

Whole Pump Production Chain Solution Provider



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Note: our Co. reserves the right to modify the product design so as to change some of the dimensions without a prior notice.



**TP/TPL SERIES ADVANCED VERTICAL
INLINE CIRCULATING PUMP**

ИИГИЕ СІВСОГАЛІИС ЪОУЬ
ИІІІЕ РЕМІЕР УДАВІСЕД АЕКІСХЕ



Company Introduction

Shanghai Tianquan Pump Group Co, Ltd. was founded in the late 1980s, and after 30-year development, has developed into a state-certified high-tech enterprise in China. We are a leading professional industrial pump solution provider and specialized in the research and production of industrial pumps, submersible motors, and electrical control systems.

With a registered capital of 100 million RMB and total assets of 1.45 billion yuan, the group covers a total area of more than 550,000 square meters and is headquartered in Qingpu District, Shanghai. The company now has four factories, which are located in Shanghai, Anhui, and Jiangsu provinces: Shanghai factory has one research center and focuses on pump assembling and testing; the Anhui factory focuses on casting and motor research and manufacturing; the Jiangsu factory focuses on the water pressure tank

The group currently has more than 2,000 sets of advanced domestic and imported production and testing equipment, such as a large pump testing center, trilinear-coordinates measuring instrument, impeller dynamic balance meter, laser rapid prototyping meter, malfunction blasting machine, automatic welding machine, large vertical lathe, large grinding machine, and CNC machine tools, etc.

The company has 4 categories industrial pumps, covering more than 3000 models. We only research and develop energy-saving product in line with GB energy conservative standard. About 50% of pump models are equipped with lower motor power compare with national counterparts. Our featured products are circulating pumps, sewage pumps, fire-fighting pump and water supply pump and are widely used in construction, environmental protection, HVAC, chemical industry, water supply and drainage, paper making, power plant, medical making and other fields.

Due to our whole industry chain production layout and energy-saving product principle, our products are featured with competitive price, energy-saving and reliable quality. Up to now, Tianquan products are selling well in 34 provinces national wide, and exported to the Middle East, Southeast Asia, and Eastern Europe.

We are strive to be the most cost-effective manufacturer with energy-saving product in the industrial pump area. Hope we can bring you good quality product and be your best energy-saving partner.

▼ COMPANY HEADQUARTERS



▼ PRODUCTION BASE



Company Introduction

Tianquan Group places a strong emphasis on building technical capabilities and upgrading production equipment. It currently possesses a National Grade II Standard Water Pump Testing Center, a five-axis coordinated machining center, large boring machines, large vertical lathes, fully automatic CNC multi-spindle drilling machines, automatic argon arc welding machines, mechanical no-box modeling machines, fully automatic mechanized presses, fully automatic cathode electrophoresis lines, fully automatic assembly lines, as well as dynamic and static balance measurement instruments, among other advanced production and measurement equipment from both domestic and international sources. These resources ensure the high-quality output of each product.

The group has established a comprehensive sales and service network with more than 80 branches nationwide and a professional sales team of over 1,800 individuals. This team provides high-quality pre-sale, in-sale, and after-sale services to a wide customer base.

Technical innovation is the driving force for corporate development, and Tianquan Group has a skilled technical team consisting of over 30 industry experts, senior and mid-level engineers, and professional technical personnel. They have introduced world-leading CFD fluid mechanics professional internal flow field analysis, SOLIDWORKS, Pro/E, and other research and design software systems and hold 15 national patents. The company currently invests more than 5% of its annual sales revenue in technical innovation and new product development.

Tianquan has gained favor among users due to its reasonable prices and excellent services. Its products are sold in 34 provinces, municipalities, and autonomous regions throughout China and are exported to the Middle East, Southeast Asia, and other regions. These products find applications in various fields, including construction, fire protection, environmental protection, drainage, HVAC, petroleum, chemical industry, metallurgy, papermaking, power generation, pharmaceuticals, and more. To date, Tianquan has successfully provided excellent products and services to numerous well-known entities, including Country Garden, Greenland Group, Tingyi (Cayman Islands) Holding Corporation, Samsung Electric, Yili Group, Sinopec, Dongfeng Motor Corporation, Shanghai Waigaoqiao Bonded Area, Beijing-Zhangjiakou High-Speed Railway, and Tsinghua University, and has received multiple accolades as an outstanding supplier.

▼ WATER SUPPLY EQUIPMENT PRODUCTION WORKSHOP



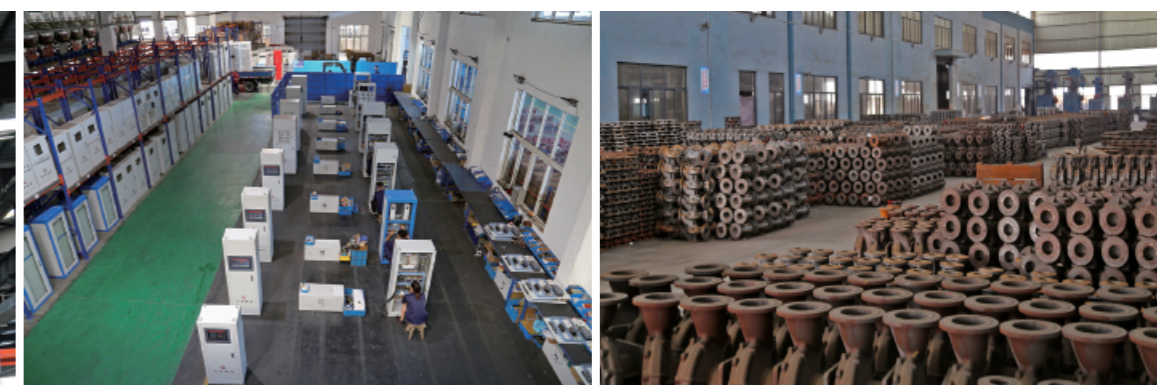
▼ SMART CLOUD MONITORING CENTER



▼ AUTOMATIC STATOR WINDING ASSEMBLY LINE



▼ CASTING WAREHOUSE



▼ ELECTRICAL CONTROL CABINET PRODUCTION WORKSHOP



◀ SEWAGE PUMP ASSEMBLY LINE

Product Overview

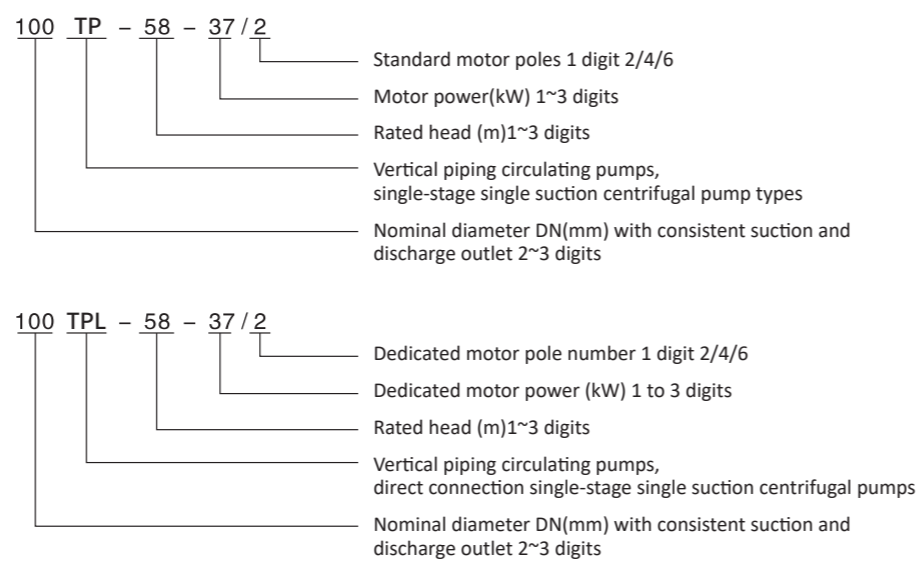
The TP/TPL two series of products is the advanced vertical inline pump, which is inherited the advantages of Tianquan's TQL series(the 3rd generation) and at the same time is developed based on the characteristics of similar products both domestically and internationally. It conforms to ISO2858 and GB/T5657 standards.

TP series's operation temperature up to 140 °C, TPL series' operation temperature up to 120°C. The design operation pressure of the series is 1.6MPa for most type (among which the pump with a rated head of 125m is 2.5MPa). The flange ranges from DN32 to DN350

Uses

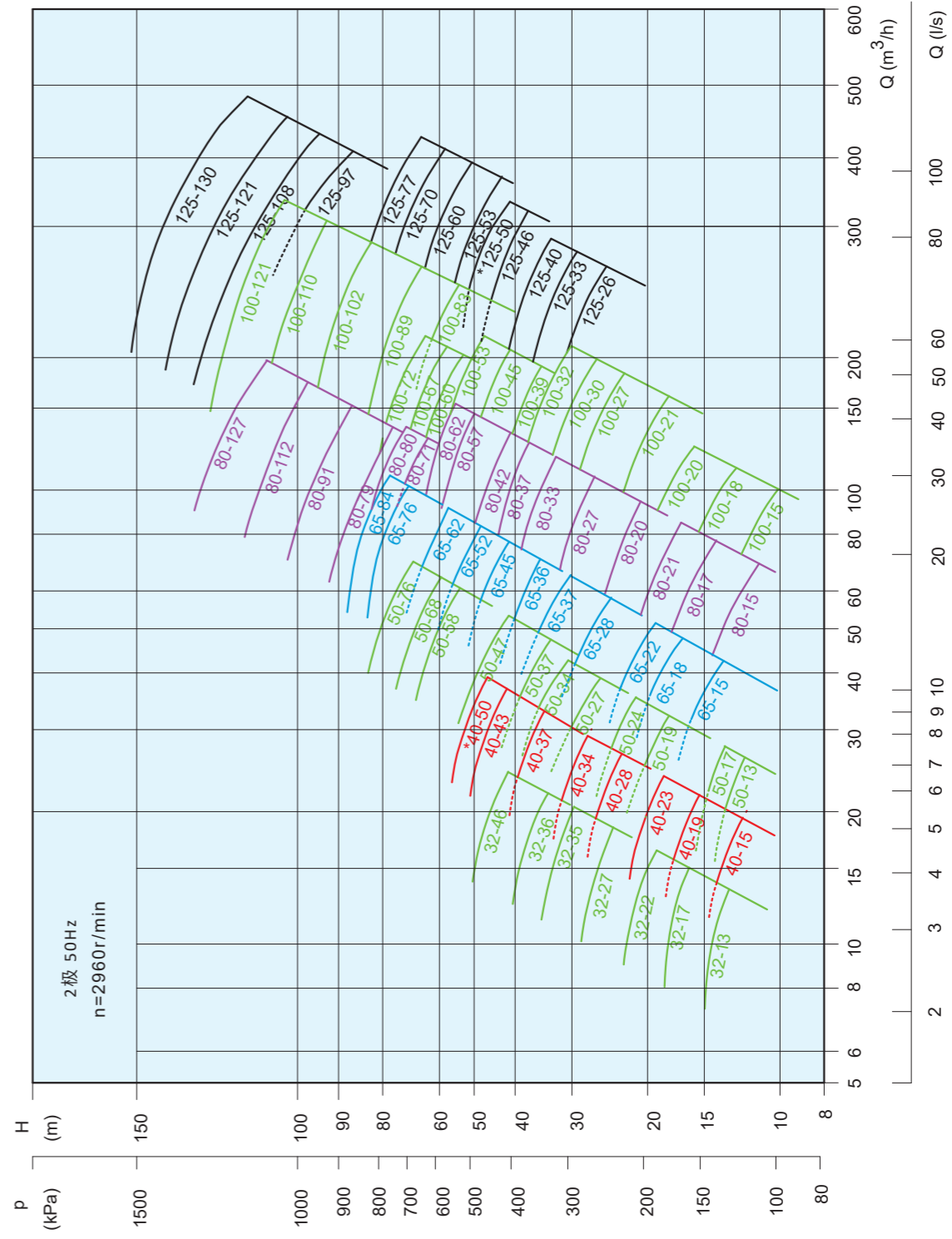
- TP/TPL pumps are mainly used to circulate hot or cold water in residential or commercial buildings and industrial applications, which are suitable for the systems described below.
- Heating systems, heating systems or building central heating systems
 - Air conditioning systems
 - Refrigeration or cooling systems
- TP/TPL pumps can also be used in liquid transfer and water supply systems in the following applications:
- Water supply systems
 - Domestic hot water systems
 - Flushing systems
 - Industrial processes

Example Of A Model:



Hydraulic Coverage Curve

TP/TPL Series Advanced Vertical Inline Circulating Pump

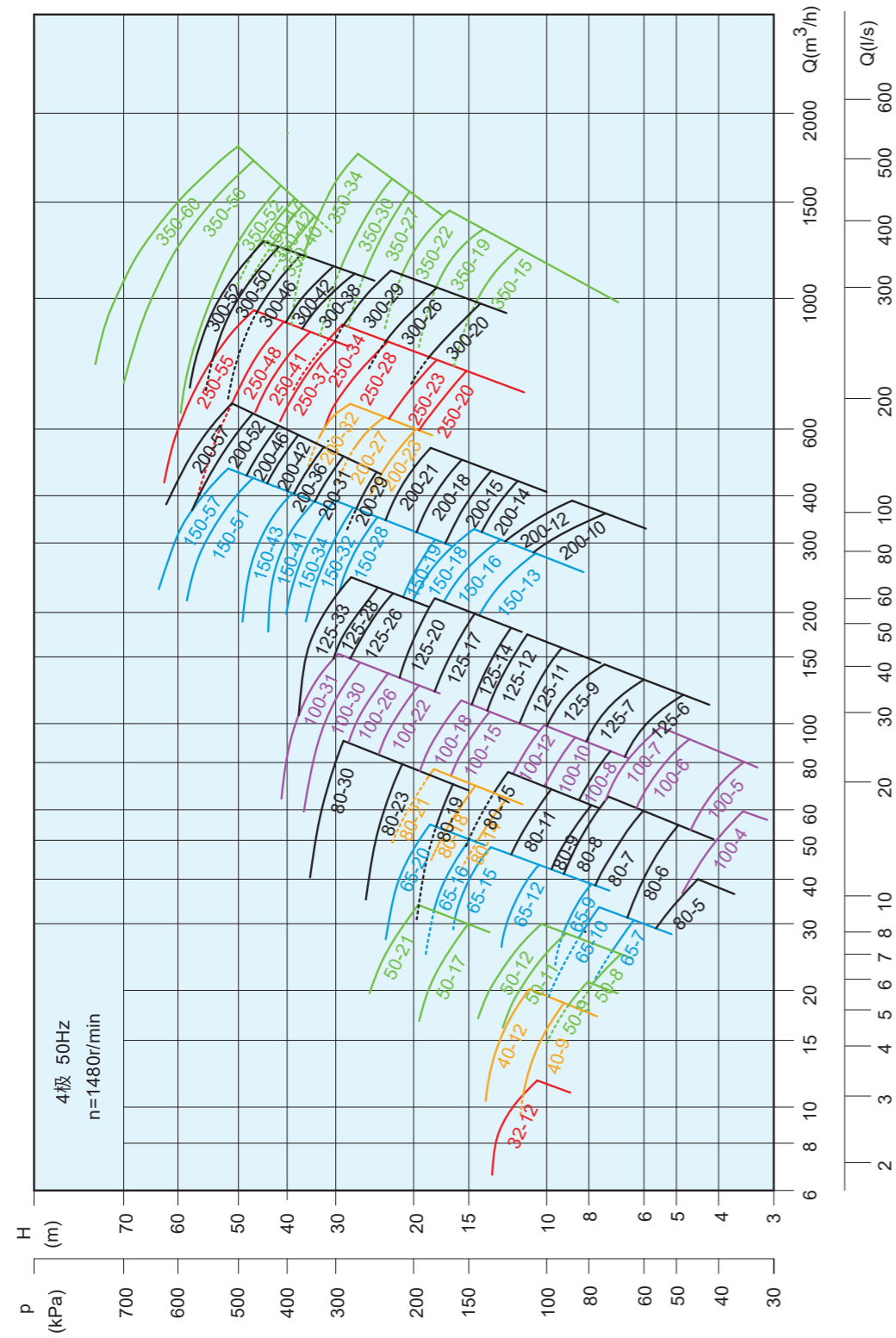


Note: Explanation of the symbol of model 32-50
 32 represents Flange Diameter, 50 represents rated head (Round Number, same for pole 4 &6)
 Model with (*) indicate only TP type

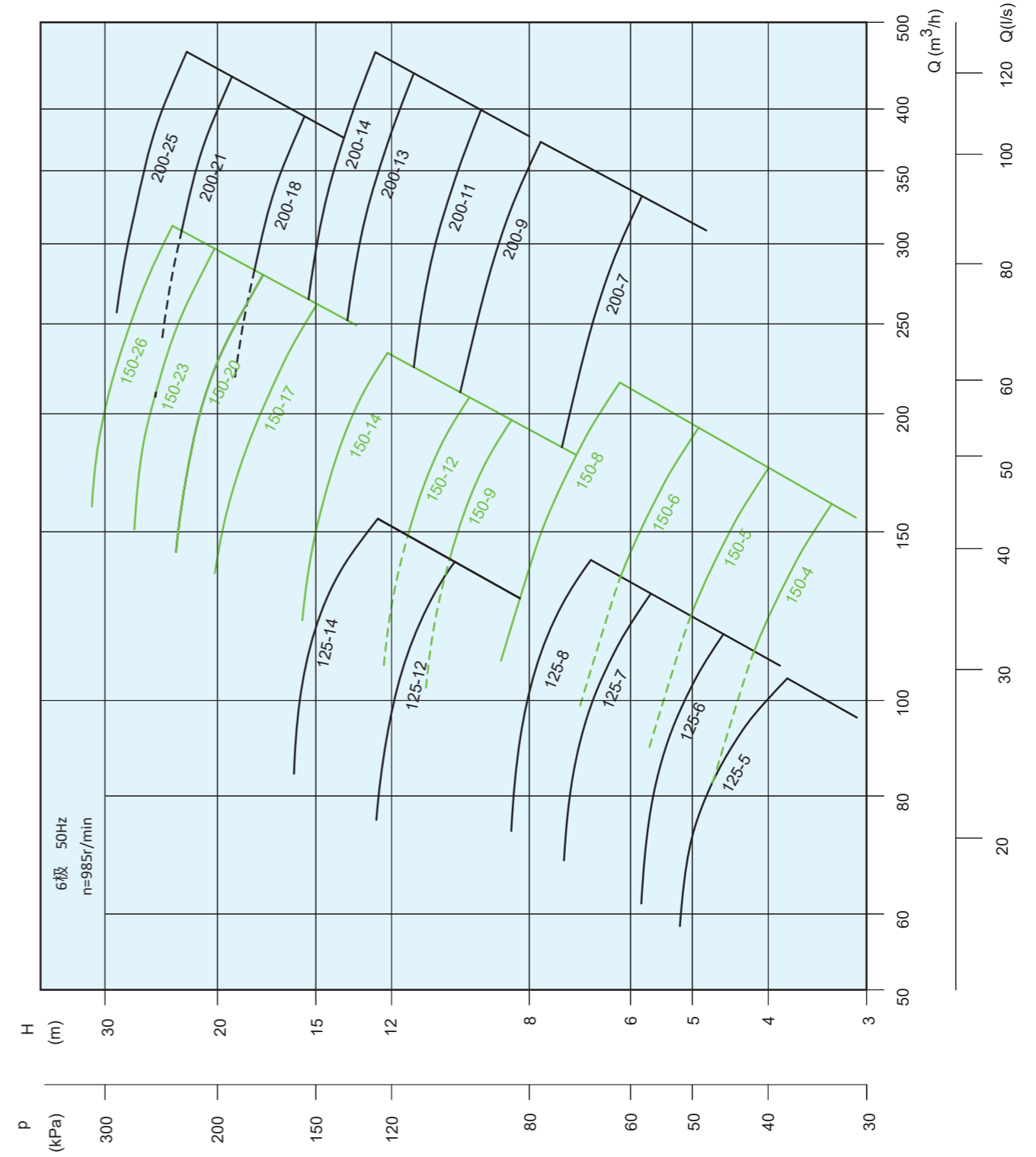
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Hydraulic Coverage Curve



Hydraulic Coverage Curve



Operating Conditions

Max.system Working Pressure And Testing Pressure

Nominal Pressure	Max. working pressure		Testing Pressure		Nominal Dia. (mm)	Speed (r/min)
	(bar)	(MPa)	(bar)	(MPa)		
PN16	16	1.6	24	2.4	DN32~125	2960
					DN32~350	1480
					DN125~200	985
PN25	25	2.5	38	3.8	DN80~125	2960

Highest Input Pressure

The max. operation pressure=inlet pressure + pressure when the value is closed

Model	H (m)	H0 (m)	Max. input pressure(MPa)	
			PN16	PN25
DN32~125 PN16 n:2960r/min	20	≤29	1.31	
	32	≤51	1.09	
	50	≤72	0.88	
	80	≤97	0.63	
DN80~125 PN25 n:2960r/min	125	≤150		1.00
DN32~200 PN16 n:1480r/min	5	≤7	1.53	
	8	≤11	1.49	
	12.5	≤17	1.43	
	20	≤27	1.33	
	31	≤41	1.19	
	42	≤55	1.05	
DN250~350 PN16 n:1480r/min	57	≤66	0.94	
	20	≤28	1.32	
	31	≤42	1.18	
	42	≤55	1.05	
	50	≤65	0.95	
DN125~200 PN16 n:985r/min	60	≤78	0.82	
	7	≤10	1.50	
	9	≤12	1.48	
	14	≤20	1.40	
	25	≤37	1.23	

Operating Conditions

The Minimum Inlet Pressure

Calculating based on the following equation

$$P_s \geq (NPSH_r \times \rho \times g - 1/2 \times \rho \times c^2) \times 0.00001 - P_b + P_d$$

Symbol in the equation:

P_s —the minimum inlet pressure, bar

$NPSH_r$ — m

ρ —liquid density, kg/m³

g —gravity, 9.81m/s²

C —inlet velocity, m/s

P_b —barometric pressure, normally set to 0.97bar

P_d —Liquid vaporization pressure, bar

Water' s vaporization pressure :

T(°C)	20	60	90	110	120	140
P_d (bar)	0.02	0.20	0.70	1.43	1.99	3.61

Noise Grade

Model	Maximum noise value (dB) GB10069. 3-2008		
	120	120	120
0.75	0.75	56	
1.1	1.1	59	
1.5	1.5	59	61
2.2	2.2	64	65
3	3	64	69
4	4	65	69
5.5	5.5	71	69
7.5	7.5	71	70
11	11	73	70
15	15	73	73
18.5	18.5	76	73
22	22	76	73
30	30	76	74
37	37	78	76
45	45	78	
55	55	79	
75	75	80	
90	90	80	
110	110	88	
132	132	88	
160	160	88	
185	185	88	
200	200	88	
220	220	95	
250	250	95	
280	280	95	
315	315	95	

The min. Input Pressure

Model	P_s (bar) / °C					
	20	60	90	110	120	140
32TP(L)13-0.75/2	0.1	0.1	0.3	1.0	1.6	3.2
32TP(L)17-1.1/2	0.1	0.1	0.3	1.0	1.6	3.2
32TP(L)22-1.5/2	0.1	0.1	0.3	1.0	1.6	3.2
32TP(L)27-2.2/2	0.1	0.2	0.7	1.4	2.0	3.6
32TP(L)35-3/2	0.1	0.2	0.7	1.4	2.0	3.6
32TP(L)36-4/2	0.2	0.4	0.9	1.6	2.2	3.8
32TP(L)46-5.5/2	0.2	0.4	0.9	1.6	2.2	3.8
40TP(L)15-1.1/2	0.1	0.1	0.4	1.1	1.6	3.3
40TP(L)19-1.5/2	0.1	0.1	0.4	1.1	1.6	3.3
40TP(L)23-2.2/2	0.1	0.1	0.4	1.1	1.6	3.3
40TP(L)28-3/2	0.1	0.1	0.4	1.1	1.6	3.3
40TP(L)34-4/2	0.2	0.4	0.9	1.6	2.1	3.8
40TP(L)37-5.5/2	0.1	0.3	0.8	1.5	2.1	3.7
40TP(L)43-7.5/2	0.1	0.3	0.8	1.5	2.1	3.7
40TP50-11/2	0.1	0.3	0.8	1.5	2.1	3.7
50TP(L)13-1.1/2	0.1	0.1	0.1	0.8	1.4	3.7
50TP(L)17-1.5/2	0.1	0.1	0.1	0.8	1.4	3.0
50TP(L)19-2.2/2	0.1	0.1	0.1	0.8	1.4	3.1
50TP(L)24-3/2	0.1	0.1	0.1	0.8	1.4	3.1
50TP(L)27-4/2	0.1	0.1	0.2	1.0	1.5	3.3
50TP(L)34-5.5/2	0.1	0.1	0.4	1.1	1.6	3.2
50TP(L)37-7.5/2	0.1	0.1	0.3	1.1	1.6	3.5
50TP(L)47-11/2	0.1	0.1	0.5	1.4	1.9	4.2
50TP(L)58-15/2	0.6	0.8	1.3	2.0	2.6	4.1

Operating Conditions

The min. Input Pressure

Model	Ps (bar) / °C					
	20	60	90	110	120	140
50TP(L)68-18.5/2	0.5	0.7	1.2	2.0	2.5	4.6
50TP(L)76-22/2	1.0	1.2	1.7	2.4	3.0	4.6
65TP(L)15-2.2/2	0.2	0.4	0.9	1.8	2.3	3.5
65TP(L)18-3/2	0.1	0.1	0.2	0.9	1.4	3.1
65TP(L)22-4/2	0.1	0.1	0.2	0.9	1.4	3.1
65TP(L)28-5.5/2	0.1	0.1	0.2	0.9	1.4	3.1
65TP(L)37-7.5/2	0.1	0.1	0.2	0.9	1.4	3.1
65TP(L)36-11/2	0.1	0.1	0.2	1.0	1.5	3.1
65TP(L)45-15/2	0.1	0.1	0.3	1.0	1.6	3.2
65TP(L)52-18.5/2	0.1	0.1	0.4	1.1	1.6	3.3
65TP(L)62-22/2	0.1	0.1	0.6	1.3	1.9	3.5
65TP(L)76-30/2	0.6	0.8	1.3	2.0	2.6	4.2
65TP(L)84-37/2	0.6	0.8	1.3	2.0	2.6	4.2
80TP(L)15-3/2	0.1	0.1	0.3	1.1	1.6	3.3
80TP(L)17-4/2	0.1	0.1	0.4	1.1	1.7	3.4
80TP(L)21-5.5/2	0.1	0.1	0.5	1.3	1.8	3.7
80TP(L)20-7.5/2	0.1	0.3	0.8	1.6	2.1	3.6
80TP(L)27-11/2	0.1	0.2	0.7	1.4	2.0	3.8
80TP(L)33-15/2	0.2	0.4	0.9	1.6	2.2	3.5
80TP(L)37-18.5/2	0.1	0.1	0.6	1.4	1.9	3.7
80TP(L)42-22/2	0.1	0.2	0.7	1.5	2.0	4.2
80TP(L)57-30/2	0.1	0.3	0.8	1.6	2.1	4.2
80TP(L)62-37/2	0.1	0.4	0.9	1.7	2.2	4.4
80TP(L)71-30/2	0.6	0.8	1.3	2.1	2.6	4.8

Operating Conditions

The min. Input Pressure

Model	Ps (bar) / °C					
	20	60	90	110	120	140
125TP(L)33-30/2	0.5	0.6	1.1	1.8	2.4	4.0
125TP(L)40-37/2	0.6	0.8	1.3	2.1	2.7	4.4
125TP(L)46-45/2	1.2	1.4	1.8	2.8	3.3	4.9
125TP50-55/4	1.2	1.4	1.8	2.8	3.3	4.9
125TP(L)53-55/2	1.2	1.4	1.8	2.8	3.3	4.9
125TP(L)60-75/2	1.3	1.5	1.9	2.9	3.5	5.0
125TP(L)70-90/2	1.3	1.5	1.9	2.9	3.5	5.0
125TP(L)77-110/2	1.3	1.5	1.9	2.9	3.5	5.0
125TP(L)97-132/2	1.4	1.6	1.8	3.0	3.5	5.1
125TP(L)108-160/2	1.4	1.6	1.8	3.0	3.5	5.1
125TP(L)121-185/2	1.4	1.6	1.8	3.0	3.5	5.1
125TP(L)130-200/2	1.4	1.6	1.8	3.0	3.5	5.1
32TP(L)12-0.75/4	0.1	0.1	0.1	0.7	1.2	2.8
40TP(L)9-0.75/4	0.1	0.1	0.1	0.6	1.2	2.8
40TP(L)12-1.1/4	0.1	0.1	0.1	0.7	1.3	2.9
50TP(L)9-0.75/4	0.1	0.1	0.1	0.7	1.3	2.9
50TP(L)8-0.75/4	0.1	0.1	0.1	0.7	1.3	2.9
50TP(L)11-1.1/4	0.1	0.1	0.1	0.7	1.3	2.9
50TP(L)12-1.5/4	0.1	0.1	0.1	0.7	1.3	2.9
50TP(L)17-2.2/4	0.1	0.1	0.1	0.9	1.4	3.0
50TP(L)21-3/4	0.1	0.1	0.2	1.0	1.5	3.1
65TP(L)7-0.75/4	0.1	0.1	0.1	0.6	1.1	2.7
65TP(L)10-1.1/4	0.1	0.1	0.1	0.6	1.1	2.7
65TP(L)9-1.5/4	0.1	0.1	0.1	0.6	1.1	2.8
65TP(L)12-2.2/4	0.1	0.1	0.1	0.6	1.2	2.8

The min. Input Pressure

Model	Ps (bar) / °C					
	20	60	90	110	120	140
80TP(L)80-37/2	0.6	0.8	1.3	2.1	2.6	4.8
80TP(L)79-45/2	0.8	1.0	1.5	2.2	2.8	4.8
80TP(L)91-55/2	1.0	1.1	1.5	2.5	3.0	5.0
80TP(L)112-75/2	1.1	1.3	1.7	2.7	3.2	5.2
80TP(L)127-90/2	1.1	1.3	1.7	2.7	3.2	5.2
100TP(L)15-4/2	0.1	0.1	0.5	1.3	1.8	3.4
100TP(L)18-5.5/2	0.1	0.1	0.5	1.3	1.8	3.4
100TP(L)20-7.5	0.1	0.1	0.5	1.3	1.8	3.4
100TP(L)21-11/2	0.6	0.8	1.3	2.0	2.5	4.2
100TP(L)27-15/2	0.6	0.8	1.3	2.0	2.5	4.2
100TP(L)30-18.5/2	0.6	0.8	1.3	2.0	2.5	4.2
100TP(L)32-22/2	0.6	0.8	1.3	2.0	2.5	4.6
100TP(L)39-22/2	1.1	1.3	1.8	2.5	3.1	4.9
100TP(L)45-30/2	1.2	1.5	2.0	2.7	3.3	5.3
100TP(L)53-37/2	1.3	1.8	2.2	3.2	3.7	5.1
100TP(L)60-45/2	1.4	1.6	2.0	3.0	3.5	5.1
100TP(L)67-55/2	1.4	1.6	2.0	3.0	3.5	5.1
100TP(L)72-75/2	1.4	1.6	2.0	3.0	3.5	5.1
100TP(L)83-75/2	1.2	1.4	1.8	2.8	3.3	4.9
100TP(L)89-90/2	1.2	1.4	1.8	2.8	3.3	4.9
100TP(L)102-110/2	1.2	1.4	1.8	2.8	3.3	4.9
100TP(L)110-132/2	1.2	1.4	1.8	2.8	3.3	4.9
100TP(L)121-160/2	1.2	1.4	1.8	2.8	3.3	4.9
125TP(L)26-22/2	0.4	0.5	1.0	1.7	2.3	3.9

The min. Input Pressure

Model	Ps (bar) / °C					
	20	60	90	110	120	140
65TP(L)15-3/4	0.1	0.1	0.1	0.6	1.2	2.8
65TP(L)16-3/4	0.1	0.1	0.1	0.8	1.3	2.8
65TP(L)20-4/4	0.1	0.1	0.1	0.8	1.3	2.9
80TP(L)5-0.75/4	0.1	0.1	0.1	0.8	1.1	4.5
80TP(L)6-1.1/4	0.1	0.1	0.1	0.8	1.1	2.9
80TP(L)7-1.5/4	0.1	0.1	0.1	0.8	1.1	2.9
80TP(L)8-2.2/4	0.1	0.1	0.1	0.8	1.1	2.9
80TP(L)9-2.2/4	0.1	0.1	0.1	0.8	1.3	2.9
80TP(L)11-3/4	0.1	0.1	0.1	0.8	1.3	2.9
80TP(L)15-4/4	0.1	0.1	0.1	0.8	1.3	2.9
80TP(L)14-3/4	0.1	0.1	0.1	0.8	1.3	2.9
80TP(L)17-4/4	0.1	0.1	0.1	0.8	1.3	2.9
80TP(L)21-5.5/4	0.1	0.1	0.1	0.8	1.3	2.9
80TP(L)19-5.5/4	0.1	0.1	0.3	1.1	1.6	3.2
80TP(L)23-7.5/4	0.1	0.1	0.3	1.1	1.6	3.1
80TP(L)30-11/4	0.1	0.1	0.3	1.1	1.6	3.2
100TP(L)4-0.75/4	0.1	0.1	0.1	0.8	1.3	4.0
100TP(L)5-1.1/4	0.1	0.1	0.1	0.9	1.4	4.3
100TP(L)6-1.5/4	0.1	0.1	0.2	1.0	1.5	3.0
100TP(L)8-2.2/4	0.1	0.2	0.6	1.3	1.9	3.0
100TP(L)10-3/4	0.2	0.3	0.8	1.5	2.1	3.1
100TP(L)12-4/4	0.3	0.4	1.0	1.8	2.3	3.9
100TP(L)15-5.5/4	0.1	0.1	0.5	1.2	1.8	3.9
100TP(L)18-7.5/4	0.1	0.2	0.6	1.4	2.0	3.4

Operating Conditions

The min. Input Pressure

Model	Ps (bar) / °C					
	20	60	90	110	120	140
100TP(L)22-11/4	0.2	0.4	0.8	1.6	2.1	3.6
100TP(L)26-15/4	0.3	0.5	0.9	1.7	2.2	3.9
100TP(L)30-18.5/4	0.3	0.5	1.0	1.8	2.3	3.9
100TP(L)31-22/4	0.5	0.7	1.2	1.9	2.5	4.1
125TP(L)6-2.2/4	0.1	0.1	0.1	0.8	1.4	3.0
125TP(L)7-3/4	0.1	0.1	0.1	0.9	1.4	3.1
125TP(L)9-4/4	0.1	0.1	0.1	0.9	1.4	3.1
125TP(L)11-5.5/4	0.1	0.1	0.1	0.9	1.4	3.1
125TP(L)12-7.5/4	0.1	0.1	0.1	0.9	1.4	3.1
125TP(L)14-7.5/4	0.1	0.1	0.1	1.0	1.5	3.1
125TP(L)17-11/4	0.1	0.1	0.1	1.0	1.5	3.1
125TP(L)20-15/4	0.1	0.1	0.1	1.1	1.6	3.1
125TP(L)26-18.5/4	0.1	0.1	0.3	0.9	1.5	3.1
125TP(L)28-22/4	0.1	0.1	0.3	1.0	1.6	3.2
125TP(L)33-30/4	0.1	0.1	0.3	1.1	1.7	3.2
150TP(L)10-7.5/4	0.1	0.1	0.3	1.0	1.6	3.2
150TP(L)13-11/4	0.1	0.1	0.4	1.1	1.7	3.4
150TP(L)16-15/4	0.1	0.1	0.5	1.2	1.8	3.4
150TP(L)18-18.5/4	0.1	0.1	0.6	1.3	1.9	3.4
150TP(L)19-18.5/4	0.1	0.2	0.7	1.5	2.0	3.7
150TP(L)22-22/4	0.1	0.2	0.7	1.5	2.0	3.7
150TP(L)28-30/4	0.1	0.2	0.7	1.5	2.0	3.6
150TP(L)32-37/4	0.1	0.2	0.7	1.5	2.0	3.6
150TP(L)34-45/4	0.1	0.2	0.7	1.5	2.0	3.4

The min. Input Pressure

Model	Ps (bar) / °C					
	20	60	90	110	120	140
150TP(L)41-45/4	0.1	0.1	0.5	1.2	1.7	3.4
150TP(L)43-55/4	0.1	0.1	0.6	1.3	1.8	3.5
150TP(L)51-75/4	0.1	0.2	0.7	1.4	1.9	3.6
150TP(L)57-90/4	0.1	0.2	0.7	1.4	2.0	3.6
200TP(L)10-11/4	0.1	0.1	0.5	1.2	1.8	3.4
200TP(L)12-15/4	0.1	0.1	0.4	1.2	1.7	3.3
200TP(L)14-18.5/4	0.2	0.4	0.8	1.5	2.1	3.8
200TP(L)15-22/4	0.1	0.2	0.7	1.4	2.0	3.8
200TP(L)18-30/4	0.1	0.1	0.6	1.3	1.9	3.6
200TP(L)21-37/4	0.1	0.1	0.5	1.2	1.8	3.5
200TP(L)23-45/4	0.1	0.1	0.4	1.1	1.6	3.3
200TP(L)27-55/4	0.1	0.1	0.5	1.2	1.7	3.4
200TP(L)32-75/4	0.1	0.2	0.7	1.4	1.9	3.3
200TP(L)29-37/4	0.1	0.1	0.3	1.1	1.6	3.3
200TP(L)32-45/4	0.1	0.1	0.3	1.1	1.6	3.3
200TP(L)36-55/4	0.1	0.1	0.4	1.1	1.7	3.4
200TP(L)42-75/4	0.1	0.1	0.4	1.1	1.7	3.4
200TP(L)46-90/4	0.1	0.2	0.5	1.2	1.8	3.3
200TP(L)52-110/4	0.1	0.3	0.7	1.4	2.0	3.6
200TP(L)57-132/4	0.2	0.4	0.9	1.7	2.2	3.6
250TP(L)20-45/4	0.1	0.1	0.3	1.1	1.6	3.2
250TP(L)23-55/4	0.1	0.1	0.3	1.1	1.6	3.2
250TP(L)28-75/4	0.1	0.1	0.3	1.1	1.6	3.2
250TP(L)34-90/4	0.1	0.2	0.7	1.4	2.0	3.6

Operating Conditions

The min. Input Pressure

Model	Ps (bar) / °C					
	20	60	90	110	120	140
250TP(L)37-90/4	0.3	0.5	0.9	1.9	2.4	3.6
250TP(L)41-110/4	0.3	0.5	0.9	1.9	2.4	3.6
250TP(L)48-132/4	0.3	0.5	0.9	1.9	2.4	4.0
250TP(L)55-160/4	0.3	0.5	0.9	1.9	2.4	4.0
300TP(L)20-55/4	0.5	0.7	1.1	2.1	2.6	4.2
300TP(L)26-75/4	0.5	0.7	1.1	2.1	2.6	4.2
300TP(L)29-90/4	0.5	0.7	1.1	2.1	2.6	4.2
300TP(L)38-110/4	0.5	0.7	1.1	2.1	2.6	4.2
300TP(L)42-132/4	0.4	0.6	1.0	2.0	2.5	4.1
300TP(L)46-160/4	0.3	0.5	0.9	1.9	2.4	4.0
300TP(L)50-185/4	0.2	0.4	0.8	1.8	2.3	4.0
300TP(L)52-200/4	0.2	0.3	0.7	1.7	2.2	4.2
350TP(L)15-55/4	2.0	2.2	2.6	3.6	4.1	5.7
350TP(L)19-75/4	2.0	2.2	2.6	3.6	4.1	5.7
350TP(L)22-90/4	2.0	2.2	2.6	3.6	4.1	5.7
350TP(L)27-110/4	1.5	1.7	2.1	3.1	3.6	5.2
350TP(L)30-132/4	1.4	1.6	2.0	3.0	3.5	5.1
350TP(L)34-160/4	1.3	1.5	1.9	2.9	3.4	5.0
350TP(L)40-185/4	0.5	0.7	1.1	2.1	2.6	4.2
350TP(L)42-200/4	0.5	0.7	1.1	2.1	2.6	4.2
350TP(L)47-220/4	0.4	0.6	1.0	2.0	2.5	4.1
350TP(L)52-250/4	0.4	0.6	1.0	2.0	2.5	4.1
350TP(L)56-280/4	0.3	0.5	0.9	1.9	2.4	4.0
350TP(L)60-315/4	0.3	0.5	0.9	1.9	2.4	4.0

The min. Input Pressure

Model	Ps (bar) / °C					
	20	60	90	110	120	140
125TP(L)5-1.5/6	0.1	0.1	0.1	0.7	1.2	2.8
125TP(L)6-2.2/6	0.1	0.1	0.1	0.7	1.3	2.9
125TP(L)7-3/6	0.1	0.1	0.1	0.7	1.2	2.9
125TP(L)8-4/6	0.1	0.1	0.1	0.8	1.4	3.0
125TP(L)12-5.5/6	0.1	0.1	0.1	0.7	1.3	2.9
125TP(L)14-7.5/6	0.1	0.1	0.1	0.7	1.3	2.9
150TP(L)4-2.2/6	0.1	0.1	0.1	0.7	1.3	2.9
150TP(L)5-3/6	0.1	0.1	0.1	0.7	1.3	2.9
150TP(L)6-4/6	0.1	0.1	0.1	0.8	1.3	2.9
150TP(L)8-5.5/6	0.1	0.1	0.1	0.8	1.3	3.0
150TP(L)9-5.5/6	0.1	0.1	0.1	0.8	1.3	3.0
150TP(L)11-7.5/6	0.1	0.1	0.1	0.8	1.3	3.0
150TP(L)14-11/6	0.1	0.1	0.1	0.9	1.4	3.2
150-TP(L)17-15/6	0.1	0.1	0.1	0.9	1.4	3.2
150TP(L)20-18.5/6	0.1	0.1	0.1	1.0	1.5	3.3
150TP(L)23-22/6	0.1	0.1	0.1	1.0	1.5	3.3
150TP(L)26-30/6	0.1	0.1	0.1	1.0	1.5	3.3
200TP(L)7-7.5/6	0.1	0.1	0.1	0.8	1.3	3.0
200TP(L)9-11/6	0.1	0.1	0.1	0.8	1.3	3.0
200TP(L)11-15/6	0.1	0.1	0.1	1.0	1.5	3.3
200TP(L)13-18.5/6	0.1	0.1	0.1	1.0	1.5	3.3
200TP(L)18-22/6	0.1	0.1	0.1	1.0	1.6	3.5
200TP(L)21-30/6	0.1	0.1	0.1	1.0	1.6	3.5
200TP(L)25-37/6	0.1	0.1	0.1	1.0	1.6	3.5

Operating Conditions

Environment

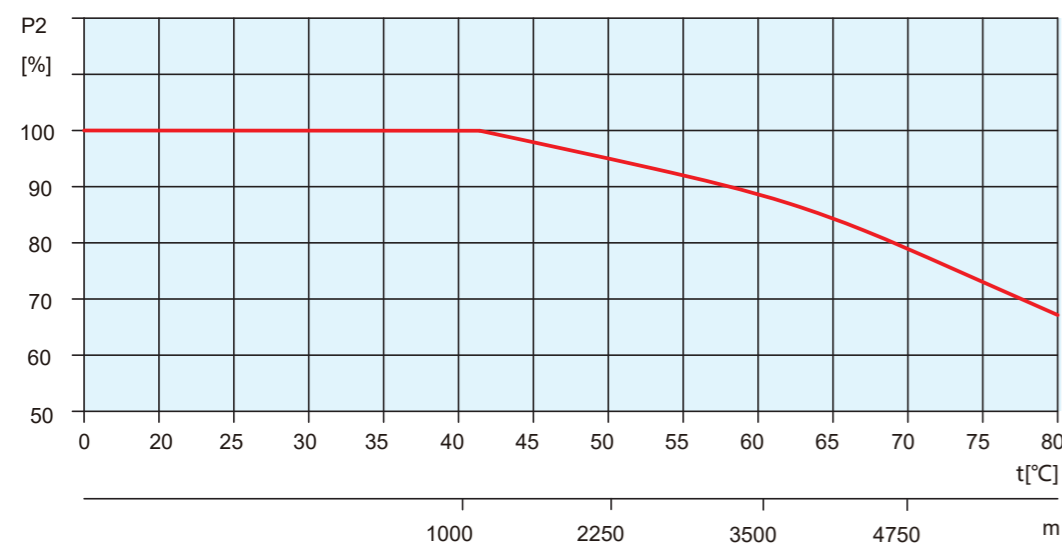
Environment temperature: $-20^{\circ}\text{C} \sim +40^{\circ}\text{C}$

Relative humidity: $\leq 95\%$

Installation location altitude $< 1000\text{m}$

If the motor operating temperature is above 40°C , please reduce the power for use.

The output power (P2) of the motor decreases when the motor is installed above altitude 1000m, mainly due to the low air density and the slow cooling of the motor, which requires a larger model motor to meet the higher output power.



The relationship between motor output power (P2) and altitude and temperature

In a humid environment, the motor center drainage hole must be open.

In addition, the drainage hole must face down. In this case,

the motor protection class is IP44. The three-phase motor must be connected to a motor protection circuit breaker.

Operating Conditions

Pumping Liquids

Clean, thin, non-aggressive, non-explosive, liquid without any solid particles or fibres that may cause mechanical or chemical aggression to the pump. The volume of fixed insoluble matter in the medium does not exceed 0.1% of the unit volume, particle size $< 0.2\text{mm}$.

TP standard configuration for pumping media temperatures from -10°C to $+120^{\circ}\text{C}$. For -20°C to -10°C and $+120^{\circ}\text{C}$ to $+140^{\circ}\text{C}$, please specify when ordering.

The TPL is standardly equipped to pump media at temperatures from -10°C to $+80^{\circ}\text{C}$. For -20°C to -10°C and

$+80^{\circ}\text{C}$ to $+120^{\circ}\text{C}$ please specify when ordering.

Areas of application for pumping media

- Central heating systems
- Industrial fluids
- Cooling systems
- Water softening
- Domestic hot water systems

If the medium 0°C to $+140^{\circ}\text{C}$ is glycol or contains other antifreeze (-25°C to 0°C), the pump must be fitted with a special shaft seal, which should be specified in the order or data sheet when ordering.

If the pumped medium has a higher density or kinematic viscosity than water, this can cause:

- Significant reduction in pressure
- Decreased hydraulic performance
- Increased energy consumption

If you have any questions, please contact TQ GROUP.

If the medium contains mineral oil, synthetic oil or chemicals and other liquids different from water, a suitable O-ring should be selected.

Operating Conditions

Structure

TP/TPL series vertical inline circulation pump is a new generation of products independently developed by Shanghai Tianquan Pump Industry Group Co., Ltd. in absorbing the advantages of similar products at home and abroad and in accordance with the current relevant standards. The comprehensive technical indicators of the two series products are leading in the domestic pump industry, and their performance, reliability, trouble-free running time, maintainability and appearance have reached the international advanced level.

TP/TPL series improved vertical pipeline circulation pump is a single stage single suction vertical centrifugal pump, the pump inlet and outlet are flange connected with the pipeline, the nominal diameter of the pump inlet and outlet is the same, the size of the shaft is the same. The pump is not equipped with bearings, the radial force and axial force are borne by the motor bearing, and the impeller design has taken into account the axial force balance. A square bottom plate is arranged between the pump and the foundation and is connected by bolts.

TP pump is equipped with 380V/50Hz/IE3 series V1 type standard closed, air-cooled, three-phase asynchronous motor and unbalanced mechanical seal and special coupling, electrical tolerances comply with IEC34-7 installation regulations, pump shaft and motor shaft through a rigid sleeve coupling connection, pump for top pull out design, That is, the pump head (motor, motor support and impeller) can be removed for maintenance or repair without moving the pump body, and the pump body and motor support are equipped with replaceable sealing rings to ensure long-term efficient pump operation. The pump and motor are independent units, which are less affected by the pump transport medium than the special special motor with the impeller mounted directly on the special shaft extension.

TPL pump is equipped with 380V/50Hz(IE3 series) series V1 type special motor and non-balanced mechanical seal, the pump impeller is directly mounted on the motor shaft extension, the pump is still the top pull out design, that is, the pump head (motor, pump cover and impeller) can be removed for maintenance or repair, without moving the pump body. An optional replaceable seal ring is provided on the pump body to ensure long-term efficient pump operation. The outstanding feature is that the total height of the pump is lower, but it is not suitable for higher temperature liquids.

According to the pump performance, design pressure and temperature, TP/TPL pump products are divided into PN16/PN25 two sub-series.

Operating Conditions

Main Feature

- Advanced and reasonable structure.

The vertical structure of the pump group, the arrangement of the inlet and outlet pipe line, is located in the central horizontal plane of the cochlear chamber, which is convenient to improve the qualified rate of the pump body casting;

The smaller inlet and outlet pipe diameter and the same size to the axis of the pipe design in the same product, reducing the footprint

- The inlet and outlet nominal diameters are the same. The 16bar pump's inlet and outlet flange grade are the same. For the 25bar pump, the inlet flange is 16bar and outlet flange grade is 25bar

- High efficiency and excellent hydraulic performance, closer to full power operation

- High efficiency IE3 three-phase asynchronous motor is standard configuration. Other efficiency levels of motors and shaft seals are optional

- ✓ IE3/IE4/IE5 series V1 model (frame number 80 ~ 355)

- ✓ Relative humidity $\leq 95\%$

- ✓ Protection class IP54

- ✓ Insulation class F

- ✓ Ambient temperature -20°C to $+40^{\circ}\text{C}$

- Top pull-out structure for easy maintenance

- TP sleeve coupling connects motor shaft to pump shaft for higher media temperatures

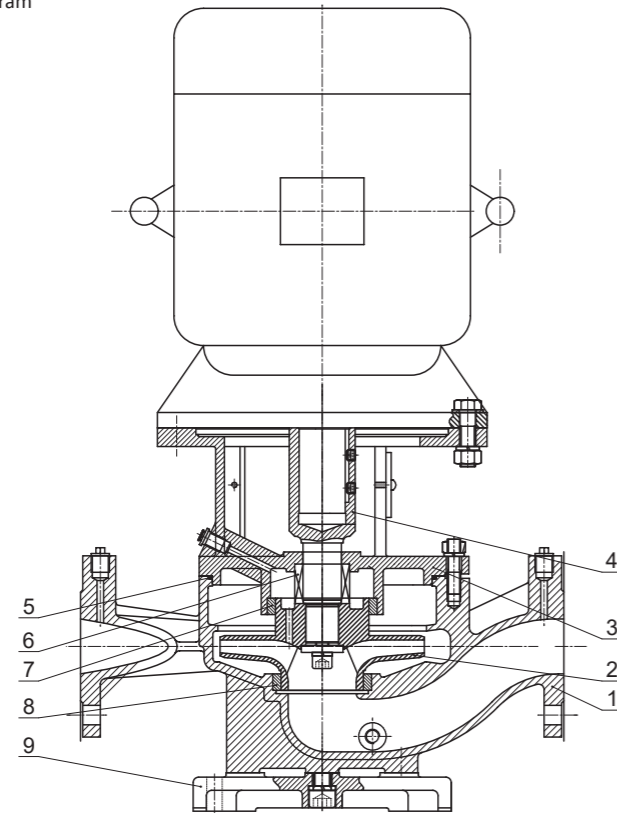
- The impeller is hydraulically and mechanically balanced so that the pump runs more smoothly

- Pump body, impeller and pump cover castings are finished with cataphoretic coating to improve corrosion resistance

- Rotation direction: clockwise from the top of the motor

Structure diagram

TP pump structure diagram

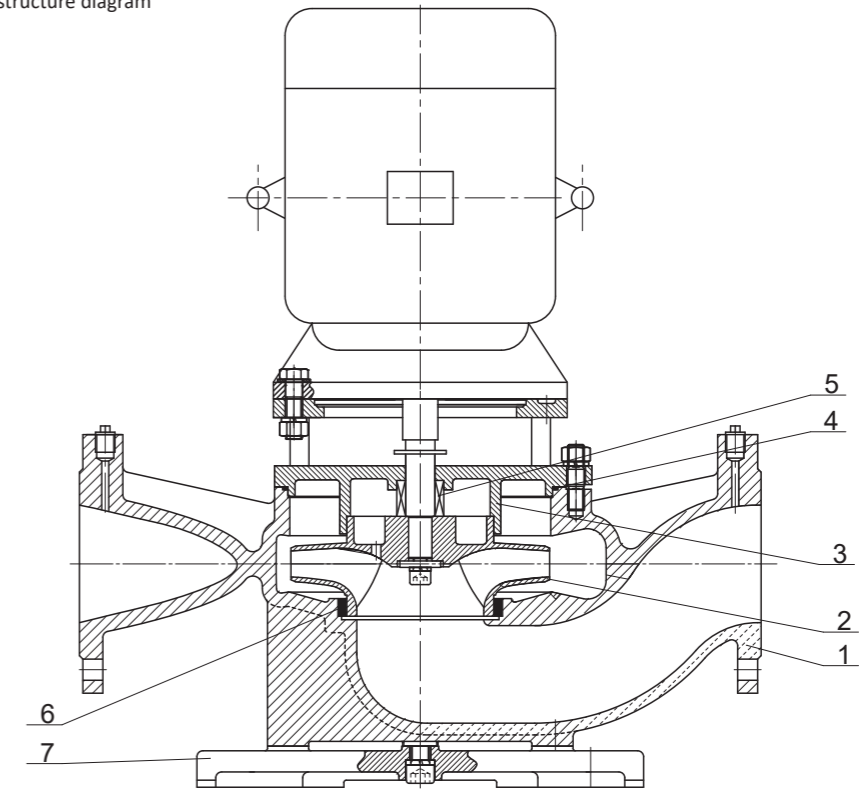


TP Structure Diagram

No.	Part	Standard	Value	Optional
1	Pump body	GB/T9439-1988	HT250	PN16
		GB1348-1988	QT400-18/QT500	PN25
2	Impeller	GB/T9439-1988	HT200	SS304
3	Pump Cover	GB/T9439-1988	HT250	/
4	Shaft	GB/T20878-2007	0Cr18Ni9	/
		GB/T4237-2007	2Cr13	/
5	O seal ring	GB3452.1	EPDM	
		GB/T 30308-2013	FXM	80°C-120°C or corrosive liquid
6	Mechanical Seal	GB/T6556-2016	FU1(UN EN12756)	
7	Sealing Ring on pump body	GB/T1176-1987	ZCuSn10Zn2	/
8	Sealing Ring on pump cover	GB/T1176-1987	ZCuSn10Zn2	/
9	Base	T210	HT200	/

Structure diagram

TPL pump structure diagram



TPL Structure Diagram

No.	Part	Standard	Value	Optional
1	Pump body	GB/T9439-1988	HT250	/
		GB1348-1988	QT400-18/QT500	/
2	Impeller	GB/T9439-1988	HT200	06Cr19Ni10 (304)
3	Pump Cover	GB/T9439-1988	HT250	/
4	O ring	GB3452.1	EPDM	
		GB/T 30308-2013	FXM	80°C-120°C or corrosive liquid
5	Mechanical Seal	GB/T6556-2016	FU1(UN EN12756)	
		GB/T33509-2017	Customized balanced seal	
6	Sealing Ring on pump body	GB/T1176-1987	/	ZCuSn10Zn2
7	Base		Q235	/

Flange grade

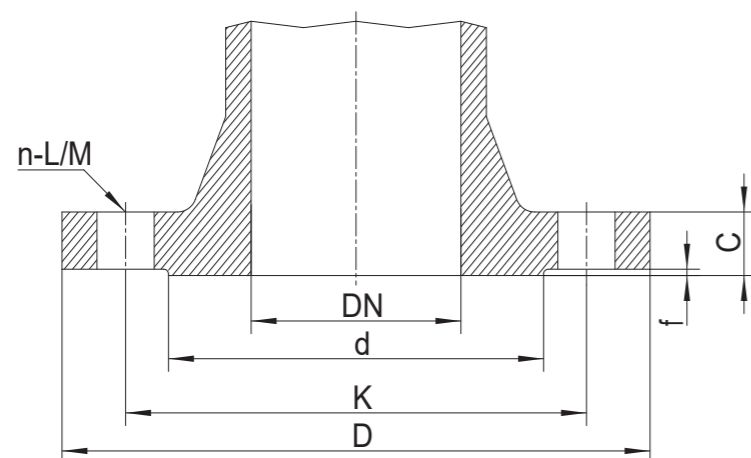
PN16 Variant

Dia.: DN32~350mm
 Flange Grade PN16, conform to GB/T17241.6/ISO7005-2/EN1092-2
 Max. Operating Pressure: 16bar
 Medium Temperature: -20°C ~ +140°C
 (-10°C ~ +120°C for TP standard, 10°C ~ +80°C for TPL standard)
 Flow: up to 1800 m³/h
 Head: up to 97m
 Speed: 2960/1480/985rpm
 Motor Power: ≤315kW

PN25 Variant

Dia.: DN80~125mm
 Flange Grade PN25, conform to GB/T17241.6/ISO7005-2/EN1092-2
 Max. Operating Pressure: 25bar
 Medium Temperature: -20°C ~ +140°C
 (-10°C ~ +120°C for TP standard, 10°C ~ +80°C for TPL standard)
 Flow: up to 1480 m³/h
 Head: up to 150m
 Speed: 2960 rpm
 Motor Power: ≤200kW

Flange Size

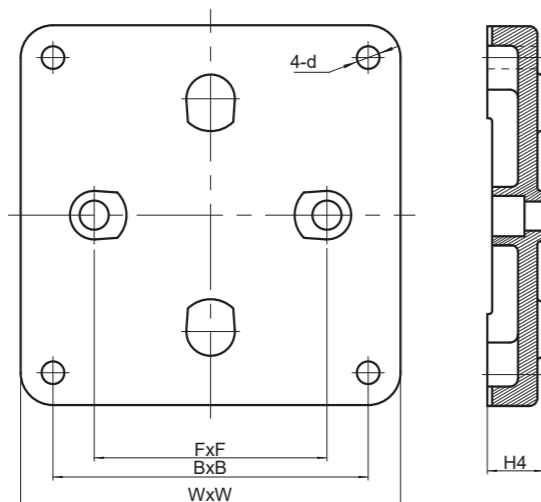


Conform to GB/T17241.6-2008,same asISO7005-2/EN1092-2. Grade PN16 & PN25

Flange grade

Integral Cast Iron Flanges GB/T17241.6-2008 (Unit: mm)										
Nominal Dimension	PN	Flange Outlet Dia.	Dia.of bolt hole circle	Dia of bolt hole	n	Thred Spec	Outer Dia of flange	Sealing Thickness	C	
DN	(bar)	D	K	L	(pcs)	M	d	f	HT250	QT400
32	16	140	100	19	4	16	76	3	18	/
40	16	150	110	19	4	16	84	3	18	19
50	16	165	125	19	4	16	99	3	20	19
65	16	185	145	19	4	16	118	3	20	19
80	16	200	160	19	8	16	132	3	22	19
80	25	200	160	19	8	16	132	3	26	19
100	16	220	180	19	8	16	156	3	24	19
100	25	235	190	23	8	20	156	3	28	19
125	16	250	210	19	8	16	184	3	26	19
125	25	270	220	28	8	24	184	3	30	19
150	16	285	240	23	8	20	211	3	26	19
200	16	340	295	23	12	20	266	3	30	20
250	16	405	355	28	12	20	319	3	32	22
250	25	425	370	31	12	27	330	3	36	24.5
300	16	460	410	28	12	20	370	4	32	24.5
300	25	485	430	31	16	27	389	4	40	27.5
350	16	520	470	28	16	20	429	4	36	26.5
350	25	555	490	34	16	30	448	4	44	30

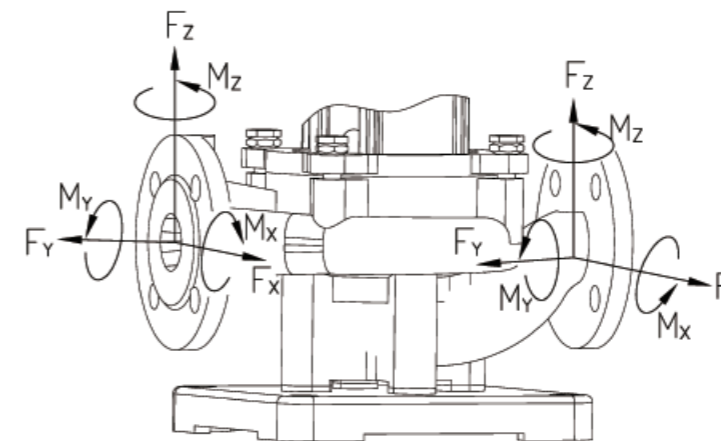
Base Plate



Base code	Figure number	F	B	W	H4	4 - d
T210-120/35	T210-120/35	120	195	235	35	4-Φ14
T210-144/35	T210-144/35	144	195	235	35	4-Φ14
T210-230/35	T210-230/35	230	290	380	35	4-Φ14
T210-280/35	T210-280/35	280	350	450	35	4-Φ24
T210-330/35	T210-330/35	330	430	530	35	4-Φ28
T210-400/50	T210-400/50	400	500	600	50	4-Φ28

Flange grade

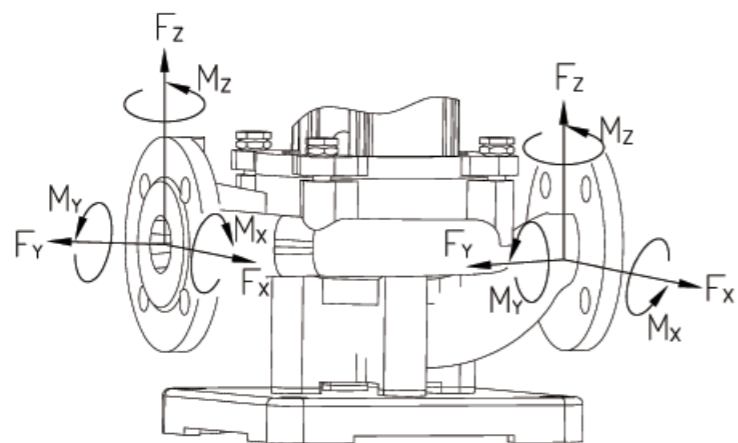
Material of Pump housing: Cast iron



Cast Iron	DN (mm)	Forces F (N)				Moments M (N·m)			
		F _x	F _y	F _z	ΣF*	M _x	M _y	M _z	ΣM*
Vertical Inline Circulating Pump Y_ Discharge Nozzle	32	630	736	596	1156	770	526	596	1120
	40	770	876	700	1366	910	630	736	1330
	50	1050	1156	946	1820	980	700	806	1436
	65	1296	1470	1190	2310	1050	770	840	1540
	80	1576	1750	1436	2766	1120	806	910	1646
	100	2100	2346	1890	3676	1226	876	1016	1820
	125	2486	2766	2240	4340	1470	1050	1330	2136
	150	3150	3500	2836	5496	1750	1226	1436	2556
	200	3820	4400	3440	6792	2150	1462	1684	3078
	250	4864	5404	4432	8506	2750	1826	2232	3970
Vertical L Inline Circulating Pump Y_ Inlet Nozzle	300	6076	6480	5320	10334	3342	2230	2708	4828
	350	7026	7812	6236	12230	3780	2528	3030	5440
	32	630	736	596	1156	770	526	596	1120
	40	770	876	700	1366	910	630	736	1330
	50	1050	1156	946	1820	980	700	806	1436
	65	1296	1470	1190	2310	1050	770	840	1540
	80	1576	1750	1436	2766	1120	806	910	1646
	100	2100	2346	1890	3676	1226	876	1016	1820
	125	2486	2766	2240	4340	1470	1050	1330	2136
	150	3150	3500	2836	5496	1750	1226	1436	2556
200	3820	4400	3440	6792	2150	1462	1684	3078	
250	4864	5404	4432	8506	2750	1826	2232	3970	
300	6076	6480	5320	10334	3342	2230	2708	4828	
350	7026	7812	6236	12230	3780	2528	3030	5440	

Flange grade

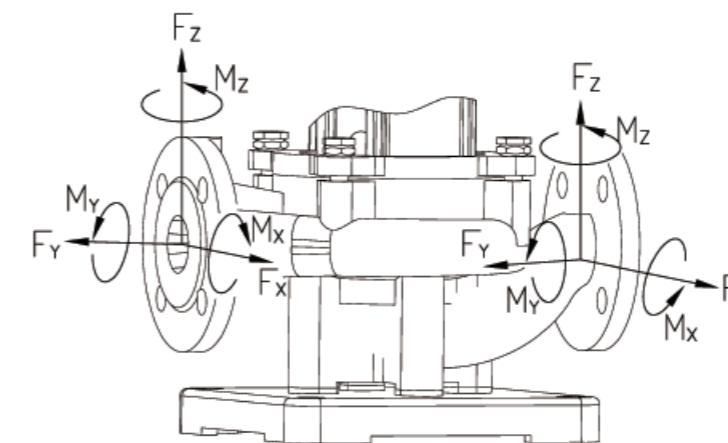
Material of Pump housing: Nodular cast iron



Nodular Cast Iron	DN (mm)	Forces F (N)				Moments M (N·m)			
		F _x	F _y	F _z	ΣF*	M _x	M _y	M _z	ΣM*
Vertical Inline Circulating Pump Y_ Discharge Nozzle	32	860	1120	740	1620	720	360	520	960
	40	1040	1340	860	1920	860	420	640	1140
	50	1420	1780	1160	2560	920	460	700	1240
	65	1760	2240	1480	3220	1780	900	1320	2400
	80	2140	2660	1780	3860	1900	940	1440	2560
	100	2840	3560	2320	5120	2660	1360	2000	3600
	125	3940	4920	3240	7080	3860	2020	3260	5240
	150	4980	6220	4100	8960	4600	2360	3520	6260
	200	7560	9780	6220	13840	7060	3520	5160	9420
	250	10680	13340	8900	19260	10040	4880	7600	13500
300	13340	16000	10680	23400	12200	5960	9220	16420	
350	14240	17800	11560	25560	12740	6240	9500	17080	
Vertical L Inline Circulating Pump Y_ Inlet Nozzle	32	860	1120	740	1620	720	360	520	960
	40	1040	1340	860	1920	860	420	640	1140
	50	1420	1780	1160	2560	920	460	700	1240
	65	1760	2240	1480	3220	1780	900	1320	2400
	80	2140	2660	1780	3860	1900	940	1440	2560
	100	2840	3560	2320	5120	2660	1360	2000	3600
	125	3940	4920	3240	7080	3860	2020	3260	5240
	150	4980	6220	4100	8960	4600	2360	3520	6260
	200	7560	9780	6220	13840	7060	3520	5160	9420
	250	10680	13340	8900	19260	10040	4880	7600	13500
300	13340	16000	10680	23400	12200	5960	9220	16420	
350	14240	17800	11560	25560	12740	6240	9500	17080	

Flange grade

Material of Pump housing: Stainless Steel



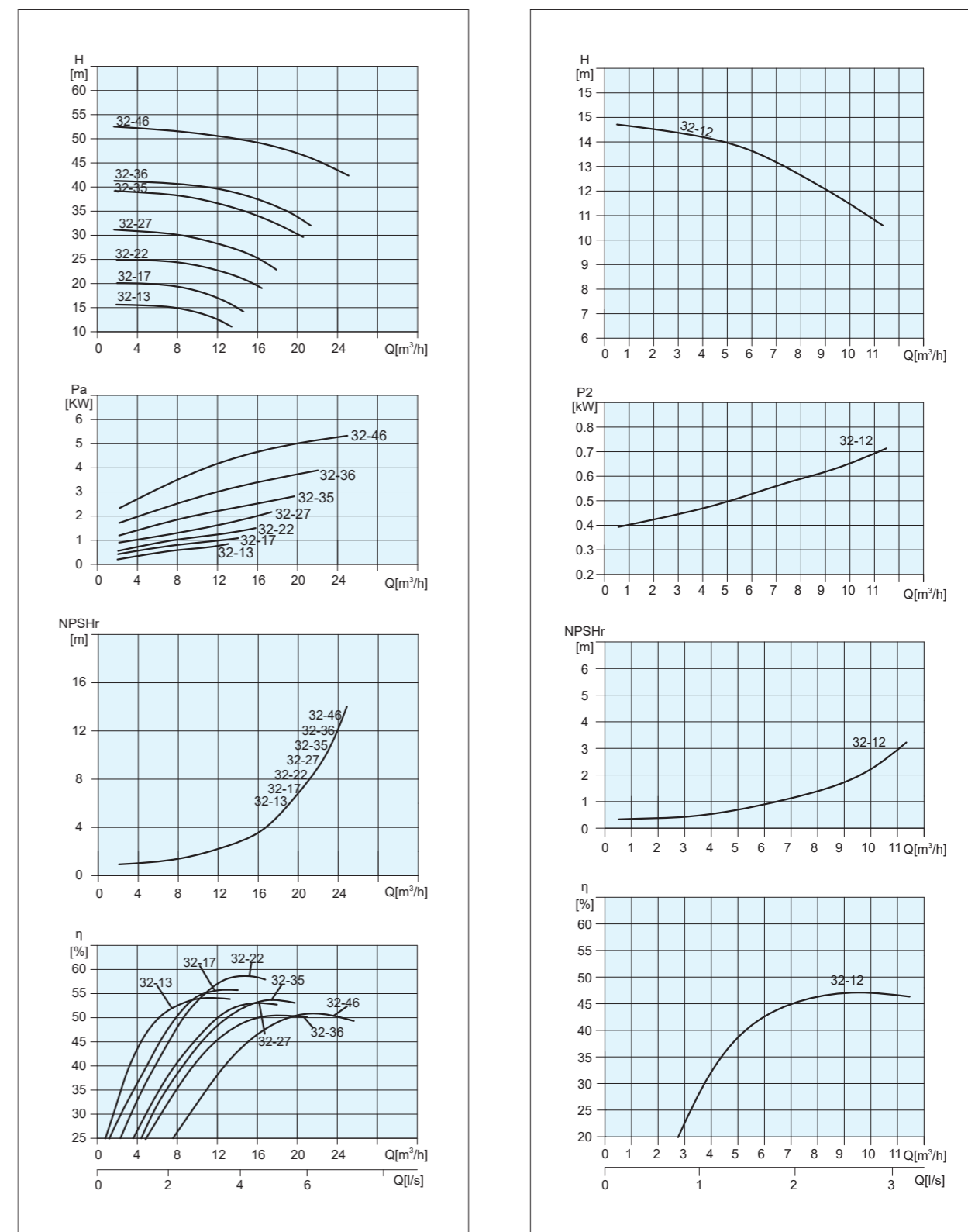
Stainless Steel	DN (mm)	Forces F (N)				Forces F (N)			
		F _x	F _y	F _z	ΣF*	M _x	M _y	M _z	ΣM*
Vertical Inline Circulating Pump Y_ Discharge Nozzle	32	1260	1470	1190	2310	1540	1050	1190	2240
	40	1540	1750	1400	2730	1820	1260	1470	2660
	50	2100	2310	1890	3640	1960	1400	1610	2870
	65	2590	2940	2380	4620	2100	1540	1680	3080
	80	3150	3500	2870	5530	2240	1610	1820	3290
	100	4200	4690	3790	7350	2450	1750	2030	3640
	125	4970	5530	4480	8680	2940	2100	2660	4270
	150	6300	7000	5670	11590	3500	2450	2870	5110
	200	8400	9680	7560	15760	4720	3220	3700	6760
	250	11860	13200	10820	21940	6720	4460	5440	9680
300	14820	15840	12980	26660	8160	5440	6600	11780	
350	15820	17620	14040	29120	8520	5700	6800	12260	
Vertical L Inline Circulating Pump Y_ Inlet Nozzle	32	1260	1470	1190	2310	1540	1050	1190	2240
	40	1540	1750	1400	2730	1820	1260	1470	2660
	50	2100	2310	1890	3640	1960	1400	1610	2870
	65	2590	2940	2380	4620	2100	1540	1680	3080
	80	3150	3500	2870	5530	2240	1610	1820	3290
	100	4200	4690	3790	7350	2450	1750	2030	3640
	125	4970	5530	4480	8680	2940	2100	2660	4270
	150	6300	7000	5670	11590	3500	2450	2870	5110
	200	8400	9680	7560	15760	4720	3220	3700	6760
	250	11860	13200	10820	21940	6720	4460	5440	9680
300	14820	15840	12980	26660	8160	5440	6600	11780	
350	15820	17620	14040	29120	8520	5700	6800	12260	

Note: *— Σ F And Σ M Are The Vector Sum Of The Forces And Moments Acting On The Flange Of The Inlet

Parameters Table

Model	Flow		Head (m)	Speed (r/min)	Pump Eff. (%)	Shaft Power (kW)	Motor Power (kW)	NPSHR (m)	Weight (kg)
	(m³/h)	(L/s)							
32TP(L)13-0.75/2	7.7	2.1	14.2	2960	48.0	0.621	0.75	2.0	43
	9.4	2.6	13.7		51.0	0.688		2.0	
	11.0	3.1	13.0		54.0	0.722		2.2	
	12.1	3.4	12.4		55.0	0.743		3.0	
	13.2	3.7	11.7		56.0	0.752		3.2	
32TP(L)17-1.1/2	8.4	2.3	18.8	2960	49.6	0.868	1.1	2.0	47
	10.2	2.8	18.0		52.9	0.946		2.0	
	12.0	3.3	17.0		56.8	0.979		2.5	
	13.2	3.7	16.5		57.6	1.030		3.3	
	14.4	4.0	16.0		57.3	1.096		3.5	
32TP(L)22-1.5/2	9.1	2.5	23.7	2960	50.8	1.157	1.5	2.0	51
	11.1	3.1	23.0		53.9	1.291		2.0	
	13.0	3.6	22.0		57.0	1.367		3.1	
	14.3	4.0	21.2		58.2	1.419		3.6	
	15.6	4.3	20.4		58.3	1.487		3.8	
32TP(L)27-2.2/2	9.8	2.7	29.5	2960	46.5	1.694	2.2	2.0	56
	11.9	3.3	28.5		51.1	1.809		2.4	
	14.0	3.9	27.0		56.7	1.817		3.4	
	15.4	4.3	26.0		56.8	1.921		3.6	
	16.8	4.7	24.8		57.0	1.992		4.0	
32TP(L)35-3/2	10.5	2.9	37.6	2960	47.4	2.270	3	2.0	65
	12.8	3.6	36.8		51.8	2.478		2.0	
	15.0	4.2	35.0		56.8	2.519		3.3	
	16.5	4.6	34.2		57.2	2.688		4.0	
	18.0	5.0	32.7		57.5	2.789		4.4	
32TP(L)36-4/2	12.6	3.5	39.5	2960	41.0	3.308	4	2.0	80
	15.3	4.3	37.7		47.0	3.344		2.0	
	18.0	5.0	36.0		50.0	3.532		3.5	
	19.8	5.5	35.0		50.5	3.739		7.6	
	21.6	6.0	32.2		50.8	3.731		12.0	
32TP(L)46-5.5/2	14.0	3.9	51.0	2960	42.0	4.633	5.5	2.0	92
	17.0	4.7	49.0		45.0	5.044		2.3	
	20.0	5.6	46.0		51.0	4.916		7.5	
	22.0	6.1	44.0		51.0	5.172		12.0	
	24.0	6.7	41.0		49.0	5.472		15.0	
32TP(L)12-0.75/4	7.0	1.9	13.3	1480	46.0	0.552	0.75	1.1	50
	8.5	2.4	12.8		48.0	0.618		1.7	
	10.0	2.8	12.0		49.0	0.667		2.3	
	11.0	3.1	11.5		48.5	0.711		2.8	
	12.0	3.3	10.7		47.5	0.737		3.3	

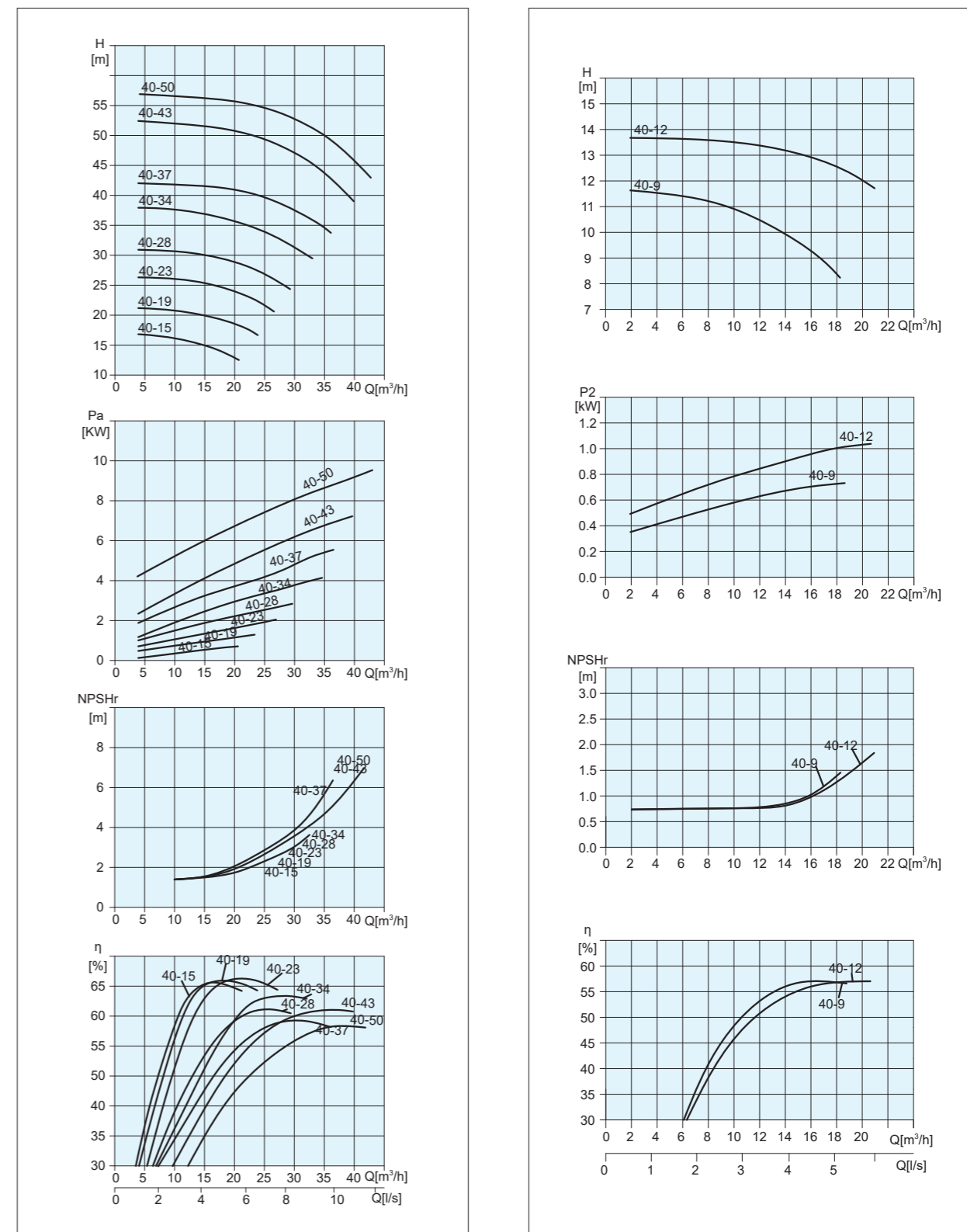
Characteristic curves



Parameters Table

Model	Flow		Head (m)	Speed (r/min)	Pump Eff. (%)	Shaft Power (kW)	Motor Power (kW)	NPSHR (m)	Weight (kg)
	(m³/h)	(L/s)							
40TP(L)15-1.1/2	11.2	3.1	16.0	2960	59.0	0.828	1.1	1.8	45
	13.6	3.8	15.5		63.0	0.912		1.8	
	16.0	4.4	15.0		66.0	0.991		1.8	
	17.6	4.9	13.6		65.0	1.003		1.8	
	19.2	5.3	12.3		64.0	1.006		1.9	
40TP(L)19-1.5/2	12.6	3.5	20.9	2960	61.0	1.176	1.5	1.8	48
	15.3	4.3	20.0		65.0	1.283		1.8	
	18.0	5.0	19.0		67.0	1.391		1.8	
	19.8	5.5	18.1		67.1	1.455		1.9	
	12.6	3.5	20.9		66.8	1.498		2.5	
40TP(L)23-2.2/2	14.0	3.9	25.4	2960	62.0	1.563	2.2	1.6	52
	17.0	4.7	24.6		65.0	1.753		1.8	
	20.0	5.6	23.0		68.0	1.843		2.0	
	22.0	6.1	22.3		68.0	1.966		2.6	
	24.0	6.7	21.2		67.4	2.057		2.8	
40TP(L)28-3/2	15.4	4.3	31.0	2960	54.0	2.409	3	1.8	65
	18.7	5.2	30.0		58.0	2.636		1.9	
	22.0	6.1	28.0		61.0	2.752		2.2	
	24.2	6.7	27.2		61.0	2.940		2.7	
	26.4	7.3	26.5		62.0	3.075		3.0	
40TP(L)34-4/2	17.5	4.9	36.2	2960	55.0	3.139	4	1.8	72
	21.3	5.9	35.1		59.0	3.453		2.0	
	25.0	6.9	34.0		62.0	3.736		2.8	
	27.5	7.6	33.0		63.5	3.894		3.1	
	30.0	8.3	31.8		63.3	4.107		3.5	
40TP(L)37-5.5/2	21.0	5.8	41.0	2960	54.0	4.345	5.5	2.1	110
	25.5	7.1	39.2		58.0	4.696		2.8	
	30.0	8.3	37.0		61.0	4.959		4.0	
	33.0	9.2	36.0		60.6	5.342		5.3	
	36.0	10.0	33.4		59.4	5.516		6.0	
40TP(L)43-7.5/2	24.5	6.8	49.0	2960	56.0	5.485	7.5	2.7	116
	30.0	8.3	47.0		59.0	6.078		3.6	
	35.0	9.7	43.0		62.0	6.382		5.2	
	38.5	10.7	41.3		60.0	6.792		6.0	
	42.0	11.7	39.4		59.0	7.316		7.3	
40TP50-11/2	24.5	6.8	55.1	2960	53	6.9	11	2.7	150
	30	8.3	52.9		55	7.8		3.6	
	35	9.7	50		57	8.4		5.2	
	38.5	10.7	48.4		57.5	8.8		6.0	
	42	11.7	45.1		58	8.9		7.2	
40TP(L)9-0.75/4	11.6	3.2	10.3	1480	53.0	0.612	0.75	0.8	66
	14.0	3.9	9.7		55.0	0.673		0.8	
	16.5	4.6	9.0		57.0	0.710		1.0	
	18.2	5.0	8.3		57.5	0.714		1.4	
	19.8	5.5	7.8		58.0	0.726		1.6	
40TP(L)12-1.1/4	12.3	3.4	13.8	1480	53.0	0.866	1.1	0.8	70
	15.0	4.2	13.2		55.0	0.981		0.8	
	17.5	4.9	12.5		57.0	1.044		1.2	
	19.3	5.3	12.1		57.5	1.102		1.5	
	21.0	5.8	11.3		58.0	1.110		1.8	

Characteristic curves



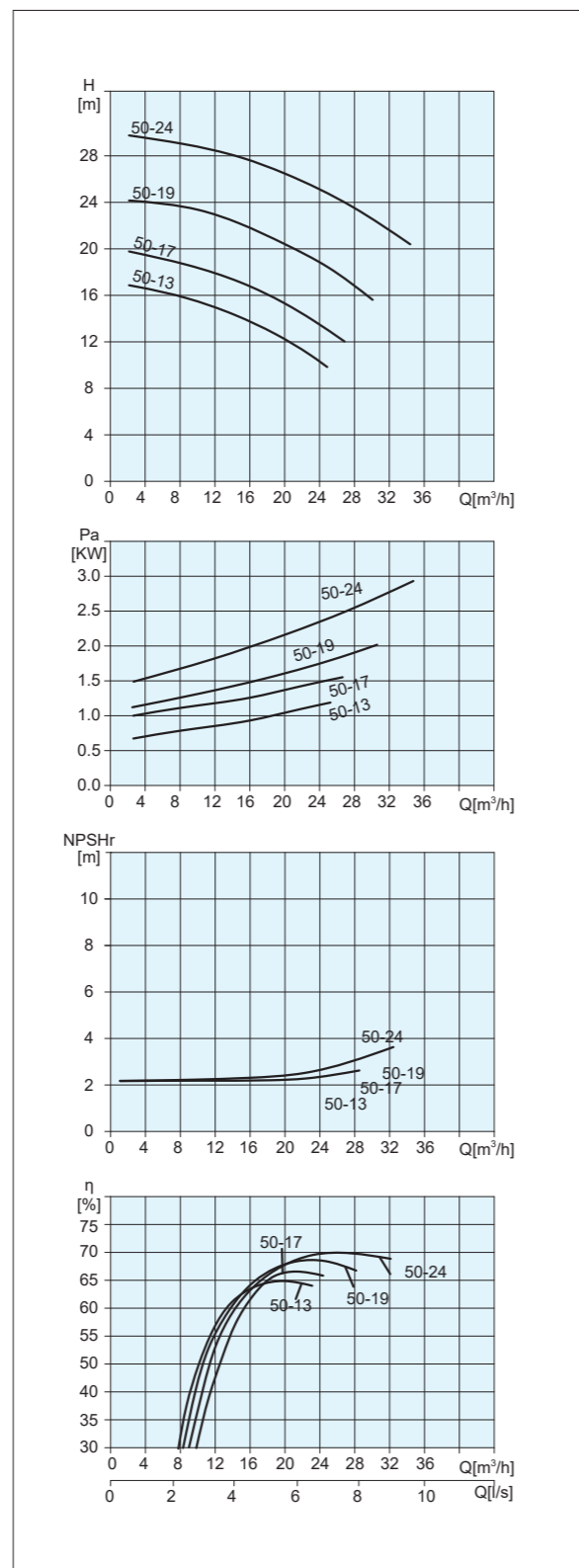
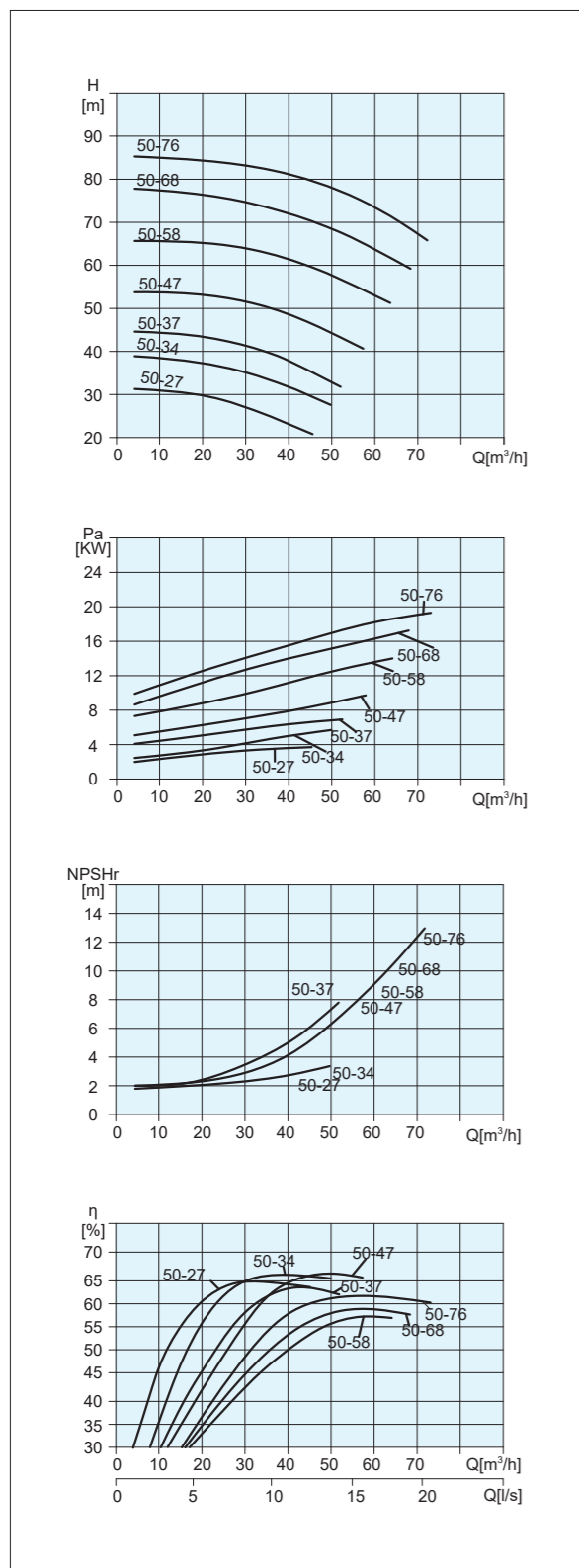
Parameters Table

Model	Flow		Head (m)	Speed (r/min)	Pump Eff. (%)	Shaft Power (kW)	Motor Power (kW)	NPSHR (m)	Weight (kg)
	(m³/h)	(L/s)							
50TP(L)13-1.1/2	12.6	3.5	14.8	2960	53.0	0.959	1.1	2.0	53
	15.3	4.3	14.0		59.0	0.989		2.0	
	18.0	5.0	13.0		63.0	1.012		2.0	
	19.8	5.5	12.5		64.0	1.054		2.1	
	21.6	6.0	12.0		65.0	1.087		2.2	
50TP(L)17-1.5/2	14.0	3.9	18.3	2960	55.0	1.269	1.5	2.0	54
	17.0	4.7	17.6		61.0	1.337		2.0	
	20.0	5.6	17.0		65.0	1.425		2.1	
	22.0	6.1	16.2		66.0	1.472		2.2	
	24.0	6.7	15.4		67.0	1.503		2.3	
50TP(L)19-2.2/2	16.1	4.5	21.5	2960	61.0	1.546	2.2	2.0	56
	19.6	5.4	20.2		65.0	1.660		2.1	
	23.0	6.4	19.0		69.0	1.726		2.3	
	25.3	7.0	18.5		69.0	1.848		2.5	
	27.6	7.7	17.2		68.0	1.902		2.8	
50TP(L)24-3/2	18.9	5.3	26.8	2960	65.0	2.123	3	2.1	67
	23.0	6.4	25.3		68.0	2.332		2.3	
	27.0	7.5	24.0		70.0	2.523		2.5	
	29.7	8.3	22.6		69.0	2.651		2.8	
	32.4	9.0	21.7		68.0	2.817		3.2	
50TP(L)27-4/2	21.0	5.8	29.8	2960	61.0	2.796	4	2.1	79
	25.5	7.1	28.5		64.0	3.094		2.1	
	30.0	8.3	27.0		65.0	3.396		2.2	
	33.0	9.2	26.1		64.0	3.667		2.2	
	36.0	10.0	24.9		63.0	3.877		2.4	
50TP(L)34-5.5/2	24.5	6.8	37.4	2960	61.0	4.093	5.5	2.1	94
	29.8	8.3	36.1		64.5	4.545		2.2	
	35.0	9.7	34.0		67.0	4.840		2.3	
	38.5	10.7	32.7		66.6	5.151		2.5	
	42.0	11.7	31.0		65.7	5.400		2.6	
50TP(L)37-7.5/2	28.0	7.8	42.8	2960	55.0	5.938	7.5	3.0	118
	34.0	9.4	41.8		61.0	6.349		4.0	
	40.0	11.1	39.0		64.0	6.642		5.2	
	44.0	12.2	37.2		65.0	6.862		5.9	
	48.0	13.3	33.8		63.0	7.018		7.5	
50TP(L)47-11/2	31.5	8.8	53.2	2960	60.0	7.611	11	3.6	151
	38.3	10.6	50.0		63.0	8.283		4.8	
	45.0	12.5	47.0		66.0	8.732		6.0	
	49.5	13.8	44.7		66.5	9.067		7.7	
	54.0	15.0	41.2		65.0	9.327		8.0	
50TP(L)58-15/2	35.0	9.7	64.5	2960	53.0	11.607	15	3.2	170
	42.5	11.8	61.0		54.0	13.083		4.6	
	50.0	13.9	58.0		55.0	14.368		6.8	
	55.0	15.3	54.7		56.0	14.640		7.5	
	60.0	16.7	52.3		57.0	15.002		9.0	

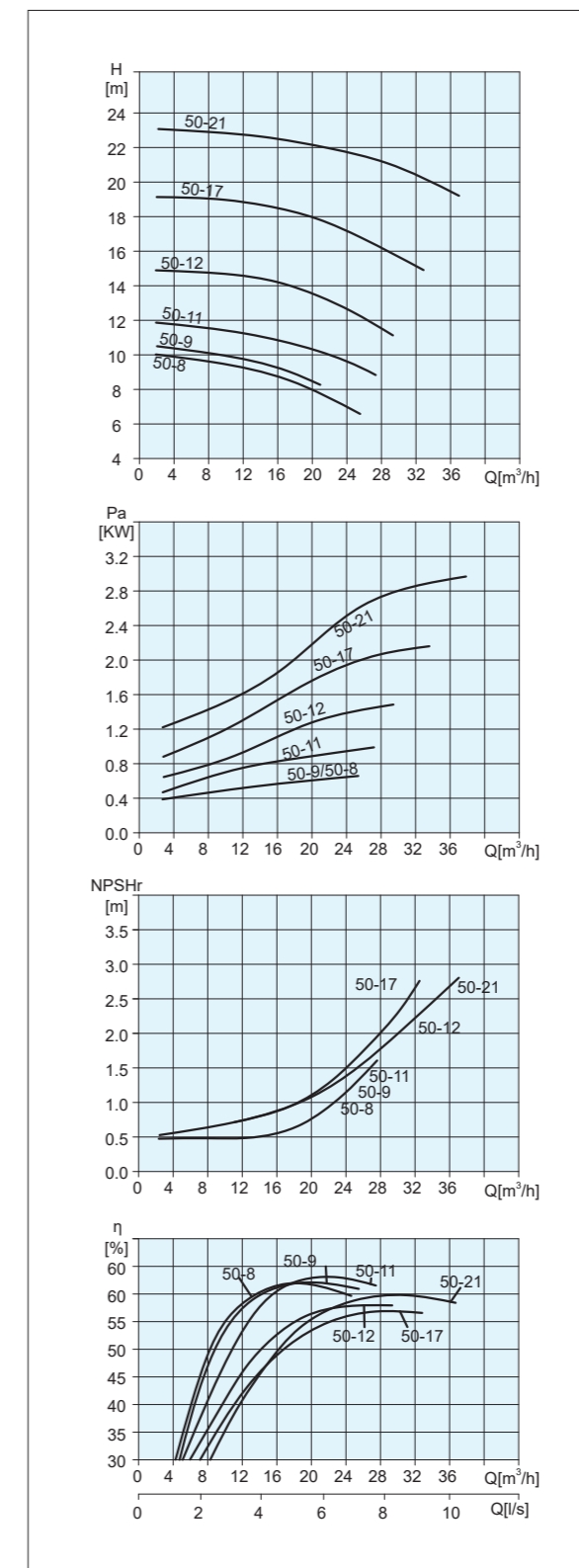
Parameters Table

Model	Flow		Head (m)	Speed (r/min)	Pump Eff. (%)	Shaft Power (kW)	Motor Power (kW)	NPSHR (m)	Weight (kg)
	(m³/h)	(L/s)							
50TP(L)68-18.5/2	36.4	10.1	75.0	2960	54.0	13.776	18.5	3.3	194
	44.2	12.3	72.0		55.0	15.767		4.8	
	52.0	14.4	68.0		56.0	17.206		7.0	
	57.2	15.9	64.0		57.0	17.501		8.0	
	62.4	17.3	61.0		58.0	17.884		9.2	
50TP(L)76-22/2	38.5	10.7	83.0	2960	58.0	15.013	22	3.7	230
	46.8	13.0	80.0		60.0	17.004		5.3	
	55.0	15.3	76.0		61.0	18.673		7.5	
	60.5	16.8	73.4		62.0	19.518		9.0	
	66.0	18.3	70.0		61.0	20.639		11.0	
50TP(L)9-0.75/4	11.9	3.3	9.9	1480	58.0	0.554	0.75	0.5	62
	14.5	4.0	9.5		61.5	0.610		0.5	
	17.0	4.7	9.0		63.0	0.662		0.6	
	18.7	5.2	8.7		62.6	0.708		0.7	
	20.4	5.7	8.3		61.7	0.748		0.8	
50TP(L)8-0.75/4	14.0	3.9	9.0	1480	54.0	0.636	0.75	0.5	75
	17.0	4.7	8.7		61.0	0.661		0.6	
	20.0	5.6	8.0		62.0	0.703		0.7	
	22.0	6.1	7.6		63.0	0.723		0.8	
	24.0	6.7	6.7		60.0	0.730		1.2	
50TP(L)11-1.1/4	15.8	4.4	12.6	1480	58.0	0.932	1.1	0.5	83
	19.2	5.3	11.8		60.0	1.026		0.7	
	22.5	6.3	11.0		64.0	1.054		0.8	
	24.8	6.9	10.4		65.0	1.079		1.2	
	27.0	7.5	9.6		64.0	1.104		1.5	
50TP(L)12-1.5/4	17.5	4.9	13.7	1480	58.0	1.122	1.5	0.8	83
	21.3	5.9	13.0		60.0	1.257		1.1	
	25.0	6.9	12.0		63.0	1.298		1.5	
	27.5	7.6	11.2		63.5	1.316		1.9	
	30.0	8.3	10.4		63.0	1.350		2.2	
50TP(L)17-2.2/4	18.2	5.1	18.8	1480	54.0	1.722	2.2	0.8	96
	22.1	6.1	18.0		55.0	1.971		1.2	
	26.0	7.2	17.0		56.0	2.151		1.6	
	28.6	7.9	16.0		57.0	2.188		2.0	
	31.2	8.7	15.3		58.0	2.235		2.5	
50TP(L)21-3/4	19.3	5.3	22.8	1480	56.0	2.136	3	1.0	105
	23.4	6.5	22.0		58.0	2.419		1.3	
	27.5	7.6	21.0		59.0	2.667		1.9	
	30.3	8.4	20.4		60.0	2.803		2.2	
	33.0	9.2	19.5		59.0	2.972		2.6	

Characteristic curves



Characteristic curves



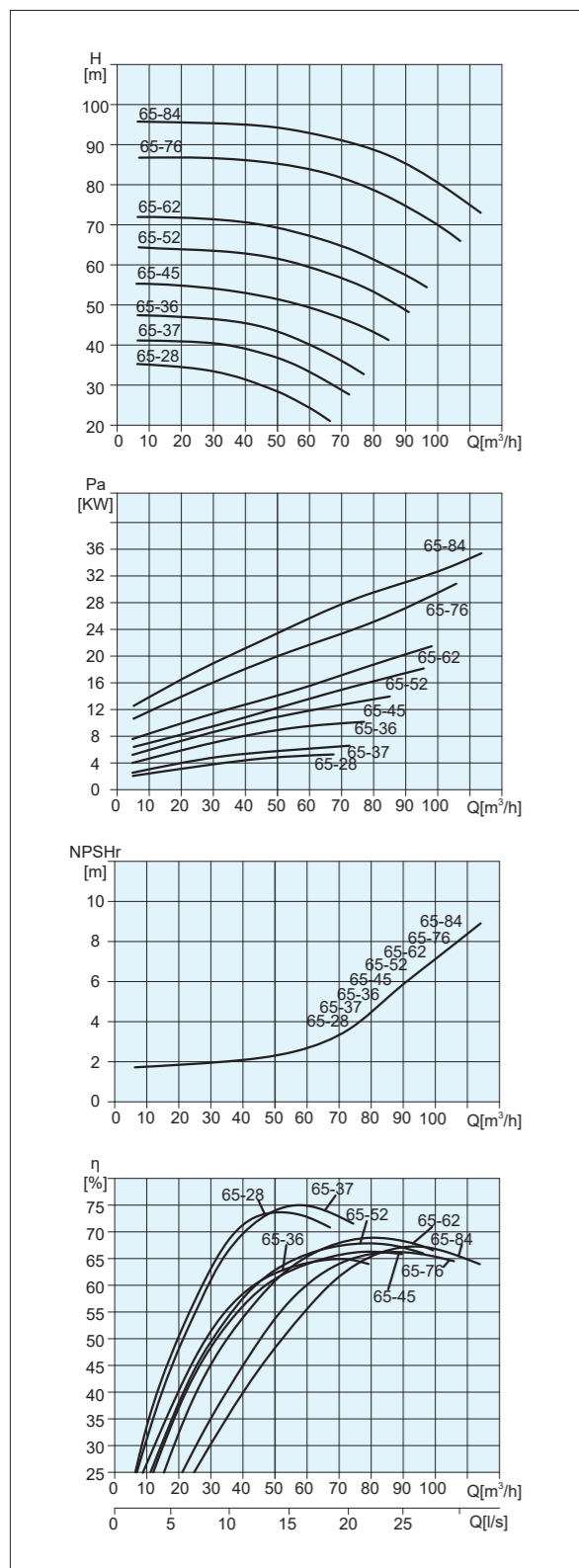
Parameters Table

Model	Flow		Head (m)	Speed (r/min)	Pump Eff. (%)	Shaft Power (kW)	Motor Power (kW)	NPSHR (m)	Weight (kg)
	(m³/h)	(L/s)							
65TP(L)15-2.2/2	21.0	5.8	16.0	2960	54.0	1.696	2.2	1.5	55
	25.5	7.1	15.5		61.5	1.751		1.8	
	30.0	8.3	15.0		65.5	1.872		2.0	
	33.0	9.2	14.2		67.7	1.886		2.3	
	36.0	10.0	13.7		66.5	2.021		2.6	
65TP(L)18-3/2	24.5	6.8	18.9	2960	61.0	2.069	3	1.8	67
	29.8	8.3	18.4		65.0	2.299		2.0	
	35.0	9.7	18.0		68.0	2.525		2.2	
	38.5	10.7	17.6		70.0	2.638		2.5	
	42.0	11.7	16.9		69.0	2.803		2.8	
65TP(L)22-4/2	28.0	7.8	23.7	2960	64.0	2.825	4	2.0	74
	34.0	9.4	22.8		70.0	3.018		2.4	
	40.0	11.1	22.0		72.0	3.331		2.8	
	44.0	12.2	21.2		73.0	3.482		3.0	
	48.0	13.3	20.0		72.0	3.633		3.2	
65TP(L)28-5.5/2	35.0	9.7	31.0	2960	70.0	4.224	5.5	2.0	97
	42.5	11.8	29.0		73.0	4.601		2.1	
	50.0	13.9	28.0		74.0	5.155		2.3	
	55.0	15.3	26.0		73.0	5.338		2.8	
	60.0	16.7	24.0		72.0	5.450		3.2	
65TP(L)37-7.5/2	36.4	10.1	39.5	2960	68.0	5.762	7.5	2.0	108
	44.2	12.3	38.5		72.0	6.440		2.2	
	52.0	14.4	37.0		75.0	6.991		2.6	
	57.2	15.9	35.3		74.2	7.415		3.0	
	62.4	17.3	32.5		73.7	7.498		3.2	
65TP(L)36-11/2	49.0	13.6	42.0	2960	61.0	9.194	11	2.5	150
	59.5	16.5	40.0		64.0	10.134		3.2	
	70.0	19.4	36.0		65.0	10.565		3.8	
	77.0	21.4	33.0		64.0	10.819		4.5	
	84.0	23.3	30.0		63.0	10.900		5.3	
65TP(L)45-15/2	52.5	14.6	51.0	2960	62.0	11.768	15	2.6	159
	63.8	17.7	48.5		65.0	12.972		3.3	
	75.0	20.8	45.0		67.0	13.727		3.8	
	82.5	22.9	43.0		67.0	14.428		4.8	
	90.0	25.0	40.0		65.0	15.092		5.8	
65TP(L)52-18.5/2	56.0	15.6	60.0	2960	65.0	14.086	18.5	2.7	177
	68.0	18.9	56.0		68.0	15.260		3.5	
	80.0	22.2	52.0		68.0	16.671		4.7	
	88.0	24.4	50.0		67.6	17.737		5.6	
	96.0	26.7	45.0		63.0	18.686		6.7	
65TP(L)62-22/2	56.0	15.6	67.0	2960	64.0	15.975	22	2.7	218
	68.0	18.9	65.0		68.6	17.558		3.5	
	80.0	22.2	62.0		69.0	19.588		4.7	
	88.0	24.4	58.5		68.0	20.630		5.6	
	96.0	26.7	54.0		67.0	21.084		6.7	

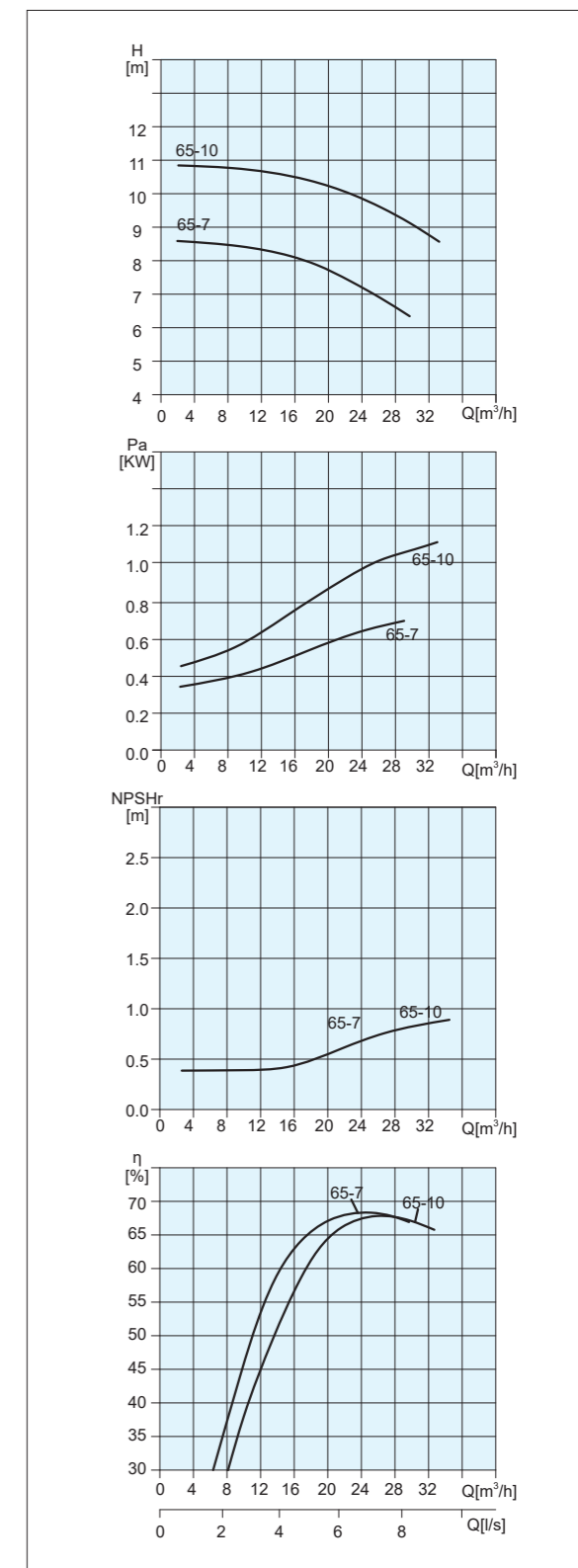
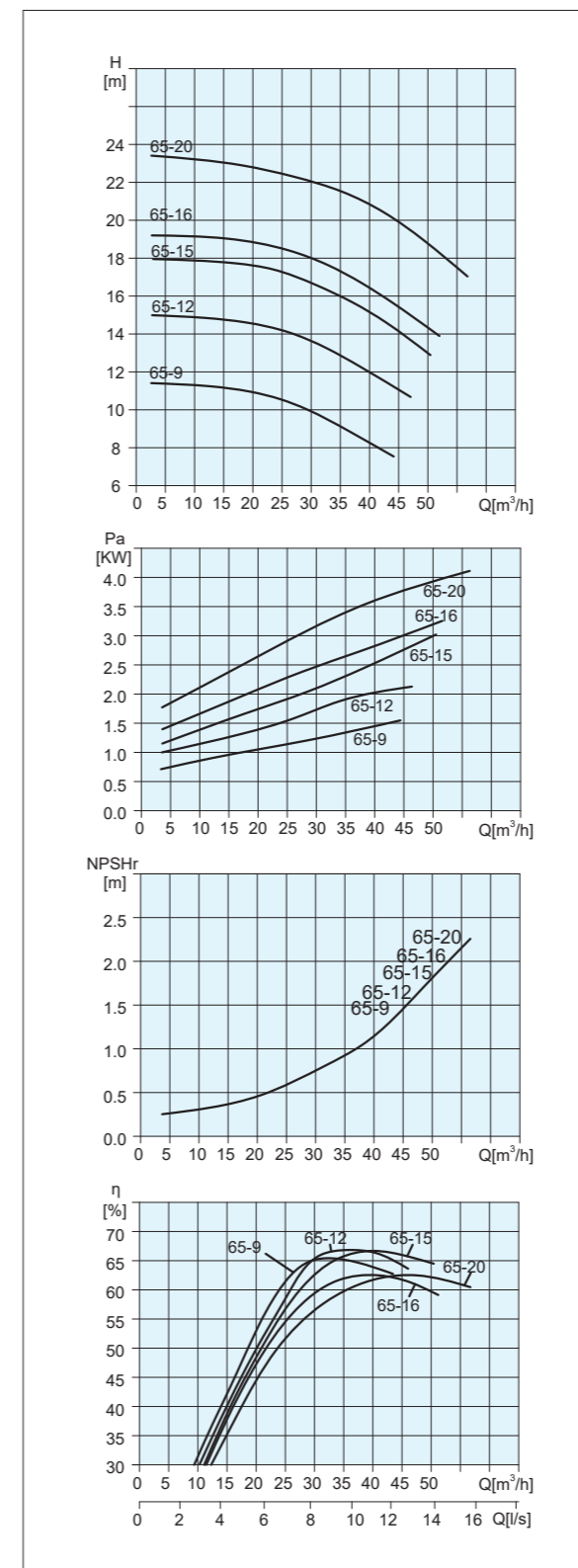
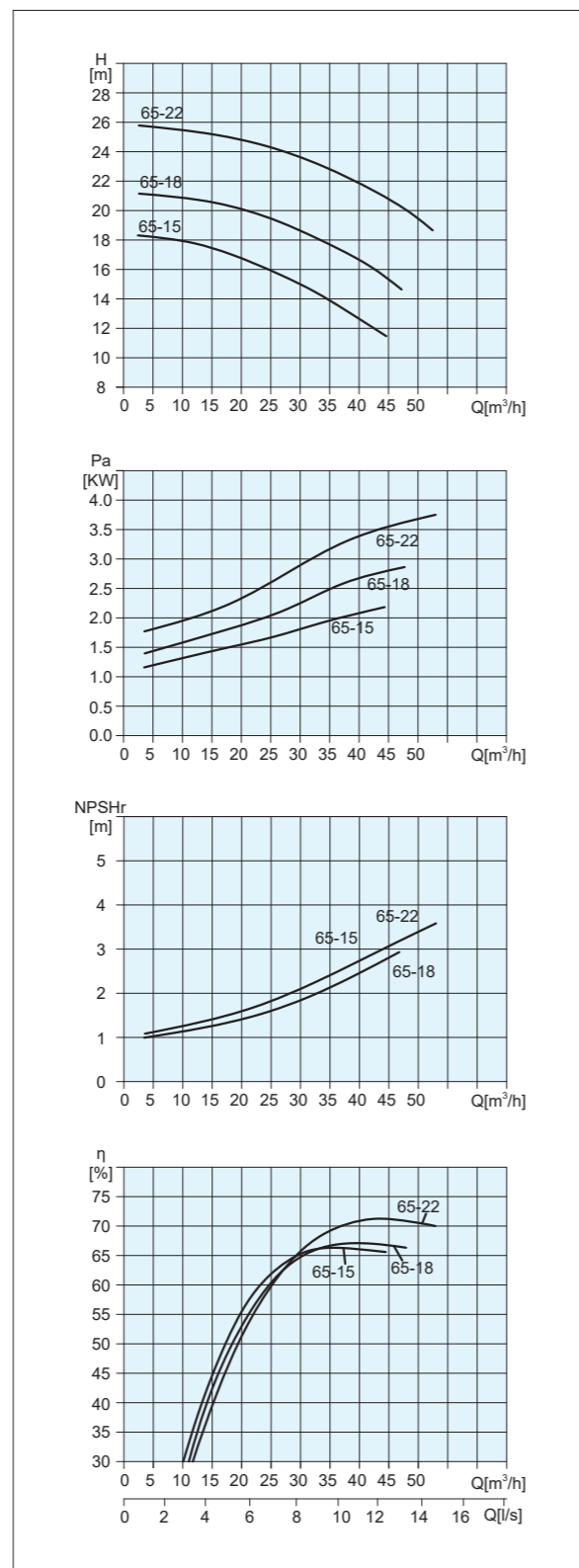
Parameters Table

Model	Flow		Head (m)	Speed (r/min)	Pump Eff. (%)	Shaft Power (kW)	Motor Power (kW)	NPSHR (m)	Weight (kg)
	(m³/h)	(L/s)							
65TP(L)76-30/2	59.5	16.5	82.7	2960	60.0	22.348	30	3.2	275
	72.3	20.1	81.0		63.0	25.331		4.1	
	85.0	23.6	76.0		64.5	27.292		5.3	
	93.5	26.0	73.0		66.0	28.181		6.5	
	102.0	28.3	68.0		64.0	29.532		7.6	
65TP(L)84-37/2	63.0	17.5	93.0	2960	59.0	27.061	37	3.5	298
	76.5	21.3	90.0		63.0	29.780		4.2	
	90.0	25.0	84.0		66.0	31.214		6.0	
	99.0	27.5	81.0		66.5	32.860		7.3	
	108.0	30.0	76.0		65.0	34.410		9.5	
65TP(L)7-0.75/4	17.5	4.9	7.8	1480	65.0	0.572	0.75	0.5	57
	21.3	5.9	7.3		67.0	0.631		0.6	
	25.0	6.9	7.0		69.0	0.691		0.7	
	27.5	7.6	6.5		68.5	0.711		0.8	
	30.0	8.3	6.0		67.0	0.732		0.8	
65TP(L)10-1.1/4	18.2	5.1	10.7	1480	63	0.842	1.1	0.5	60
	22.1	6.1	10.4		67	0.935		0.6	
	26.0	7.2	10.0		69	1.027		0.7	
	28.6	7.9	9.5		69	1.073		0.8	
	31.2	8.7	8.8		68	1.100		0.9	
65TP(L)9-1.5/4	26.3	7.3	10.6	1480	62.0	1.223	1.5	0.6	65
	31.9	8.9	9.9		64.0	1.345		0.8	
	36.0	10.0	9.0		66.0	1.338		1.1	
	39.6	11.0	8.5		63.0	1.456		1.1	
	43.2	12.0	7.8		61.3	1.498		1.5	
65TP(L)12-2.2/4	28.0	7.8	14.0	1480	65.0	1.643	2.2	0.7	72
	34.0	9.4	13.0		67.0	1.798		0.9	
	40.0	11.1	12.0		66.0	1.982		1.2	
	44.0	12.2	11.5		64.0	2.154		1.4	
	48.0	13.3	10.3		62.0	2.173		1.7	
65TP(L)15-3/4	29.4	8.2	16.3	1480	63.0	2.073	3	0.7	110
	35.7	9.9	15.8		66.0	2.329		0.9	
	42.0	11.7	15.0		67.0	2.562		1.2	
	46.2	12.8	14.1		64.0	2.774		1.4	
	50.4	14.0	13.0		62.0	2.880		1.7	
65TP(L)16-3/4	29.8	8.3	17.7	1480	60.0	2.392	3	0.8	110
	36.2	10.0	17.3		61.0	2.794		1.0	
	42.5	11.8	16.0		63.0	2.941		1.1	
	46.8	13.0	15.3		64.0	3.046		1.6	
	51.0	14.2	14.0		64.0	3.040		1.9	
65TP(L)20-4/4	30.8	8.6	22.3	1480	58.0	3.227	4	0.6	124
	37.4	10.4	21.5		62.0	3.534		1.1	
	44.0	12.2	20.0		65.0	3.689		1.5	
	48.4	13.4	19.2		65.5	3.866		1.8	
	52.8	14.7	18.0		64.5	4.015		2.0	

Characteristic curves



Characteristic curves



Parameters Table

Model	Flow		Head (m)	Speed (r/min)	Pump Eff. (%)	Shaft Power (kW)	Motor Power (kW)	NPSHR (m)	Weight (kg)
	(m³/h)	(L/s)							
80TP(L)15-3/2	35.0	9.7	17.3	2960	69.0	2.391	3	3.1	64
	42.5	11.8	16.3		73.0	2.586		3.4	
	50.0	13.9	15.0		74.0	2.762		3.7	
	55.0	15.3	13.9		74.0	2.815		3.8	
	60.0	16.7	13.0		72.0	2.952		4.0	
80TP(L)17-4/2	37.8	10.5	20.4	2960	65.0	3.233	4	3.2	81
	45.9	12.8	19.3		70.5	3.424		3.5	
	54.0	15.0	17.0		73.0	3.427		3.8	
	59.4	16.5	16.8		72.0	3.777		4.0	
	64.8	18.0	15.5		70.0	3.910		4.1	
80TP(L)21-5.5/2	46.2	12.8	24.0	2960	72.0	4.197	5.5	3.5	99
	56.1	15.6	22.8		75.5	4.617		3.9	
	66.0	18.3	21.0		76.6	4.931		4.2	
	72.6	20.2	19.3		74.3	5.139		4.7	
	79.2	22.0	17.7		71.6	5.335		5.2	
80TP(L)20-7.5/2	64.4	17.9	24.0	2960	70.0	6.017	7.5	3.8	115
	78.2	21.7	22.0		71.0	6.603		4.3	
	92.0	25.6	20.0		72.0	6.964		4.4	
	101.2	28.1	17.6		69.0	7.034		6.1	
	110.4	30.7	15.5		65.0	7.174		7.0	
80TP(L)27-11/2	70.0	19.4	31.8	2960	70.5	8.604	11	4.0	152
	85.0	23.6	29.7		73.5	9.360		4.8	
	100.0	27.8	27.0		75.0	9.810		6.0	
	110.0	30.6	24.8		74.0	10.046		7.0	
	120.0	33.3	22.3		69.5	10.492		8.4	
80TP(L)33-15/2	77.0	21.4	37.0	2960	71.5	10.858	15	4.2	161
	93.5	26.0	35.0		74.5	11.970		4.5	
	110.0	30.6	33.0		76.0	13.015		7.0	
	121.0	33.6	30.0		74.0	13.367		8.4	
	132.0	36.7	28.6		73.5	13.996		10.8	
80TP(L)37-18.5/2	80.5	22.4	43.0	2960	66.0	14.292	18.5	3.8	203
	92.0	25.6	40.0		70.0	14.326		4.2	
	115.0	31.9	37.0		71.0	16.331		6.5	
	126.5	35.1	35.0		70.0	17.236		7.3	
	138.0	38.3	31.0		66.0	17.663		9.5	
80TP(L)42-22/2	84.0	23.3	47.8	2960	62	17.647	22	3.9	230
	102.0	28.3	45.0		66	18.951		5.1	
	120.0	33.3	42.0		70	19.620		7.2	
	132.0	36.7	40.0		68	21.159		8.3	
	144.0	40.0	36.0		65	21.733		10.7	
80TP(L)57-30/2	87.5	24.3	60.8	2960	65.5	22.133	30	4.0	275
	106.3	29.5	58.4		68.0	24.877		5.3	
	125.0	34.7	57.0		72.0	26.966		7.3	
	137.5	38.2	53.3		71.0	28.128		9.2	
	150.0	41.7	48.0		67.0	29.284		12.0	
80TP(L)62-37/2	91.0	25.3	66.2	2960	68	24.141	37	4.2	298
	110.5	30.7	64.3		72	26.891		6.0	
	130.0	36.1	62.0		73	30.087		8.5	
	143.0	39.7	58.6		72	31.715		10.2	
	156.0	43.3	52.3		68	32.695		12.8	

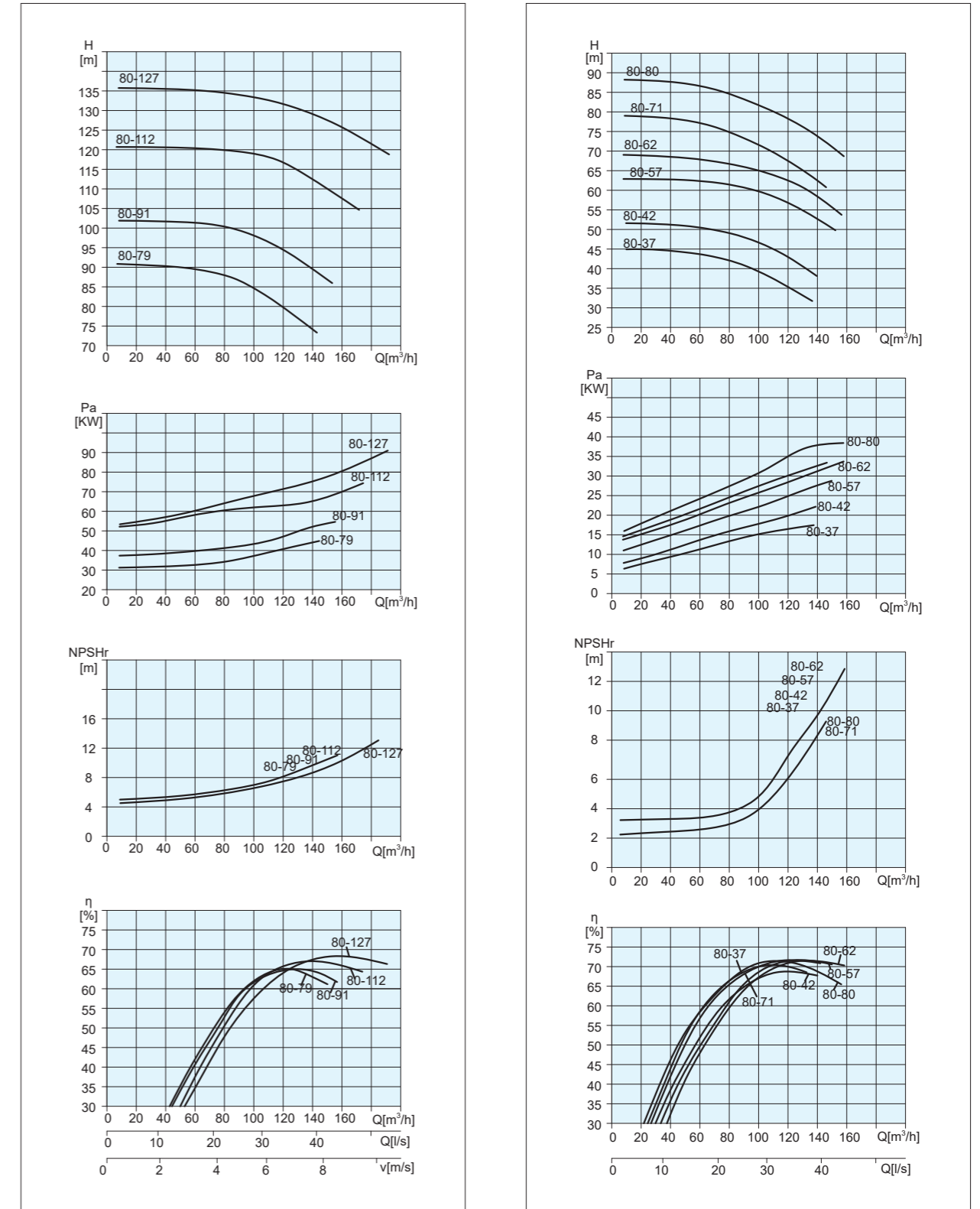
Parameters Table

Model	Flow		Head (m)	Speed (r/min)	Pump Eff. (%)	Shaft Power (kW)	Motor Power (kW)	NPSHR (m)	Weight (kg)
	(m³/h)	(L/s)							
80TP(L)71-30/2	70.0	19.4	76.5	2960	63.8	22.872	30	2.6	295
	85.0	23.6	74.3		69.0	24.942		3.3	
	100.0	27.8	71.0		71.0	27.250		4.1	
	110.0	30.6	68.5		72.0	28.518		5.0	
	120.0	33.3	67.4		73.4	30.027		6.0	
	77.0	21.4	86.0		65.0	27.761		2.9	
80TP(L)80-37/2	93.5	26.0	83.0	2960	69.0	30.648	37	3.8	320
	110.0	30.6	80.0		72.0	33.306		5.0	
	121.0	33.6	77.0		72.5	35.019		6.0	
	132.0	36.7	73.0		71.0	36.983		7.5	
	88	24.4	87		59.0	35.360		6.0	
	106	29.4	84		62.0	39.135		6.9	
80TP(L)79-45/2	125	34.7	79	2960	65.0	41.399	45	8.0	368
	138	38.3	74		63.8	43.617		8.8	
	150	41.7	67		62.0	44.171		9.7	
	92	25.6	99		59.0	42.067		6.2	
	112	31.1	96		62.5	46.879		7.3	
80TP(L)91-55/2	132	36.7	91	2960	65.6	49.897	55	8.6	512
	145	40.3	86		64.3	52.847		9.3	
	158	43.9	77		62.2	53.300		10.1	
	101	28.0	119		62.0	52.721		6.6	
	122	33.9	117		65.5	59.384		7.9	
80TP(L)112-75/2	144	40.0	112	2960	67.6	65.013	75	9.3	600
	158	43.9	109		66.3	70.784		10.1	
	173	48.0	103		65.2	74.387		11.4	
	109	30.3	134		62.0	64.196		7.0	
	133	36.9	132		65.5	73.038		8.6	
80TP(L)127-90/2	156	43.3	127	2960	68.6	78.699	90	10.0	649
	172	47.8	124		67.3	86.358		11.4	
	187	51.9	118		66.6	90.285		13.0	
	24.5	6.8	5.8		67.0	0.578		1.1	
	29.8	8.3	5.5		70.5	0.634		1.1	
80TP(L)5-0.75/4	35.0	9.7	5.0	1480	71.6	0.666	0.75	1.1	70
	38.5	10.7	4.6		69.3	0.696		1.1	
	42.0	11.7	4.2		66.5	0.723		1.2	
	31.5	8.8	7.0		65.0	0.924		0.8	
	38.3	10.6	6.5		68.0	0.998		0.9	
80TP(L)6-1.1/4	45.0	12.5	6.0	1480	70.0	1.051	1.1	1.2	70
	49.5	13.8	5.5		68.5	1.083		1.3	
	54.0	15.0	5.0		67.5	1.090		1.6	
	35.0	9.7	8.2		66	1.185		0.8	
	42.5	11.8	7.7		69	1.292		0.9	
80TP(L)7-1.5/4	50.0	13.9	7.0	1480	71	1.343	1.5	1.2	78
	55.0	15.3	6.5		69	1.412		1.3	
	60.0	16.7	5.9		67	1.440		1.6	
	38.5	10.7	9.5		66.0	1.510		0.8	
	46.8	13.0	9.0		69.0	1.662		1.1	
80TP(L)8-2.2/4	55.0	15.3	8.5	1480	72.0	1.769	2.2	1.3	85
	60.5	16.8	7.7		70.0	1.813		1.6	
	66.0	18.3	7.4		68.0	1.957		1.8	

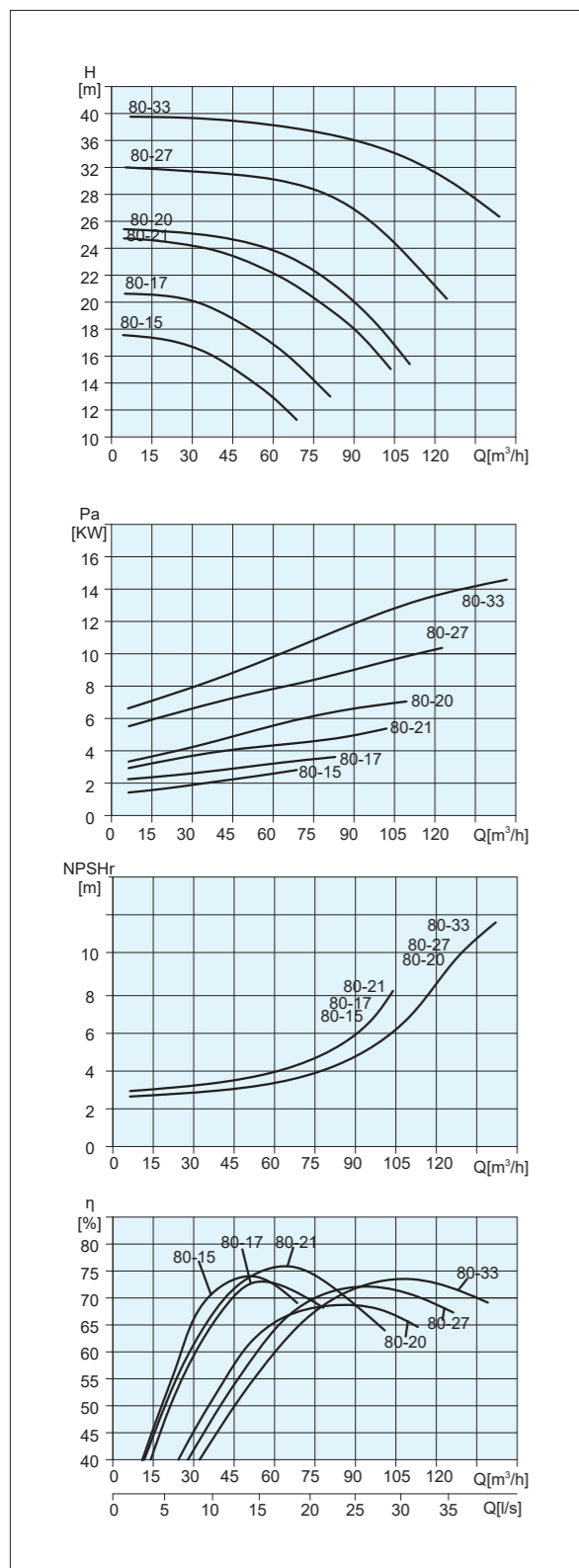
Parameters Table

Model	Flow		Head (m)	Speed (r/min)	Pump Eff. (%)	Shaft Power (kW)	Motor Power (kW)	NPSHR (m)	Weight (kg)
	(m³/h)	(L/s)							
80TP(L)9-2.2/4	40.3	11.2	10.5	1480	62.0	1.858	2.2	0.7	96
	46.0	12.8	9.8		64.0	1.910		1.0	
	57.5	16.0	9.0		68.0	2.074		1.3	
	63.3	17.6	8.5		67.0	2.187		1.6	
	69.0	19.2	7.5		63.0	2.238		2.0	
80TP(L)11-3/4	42.0	11.7	12.4	1480	63.0	2.253	3	0.8	107
	51.0	14.2	11.8		65.0	2.512		1.1	
	60.0	16.7	11.0		69.0	2.607		1.5	
	66.0	18.3	10.5		68.0	2.777		1.8	
	72.0	20.0	9.5		64.0	2.912		2.2	
80TP(L)15-4/4	43.4	12.1	15.8	1480	64	2.920	4	1.0	125
	52.7	14.6	15.4		66	3.351		1.3	
	62.0	17.2	15.0		70	3.620		1.6	
	68.2	18.9	14.3		69	3.852		2.1	
	74.4	20.7	13.0		66	3.993		2.5	
80TP(L)14-3/4	35.0	9.7	15.2	1480	63.0	2.301	3	1.6	127
	42.5	11.8	14.6		67.5	2.505		1.7	
	50.0	13.9	14.0		69.0	2.764		1.8	
	55.0	15.3	13.4		69.5	2.890		1.8	
	60.0	16.7	12.9		70.0	3.013		2.0	
80TP(L)17-4/4	38.5	10.7	18.3	1480	64.5	2.977	4	1.6	145
	47.0	13.1	17.8		68.3	3.338		1.7	
	55.0	15.3	17.0		70.5	3.614		1.8	
	60.5	16.8	16.3		70.0	3.839		1.9	
	66.0	18.3	15.6		69.6	4.031		2.1	
80TP(L)21-5.5/4	42.0	11.7	23.0	1480	66.6	3.952	5.5	1.7	197
	51.0	14.2	22.0		69.6	4.393		1.8	
	60.0	16.7	21.0		71.0	4.836		2.1	
	66.0	18.3	20.0		69.7	5.161		2.3	
	72.0	20.0	19.0		69.2	5.387		2.7	
80TP(L)19-5.5/4	45.5	12.6	21.0	1480	58.2	4.474	5.5	3.0	217
	55.3	15.4	19.7		61.6	4.819		3.9	
	65.0	18.1	19.0		62.7	5.367		4.5	
	71.5	19.9	17.7		63.0	5.474		5.2	
	78.0	21.7	16.2		62.8	5.483		6.0	
80TP(L)23-7.5/4	50.4	14.0	25.5	1480	59.4	5.896	7.5	3.2	230
	61.0	16.9	24.2		62.6	6.426		4.1	
	72.0	20.0	23.0		63.7	7.084		4.7	
	79.0	21.9	22.0		64.0	7.400		5.4	
	86.4	24.0	20.8		65.0	7.534		6.2	
80TP(L)30-11/4	54.5	15.1	32.0	1480	58.4	8.138	11	3.5	270
	66.5	18.5	31.4		60.0	9.483		4.3	
	78.0	21.7	30.0		64.0	9.963		5.0	
	86.0	23.9	29.2		64.8	10.560		5.7	
	93.5	26.0	27.7		65.0	10.858		6.5	

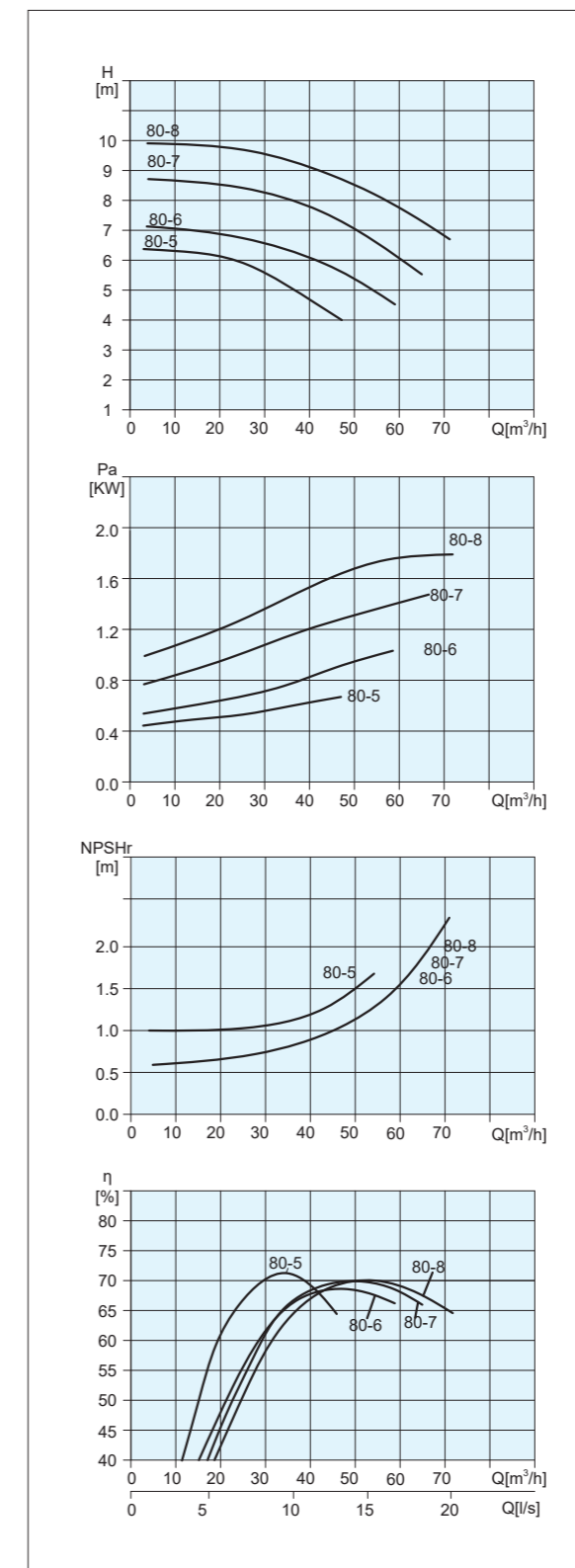
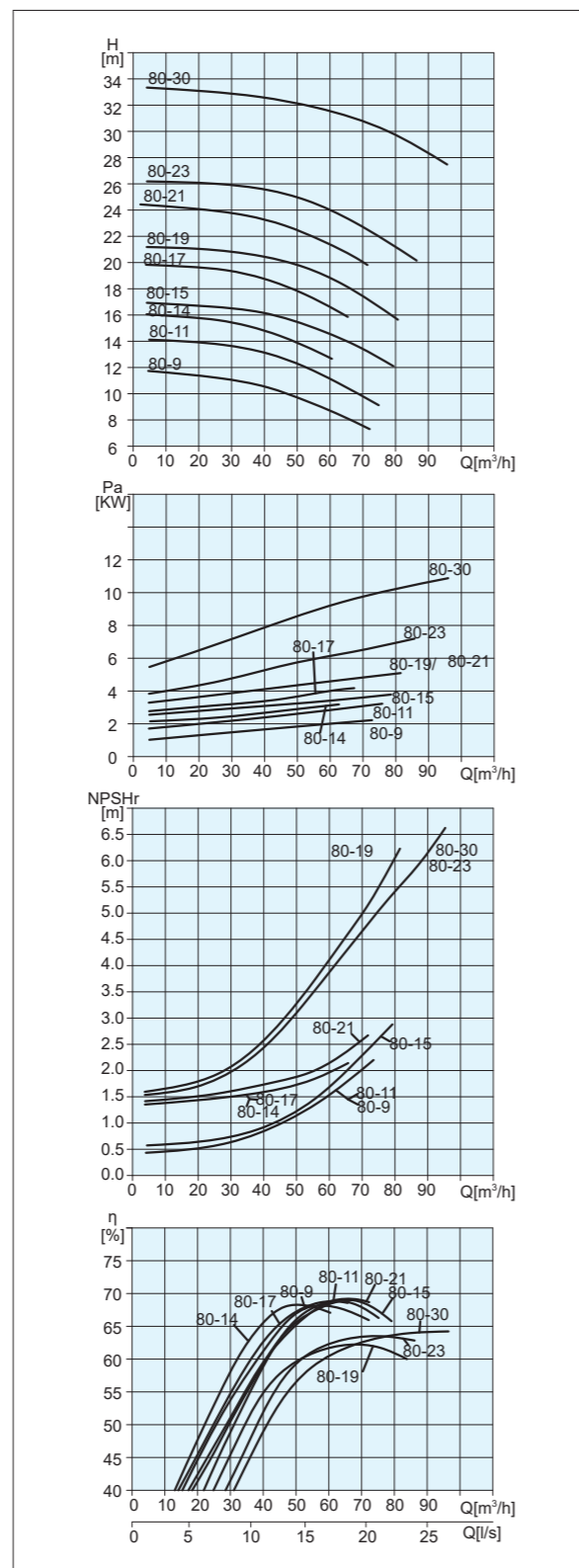
Characteristic curves



Characteristic curves



Characteristic curves



Parameters Table

Model	Flow		Head (m)	Speed (r/min)	Pump Eff. (%)	Shaft Power (kW)	Motor Power (kW)	NPSHR (m)	Weight (kg)
	(m³/h)	(L/s)							
100TP(L)15-4/2	50	14.0	16.5	2960	66.0	3.434	4	4.0	92
	61	17.0	15.8		72.5	3.634		4.0	
	72	20.0	15.0		76.5	3.847		4.0	
	79	22.0	13.8		75.5	3.945		4.0	
	86	24.0	12.7		74.6	4.008		4.2	
100TP(L)18-5.5/2	56	15.6	20	2960	70.0	4.360	5.5	4.0	108
	68	18.9	19.2		76.0	4.681		4.0	
	80	22.2	18.0		78.0	5.031		4.0	
	88	24.4	16.1		77.0	5.014		4.3	
	96	26.7	15		75.0	5.232		4.4	
100TP(L)20-7.5/2	70	19.4	23.0	2960	74.0	5.929	7.5	4.0	123
	85	23.6	21.5		77.0	6.467		4.3	
	100	27.8	20.0		78.0	6.987		4.5	
	110	30.6	17.8		76.0	7.020		4.8	
	120	33.3	15.6		73.0	6.988		5.3	
100TP(L)21-11/2	98	27.2	24.2	2960	68.0	9.504	11	5.0	168
	119	33.1	23.0		76.0	9.814		5.5	
	140	38.9	21.0		77.0	10.405		6.0	
	154	42.8	19.3		76.0	10.657		6.5	
	168	46.7	17.1		72.0	10.873		7.0	
100TP(L)27-15/2	105	29.2	31.3	2960	72.0	12.438	15	5.0	180
	128	35.6	30.1		77.0	13.635		5.5	
	150	41.7	27.0		78.6	14.041		6.0	
	165	45.8	25.1		77.0	14.657		6.8	
	180	50.0	22.4		73.7	14.908		8.5	
100TP(L)30-18.5/2	112	31.1	36.0	2960	73.6	14.928	18.5	5.0	198
	136	37.8	34.0		77.2	16.322		5.8	
	160	44.4	30.0		78.6	16.641		6.6	
	176	48.9	28.0		77.0	17.440		7.2	
	192	53.3	25.0		73.0	17.918		9.5	
100TP(L)32-22/2	119	33.1	37.0	2960	74.0	16.214	22	5.3	222
	145	40.1	34.8		77.0	17.796		6.1	
	170	47.2	32.0		79.0	18.765		7.0	
	187	51.9	28.8		76.0	19.310		9.4	
	204	56.7	25.0		72.0	19.302		10.0	
100TP(L)39-22/2	105	29.2	43.5	2960	69.0	18.038	22	6.0	250
	128	35.6	42.0		76.0	19.276		7.4	
	150	41.7	39.0		76.0	20.975		10.0	
	165	45.8	35.5		75.0	21.282		12.0	
	180	50.0	32.6		73.0	21.905		14.0	
100TP(L)45-30/2	112	31.1	51.0	2960	72.0	21.618	30	6.2	299
	136	37.8	49.0		77.0	23.584		8.0	
	160	44.4	45.0		77.0	25.481		11.0	
	176	48.9	42.0		76.0	26.504		13.2	
	192	53.3	40.0		72.0	29.067		15.0	
100TP(L)53-37/2	119	33.1	58.0	2960	72.0	26.122	37	6.5	320
	145	40.1	57.0		77.0	29.149		8.8	
	170	47.2	53.0		77.0	31.886		13.0	
	187	51.9	50.0		76.0	33.525		14.8	
	204	56.7	47.0		72.0	36.288		18.0	

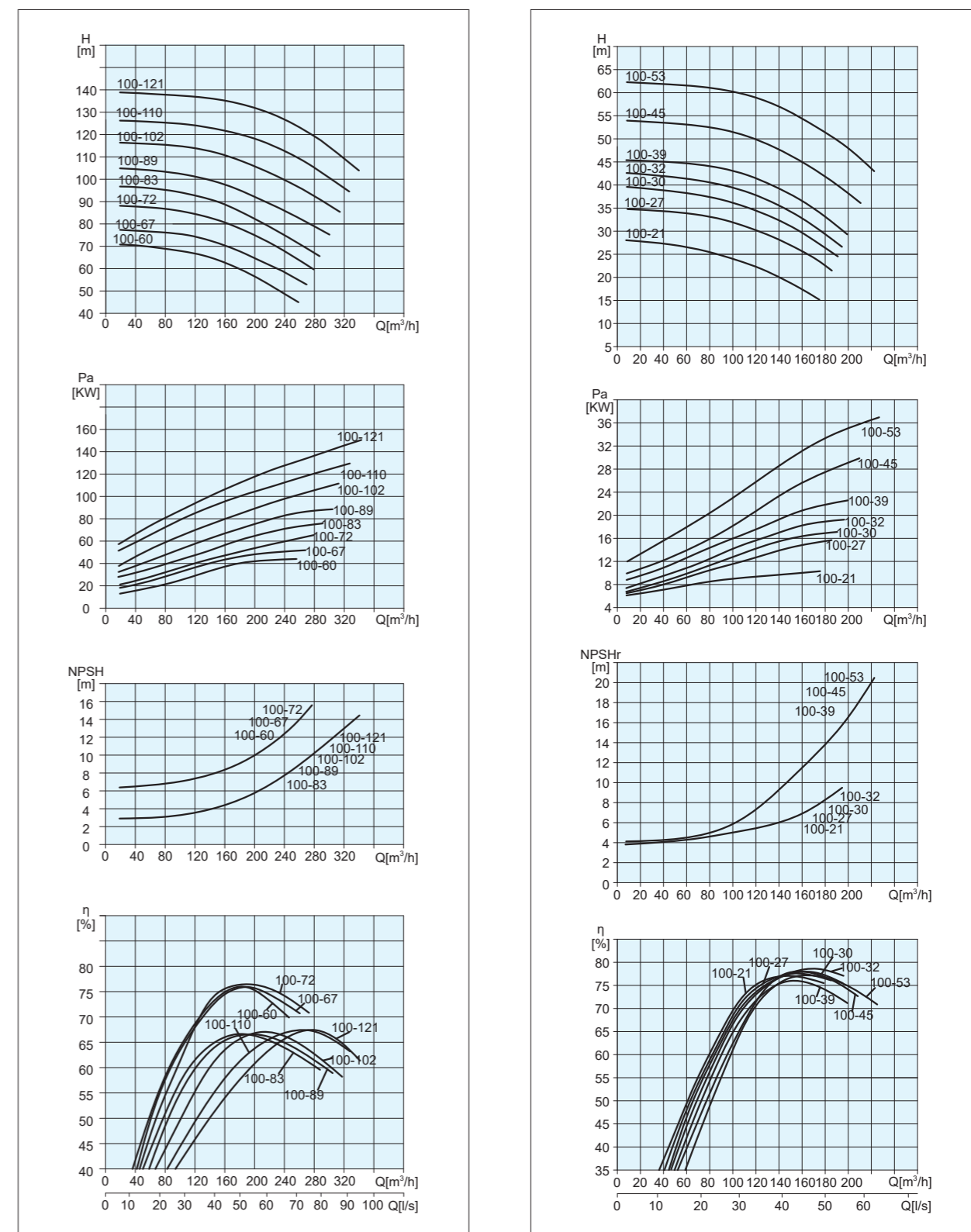
Parameters Table

Model	Flow		Head (m)	Speed (r/min)	Pump Eff. (%)	Shaft Power (kW)	Motor Power (kW)	NPSHR (m)	Weight (kg)
	(m³/h)	(L/s)							
100TP(L)60-45/2	137	37.9	67	2960	71	35.101	45	7.2	390
	166	46.1	63		74	38.587		8.7	
	180	50.0	60		75	39.240		9.5	
	196	54.4	57		74	41.140		10.2	
	216	60.0	53		71	43.938		10.8	
	140	38.9	75		72	39.528		7.2	
100TP(L)67-55/2	170	47.2	71	2960	73	44.802	55	8.7	470
	200	55.6	67		76	48.261		10.1	
	220	61.1	64		75	51.477		10.8	
	240	66.7	60		72	54.863		11.3	
	154	42.8	81		75	45.322		7.8	
100TP(L)72-75/2	187	51.9	76	2960	76	51.092	75	9.8	600
	220	61.1	72		77	56.135		11.0	
	242	67.2	67		76	58.309		11.5	
	264	73.3	63		72	62.948		12.8	
	140	38.9	93		63	56.317		4.2	
	170	47.2	88		67	60.845		5.6	
100TP(L)83-75/2	200	55.6	83	2960	67	67.515	75	6.0	680
	220	61.1	78		65	71.940		6.9	
	240	66.7	73		63	75.781		8.0	
	154	42.8	100		64	65.833		4.8	
	187	51.9	95		58	83.201		5.9	
100TP(L)89-90/2	220	61.1	89	2960	68	78.376	90	6.9	910
	242	67.2	84		67	82.579		8.1	
	264	73.3	80		64	89.925		9.1	
	168	46.7	118		64	84.407		5.5	
	204	56.7	108		68	87.963		6.1	
	240	66.7	102		69	96.394		8.0	
100TP(L)102-110/2	264	73.3	97	2960	67	104.719	110	9.1	970
	288	80.0	90		64	109.749		10.3	
	182	50.6	124		62	99.350		5.8	
	221	61.4	118		67	105.704		7.0	
	260	72.2	110		70	111.741		9.0	
	284	78.9	105		70	116.920		10.2	
100TP(L)110-132/2	312	86.7	99	2960	66	127.530	132	12.2	1050
	196	54.4	135		64	112.912		6.0	
	238	66.1	129		67	124.967		7.9	
	280	77.8	121		71	129.603		10.0	
	308	85.6	112		67	140.677		12.0	
	336	93.3	104		63	151.292		14.0	
100TP(L)121-160/2	315	8.8	5.4	1480	69.0	0.672	0.75	1.5	92
	38.3	10.6	5.0		73.0	0.714		1.5	
	45.0	12.5	4.5		75.0	0.736		1.8	
	49.5	13.8	4.1		74.0	0.747		2.5	
	54.0	15.0	3.7		73.0	0.746		3.3	
	38.5	10.7	5.8		67.0	0.908		1.5	
100TP(L)4-0.75/4	46.8	13.0	5.5	1480	71.0	0.987	1.1	1.6	95
	55.0	15.3	5.0		74.0	1.013		1.8	
	60.5	16.8	4.6		74.0	1.025		1.8	
	66.0	18.3	4.0		72.0	0.999		1.8	

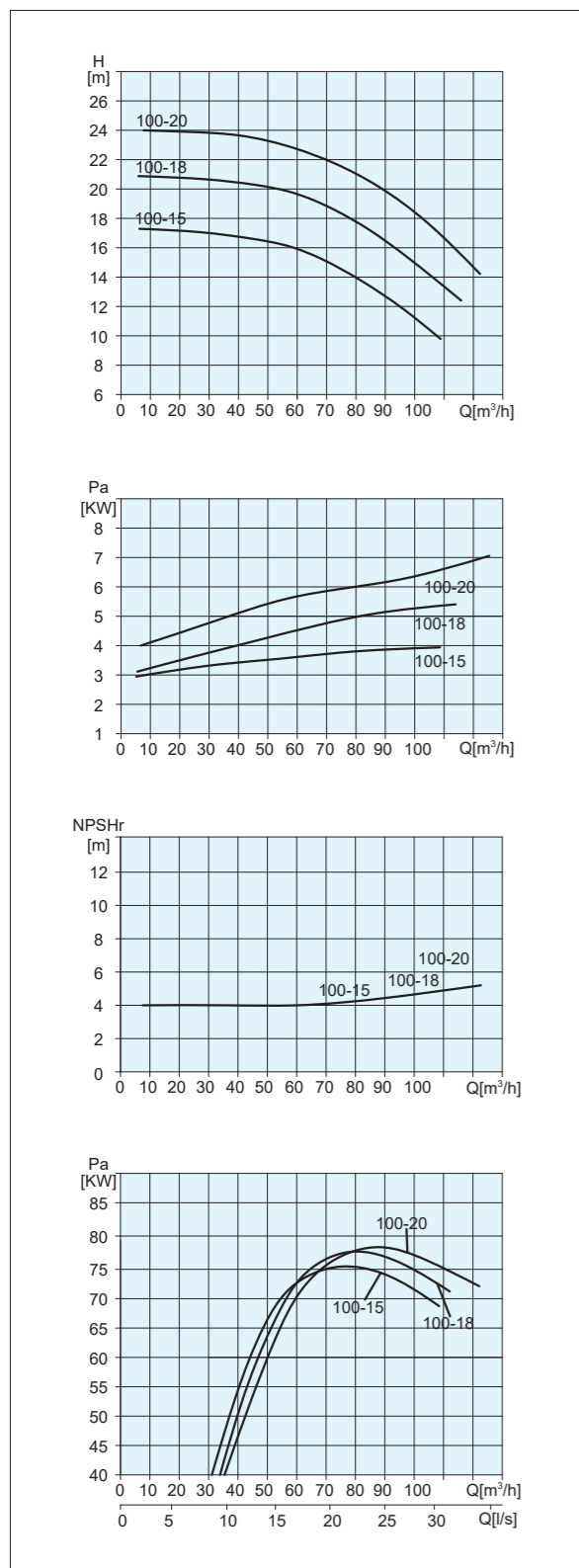
Parameters Table

Model	Flow		Head (m)	Speed (r/min)	Pump Eff. (%)	Shaft Power (kW)	Motor Power (kW)	NPSHR (m)	Weight (kg)
	(m³/h)	(L/s)							
100TP(L)6-1.5/4	46.2	12.8	6.9	1480	68.0	1.277	1.5	1.7	100
	56.1	15.6	6.6		72.0	1.401		1.8	
	66.0	18.3	6.0		75.0	1.439		1.9	
	72.6	20.2	5.6		75.0	1.477		2.1	
	79.2	22.0	5.0		73.0	1.478		2.1	
100TP(L)7-2.2/4	59.5	16.5	8.5	1480	71.0	1.941	2.2	1.8	128
	72.3	20.1	7.9		75.0	2.074		2.0	
	85.0	23.6	7.0		76.0	2.133		2.2	
	93.5	26.0	6.2		73.0	2.164		2.6	
	102.0	28.3	5.4		69.0	2.175		3.3	
100TP(L)8-2.2/4	52.5	14.6	9.2	1480	70.0	1.880	2.2	1.5	142
	63.8	17.7	8.7		73.0	2.070		1.7	
	75.0	20.8	8.0		75.0	2.180		2.3	
	82.5	22.9	7.2		74.0	2.187		2.9	
	90.0	25.0	6.4		72.0	2.180		4.0	
100TP(L)10-3/4	52.5	14.6	11.1	1480	70.0	2.269	3	1.5	147
	63.8	17.7	10.7		73.0	2.546		1.7	
	75.0	20.8	10.0		75.0	2.725		2.3	
	82.5	22.9	9.1		74.0	2.765		2.9	
	90.0	25.0	8.3		72.0	2.827		4.0	
100TP(L)12-4/4	56.0	15.6	13.5	1480	70.0	2.943	4	1.6	158
	68.0	18.9	13.0		73.0	3.300		1.8	
	80.0	22.2	12.0		75.0	3.488		2.7	
	88.0	24.4	11.3		74.0	3.662		3.8	
	96.0	26.7	10.8		72.0	3.924		4.8	
100TP(L)15-5.5/4	68.3	19.0	16.6	1480	69.0	4.474	5.5	1.9	188
	82.9	23.0	15.8		71.0	5.027		2.1	
	90.0	25.0	15.0		72.0	5.109		2.3	
	98.0	27.2	14.1		72.0	5.230		2.4	
	108.0	30.0	13.5		69.0	5.758		2.9	
100TP(L)18-7.5/4	70.0	19.4	20.2	1480	67.0	5.751	7.5	2.0	200
	85.0	23.6	19.3		72.0	6.209		2.2	
	100.0	27.8	18.0		73.0	6.719		2.5	
	110.0	30.6	16.9		72.0	7.036		3.0	
	120.0	33.3	15.8		69.0	7.488		3.5	
100TP(L)22-11/4	75.6	21.0	24.9	1480	61.0	8.409	11	3.0	310
	91.8	25.5	23.5		65.0	9.044		3.5	
	108.0	30.0	22.0		65.0	9.961		4.2	
	118.8	33.0	20.8		64.0	10.521		4.7	
	129.6	36.0	19.8		63.0	11.099		5.3	
100TP(L)26-15/4	84.0	23.3	29.4	1480	60.0	11.216	15	3.2	326
	102.0	28.3	28.0		63.0	12.353		3.8	
	120.0	33.3	26.0		65.0	13.080		4.6	
	132.0	36.7	24.4		63.0	13.931		5.3	
	144.0	40.0	22.4		61.0	14.409		6.0	
100TP(L)30-18.5/4	91.0	25.3	33.6	1480	60.0	13.866	18.5	3.7	362
	110.5	30.7	32.6		63.0	15.581		4.5	
	130.0	36.1	30.0		65.0	16.336		5.5	
	143.0	39.7	28.2		63.0	17.443		5.8	
	156.0	43.3	26.1		60.0	18.492		7.3	
100TP(L)31-22/4	98.0	27.2	36.0	1480	62.0	15.506	22	3.7	376
	119.0	33.1	33.4		66.0	16.410		4.5	
	140.0	38.9	31.0		65.0	18.195		5.5	
	154.0	42.8	28.8		63.0	19.184		5.8	
	168.0	46.7	26.7		59.0	20.717		7.3	

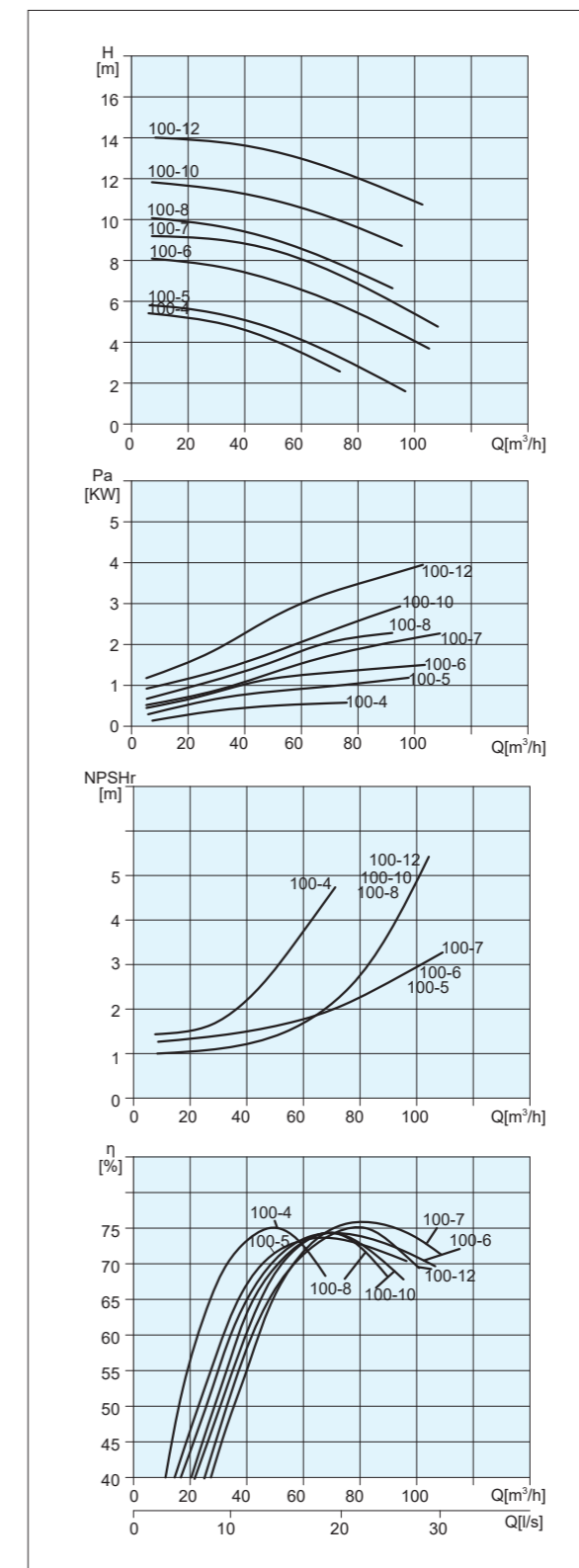
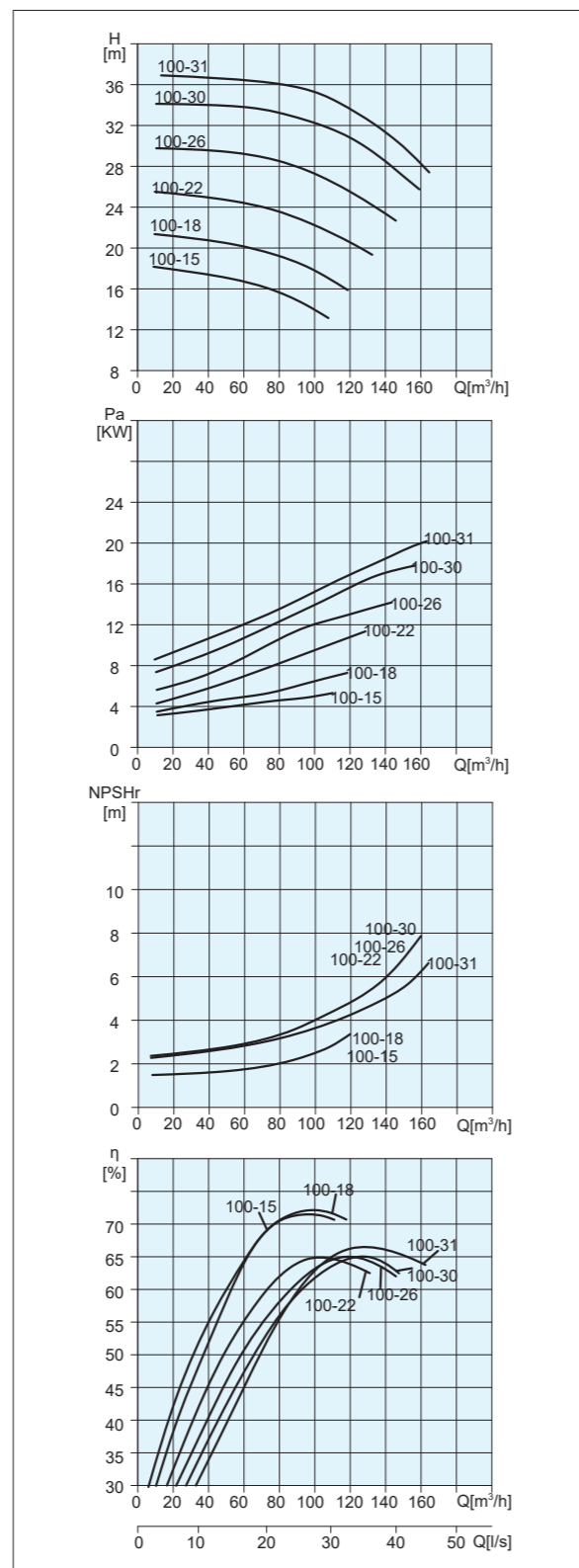
Characteristic curves



Characteristic curves



Characteristic curves



Parameters Table

Model	Flow		Head (m)	Speed (r/min)	Pump Eff. (%)	Shaft Power (kW)	Motor Power (kW)	NPSHR (m)	Weight (kg)
	(m³/h)	(L/s)							
125TP(L)26-22/2	154	42.8	29.9	2960	70.0	18.452	22	10.2	262
	187	51.9	28.3		75.0	19.488		10.5	
	220	61.1	26.0		76.0	20.509		10.9	
	242	67.2	23.6		75.0	20.751		11.2	
	264	73.3	21.6		73.0	21.286		11.5	
125TP(L)33-30/2	161	44.7	37.1	2960	70.0	23.252	30	10.0	314
	196	54.4	35.8		75.0	25.494		10.3	
	230	63.9	33.0		77.0	26.861		11.0	
	253	70.3	30.3		76.0	27.486		11.5	
125TP(L)40-37/2	276	76.7	27.3	2960	71.0	28.919	37	12.0	337
	168	46.7	44.0		70.0	28.776		10.7	
	204	56.7	43.0		75.7	31.577		11.1	
	240	66.7	40.0		78.0	33.538		11.5	
125TP(L)46-45/2	264	73.3	37.0	2960	77.0	34.569	45	12.0	440
	288	80.0	34.0		72.0	37.060		12.5	
	175	48.6	53.1		70.0	36.174		10.0	
	213	59.0	49.7		73.0	39.424		11.0	
	250	69.4	46.0		76.0	41.234		12.0	
125TP50-55/2	275	76.4	42.9	2960	74.0	43.443	55	13.0	520
	300	83.3	38.9		71.0	44.790		15.0	
	182	50.6	56.8		70	40.2		10.0	
	221	61.4	53.4		73	44.0		11.0	
125TP(L)53-55/2	260	72.2	50.0	2960	76	46.6	55	12.7	572
	286	79.4	46.3		74	48.7		13.8	
	312	86.7	42		72	49.6		15.6	
	189	52.5	62.0		71.0	44.974		5.6	
	230	63.9	59.0		73.0	50.655		7.0	
125TP(L)60-75/2	270	75.0	53.0	2960	75.0	51.993	75	9.0	652
	297	82.5	50.0		74.0	54.684		9.9	
	324	90.0	45.0		72.0	55.181		12.0	
	210	58.3	65.9		73.0	51.659		6.0	
125TP(L)70-90/2	255	70.8	64.0	2960	75.0	59.296	90	8.0	780
	300	83.3	60.0		76.0	64.539		10.0	
	330	91.7	56.8		74.0	69.024		12.7	
	360	100.0	52.4		71.0	72.401		15.5	
125TP(L)77-110/2	231	64.2	76.9	2960	75.0	64.542	110	7.0	990
	281	77.9	74.3		76.0	74.726		9.0	
	330	91.7	70.0		77.0	81.750		12.0	
	363	100.8	63.7		76.0	82.908		15.0	
	396	110.0	60.0		74.0	87.495		18.0	
125TP(L)97-132/2	252	70.0	85.6	2960	75.0	78.375	132	8.0	1060
	306	85.0	82.4		77.0	89.233		11.0	
	360	100.0	77.0		78.0	96.842		14.0	
	396	110.0	71.8		76.0	101.947		17.5	
	432	120.0	66.3		73.0	106.916		21.0	
125TP(L)108-160/2	224	62.2	104	2960	72.0	93.445	160	6.0	1140
	272	75.6	102		75.0	106.169		7.4	
	320	88.9	97		75.0	113.127		11.5	
	352	97.8	93		74.0	120.937		13.0	
	384	106.7	89		72.0	126.858		15.6	
125TP(L)108-160/2	252	70.0	118	2960	73.0	111.283	160	7.2	1140
	306	85.0	114		76.0	124.529		10.2	
	360	100.0	108		76.0	139.534		13.2	
	396	110.0	103		75.0	148.053		16.2	
	432	120.0	96		73.0	154.487		17.6	

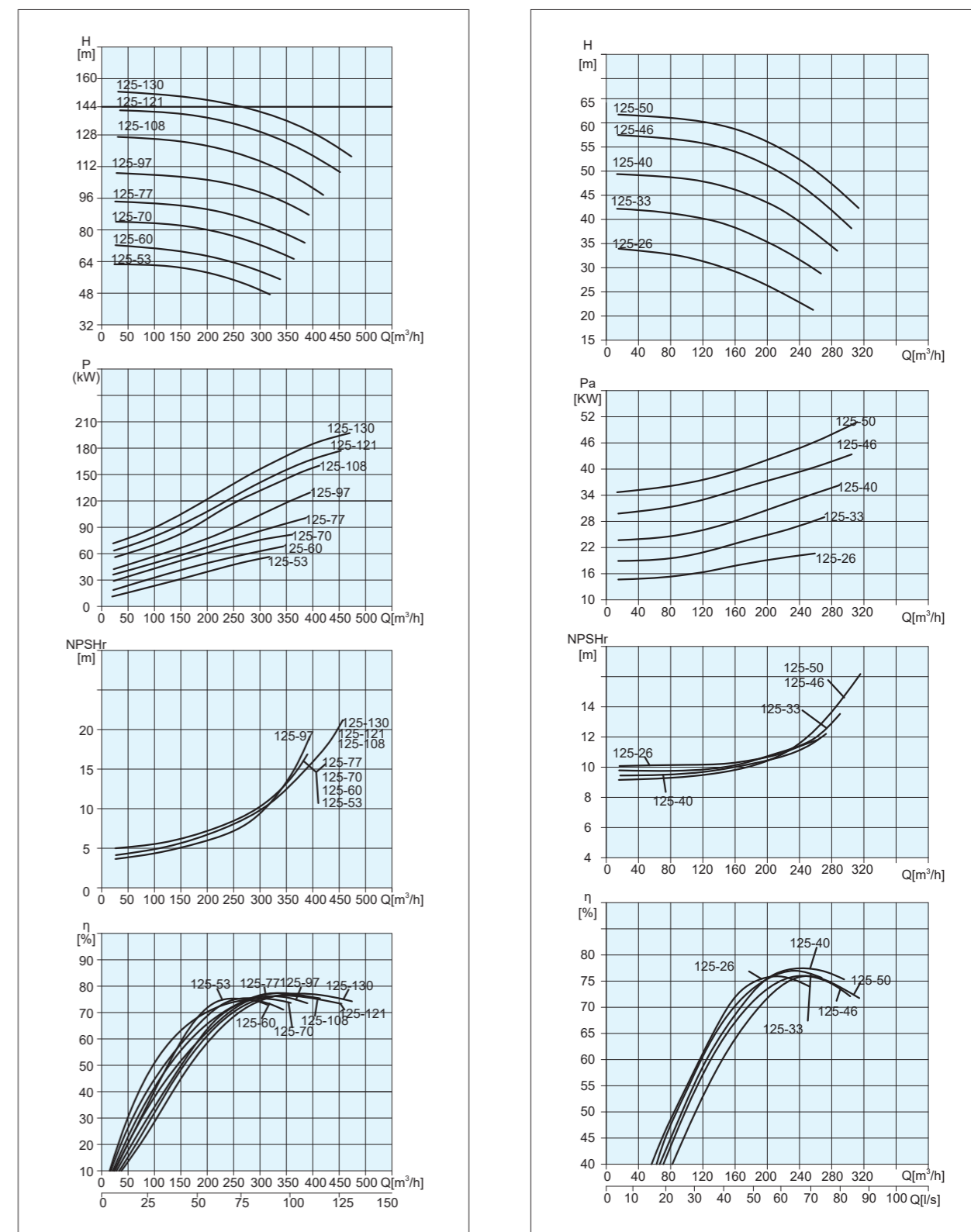
Parameters Table

Model	Flow		Head (m)	Speed (r/min)	Pump Eff. (%)	Shaft Power (kW)	Motor Power (kW)	NPSHR (m)	Weight (kg)
	(m³/h)	(L/s)							
125TP(L)121-185/2	270	75.0	134	2960	73.5	133.836	185	7.4	1192
	327	90.8	129		76.5	149.794		11.7	
	385	106.9	121		76.8	165.838		15.7	
	424	117.8	115		75.5	175.223		18.1	
	462	128.3	107		73.5	182.933		21.2	
	280	77.8	144		74.0	148.476		7.5	
125TP(L)130-200/2	340	94.4	138	2960	77.0	166.048	200	12.8	1222
	400	111.1	130		78.0	181.667		16.6	
	440	122.2	122		78.2	187.056		20	
	480	133.3	114		75.8	196.718		22.4	
125TP(L)6-2.2/4	70	19.4	7.1	1480	67.8	1.998	2.2	2.3	123
	85	23.6	6.5		72.7	2.071		2.7	
	100	27.8	6.0		74.8	2.186		3.2	
	110	30.6	5.5		73.6	2.240		3.6	
	120	33.3	4.9		72.5	2.210		4.0	
125TP(L)7-3/4	76	21.0	8.0	1480	68.0	2.424	3	2.4	133
	92	25.5	7.7		73.0	2.639		2.8	
	108	30.0	7.0		75.0	2.747		3.4	
	119	33.0	6.4		74.0	2.800		3.8	
125TP(L)9-4/4	130	36.0	5.8	1480	72.0	2.845	4	4.2	148
	77	21.4	10.0		68.6	3.059		2.5	
	94	26.0	9.6		72.6	3.369		3.0	
	110	30.6	9.0		75.0	3.597		3.6	
	121	33.6	8.4		74.8	3.703		4.0	
125TP(L)11-5.5/4	132	36.7	8.2	1480	73.6	4.008	5.5	4.6	192
	88	24.3	12.7		69.0	4.397		2.0	
	106	29.5	11.9		73.0	4.720		2.2	
	125	34.7	11.0		74.8	4.986		2.4	
125TP(L)12-7.5/4	138	38.2	10.2	1480	74.0	5.165	7.5	2.6	204
	150	41.7	9.4		72.7	5.285		2.8	
	91	25.3	13.8		69.0	4.960		2.0	
	111	30.8	13.0		73.0	5.387		2.2	
	130	36.1	12.0		75.0	5.668		2.4	
125TP(L)14-7.5/4	143	39.7	11.0	1480	74.0	5.792	7.5	2.6	230
	156	43.3	10.0		72.0	5.904		2.8	
	100	27.8	16.0		67.3	6.478		1.8	
	121	33.6	15.2		71.7	6.990		2.0	
	143	39.6	14.0		73.1	7.437		2.3	
	157	43.6	12.7		72.6	7.484		2.5	
125TP(L)17-11/4	171	47.5	11.5	1480	71.8	7.463	11	2.9	265
	109	30.1	18.3		67.8	7.980		1.8	
	132	36.7	18.1		72.0	9.042		2.3	
	155	43.1	17.0		73.3	9.796		2.7	
	171	47.4	16.2		72.8	10.339		3.1	
125TP(L)20-15/4	186	51.7	15.0	1480	72.0	10.559	15	3.6	283
	119	33.1	22.4		70.5	10.303		1.8	
	145	40.1	21.4		74.0	11.387		2.4	
	170	47.2	20.0		75.4	12.288		3.0	
	187	51.9	19.0		75.0	12.909		3.5	
	204	56.7	17.5		72.5	13.418		4.0	

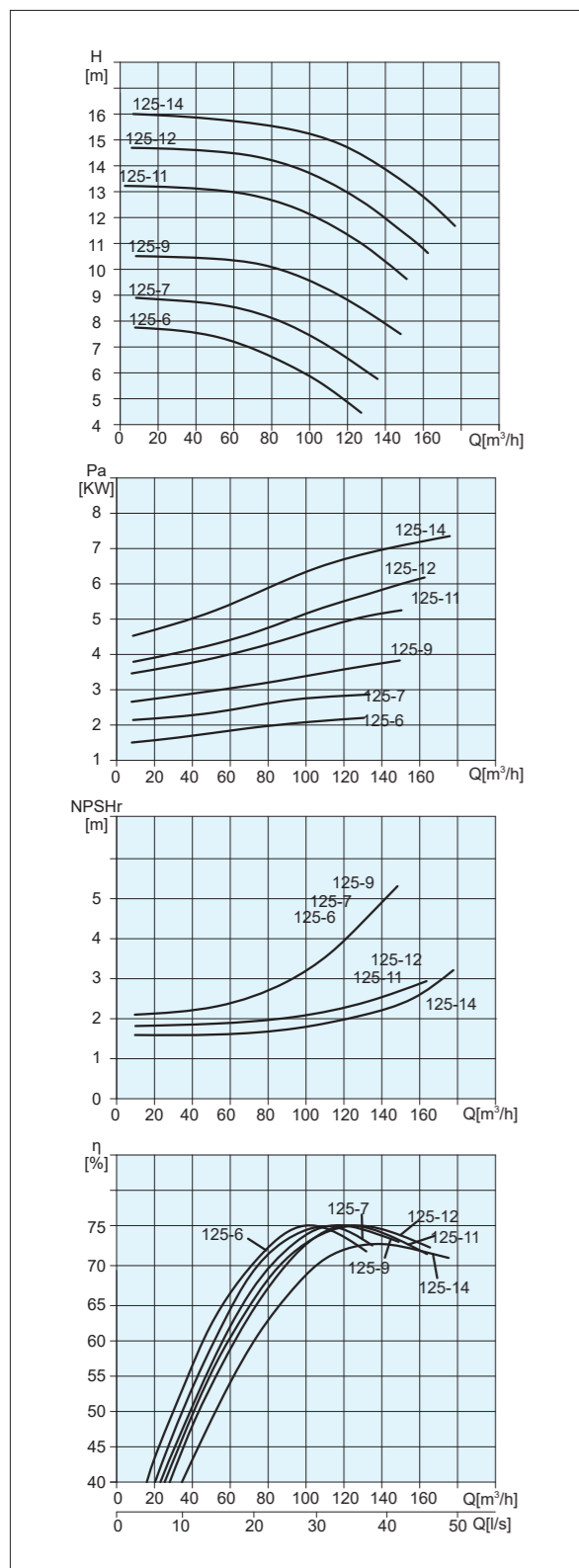
Parameters Table

Model	Flow		Head (m)	Speed (r/min)	Pump Eff. (%)	Shaft Power (kW)	Motor Power (kW)	NPSHR (m)	Weight (kg)
	(m³/h)	(L/s)							
125TP(L)26-18.5/4	126	35.0	28.6	1480	71.0	13.831	18.5	1.7	334
	153	42.5	27.6		74.1	15.529		2.0	
	180	50.0	26.0		74.7	17.072		2.6	
	198	55.0	24.7		74.0	18.009		3.5	
	216	60.0	23.0		72.4	18.699		4.4	
125TP(L)28-22/4	137	37.9	31.4	1480	70.0	16.685	22	1.8	348
	166	46.0	30.0		74.5	18.188		2.4	
	195	54.2	28.0		75.0	19.838		3.4	
	215	59.6	26.3		74.1	20.746		4.3	
	234	65.0	24.4		72.7	21.401		4.8	
125TP(L)33-30/4	140	38.9	36.0	1480	70.4	19.509	30	1.9	410
	170	47.2	34.5		74.5	21.453		2.5	
	200	55.6	33.0		75.4	23.853		3.6	
	220	61.1	31.5		75.6	24.979		4.4	
	240	66.7	30.0		75.2	26.090		6.0	
125TP(L)5-1.5/6	53	14.7	5.7	985	67.0	1.229	1.5	1.0	156
	64	17.8	5.3		70.0	1.320		1.1	
	75	20.8	5.0		72.0	1.419		1.2	
	83	23.1	4.6		70.0	1.486		1.3	
	90	25.0	4.1		68.0	1.479		1.4	
125TP(L)6-2.2/6	63	17.5	6.9	985	65	1.822	2.2	1.1	187
	77	21.4	6.5		68	2.006		1.2	
	90	25.0	6.0		71	2.073		1.3	
	99	27.5	5.5		69	2.150		1.4	
	108	30.0	4.9		66	2.185		1.5	
125TP(L)7-3/6	77	21.4	7.8	985	66.0	2.480	3	1.2	202
	93	25.8	7.5		69.0	2.755		1.3	
	110	30.6	7.0		72.0	2.914		1.4	
	121	33.6	6.3		70.0	2.968		1.5	
	132	36.7	5.7		68.0	3.015		1.6	
125TP(L)8-4/6	84	23.3	9.0	985	66.0	3.121	4	1.2	220
	102	28.3	8.6		69.0	3.464		1.3	
	120	33.3	8.0		72.0	3.633		1.5	
	132	36.7	7.4		70.0	3.803		1.6	
	144	40.0	6.8		67.0	3.983		1.7	
125TP(L)12-5.5/6	84	23.3	13.0	985	70.0	4.251	5.5	1.3	240
	102	28.3	12.5		74.0	4.695		1.4	
	120	33.3	12.0		75.0	5.232		1.5	
	132	36.7	11.3		75.2	5.405		1.6	
	144	40.0	10.5		74.6	5.523		1.8	
125TP(L)14-7.5/6	95	26.4	15.6	985	70.5	5.728	7.5	1.3	272
	114	31.7	14.9		74.9	6.180		1.4	
	135	37.5	14.0		75.4	6.831		1.5	
	149	41.4	13.1		74.6	7.130		1.6	
	162	45.0	12.2		73.2	7.358		1.8	

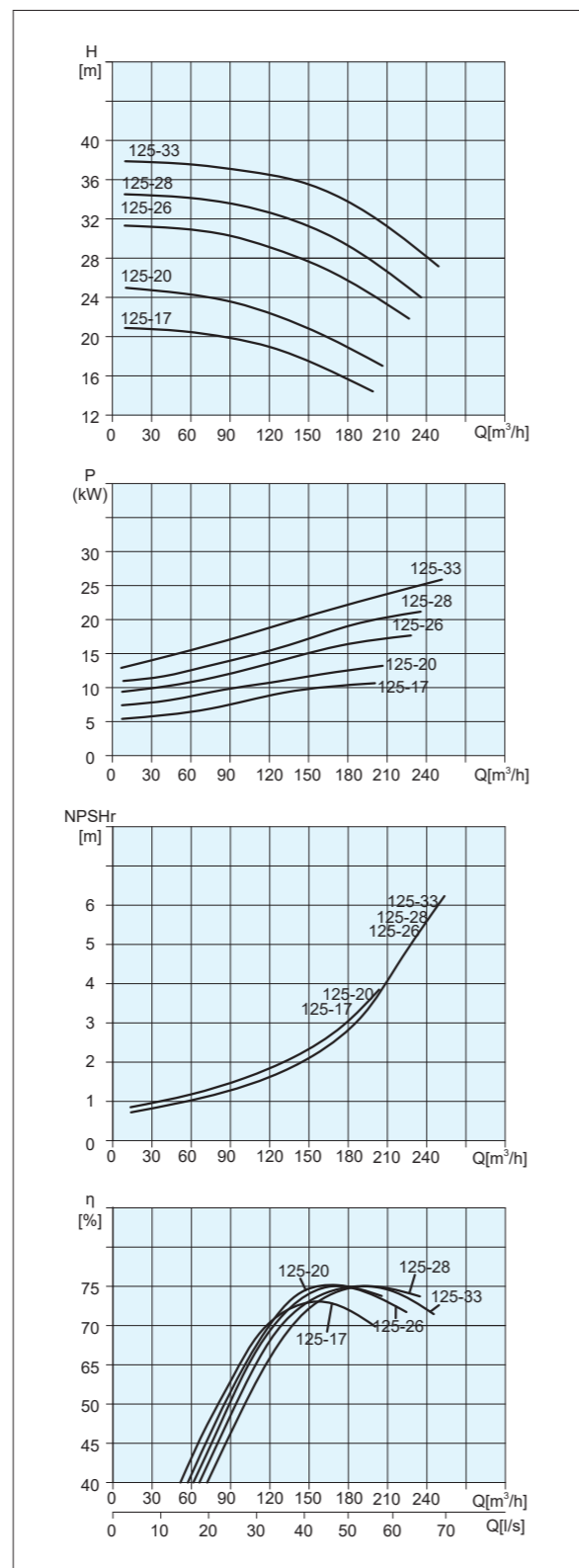
Characteristic curves



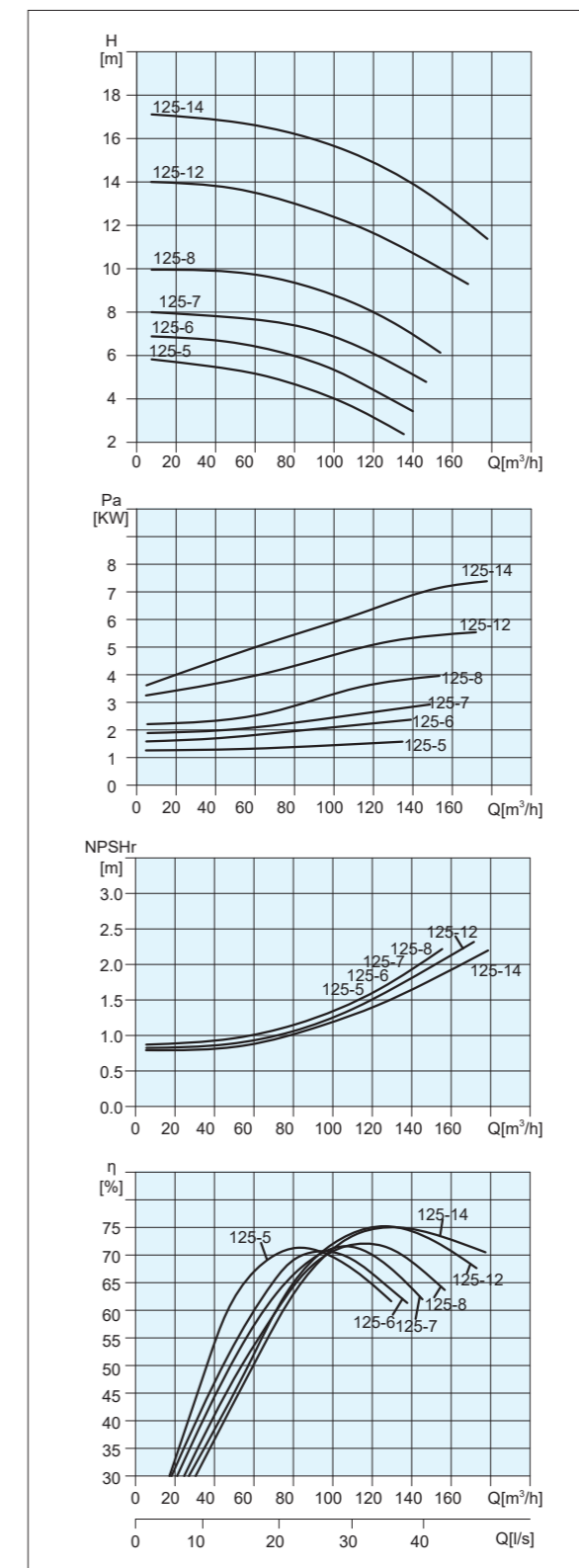
Characteristic curves



Characteristic curves



Characteristic curves



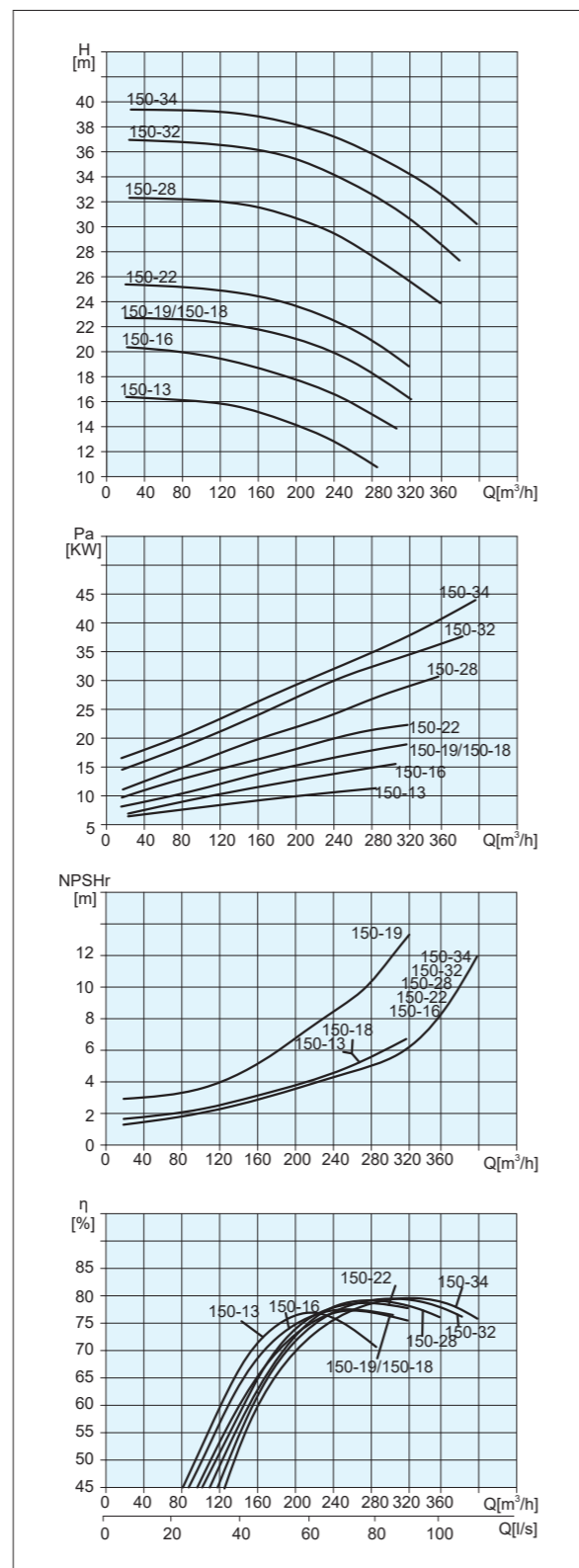
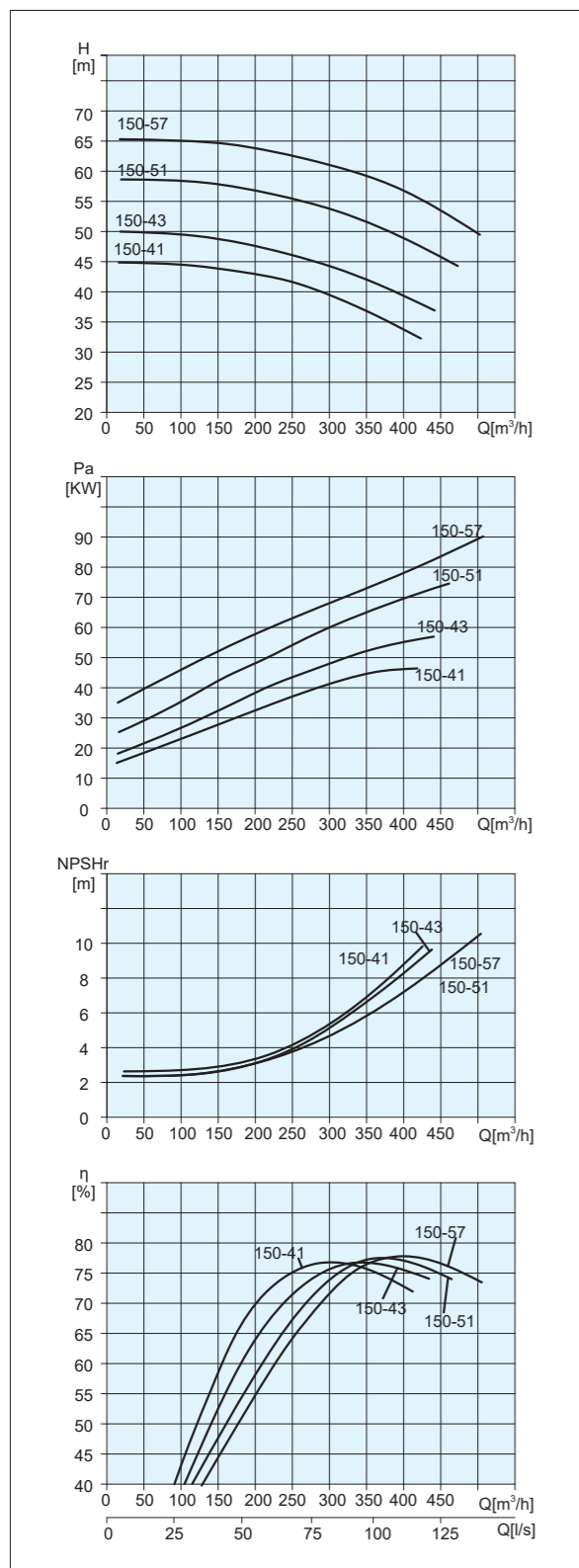
Parameters Table

Model	Flow		Head (m)	Speed (r/min)	Pump Eff. (%)	Shaft Power (kW)	Motor Power (kW)	NPSHR (m)	Weight (kg)
	(m³/h)	(L/s)							
150TP(L)13-11/4	161	44.7	15.0	1480	72.0	9.140	11	3.7	305
	196	54.4	14.3		76.9	9.932		3.9	
	230	63.9	13.0		77.9	10.459		4.1	
	253	70.3	11.8		75.4	10.789		4.3	
	276	76.7	11.0		74.8	11.060		4.6	
150TP(L)16-15/4	182	50.6	19.0	1480	72.2	13.051	15	3.9	340
	221	61.4	17.7		78.4	13.596		4.0	
	260	72.2	16.0		78.8	14.386		4.4	
	286	79.4	15.0		78.5	14.892		4.7	
	312	86.7	13.8		78.2	15.004		4.9	
150TP(L)18-18.5/4	196	54.4	21.5	1480	74.3	15.455	18.5	4.0	365
	238	66.1	20.3		77.2	17.054		4.2	
	280	77.8	18.0		79.0	17.385		4.6	
	308	85.6	16.4		78.0	17.647		4.8	
	336	93.3	14.1		73.0	17.685		5.5	
150TP(L)19-18.5/4	175	48.6	20.7	1480	70.4	14.022	18.5	6.5	370
	213	59.2	20.0		74.5	15.582		7.5	
	250	69.4	19.0		76.2	16.987		8.5	
	275	76.4	18.2		76.8	17.759		9.5	
	300	83.3	17.0		76.2	18.238		12.0	
150TP(L)22-22/4	182	50.6	23.7	1480	72.2	16.280	22	3.3	400
	221	61.4	23.0		77.1	17.965		4.0	
	260	72.2	22.0		79.0	19.730		4.5	
	286	79.4	21.0		79.1	20.691		5.0	
	312	86.7	20.0		79.2	21.470		5.5	
150TP(L)28-30/4	196	54.4	29.6	1480	72.5	21.806	30	3.7	437
	238	66.1	29.2		77.7	24.373		4.2	
	280	77.8	28.0		79.2	26.975		4.9	
	308	85.6	26.8		77.5	29.024		5.4	
	336	93.3	25.5		76.6	30.480		6.3	
150TP(L)32-37/4	210	58.3	34.7	1480	72.5	27.389	37	3.9	481
	255	70.8	33.8		77.7	30.228		4.5	
	300	83.3	32.0		79.2	33.030		5.3	
	330	91.7	30.3		77.5	35.158		6.2	
	360	100.0	28.4		76.4	36.466		8.4	
150TP(L)34-45/4	231	64.2	37.0	1480	74.0	31.474	45	4.1	515
	281	78.1	35.5		77.0	35.303		4.9	
	330	91.7	34.0		79.7	38.362		6.2	
	363	100.8	32.4		78.0	41.089		8.5	
	396	110.0	30.4		75.3	43.565		12.0	
150TP(L)41-45/4	203	56.4	43.8	1480	70.0	34.613	45	3.4	545
	247	68.6	42.4		74.6	38.255		4.0	
	290	80.6	41.0		77.0	42.078		5.0	
	319	88.6	38.5		76.0	44.036		6.0	
	348	96.7	36.0		75.8	45.038		7.0	
150TP(L)43-55/4	238	66.1	46.5	1480	71.7	42.061	55	3.7	634
	289	80.3	45.0		75.9	46.691		4.8	
	340	94.4	43.0		78.0	51.076		6.4	
	374	103.9	41.0		77.6	53.847		7.5	
	408	113.3	38.7		77.2	55.734		9.0	
150TP(L)51-75/4	260	72.2	55.3	1480	72.7	53.893	75	4.0	753
	316	87.8	53.7		76.9	60.131		5.3	
	372	103.3	51.0		79.0	65.441		6.7	
	409	113.6	48.5		77.9	69.390		7.7	
	446	123.9	46.4		77.6	72.670		9.3	

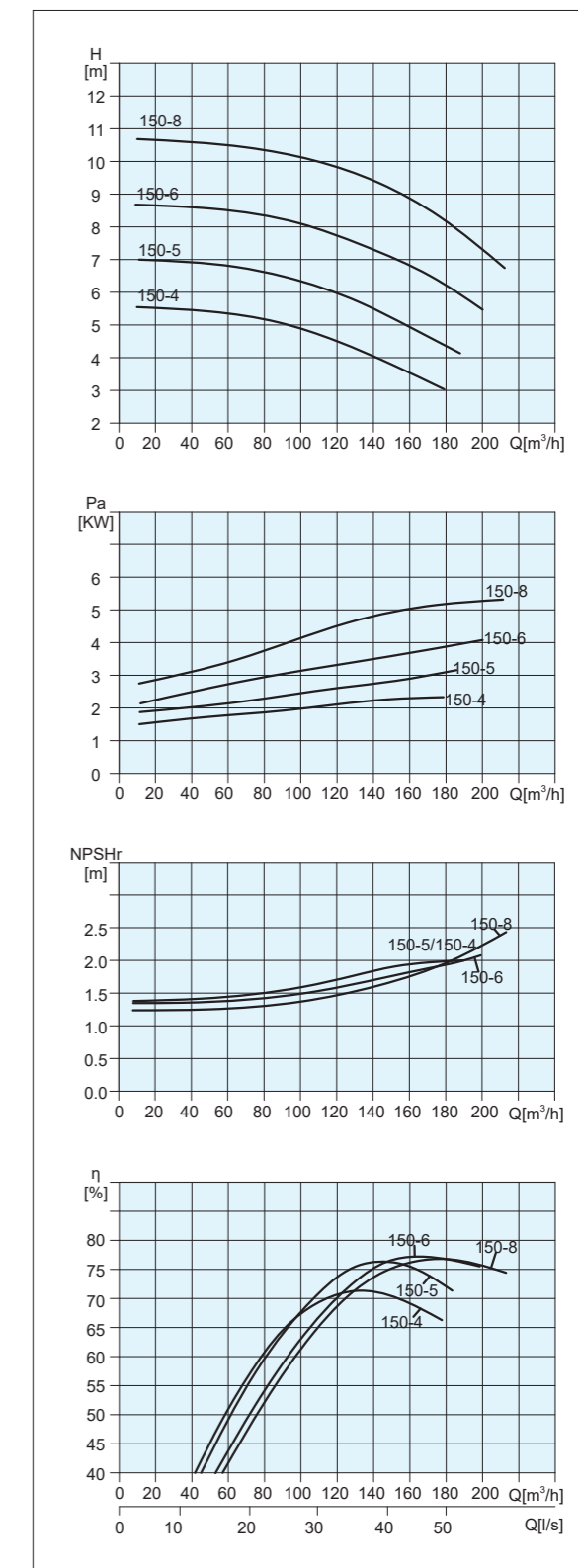
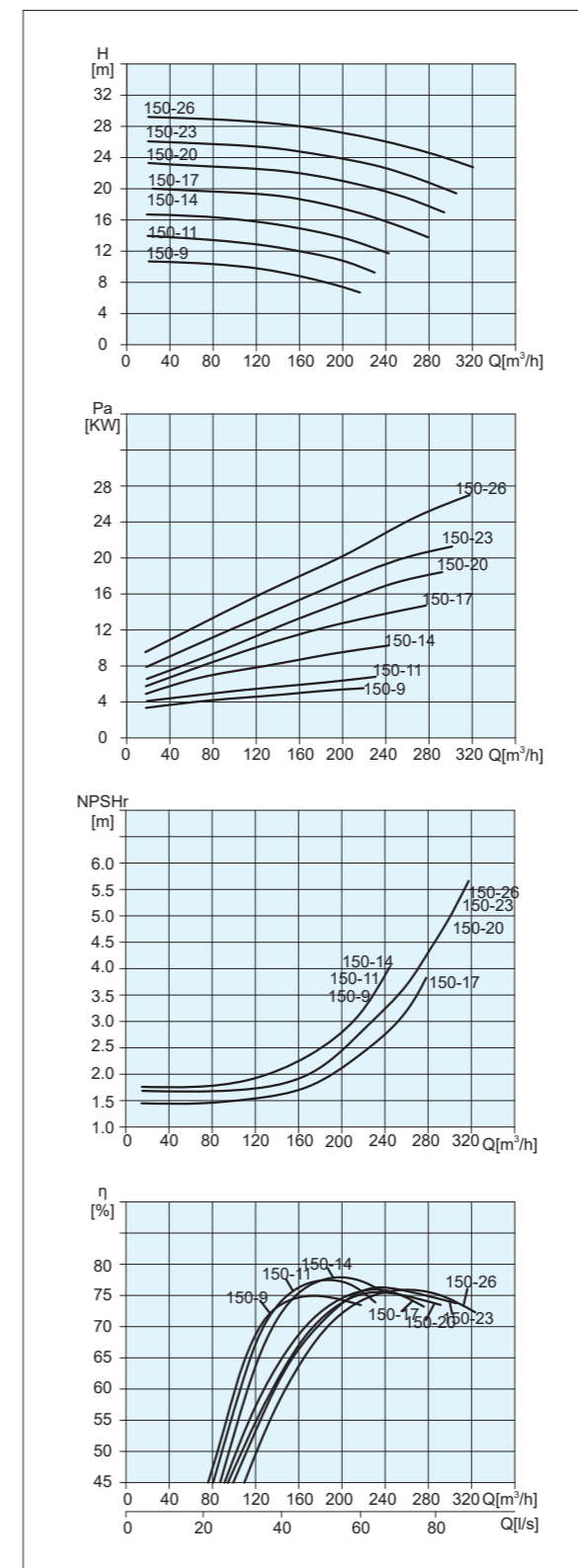
Parameters Table

Model	Flow		Head (m)	Speed (r/min)	Pump Eff. (%)	Shaft Power (kW)	Motor Power (kW)	NPSHR (m)	Weight (kg)
	(m³/h)	(L/s)							
150TP(L)57-90/4	280	77.8	61.0	1480	72.6	64.109	90	4.5	820
	340	94.4	59.0		76.5	71.456		5.9	
	400	111.1	57.0		80.0	77.663		7.5	
	440	122.2	54.0		78.0	83.008		9.2	
	480	133.3	51.0		76.0	87.774		10.5	
150TP(L)4-2.2/6	95	26.4	4.8	985	66.2	1.877	2.2	1.6	233
	115	31.9	4.4		68.2	2.022		1.6	
	135	37.5	4.0		71.2	2.067		1.7	
	149	41.4	3.7		69.7	2.155		1.8	
	162	45.0	3.3		68.2	2.136		1.9	
150TP(L)5-3/6	111	30.8	5.8	985	70.5	2.488	3	1.6	237
	134	37.2	5.5		75.4	2.664		1.7	
	158	43.9	5.0		76.4	2.818		1.9	
	174	48.3	4.4		73.9	2.823		1.9	
	190	52.8	4.1		72.1	2.944		2.0	
150TP(L)6-4/6	123	34.2	7.3	985	70.8	3.456	4	1.7	248
	149	41.4	6.8		77.0	3.586		1.8	
	175	48.6	6.0		77.4	3.697		1.9	
	193	53.6	5.6		76.9	3.830		2.0	
	210	58.3	5.2		76.6	3.885		2.2	
150TP(L)8-5.5/6	130	36.1	9.6	985	71.0	4.782	5.5	1.7	260
	158	43.8	9.0		75.9	5.092		1.7	
	185	51.5	8.0		76.2	5.304		2.0	
	204	56.7	7.3		75.5	5.374		2.2	
	222	61.8	6.3		70.1	5.449		2.4	
150TP(L)9-5.5/6	111	30.8	9.7	985	69.2	4.240	5.5	1.9	290
	134	37.2	9.4		73.3	4.683		2.1	
	158	43.9	9.0		75.0	5.167		2.3	
	174	48.3	8.6		75.6	5.394		2.6	
	190	52.8	8.0		75.3	5.501		2.8	
150TP(L)11-7.5/6	123	34.2	11.9	985	68.6	5.814	7.5	1.9	320
	150	41.7	11.5		73.4	6.404		2.1	
	176	48.9	11.0		75.7	6.969		2.5	
	194	53.9	10.3		75.3	7.231		2.7	
	211	58.6	9.8		75.2	7.493		3.2	
150TP(L)14-11/6	140	38.9	15.2	985	71.3	8.132	11	2.0	348
	170	47.2	14.8		76.5	8.965		2.3	
	200	55.6	14.0		78.0	9.793		2.7	
	220	61.1	13.3		76.3	10.428		3.1	
	240	66.7	12.4		75.2	10.818		4.2	
150TP(L)17-15/6	158	43.8	18.5	985	68.9	11.548	15	1.7	448
	191	53.2	17.9		73.5	12.679		2.0	
	225	62.5	17.0		75.9	13.736		2.5	
	248	68.8	16.1		74.9	14.523		3.0	
	270	75.0	15.3		74.8	15.088		3.5	
150TP(L)20-18.5/6	165	45.8	21.5	985	68.9	14.024	18.5	1.9	493
	201	55.7	20.8		73.4	15.530		2.4	
	236	65.5	20.0		75.8	16.926		3.2	
	260	72.1	19.1		74.8	18.058		3.8	
	283	78.5	17.9		74.7	18.432		4.5	
150TP(L)23-22/6	172	47.8	24.9	985	69.6	16.784	22	2.0	525
	209	58.1	24.2		73.8	18.697		2.7	
	246	68.4	23.0		75.9	20.340		3.3	
	271	75.2	21.9		75.0	21.549		3.9	
	295	82.0	20.5		74.7	22.085		4.7	
150TP(L)26-30/6	185	51.5	27.7	985	69.6	20.108	30	2.3	560
	225	62.5	26.8		73.5	22.370		3.0	
	265	73.6	26.0		76.7	24.466		3.8	
	291	80.9	24.7		74.8	26.217		4.6	
	318	88.3	23.3		72.9	27.682		5.3	

Characteristic curves



Characteristic curves





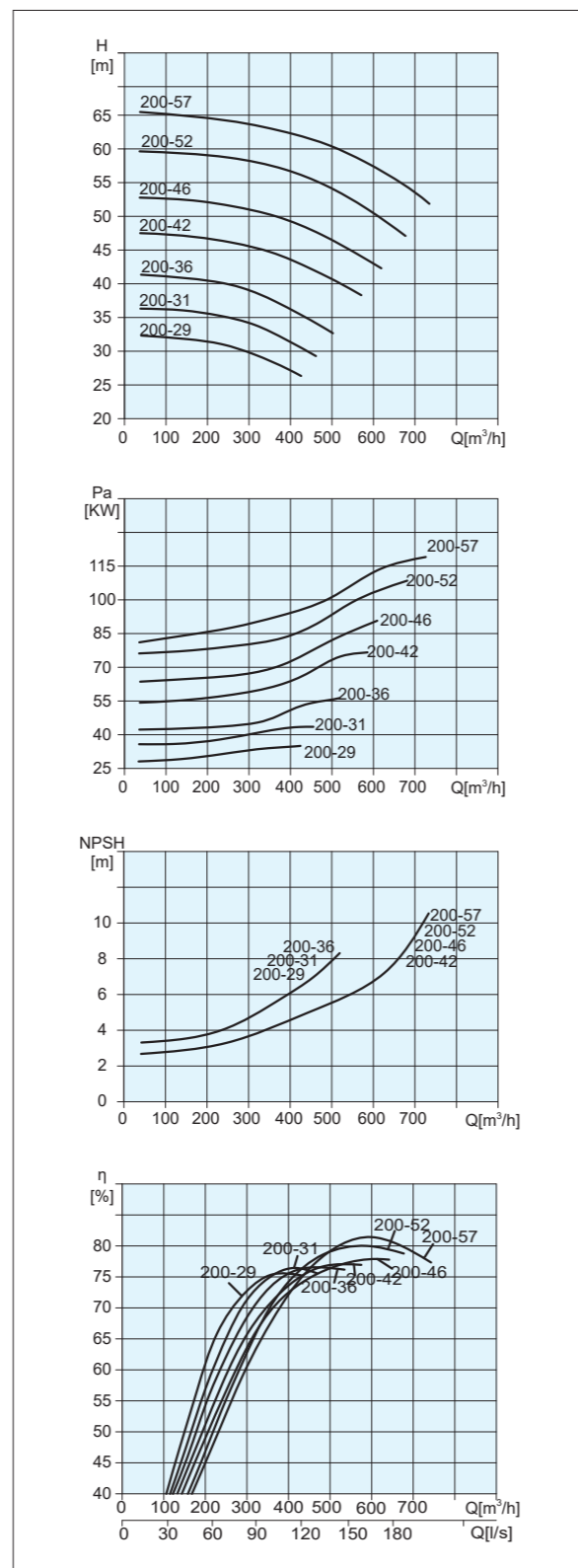
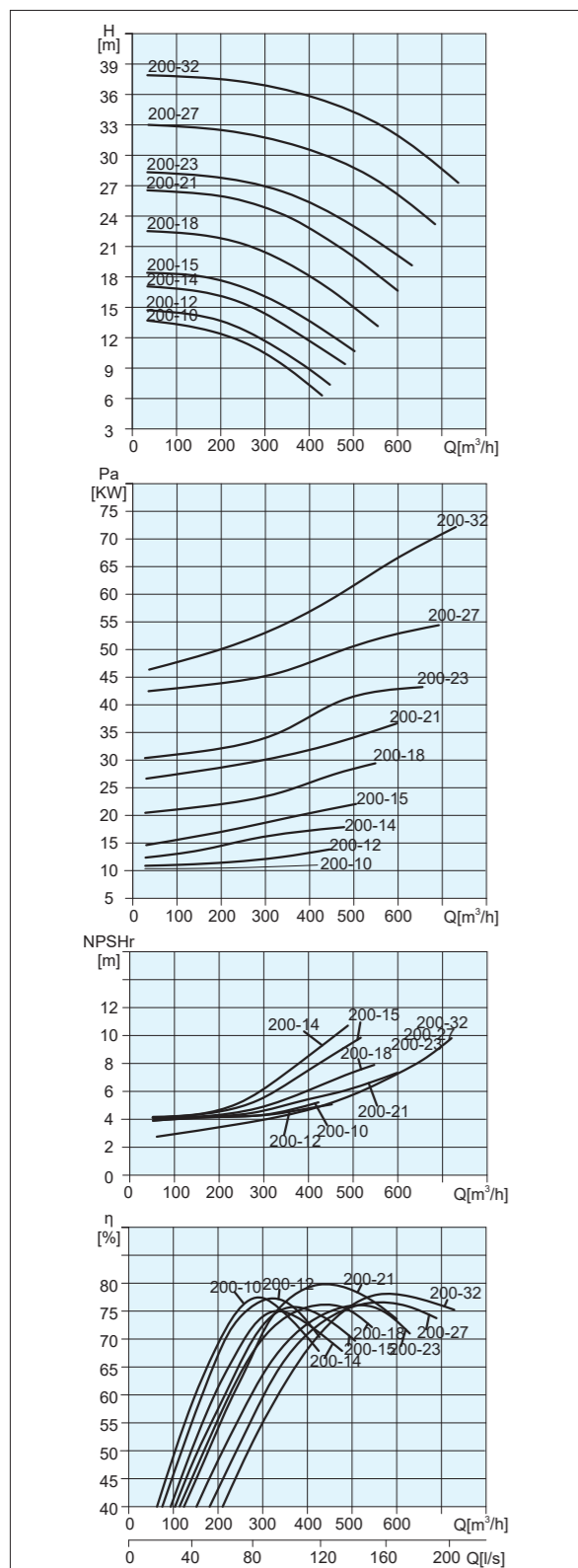
Parameters Table

Model	Flow		Head (m)	Speed (r/min)	Pump Eff. (%)	Shaft Power (kW)	Motor Power (kW)	NPSHR (m)	Weight (kg)
	(m³/h)	(L/s)							
200TP(L)10-11/4	210	58.3	12.6	1480	72.0	10.014	11	4.2	300
	255	70.8	11.3		76.0	10.332		4.2	
	300	83.3	10.0		78.0	10.481		4.3	
	330	91.7	8.7		75.0	10.431		4.7	
	360	100.0	7.4		72.0	10.083		5	
200TP(L)12-15/4	217	60.3	14.9	1480	73.1	12.053	15	4.2	320
	264	73.3	13.9		77.8	12.853		4.2	
	310	86.1	12.0		78.9	12.848		4.5	
	341	94.7	10.7		76.6	12.980		4.9	
	372	103.3	9.5		72.0	13.375		5.5	
200TP(L)14-18.5/4	235	65.3	15.4	1480	67.0	14.719	18.5	5.0	410
	285	79.2	14.8		71.0	16.189		6.0	
	335	93.1	14.0		75.0	17.040		7.0	
	369	102.5	13.0		73.5	17.785		8.0	
	402	111.7	12.0		73.0	18.007		9.0	
200TP(L)15-22/4	263	73.1	16.6	1480	68.5	17.368	22	5.0	425
	319	88.6	16.0		73.0	19.053		6.0	
	375	104.2	15.0		76.0	20.169		7.0	
	413	114.7	13.9		74.4	21.026		8.0	
	450	125.0	12.9		73.0	21.669		9.0	
200TP(L)18-30/4	294	81.7	20.3	1480	70.0	23.233	30	4.8	481
	357	99.2	19.3		74.0	24.967		5.5	
	420	116.7	18.0		76.2	27.035		6.2	
	462	128.3	16.7		76.0	27.921		6.9	
	504	140.0	15.2		74.0	29.238		7.5	
200TP(L)21-37/4	326	90.6	24.0	1480	74.7	28.541	37	5.2	530
	395	109.7	21.8		78.0	30.083		5.6	
	465	129.2	21.0		79.5	33.471		6.0	
	512	142.2	19.4		78.3	34.568		6.5	
	558	155.0	17.7		76.2	35.320		7.0	
200TP(L)23-45/4	350	97.2	26.6	1480	69.0	36.768	45	4.2	600
	425	118.1	25.0		74.0	39.126		5.2	
	500	138.9	23.0		76.0	41.234		6.0	
	550	152.8	21.5		75.0	42.964		6.7	
	600	166.7	19.5		73.0	43.675		7.3	
200TP(L)27-55/4	385	106.9	31.5	1480	70.6	46.809	55	4.7	680
	468	130.0	29.6		74.6	50.602		5.8	
	550	152.8	27.0		77.6	52.147		6.7	
	605	168.1	24.9		77.5	52.969		7.3	
	660	183.3	23.2		76.3	54.686		8.1	
200TP(L)32-75/4	420	116.7	35.3	1480	70.0	57.716	75	5.2	750
	510	141.7	34.5		76.0	63.087		6.1	
	600	166.7	32.0		78.0	67.077		7.3	
	660	183.3	30.5		77.6	70.688		8.1	
	720	200.0	28.0		76.0	72.284		9.5	
200TP(L)29-37/4	231	64.2	31.5	1480	68.0	29.160	37	3.6	560
	281	78.1	30.5		72.0	32.437		4.2	
	330	91.7	29.0		75.0	34.771		5.2	
	363	100.8	27.5		76.0	35.793		5.7	
	396	110.0	26		76.0	36.917		6.2	
200TP(L)32-45/4	263	73.1	35.0	1480	68.0	36.888	45	4.0	640
	319	88.6	34.0		72.0	41.049		5.0	
	375	104.2	32.0		75.0	43.600		6.0	
	413	114.7	30.4		76.0	45.017		6.2	
	450	125.0	28.0		76.0	45.178		6.4	
200TP(L)36-55/4	294	81.7	39.0	1480	69.0	45.282	55	4.9	720
	357	99.2	38.0		73.0	50.640		5.8	
	420	116.7	36.0		76.0	54.213		6.3	
	462	128.3	34.0		77.0	55.590		6.5	
	504	140.0	31.0		77.0	55.293		6.8	

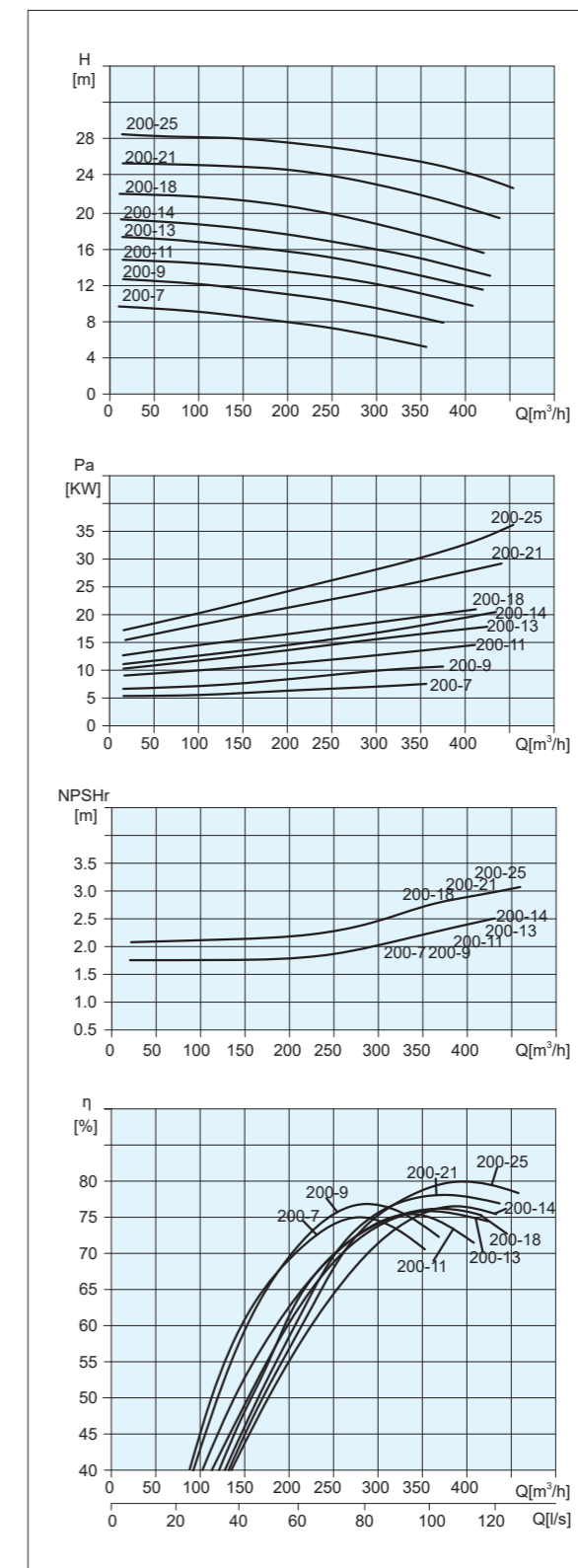
Parameters Table

Model	Flow		Head (m)	Speed (r/min)	Pump Eff. (%)	Shaft Power (kW)	Motor Power (kW)	NPSHR (m)	Weight (kg)
	(m³/h)	(L/s)							
200TP(L)42-75/4	333	92.5	45.3	1480	70.0	58.723	75	4.0	780
	404	112.2	43.7		74.0	65.013		4.9	
	475	131.9	42.1		77.0	70.770		5.4	
	523	145.3	40.8		78.0	74.548		5.7	
	570	158.3	38.5		78.0	76.667		5.9	
200TP(L)46-90/4	368	102.2	50.2	1480	71.7	70.210	90	4.2	840
	446	123.9	48.7		75.0	78.917		5.3	
	525	145.8	46.0		77.6	84.805		5.7	
	578	160.6	44.5		78.5	89.286		6.0	
	630	175.0	42.6		79.0	92.574		6.6	
200TP(L)52-110/4	396	110.0	57.5	1480	74.3	83.510	110	4.8	1116
	481	133.6	55.5		78.5	92.669		5.5	
	566	157.2	52.0		80.0	100.253		5.9	
	623	173.1	49.7		80.0	105.468		6.5	
	679	188.6	47.3		79.0	110.782		8.0	
200TP(L)57-132/4	420	116.7	61.7	1480	75.0	94.154	132	5.0	1250
	510	141.7	59.6		79.0	104.847		5.8	
	600	166.7	57.0		81.0	115.056		6.2	
	660	183.3	54.2		80.0	121.848		7.3	
	720	200.0	51.4		79.0	127.654		10.0	
200TP(L)7-7.5/6	195	54.1	8.0	985	68.5	6.196	7.5	1.7	368
	236	65.7	7.6		73.7	6.643		1.8	
	278	77.3	7.0		74.7	7.102		1.9	
	306	85.0	6.4		73.8	7.229		2.0	
	334	92.7	5.8		72.0	7.326		2.1	
200TP(L)9-11/6	217	60.3	10.2	985	72.2	8.354	11	1.7	400
	264	73.3	9.6		75.5	9.147		1.9	
	310	86.1	9.0		77.0	9.874		2.0	
	341	94.7	8.3		75.8	10.175		2.1	
	372	103.3	7.6		73.7	10.453		2.2	
200TP(L)11-15/6	245	68.1	12.5	985	68.5	12.183	15	1.8	475
	298	82.8	11.9		71.6	13.496		1.9	
	350	97.2	11.0		75.6	13.877		2.1	
	385	106.9	10.4		75.0	14.548		2.3	
	420	116.7	9.7		74.2	14.962		2.4	
200TP(L)13-18.5/6	259	71.9	14.9	985	69.3	15.175	18.5	1.9	515
	315	87.5	14.1		73.3	16.512		2.1	
	370	102.8	13.0		76.3	17.179		2.4	
	407	113.1	12.1		76.2	17.611		2.4	
	444	123.3	11.1		74.8	17.954		2.6	
200TP(L)14-22/6	280	77.8	15.5	985	68.7	17.172	22	1.9	546
	340	94.4	15.1		74.8	18.717		2.2	
	400	111.1	14.0		76.8	19.893		2.4	
	440	122.2	13.4		76.4	20.965		2.5	
	480	133.3	12.3		74.8	21.446		2.8	
200TP(L)18-22/6	217	60.3	19.4	985	68.5	16.747	22	2.3	570
	264	73.3	18.7		72.5	18.556		2.4	
	310	86.1	18.0		75.5	20.140		2.6	
	341	94.7	17.5		76.5	21.257		2.8	
	372	103.3	16.5		76.5	21.722		2.9	
200TP(L)21-30/6	262	72.8	23.4	985	73.1	22.873	30	2.4	630
	319	88.5	22.5		77.3	25.263		2.6	
	375	104.1	21.0		78.8	27.217		2.9	
	413	114.6	20.0		78.8	28.531		2.9	
	450	124.9	18.9		77.8	29.763		3.1	
200TP(L)25-37/6	273	75.8	27.1	985	74.0	27.244	37	2.4	725
	332	92.2	26.1		78.0	30.273		2.7	
	390	108.3	25.0		80.0	33.211		2.9	
	429	119.2	23.8		79.0	35.219		3.0	
	468	130.0	22.5		78.0	36.788		3.3	

Characteristic curves



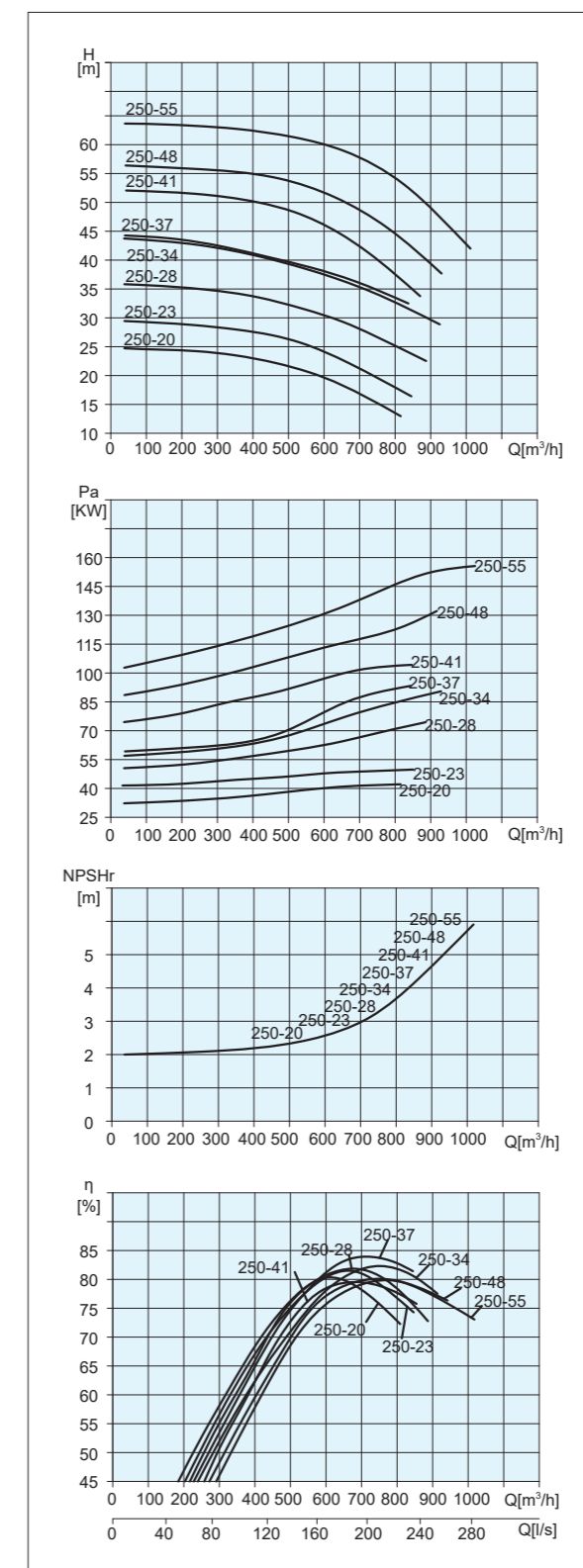
Characteristic curves



Parameters Table

Model	Flow		Head (m)	Speed (r/min)	Pump Eff. (%)	Shaft Power (kW)	Motor Power (kW)	NPSHR (m)	Weight (kg)
	(m³/h)	(L/s)							
250TP(L)20-45/4	420	116.7	23.3	1480	70	38.096	45	2.1	630
	510	141.7	21.7		77	39.166		2.3	
	600	166.7	20.0		81	40.370		2.5	
	660	183.3	18.5		80	41.590		2.8	
	720	200.0	16.5		76	42.596		3.2	
250TP(L)23-55/4	455	126.4	27.6	1480	73	46.877	55	2.2	740
	553	153.6	26.2		77	51.275		2.4	
	650	180.6	23.0		82	49.681		2.7	
	715	198.6	20.8		81	50.032		3.1	
250TP(L)28-75/4	490	136.1	32.5	1480	76	57.100	75	2.2	900
	595	165.3	31.0		81	62.053		2.5	
	700	194.4	28.0		82	65.134		3.0	
	770	213.9	25.5		77	69.488		3.4	
250TP(L)34-90/4	525	145.8	38.0	1480	73	74.471	90	2.4	1000
	638	177.2	36.0		79	79.225		2.7	
	750	208.3	34.0		83	83.720		3.3	
	825	229.2	32.0		82	87.732		3.8	
250TP(L)37-90/4	462	128.3	39.7	1480	72.5	68.938	90	2.1	1150
	561	155.8	38.3		76.0	77.040		2.4	
	660	183.3	37.0		78.6	84.662		2.6	
	726	201.7	35.1		78.7	88.234		3.1	
250TP(L)41-110/4	490	136.1	49.0	1480	74.0	88.415	110	2.2	1400
	595	165.3	45.5		78.0	94.580		2.5	
	700	194.4	42.0		79.0	101.411		3.0	
	770	213.9	38.0		78.5	101.571		3.5	
250TP(L)48-132/4	504	140.0	54.5	1480	71.5	104.686	132	2.2	1450
	612	170.0	52.3		76.5	114.014		2.6	
	720	200.0	48.0		80.0	117.720		3.1	
	792	220.0	45.0		78.0	124.512		3.6	
250TP(L)55-160/4	560	155.6	61.0	1480	73.0	127.515	160	2.4	1550
	680	188.9	58.0		77.4	138.855		2.9	
	800	222.2	55.0		80.0	149.875		3.7	
	880	244.4	50.0		77.5	154.710		4.4	
	960	266.7	45.0		74.0	159.081		5.2	

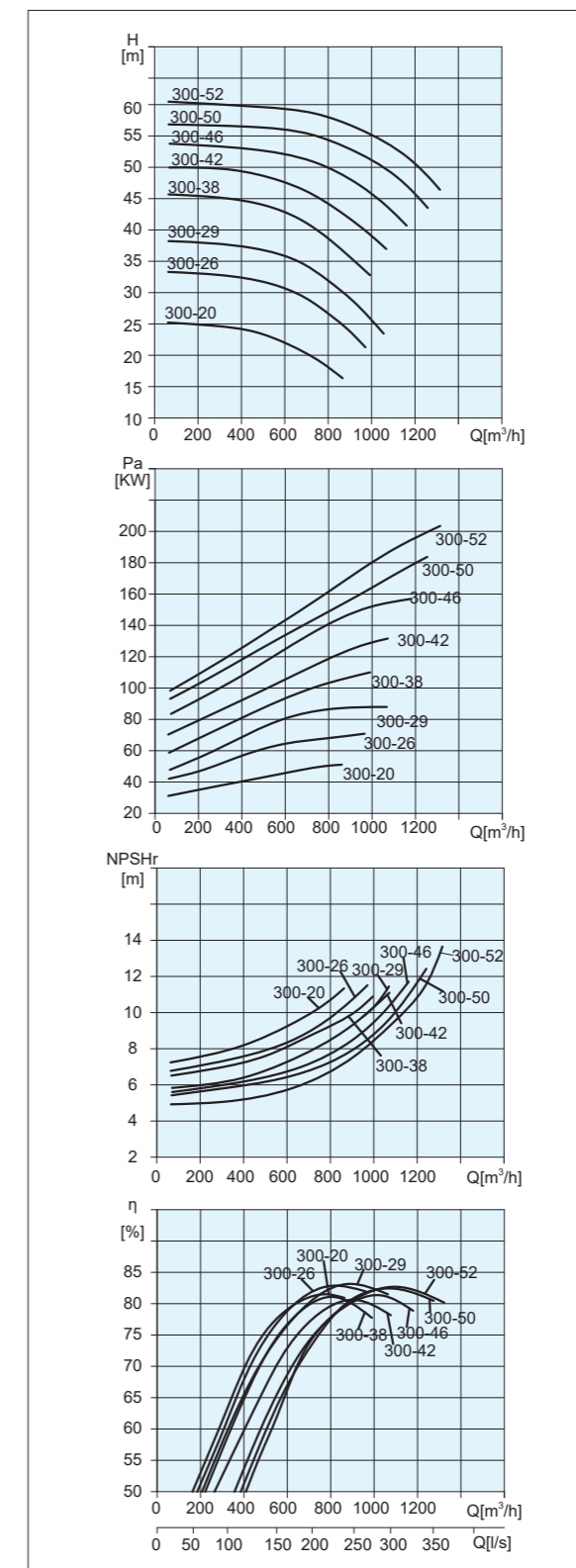
Characteristic curves



Parameters Table

Model	Flow		Head (m)	Speed (r/min)	Pump Eff. (%)	Shaft Power (kW)	Motor Power (kW)	NPSHR (m)	Weight (kg)
	(m³/h)	(L/s)							
300TP(L)20-55/4	504	140.0	24.0	1480	75.0	43.949	55	8.3	850
	612	170.0	22.5		80.0	46.904		9.2	
	720	200.0	20.0		82.0	47.854		10.2	
	792	220.0	18.5		81.0	49.292		10.9	
	864	240.0	17.0		80.0	50.031		11.5	
300TP(L)26-75/4	581	161.4	31.1	1480	76.0	64.787	75	8.0	1010
	706	196.1	28.5		81.0	67.691		8.8	
	830	230.6	26.0		83.0	70.850		10.2	
	913	253.6	23.5		82.0	71.300		10.7	
	996	276.7	21.5		81.0	72.041		11.7	
300TP(L)29-90/4	637	176.9	36.1	1480	77.0	81.381	90	7.4	1110
	774	215.0	32.9		82.0	84.623		8.3	
	910	252.8	29.0		84.0	85.610		9.8	
	1001	278.1	25.6		82.4	84.745		10.7	
	1092	303.3	21.9		77.0	84.634		12.0	
300TP(L)38-110/4	560	155.6	43.7	1480	74.0	90.116	110	8.0	1520
	680	188.9	41.6		79.0	97.576		8.2	
	800	222.2	38.0		81.0	102.272		9.1	
	880	244.4	35.1		80.0	105.212		9.8	
	960	266.7	32.2		77.0	109.396		10.5	
300TP(L)42-132/4	616	171.1	47.7	1480	74.0	108.202	132	7.4	1620
	748	207.8	45.6		79.0	117.654		8.2	
	880	244.4	42.0		81.0	124.341		9.5	
	968	268.9	38.9		80.0	128.263		10.0	
	1056	293.3	35.2		77.0	131.547		11.0	
300TP(L)46-160/4	687	190.8	51.7	1480	73.0	132.584	160	7.2	2150
	835	231.9	49.6		78.0	144.691		8.1	
	982	272.8	46.0		81.0	151.968		9.4	
	1080	300.0	42.9		82.0	153.969		10.3	
	1178	327.2	39.2		81.0	155.351		11.5	
300TP(L)50-185/4	724	201.1	55.0	1480	77.0	140.921	185	7.0	2200
	880	244.4	53.3		81.0	157.794		8.0	
	1035	287.5	50.0		83.0	169.902		9.3	
	1139	316.4	47.0		82.0	177.899		10.5	
	1242	345.0	44.6		81.0	186.354		12.0	
300TP(L)52-200/4	766	212.8	57.6	1480	77.0	156.145	200	6.8	2250
	930	258.3	56.0		81.0	175.207		8.0	
	1094	303.9	52.0		83.0	186.771		9.8	
	1203	334.2	50.0		82.0	199.889		11.2	
	1313	364.	45.0		81.0	198.774		12.5	

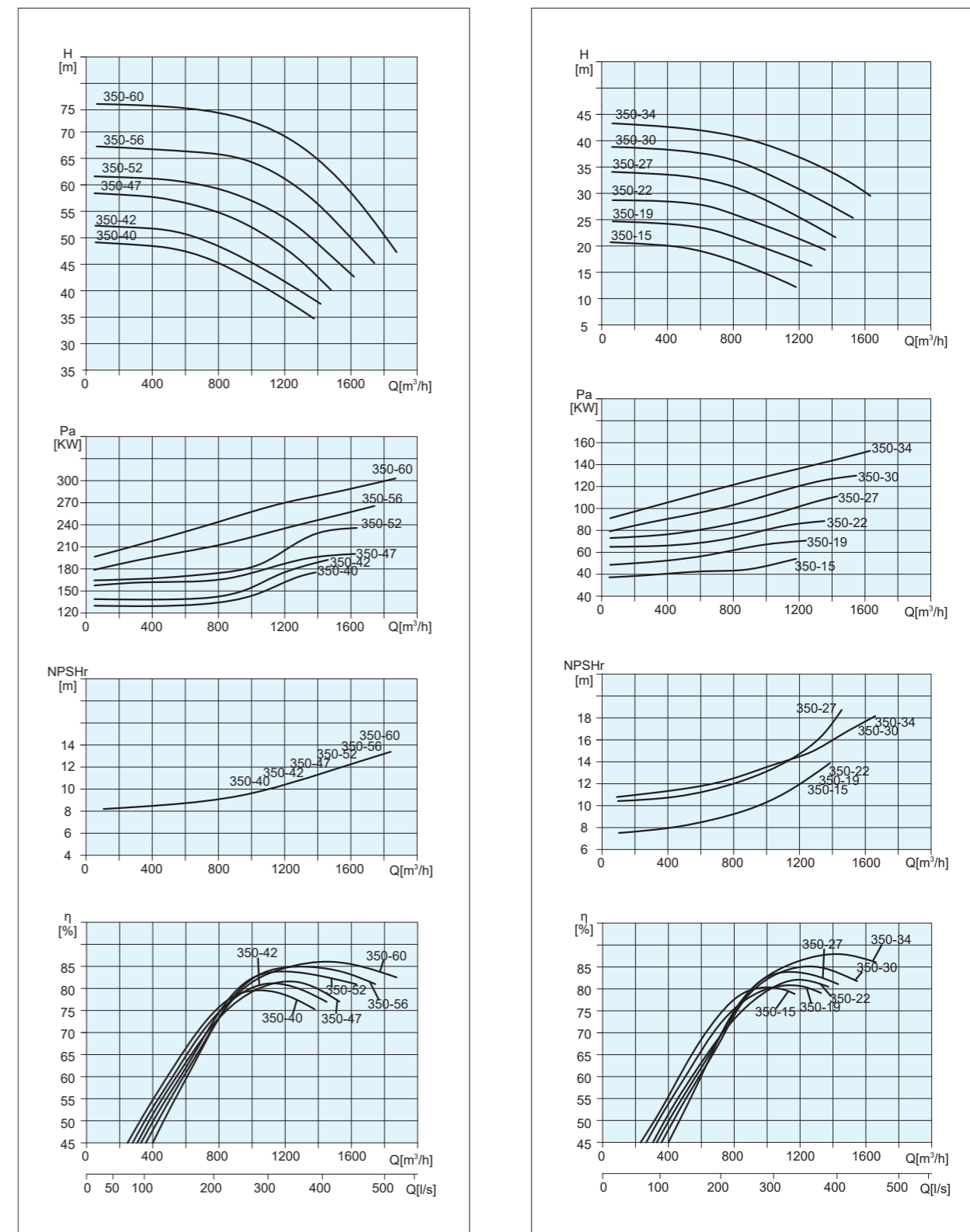
Characteristic curves



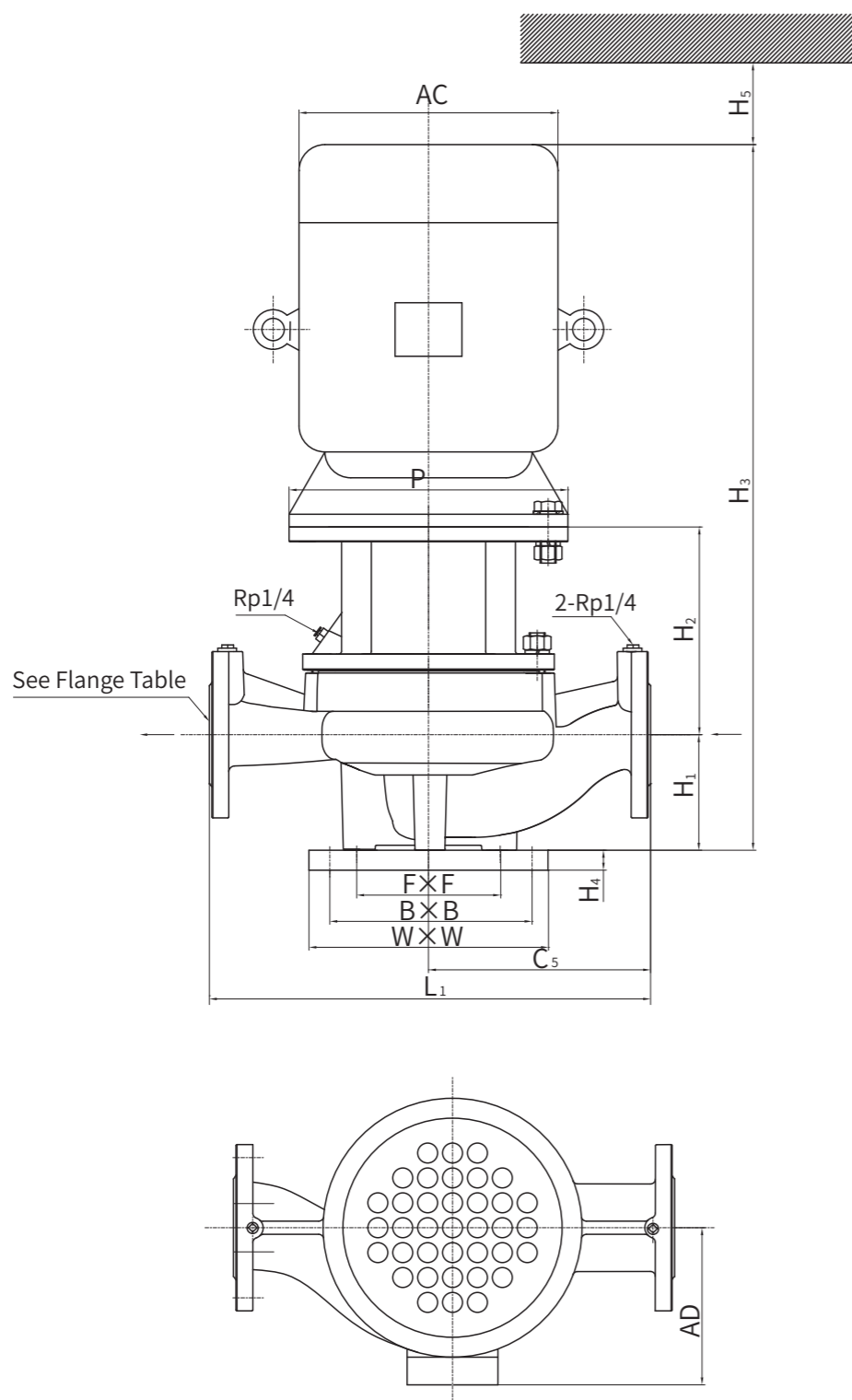
Parameters Table

Model	Flow		Head (m)	Speed (r/min)	Pump Eff. (%)	Shaft Power (kW)	Motor Power (kW)	NPSHR (m)	Weight (kg)
	(m³/h)	(L/s)							
350TP(L)15-55/4	672	186.7	17.0	1480	72.0	43.237	55	8.5	1450
	816	226.7	16.0		77.0	46.205		9.3	
	960	266.7	15.0		80.0	49.050		10.2	
	1056	293.3	14.0		80.0	50.358		11.0	
350TP(L)19-75/4	1152	320.0	13.0	1480	79.0	51.658	75	12.0	1590
	742	206.1	21.5		71.0	61.228		8.9	
	901	250.3	20.0		78.0	62.954		9.9	
	1060	294.4	19.0		81.0	67.755		11.0	
350TP(L)22-90/4	1166	323.9	18.0	1480	81.0	70.608	90	12.1	1680
	1272	353.3	17.0		80.0	73.657		12.5	
	840	233.3	25.0		75.0	76.300		9.5	
	1020	283.3	23.5		80.0	81.648		10.8	
350TP(L)27-110/4	1200	333.3	22.0	1480	83.0	86.675	110	12.3	2010
	1320	366.7	20.0		82.5	87.200		13.0	
	1440	400.0	17.0		80.0	83.385		14.0	
	798	221.7	31.5		75.0	91.331		12.0	
350TP(L)30-132/4	969	269.2	29.0	1480	81.0	94.537	132	12.8	2140
	1140	316.7	27.0		84.0	99.852		14.5	
	1254	348.3	25.5		83.5	104.356		15.5	
	1368	380.0	23.0		82.0	104.560		16.5	
350TP(L)34-160/4	889	246.9	35.0	1480	80.0	105.985	160	13.0	2220
	1080	300.0	32.0		84.0	112.114		14.0	
	1270	352.8	30.0		85.0	122.144		15.0	
	1397	388.1	28.0		84.0	126.894		16.0	
350TP(L)40-185/4	1524	423.3	25.5	1480	83.0	127.589	185	17.0	2260
	980	272.2	39.0		83.0	125.481		13.2	
	1190	330.6	37.0		86.0	139.514		14.4	
	1400	388.9	34.0		88.0	147.398		16.0	
350TP(L)42-200/4	1540	427.8	31.0	1480	87.0	149.530	200	17.3	2330
	1680	466.7	28.0		83.0	154.439		18.5	
	805	223.6	46.0		76.0	132.772		8.6	
	978	271.7	43.0		79.0	145.060		9.5	
350TP(L)47-220/4	1150	319.4	40.0	1480	80.0	156.688	220	10.3	2500
	1265	351.4	38.0		78.0	167.937		10.8	
	1380	383.3	36.0		76.0	178.129		11.4	
	840	233.3	48.0		77.0	142.691		8.6	
350TP(L)52-250/4	1020	283.3	45.0	1480	80.0	156.347	250	9.3	2650
	1200	333.3	42.0		81.0	169.556		10.3	
	1320	366.7	40.0		79.0	182.127		11.2	
	1440	400.0	38.0		77.0	193.652		11.7	
350TP(L)56-280/4	875	243.1	53.0	1480	76.0	166.279	280	8.8	2770
	1063	295.3	50.0		81.0	178.807		9.6	
	1250	347.2	47.0		82.0	195.236		10.7	
	1375	381.9	43.0		80.5	200.144		11.3	
350TP(L)60-315/4	1500	416.7	39.0	1480	79.0	201.788	315	12.0	2880
	910	252.8	57.0		81.0	174.501		9.0	
	1105	306.9	55.0		83.0	199.532		10.0	
	1300	361.1	52.0		84.0	219.298		11.0	
350TP(L)60-315/4	1430	397.2	49.0	1480	83.0	230.049	315	11.6	2880
	1560	433.3	44.5		83.0	230.049		11.6	
	980	272.2	65.0		82.0	230.695		12.4	
	1190	330.6	61.0		82.0	211.686		9.6	
350TP(L)60-315/4	1400	388.9	56.0	1480	85.0	232.715	315	10.2	2880
	1540	427.8	51.0		85.5	249.871		11.7	
	1680	466.7	47.0		85.0	251.790		12.2	
	1050	291.7	72.5		82.0	252.976		9.7	
350TP(L)60-315/4	1275	354.2	67.5	1480	85.0	275.906	315	10.8	2880
	1500	416.7	60.0		87.0	281.897		12.0	
	1650	458.3	56.5		86.0	295.393		12.6	
	1800	500.0	50.0		82.0	299.085		13.7	

Characteristic curves



Dimension Figure



Outline installation dimension table

PUMP TYPE	M.T.	PN _g /PN _b	L ₁	C ₅	H ₁	H ₂	H ₃	H ₄	H ₅	P	AC	AD	F	B	W
32TP13-0.75/2	80M1					147	509				165	145			
32TPL13-0.75/2						112	467								
32TP17-1.1/2	80M2	16/16	300	150	100	147	509	35	≥300	200	165	145			
32TPL17-1.1/2						112	467								
32TP22-1.5/2	90S					147	554				180	165			
32TPL22-1.5/2						112	477								
32TP27-2.2/2	90L	16/16	340	170	100	152	589	35	≥300	200	180	165	144	195	235
32TPL27-2.2/2						117	507								
32TP35-3/2	100L					162	633			250	205	175			
32TPL35-3/2						127	552								
32TP36-4/2	112M					171	677		≥300	250	225	190			
32TPL36-4/2						122	562								
32TP46-5.5/2	132S1	16/16	370	185	100	177	707	35	≥1000	300	270	220			
32TPL46-5.5/2						122	612								
32TP12-0.75/4	80M2					147	512		≥300	200	165	145			
32TPL12-0.75/4						112	467								
40TP15-1.1/2	80M2					148	514								
40TPL15-1.1/2						113	468								
40TP19-1.5/2	90S	16/16	320	160	100	148	558	35	≥300	200	180	165			
40TPL19-1.5/2						113	478								
40TP23-2.2/2	90L					148	588								
40TPL23-2.2/2						113	503								
40TP28-3/2	100L	16/16	340	170	100	164	639	35	≥300	250	205	175	144	195	235
40TPL28-3/2						129	554								
40TP34-4/2	112M					164	674				225	190			
40TPL34-4/2						129	569								
40TP37-5.5/2	132S1					182	718		≥1000	300	270	220			
40TPL37-5.5/2						127	627								
40TP43-7.5/2	132S2	16/16	440	220	110	182	718	35			350	320	260		
40TPL43-7.5/2						127	627								
40TP50-11/2	160M1					217	882								
40TP9-0.75/4	80M2	16/16	440	220	110	152	524	35	≥300	200	165	145	144	195	235
40TPL9-0.75/4						117	482								
40TP12-1.1/4	90S					152	569				180	165			
40TPL12-1.1/4						117	492								
50TP13-1.1/2	80M2	16/16	340	170	115	151	550	35	≥300	200	160	145	144	195	235
50TPL13-1.1/2						116	486								
50TP17-1.5/2	90S					151	573				180	165			
50TPL17-1.5/2						116	496								

Outline installation dimension table

PUMP TYPE	M.T.	PN _g /PN _b	L ₁	C ₅	H ₁	H ₂	H ₃	H ₄	H ₅	P	AC	AD	F	B	W					
50TP19-2.2/2	90L	16/16	340	170	115	151	603	35	≥300	200	180	165								
50TPL19-2.2/2						116	521													
50TP24-3/2	100L					161	647													
50TPL24-3/2						126	566													
50TP27-4/2	112M	16/16	340	170	115	161	682	35	≥300	250	225	190								
50TPL27-4/2						127	582													
50TP34-5.5/2	132S1					182	723		≥1000							300	270	220		
50TPL34-5.5/2						127	632													
50TP37-7.5/2	132S2	16/16	440	220	115	182	723	35	≥1000	300	270	220								
50TPL37-7.5/2						140	645													
50TP47-11/2	160M1					230	900									350	320	260		
50TPL47-11/2						150	770													
50TP58-15/2	160M2	16/16	475	238	125	229	909	35	≥1000	350	320	260	144	195	235					
50TPL58-15/2						149	779													
50TP68-18.5/2	160L					229	939									149	834			
50TPL68-18.5/2						149	834													
50TP76-22/2	180M	229	1039	360	265															
50TPL76-22/2		149	864																	
50TP9-0.75/4	80M2	16/16	340	170	115	152	528	35	≥300	200	165	145								
50TPL9-0.75/4						117	487													
50TP8-0.75/4	80M2					165	587									165	145			
50TPL8-0.75/4						130	500													
50TP11-1.1/4	90S	16/16	440	220	115	165	587	35	≥300	200	180	165								
50TPL11-1.1/4						130	510													
50TP12-1.5/4	90L					165	617									130	535			
50TPL12-1.5/4						130	535													
50TP17-2.2/4	100L	16/16	475	238	125	174	670	35	≥300	250	205	175								
50TPL17-2.2/4						139	589													
50TP21-3/4	100L2					174	670									139	589			
50TPL21-3/4						139	589													
65TP15-2.2/2	90L	16/16	360	180	110	157	603.5	35	≥300	200	180	165	144	195	235					
65TPL15-2.2/2						122	522													
65TP18-3/2	100L					167	648									132	567	250	205	175
65TPL18-3/2						132	567													
65TP22-4/2	112M	167	683	132	582	225	190													
65TPL22-4/2		132	582																	
65TP28-5.5/2	132S1	16/16	400	200	115	184	725	35	≥1000	300	275	210	144	195	235					
65TPL28-5.5/2						129	634													
65TP37-7.5/2	132S2					184	725									129	634			
65TPL37-7.5/2						129	634													

Outline installation dimension table

PUMP TYPE	M.T.	PN _g /PN _b	L ₁	C ₅	H ₁	H ₂	H ₃	H ₄	H ₅	P	AC	AD	F	B	W						
65TP36-11/2	160M1	16/16	475	238	125	228	908	35	≥1000	350	330	255									
65TPL36-11/2						148	778														
65TP45-15/2	160M2					228	908									330	255				
65TPL45-15/2						148	778														
65TP52-18.5/2	160L	228	938	330	255																
65TPL52-18.5/2		148	833																		
65TP62-22/2	180M	228	1038	380	280																
65TPL62-22/2		148	863																		
65TP76-30/2	200L1	16/16	500	250	125	228	1098	35	≥1000	400	420	305	144	195	235						
65TPL76-30/2	148					933															
65TP84-37/2	200L2					228	1098									400	420	305			
65TPL84-37/2						148	933														
65TP7-0.75/4	80M2	16/16	400	200	115	154	530.5	35	≥300	200	175	145	144	195	235						
65TPL7-0.75/4						119	489														
65TP10-1.1/4	90S					154	575.5									200	195	165			
65TPL10-1.1/4						119	499														
65TP9-1.5/4	90L	16/16	475	238	125	163	628.5	35	≥300	200	195	165									
65TPL9-1.5/4						128	543														
65TP12-2.2/4	100L					173	673									250	215	180	144	195	235
65TPL12-2.2/4						138	588														
65TP15-3/4	100L2	173	690	250	215	180															
65TPL15-3/4		138	588																		
65TP16-3/4	100L2	16/16	500	250	125	173	669	35	≥300	250	215	180	144	195	235						
65TPL16-3/4						138	588														
65TP20-4/4	112M					173	704									250	240	190			
65TPL20-4/4						138	603														
80TP15-3/2	100L	16/16	440	220	140	167	678	35	≥300	250	205	175									
80TPL15-3/2						132	597														
80TP17-4/2	112M					167	713									132	612	187	753		
80TPL17-4/2						132	612														
80TP21-5.5/2	132S1	132	662	300	270	220															
80TPL21-5.5/2		132	662																		
80TP20-7.5/2	132S2	16/16	500	250	140	195	761	35	≥1000	300	270	220									
80TPL20-7.5/2						140	670														
80TP26-11/2	160M1					230	925									150	795	230	925		
80TPL26-11/2						150	795														
80TP33-15/2	160M2	230	925	150	795																
80TPL33-15/2		150	795																		
80TP37-18.5/2	160L	16/16	550	275	140	232	585	35	≥1000	350	320	260	144	195	235						
80TPL37-18.5/2						152	852														

Outline installation dimension table

PUMP TYPE	M.T.	PN _g /PN _b	L ₁	C ₅	H ₁	H ₂	H ₃	H ₄	H ₅	P	AC	AD	F	B	W												
80TP42-22/2	180M	16/16	550	275	140	232	685	35	≥1000	350	320	260	144	195	235												
80TPL42-22/2						152	882																				
80TP57-30/2	200L1					232	745																				
80TPL57-30/2						152	952																				
80TP62-37/2	200L2					232	745																				
80TPL62-37/2						152	952																				
80TP71-30/2	200L1	16/16	550	275	145	224	1030	35	≥1000	400	400	305	144	195	235												
80TPL71-30/2						144	949																				
80TP80-37/2	200L2					224	1030																				
80TPL80-37/2						144	949																				
80TP79-45/2	225M					16/25	660									330	170	243	1120	35	≥1000	450	420	305	280	350	450
80TPL79-45/2																		163	1043								
80TP91-55/2	250M	283	1328																								
80TPL91-55/2		163	1108																								
80TP112-75/2	280S	283	1418																								
80TPL112-75/2		163	1168																								
80TP127-90/2	280M	283	1418																								
80TPL127-90/2		163	1218																								
80TP5-0.75/4	80M2	16/16	500	250	140			165	566.5	35	≥300	200	165	145	144			195	235								
80TPL5-0.75/4								122	517																		
80TP6-1.1/4	90S							165	611.5																		
80TPL6-1.1/4								130	535																		
80TP7-1.5/4	90L					165	641.5																				
80TPL7-1.5/4						130	560																				
80TP8-2.2/4	100L	175	640																								
80TPL8-2.2/4		140	605																								
80TP9-2.2/4	100L	16/16	550	275	140	177	688	35	≥300	250	205	175	144	195	235												
80TPL9-2.2/4						142	607																				
80TP11-3/4	100L2					177	688																				
80TPL11-3/4						142	607																				
80TP15-4/4	112M					177	723																				
80TPL15-4/4						142	622																				
80TP14-3/4	100L2					16/16	550									275	145	169	639	35	≥300	250	205	175	144	195	235
80TPL14-3/4																		134	604								
80TP17-4/4	112M																	169	654								
80TPL17-4/4																		134	619								
80TP21-5.5/4	132S																	174	709								
80TPL21-5.5/4																		134	669								
80TP19-5.5/4	132S	16/16	660	330	170	208	804	35	≥300	300	270	220	280	350	450												
80TPL19-5.5/4						153	713																				

Outline installation dimension table

PUMP TYPE	M.T.	PN _g /PN _b	L ₁	C ₅	H ₁	H ₂	H ₃	H ₄	H ₅	P	AC	AD	F	B	W												
80TP23-7.5/4	132M	16/16	660	330	170	208	854	35	≥1000	300	270	220	280	350	450												
80TPL23-7.5/4						153	753																				
80TP30-11/4	160M					243	968																				
80TPL30-11/4						163	838																				
100TP15-4/2	112M					16/16	500									250	140	172	718	35	≥300	250	225	190	144	195	235
100TPL15-4/2																		137	617								
100TP18-5.5/2	132S1	192	758																								
100TPL18-5.5/2		137	667																								
100TP21-7.5/2	132S2	192	758																								
100TPL21-7.5/2		137	667																								
100TP20-11/2	160M1	16/16	580	290	155			235	945	35	≥1000	350	320	260	230			290	380								
100TPL20-11/2								155	815																		
100TP27-15/2	160M2							235	945																		
100TPL27-15/2								155	815																		
100TP30-18.5/2	160L							235	975																		
100TPL30-18.5/2								155	870																		
100TP32-22/2	180M					235	980																				
100TPL32-22/2						155	900																				
100TP39-22/2	180M					16/16	580	290	155							230.5	1010.5			35	≥1000	350	360	265	230	290	380
100TPL39-22/2																150.5	895.5										
100TP45-30/2	200L1															230.5	1060.5										
100TPL45-30/2																150.5	965.5										
100TP53-37/2	200L2	230.5	1060.5																								
100TPL53-37/2		150.5	965.5																								
100TP60-45/2	225M	16/16	610	305	165					239	1114	35	≥1000	450	450	325	230	290	380								
100TPL60-45/2										159	299																
100TP67-55/2	250M									279	1214																
100TPL67-55/2										159	1099																
100TP74-75/2	280S									279	1279																
100TPL74-75/2										159	1159																
100TP83-75/2	280S					16/25	740	370	190	298	1328									35	≥1000	550	550	395	280	350	450
100TPL83-75/2										178	1203																
100TP89-90/2	280M									298	1378																
100TPL89-90/2										178	1253																
100TP102-110/2	280M1									303	1647																
100TPL102-110/2										193	1458																
100TP110-132/2	315M	303	1677																								
100TPL110-132/2		193	1568																								
100TP121-160/2	315L1	303	1677																								
100TPL121-160/2		193	1568																								

Outline installation dimension table

PUMP TYPE	M.T.	PN _g /PN _b	L ₁	C ₅	H ₁	H ₂	H ₃	H ₄	H ₅	P	AC	AD	F	B	W												
125TP12-5.5/6	132M2	16/16	800	400	220	219	915	35	≥1000	300	270	220	280	350	450												
125TPL12-5.5/6						164	814																				
125TP14-7.5/6	160M					254	1175																				
125TPL14-7.5/6						174	899																				
150TP13-11/4	160M	16/16	880	440	250	255	1060	35	≥1000	350	320	260	280	350	450												
150TPL13-11/4	175					930																					
150TP16-15/4	160L					255	1090																				
150TPL16-15/4						175	985																				
150TP18-18.5/4	180M					255	1190																				
150TPL18-18.5/4						175	1015																				
150TP19-18.5/4	180M	16/16	920	460	260	251	1100	35	≥1000	350	360	265	330	430	530												
150TP19-18.5/4						171	1021																				
150TP22-22/4	180L					251	1140																				
150TPL22-22/4						171	1061																				
150TP28-30/4	200L					251	1175																				
150TPL28-30/4						171	1091																				
150TP32-37/4	225S					281	1216																				
150TPL32-37/4						171	1106																				
150TP34-45/4	225M					281	1251																				
150TPL34-45/4						171	1141																				
150TP41-45/4	225M	16/16	1000	500	260	288	1258	35	≥1000	450	450	325	330	430	530												
150TPL41-45/4						178	1148																				
150TP43-55/4	250M					288	1423																				
150TPL43-55/4						178	1213																				
150TP51-75/4	280S					288	1503																				
150TPL51-75/4						178	1273																				
150TP57-90/4	280M					288	1553																				
150TPL57-90/4						178	1323																				
150TP4-2.2/6	112M					16/16	880									440	250	200	790	35	≥300	250	225	190	280	350	450
150TPL4-2.2/6																		165	755								
150TP5-3/6	132S																	220	896								
150TPL5-3/6																		165	805								
150TP6-4/6	132M1	220	946																								
150TPL6-4/6		165	845																								
150TP8-5.5/6	132M2	16/16	920	460	250	220	946	35	≥1000	300	270	220	280	350	450												
150TPL8-5.5/6						165	845																				
150TP9-5.5/6	132M2					201	890																				
150TPL9-5.5/6						161	851																				
150TP12-7.5/6	160M					251	1066																				
150TPL12-7.5/6						171	936																				

Outline installation dimension table

PUMP TYPE	M.T.	PN _g /PN _b	L ₁	C ₅	H ₁	H ₂	H ₃	H ₄	H ₅	P	AC	AD	F	B	W												
150TP14-11/6	160L	16/16	920	460	260	251	1096	35	≥1000	350	320	260	330	430	530												
150TPL14-11/6						171	991																				
150TP17-15/6	180L					258	1253																				
150TPL17-15/6						178	1068																				
150TP20-18.5/6	200L1	16/16	1000	500	260	258	1263	35	≥1000	400	400	305	330	430	530												
150TPL20-18.5/6						178	1098																				
150TP23-22/6	200L2					258	1263																				
150TPL23-22/6						178	1098																				
150TP26-30/6	225M					288	1348																				
150TPL26-30/6						178	1148																				
200TP10-11/4	160M	16/16	950	475	290	252	1097	35	≥1000	350	320	260	280	350	450												
200TPL10-11/4						185	980																				
200TP18-15/4	160L					252	1127																				
200TPL18-15/4						185	1035																				
200TP14-18.5/4	180M	16/16	1060	530	290	295	1270	35	≥1000	350	360	265	330	430	530												
200TPL14-18.5/4						185	1065																				
200TP15-22/4	180L					295	1320																				
200TPL15-22/4						185	1105																				
200TP18-30/4	200L					295	1330																				
200TPL18-30/4						185	1135																				
200TP21-37/4	225S					295	1360																				
200TPL21-37/4						185	1150																				
200TP23-45/4	225M					16/16	1120									560	310	291	1401	35	≥1000	450	450	325	330	430	530
200TPL23-45/4																		185	1205								
200TP27-55/4	250M	291	1476																								
200TPL27-55/4		185	1270																								
200TP32-75/4	280S	291	1436																								
200TPL32-75/4		185	1330																								
200TP29-37/4	225S	16/16	1120	560	310			301	1286	35	≥1000	450	450	325	330			430	530								
200TPL29-37/4								191	1176																		
200TP32-45/4	225M							301	1321																		
200TPL32-45/4								191	1211																		
200TP36-55/4	250M							301	1386																		
200TPL36-55/4								191	1276																		
200TP42-75/4	280S					301	1611																				
200TPL42-75/4						191	1336																				
200TP46-90/4	280M					301	1651																				
200TPL46-90/4						191	1386																				
200TP52-110/4	315S	336	1890																								
200TPL52-110/4		221	1576																								

Outline installation dimension table

PUMP TYPE	M.T.	PN _g /PN _b	L ₁	C ₅	H ₁	H ₂	H ₃	H ₄	H ₅	P	AC	AD	F	B	W
200TP57-132/4	315M	16/16	1120	560	310	336	1920	35	≥1000	660	630	540	330	430	530
200TPL57-132/4						221	1686								
200TP7-7.5/6	160M	16/16	1060	530	290	265	1110	35	≥1000	350	320	260	330	430	530
200TPL7-7.5/6						185	980								
200TP9-11/6	160L	16/16	1060	530	290	265	1140	35	≥1000	350	320	260	330	430	530
200TPL9-11/6						185	1035								
200TP11-15/6	180L	16/16	1120	560	310	261	1305	35	≥1000	350	360	265	330	430	530
200TPL11-15/6						181	1125								
200TP13-18.5/6	200L1	16/16	1120	560	310	291	1346	35	≥1000	400	400	305	330	430	530
200TPL13-18.5/6						181	1155								
200TP14-22/6	200L2	16/16	1120	560	310	291	1265	35	≥1000	400	400	305	330	430	530
200TPL14-22/6						181	1155								
200TP18-22/6	200L2	16/16	1120	560	310	271	1326	35	≥1000	400	400	305	330	430	530
200TPL18-22/6						191	1161								
200TP21-30/6	225M	16/16	1120	560	310	301	1411	35	≥1000	450	450	325	330	430	530
200TPL21-30/6						191	1211								
200TP25-37/6	250M	16/16	1120	560	310	301	1486	35	≥1000	550	510	380	330	430	530
200TPL25-37/6						191	1276								
250TP20-45/4	225M	16/16	1110	580	340	306	1446	50	≥1000	450	450	325	400	500	600
250TPL20-45/4						196	1246								
250TP23-55/4	250M	16/16	1110	580	340	306	1521	50	≥1000	550	510	380	400	500	600
250TPL23-55/4						196	1311								
250TP28-75/4	280S	16/16	1110	580	340	306	1651	50	≥1000	550	550	390	400	500	600
250TPL28-75/4						196	1371								
250TP34-90/4	280M	16/16	1110	580	340	306	1706	50	≥1000	550	550	390	400	500	600
250TPL34-90/4						196	1421								
250TP38-90/4	280M	16/16	1210	605	355	311	1551	50	≥1000	550	550	395	400	500	600
250TPL38-90/4						201	1441								
250TP42-110/4	280M1	16/16	1210	605	355	346	1945	50	≥1000	660	645	530	400	500	600
250TPL42-110/4						216	1646								
250TP48-132/4	315M	16/16	1210	605	355	346	1975	50	≥1000	660	645	530	400	500	600
250TPL48-132/4						231	1741								
250TP55-160/4	315L1	16/16	1210	605	355	346	1975	50	≥1000	660	645	530	400	500	600
250TPL55-160/4						231	1741								
300TP20-55/4	250M	16/16	1260	630	400	306	1581	50	≥1000	550	510	380	400	500	600
300TPL20-55/4						196	1371								
300TP26-75/4	280S	16/16	1260	630	400	306	1671	50	≥1000	550	550	390	400	500	600
300TPL26-75/4						196	1431								
300TP29-90/4	280M	16/16	1260	630	400	306	1711	50	≥1000	550	550	390	400	500	600
300TPL29-90/4						196	1481								

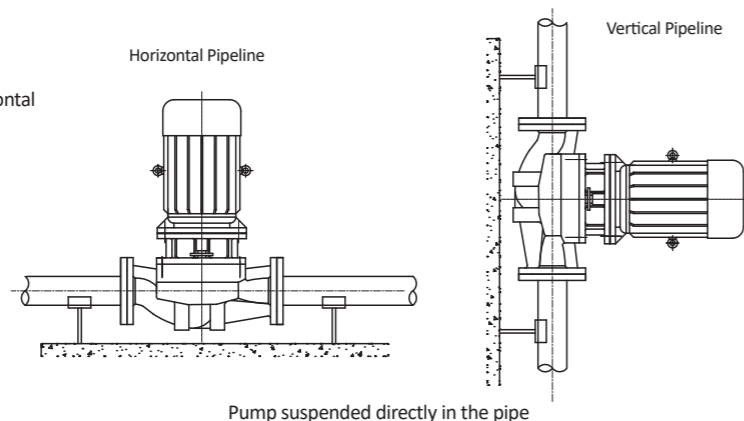
Outline installation dimension table

PUMP TYPE	M.T.	PN _g /PN _b	L ₁	C ₅	H ₁	H ₂	H ₃	H ₄	H ₅	P	AC	AD	F	B	W
300TP38-110/4	315S	16/16	1280	640	395	346	1985	50	≥1000	660	630	540	400	500	600
300TPL38-110/4						231	1671								
300TP42-132/4	315M	16/16	1280	640	395	346	2015	50	≥1000	660	630	540	400	500	600
300TPL42-132/4						231	1781								
300TP46-160/4	315L1	16/16	1280	640	395	346	2015	50	≥1000	660	630	540	400	500	600
300TPL46-160/4						231	1781								
300TP50-185/4	315L	16/16	1280	640	395	346	2015	50	≥1000	660	630	540	400	500	600
300TPL50-185/4						231	1781								
300TP52-200/4	315L2	16/16	1280	640	395	346	2015	50	≥1000	660	630	540	400	500	600
300TPL52-200/4						231	1781								
350TP15-55/4	250M	16/16	1360	680	440	306	1621	50	≥1000	550	510	380	400	500	600
350TPL15-55/4						204	1419								
350TP19-75/4	280S	16/16	1360	680	440	306	1701	50	≥1000	550	550	390	400	500	600
350TPL19-75/4						204	1479								
350TP22-90/4	280M	16/16	1360	680	440	306	1751	50	≥1000	550	550	390	400	500	600
350TPL22-90/4						204	1529								
350TP27-110/4	315S	16/16	1400	700	440	350	2034	50	≥1000	660	630	540	400	500	600
350TPL27-110/4						234	1719								
350TP30-132/4	315M	16/16	1400	700	440	350	2064	50	≥1000	660	630	540	400	500	600
350TPL30-132/4						234	1829								
350TP34-160/4	315L1	16/16	1400	700	440	350	2064	50	≥1000	660	630	540	400	500	600
350TPL34-160/4						234	1829								
350TP40-185/4	315L	16/16	1400	700	440	350	2064	50	≥1000	660	630	540	400	500	600
350TPL40-185/4						234	1829								
350TP42-200/4	315L2	16/16	1400	700	440	350	2064	50	≥1000	660	630	540	400	500	600
350TPL42-200/4						234	1829								
350TP47-220/4	355M1	16/16	1460	730	440	364	2188	50	≥1000	800	715	645	400	500	600
350TPL47-220/4						239	1834								
350TP52-250/4	355M	16/16	1460	730	440	364	2188	50	≥1000	800	715	645	400	500	600
350TPL52-250/4						239	2034								
350TP56-280/4	355L1	16/16	1460	730	440	364	2298	50	≥1000	800	715	645	400	500	600
350TPL56-280/4						239	2034								
350TP60-315/4	355L	16/16	1460	730	440	364	2298	50	≥1000	800	715	645	400	500	600
350TPL60-315/4						239	2034								

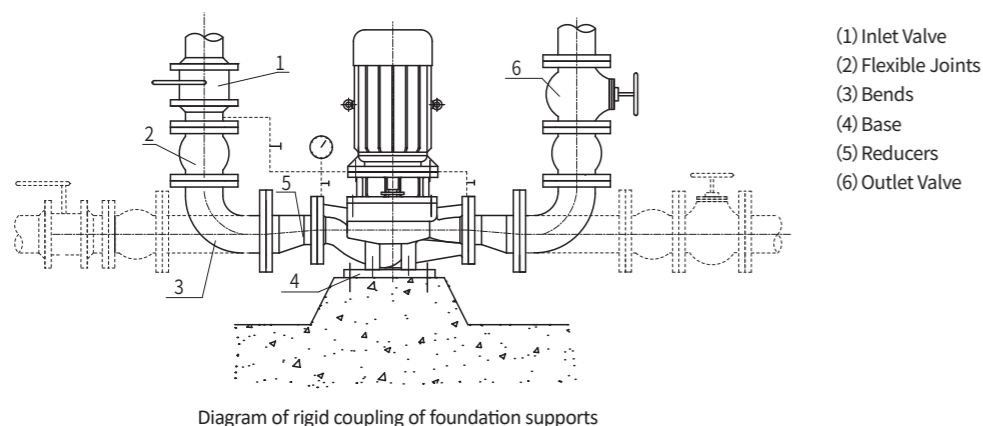
Base Requirement and Installation Mode

Vertical Installation

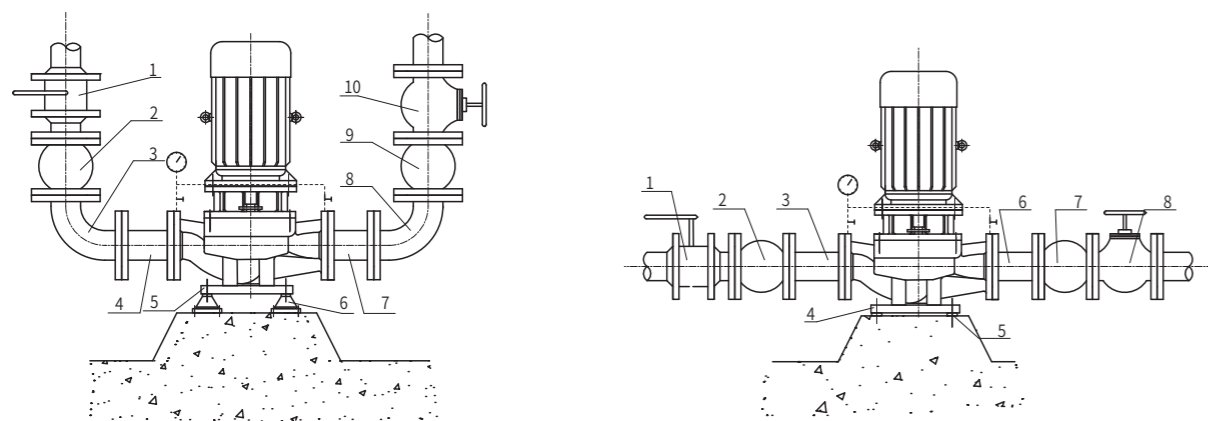
Pumps $\leq 7.5\text{kW}$ can be installed directly in horizontal or vertical piping systems without a base if the piping on both sides of the pump is adequately supported.



Foundation Support Rigid Coupling



Flexible Coupling Of Foundation Supports



Flexible coupling diagram for foundation support

Notes on Order-placing

Dear Customer:

Please fill in the following form with the assistance of Tianquan sales staff or agents, so that the pump solution can meet your requirements in pump model, material, shaft seal, accessories, installation conditions and other aspects

Data Sheet	Sheet No.
Customer Information	Product Information
Company Name:	Project name:
Contact Person:	Model:
Phone:	Quantity:
FAX:	
E-mail:	

Medium

Liquid Name: _____
 Max. Temperature: _____ (°C)
 Min. Temperature: _____ (°C)
 Density: _____ (%)
 PH Value: _____
 Viscosity: _____ (mm²/s)
 Density: _____ (kg/m³)
 Solid particle content: _____ (mass%)
 Crystallization? Yes: ____ NO ____

Environment

Ambient Temperature: _____ (°C)
 Ambient Humidity: _____ (%)
 Altitude: _____ (m)

Pressure

Min. Inlet Pressure: _____ (bar)
 Max. Inlet Pressure: _____ (bar)

Parameter

Main Operating Point Q: _____ (m³/h) H: _____ (m)
 Max. Operating Point Q: _____ (m³/h) Hmax: _____ (m)
 Min. Operating Point Q: _____ (m³/h) Hmin: _____ (m)

Material Requirement:

Mechanical Sealing: _____

Motor: _____

Other accessories (base plate, valve, flexible joint, etc.): _____