPRO MEMBRANE VESSELS

FIX MEMBRANE



Horizontal fix membrane pressure tanks for use with drinking water. In order to minimize pump vibration, the tank's baseplate and legs are made of plastic. Tanks are available with 24, 50, 80 and 100 litres capacity. Inside the steel vessel there is a fix membrane made of butyl rubber with high tensile strength and high temperature resistance, separating the liquid from the air.

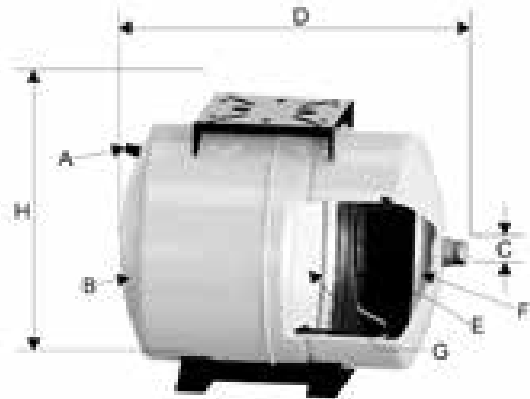
TANK SPECIFICATION:

- 1" stainless steel connection
- Outer surface with two-coat acrylic epoxy and polyurethane paint
- Compliant with the Pressure Equipment Directive (PED) 2014/68/UE
- Maximum operating pressure - 10 bar

MEMBRANE SPECIFICATION:

- Made of butyl rubber
- Hygenic approval

- A. Sealed air valve
- B. Two-coat epoxy and polyurethane paint
- C. 1" stainless steel connection
- D. Diameter
- E. Membrane made of approved butyl rubber
- F. Approved outer coating
- G. Precharge pressure - 2bar
- H. Height



NAME	Capacity (L)	Pressure (bar)	Diameter (D)	Height (H)	Precharge pressure (bar)	Inlet/Outlet [inch]
IPRO FIX HORIZONTAL VESSEL 24L	24	10	425	334	2	1 BSP / NPT
IPRO FIX HORIZONTAL VESSEL 50L	50	10	570	384	3	1 BSP / NPT
IPRO FIX HORIZONTAL VESSEL 80L	80	10	670	435	3	1 BSP / NPT
IBO ITALY FIX HORIZONTAL VESSEL 100L	100	10	712	544	3	1 BSP / NPT

IPRO MEMBRANE VESSELS

FIX MEMBRANE



Vertical fix membrane pressure tanks for use with drinking water. In order to minimize pump vibration, the tank's baseplate and legs are made of plastic. Tanks are available with 24, 50, 80 and 100 litres capacity. Inside the steel vessel there is a fix membrane made of butyl rubber with high tensile strength and high temperature resistance, separating the liquid from the air.

TANK SPECIFICATION:

- 1" stainless steel connection
- Outer surface with two-coat acrylic epoxy and polyurethane paint
- Compliant with the Pressure Equipment Directive (PED) 2014/68/UE
- Maximum operating pressure - 10 bar

MEMBRANE SPECIFICATION:

- Made of butyl rubber
- Hygenic approval

- A. Sealed air valve
- B. Two-coat epoxy and polyurethane paint
- C. 1" stainless steel connection
- D. Diameter
- E. Membrane made of approved butyl rubber
- F. Approved outer coating
- G. Precharge pressure - 2bar
- H. Height



NAME	Capacity (L)	Pressure (Bar)	Diameter (D)	Height (H)	Precharge pressure (bar)	Inlet/Outlet (inch)
ZBIORNIK IPRO FIX PIONOWY 50L	50	10	350	625	3	1 BSP / NPT
ZBIORNIK IPRO FIX PIONOWY 80L	80	10	400	730	3	1 BSP / NPT
ZBIORNIK IPRO FIX PIONOWY 100L	100	10	500	770	3	1 BSP / NPT
ZBIORNIK IPRO FIX PIONOWY 150L	150	10	500	900	3	1 BSP / NPT
ZBIORNIK IPRO FIX POIONOWY 200L	200	10	600	1043	3	1¼ BSP / NPT
ZBIORNIK IPRO FIX POIONOWY 300L	300	10	650	1132	3	1¼ BSP / NPT

FIX DRAINAGE TANKS

IPRO MEMBRANE CO / CWU / SOLAR



Diaphragm vessels with a non-replaceable membrane - IPRO FIX

Diaphragm vessel, used to prevent excessive pressure build-up in closed systems. IPRO FIX expansion vessels are designed for:

- hot and cold drinking water supply systems to maintain and stabilize the system pressure changes resulting from the increase in water volume.
- heating and solar systems to maintain and stabilize the system pressure changes resulting from the increase in fluid volume and temperature.

Inside the steel vessel there is a fix membrane made of butyl rubber with high tensile strength and high temperature resistance, separating the liquid from the air.

The vessels are intended for systems with the maximum 50% glycol content

TANK SPECIFICATION:

- 1" thick stainless steel connection
- Outer surface with two-coat acrylic epoxy and polyurethane paint
- Compliant with the Pressure Equipment Directive (PED) 2014/68/UE
- Maximum operating pressure - 10 bar

MEMBRANE SPECIFICATION:

- Made of butyl rubber
- Hygenic approval

- A. Sealed air valve
- B. Two-coat epoxy and polyurethane paint
- C. 1" thick stainless steel connection
- D. Diameter
- E. Membrane made of approved butyl rubber
- F. Approved outer coating
- G. Precharge pressure - 2bar YEAR
- H. Height



NAME	Capacity (L)	Pressure (bar)	Diameter (D)	Height (H)	Precharge pressure (bar)	Inlet/Outlet [inch]
IPRO FIX 12L CO/CWU tanks	12	10	240	352	2	1 BSP / NPT
IPRO FIX 19L CO/CWU tanks	19	10	270	370	2	1 BSP / NPT
IPRO FIX 24L CO/CWU tanks	24	10	300	425	2	1 BSP / NPT

Circulating pumps

API



API

Energy-saving electronic circulation pumps which meet the requirements of A-rated pumps.

PWM CONTROL

The energy efficiency index of API series pumps is:

$$EEI \leq 0,20$$

Energy-saving pumps are designed for forcing the circulation of central heating and in solar installations. The pumps are equipped with an electronic processor which automatically controls the operation of the pumps, which, in combination with a frequency converter, allows for significant savings in electricity consumption. The processor used allows you to choose one of 9 operating modes, depending on the needs of the installation. The current consumption is from 1/10 to 1/3 compared to classic pumps. The pump set includes a set of screw connections and a power cord.

Additional advantage of pump is the screw at the end of control box with allow to easy way vent the system.

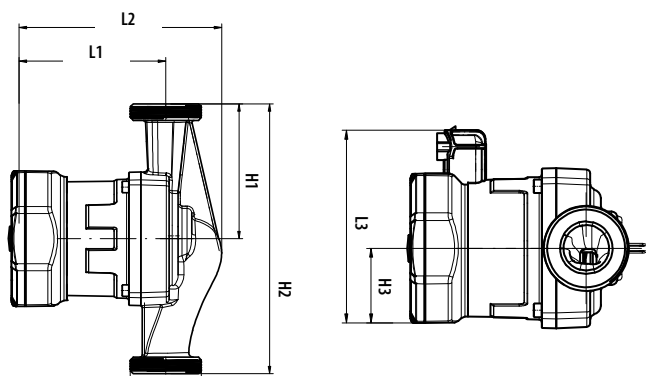
APPLICATION:

The API series circulation pump is best suited for the following systems:

- Constant temperature heating system with variable flow
- Variable pipe temperature heating system
- Heating system with night mode
- Air conditioning system
- Industrial circulation system
- Home central heating system and domestic hot water system.

THE PUMP HAS 9 OPERATING MODES:

- AUTO(factory setting)
- High to low, proportional pressure characteristic curve
- LPP / HPP- Proportional pressure curves
- LCP / HCP- Constant pressure curves
- I / II / III- Constant speed curves.
- PWM- Parameters modulated by PWM signal



NAMEE	Dimensions (mm)					
	L1	L2	L3	H1	H2	H3
API 15-60/25-60/130	98	135	107,5	90	130	44
API 25-40/25-60/ 25-80/180					180	



SPECIFICATIONS		
Electrical supply	1×230V +6%/-10%, 50Hz	
Motor protection	There is no need for an additional motor protection.	
Ingress Protection Code	IP 44	
Insulation class	E	
Maximum ambient relative humidity	≤ 95%	
Maximum pressure in the central heating system	1 MPa	
Minimum inlet suction pressure depending on heating medium temperature	Medium temperature	
	≤ 85 °C	0.005 MPa
	≤ 90 °C	0.028 MPa
	≤ 110 °C	0.100 MPa
EMC compliance	EN61000-6-1; EN61000-6-3	
Running pump sound pressure	43 dB (A)	
Allowable ambient temperature	0~+40°C	
Maximum heating medium temperature	TF 110	
Maximum heat of pump surface	≤ 125°C	
Fluid temperature range	2~+110°C	

NAME	Tryb pracy (x1)	Head (m)	Flow (l/min)	Motor power (W)	Inlet/Outlet diameter (mm)	Connector spacing (mm)	Weight (kg)
API 25-40/180	9	4,5	50	5-22	25	180	2,2
API 15-60/130	9	6	45	5-45	15	130	2,1
API 25-60/130	9	6	55	5-45	25	130	2,1
API 25-60/180	9	6	55	5-45	25	180	2,4
API 25-80/180	9	8	90	5-70	25	180	2,9
API 32-80/180	9	8	90	5-70	32	180	2,9

Accesorios

IPRO IPC 122 M
IPRO IPC 130 M
IPRO IPC 140 - 2150
WATER PASS SWITCH
ELECTRICAL CABLES



IPRO IPC 122M / IPC 130M INTELLIGENT WATER PUMP CONTROLLERS

This controller adopts the original imported microcomputer single-chip microcomputer technology, which has the advantages of powerful function and simple and convenient installation. The unique noncontact induction technology realizes the shutdown protection when the pump is dry and short of water without installing a probe in deep wells. Make the pump truly realize full intelligent unmanned management.

APPLICATION:

It used for water supply of urban high-rise buildings and drainage control of basements; It can effectively control and protect centrifugal pump, submersible pump, multistage pump, deep well pump, sewage pump, booster pump and pipeline pump.pump.



Type	IPC 122M/ IPC 130M – Single pump	
MODEL/RATED POWER	IPC 122 IPC 130	0,37-2,2 kW 0,37-3,0 kW
MODEL/RATED POWER	220+/-10% 50 Hz	
DISPLAY	LCD display	
START TYPE	Direct	
SIGNAL TRANSMISSION MODE	Level float switch Level probe Pressure switch Electric contact pressure gauge	
WATER LEVEL INDICATION	High/Middle/Low	
MAX. CONTROL DISTANCE	<=2000m without strong electric and electromagnetic fields	
OVER/UNDER-VOLTAGE RANGE	176-264V adjustable	
WORKING TEMPERATURE	-20°C - +50°C	
WORKING HUMIDITY	20-90% RH, no drips concremented	
INSTALL POSITION	Wall mounted	
PRODUCT SIZE	210x139x65 0,64kg	

MAIN FUNCTION:

- Transmission characteristic: Float switch, pressure gauge, pressure switch, electrode probe,
- Fault status: Fault cause display, fault sound and light alarm,
- Overcurrent/undercurrent parameter independent key setting (no-load delay start adjustable),
- After the over/under voltage is protected, it will start automatically after the voltage returns to normal,
- Water supply in upper pool, drainage in lowe pool and constant pressure control of pipeline,
- Digital voltage display, current display, upper/lower pool water level three-gear display,
- Pump stalled protection, Dry run protection, Overcurrent protection, Undercurrent protection, Phase failure protection, Overvoltage/undervoltage protection, Short circuit protection,
- Automatic/manual one-key switching,
- Power automatically starts the water pump after power failure,
- No-load restart: Adjustment range 0-999 minutes.

MAIN PARAMETERS:

- Anti-rust inspection time:
The adjustment range is 0-30 days,
- Trip response of dry run: 0,1s-3min.,
- Trip response of overload: 0,1s-3min.,
- Automatic fault conversion: 1s,
- Trip response of phase loss: <2s,

IPRO IPC 140 –2150

INTELLIGENT WATER PUMP CONTROLLERS

This controller adopts the original imported microcomputer single chip microcomputer technology, which has the advantages of powerful function and simple and convenient installation. The unique noncontact induction technology realizes the shutdown protection when the pump is dry and short of water without installing a probe in deep wells. Makes the pump truly realize full intelligent unmanned management.

APPLICATION:

It used for water supply of urban high-rise buildings and drainage control of basements; It can effectively control and protect centrifugal pump, submersible pump, multistage pump, deep well pump, sewage pump, booster pump and pipeline pump.



Type	IPC 1 M/T – Single pump		IPC 2 M/T – Dwie pompy	
Model/Rated Power	IPC140 IPC175 IPC1110 IPC1150 IPC1185 IPC1220	0,75-4 kW 1,1-7,5 kW 1,1-11 kW 2,2-15 kW 2,2-18,5 kW 2,2-22 kW	IPC240 IPC275 IPC2110 IPC2150	0,75-4 kW 1,1-7,5 kW 1,1-11 kW 2,2-15 kW
Model/Rated Power	220 (M)+/-10% lub 380 (T)+/-10% 50 Hz			
Display	LCD display			
Start Type	Direct			
Signal Transmission Mode	Level float switch Level probe Pressure switch Electric contact pressure gauge			
Water Level Indication	High/Middle/Low			
Max. Control Distance	<=2000m without strong electric and electromagnetic fields			
Over/Under-Voltage Range	304-456V or 176-264V (adjustable)			
Working Temperature	-25°C - +55°C			
Working Humidity	20-90% RH, no drips concreate			
Install Position	Wall mounted			
Product Size	330 x 220 x 135			

MAIN FUNCTION:

- Transmission characteristic: Float switch, pressure gauge, pressure switch, electrode probe,
- Fault status: Fault cause display, fault sound and light alarm,
- Overcurrent/undercurrent parameter independent key setting (no-load delay start adjustable),
- After the over/under voltage is protected, it will start automatically after the voltage returns to normal,
- Water supply in upper pool, drainage in lower pool and constant pressure control of pipeline,
- Digital voltage display, current display, upper/lower pool water level three-gear display,
- Pump stalled protection, Dry run protection, Overcurrent protection, Undercurrent protection, Phase failure protection, Overvoltage/undervoltage protection, Short circuit protection,
- Automatic/manual one-key switching,
- Power automatically starts the water pump after power failure,
- No-load restart: Adjustment range 0-999 minutes.

MAIN PARAMETERS:

- Timing Rotation Time: adjustment range 0-480 minutes,
- Anti-rust inspection time: The adjustment rang is 0-30 days,
- Trip response of dry run: 0,1s-3min.,
- Trip response of overload: 0,1s-3min.,
- Automatic fault conversion: 1s,
- Trip response of phase loss: <2s,

FOR DOUBLE PUMPS SERIES IPC 2 M/T

- Control mode: One for use and the other for standby, double pump rotation (alternating operation), automatic error conversion and simultaneous running of dual pumps in very high level,
- Control functions: Automatic control, one for use and one for standby or two pumps start at the same time.

WATER PASS SWITCH

INTELLIGENT PUMP CONTROLLER

The WATER-PASS controller is an electronic device used to control the operation of the pump. The device controls the operation of the pump by examining changes in water pressure in the pipeline and water flow through the pipeline. Thanks to the user-adjustable switching pressure, the device fully replaces traditional pressure switches.

The device also protects against dry running (pump operation without water). An integrated check valve prevents the system from returning water to the pump.

WATER-PASS 2 in relation to WATER-PASS has been equipped with a 1L tank reducing hydraulic stroke. The turn on pressure is factory-set to 1.5 bar

The intelligent WATER-PASS controller is designed to control the pump by turning the device on and off. Operating depends on the water pressure, if the pressure drop in the water system below the switch-on pressure set on the controller, device will turn on the pump. In practice, the device turns on the pump when the water tap is turned on or the sprinklers are opened, and it turns off after about 6 seconds from the moment the tap is turned off or the sprinklers are closed. The device has a function of protection against dry running (operation of the pump without water), in the absence of water in the device, the controller turns off the pump preventing its destruction.

The device can operate pumps, equipped with the motors which do not consume more than 12 A current while working.

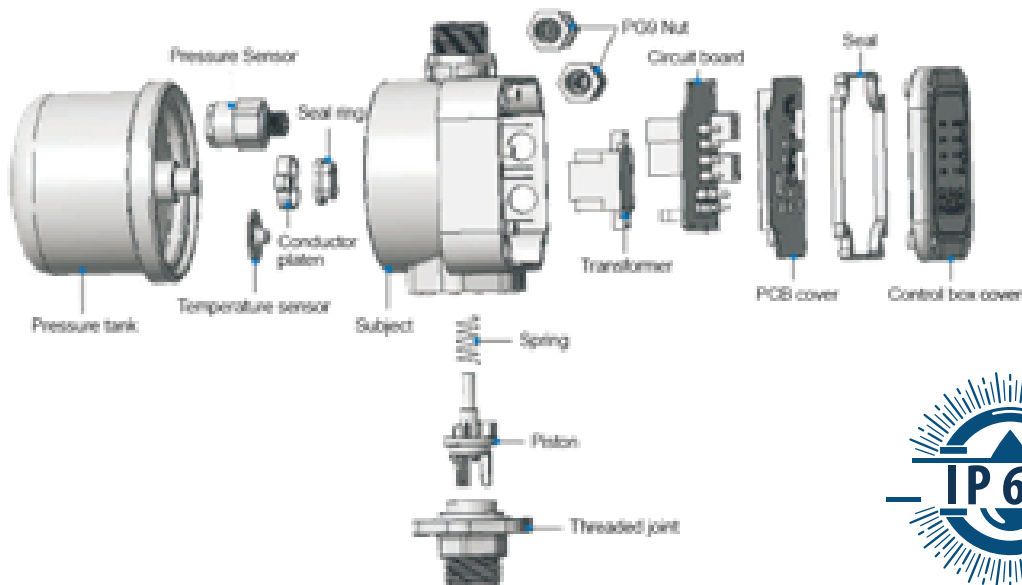
The device is designed to work with clean water without any mechanical sediments. The maximum water temperature should be less than 80 °C.

WATER-PASS 2 is equipped with a 1L tank and no additional tank should be installed. In order to increase the flexibility of the system operation, a small expansion vessel can be mounted on the WATER-PASS model.



TECHNICAL DATA:

- Supply voltage: 100-260V
- Power frequency: 50 / 60Hz
- Max. power of the controlled pump: 2.2 kW
- Max. current consumption of the controlled pump: 12A
- Max. operating pressure: 15 bar
- Max. ambient temperature: 40 °C
- Max. liquid temperature: 80 °C
- Protection: IP65
- Switch-on pressure range: 0-10 bar
- Vertical working position
- WATER-PASS 2S - tank capacity 1L
- Printed circuit protection: epoxy resin
- Dry-running protection: 8 sec.



E:ECTRICAL CABLES



H07RN-F rubber heavy duty power and control cable 450/750 V, for industrial and agricultural applications. Class 5, from -25°C to 60°C, oil resistant, flame retardant

Compliance: PN-EN 60228 / PN-EN 60332-1

FEATURES:

- Resistant to low temperatures
- Resistant to mechanical damage
- Oil resistant
- UV radiation resistant

APPLICATION:

- Hand and power operated equipment
- Medium mechanical loads
- Industrial and agricultural applications
- In dry, wet and humid environments

Depending on the batch, the dimensions may differ from the data specified below.

Nominal voltage	450/750V
Conductor material	copper
Number of conductors	3 / 4
Identification of conductors	Colour
Type of cores	Multi-strand (flexible)
Conductor insulation	Rubber (EPR)
Conductor class	Class 5 = flexible
Sheathing material	Rubber (EPR)
Permissible cable temperature	(-25) - (+60)
Sheathing colour	Black
Shape	Round
Sheathing	chloroprene rubber, oil resistant, flame retardant

Model (number of conductors x conductor diameter) (mm ²)	Number of conductors/ Sheathing colour	
	Service	Protective
	2 (brown, blue)	1 (yellow-green)
	Outer diameter (mm ²)	
3 x 1,5 mm ²	9,5	
3 x 2,5 mm ²	10,5	
3 x 4 mm ²	13	
3 x 6 mm ²	14,5	
3 x 10 mm ²	22,4	

NAME (number of conductors x conductor diameter) (mm ²)	Number of conductors/ Sheathing colour	
	Service	Protective
	3 (brown, black, blue)	1 (yellow-green)
4 x 1,5 mm ²	10,5	
4 x 2,5 mm ²	12,5	
4 x 4 mm ²	14,5	
4 x 6 mm ²	16,2	
4 x 10 mm ²	21,5	

Motor type	Power (kW)	1 mm ²	1,5 mm ²	2,5 mm ²	4 mm ²	6 mm ²	10 mm ²	16 mm ²
230V	0,37	50 m	75 m	125 m				
230V	0,55	38 m	57 m	95 m	152 m			
230V	0,75	30 m	45 m	45 m	120 m	175 m		
230V	1,1	22 m	33 m	53 m	85 m	127 m	210 m	
230V	1,5	23 m	38 m	63 m	92 m	154 m	246 m	
230V	2,2	28 m	45 m	67 m	112 m	180 m		
400V	0,37	240 m						
400V	0,55	164 m	246 m					
400V	0,75	133 m	200 m	233 m				
400V	1,1	97 m	146 m	244 m	390 m			
400V	1,5	72 m	109 m	180 m	290 m	435 m		
400V	2,2	51 m	78 m	130 m	207 m	310 m	516 m	
400V	3	41 m	62 m	104 m	167 m	250 m	416 m	
400V	4	31 m	46 m	77 m	124 m	186 m	310 m	496 m
400V	5,5	33 m	56 m	90 m	135 m	225 m	360 m	
400V	7,5	25 m	66 m	100 m	165 m	270 m		

PERFORMANCE OVERVIEW

Hose diameter (mm)	Nozzle diameter (mm)	Pressure at the nozzle (bar)	Flow																
				atm	l/min	150 m	200 m	250 m											
50	10	2	130	3,6	4	4,4													
		3	160	5,2	5,8	6,3													
	12	3	215	6,3	7,3	8,1													
		4	240	8,2	9,4	10,5													
	14	4	310	10,4	11,8	14													
		5	350	12,8	15,3	17,5													
63	14	2	200	3,5	3,8	4,1													
		3	245	4,9	5,4	5,8													
	16	3	310	5,6	6,5	7,2													
		4	360	7,8	8,4	9,4													
	18	4	440	9,7	10,5	12													
		5	500	11,5	12,9	14,7													
70	16	2	230	3,7	3,8	4,1	4,2	4,3											
		3	280	5,3	5,5	5,7	5,8	5,9											
	18	3	365	6,4	6,8	7,1	7,3	7,4											
		4	420	8,3	8,8	9,2	9,4	9,6											
	20	4	515	10,2	10,9	11,5	11,8	12											
		5	550	12,6	13,4	13,9	14,3	14,6											
75	16	2	230	3	3,2	3,4	3,6	3,6	3,8										
		3	280	4,3	4,5	4,8	5	5,1	5,4										
	18	3	360	4,7	5,1	5,5	5,9	6,1	6,5										
		4	415	6,1	6,6	7,1	7,6	8	8,5										
	20	4	515	6,9	7,8	8,5	9,1	10	10,5										
		5	550	8,5	9,5	10,5	11,3	12	12,9										
82	18	2	290	3	3,2	3,4	3,6	3,7	3,9	4,1									
		3	350	4,2	4,5	4,8	5,1	5,3	5,6	5,9									
	20	3	440	4,7	5	5,4	5,9	6,3	6,7	7									
		4	515	6	6,4	7	7,6	8,2	8,7	9,2									
	22	5	680	8,2	9	10	11,1	12	13	13,8									
		6	750	9,7	10,6	11,8	13,2	14,2	15,4	16,4									
90	22	3	550	4,5	4,8	5,2	5,3	5,5	5,8	6,1	6,3								
		4	620	5,8	6,3	6,7	6,9	7,1	7,6	7,9	8,1								
	24	4	750	6,3	7	7,6	7,8	8,2	8,8	9,2	9,6								
		5	820	8	8,6	9,3	9,6	10	10,9	11,4	11,8								
	26	5	950	8,7	9,7	10,7	11,1	11,7	12,8	13,5	14,1								
		6	1050	10,3	11,5	12,7	13,1	13,9	15,2	16	16,7								
100	26	3	750	4,7	5	5,3	5,6	5,7	6,1	6,3	6,5	6,9							
		4	850	6,1	6,4	6,9	7,2	7	7,9	8,1	8,5	9							
	28	4	1000	6,7	7,1	7,7	8,1	8,3	9	9,6	9,8	10,5							
		5	1120	8,2	8,7	9,4	9,9	10,2	11,1	11,8	12	12,9							
	30	5	1250	9	9,7	10,6	11,2	11,6	12,8	14,1	14	15,2							
		6	1400	10,7	11,5	12,6	13,4	13,8	15,2	16,7	16,6	18,1							
110	28	3	850	4,5	4,7	4,9	5	5,3	5,6	5,8	6	6,5	7	7,4					
		4	990	5,8	6,1	6,4	6,6	6,8	7,2	7,5	7,8	8,4	9,1	9,6					
	30	4	1180	6,1	6,5	7	7,2	7,5	8,1	8,5	8,9	9,6	10,5	11,2					
		5	1250	7,5	7,9	8,6	8,9	9,2	9,9	10,4	10,9	11,8	12,9	13,8					
	32	6	1600	9,6	10,2	11,1	11,5	12,2	13,2	13,9	14,7	16,2	17,8	19,1					
		7	1710	11,1	11,8	12,9	13,1	13,3	15,3	16	17	18,7	20,6	22,1					
125	32	4	1290	5,7	5,9	6,2	6,4	6,6	6,9	7,1	7,3	7,9	8,3	8,9					
		5	1450	7	7,3	7,7	7,8	8	8,5	8,8	9	9,6	10,3	10,9					
	34	6	1750	8,7	9,2	9,8	10	10,3	11	11,4	11,8	12,7	13,7	14,7					
		7	1920	10,1	10,6	11,3	11,6	12	12,8	13,2	13,6	14,7	15,8	17					
	36	7	2155	10,7	11,5	12,2	12,6	13	14	14,5	15,1	16,5	17,8	19,3					
		8	2315	12,1	12,9	13,8	14,2	14,8	15,9	16,5	17,1	18,7	20,2	22					
140	34	5	1650	6,5	6,7	6,9	7,1	7,3	7,6	7,9	8,2	8,4	8,7	9,1					
		6	1820	7,7	7,9	8,2	8,4	8,6	9	9,4	9,6	9,9	10,3	10,8					
	36	6	2050	8,1	8,3	8,7	8,9	9,1	9,6	10	10,3	10,7	11,2	11,8					
		7	2150	9,3	9,6	10	1,2	10,5	11,1	11,5	11,9	12,4	13	13,7					
	38	7	2400	9,7	10,2	10,6	10,9	11,2	11,9	12,4	12,9	13,5	14,2	5,1					
		8	2600	10,8	11,2	12	12,3	12,7	13,5	14,1	14,7	15,4	16,2	17,2					
160	34	5	1650			6,4	6,5	6,6	6,7	6,8	6,9	7,1	7,2	7					
		6	1820			7,5	7,7	7,8	8	8,1	8,2	8,4	8,6	8,9					
	36	6	2000			7,8	7,9	8,1	8,3	8,4	8,6	9,1	9,3	9,6					
		7	2150			8,9	9,1	9,3	9,6	9,8	9,9	10,2	10,5	10,9					
	38	7	2450			9,3	9,5	9,8	10,1	10,3	10,5	11,1	11,4	11,9					
		8	2700			10,7	11	11,2	11,5	11,7	11,9	12,6	13	13,5					
40	8	2800			10,2	10,8	11,2	12	12,8	13,2	14	15	16,2						

HEAD LOSS TABLE

The table shows pressure and flow losses taking into account the water discharge resistance of a rigid, horizontal metal pipeline.

WATER FLOW		Loss per 100 m	NOMINAL DIAMETER in mm and inches																	
m ³ /h	l/min		15 1/2"	20 3/4"	25 1"	32 1 1/4"	40 1 1/2"	50 2"	65 2 1/2"	80 3"	100 4"	125 5"	150 6"	175 7"	200 8"	250 10"	300 12"	350 14"	400 16"	
0,6	10		17,0	4,0	1,5	0,5	0,2													
0,9	15		34,8	8,4	2,9	0,9	0,3													
1,2	20		58,6	14,5	4,9	1,6	0,5	0,2												
1,5	25		89,0	22,0	7,5	2,4	0,8	0,3												
1,8	30		125,0	31,0	11,0	3,3	1,2	0,4												
2,1	35		166,1	40,0	14,3	4,3	1,5	0,5												
2,4	40			52,0	18,1	5,3	1,9	0,7	0,2											
3	50			78,5	27,0	8,0	2,8	0,9	0,3											
3,6	60			110,2	37,2	11,9	3,9	1,4	0,4											
4,2	70			145,8	50,0	15,1	5,1	1,8	0,5											
4,8	80			188,3	64,1	19,5	6,5	2,3	0,6											
5,4	90				78,2	24,1	8,0	2,8	0,8	0,3										
6	100				95,4	29,0	9,9	3,4	0,9	0,4										
7,5	125				144,0	44,1	15,0	5,0	1,5	0,5										
9	150					60,5	20,8	7,0	2,0	0,7	0,3									
10,5	175					81,0	27,5	9,5	2,7	1,0	0,4									
12	200					105	35,0	12,1	3,4	1,3	0,5									
15	250					155,5	52,8	18,0	5,0	1,9	0,6	0,20								
18	300						73,9	25,2	7,0	2,6	0,9	0,3								
24	400	head loss (m)					125	42,1	11,9	4,5	1,5	0,5	0,2							
30	500						189	63,9	18,3	6,5	2,3	0,8	0,3							
36	600							89,5	25,0	9,5	3,3	1,2	0,5	0,2						
42	700							119,5	33,5	12,0	4,3	1,4	0,6	0,3						
48	800							153,2	42,5	15,5	5,3	1,8	0,8	0,4						
54	900							189,3	54,0	19,5	6,5	2,3	0,9	0,5						
60	1000								64,0	24,0	7,9	2,8	1,1	0,6	0,3					
75	1250								97,0	35,6	12,0	4,0	1,7	0,8	0,4					
90	1500								135,0	50,0	16,9	5,7	2,4	1,1	0,6					
105	1750								180,0	65,0	22,4	7,5	3,2	1,5	0,8					
120	2000									85,0	29,0	9,8	4,0	1,9	1,0	0,4				
150	2500									128,0	43,0	14,9	6,0	2,9	1,5	0,5				
180	3000										60,0	20,5	8,5	4,0	2,2	0,7	0,3			
210	3500										80,0	27,5	11,5	5,3	2,9	1,0	0,4			
240	4000										103,0	35,5	14,5	6,9	3,5	1,3	0,5			
300	5000											52,5	22,0	10,5	5,4	1,9	0,8			
360	6000											74,0	30,0	14,5	7,5	2,6	1,1			
420	7000												40,0	19,0	10,0	3,4	1,4	0,7		
480	8000												52,0	24,0	13,0	4,4	1,8	0,9		
540	9000												65,0	30,5	14,0	5,4	2,2	1,1	0,6	
600	10000												37,0	19,0	6,5	2,7	1,3	0,7		

Component	NOMINAL DIAMETER in mm and inches												
	25 1"	32 1 1/4"	40 1 1/2"	50 2"	65 2 1/2"	80 3"	100 4"	125 5"	150 6"		200 8"	250 10"	300 12"
Valve			0,3	0,3	0,3	0,6	0,6	0,9	1,2		1,5	1,8	19,5
Non-return valve	1,5	2,1	2,7	3,3	4,2	4,8	6,6	8,3	10,4		13,5	16,5	19,5
45° elbow	0,3	0,3	0,6	0,6	0,9	0,9	1,2	1,5	2,1		2,7	3,3	3,9
90° elbow	0,6	0,9	1,2	1,5	1,8	2,1	3	3,6	4,2		5,4	3,6	8,1

Pressure loss / discharge resistance when using galvanized steel pipeline.
 Pressure losses along the 100 m horizontal section
 Pressure loss when using a different pipeline (ratio) Cast iron pipeline x 1.4
 Stainless steel pipeline x 0.8
 Aluminium pipeline x 0.7
 PE / PVC pipeline x 0.65



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