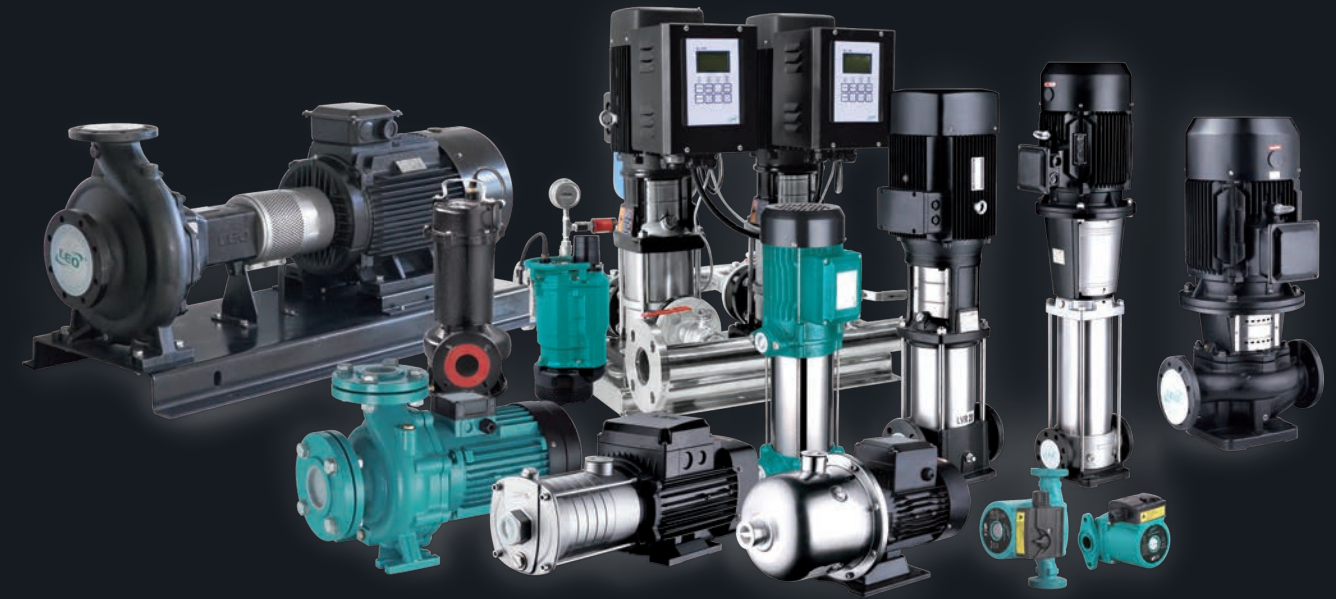


LEO PUMP



Product Catalogue



Commercial Pumps

Commercial Pumps

 利欧集团股份有限公司
LEO GROUP CO., LTD. (Stock code: 002131)

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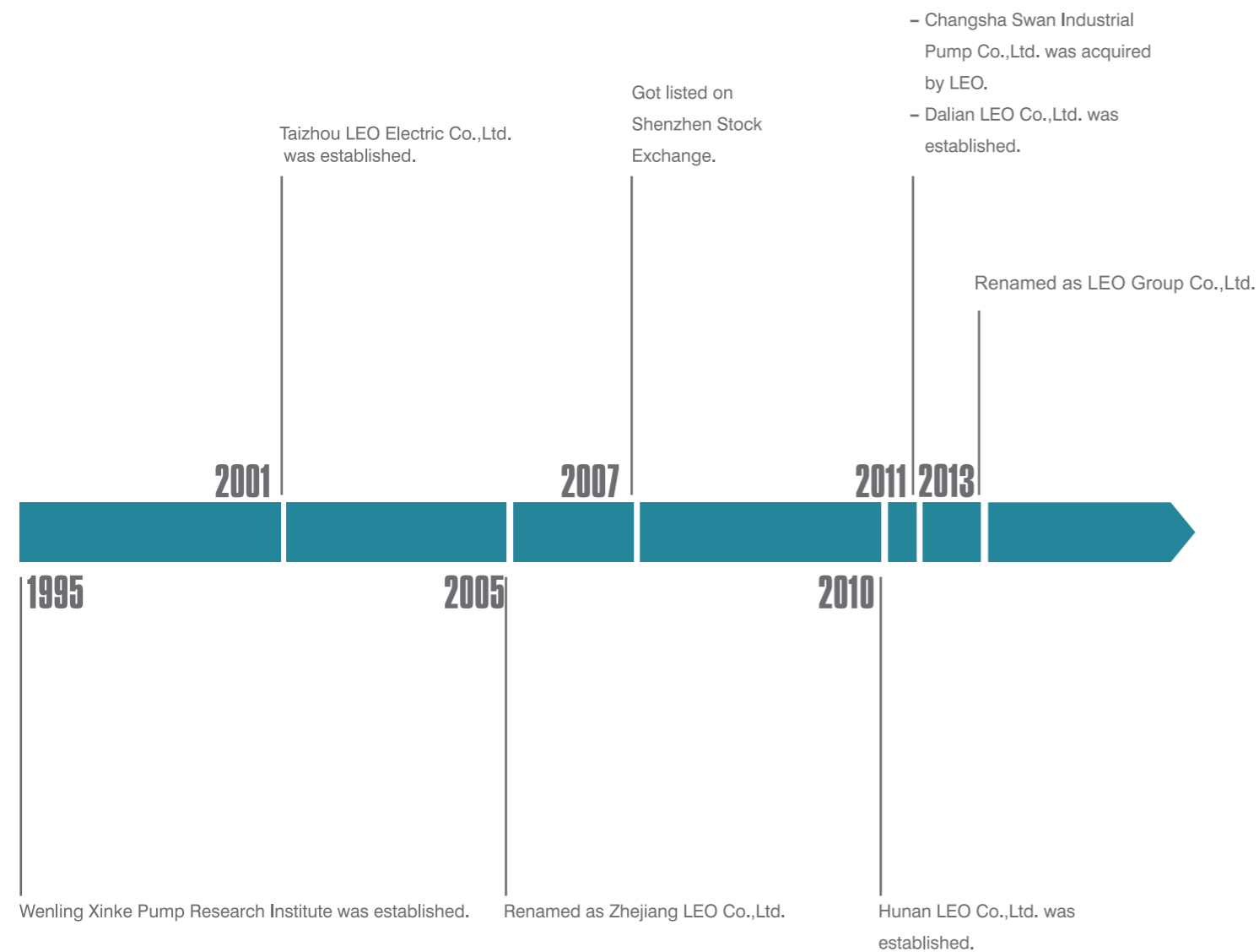
利欧集团股份有限公司
LEO GROUP CO., LTD.



www.leogroup.cn

2016 V1.0

HISTORY



TO KNOW LEO

LEO Group Co., Ltd. (got listed in Shenzhen Stock Exchange with stock code 002131) is a national high-tech enterprise engaged in R&D, design, manufacture, sales and service of all series pumps. LEO is the first listed company in Chinese pump industry, one of the drafters of pump industry standard and the vice president of drainage and irrigation machinery branch of China Agricultural machinery industry association as well. It is mentionable that LEO has the only state-authorized technical center in this industry.

Our products have been sold to over 120 countries and regions, such as Europe, North America, Central & South America, Southeast Asia, Middle East, Africa, Oceania, etc., which play a crucial role in water conservancy, water resources, electric power construction, petrochemical industry, mining, metallurgy, fire-fighting, HVAC (Heating, Ventilation and Air Conditioning), agricultural irrigation, civil water supply and drainage, etc.

LEO has currently two industrial groups respectively for industrial and civilian applications. With five manufacturing bases in Wenling of Zhejiang, Xiangtan of Hunan, Changsha of Hunan, Wuxi of Jiangsu and Dalian of Liaoning, LEO possesses a solid foundation to become a world-class pump and system solution provider rapidly.

With over 70 years' professional technology, LEO will continue her consistent creativity and development ability in each pump for human's health.



NUMEROUS MEMBERS, ONE FAMILY

Based on market segment, LEO's pump business is divided into 5 fields, namely water conservancy & water resources, power station, petrochemical industry, mining & metallurgical industry and civilian applications. For each field there's a professional manufacturing base with relevant professional sales teams. Four subsidiary companies – Wuxi LEO Xi Pump, Changsha LEO Swan Pump, Dalian LEO Huaneng Pump and Hunan LEO Pump are all well-known industrial pump manufacturers in their own fields. With over 70 years' industrial pump manufacturing experience and extraordinary comprehensive strength, LEO becomes a leading company among all industrial pump manufacturers in China.



Pump Manufacturing Base for General Industrial Pumps (Xiangtan City, Hunan Province)

It is the core base and the most important R&D, manufacturing and testing center of LEO group.

The leading products include large mixed flow pump, large mixed axial flow pump (vertical, horizontal, oblique, tubular, submersible, etc.), double-suction centrifugal pump, multistage centrifugal pump, slurry pump, desulphurization and submerged centrifugal pump. Conventional products are mainly used in mine, metallurgy, goal washing, FGD, municipal water, etc.

There are numerous high-grade precision and advanced processing equipment, such as 8 m CNC vertical lathe and 5-axis linkage machining center.

A world-class pump testing center with testing power up to 12,500 kW realizes high precision tests for real pumps which are used for power station, water conservancy and water resources, petrochemical industry, mining and metallurgical industry.



Pump Manufacturing Base for Water Conservancy & Water Resources (Wuxi City, Jiangsu Province)

This base grew out of Wuxi Xi Pump Manufacturing Co.,Ltd, a well-known manufacturer for water conservancy.

The base is specialized in production of large and medium-sized pumps for urban water supply and drainage, field irrigation, water conservancy projects and large water diversion projects. The main products cover 8 series with 995 specifications.

With great honor, the model 300HW-8 mixed-flow pump won the first national quality award of Chinese pump industry. As a main supplier, the base provides large pumps for South-to-North Water Diversion Project, a national key project.



Pump Manufacturing Base for Petrochemical Industry (Dalian City, Liaoning Province)

The predecessor of this base is Dalian Huaneng Corrosion-Resistant Pump Works, who's a well-known pump manufacturer in petrochemical industry.

The base is specialized in production of petrochemical pumps for the upstream industry of oil and gas (including exploration, exploitation and storage) and downstream industry of petrochemicals (including crude oil refinery, heavy chemical industry, fine chemistry and coal chemical industry).

The base focuses on design and manufacture of 30 series (OH, BB, VS, etc.) of petrochemical pumps with over 3,000 specifications, which are in accordance with API and ISO standard. The production of large crude oil long distance pipeline pump (BB1 and BB2) and HTHP overloaded pump (BB3 and BB4) is available. LNG cryo-pump is already in development.

The base is Class A supplier of CNPC and qualified sub supplier of Shenhua Group.



Pump Manufacturing Base for Civilian Applications (Wenling City, Zhejiang Province)

This base is specialized in production of domestic pumps for family water supply, pipeline boost, HVAC, garden and field irrigation, etc.

The product range covers 15 series with over 2,000 specifications, which are well sold in more than 120 countries and regions. The base has established steady cooperative relationships with world class pump manufacturers, importers, dealers and hypermarkets.

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• Stainless Steel Vertical Multistage Pump

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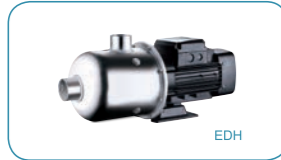
• Stainless Steel Vertical Multistage Pump

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• Submersible Dewatering Pump

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• Submersible Slurry Pump

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• Submersible Sewage Pump

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• Submersible Sewage Pump

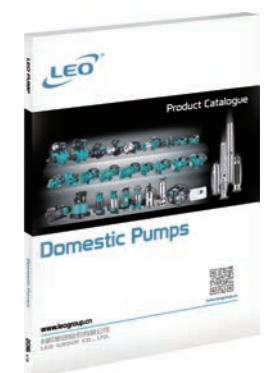
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• Pressure Booster System

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Domestic pumps :





Application

- Suitable for transferring liquids of low viscosity, non-inflammable and non-explosive, not containing solid particles or fibers
- Water supply & drainage for high-rise buildings, filtration and transfer at waterworks, pressure boosting in main pipe
- Washing and cleaning systems, boiler feeding, cooling water circulation, water treatment systems, auxiliary system, support equipment
- Ultra-filtration systems, reverse-osmosis systems, distillation systems, separators, swimming pools
- Agricultural irrigation: sprinkler irrigation, drip-feed irrigation
- Food & beverage industry
- Fire-fighting system

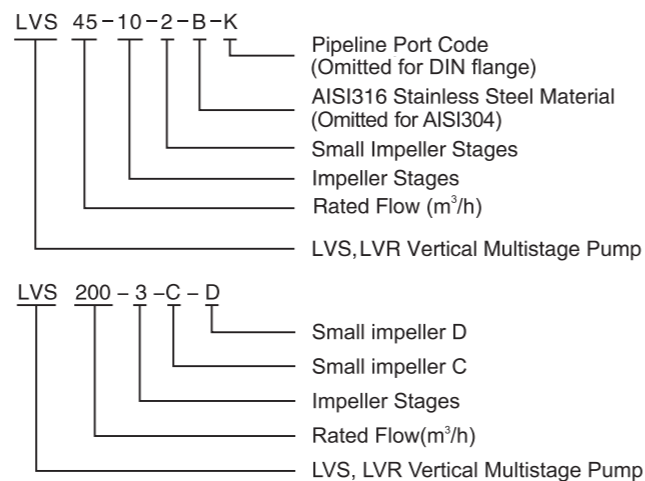
Operating Conditions

- Low viscosity, non-inflammable and non-explosive liquids not containing solid particles or fibers. The liquids must not chemically attack the pump materials. When pumping liquids with a density or viscosity is higher than that of water, a motor with a higher output power rating shall be used.
- Liquid temperature: -20°C~+120°C
- Flow ranges: 0.7-240 m³/h
- Liquid pH value: 4 - 10
- Max. ambient temperature: +40°C
- Max. operation pressure: 33 bar
- Altitude: up to 1000 m

Motor

- IE 2 motor (IE 3 motor optional)
- Totally enclosed & fan-cooled
- Protection class: IP55
- Standard voltage: 50Hz 1 × 220V/3 × 380V

Identification Codes



LVS: Stainless steel wetted parts
LVR: Cast iron base & pump cover

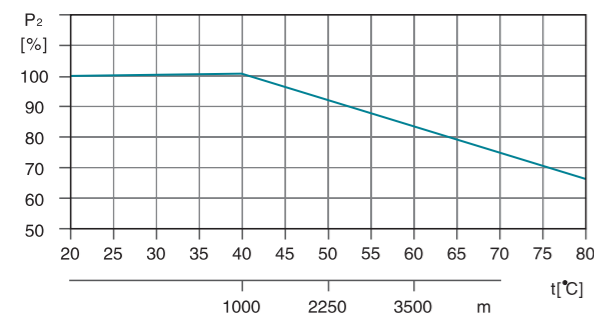
Identifications codes of flange structure

A: Oval flange : K: Clamp connector :
G: Threaded connector

Ambient Temperature

Max. ambient temperature: + 40°C. Ambient temperature above 40°C or installation at altitude of more than 1000 meters above sea level require the use of an oversize motor. Because of low air density and poor cooling effects, the motor output power P₂ will be decreased. See the picture.

In such cases, it may be necessary to use a motor with a higher output power rating.



For example, when the pump is installed at altitude of more than 3500 meters above sea level, P₂ will be decreased to 88%. When the ambient temperature is 70°C, P₂ will be decreased to 78%.

Minimum Inlet Pressure-Npsh

Calculation of the inlet pressure "H" is recommended in these situations:

- The liquid temperature is high.
- The flow is significantly higher than the rated flow.
- Water is drawn from depths.
- Water is drawn through long pipes.
- Inlet conditions are poor.

To avoid cavitation, make sure that there is a minimum pressure on the suction side of the pump. The maximum suction lift "H" in meters head can be calculated as follows:

$$H = P_b \times 10.2 - NPSH - H_f - H_v - H_s$$

P_b = Barometric pressure in bar. (Barometric pressure can be set to 1 bar). In closed systems, P_b indicates the system pressure in bar.

NPSH = Net Positive Suction Head in meters head. (To be read from the NPSH curve at the highest flow the pump will be delivering.)

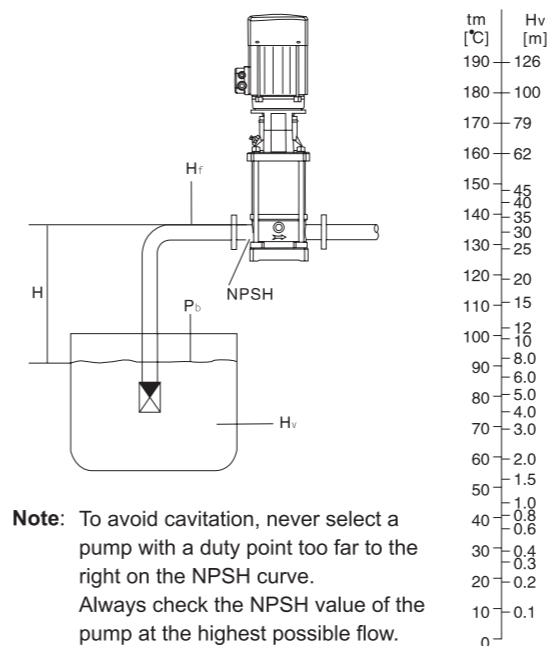
H_f = Friction loss in suction pipe in meters head. (At the highest flow the pump will be delivering.)

H_v = Vapor pressure in meters head. (To be read from the vapor pressure scale. "H_v" depends on the liquid temperature "tm")

H_s = Safety margin=minimum 0.5 meters head.

If the "H" calculated is positive, the pump can operate at a suction lift of maximum "H" meters head.

If the "H" calculated is negative, an inlet pressure of minimum "H" meters head is required.



Note: To avoid cavitation, never select a pump with a duty point too far to the right on the NPSH curve. Always check the NPSH value of the pump at the highest possible flow.

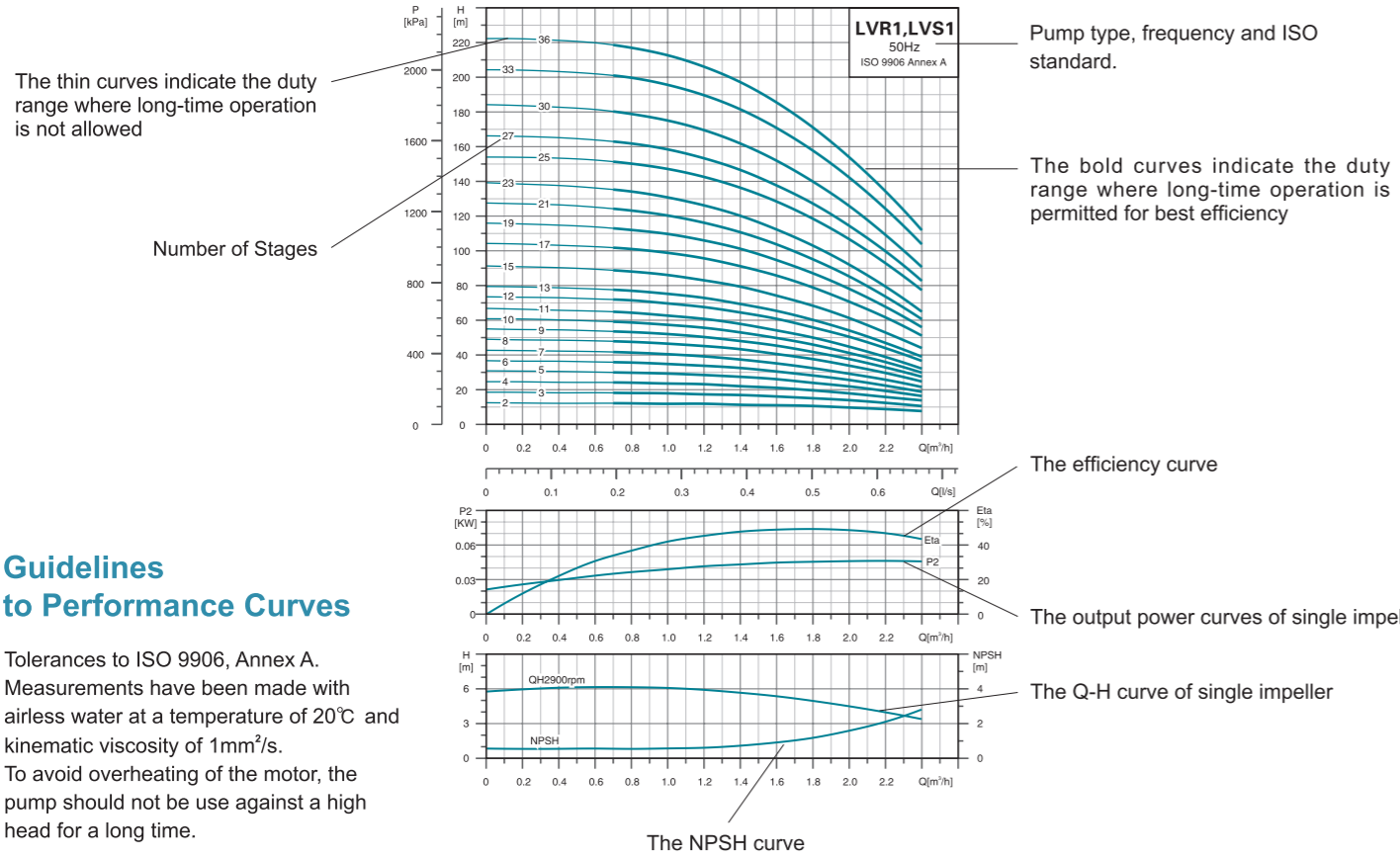
Maximum Inlet Pressure

The following table shows the maximum permissible inlet pressure. However, the current inlet pressure + the pressure against a closed valve must always be lower than the Max. permissible operating pressure.

If the maximum permissible operating pressure is exceeded, the bearing in the motor may be damaged and the life of the shaft seal reduced.

Model	Maximum Inlet Pressure [bar]
LVR1, LVS1	
1-2 — 1-36	10
LVR2, LVS2	
2-2	6
2-3 — 2-12	10
2-13 — 2-26	15
LVR3, LVS3	
3-2 — 3-29	10
3-31 — 3-26	15
LVR4, LVS4	
4-2	6
4-3 — 4-11	10
4-12 — 4-22	15
LVR5, LVS5	
5-2 — 5-16	10
5-18 — 5-29	15
LVR10, LVS10	
10-1 — 10-6	8
10-7 — 10-22	10
LVR15, LVS15	
15-1 — 15-3	8
15-4 — 15-17	10
LVR20, LVS20	
20-1 — 20-3	8
20-4 — 20-17	10
LVR32, LVS32	
32-1-1 — 32-4	4
32-5-2 — 32-10	10
32-11 — 32-14	15
LVR45, LVS45	
45-1-1 — 45-2	4
45-3-2 — 45-5	10
45-6-2 — 45-13-2	15
LVR64, LVS64	
64-1-1 — 64-2-2	4
64-2-1 — 64-4-2	10
64-4-1 — 64-8-1	15
LVR90, LVS90	
90-1-1 — 90-1	4
90-2-2 — 90-3-2	10
90-3 — 90-6	15
LVR120, LVS120	
120-1 — 120-2-1	10
120-2 — 120-5-1	15
120-5 — 120-7	20
LVR150, LVS150	
150-1-1 — 150-2-2	10
150-2-1 — 150-4-1	15
150-4 — 150-6	20
LVR200, LVS200	
200-1-D	10
200-1-C — 200-2-2C	15
200-2-C — 200-4	20

How to Read The Curve Charts



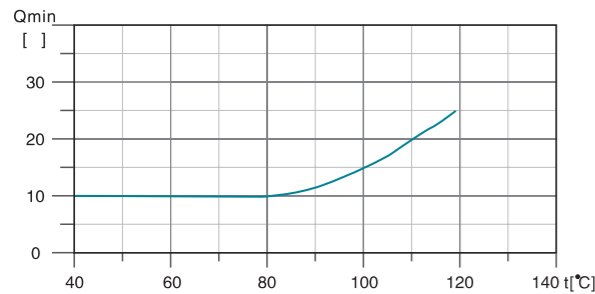
Guidelines to Performance Curves

Tolerances to ISO 9906, Annex A. Measurements have been made with airless water at a temperature of 20°C and kinematic viscosity of 1mm²/s. To avoid overheating of the motor, the pump should not be use against a high head for a long time.

Minimum Flow Rate

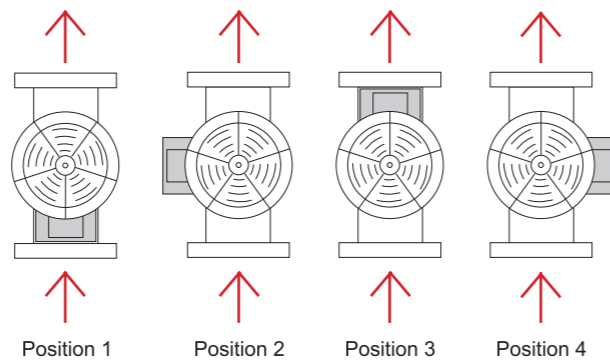
Due to the risk of overheating, the pump should not be used at a flow below the minimum flow rate. The curve below shows the minimum flow rate as a percentage of the nominal flow rate in relation to the liquid temperature.

Air cooling apparatus



Note: The outlet valve must be opened when the pump is in operation.

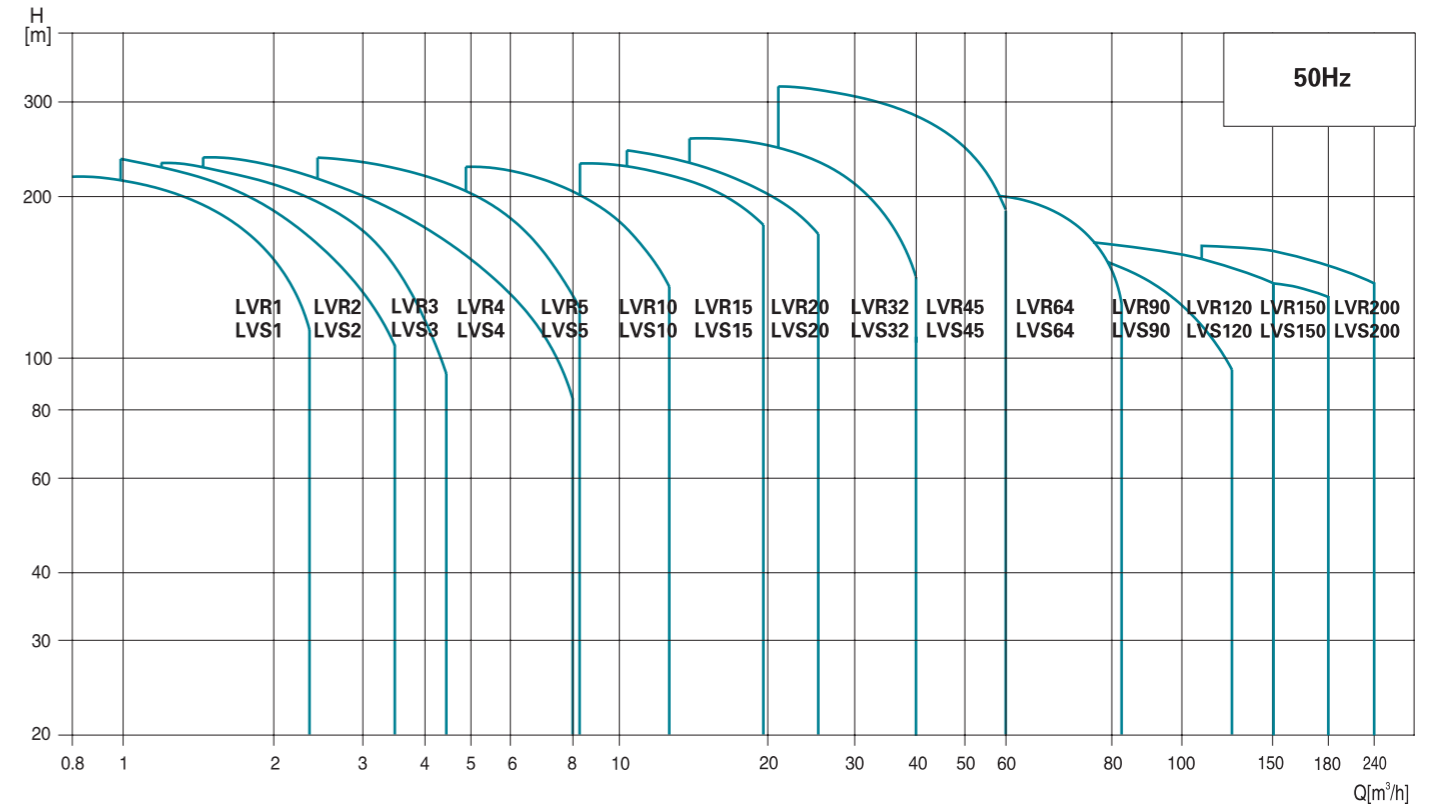
Terminal Box Positions
(Note: set to position 1 before delivery)



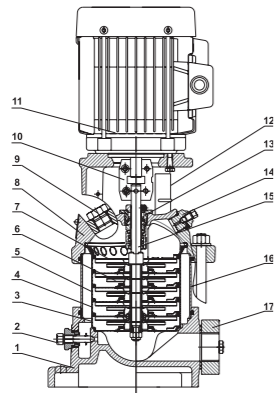
Product Range

MODEL	LVR(S)1	LVR(S)2	LVR(S)3	LVR(S)4	LVR(S)5	LVR(S)10	LVR(S)15	LVR(S)20	LVR(S)32	LVR(S)45	LVR(S)64	LVR(S)90	LVR(S)120	LVR(S)150	LVR(S)200
DESCRIPTION															
Rated flow [m ³ /h]	1	2	3	4	5	10	15	20	32	45	64	90	120	150	200
Flow range [m ³ /h]	0.7-2.4	1.0-3.5	1.2-4.5	1.5-8	2.5-8.5	5-13	8-23	10.5-29	15-40	22-58	30-85	45-120	60-150	80-180	100-240
Max. pressure [bar]	22	23	24	21	24	22	23	25	28	33	22	20	16	16	16
Motor power [kW]	0.37-2.2	0.37-3	0.37-3	0.37-4	0.37-4	1.1-7.5	1.1-15	1.1-18.5	1.5-30	3-45	4-45	5.5-45	11-75	11-75	18.5-110
Temperature Range [°C]	-20°C~+120°C (Note: Both the Max. permissible pressure and liquid temperature range refer to the pump capacity.)														
Max. pump efficiency [%]	45	46	55	59	60	65	70	72	78	79	80	81	74	73	79
Pipe connection-LVR															
Oval flange	G1	G1	G1	G1 1/4	G1 1/4	-	-	-	-	-	-	-	-	-	-
DIN flange	DN25	DN25	DN25	DN32	DN32	DN40	DN50	DN50	DN65	DN80	DN100	DN100	DN125	DN125	DN150
Pipe connection-LVS															
Oval flange	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DIN flange	DN32	DN32	DN32	DN32	DN32	DN40	DN50	DN50	DN65	DN80	DN100	DN100	DN125	DN125	DN150
Clamp connector	φ 42	φ 42	φ 42	φ 42	φ 42	-	-	-	-	-	-	-	-	-	-
Threaded connector	G1 1/4	G1 1/4	G1 1/4	G1 1/4	G1 1/4	-	-	-	-	-	-	-	-	-	-

Scope of Performance-LVR,LVS

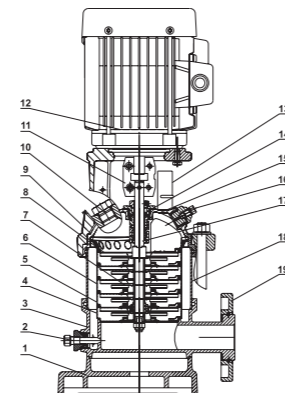


Cross Section



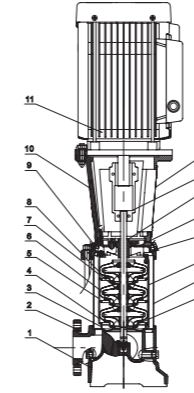
MODEL: LVR1 (2,3,4,5)

Part	Material
1 Base	HT200
2 Drainage plug assembly	AISI304
3 Primary diffuser	AISI304
4 Diffuser with bearing	AISI304
5 Medium diffuser	AISI304
6 Impeller	AISI304
7 Final volute	AISI304
8 Motor base	HT200
9 Filling plug	AISI304
10 Coupling	Iron based powder metallurgy
11 Motor	
12 Guarding plate	AISI304
13 Cartridge seal	
14 Vent plug assembly	AISI304
15 Pump shaft	AISI304
16 Pump barrel	AISI304
17 Oval flange	HT200



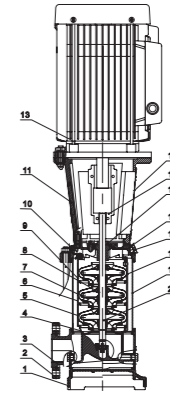
MODEL: LVS1 (2,3,4,5)

Part	Material	Optional Material
1 Base plate	HT200	
2 Drainage plug assembly	AISI304	AISI316
3 Chasis	ZG304	ZG316
4 Primary diffuser	AISI304	AISI316
5 Diffuser with bearing	AISI304	AISI316
6 Medium diffuser	AISI304	AISI316
7 Impeller	AISI304	AISI316
8 Final volute	AISI304	AISI316
9 Motor base	HT200	
10 Filling plug	AISI304	AISI316
11 Coupling	Iron based powder metallurgy	
12 Motor		
13 Guarding plate	AISI304	
14 Cartridge seal		
15 Pump cover	ZG304	ZG316
16 Vent plug assembly	AISI304	AISI316
17 Pump shaft	AISI304	AISI316
18 Pump barrel	AISI304	AISI316
19 Flange	ZG35	



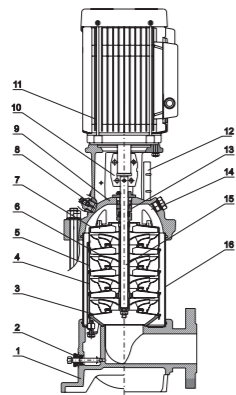
MODEL: LVR32 (45,64,90)

Part	Material
1 Base plate	HT200
2 Flange	ZG35
3 Primary diffuser	AISI304
4 Medium diffuser	AISI304
5 Diffuser with bearing	AISI304
6 Impeller	AISI304
7 Shaft sleeve assembly	
8 Final diffuser	AISI304
9 Vent plug assembly	AISI304
10 Motor base	HT200
11 Motor	
12 Guarding plate	AISI304
13 Coupling	QT400
14 Cartridge seal	
15 HT200 Pump head	HT200
16 Filling plug	AISI304
17 Tension plate	AISI304
18 Pump barrel	AISI304
19 Pump shaft	AISI304



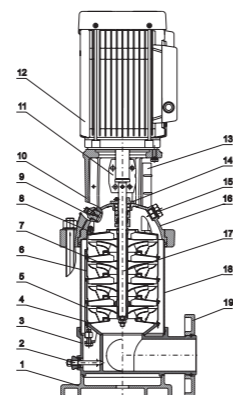
MODEL: LVS32 (45,64,90)

Part	Material	Optional Material
1 Base plate	HT200	
2 Flange	ZG35	
3 Chasis	ZG304	ZG316
4 Primary diffuser	AISI304	AISI316
5 Medium diffuser	AISI304	AISI316
6 Diffuser with bearing	AISI304	AISI316
7 Impeller	AISI304	AISI316
8 Shaft sleeve assembly		
9 Final diffuser	AISI304	AISI316
10 Vent plug assembly	AISI304	AISI316
11 Motor base	HT200	
12 Motor		
13 Guarding plate	AISI304	
14 Coupling	QT400	
15 Cartridge seal		
16 Pump head	ZG304	ZG316
17 Filling plug	AISI304	AISI316
18 Tension plate	AISI304	AISI316
19 Pump barrel	AISI304	AISI316
20 Pump shaft	AISI304	AISI316



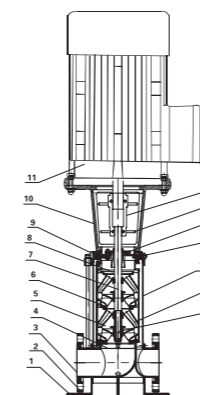
MODEL: LVR10 (15,20)

Part	Material
1 Base	HT200
2 Drainage plug assembly	AISI304
3 Primary diffuser	AISI304
4 Diffuser with bearing	AISI304
5 Medium diffuser	AISI304
6 Impeller	AISI304
7 Final volute	AISI304
8 Filling plug	AISI304
9 Motor base	HT200
10 Coupling	Iron based powder metallurgy
11 Motor	
12 Guarding plate	AISI304
13 Cartridge seal	
14 Vent plug assembly	AISI304
15 Pump shaft	AISI304
16 Pump barrel	AISI304



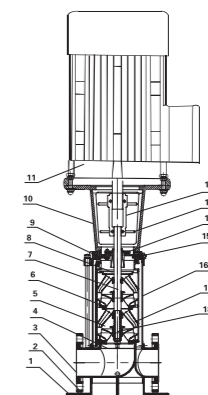
MODEL: LVS10 (15,20)

Part	Material	Optional Material
1 Base plate	HT200	
2 Drainage plug assembly	AISI304	AISI316
3 Chasis	ZG304	ZG316
4 Primary diffuser	AISI304	AISI316
5 Diffuser with bearing	AISI304	AISI316
6 Medium diffuser	AISI304	AISI316
7 Impeller	AISI304	AISI316
8 Final volute	AISI304	AISI316
9 Filling plug	AISI304	AISI316
10 Motor base	HT200	
11 Coupling	Iron based powder metallurgy	
12 Motor		
13 Guarding plate	AISI304	
14 Cartridge seal		
15 Vent plug assembly	AISI304	AISI316
16 Pump cover	ZG304	AISI316
17 Pump shaft	AISI304	AISI316
18 Pump barrel	AISI304	AISI316
19 Flange	ZG35	



MODEL: LVR120 (150,200)

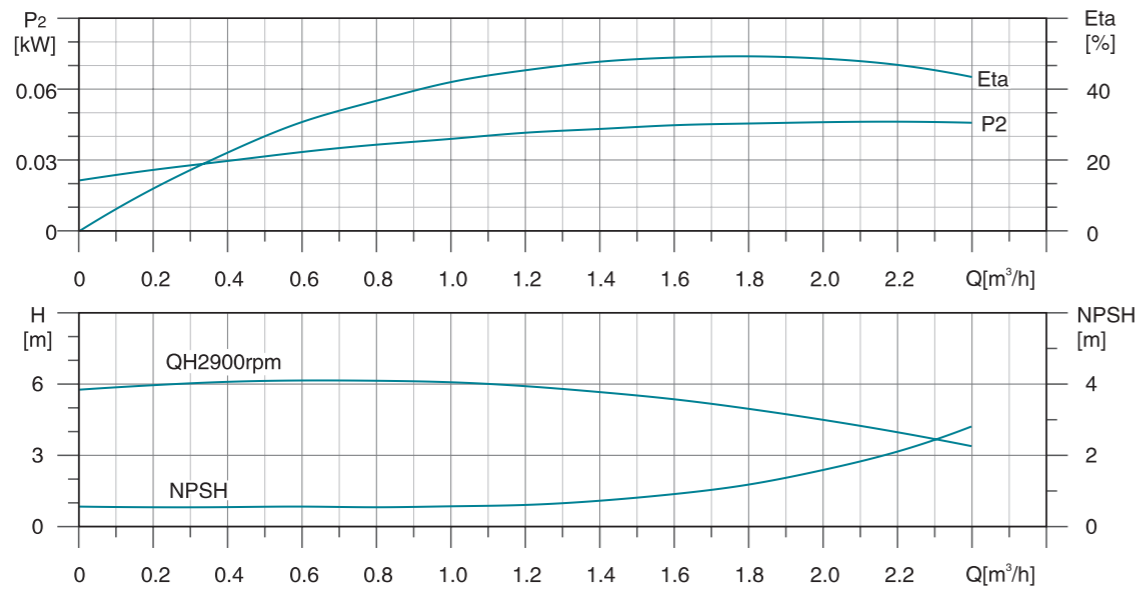
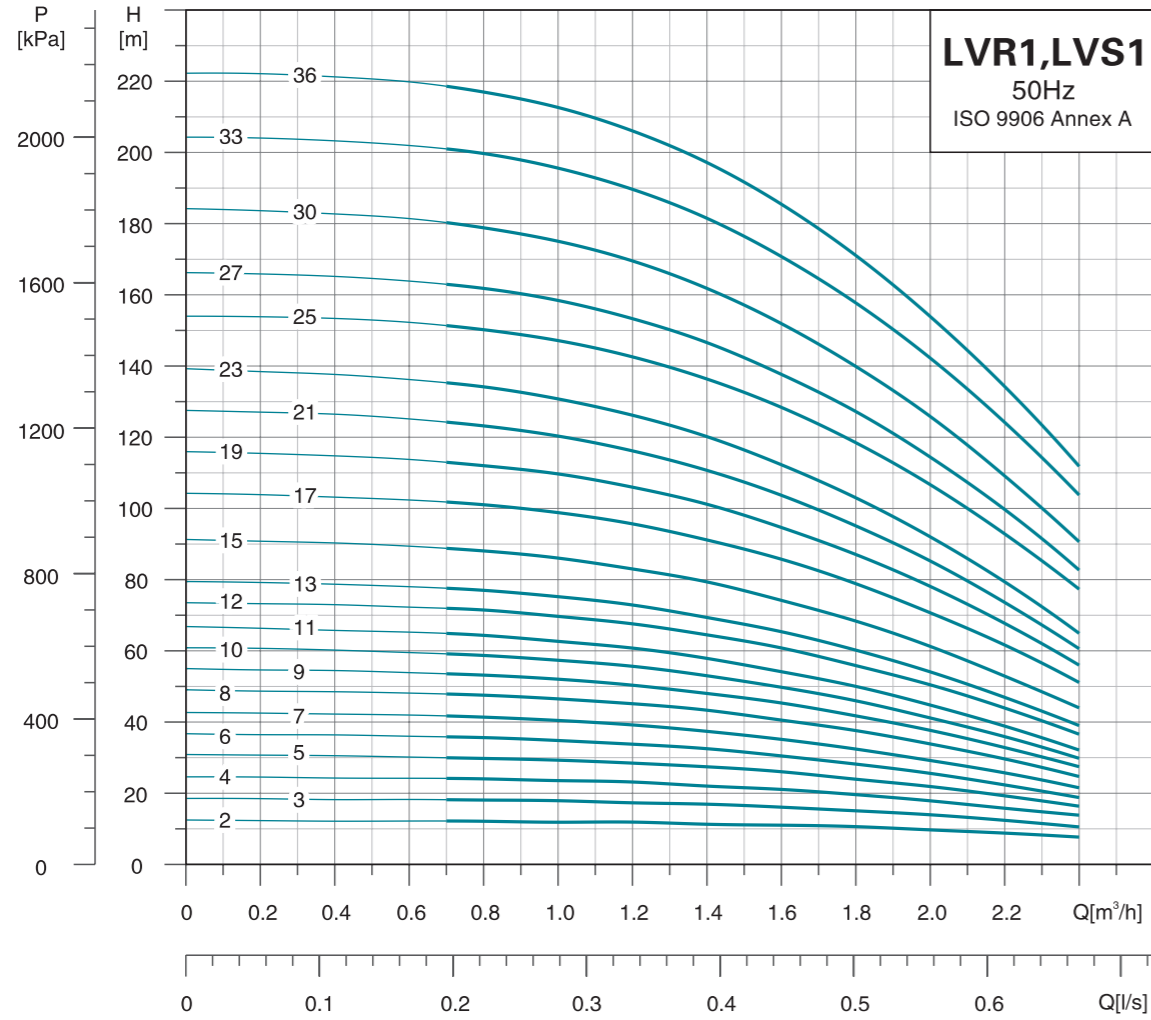
Part	Material
1 Base plate	HT200
2 Flange	ZG35
3 Base	HT200
4 Primary diffuser	AISI304
5 Medium diffuser	AISI304
6 Diffuser with bearing	AISI304
7 Impeller	AISI304
8 Final diffuser	AISI304
9 Pump head	HT200
10 Motor base	HT200
11 Motor	
12 Coupling	QT400
13 Guarding plate	AISI304
14 Cartridge seal	
15 Filling plug	AISI304
16 Tension plate	AISI304
17 Pump barrel	AISI304
18 Pump shaft	AISI304



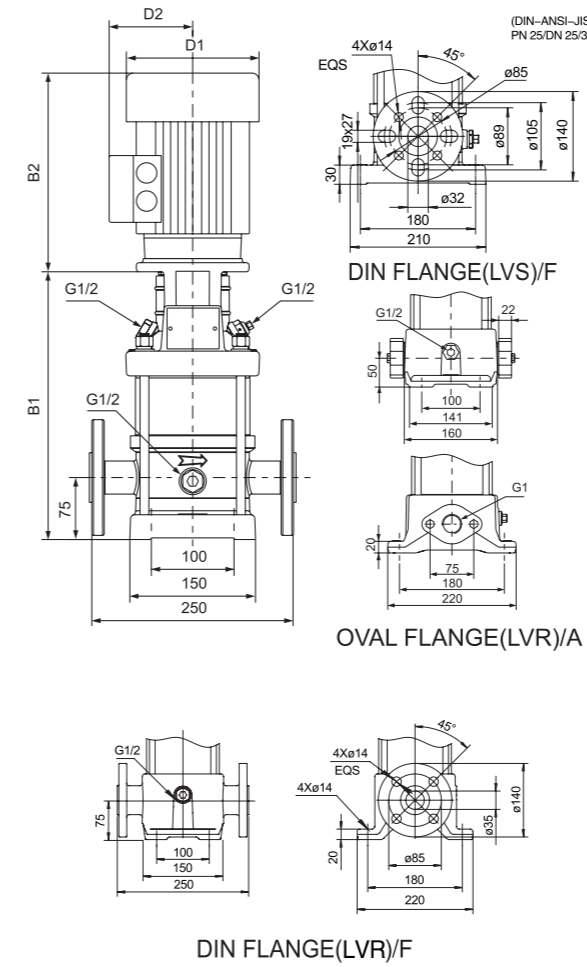
MODEL: LVS120 (150,200)

Part	Material	Optional Material
1 Base plate	HT200	
2 Flange	ZG35	
3 Chasis	ZG304	ZG316
4 Primary diffuser	AISI304	AISI316
5 Medium diffuser	AISI304	AISI316
6 Diffuser with bearing	AISI304	AISI316
7 Impeller	AISI304	AISI316
8 Final diffuser	AISI304	AISI316
9 Pump head	ZG304	ZG316
10 Motor base	HT200	
11 Motor		
12 Coupling	QT400	
13 Guarding plate	AISI304	
14 Cartridge seal		
15 Filling plug	AISI304	AISI316
16 Tension plate	AISI304	AISI316
17 Pump barrel	AISI304	AISI316
18 Pump shaft	AISI304	AISI316

Hydraulic Performance Curves

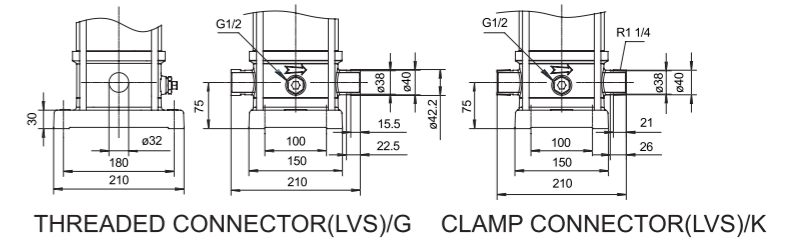


Dimension Drawing



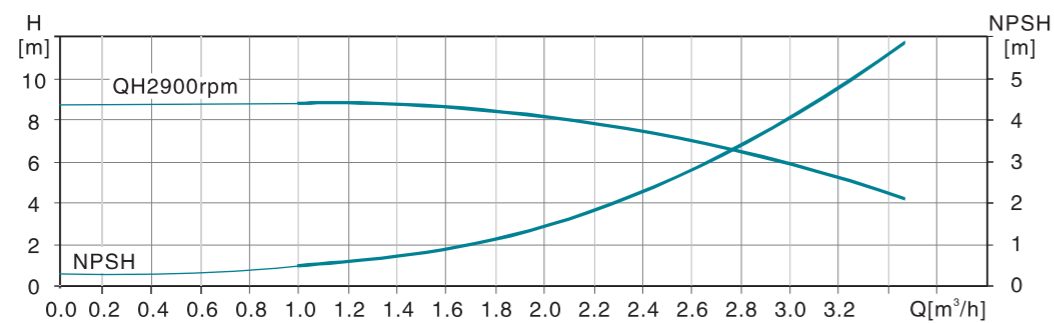
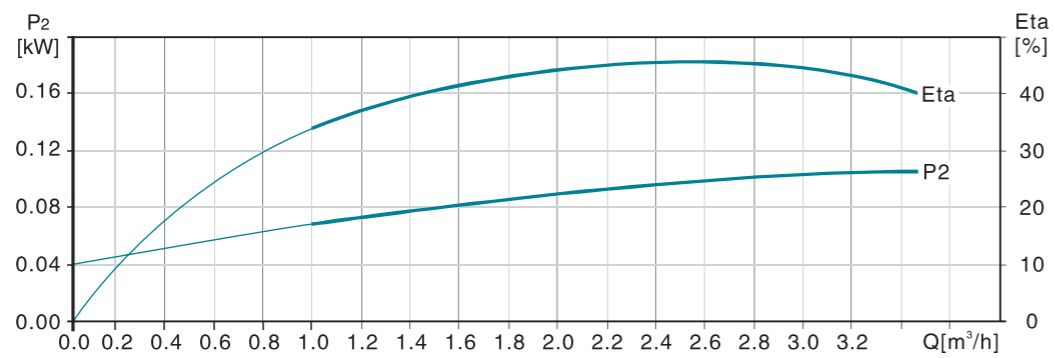
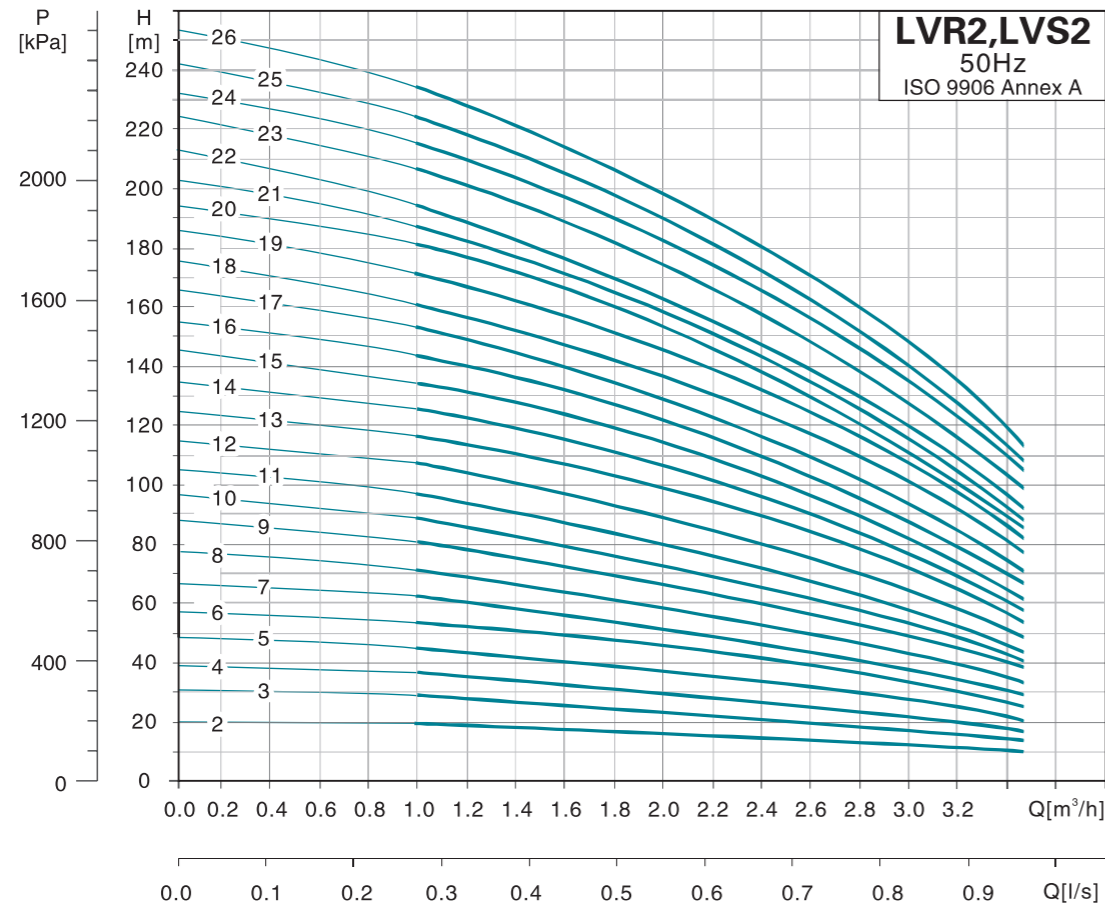
MODEL	OVAL FLANGE(LVR)		DIN FLANGE(LVS)		D1	D2
	B1	B1+B2	B1	B1+B2		
1-2	238	468	264	494	136	109
1-3	256	486	282	512	136	109
1-4	274	504	300	530	136	109
1-5	292	522	318	548	136	109
1-6	310	540	336	566	136	109
1-7	328	558	354	584	136	109
1-8	346	576	372	602	136	109
1-9	364	594	390	620	136	109
1-10	382	612	408	638	136	109
1-11	400	630	426	656	136	109
1-12	422	672	448	698	155	124
1-13	440	690	466	716	155	124
1-15	476	726	502	752	155	124
1-17	512	762	538	788	155	124
1-19	548	798	574	824	155	124
1-21	584	834	610	860	155	124
1-23	620	870	646	896	155	124
1-25	672	982	698	1008	175	137
1-27	708	1018	734	1044	175	137
1-30	762	1072	788	1098	175	137
1-33	816	1126	842	1152	175	137
1-36	870	1180	896	1206	175	137

Note: B1 and B1+B2 of clamp connector and threaded connector are in compliance with that of DIN flange.

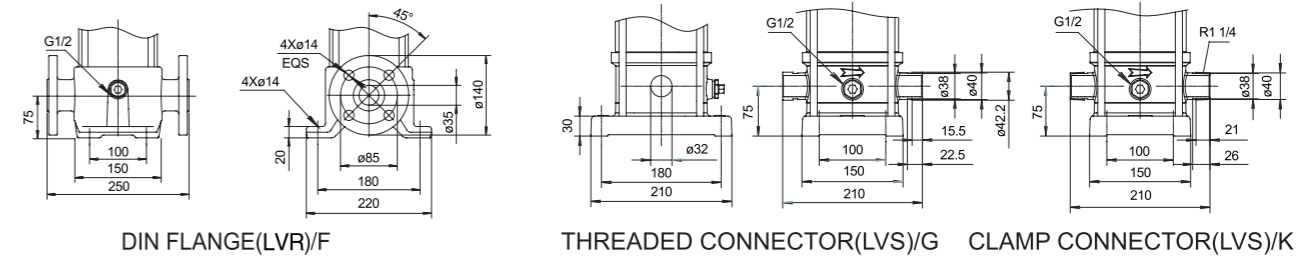
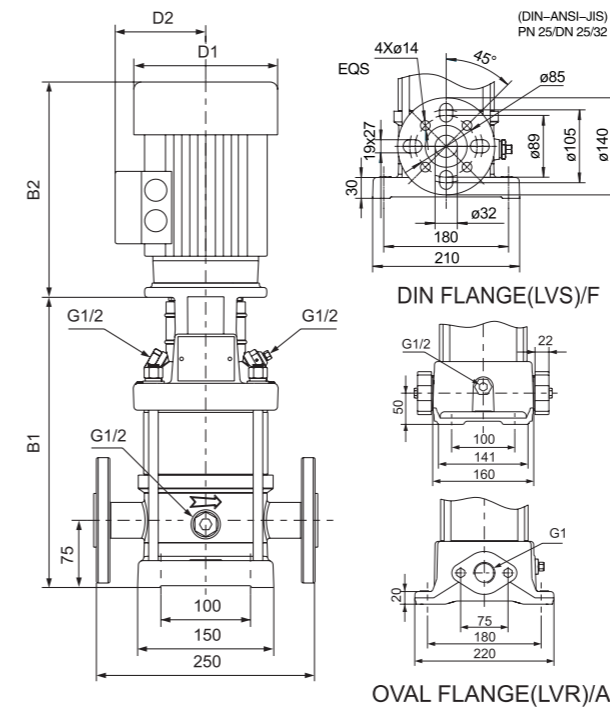


MODEL	POWER[kW]	Q[m³/h]	0.4	0.6	0.8	1.0	1.2	1.4	1.6	1.8	2.0
1-2	0.37		12	12	12	12	12	11	11	10	10
1-3	0.37		18	18	18	18	17	17	16	15	14
1-4	0.37		24	24	24	24	22	22	21	19	18
1-5	0.37		30	30	30	29.5	28	27	26	24	22
1-6	0.37		36	36	35	35	34	32	30	28	25
1-7	0.37		42	42	41	40.5	39	37	35	32	30
1-8	0.55		48	48	47	46.5	45	43	40	38	34
1-9	0.55		54	54	53	52	50	48	45	42	37
1-10	0.55		60	59	58	57.5	55	53	50	46	41
1-11	0.55		65	65	64	63	61	58	54	51	45
1-12	0.75		73	72	71	70	67	64	61	56	50
1-13	0.75		78	78	77	75	73	69	65	60	54
1-15	0.75		90	90	88	86	83	79	74	68	61
1-17	1.1		103	102	101	98	95	91	85	78	70
1-19	1.1		115	114	112	110	106	101	94	87	78
1-21	1.1		126	125	123	120	116	110	103	95	85
1-23	1.1		137	136	134	130	126	120	112	103	92
1-25	1.5		153	152	150	145	142	136	128	119	106
1-27	1.5		165	164	162	157	153	146	137	128	114
1-30	1.5		182	181	178	173	169	162	152	140	126
1-33	2.2		203	202	199	194	189	181	170	158	142
1-36	2.2		221	220	217	210	206	197	185	170	154

Hydraulic Performance Curves



Dimension Drawing

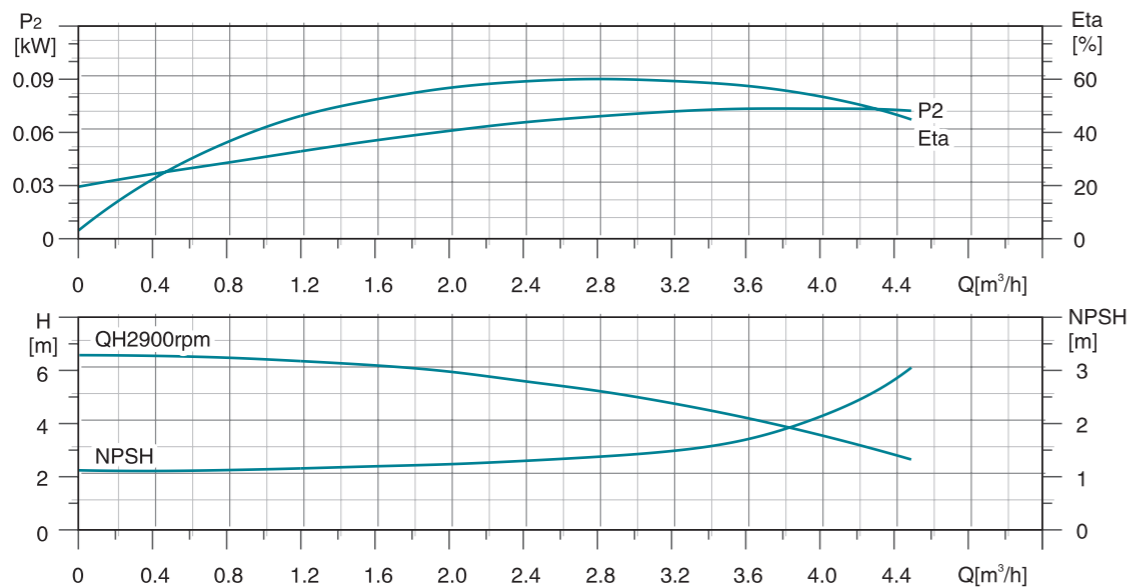
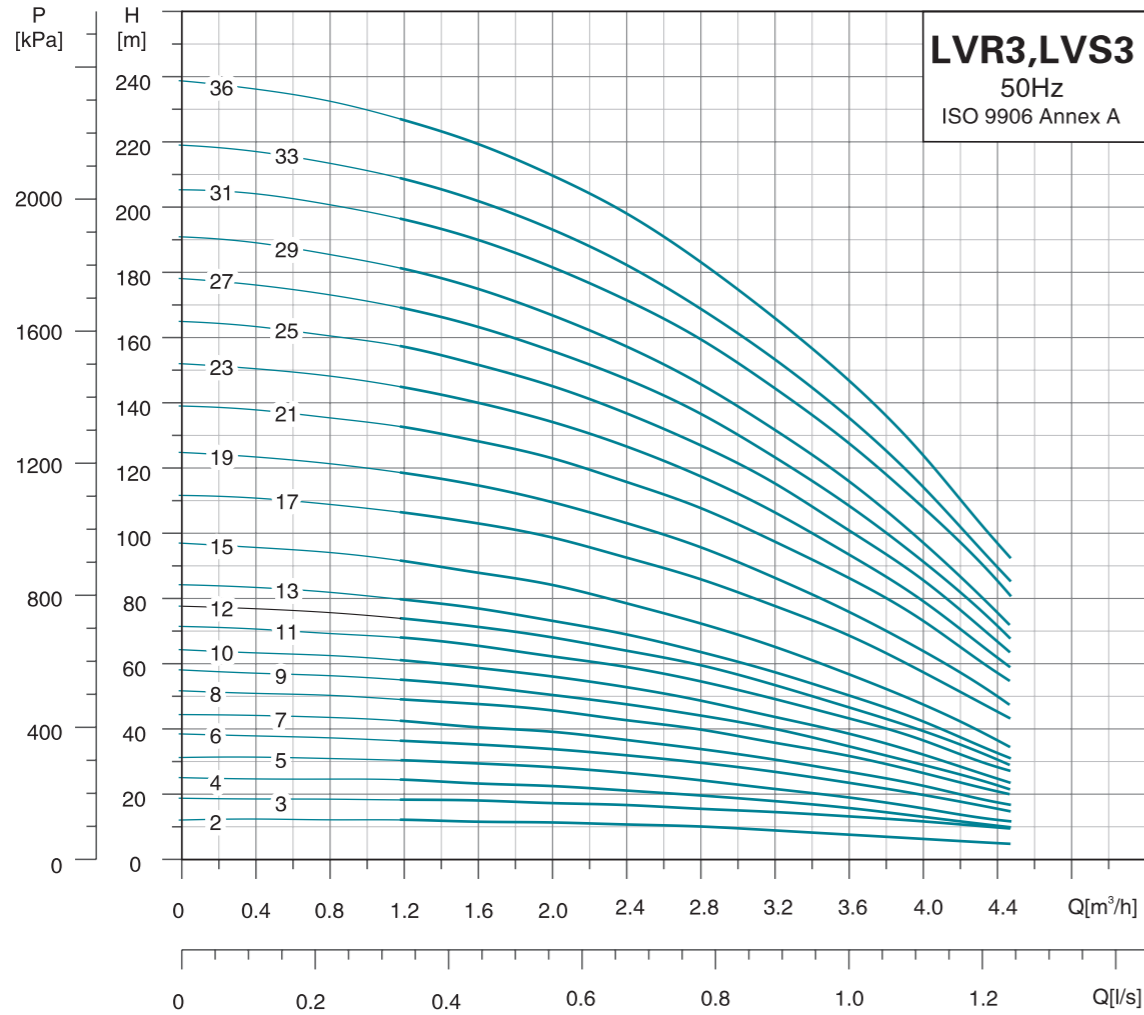


MODEL	OVAL FLANGE(LVR)		DIN FLANGE(LVS)		D1	D2
	B1	B1+B2	B1	B1+B2		
2-2	220	440	245	465	140	110
2-3	238	458	263	483	140	110
2-4	256	476	281	501	140	110
2-5	274	494	299	519	140	110
2-6	297	547	322	572	160	125
2-7	315	565	340	590	160	125
2-8	333	583	358	608	160	125
2-9	351	601	376	626	160	125
2-10	369	619	394	644	160	125
2-11	387	637	412	662	160	125
2-12	422	712	447	737	180	125
2-13	440	730	465	755	180	125
2-14	458	748	483	773	180	125
2-15	476	766	501	791	180	125
2-16	494	784	519	809	180	125
2-17	512	802	537	827	180	125
2-18	530	820	555	845	180	125
2-19	548	838	573	863	180	125
2-20	566	856	591	881	180	125
2-21	584	874	609	899	180	125
2-22	602	892	627	917	180	125
2-23	628	958	653	983	190	140
2-24	646	976	671	1001	190	140
2-25	664	994	689	1019	190	140
2-26	682	1012	707	1037	190	140

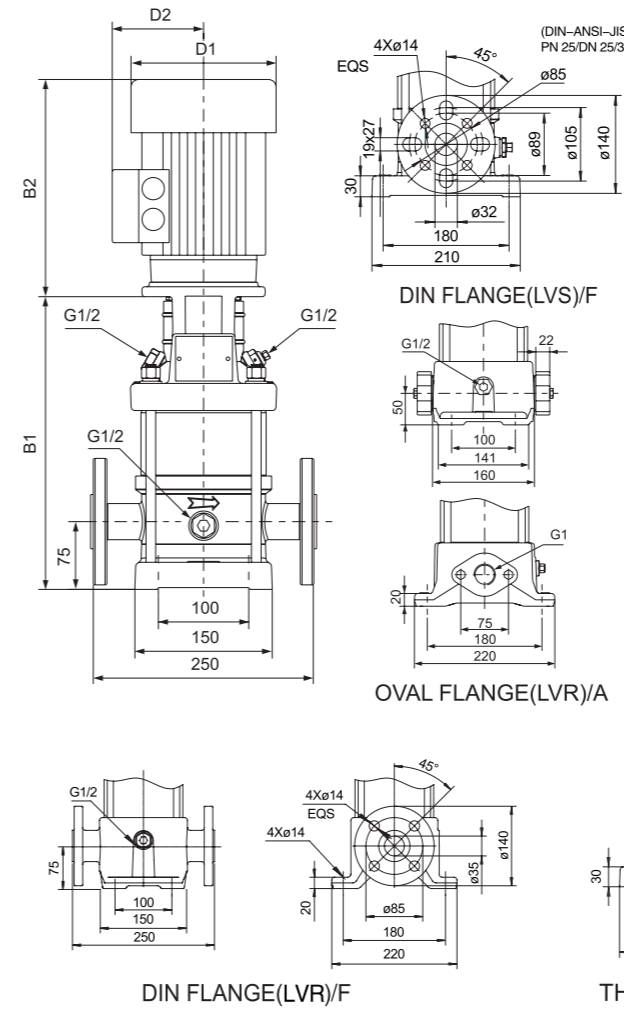
Note: B1 and B1+B2 of clamp connector and threaded connector are in compliance with that of DIN flange.

MODEL	POWER[kW]	Q[m³/h]	1.0	1.2	1.6	2.0	2.5	2.8	3.2	3.5
2-2	0.37		18	17	16	15.5	13.5	12	10	8
2-3	0.37		27	26	24	22.5	19.5	18	15	12
2-4	0.55		36	35	33	30.5	27	24	17	16
2-5	0.55		45	43	40	37	32.5	30	24	20
2-6	0.75		53	52	50	45.5	40	36	30	24
2-7	0.75		63	61	57	52	45.5	41	35	28
2-8	1.1		71	69	65	59	51	47	40	33
2-9	1.1		80	78	73	68.5	60	54	45	37
2-10	1.1		89	86	81	74	65	59	49	40
2-11	1.1		98	95	89	82	71.5	64	54	44
2-12	1.5		107	103	97	90	78	71	59	47
2-13	1.5		116	114	106	98	86.5	78	65	52
2-14	1.5	H(m)	125	122	114	105	92	84	69	57
2-15	1.5		134	130	123	112	98	90	73	60
2-16	2.2		143	139	131	120	104	96	79	66
2-17	2.2		152	148	139	128	111	102	85	70
2-18	2.2		161	157	148	136	122	108	91	76
2-19	2.2		170	165	156	143	128	113	95	81
2-20	2.2		179	174	164	150	134	119	100	85
2-21	2.2		188	183	172	157	140	124	105	88
2-22	2.2		197	192	180	165	145	130	110	90
2-23	3.0		205	201	188	173	153	137	105	97
2-24	3.0		214	210	197	181	160	144	120	105
2-25	3.0		223	219	205	189	168	151	125	107
2-26	3.0		232	228	214	198	176	158	130	110

Hydraulic Performance Curves



Dimension Drawing

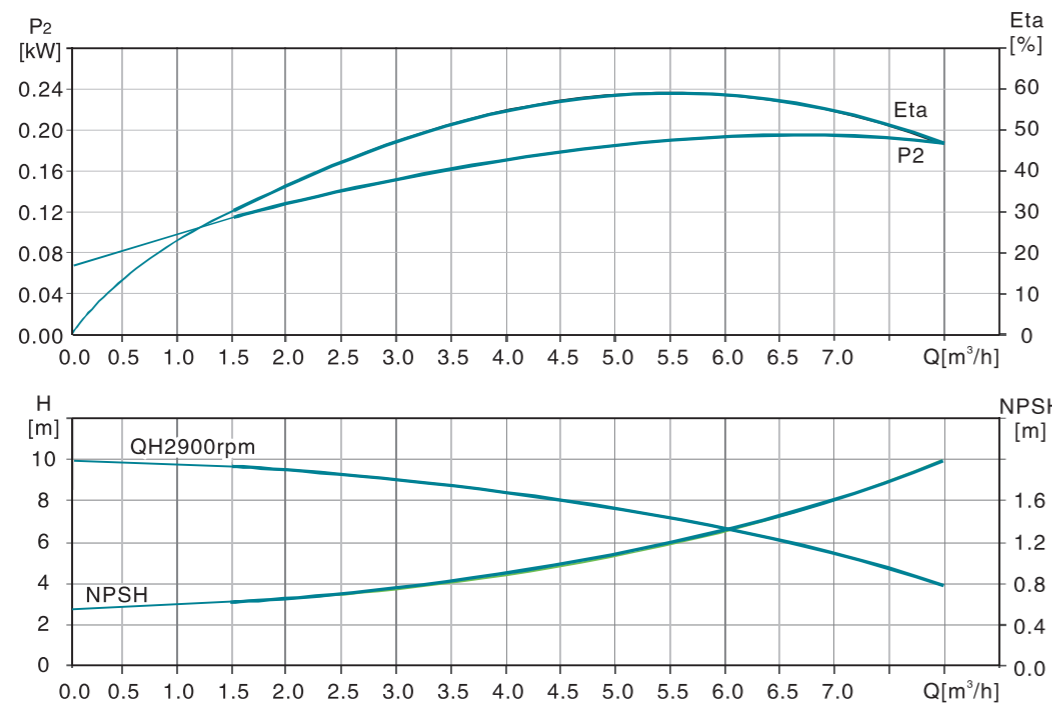
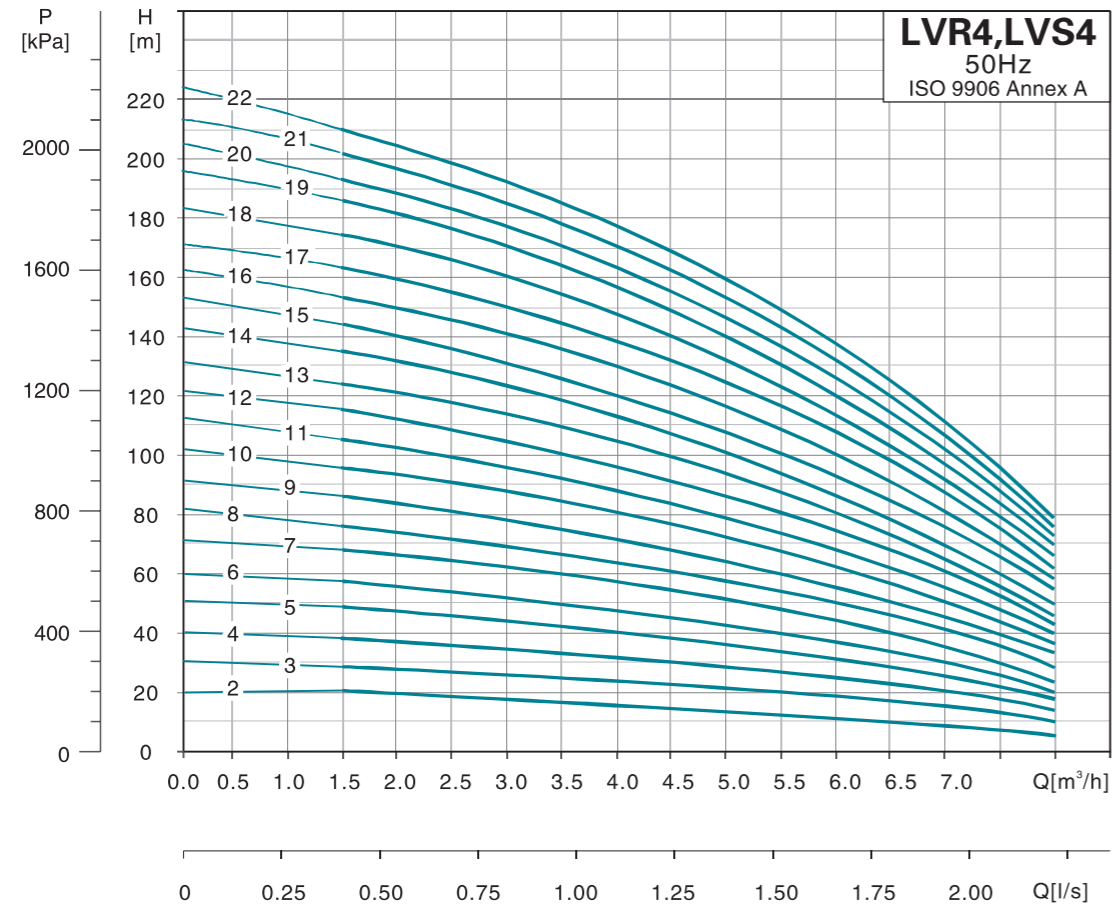


MODEL	OVAL FLANGE(LVR)		DIN FLANGE(LVS)		D1	D2
	B1	B1+B2	B1	B1+B2		
3-2	238	468	264	494	136	109
3-3	256	486	282	512	136	109
3-4	274	504	300	530	136	109
3-5	292	522	318	548	136	109
3-6	310	540	336	566	136	109
3-7	328	558	354	584	136	109
3-8	350	600	376	626	155	124
3-9	368	618	394	644	155	124
3-10	386	636	412	662	155	124
3-11	404	654	430	680	155	124
3-12	422	672	448	698	155	124
3-13	440	690	466	716	155	124
3-15	476	726	502	752	155	124
3-17	528	838	554	864	175	137
3-19	564	874	590	900	175	137
3-21	600	910	626	936	175	137
3-23	636	946	662	972	175	137
3-25	672	982	698	1008	175	137
3-27	708	1018	734	1044	175	137
3-29	744	1054	770	1080	175	137
3-31	784	1114	810	1140	195	151
3-33	820	1150	846	1176	195	151
3-36	874	1204	900	1230	195	151

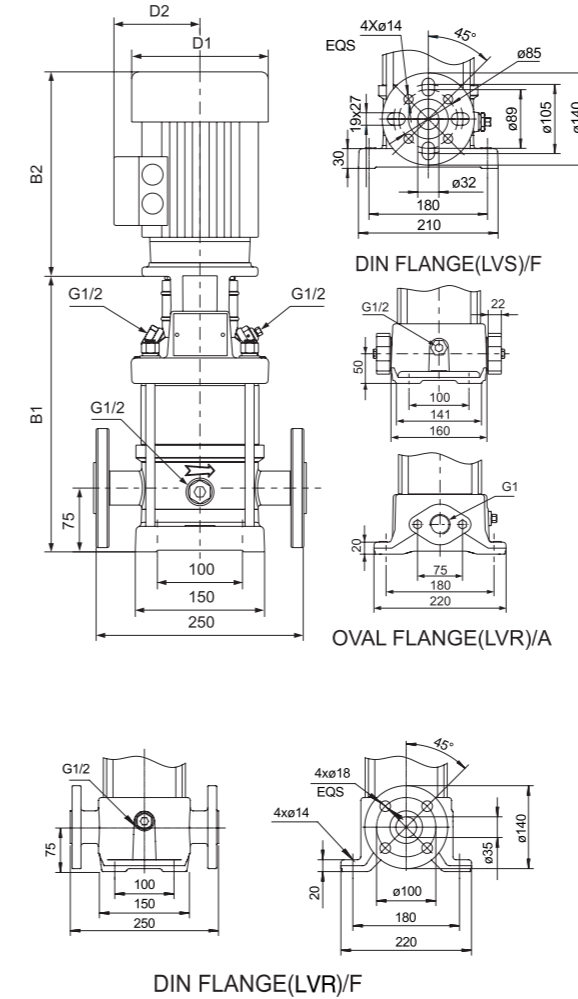
Note: B1 and B1+B2 of clamp connector and threaded connector are in compliance with that of DIN flange.

MODEL	POWER[kW]	Q[m³/h]	1.2	1.6	2.0	2.4	2.8	3.2	3.6	4.0
3-2	0.37		13	12	12	11	11	10	8	7.5
3-3	0.37		19	19	18	17	16	15	14	12
3-4	0.37		25	24	23	22	20	19	17	14
3-5	0.37		31	31	29	27	25	24	20	17
3-6	0.55		37	36	35	33	30	28	24	21
3-7	0.55		43	40	40	37	35	32	28	24
3-8	0.75		51	48	47	44	41	38	33	28
3-9	0.75		56	54	51	48	45	42	36	30
3-10	0.75		62	60	57	54	50	46	40	33
3-11	1.1		69	66	63	60	56	51	44	38
3-12	1.1		75	72	69	65	61	56	48	41
3-13	1.1		80	78	74	70	65	60	51	44
3-15	1.1		92	89	85	80	73	68	58	49
3-17	1.5		107	104	100	94	87	78	70	59
3-19	1.5		119	116	111	104	97	87	77	65
3-21	2.2		133	129	124	117	109	97	88	75
3-23	2.2		146	141	135	128	119	105	95	81
3-25	2.2		158	153	146	138	128	115	102	87
3-27	2.2		170	164	157	148	138	124	110	93
3-29	2.2		182	176	168	159	147	133	118	100
3-31	3.0		197	191	183	173	161	142	128	110
3-33	3.0		210	203	194	194	170	152	137	116
3-36	3.0		228	221	211	200	185	165	149	126

Hydraulic Performance Curves



Dimension Drawing

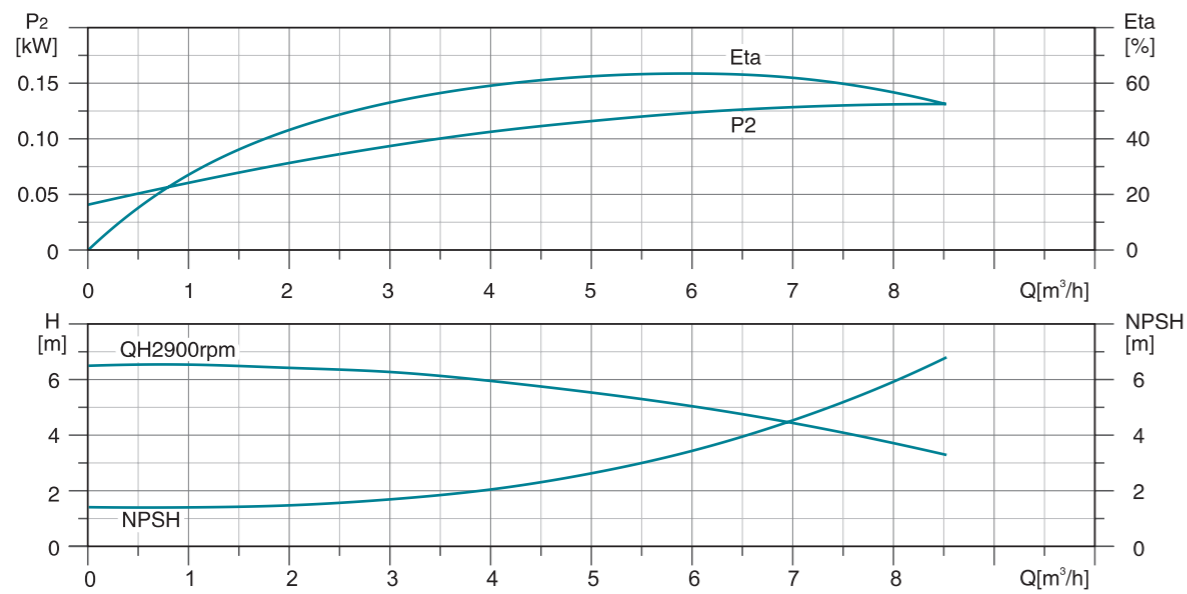
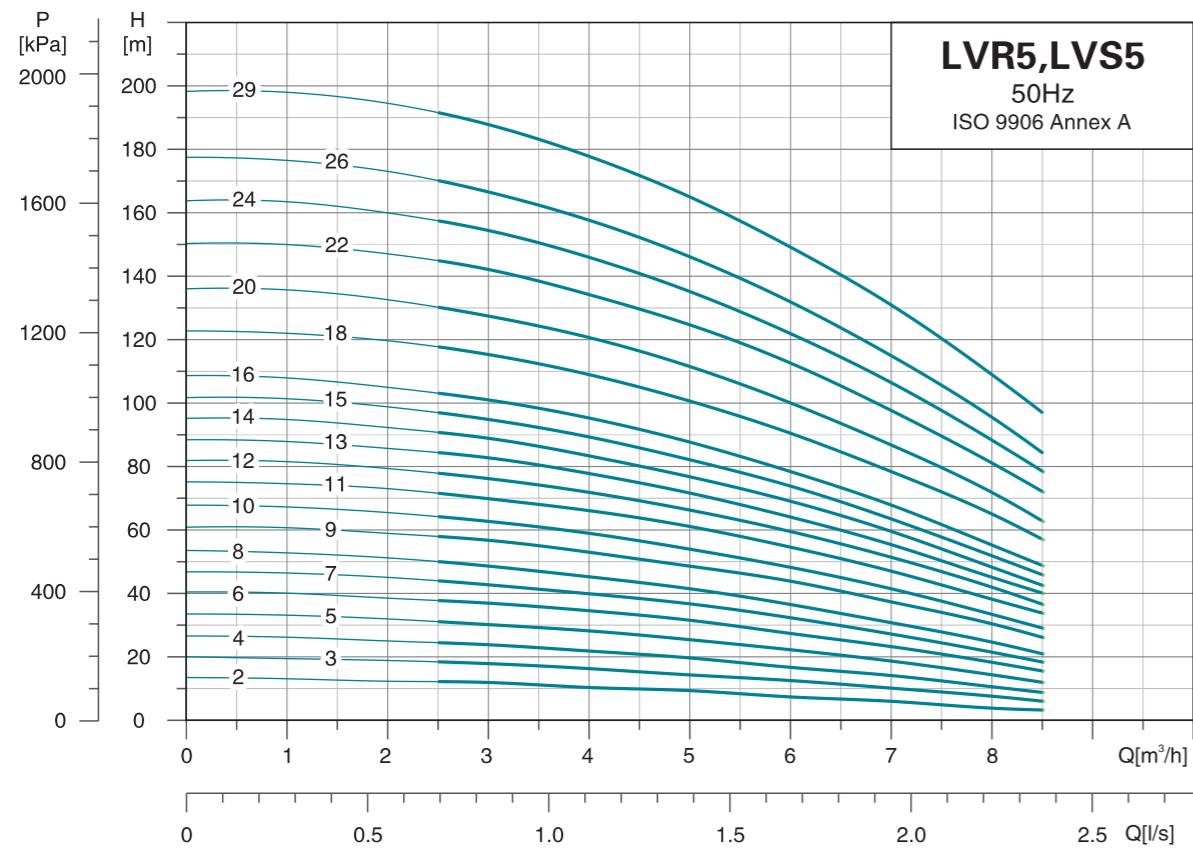


MODEL	OVAL FLANGE(LVR)		DIN FLANGE(LVS)		D1	D2
	B1	B1+B2	B1	B1+B2		
4-2	238	458	263	483	140	110
4-3	265	485	290	510	140	110
4-4	297	547	322	572	160	125
4-5	324	574	349	599	160	125
4-6	351	601	376	626	160	125
4-7	395	685	420	710	180	125
4-8	422	712	447	737	180	125
4-9	449	739	474	764	180	125
4-10	476	766	501	791	180	125
4-11	503	793	528	818	180	125
4-12	530	820	555	845	180	125
4-13	565	895	590	920	190	140
4-14	592	922	617	947	190	140
4-15	619	949	644	974	190	140
4-16	646	976	671	1001	190	140
4-17	673	1003	698	1028	220	150
4-18	700	1030	725	1055	220	150
4-19	727	1057	752	1082	220	150
4-20	754	1084	779	1109	220	150
4-21	781	1111	806	1136	220	150
4-22	808	1138	833	1163	220	150

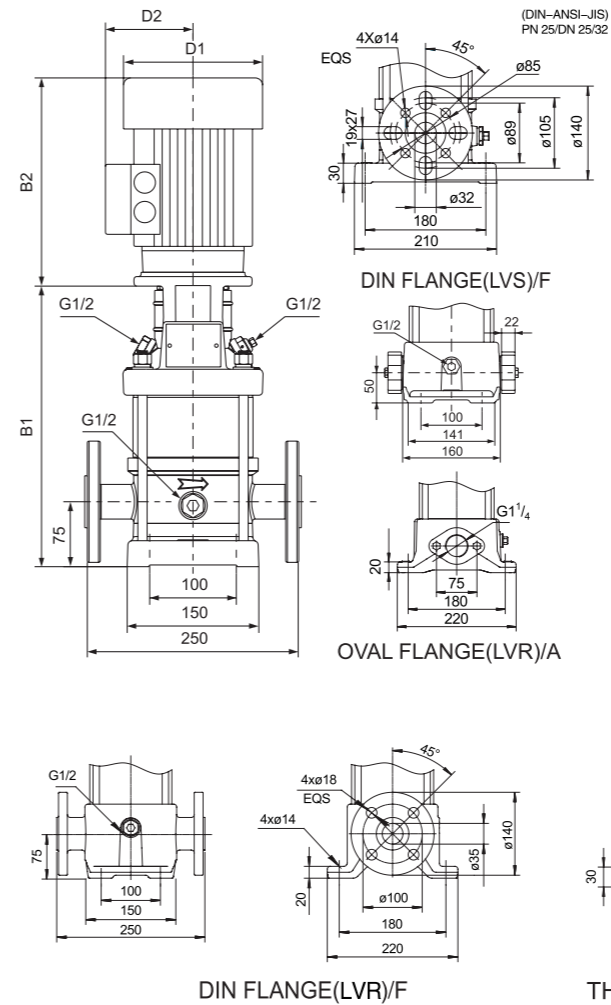
Note: B1 and B1+B2 of clamp connector and threaded connector are in compliance with that of DIN flange.

MODEL	POWER[kW]	Q[m³/h]	1.5	2.0	3.0	4.0	5.0	6.0	7.0	8.0
4-2	0.37		19	18	17	14.5	13	10.5	8	6
4-3	0.55		28	27	26	23.5	20	18	14	10
4-4	0.75		38	36	34	31.5	27	24.5	18	13
4-5	1.1		47	45	43	40.5	34	31.5	23	17
4-6	1.1		56	54	52	47.5	41	36	28	20
4-7	1.5		66	63	61	57	48	44.5	34	24
4-8	1.5		74	72	70	64	55	49.5	38	27
4-9	2.2		86	81	78	72	63	56	44	32
4-10	2.2		96	90	87	81	71	64	50	34
4-11	2.2		105	99	95	88	78	69	53	39
4-12	2.2	H(m)	114	108	104	96	85	75	57	41
4-13	3.0		123	117	113	103	93	83	63	45
4-14	3.0		136	126	122	114	101	90	69	48
4-15	3.0		142	135	131	120	108	96	73	52
4-16	3.0		152	144	140	129	115	102	78	55
4-17	4.0		163	153	149	137	122	108	83	62
4-18	4.0		175	162	158	145	129	115	89	65
4-19	4.0		183	171	168	155	137	123	95	67
4-20	4.0		192	180	176	161	144	128	99	72
4-21	4.0		203	210	184	169	152	134	103	75
4-22	4.0		211	200	192	177	160	139	108	79

Hydraulic Performance Curves

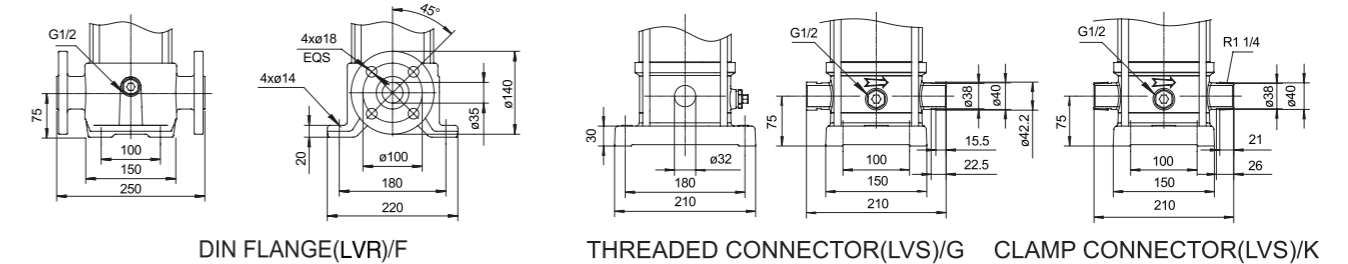


Dimension Drawing



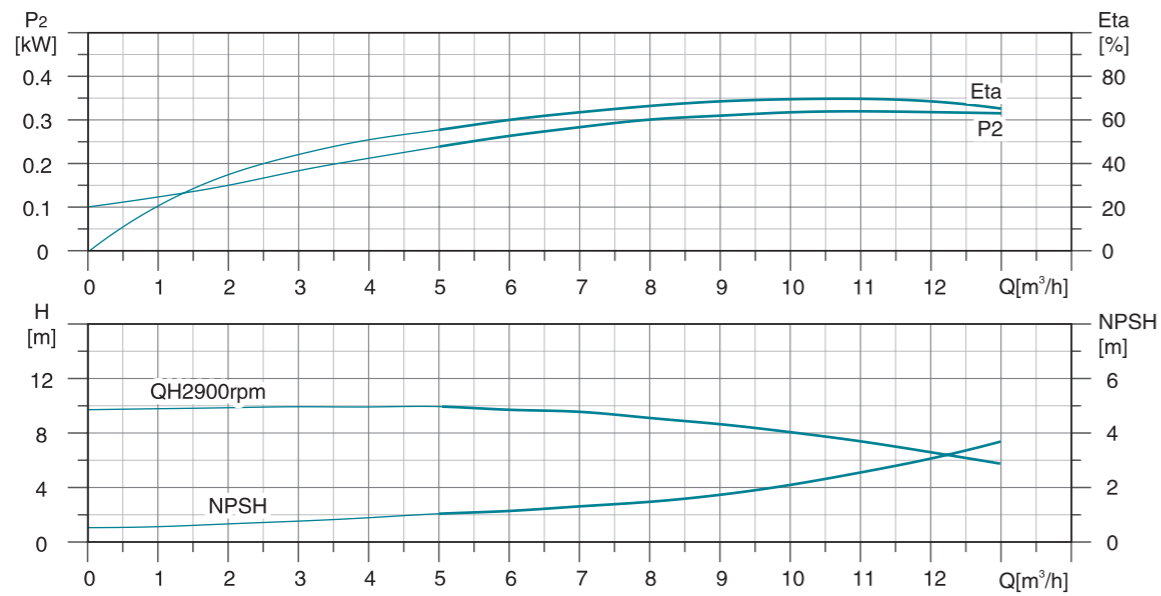
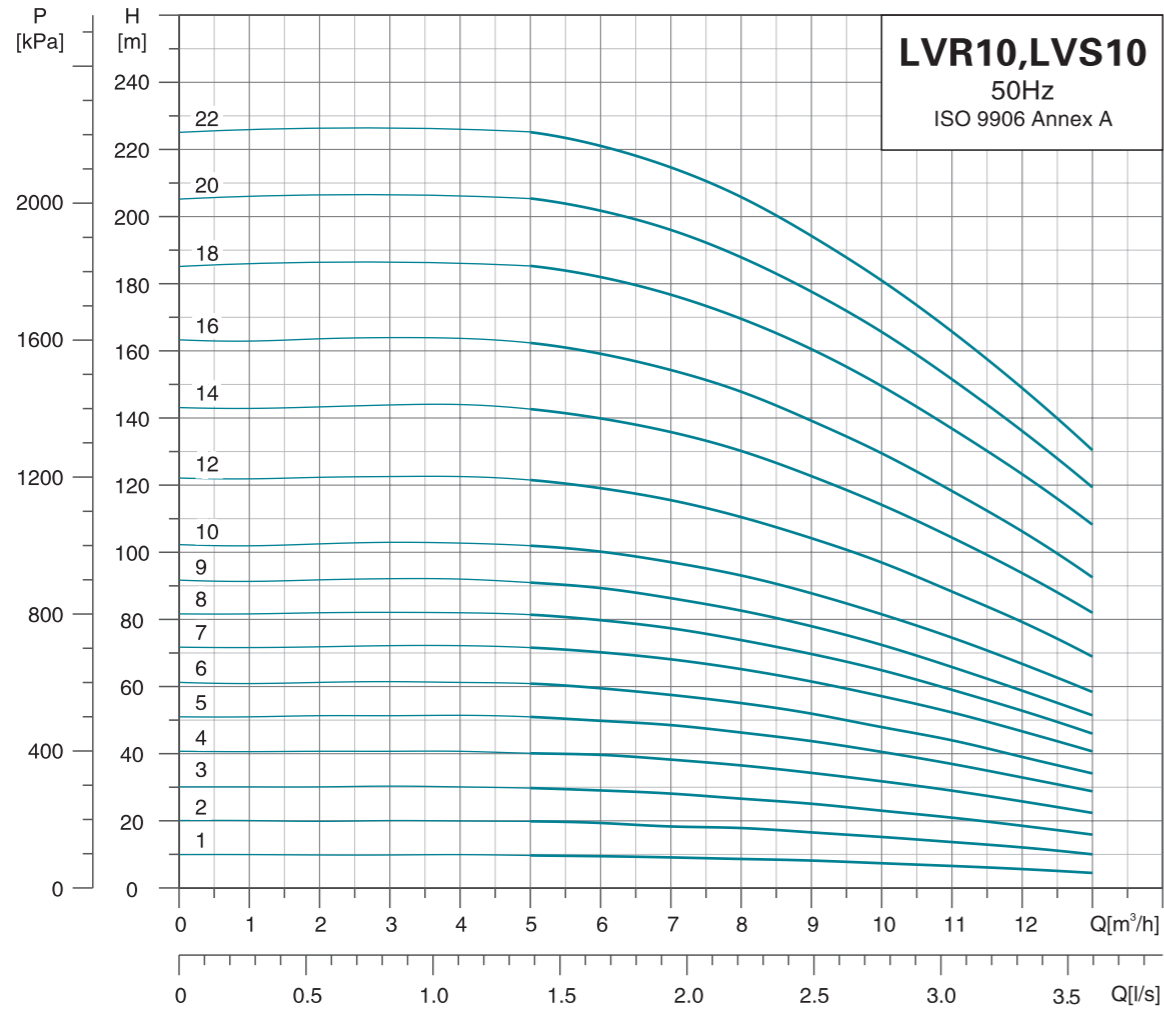
MODEL	OVAL FLANGE(LVR)		DIN FLANGE(LVS)		D1	D2
	B1	B1+B2	B1	B1+B2		
5-2	256	486	282	512	136	109
5-3	283	513	309	539	136	109
5-4	310	540	336	566	136	109
5-5	341	591	367	617	155	124
5-6	368	618	394	644	155	124
5-7	395	645	421	671	155	124
5-8	422	672	448	698	155	124
5-9	465	775	491	801	175	137
5-10	492	802	518	828	175	137
5-11	519	829	545	855	175	137
5-12	546	856	572	882	175	137
5-13	573	883	599	909	175	137
5-14	600	910	626	936	175	137
5-15	627	937	653	963	175	137
5-16	654	964	680	990	175	137
5-18	712	1042	738	1068	195	151
5-20	766	1096	792	1122	195	151
5-22	820	1177	846	1203	219	169
5-24	874	1231	900	1257	219	169
5-26	928	1285	954	1311	219	169
5-29	1009	1366	1035	1392	219	169

Note: B1 and B1+B2 of clamp connector and threaded connector are in compliance with that of DIN flange.

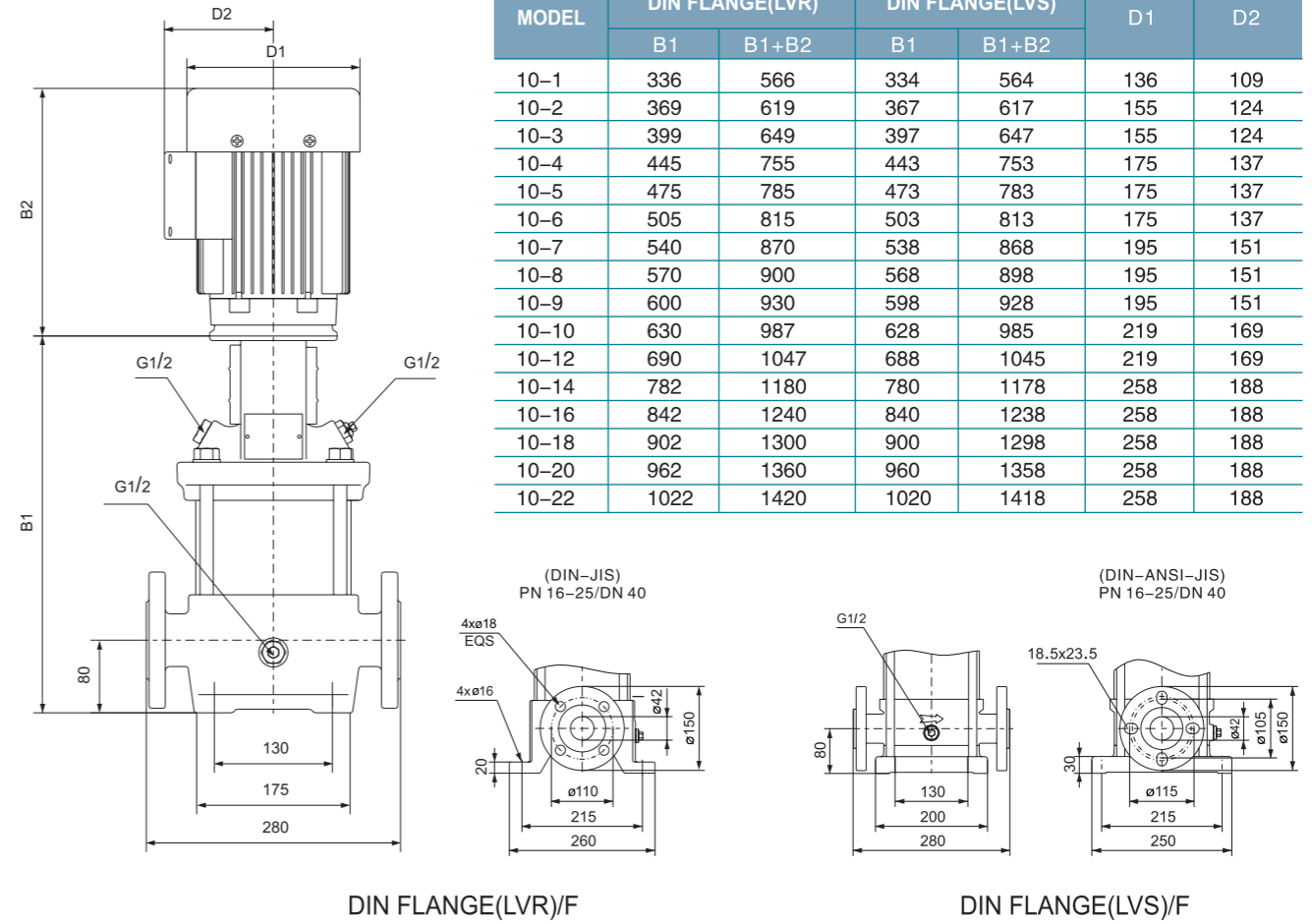


MODEL	POWER[kW]	Q[m³/h]	1.0	2.0	3.0	4.0	5.0	6.0	7.0
5-2	0.37		13	12	12	10	9	7	6
5-3	0.55		19	19	18	16	15	12	10
5-4	0.55		26	25	24	22	19	16	14
5-5	0.75		33	32	30	28	24	22	18
5-6	1.1		40	38	37	34	28	27	23
5-7	1.1		46	45	42	40	32	32	27
5-8	1.1		53	51	48	45	40	36	31
5-9	1.5		60	59	56	53	47	44	37
5-10	1.5		67	65	62	59	53	48	41
5-11	2.2		74	73	70	66	59	54	47
5-12	2.2	H(m)	81	79	76	72	63	59	51
5-13	2.2		88	85	82	78	68	64	55
5-14	2.2		95	92	89	83	74	69	60
5-15	2.2		101	99	95	89	79	74	63
5-16	2.2		108	105	101	95	85	78	68
5-18	3.0		122	119	115	109	98	90	78
5-20	3.0		135	132	127	120	108	100	87
5-22	4.0		150	147	142	134	120	112	97
5-24	4.0		163	160	154	146	132	122	106
5-26	4.0		176	173	166	157	145	132	115
5-29	4.0		198	194	188	178	155	149	131

Hydraulic Performance Curves



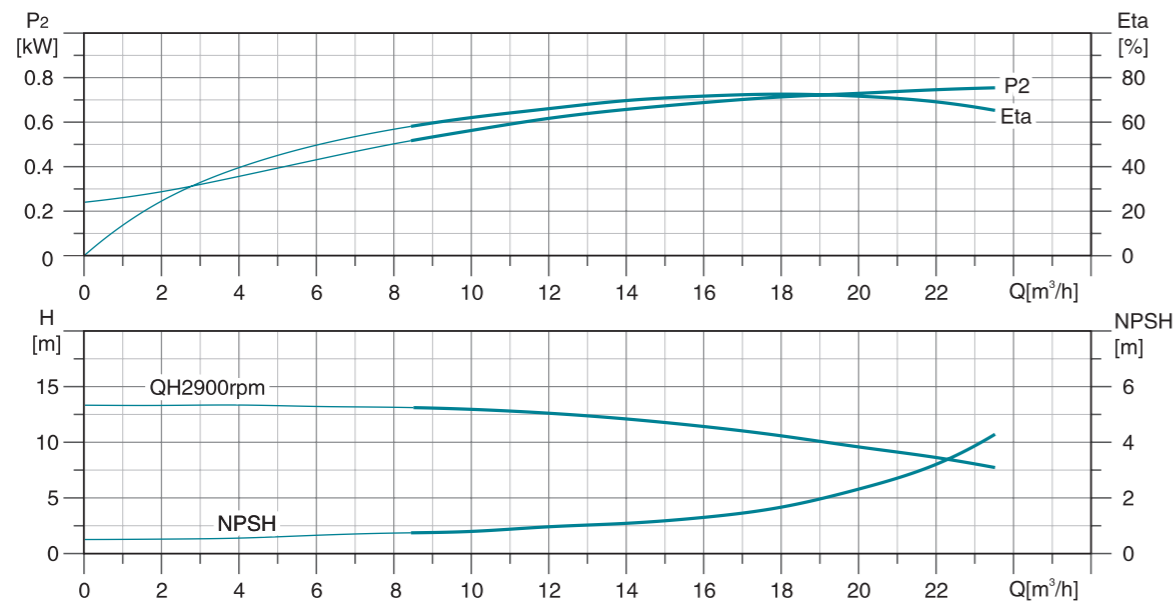
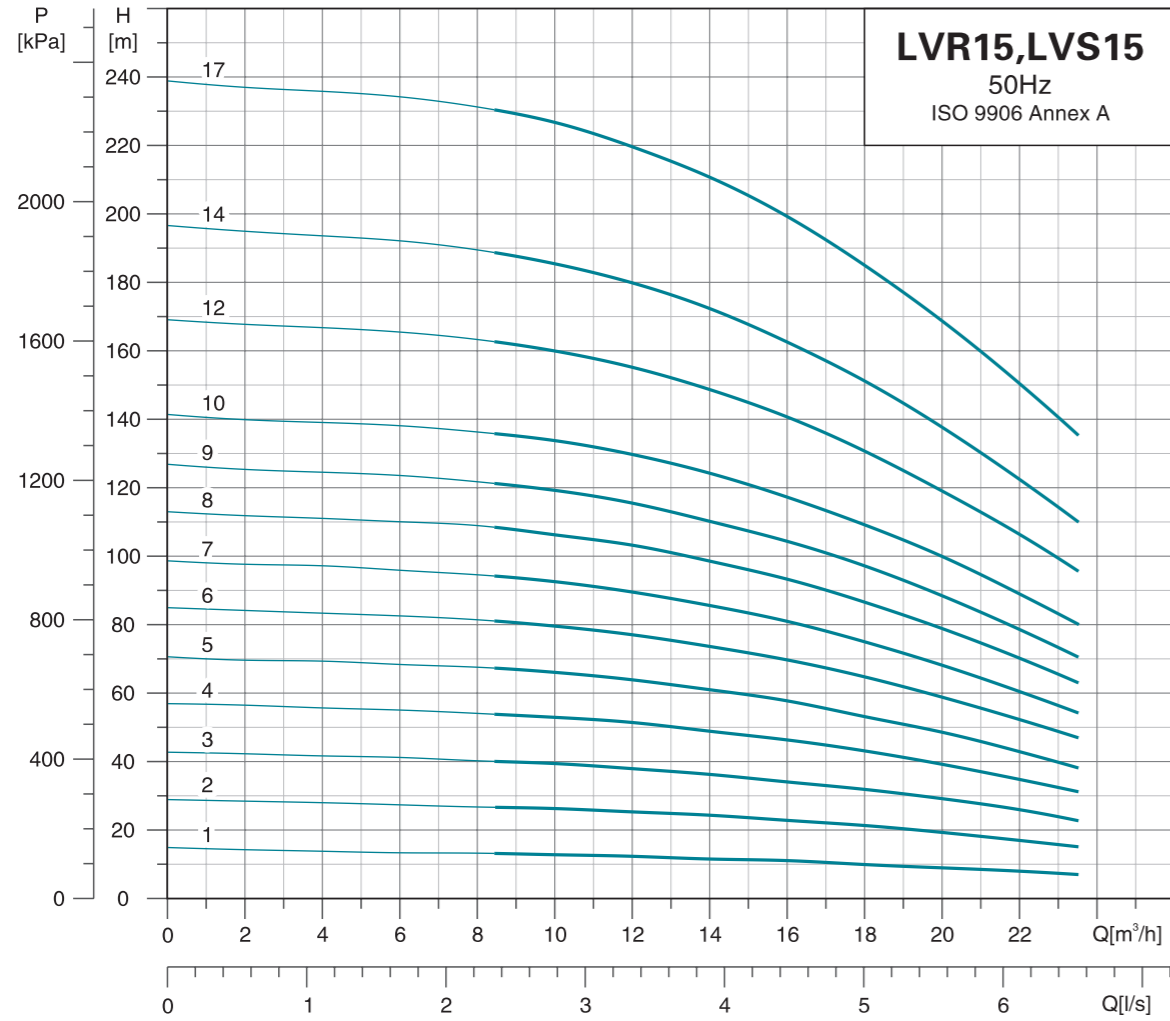
Dimension Drawing



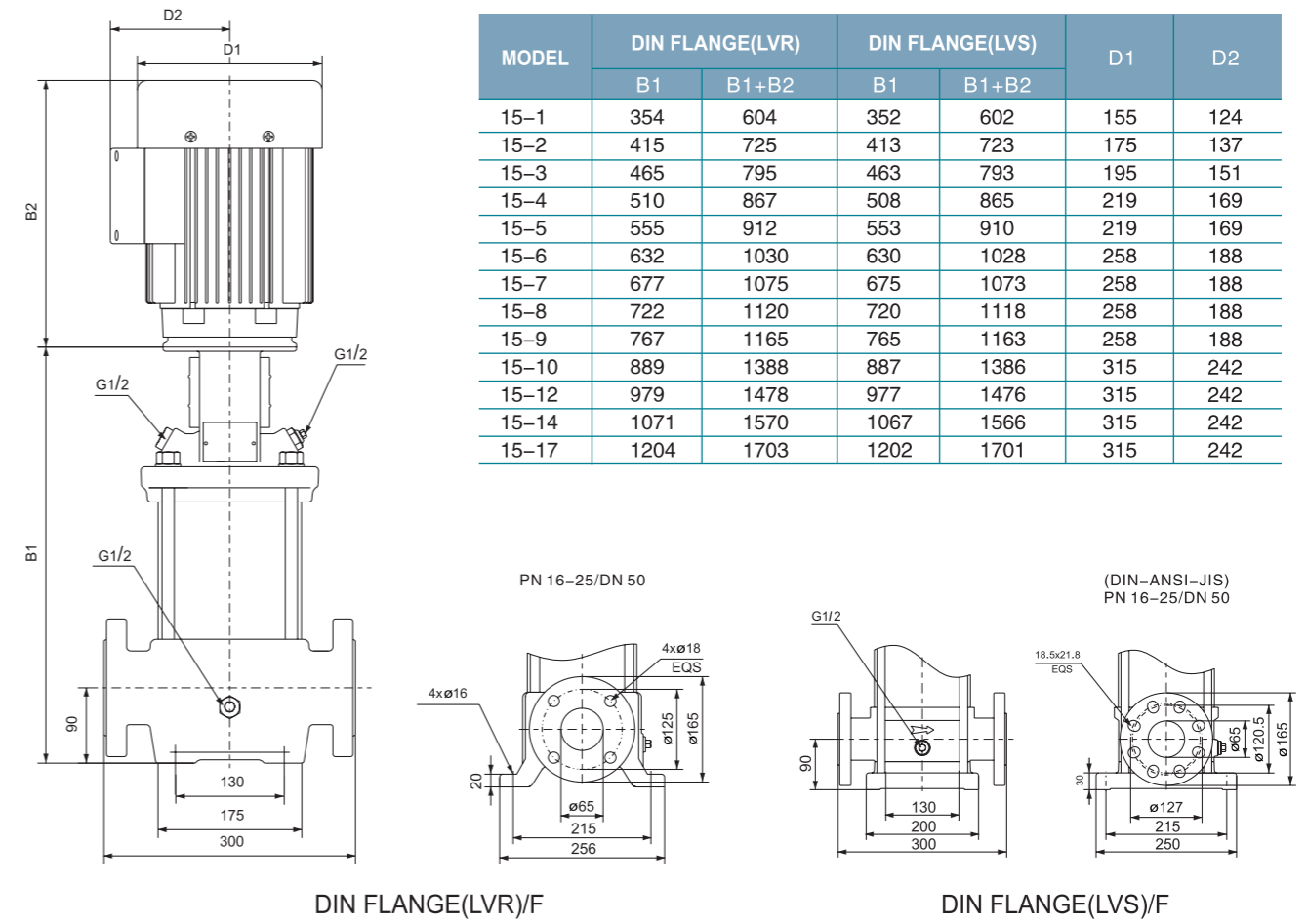
MODEL	DIN FLANGE(LVR)		DIN FLANGE(LVS)		D1	D2
	B1	B1+B2	B1	B1+B2		
10-1	336	566	334	564	136	109
10-2	369	619	367	617	155	124
10-3	399	649	397	647	155	124
10-4	445	755	443	753	175	137
10-5	475	785	473	783	175	137
10-6	505	815	503	813	175	137
10-7	540	870	538	868	195	151
10-8	570	900	568	898	195	151
10-9	600	930	598	928	195	151
10-10	630	987	628	985	219	169
10-12	690	1047	688	1045	219	169
10-14	782	1180	780	1178	258	188
10-16	842	1240	840	1238	258	188
10-18	902	1300	900	1298	258	188
10-20	962	1360	960	1358	258	188
10-22	1022	1420	1020	1418	258	188

MODEL	POWER[kW]	Q[m³/h]	2	4	6	8	10	12
10-1	0.37	H(m)	10	10	9	8	7.5	5
10-2	0.75		20	20	19	18	15	12
10-3	1.1		30	30	29	26	23	18
10-4	1.5		40	40	40	36	32	26
10-5	2.2		51	51	50	46	40	33
10-6	2.2		61	61	59	55	48	39
10-7	3.0		72	72	70	65	56	46
10-8	3.0		82	82	80	74	64	53
10-9	3.0		92	92	89	82	70	59
10-10	4.0		102	102	100	93	80	66
10-12	4.0		122	122	119	110	95	79
10-14	5.5		143	144	140	130	113	94
10-16	5.5		163	163	159	148	128	106
10-18	7.5		185	186	182	169	147	123
10-20	7.5		206	204	201	188	164	136
10-22	7.5		226	226	221	206	178	147

Hydraulic Performance Curves



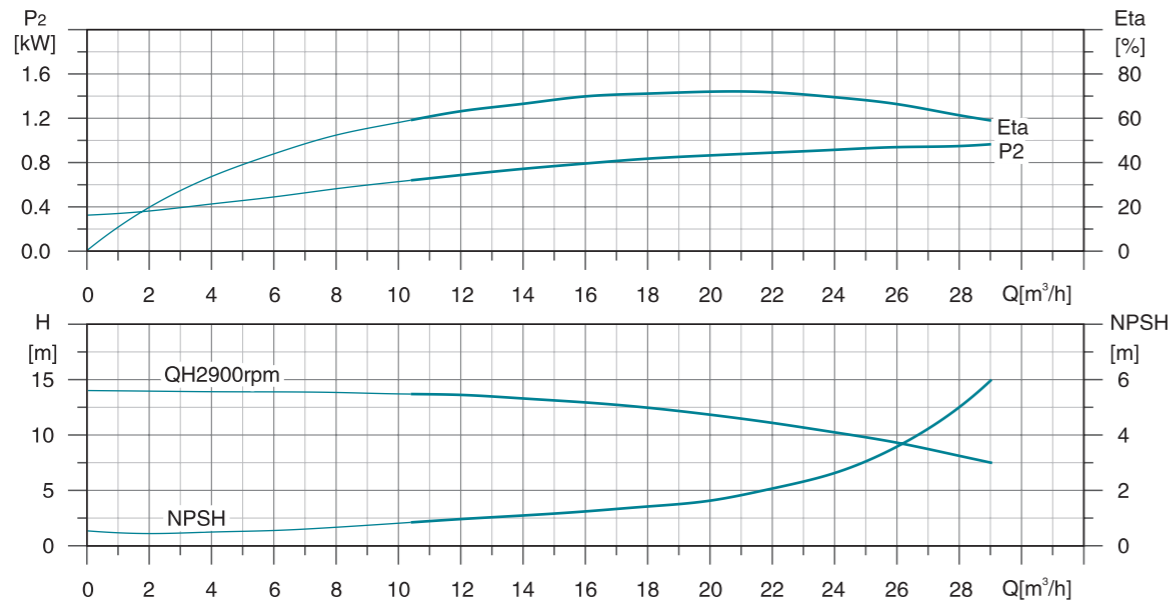
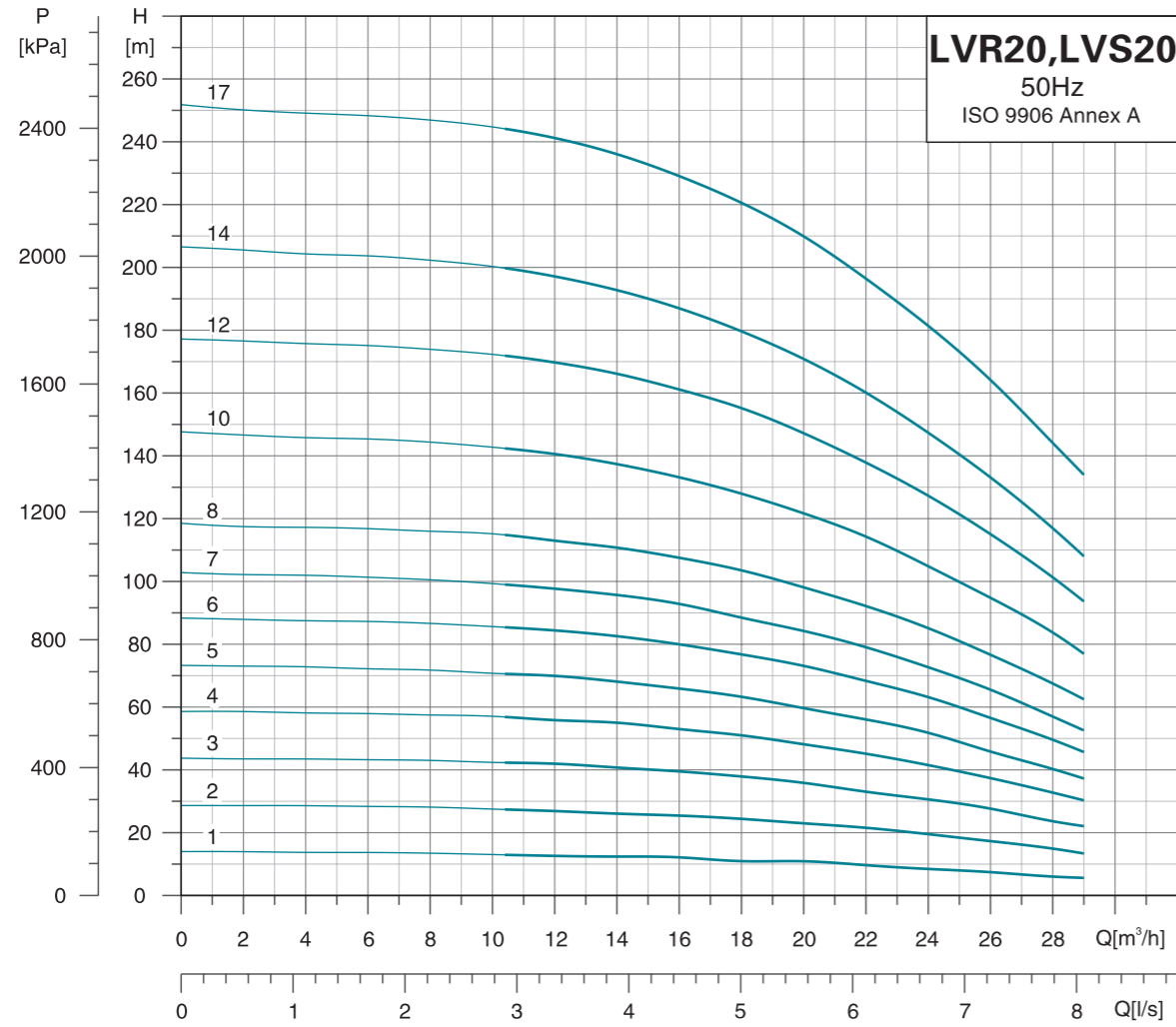
Dimension Drawing



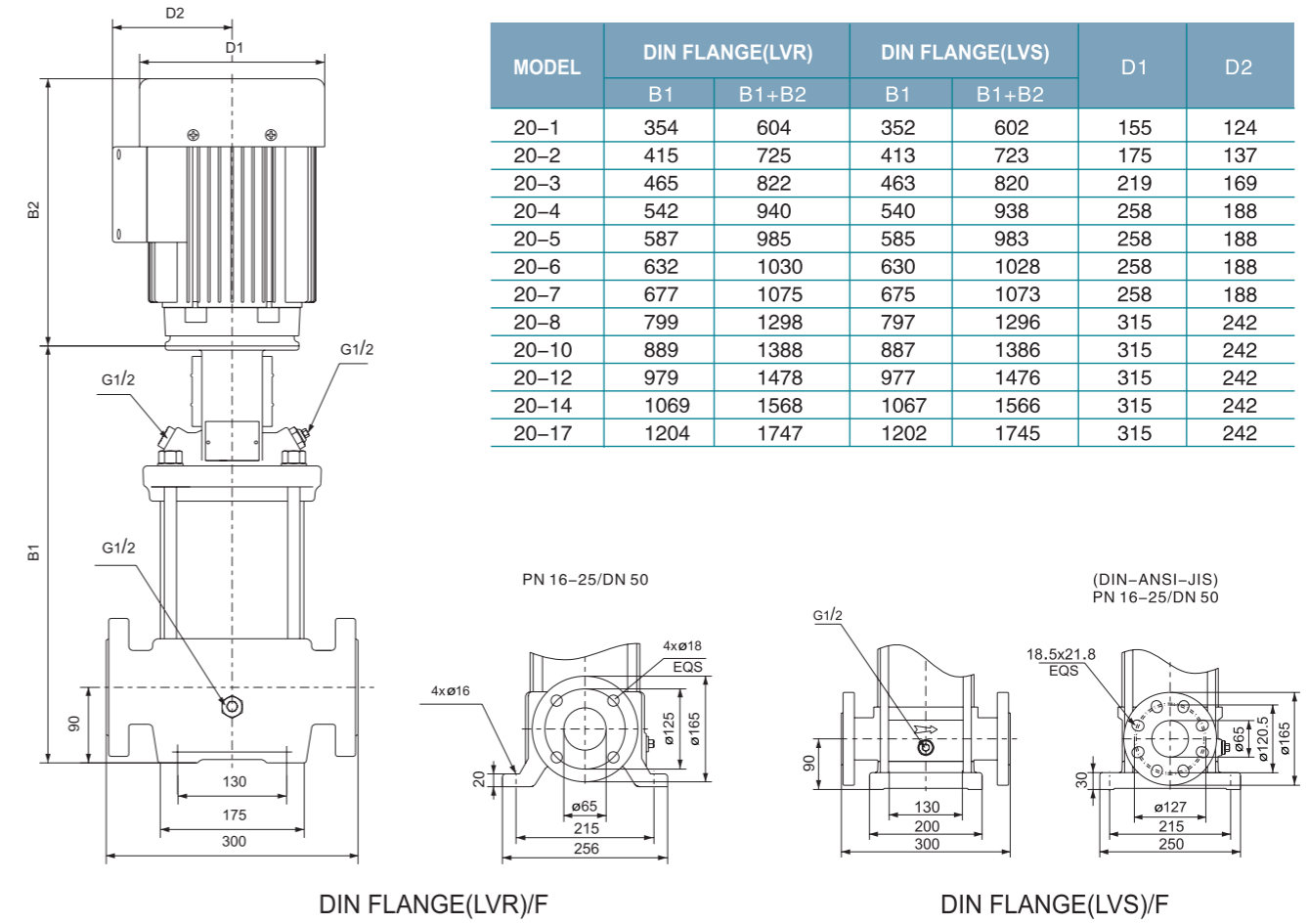
MODEL	DIN FLANGE(LVR)		DIN FLANGE(LVS)		D1	D2
	B1	B1+B2	B1	B1+B2		
15-1	354	604	352	602	155	124
15-2	415	725	413	723	175	137
15-3	465	795	463	793	195	151
15-4	510	867	508	865	219	169
15-5	555	912	553	910	219	169
15-6	632	1030	630	1028	258	188
15-7	677	1075	675	1073	258	188
15-8	722	1120	720	1118	258	188
15-9	767	1165	765	1163	258	188
15-10	889	1388	887	1386	315	242
15-12	979	1478	977	1476	315	242
15-14	1071	1570	1067	1566	315	242
15-17	1204	1703	1202	1701	315	242

MODEL	POWER[kW]	Q[m³/h]	3	6	9	12	15	18	21
15-1	1.1	H(m)	15	13	13	12	11	10	9
15-2	2.2		28	27	26	25	23	21	18
15-3	3.0		42	41	40	38	35	32	28
15-4	4.0		58	55	55	51	47	43	38
15-5	4.0		70	68	66	64	58	53	48
15-6	5.5		83	82	80	77	71	64	58
15-7	5.5		98	96	94	89	83	75	65
15-8	7.5		112	110	108	103	96	86	75
15-9	7.5		125	123	120	115	108	97	84
15-10	11.0		140	138	136	129	120	109	95
15-12	11.0		168	165	162	155	142	130	114
15-14	11.0		194	192	188	180	166	151	130
15-17	15.0		237	234	230	219	205	185	160

Hydraulic Performance Curves



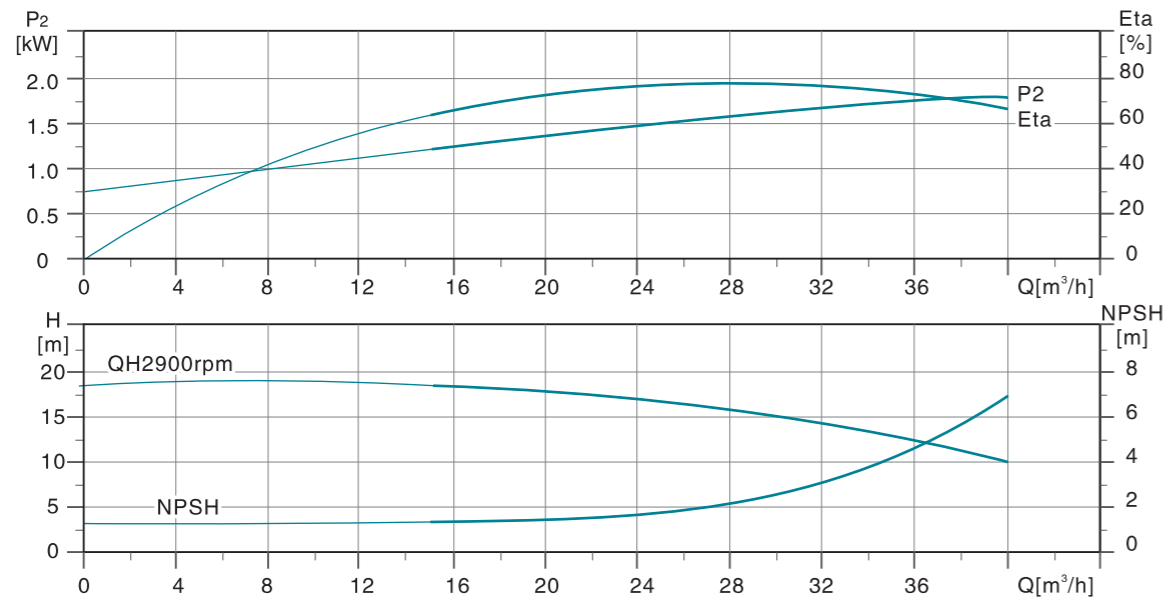
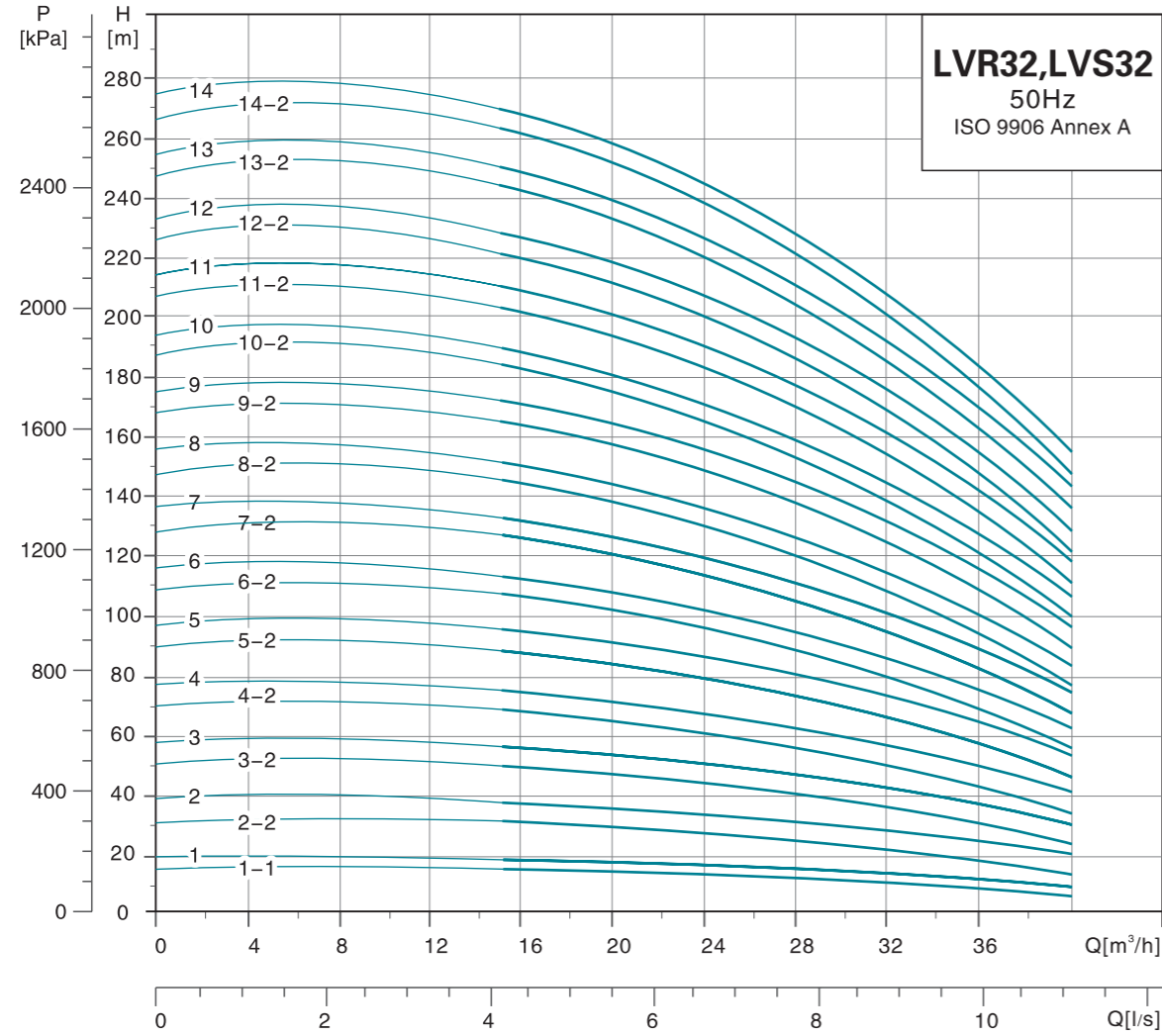
Dimension Drawing



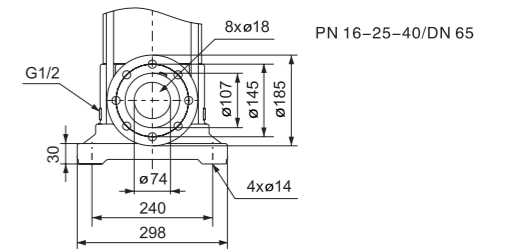
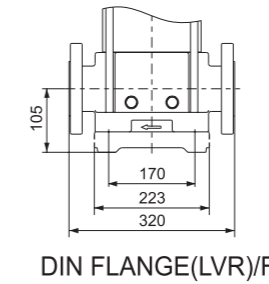
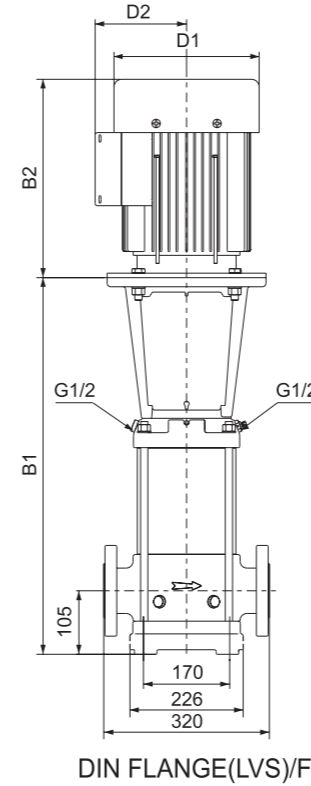
MODEL	DIN FLANGE(LVR)		DIN FLANGE(LVS)		D1	D2
	B1	B1+B2	B1	B1+B2		
20-1	354	604	352	602	155	124
20-2	415	725	413	723	175	137
20-3	465	822	463	820	219	169
20-4	542	940	540	938	258	188
20-5	587	985	585	983	258	188
20-6	632	1030	630	1028	258	188
20-7	677	1075	675	1073	258	188
20-8	799	1298	797	1296	315	242
20-10	889	1388	887	1386	315	242
20-12	979	1478	977	1476	315	242
20-14	1069	1568	1067	1566	315	242
20-17	1204	1747	1202	1745	315	242

MODEL	POWER[kW]	Q[m³/h]	4	8	12	16	20	24	28
20-1	1.1	H(m)	13	13	13	12	10.5	9.5	6.5
20-2	2.2		28	28	27	25	22.5	19	15
20-3	4.0		43	43	42	39	36	30	23
20-4	5.5		58	57	56	53	48	41	32
20-5	5.5		73	72	70	66	60	52	40
20-6	7.5		87	83	84	80	72	62	49
20-7	7.5		102	100	97	93	84	72	57
20-8	11.0		117	116	113	107	96	85	67
20-10	11.0		146	144	140	132	120	105	83
20-12	15.0		175	174	169	161	144	127	101
20-14	15.0		204	202	197	187	168	147	117
20-17	18.5		249	247	241	229	205	181	144

Hydraulic Performance Curves



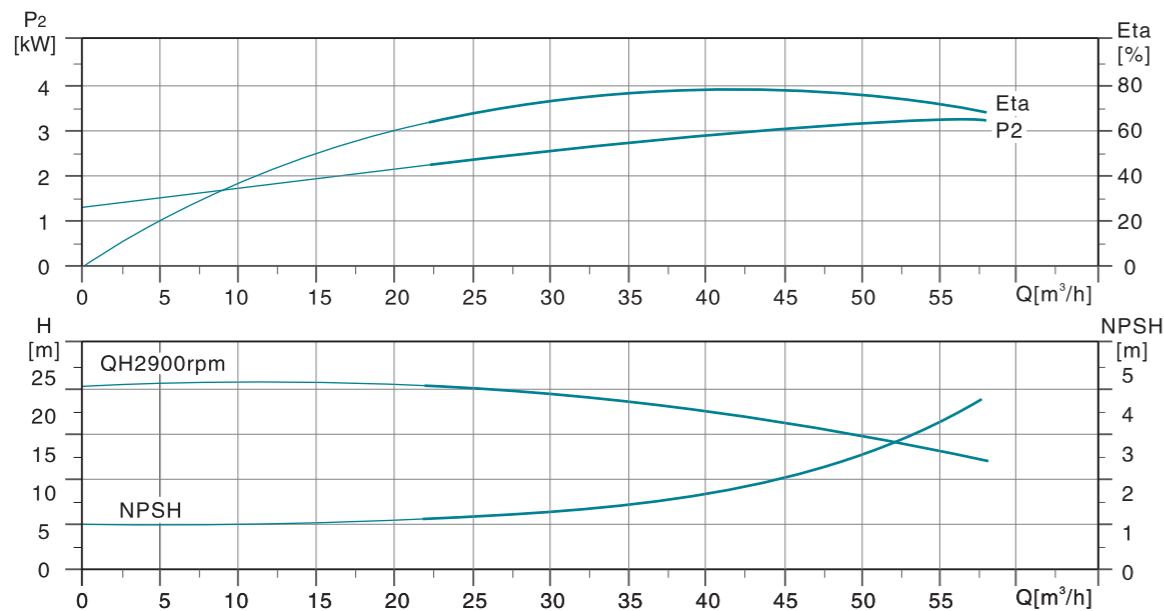
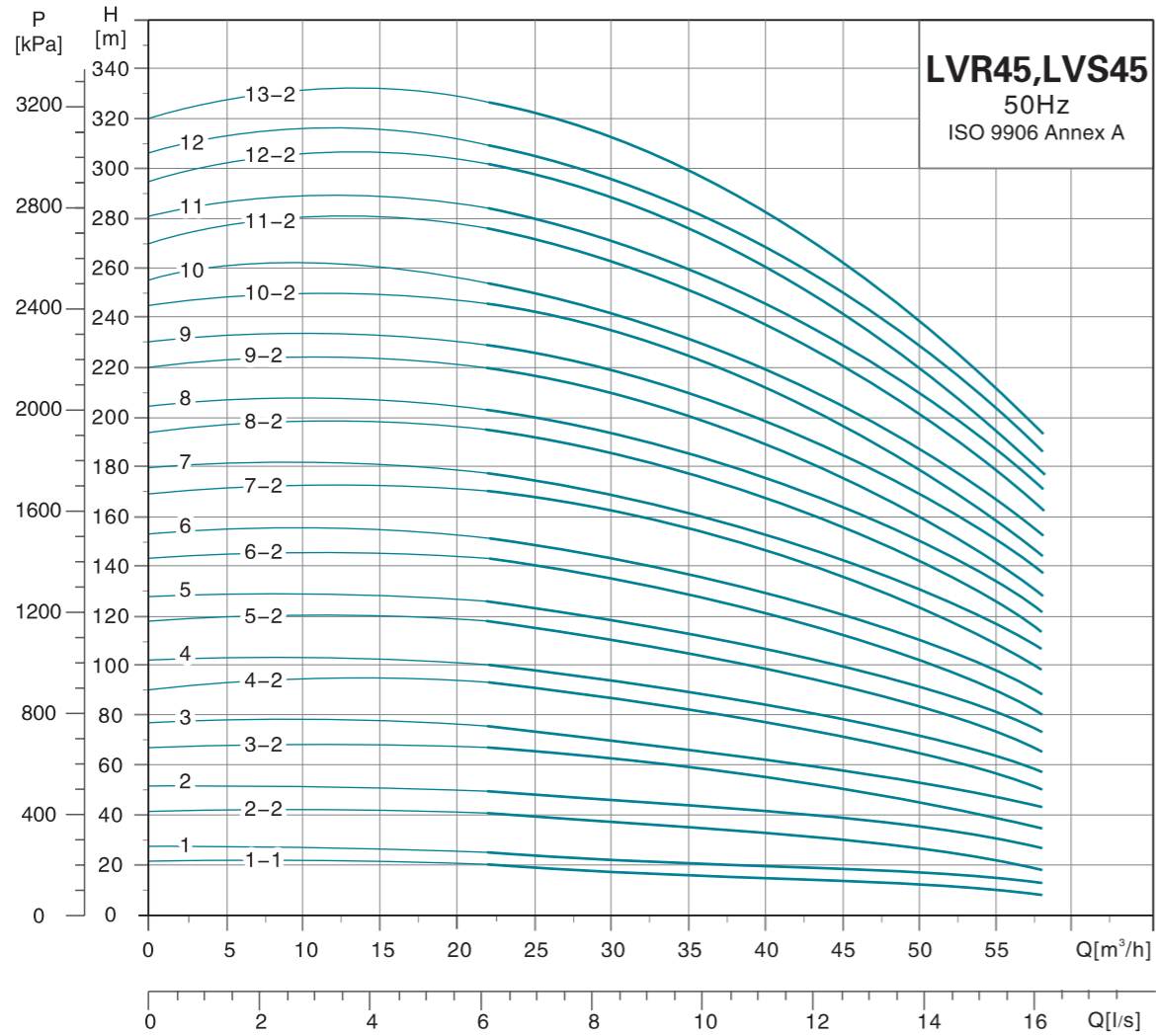
Dimension Drawing



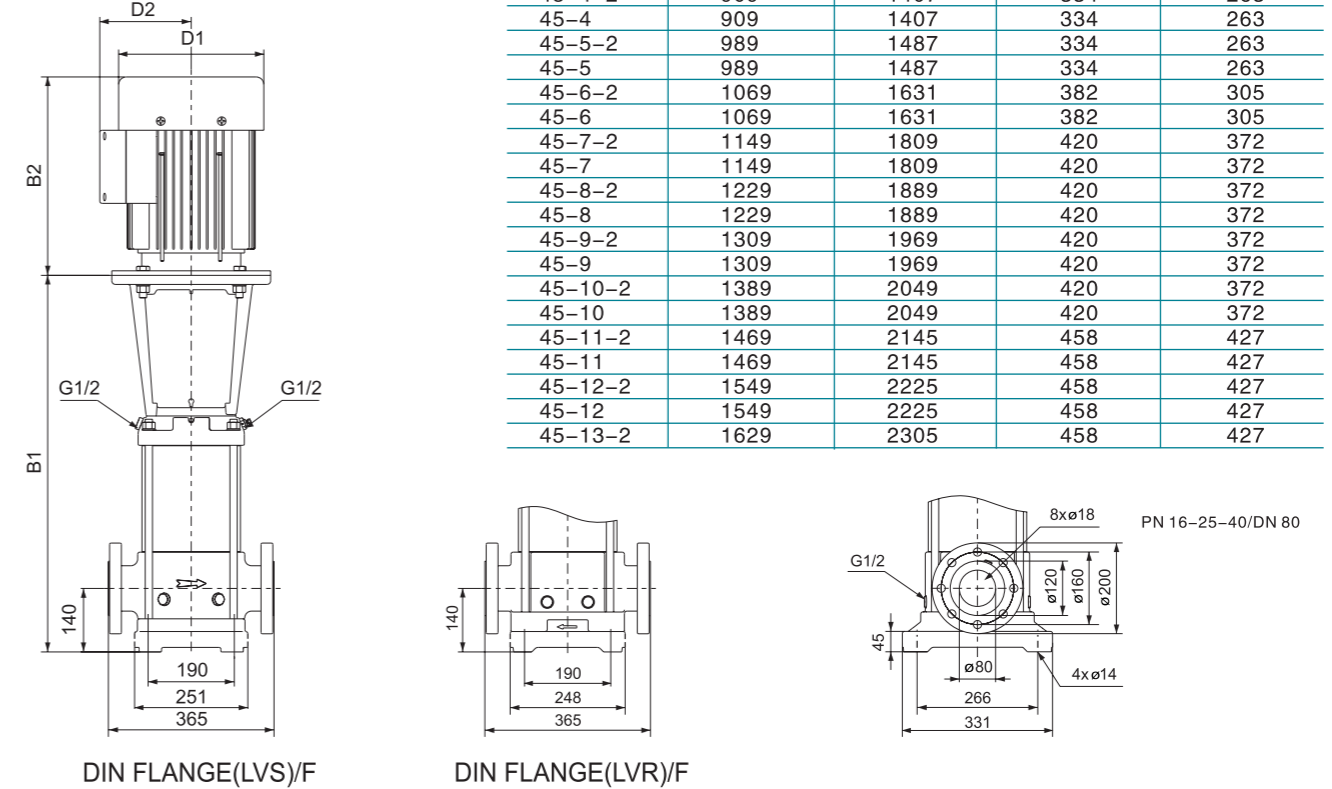
MODEL	DIN FLANGE(LVR, LVS)		D1	D2
	B1	B1+B2		
32-1-1	505	786	178	110
32-1	505	826	178	110
32-2-2	575	910	198	120
32-2	575	947	220	134
32-3-2	645	1036	220	134
32-3	645	1036	220	134
32-4-2	715	1106	220	134
32-4	715	1106	220	134
32-5-2	895	1393	334	263
32-5	895	1393	334	263
32-6-2	965	1463	334	263
32-6	965	1463	334	263
32-7-2	1035	1533	334	263
32-7	1035	1533	334	263
32-8-2	1105	1603	334	263
32-8	1105	1603	334	263
32-9-2	1175	1673	334	263
32-9	1175	1673	334	263
32-10-2	1245	1743	334	263
32-10	1245	1743	334	263
32-11-2	1315	1877	382	305
32-11	1315	1877	382	305
32-12-2	1385	1947	382	305
32-12	1385	1947	382	305
32-13-2	1455	2115	420	372
32-13	1455	2115	420	372
32-14-2	1525	2185	420	372
32-14	1525	2185	420	372

MODEL	POWER[kW]	Q[m³/h]	15	20	25	32	35	40
32-1-1	1.5		15	14	13	10	8	5
32-1	2.2		18	17	16	13	11.5	9
32-2-2	3		31	29.5	26.5	20.5	17.5	12
32-2	4		37	35.5	32.5	27.5	25	19.5
32-3-2	5.5		50	47	43.5	35.5	31	22.5
32-3	5.5		55.5	53	49	41.5	37.5	29.5
32-4-2	7.5		68.5	65	60	49.5	44	32.5
32-4	7.5		74.5	70.5	66	56	50.5	40
32-5-2	11		88.5	84.5	78	65.5	58.5	45
32-5	11		94.5	90	84	72	65	52
32-6-2	11		107	102	94.5	79.5	71	55
32-6	11		113	108	100	85.5	77.5	61.5
32-7-2	15		127	121	112	94.5	85	66.5
32-7	15		133	126	118	101	92	73.5
32-8-2	15		145	138	128	108	98	76.5
32-8	15		151	144	134	115	104	83
32-9-2	18.5		165	158	147	124	112	88.5
32-9	18.5		171	163	152	131	119	95.5
32-10-2	18.5		184	175	163	138	125	98.5
32-10	18.5		190	181	169	145	133	106
32-11-2	22		203	194	181	154	140	111
32-11	22		209	200	187	161	147	118
32-12-2	22		222	212	197	168	152	121
32-12	22		227	217	203	176	160	128
32-13-2	30		244	233	218	187	169	136
32-13	30		250	239	224	193	177	145
32-14-2	30		263	251	234	201	183	146
32-14	30		269	258	241	207	188	156

Hydraulic Performance Curves



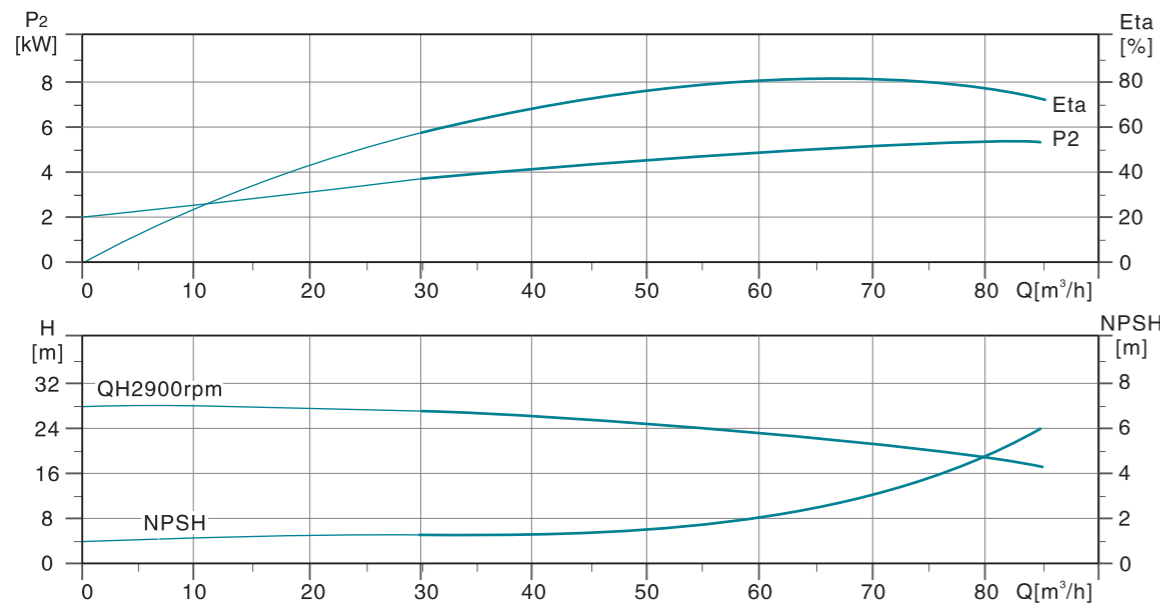
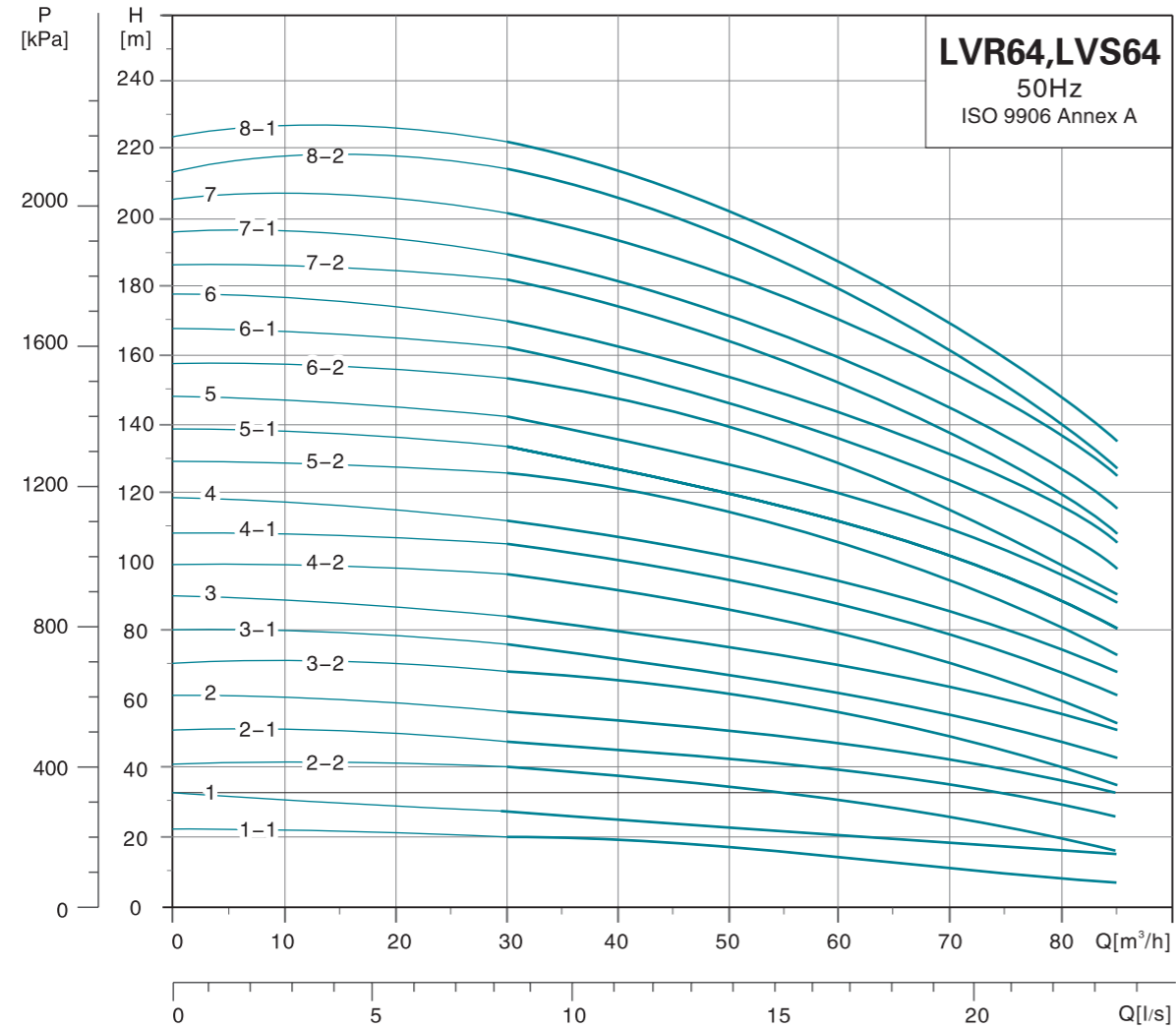
Dimension Drawing



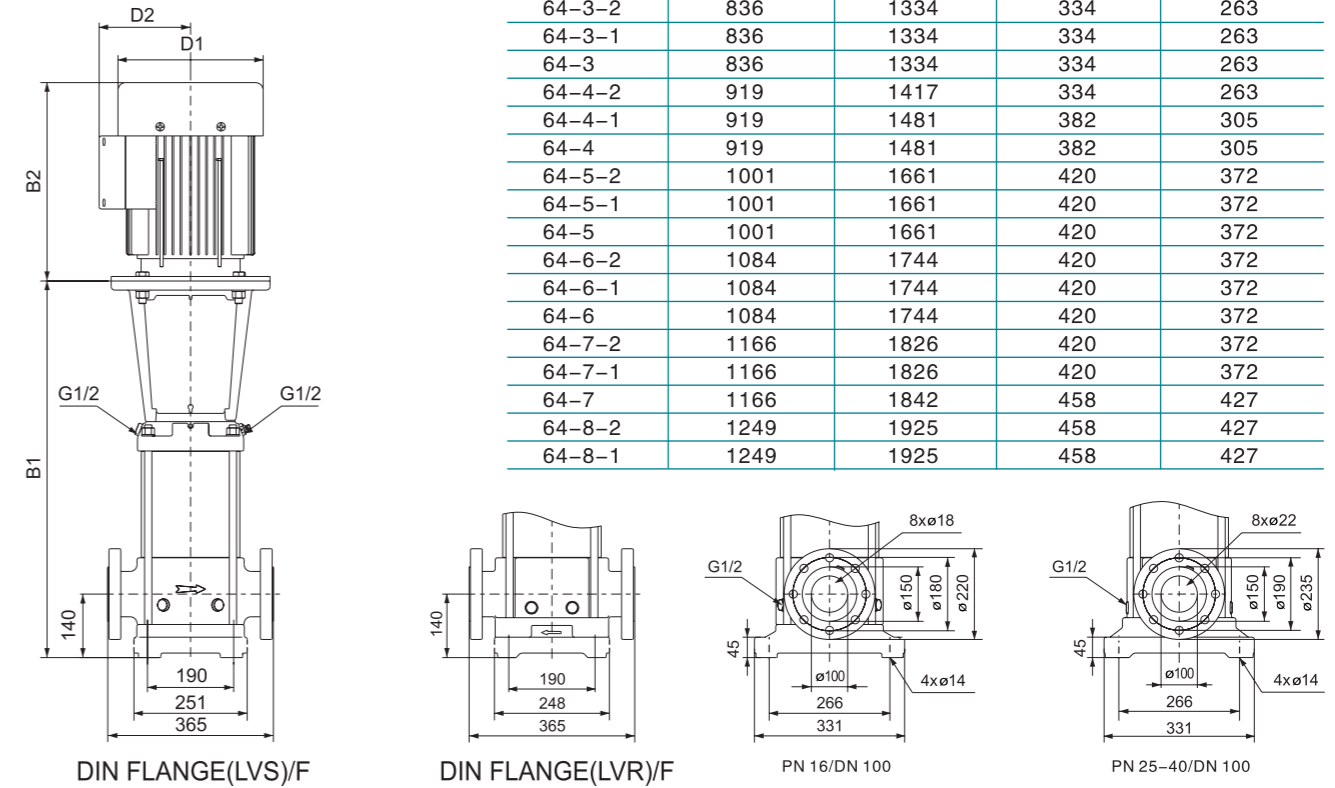
MODEL	DIN FLANGE(LVR, LVS)		D1	D2
	B1	B1+B2		
45-1-1	559	894	198	120
45-1	559	931	220	134
45-2-2	639	1030	220	134
45-2	639	1030	220	134
45-3-2	829	1327	334	263
45-3	829	1327	334	263
45-4-2	909	1407	334	263
45-4	909	1407	334	263
45-5-2	989	1487	334	263
45-5	989	1487	334	263
45-6-2	1069	1631	382	305
45-6	1069	1631	382	305
45-7-2	1149	1809	420	372
45-7	1149	1809	420	372
45-8-2	1229	1889	420	372
45-8	1229	1889	420	372
45-9-2	1309	1969	420	372
45-9	1309	1969	420	372
45-10-2	1389	2049	420	372
45-10	1389	2049	420	372
45-11-2	1469	2145	458	427
45-11	1469	2145	458	427
45-12-2	1549	2225	458	427
45-12	1549	2225	458	427
45-13-2	1629	2305	458	427

MODEL	POWER[kW]	Q[m³/h]	25	30	35	40	45	50	55
45-1-1	3		20	19.5	18	17	15	12.5	10.5
45-1	4		24	23	22	20.5	19	17.5	15
45-2-2	5.5		41	39	37	34	30.5	26.5	22
45-2	7.5		48.5	46.5	44.5	42	39	35	31
45-3-2	11		66	64	61	56.5	52	46	40
45-3	11		73.5	71	68	64	59.5	54	47.5
45-4-2	15		91	88	84	78.5	72	64.5	56
45-4	15		98.5	95	91	85.5	79.5	72.5	64
45-5-2	18.5		116	113	107	101	92.5	83.5	73
45-5	18.5		124	120	115	108	100	91.5	81
45-6-2	22		142	137	131	122	113	103	90
45-6	22		149	144	138	130	121	111	98
45-7-2	30		168	163	156	147	135	123	109
45-7	30		176	171	163	155	144	132	116
45-8-2	30		193	187	179	168	155	142	126
45-8	30		200	194	187	176	164	149	134
45-9-2	30		217	211	202	189	175	159	142
45-9	37		226	219	210	199	185	170	151
45-10-2	37		243	236	225	212	196	179	159
45-10	37		251	243	233	220	205	187	166
45-11-2	45		273	264	253	238	222	201	179
45-11	45		281	272	261	246	230	209	187
45-12-2	45		298	289	276	261	242	220	195
45-12	45		306	296	284	268	251	229	204
45-13-2	45		323	313	300	283	263	239	212

Hydraulic Performance Curves



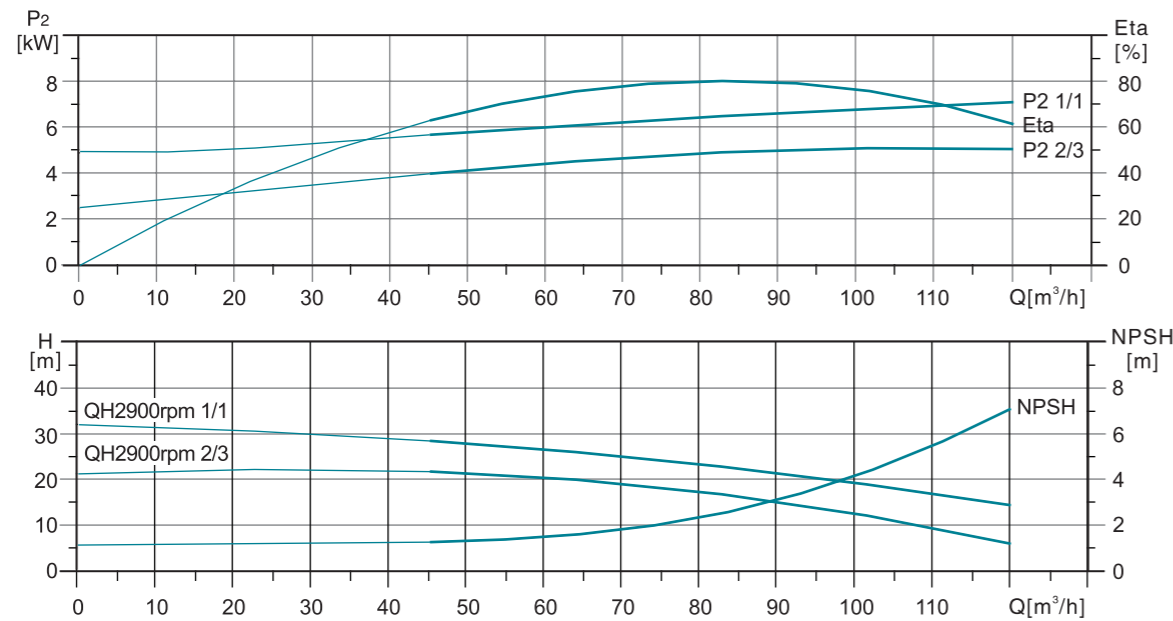
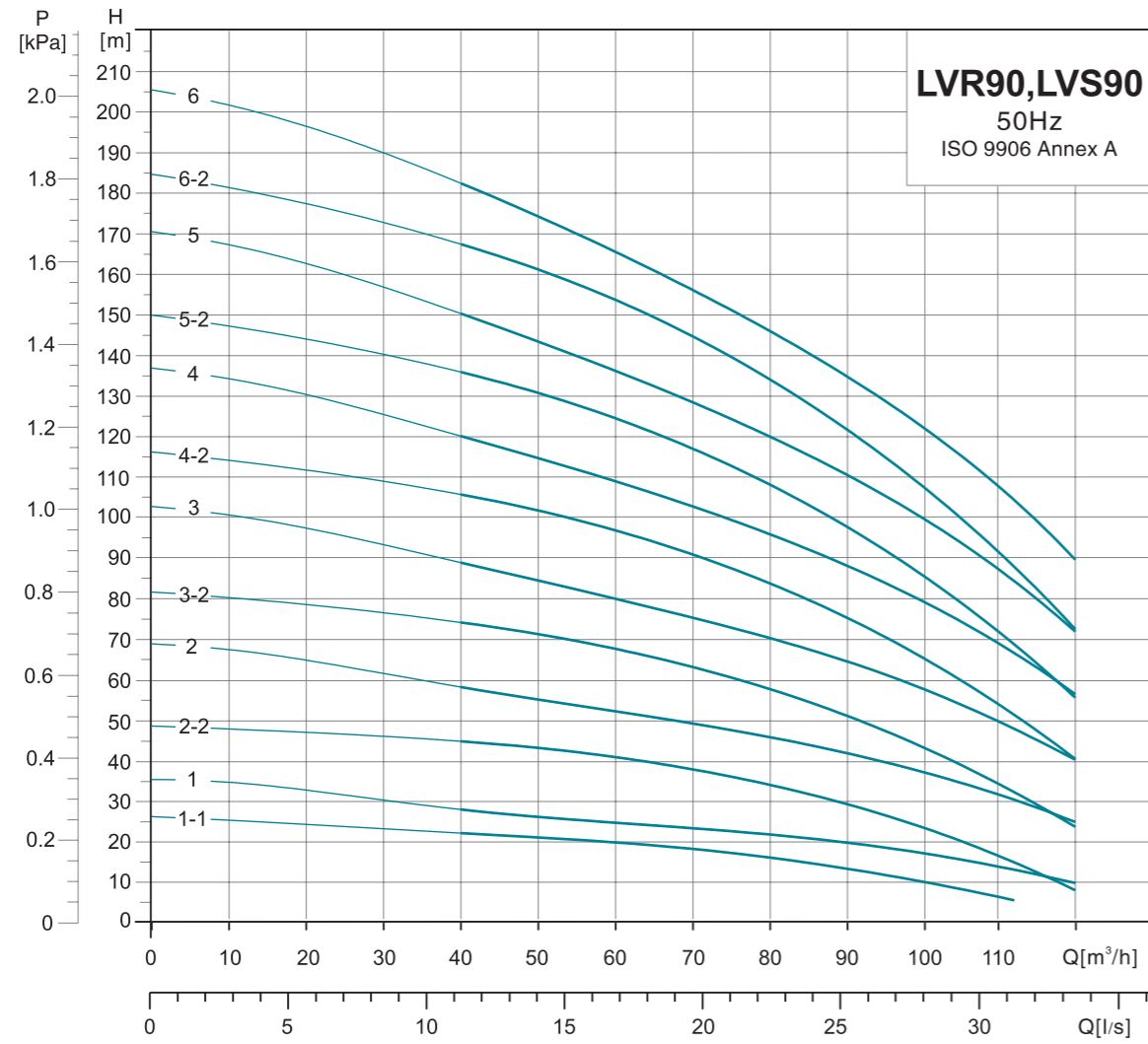
Dimension Drawing



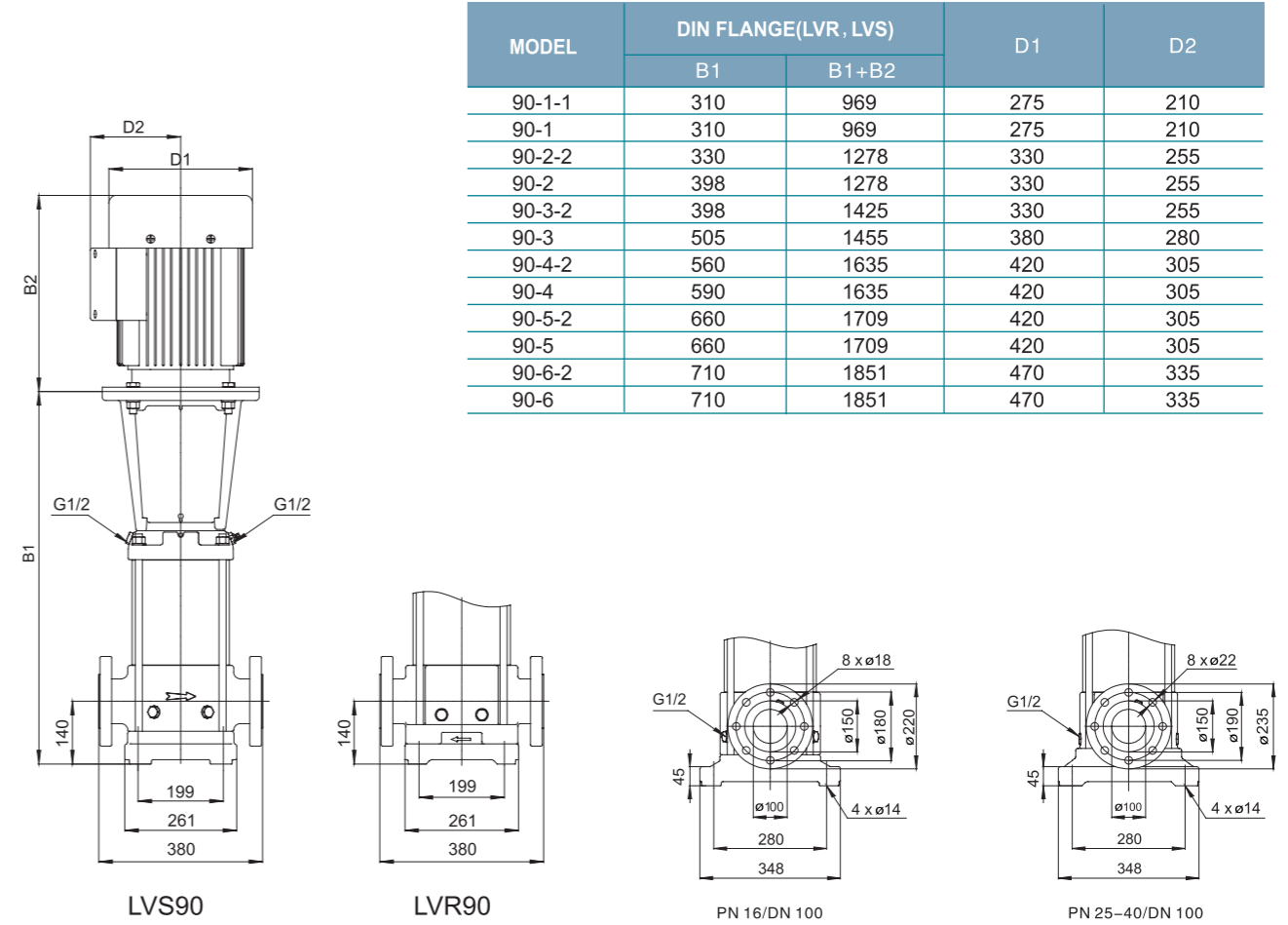
MODEL	DIN FLANGE(LVR, LVS)		D1	D2
	B1	B1+B2		
64-1-1	561	933	220	134
64-1	561	952	220	134
64-2-2	644	1035	220	134
64-2-1	754	1252	334	263
64-2	754	1252	334	263
64-3-2	836	1334	334	263
64-3-1	836	1334	334	263
64-3	836	1334	334	263
64-4-2	919	1417	334	263
64-4-1	919	1481	382	305
64-4	919	1481	382	305
64-5-2	1001	1661	420	372
64-5-1	1001	1661	420	372
64-5	1001	1661	420	372
64-6-2	1084	1744	420	372
64-6-1	1084	1744	420	372
64-6	1084	1744	420	372
64-7-2	1166	1826	420	372
64-7-1	1166	1826	420	372
64-7	1166	1842	458	427
64-8-2	1249	1925	458	427
64-8-1	1249	1925	458	427

MODEL	POWER[kW]	Q[m³/h]	30	40	50	64	70	80
64-1-1	4		20	19	17.5	15.5	12	8.5
64-1	5.5		27	25.5	23.5	21.5	20	17
64-2-2	7.5		40	38	35.5	31	25.5	19
64-2-1	11		48	45.5	42.5	38	34.5	29
64-2	11		55	52.5	49.5	44.5	41.5	36
64-3-2	15		68	65.5	60	54	48.5	40
64-3-1	15		75.5	72	67.5	60	55.5	47
64-3	18.5		83.5	80	76	66.5	64	56
64-4-2	18.5		96	92.5	87	76	70	59
64-4-1	22		104	100	94.5	82.5	78.5	67.5
64-4	22		112	107	102	89	85.5	74.5
64-5-2	30		126	122	115	100	94	80.5
64-5-1	30		134	129	122	106	102	88
64-5	30		141	136	129	113	109	96
64-6-2	30		154	148	140	122	115	99
64-6-1	37		162	156	148	129	124	108
64-6	37		170	163	155	135	131	116
64-7-2	37		182	176	166	145	138	119
64-7-1	37		190	183	173	151	145	126
64-7	45		202	194	184	163	155	136
64-8-2	45		214	207	196	172	163	140
64-8-1	45		222	214	203	180	170	148

Hydraulic Performance Curves

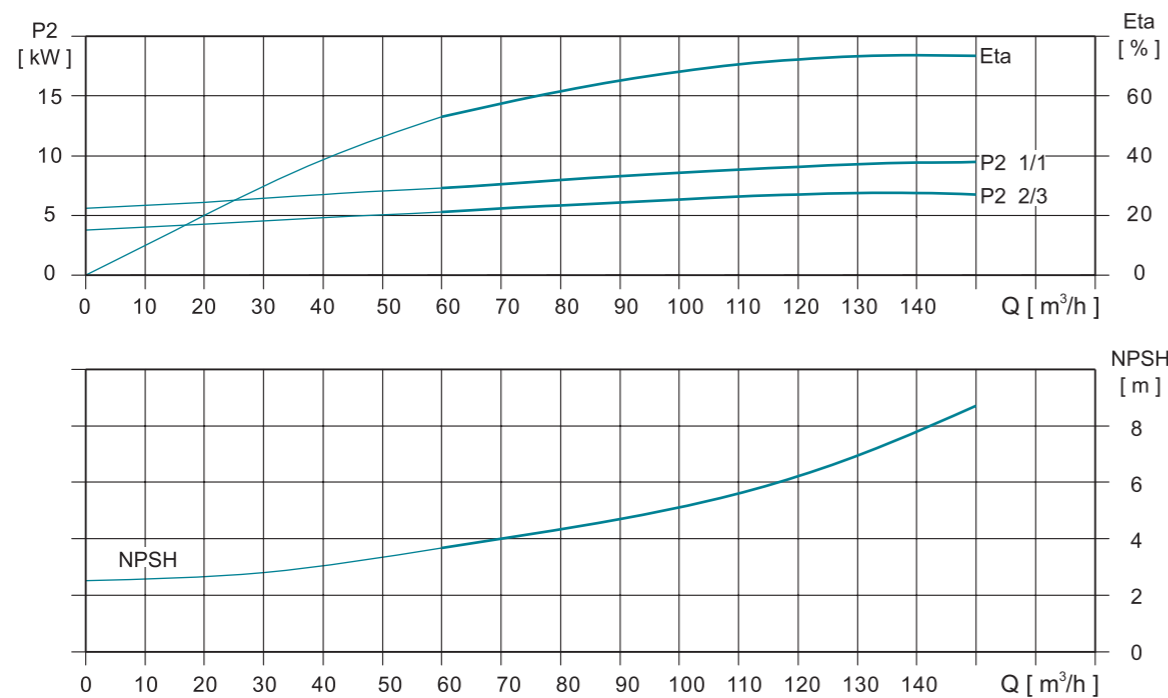
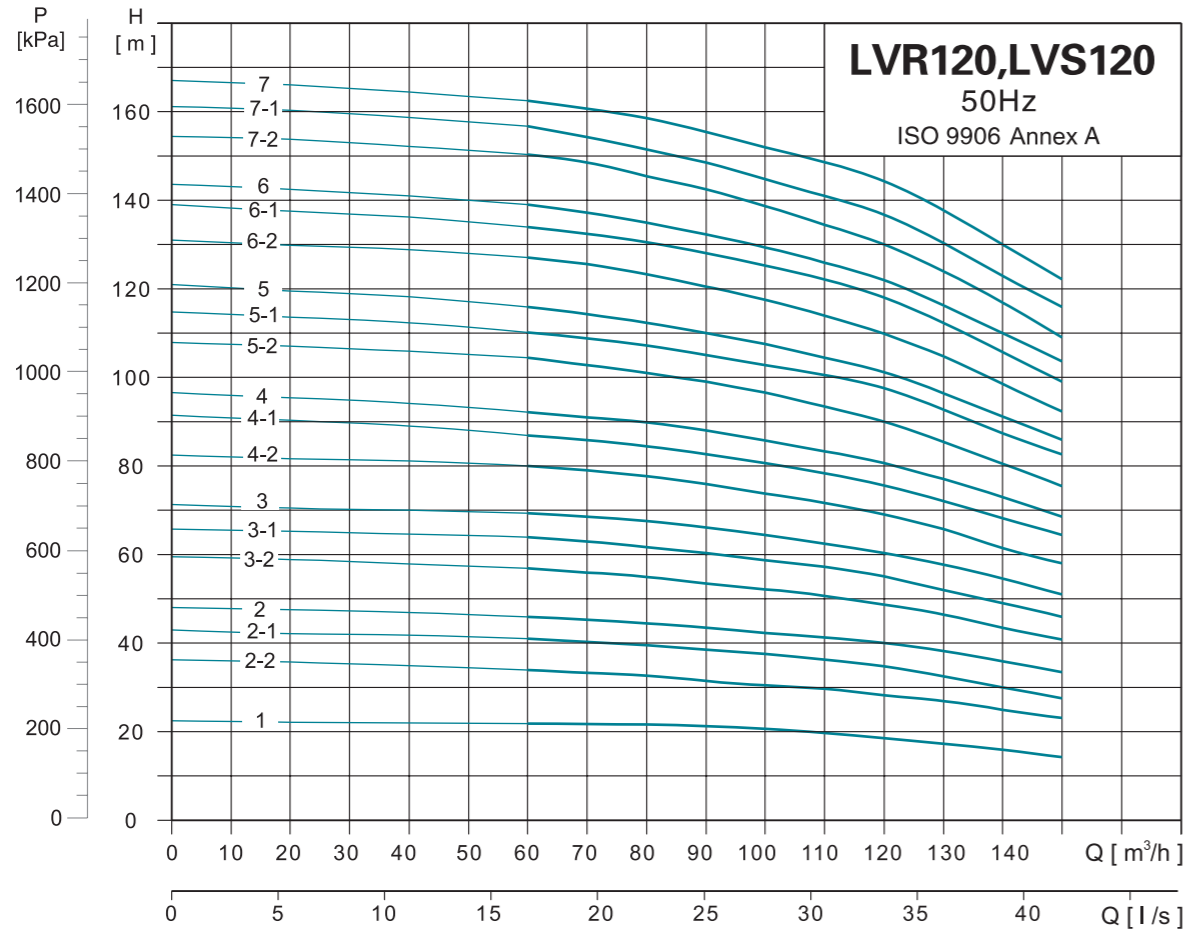


Dimension Drawing

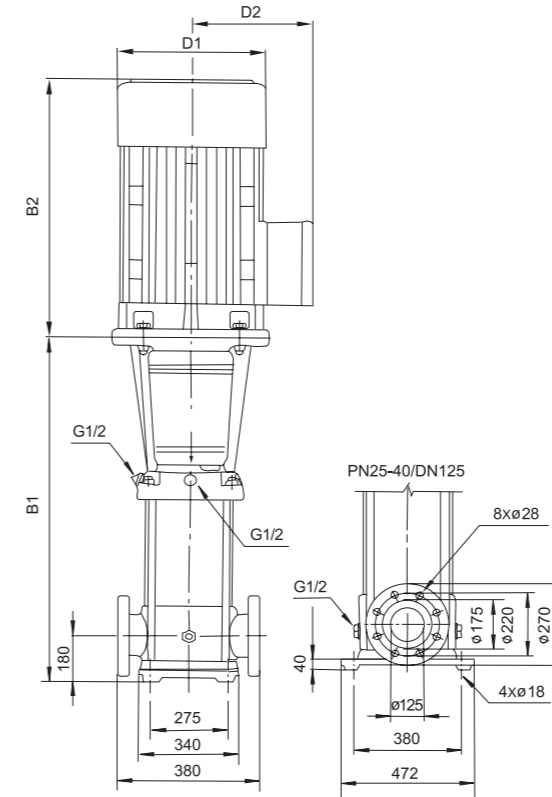


MODEL	POWER[kW]	Q[m³/h]	50	60	70	80	90	100	110
90-1-1	5.5	H(m)	21	20	18	16	14	10.5	6.5
90-1	7.5		26	25	23.5	22	20	17.5	14
90-2-2	11		43	41	38	34.5	30	24	17
90-2	15		55	52	49	46	42.5	37.5	31.5
90-3-2	18.5		71.5	68	63.5	58	51.5	44	35
90-3	22		84.5	80	75.5	70.5	65	58.5	50.5
90-4-2	30		102	97	91	84.5	76	65.5	54
90-4	30		114	109	103	96	88.5	79.5	69.5
90-5-2	37		131	125	118	109	98.5	86.5	72
90-5	37		144	136	129	121	111	101	87
90-6-2	45		161	154	145	135	123	108	91.5
90-6	45		175	166	156	146	135	123	108

Hydraulic Performance Curves



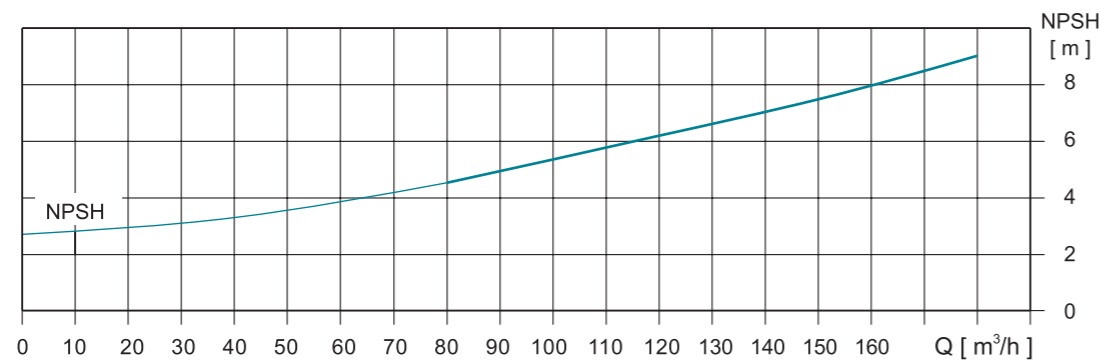
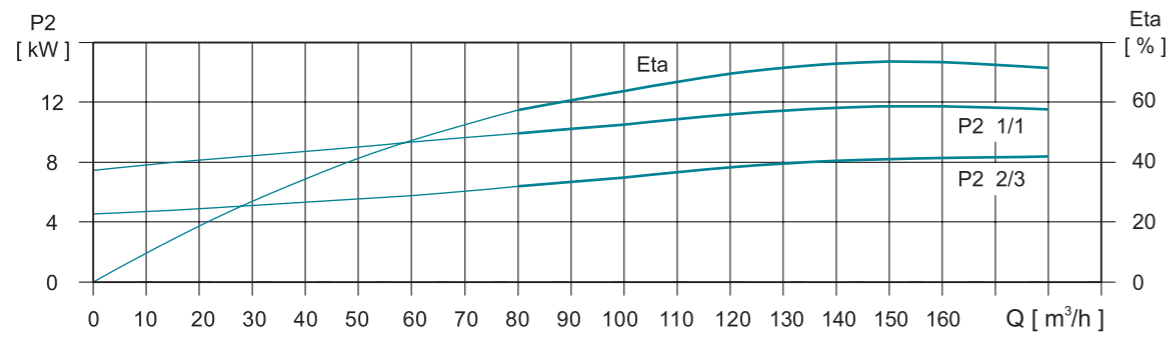
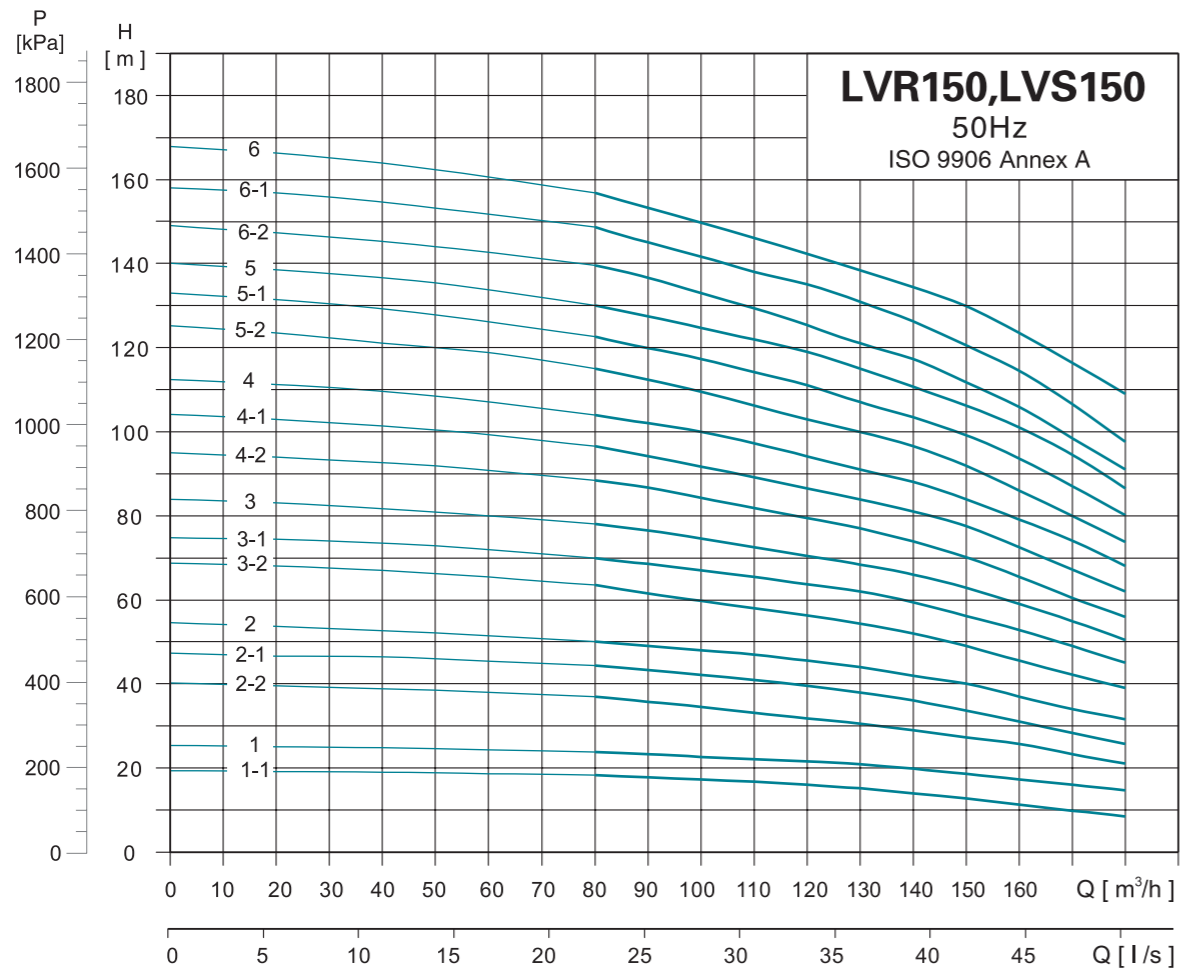
Dimension Drawing



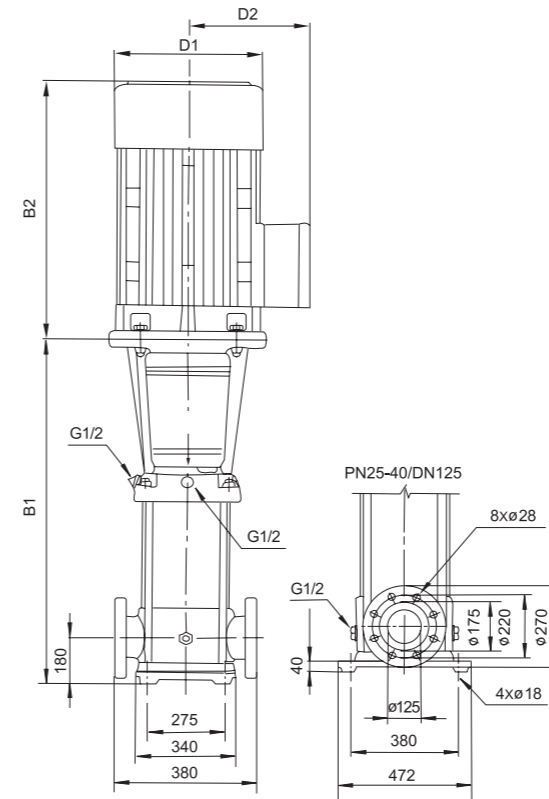
MODEL	DIN FLANGE(LVR, LVS)		D1	D2
	B1	B1+B2		
120-1	840	1333	254	175
120-2-2	1000	1493	254	175
120-2-1	1000	1560	330	250
120-2	1000	1600	380	280
120-3-2	1160	1840	420	305
120-3-1	1160	1840	420	305
120-3	1160	1840	420	305
120-4-2	1320	2000	420	305
120-4-1	1320	2000	420	305
120-4	1320	2035	470	335
120-5-2	1480	2195	470	335
120-5-1	1480	2195	470	335
120-5	1480	2295	510	370
120-6-2	1670	2455	510	370
120-6-1	1670	2455	510	370
120-6	1670	2515	580	410
120-7-2	1830	2675	580	410
120-7-1	1830	2675	580	410
120-7	1830	2675	580	410

MODEL	POWER[kW]	Q[m³/h]	60	70	80	90	100	110	120	130	140	150
120-1	11	H(m)	22	21.8	21.6	21	20.5	19.5	18.5	17	16	15
120-2-2	15		34	33.6	33	31	30.2	30	28.5	27	25	24
120-2-1	18.5		41	40	39.5	38.5	37	36.5	34.5	32.5	30	27.5
120-2	22		46	45	44.5	43.5	42.4	41	40	38	36	33.5
120-3-2	30		57	56	55	53.5	52	51	49	46.5	43.5	41
120-3-1	30		64	63	62	60	58.5	57.5	55.5	52	49	46
120-3	30		69.5	68.5	67.5	66	64.4	62.5	61	57.5	54.5	51
120-4-2	37		80.5	79	78	76	73.5	72	69	66	61.5	58
120-4-1	37		87	86	84.5	82	80	78	76	72	68	64.5
120-4	45		92.5	91	90	88	85.5	83	81	77	73	68.5
120-5-2	45		104.5	103	101	99	96	93	90	85.5	80.5	75.5
120-5-1	45		110.5	109	107.5	105	102	100	97	92	86.5	83
120-5	55		115.5	114	113	110	107.5	104.5	101.5	96	91	86
120-6-2	55		128	125.5	123	121	117.3	113.5	110	104.5	98.5	92.5
120-6-1	55		134	132	130.5	127	124	121	118	111	105	100
120-6	75	139	137	135	132	128.8	126	123	116	110	104	
120-7-2	75	151	148	145.5	143	138.6	134	130	123.5	116.5	109	
120-7-1	75	156.5	154	152	148.5	144.5	141	137.5	130	123	116.5	
120-7	75	162.5	160.5	158.5	155	151	148	145	137	129	123	

Hydraulic Performance Curves



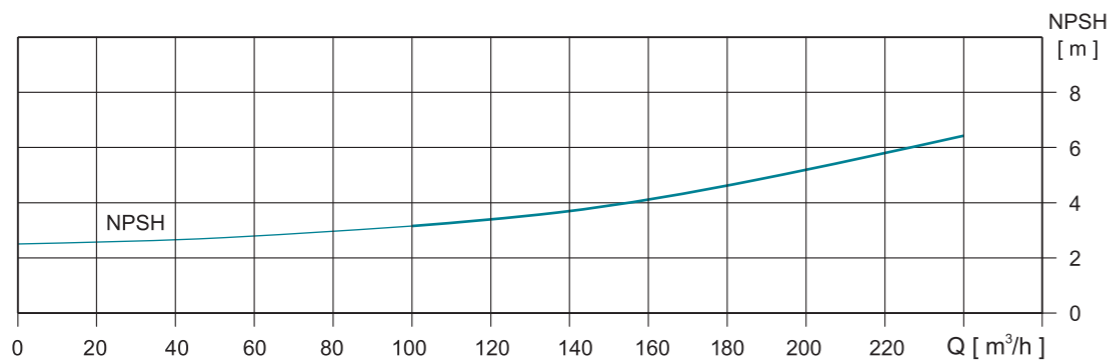
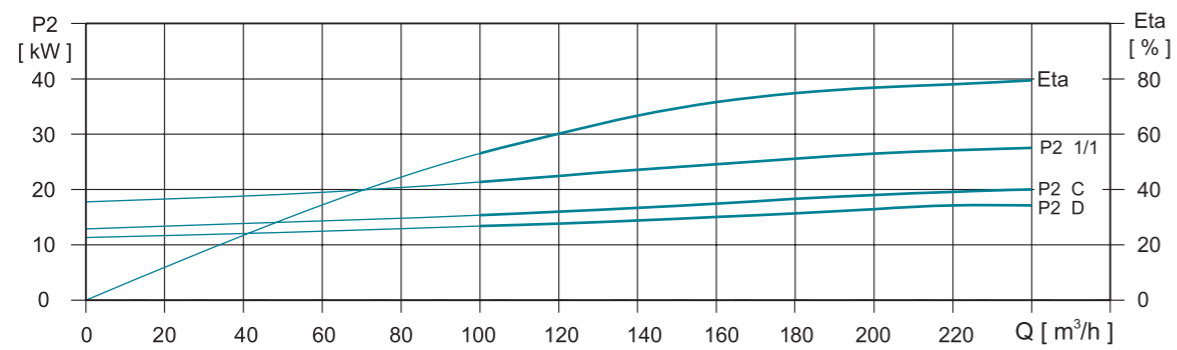
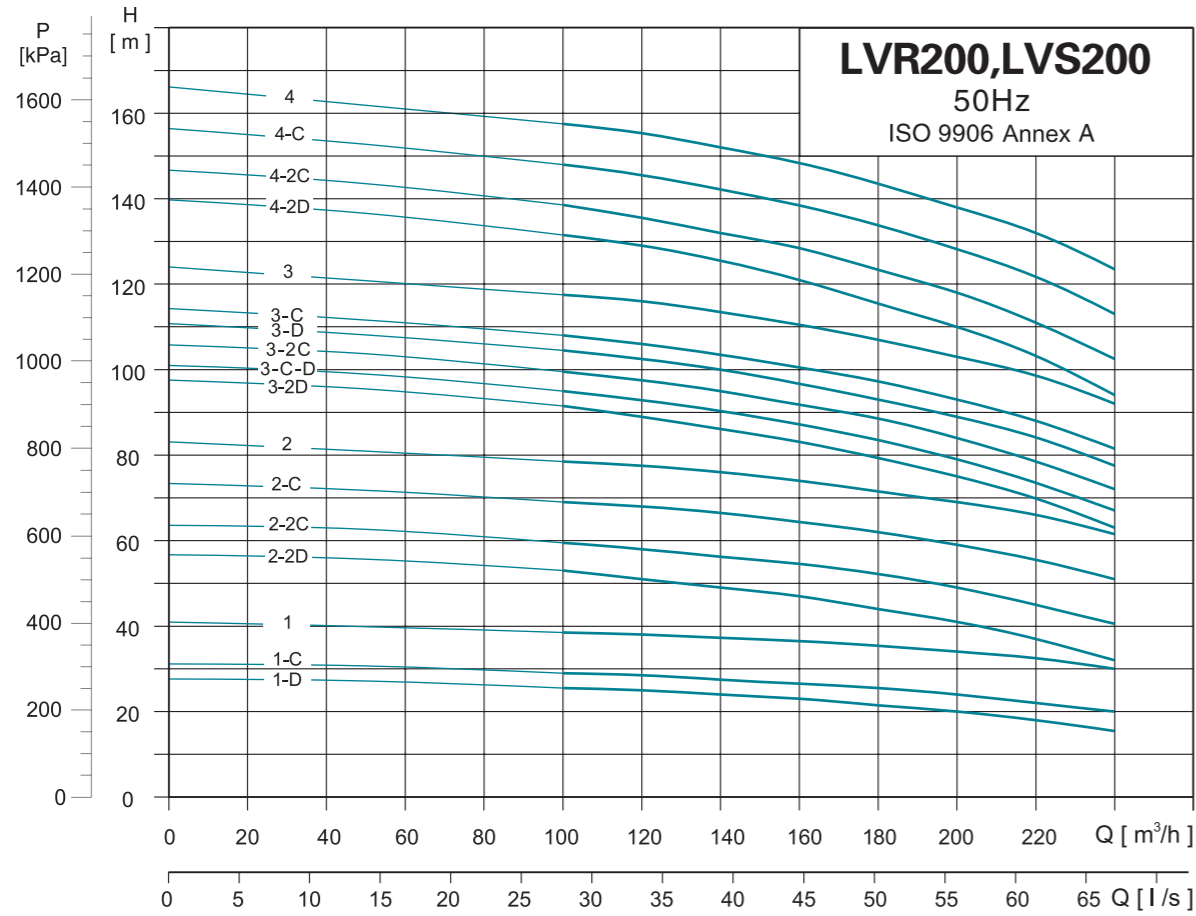
Dimension Drawing



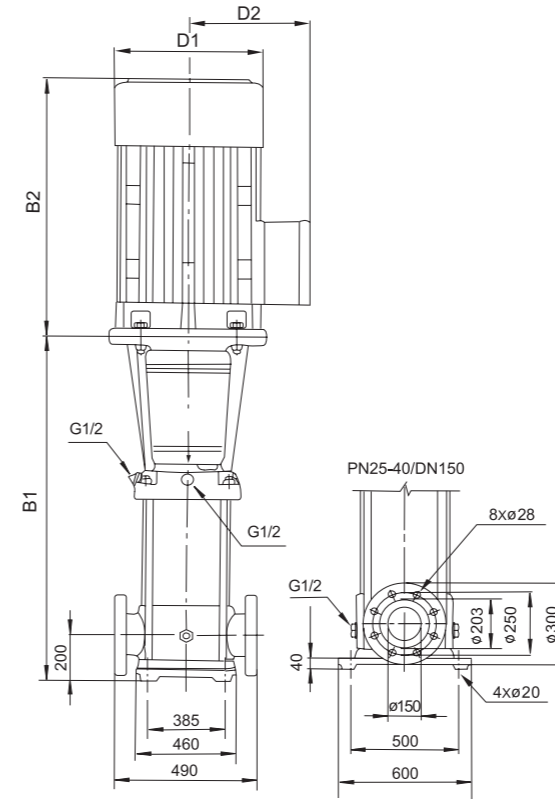
MODEL	DIN FLANGE(LVR, LVS)		D1	D2
	B1	B1+B2		
150-1-1	840	1333	254	175
150-1	840	1333	254	175
150-2-2	1000	1560	330	250
150-2-1	1000	1600	380	280
150-2	1000	1680	420	305
150-3-2	1160	1840	420	305
150-3-1	1160	1840	420	305
150-3	1160	1840	420	305
150-4-2	1320	2035	470	335
150-4-1	1320	2035	470	335
150-4	1350	2135	510	370
150-5-2	1510	2295	510	370
150-5-1	1510	2355	580	410
150-5	1510	2355	580	410
150-6-2	1670	2515	580	410
150-6-1	1670	2515	580	410
150-6	1670	2515	580	410

MODEL	POWER[kW]	Q[m³/h]	80	90	100	110	120	130	140	150	160	170	180
150-1-1	11	H(m)	18.3	17.8	17.3	17	16	15	14	12.5	11	10	8.5
150-1	15		24	23	22.5	22	21.5	20.5	20	18.5	17	16	15
150-2-2	18.5		37	35.5	34	33	32	31	29	27.5	26	23	21
150-2-1	22		44.3	43	42	40	39	38.5	37.5	35	33	30	27
150-2	30		50	49	48	47	45.5	44	42	40	37	34	32
150-3-2	30		63.5	61	59	57.5	56	54.5	53	49	45.5	42	39
150-3-1	30		70	68	67	65	63	62	60	56	53	49	45
150-3	37		78	76.5	75	73	70.5	68	66	63	59	55	50.5
150-4-2	37		89	87	84	81.5	79	77	74.5	70.5	65.5	60	56
150-4-1	45		96.5	94	91.5	89	86.5	84	81.5	77	72.5	67	62
150-4	45		104	102	100	97	95	91	88	84	79.5	74	68
150-5-2	55		115.5	112	109	106	102.5	100	97	92	86	79	73.5
150-5-1	55		122.5	119.5	117	113.5	111.5	107.5	104.5	99	93.5	87	80
150-5	75		130	127.5	125	121	119	115	111.5	106.5	101	94.5	86.5
150-6-2	75	140	137	133	130	126	121	118	112	106	98	91	
150-6-1	75	148.5	145	141.7	137.5	135	131	127	120.5	114.5	106.5	97.5	
150-6	75	157	153	149	145	142	139.5	137	130	123.5	116	109	

Hydraulic Performance Curves



Dimension Drawing



MODEL	DIN FLANGE(LVR, LVS)		D1	D2
	B1	B1+B2		
200-1-D	907	1467	330	250
200-1-C	907	1507	380	280
200-1	907	1587	420	305
200-2-2D	1101	1781	420	305
200-2-2C	1101	1816	470	335
200-2-C	1131	1916	510	370
200-2	1131	1916	510	370
200-3-2D	1325	2170	580	410
200-3-C-D	1325	2170	580	410
200-3-2C	1325	2170	580	410
200-3-D	1325	2170	580	410
200-3-C	1325	2170	580	410
200-3	1325	2220	580	410
200-4-2D	1519	2414	580	410
200-4-2C	1519	2619	645	530
200-4-C	1519	2619	645	530
200-4	1519	2619	645	530

MODEL	POWER[kW]	Q[m³/h]	100	120	140	160	180	200	220	240
200-1-D	18.5	H(m)	25.5	25	24	23	21.5	20	18	15.5
200-1-C	22		29	28.5	27.5	26.5	25.5	24	22	20
200-1	30		38.5	38	37.5	36.5	35	34	32.5	30
200-2-2D	37		53	51	49	47	44	41	37	32
200-2-2C	45		59.5	58	56	54	52.5	49	44.5	40.5
200-2-C	55		69	68	66	64	62	59	55.5	51
200-2	55		78.5	77.5	76	74	71.5	69	66	61.5
200-3-2D	75		91.5	89	86.5	83.5	79	75	70	63
200-3-C-D	75		95	93	90	87	83.5	79	73.5	67
200-3-2C	75		99.5	97.5	94.5	91.5	89	84	78.5	72
200-3-D	75		104.5	102.5	100	97	93	89	84.5	77.5
200-3-C	75		108	106	103.5	100.5	97.5	93	88	81.5
200-3	90		117.5	116	113.5	110.5	107	103	99	92
200-4-2D	90		131.5	129	125.5	121	115.5	110	103.5	94
200-4-2C	110		138.5	136	132	128	124	118	111	102.5
200-4-C	110		148	145.5	142.5	138	134	128	122	113
200-4	110	157.5	155.5	152.5	148	143.5	138	132.5	123.5	



Application

- Water supply: Pressure boosting for main pipes and high-rise buildings
- Industrial pressure boosting: Water system, cleaning system, high pressure washing system and firefighting system
- Pressure boosting for pressure tank, sprinkling irrigation and trichling irrigation
- Air conditioner, cooling system and industrial cleaning

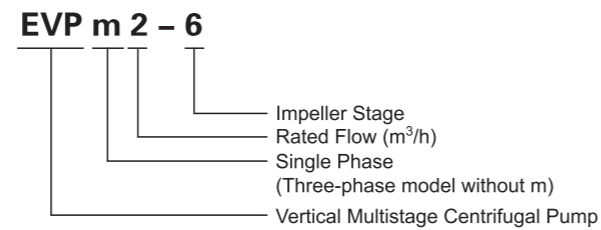
Features

- Applicable for a wide scope of different temperatures, flow rates and pressure ranges
- Water inlet and outlet can be rotated for proper assembly in accordance with installation requirement
- Easy installation and maintenance
- Advanced hydraulic model design, featuring stable operation and high efficiency
- Cast iron water inlet and outlet with special anti-rust treatment
- High-strength engineering plastic flow passage components
- Reliable stainless steel welded shaft

Working Conditions

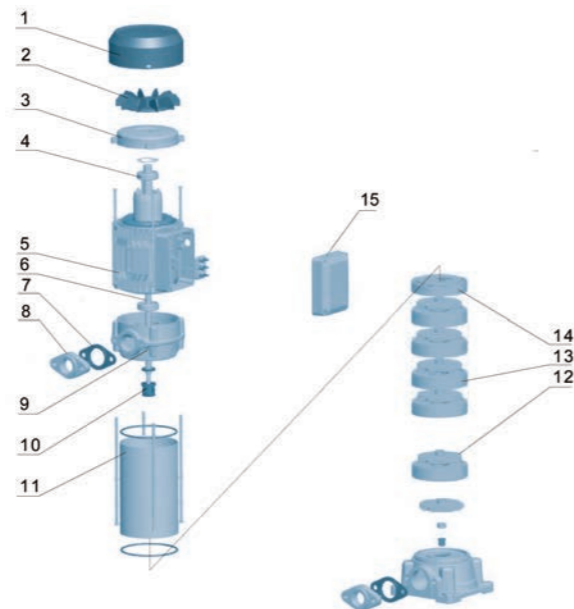
- Liquid temperature: +5°C ~ 60°C
- Maximum ambient temperature: +40°C
- Maximum pressure: 15 bar
- Altitude: up to 1000 m

Identification Codes



Materials Table

No.	Part	Material
1	Fan cover	08F
2	Fan	PP
3	Rear cover	Cast iron
4	Bearing	
5	Stator	
6	Rotor	
7	Gasket	Rubber
8	Flange	Cast iron
9	Motor bracket	Aluminum
10	Mechanical seal	
11	Pump barrel	AISI 304
12	Impeller	Plastic
13	Diffuser	Plastic
14	Last stage diffuser	Plastic
15	Capacitor box	Plastic

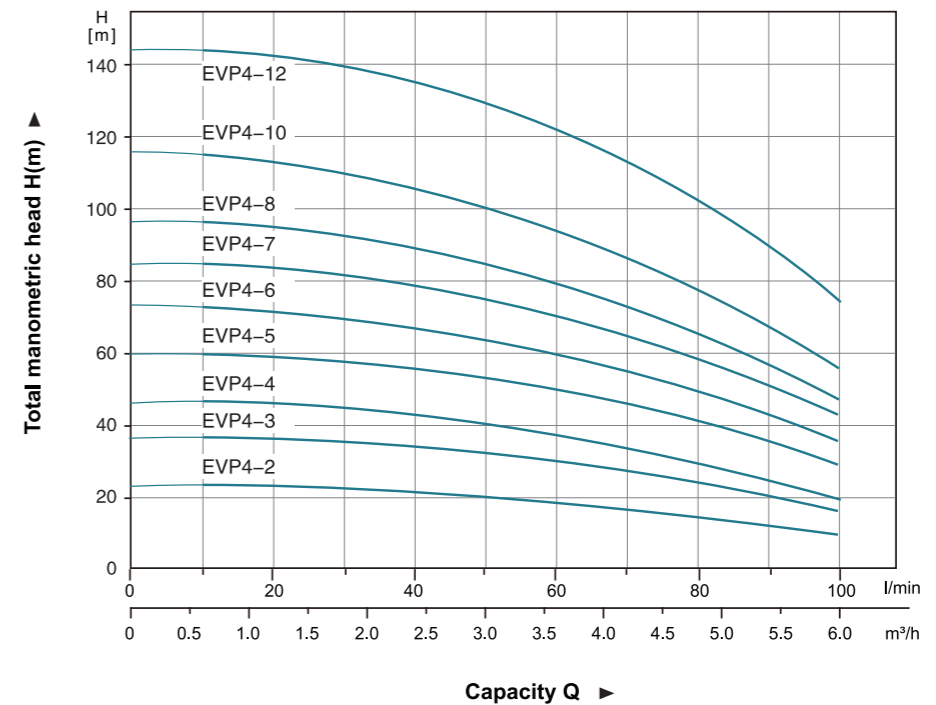
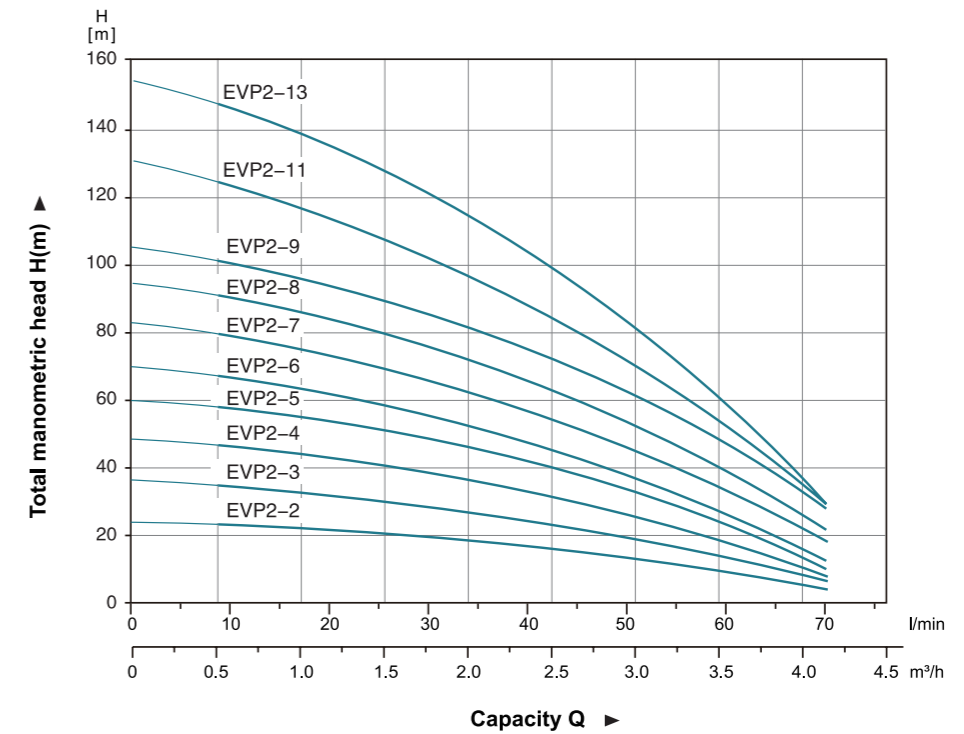


Model Selection Instructions

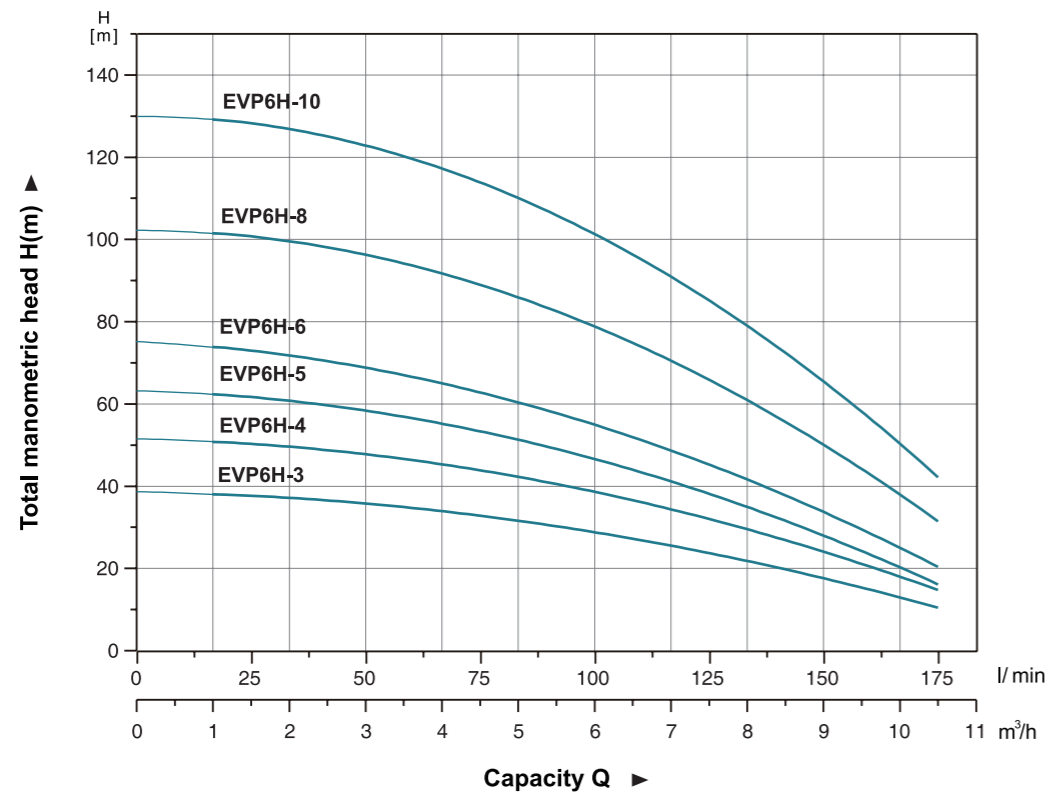
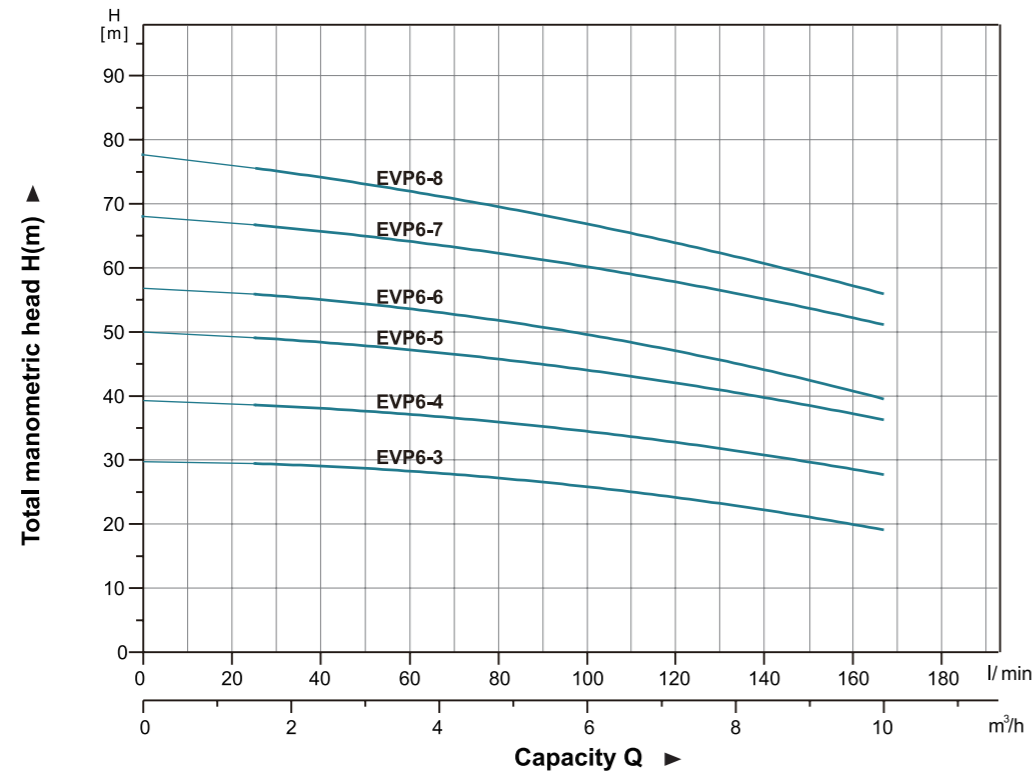
- Voltage and frequency: Single-phase 220-240V/50Hz;
Three-phase 380-415V/50Hz.

Please choose the pump with appropriate flow rate and head to meet your actual demand.

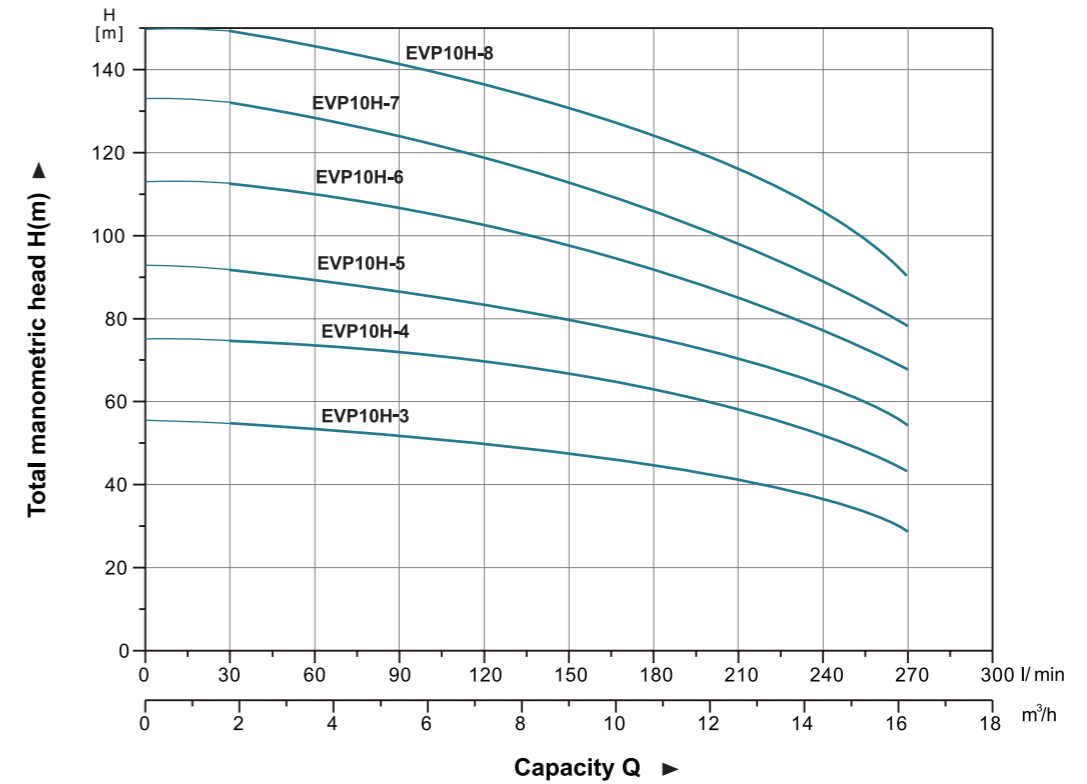
Hydraulic Performance Curves



Hydraulic Performance Curves



Hydraulic Performance Curves



Technical Data

Model		Power (P2)		Q (m³/h)	0	1	2	3	4
Single-phase	Three-phase	kW	HP	Q (l/min)	0	16.7	33.3	50	66.7
EVPm2-2	EVP2-2	0.37	0.5	H (m)	24	23	18	13	6
EVPm2-3	EVP2-3	0.55	0.75		36	33	26	20	9
EVPm2-4	EVP2-4	0.75	1.0		48	45	35	26	11
EVPm2-5	EVP2-5	1.0	1.5		59	57	44	33	15
EVPm2-6	EVP2-6	1.0	1.5		69	65	52	37	18
EVPm2-7	EVP2-7	1.1	1.5		82	75	62	45	25
EVPm2-8	EVP2-8	1.5	2.0		94	87	72	52	28
EVPm2-9	EVP2-9	1.5	2.0		105	98	82	60	35
EVPm2-11	EVP2-11	1.8	2.5		130	119	98	69	37
-	EVP2-13	2.2	3.0		153	142	115	80	39

Model		Power (P2)		Q (m³/h)	0	1	2	3	4	5	6
Single-phase	Three-phase	kW	HP	Q (l/min)	0	16.7	33.3	50	66.7	83.3	100
EVPm4-2	EVP4-2	0.55	0.75	H (m)	24	23	22	21	18	15	10
EVPm4-3	EVP4-3	0.75	1.0		37	36	34	33	29	24	16
EVPm4-4	EVP4-4	1.0	1.5		47	46	45	41	36	28	20
EVPm4-5	EVP4-5	1.5	2.0		61	58	57	55	48	39	29
EVPm4-6	EVP4-6	1.5	2.0		74	72	69	66	57	47	36
-	EVP4-7	2.2	3.0		86	83	81	77	68	57	43
-	EVP4-8	2.2	3.0		98	95	92	86	76	63	47
-	EVP4-10	2.2	3.0		116	114	110	102	90	73	57
-	EVP4-12	3.0	4.0		145	142	140	131	115	97	75

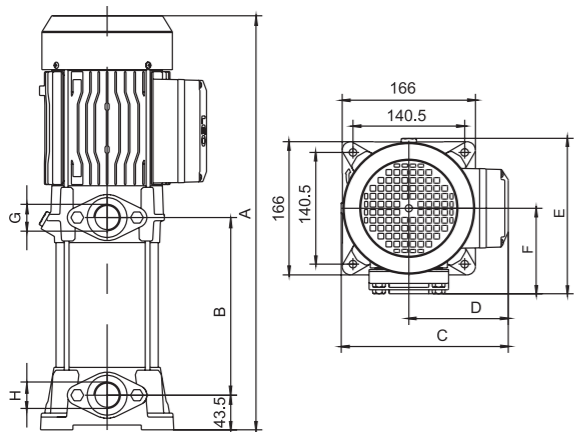
Technical Data

Model		Power (P2)		Q (m³/h)	Q (l/min)										
Single-phase	Three-phase	kW	HP		0	1	2	3	4	5	6	7	8	9	10
EVPm6-3	EVP6-3	1.1	1.5	H (m)	30	29.5	29	28.5	28	27	26	24.5	23	21	19
EVPm6-4	EVP6-4	1.5	2.0		40	38.5	37.5	37.3	37	36	34	33.5	32	30	27
—	EVP6-5	2.2	3.0		50	49	48.5	48.3	48	45	43	42	41	39	36
—	EVP6-6	2.2	3.0		58	56	54	53.5	53	52	51	48	45	41	40
—	EVP6-7	3.0	4.0		68	67	66.5	65	63.5	62	60	58	56	54	51
—	EVP6-8	3.0	4.0		78	75	73	72	71	70	68	65	62	59	55

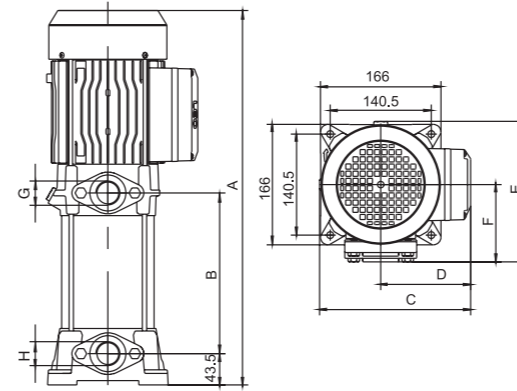
Model		Power (P2)		Q (m³/h)	Q (l/min)										
Single-phase	Three-phase	kW	HP		0	1	2	3	4.5	6	7.5	9	10.5		
EVPm6H-3	EVP6H-3	1.1	1.5	H (m)	39	38	37	35	33	29	24	18	10		
EVPm6H-4	EVP6H-4	1.5	2		52	51	49	47	44	39	32	25	14		
EVPm6H-5	EVP6H-5	1.8	2.5		64	62	60	58	54	47	38	28	16		
—	EVP6H-6	2.2	3		76	74	71	68	63	56	45	34	20		
—	EVP6H-8	3.0	4		103	100	97	95	90	80	66	50	31		
—	EVP6H-10	4.0	5.5		130	127	124	121	114	103	86	66	41		

Model		Power (P2)		Q (m³/h)	Q (l/min)										
Three-phase	kW	HP	Q (l/min)		0	2	4	6	8	10	12	14	16		
EVP10H-3	3.0	4.0	H (m)	56	55	54	52	49	46	42	39	29			
EVP10H-4	4.0	5.5		75	74	72	70	67	64	60	53	43			
EVP10H-5	5.5	7.5		93	91	87	84	81	77	72	64	55			
EVP10H-6	5.5	7.5		113	110	107	104	100	96	87	78	68			
EVP10H-7	7.5	10		132	128	124	120	116	112	103	93	80			
EVP10H-8	7.5	10		150	147	143	139	134	127	120	108	92			

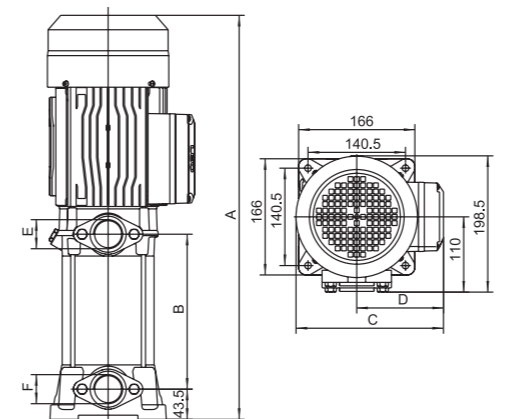
Dimension



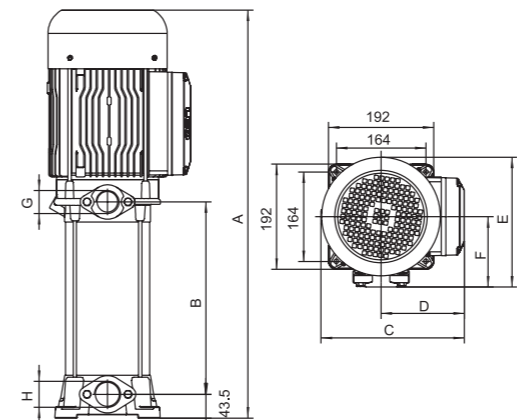
Model		Power (P2)		A	B	C	D	E	F	G	H
Single-phase	Three-phase	kW									
EVPm2-2	EVP2-2	0.37		382	120	193	110	202	114.5	G1	G1
EVPm2-3	EVP2-3	0.55		406	144	193	110	202	114.5	G1	G1
EVPm2-4	EVP2-4	0.75		430	168	193	110	202	114.5	G1	G1
EVPm2-5	EVP2-5	1.0		454	192	193	110	202	114.5	G1	G1
EVPm2-6	EVP2-6	1.0		478	216	193	110	202	114.5	G1	G1
EVPm2-7	EVP2-7	1.1		545	247.5	210	125	202	114.5	G1	G1
EVPm2-8	EVP2-8	1.5		569	271.5	210	125	202	114.5	G1	G1
EVPm2-9	EVP2-9	1.5		593	295.5	210	125	202	114.5	G1	G1
EVPm2-11	EVP2-11	1.8		641	343.5	210	125	202	114.5	G1	G1
—	EVP2-13	2.2		689	391.5	210	125	202	114.5	G1	G1



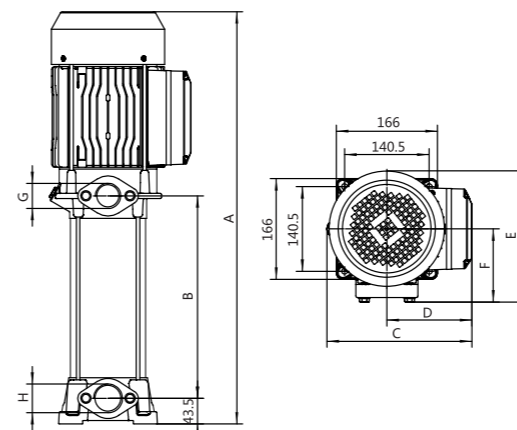
Model		Power (P2)		A	B	C	D	E	F	G	H
Single-phase	Three-phase	kW									
EVPm4-2	EVP4-2	0.55		382	120	193	110	202	114.5	G1	G1
EVPm4-3	EVP4-3	0.75		406	144	193	110	202	114.5	G1	G1
EVPm4-4	EVP4-4	1.0		430	168	193	110	202	114.5	G1	G1
EVPm4-5	EVP4-5	1.5		497	199.5	210	125	202	114.5	G1	G1
EVPm4-6	EVP4-6	1.5		521	223.5	210	125	202	114.5	G1	G1
—	EVP4-7	2.2		545	247.5	210	125	202	114.5	G1	G1
—	EVP4-8	2.2		569	271.5	210	125	202	114.5	G1	G1
—	EVP4-10	2.2		617	319.5	210	125	202	114.5	G1	G1
—	EVP4-12	3.0		731	374	240	141	218	121.5	G1	G1



Model		Power (P2)		A	B	C	D	E	F
Single-phase	Three-phase	kW							
EVPm6-3	EVP6-3	1.1		487	190	210	125	G1½	G1½
EVPm6-4	EVP6-4	1.5		524	227	210	125	G1½	G1½
—	EVP6-5	2.2		561	264	210	125	G1½	G1½
—	EVP6-6	2.2		598	301	210	125	G1½	G1½
—	EVP6-7	3.0		685	338	221	134	G1½	G1½
—	EVP6-8	3.0		722	375	221	134	G1½	G1½



Model		Power (P2)		A	B	C	D	E	F	G	H
Three-phase	kW										
EVP10H-3	3.0			554.5	187	240	141	227	127	G1½	G1½
EVP10H-4	4.0			577.5	220	240	141	227	127	G1½	G1½
EVP10H-5	5.5			647	253	262	152	244	135	G1½	G1½
EVP10H-6	5.5			680	286	262	152	244	135	G1½	G1½
EVP10H-7	7.5			713	319	262	152	244	135	G1½	G1½
EVP10H-8	7.5			746	352	262	152	244	135	G1½	G1½



Model		Power (P2)		A	B	C	D	E	F	G	H
Single-phase	Three-phase	kW									
EVPm6H-3	EVP6H-3	1.1		457	158.5	210	125	202	114.5	G1½	G1½
EVPm6H-4	EVP6H-4	1.5		483.5	185	210	125	202	114.5	G1½	G1½
EVPm6H-5	EVP6H-5	1.8		510	211.5	210	125	202	114.5	G1½	G1½
—	EVP6H-6	2.2		536.5	238	210	125	202	114.5	G1½	G1½
—	EVP6H-8	3.0		655	297.5	240	141	218	121.5	G1½	G1½
—	EVP6H-10	4.0		708	350.5	240	141	218	121.5	G1½	G1½

ECH

Stainless Steel Horizontal Multistage Pump



Application

- It is applicable to household water supply, equipment support, pipeline pressurization, garden watering, vegetable greenhouse watering, fish farming and poultry raising, industrial and mining, water supply and drainage of enterprises and high-rise buildings, central air conditioner and centralized heating circulation system, etc.

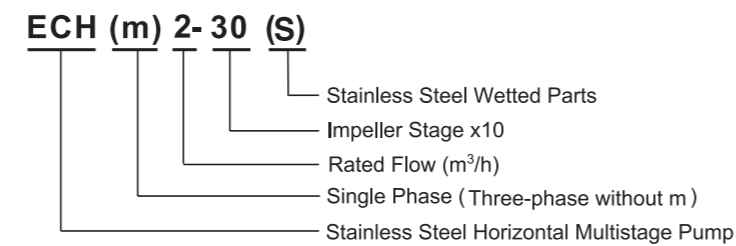
Pump

- AISI 304 shaft
- Max. liquid temperature: +85°C
- Altitude: up to 1000 m
- Max. suction: 8 m
- Max. inlet pressure: limited by max. operating pressure

Motor

- Motor with copper winding
- Built-in thermal protector for single phase motor
- Insulation class: F
- Protection class: IP55
- Max. ambient temperature: +40°C

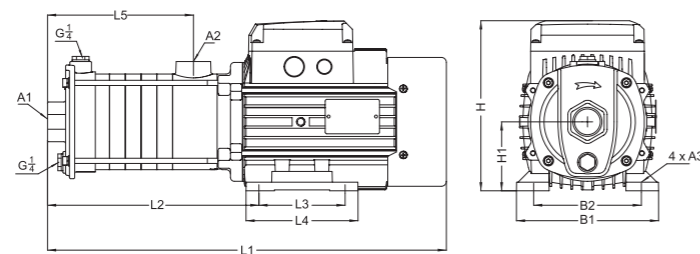
Identification Codes



Technical Data

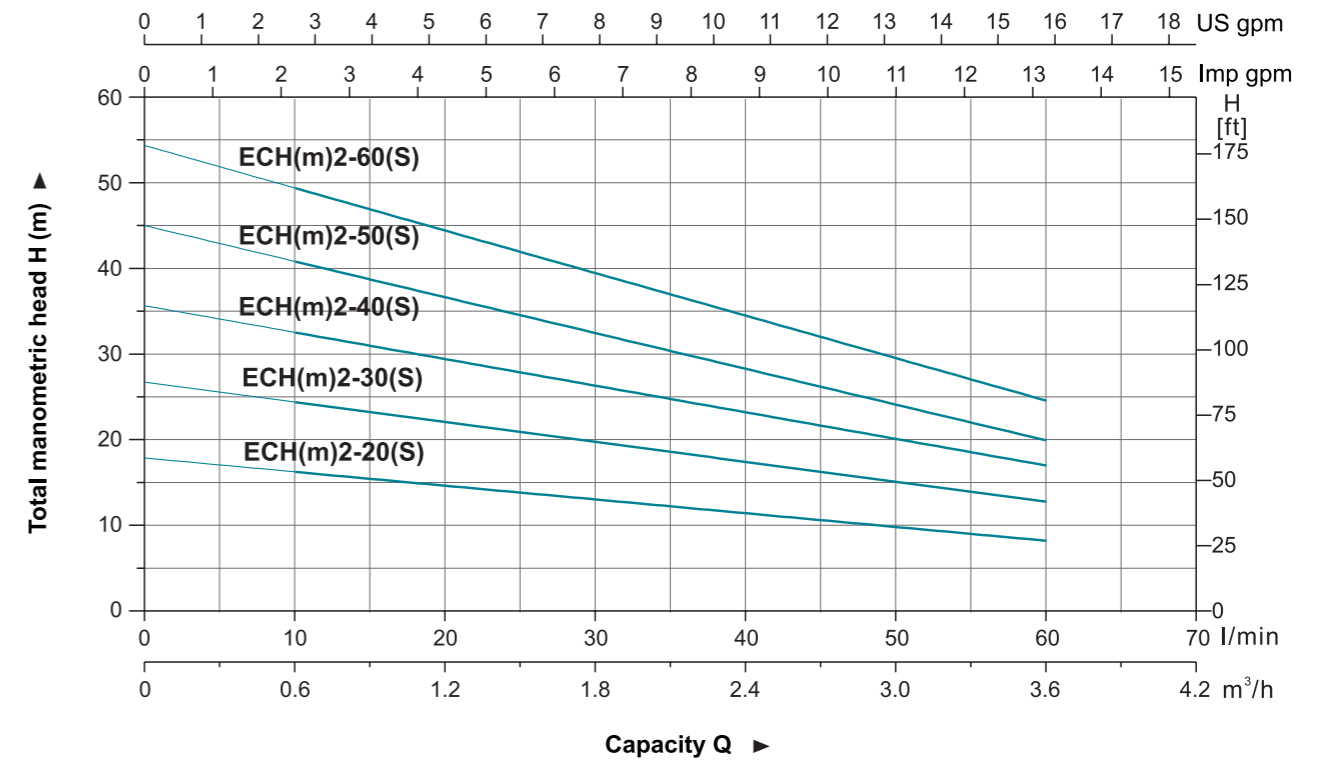
Model	Power		Q (m ³ /h) Q (l/min)	0.6	1.2	1.8	2.4	3.0	3.6
	kW	HP		H (m)					
ECH(m)2-20(S)	0.37	0.5	10	16	15	13	12	10	8
ECH(m)2-30(S)	0.37	0.5	20	24	22	20	18	16	12
ECH(m)2-40(S)	0.55	0.75	30	33	30	26	24	21	16
ECH(m)2-50(S)	0.55	0.75	40	40	37	33	30	24	19
ECH(m)2-60(S)	0.75	1.0	50	50	45	40	36	30	23

Dimension



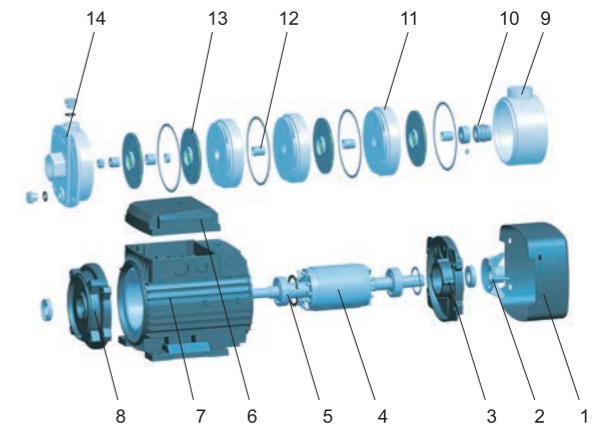
Model	L1	L2	L3	L4	L5	B1	B2	H	H1	A1	A2	A3
ECH(m)2-20(S)	344.5	165.5	90	110	98.5	137	109	176.5	71	G1	G1	Φ7
ECH(m)2-30(S)	362.5	183.5	90	110	116.5	137	109	176.5	71	G1	G1	Φ7
ECH(m)2-40(S)	380.5	201.5	90	100	134.5	137	109	176.5	71	G1	G1	Φ7
ECH(m)2-50(S)	399.5	220.5	90	110	153.5	137	109	176.5	71	G1	G1	Φ7
ECH(m)2-60(S)	417.5	238.5	90	110	171.5	137	109	176.5	71	G1	G1	Φ7

Hydraulic Performance Curves



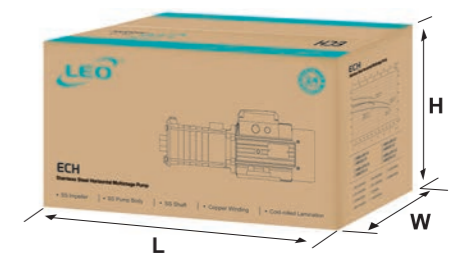
Materials Table

No.	Part	Material
1	Fan cover	08F
2	Fan	PP
3	Rear cover	ZL 102
4	Rotor	
5	Bearing	
6	Terminal box	ZL 102
7	Stator	
8	Front cover	Cast iron
9	Outlet body	Cast iron/AISI 304
10	Mechanical seal	Carbon/Ceramic
11	Diffuser	AISI 304
12	Sleeve	AISI 304
13	Impeller	AISI 304
14	Pump body	Cast iron/AISI 304



Package Information

Model	GW (Kgs)	L (mm)	W (mm)	H (mm)	Quantity (PCS/20 TEU)
ECH(m)2-20(S)	11.5	420	215	243	1215
ECH(m)2-30(S)	11.8	420	215	243	1215
ECH(m)2-40(S)	13.2	420	215	243	1215
ECH(m)2-50(S)	13.7	455	215	243	1170
ECH(m)2-60(S)	14.6	455	215	243	1170



ECH

Stainless Steel Horizontal Multistage Pump



ECH

ECHS

Application

- It is applicable to household water supply, equipment support, pipeline pressurization, garden watering, vegetable greenhouse watering, fish farming and poultry raising, industrial and mining, water supply and drainage of enterprises and high-rise buildings, central air conditioner and centralized heating circulation system, etc.

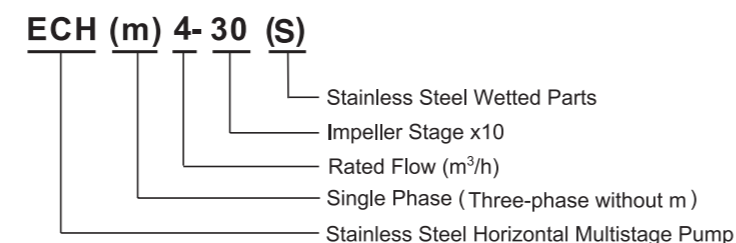
Pump

- AISI 304 shaft
- Max. liquid temperature: +85°C
- Altitude: up to 1000 m
- Max. suction: 8 m
- Max. inlet pressure: limited by max. operating pressure

Motor

- Motor with copper winding
- Built-in thermal protector for single phase motor
- Insulation class: F
- Protection class: IP55
- Max. ambient temperature: +40°C

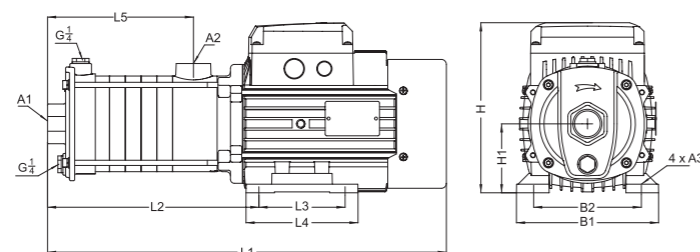
Identification Codes



Technical Data

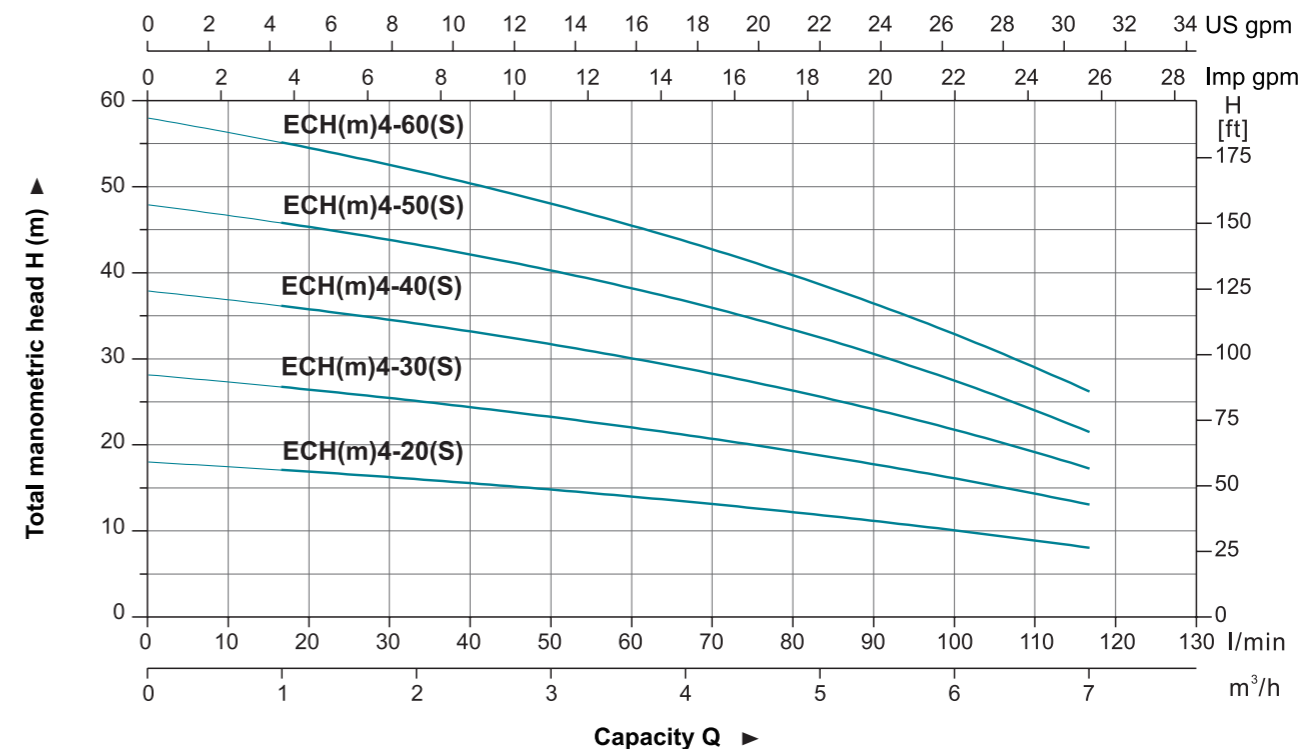
Model	Power		Q (m ³ /h) Q (l/min)	1	2	3	4	5	6	7
	kW	HP		H (m)	17	33	50	67	83	100
ECH(m)4-20(S)	0.55	0.75	H (m)	17	16	15	13	12	10	8
ECH(m)4-30(S)	0.55	0.75		27	25	23	21	19	16	13
ECH(m)4-40(S)	0.75	1.0		36	34	32	28	26	22	17
ECH(m)4-50(S)	1.1	1.5		46	43	40	36	33	28	21
ECH(m)4-60(S)	1.1	1.5		55	52	48	43	39	33	26

Dimension



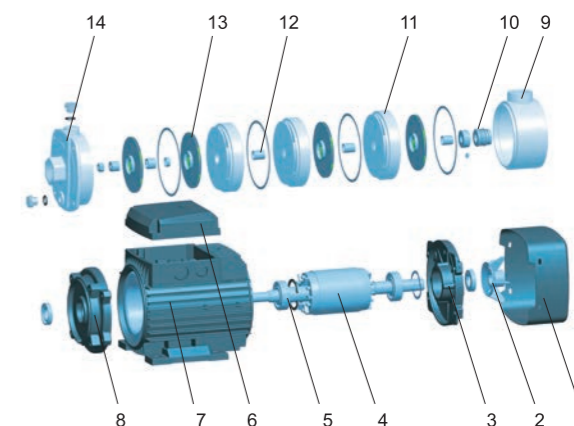
Model	L1	L2	L3	L4	L5	B1	B2	H	H1	A1	A2	A3
ECH(m)4-20(S)	354	175.5	90	110	108.5	137	109	176.5	71	G1 ¹ / ₄	G1	Φ7
ECH(m)4-30(S)	381.5	203	90	110	136	137	109	176.5	71	G1 ¹ / ₄	G1	Φ7
ECH(m)4-40(S)	408.5	230	90	110	163	137	109	176.5	71	G1 ¹ / ₄	G1	Φ7
ECH(m)4-50(S)	484	266	100	130	190	165	125	204.5	80	G1 ¹ / ₄	G1	Φ10
ECH(m)4-60(S)	511.5	293.5	100	130	217.5	165	125	204.5	80	G1 ¹ / ₄	G1	Φ10

Hydraulic Performance Curves



Materials Table

No.	Part	Material
1	Fan cover	08F
2	Fan	PP
3	Rear cover	ZL 102
4	Rotor	
5	Bearing	
6	Terminal box	ZL 102
7	Stator	
8	Front cover	Cast iron
9	Outlet body	Cast iron/AISI 304
10	Mechanical seal	Carbon/Ceramic
11	Diffuser	AISI 304
12	Sleeve	AISI 304
13	Impeller	AISI 304
14	Pump body	Cast iron/AISI 304



Package Information

Model	GW (Kgs)	L (mm)	W (mm)	H (mm)	Quantity (PCS/20 TEU)
ECH(m)4-20(S)	13.1	420	215	243	1215
ECH(m)4-30(S)	13.6	420	215	243	1215
ECH(m)4-40(S)	14.7	455	215	243	1170
ECH(m)4-50(S)	21.5	548	235	268	800
ECH(m)4-60(S)	22	548	235	268	800



ECH

Stainless Steel Horizontal Multistage Pump



Application

- It is applicable to household water supply, equipment support, pipeline pressurization, garden watering, vegetable greenhouse watering, fish farming and poultry raising, industrial and mining, water supply and drainage of enterprises and high-rise buildings, central air conditioner and centralized heating circulation system, etc.

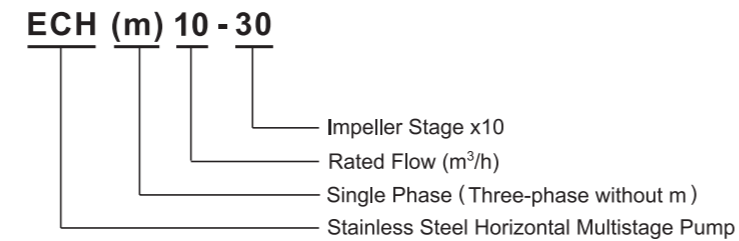
Pump

- AISI 304 shaft
- Max. liquid temperature: +85°C
- Altitude: up to 1000 m
- Max. suction: 8 m
- Max. inlet pressure: limited by max. operating pressure

Motor

- Motor with copper winding
- Built-in thermal protector for single phase motor
- Insulation class: F
- Protection class: IP55
- Max. ambient temperature: +40°C

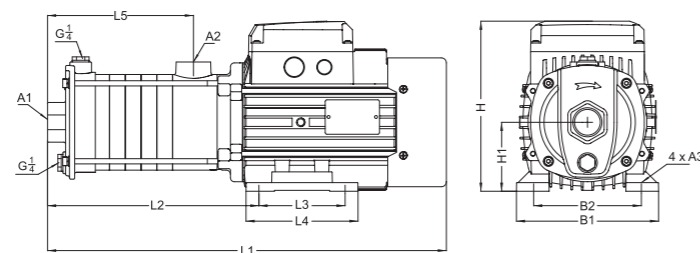
Identification Codes



Technical Data

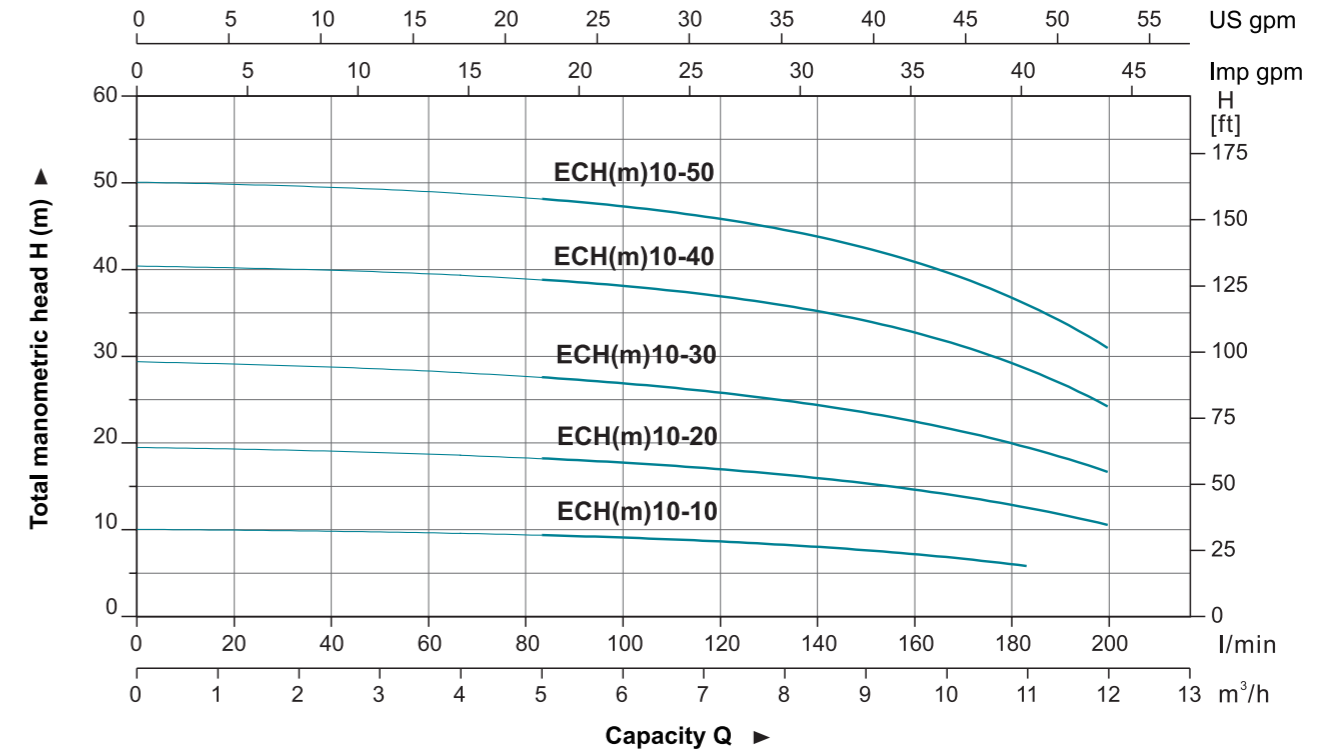
Model	Power		Q (m ³ /h) Q (l/min)	6	7	8	9	10	11	12
	kW	HP		H (m)	100	117	133	150	167	183
ECH(m)10-10	0.75	1.0	H (m)	9.1	8.7	8.2	7.7	6.8	5.8	—
ECH(m)10-20				17.9	17.1	16.3	15.3	14.0	12.5	10.6
ECH(m)10-30	1.1	1.5		27.1	26.3	24.9	23.4	21.4	19.3	16.9
ECH(m)10-40	1.5	2.0		38.6	37.6	35.9	33.9	31.2	28.2	24.6
ECH(m)10-50	2.2	3.0		47.8	46.4	44.4	42.2	39.5	35.9	31.1

Dimension



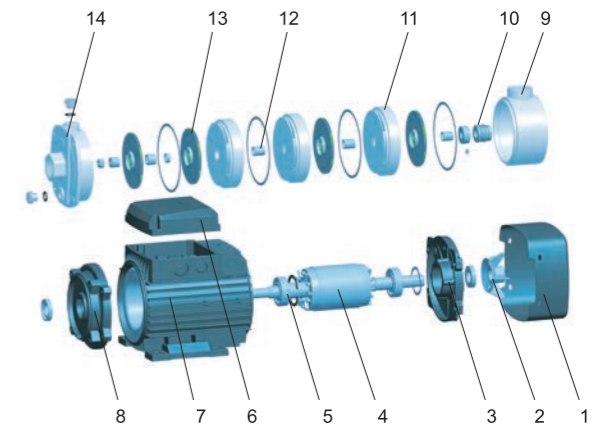
Model	L1	L2	L3	L4	L5	B1	B2	H	H1	A1	A2	A3
ECH(m)10-10	430	212	100	130	121	165	125	204.5	80	G1 ¹ / ₂	G1 ¹ / ₄	Φ10
ECH(m)10-20	430	212	100	130	121	165	125	204.5	80	G1 ¹ / ₂	G1 ¹ / ₄	Φ10
ECH(m)10-30	460.5	242.5	100	130	151.5	165	125	504.5	80	G1 ¹ / ₂	G1 ¹ / ₄	Φ10
ECH(m)10-40	549.5	261.5	125	150	182	180	140	217.5	90	G1 ¹ / ₂	G1 ¹ / ₄	Φ10
ECH(m)10-50	579.5	291.5	125	150	212	180	140	217.5	90	G1 ¹ / ₂	G1 ¹ / ₄	Φ10

Hydraulic Performance Curves



Materials Table

No.	Part	Material
1	Fan cover	08F
2	Fan	PP
3	Rear cover	ZL 102
4	Rotor	
5	Bearing	
6	Terminal box	ZL 102
7	Stator	
8	Front cover	Cast iron
9	Outlet body	Cast iron
10	Mechanical seal	Carbon/Ceramic
11	Diffuser	AISI 304
12	Sleeve	AISI 304
13	Impeller	AISI 304
14	Pump body	Cast iron



Package Information

Model	GW (Kgs)	L (mm)	W (mm)	H (mm)	Quantity (PCS/20 TEU)
ECH(m)10-10	20.7	503	235	268	856
ECH(m)10-20	20.8	503	235	268	856
ECH(m)10-30	21.9	503	235	268	856
ECH(m)10-40	28.2	618	245	283	653
ECH(m)10-50	30.6	618	245	283	653



ECH

Stainless Steel Horizontal Multistage Pump



Application

- It is applicable to household water supply, equipment support, pipeline pressurization, garden watering, vegetable greenhouse watering, fish farming and poultry raising, industrial and mining, water supply and drainage of enterprises and high-rise buildings, central air conditioner and centralized heating circulation system, etc.

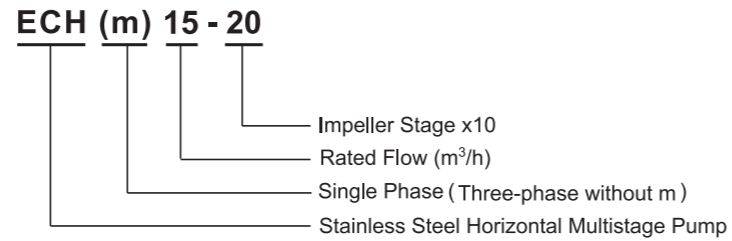
Pump

- AISI 304 shaft
- Max. liquid temperature: +85°C
- Altitude: up to 1000 m
- Max. suction: 8 m
- Max. inlet pressure: limited by max. operating pressure

Motor

- Motor with copper winding
- Built-in thermal protector for single phase motor
- Insulation class: F
- Protection class: IP55
- Max. ambient temperature: +40°C

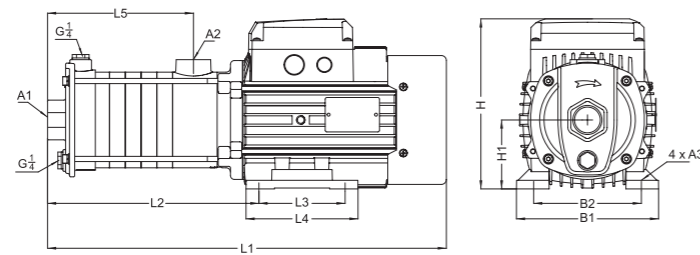
Identification Codes



Technical Data

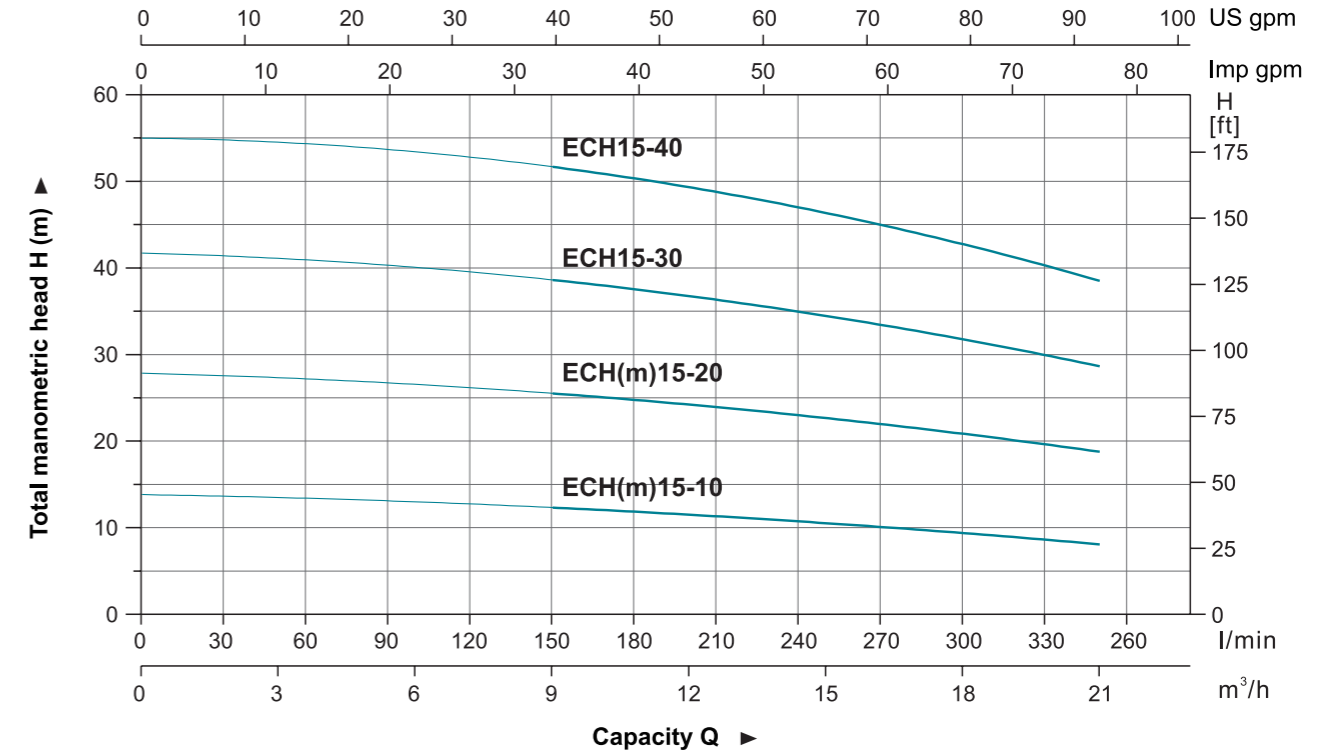
Model	Power		Q (m³/h)	9	12	15	18	21
	kW	HP						
ECH(m)15-10	1.1	1.5	H (m)	12.4	11.6	10.6	9.4	8.2
ECH(m)15-20	2.2	3		25.6	24.1	22.7	21.1	18.8
ECH15-30	3.0	4		38.7	36.9	34.9	31.9	28.5
ECH15-40	4.0	5.5		51.8	49.7	46.8	42.9	38.3

Dimension



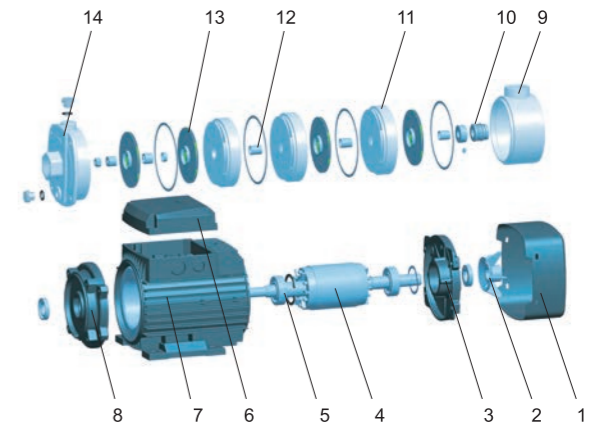
Model	L1	L2	L3	L4	L5	B1	B2	H	H1	A1	A2	A3
ECH(m)15-10	451	233.5	100	130	139.5	165	125	204.5	80	G2	G2	Φ10
ECH(m)15-20	510	222	125	150	139.5	180	140	217.5	90	G2	G2	Φ10
ECH15-30	560	272	125	150	189.5	180	140	247.5	90	G2	G2	Φ10
ECH15-40	616	336.5	140	180	230	205	160	224.5	100	G2	G2	Φ12

Hydraulic Performance Curves



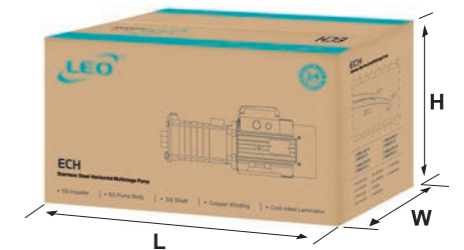
Materials Table

No.	Part	Material
1	Fan cover	08F
2	Fan	PP
3	Rear cover	ZL 102
4	Rotor	
5	Bearing	
6	Terminal box	ZL 102
7	Stator	
8	Front cover	Cast iron
9	Outlet body	Cast iron
10	Mechanical seal	Carbon/Ceramic
11	Diffuser	AISI 304
12	Sleeve	AISI 304
13	Impeller	AISI 304
14	Pump body	Cast iron



Package Information

Model	GW (Kgs)	L (mm)	W (mm)	H (mm)	Quantity (PCS/20 TEU)
ECH(m)15-10	22.7	503	235	268	856
ECH(m)15-20	30.3	557	245	283	659
ECH15-30	32.2	618	245	283	620
ECH15-40	39.6	687	245	290	504



ECH

Stainless Steel Horizontal Multistage Pump



Application

- It is applicable to household water supply, equipment support, pipeline pressurization, garden watering, vegetable greenhouse watering, fish farming and poultry raising, industrial and mining, water supply and drainage of enterprises and high-rise buildings, central air conditioner and centralized heating circulation system, etc.

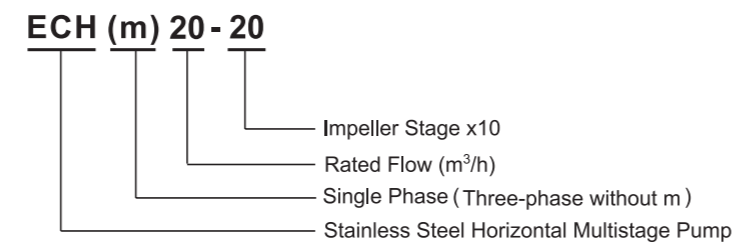
Pump

- AISI 304 shaft
- Max. liquid temperature: +85°C
- Altitude: up to 1000 m
- Max. suction: 8 m
- Max. inlet pressure: limited by max. operating pressure

Motor

- Motor with copper winding
- Built-in thermal protector for single phase motor
- Insulation class: F
- Protection class: IP55
- Max. ambient temperature: +40°C

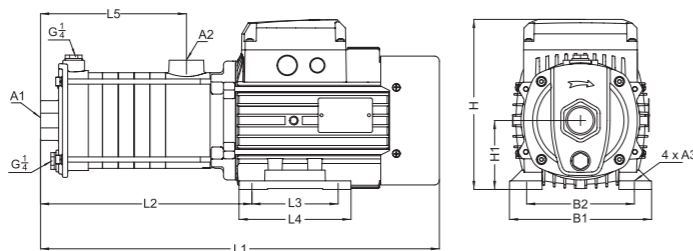
Identification Codes



Technical Data

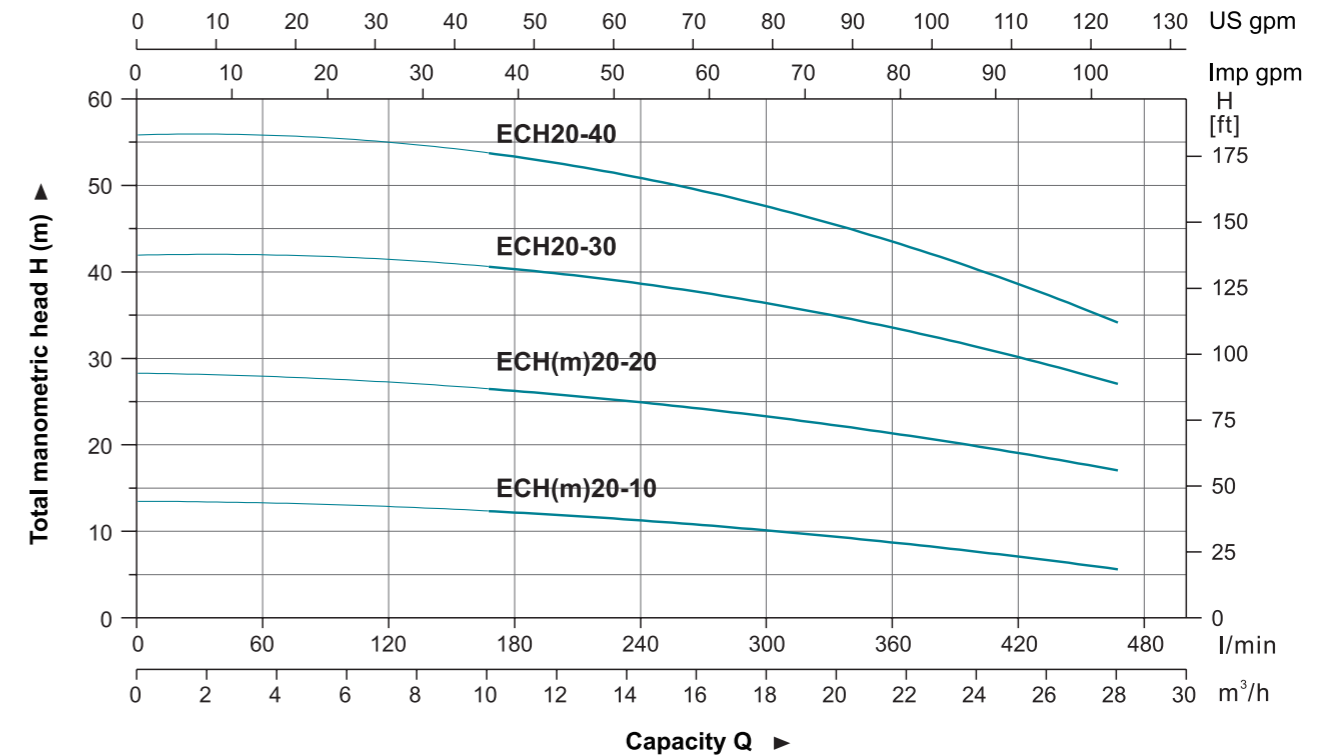
Model	Power		Q (m³/h)	12	16	20	24	28
	kW	HP						
ECH(m)20-10	1.1	1.5	H (m)	12.1	10.8	9.5	7.8	5.7
ECH(m)20-20	2.2	3		26.1	24.4	22.4	19.8	17.2
ECH20-30	4.0	5.5		39.9	38.0	35.5	31.4	26.9
ECH20-40				52.7	50.1	45.9	40.3	34.0

Dimension



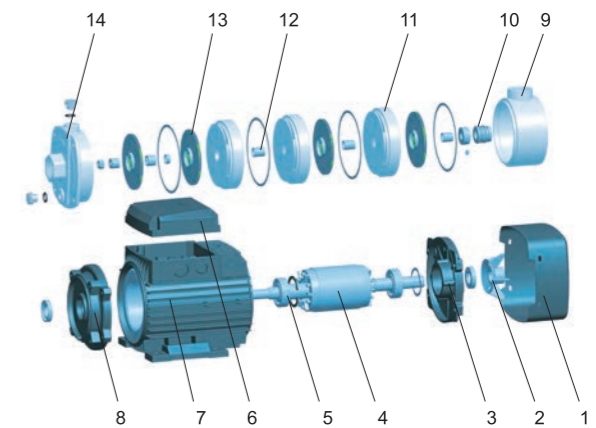
Model	L1	L2	L3	L4	L5	B1	B2	H	H1	A1	A2	A3
ECH(m)20-10	451	233.5	100	130	139.5	165	125	204.5	80	G2	G2	Φ10
ECH(m)20-20	510	222	125	150	139.5	180	140	217.5	90	G2	G2	Φ10
ECH20-30	570.5	291	140	180	184.5	205	160	224.5	100	G2	G2	Φ12
ECH20-40	616	336.5	140	180	230	205	160	224.5	100	G2	G2	Φ12

Hydraulic Performance Curves



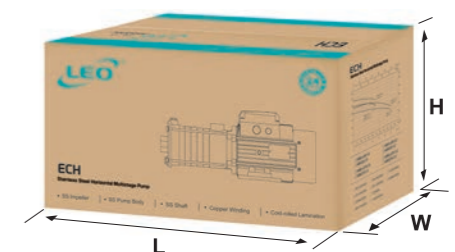
Materials Table

No.	Part	Material
1	Fan cover	08F
2	Fan	PP
3	Rear cover	ZL 102
4	Rotor	
5	Bearing	
6	Terminal box	ZL 102
7	Stator	
8	Front cover	Cast iron
9	Outlet body	Cast iron
10	Mechanical seal	Carbon/Ceramic
11	Diffuser	AISI 304
12	Sleeve	AISI 304
13	Impeller	AISI 304
14	Pump body	Cast iron



Package Information

Model	GW (Kgs)	L (mm)	W (mm)	H (mm)	Quantity (PCS/20 TEU)
ECH(m)20-10	22.7	503	235	268	856
ECH(m)20-20	30.3	557	245	283	659
ECH20-30	38.9	687	245	290	513
ECH20-40	39.4	687	245	290	504



EDH

Stainless Steel Horizontal Multistage Pump



Application

- It is applicable to household water supply, equipment support, pipeline pressurization, garden watering, vegetable greenhouse watering, fish farming and poultry raising, industrial and mining, water supply and drainage of enterprises and high-rise buildings, central air conditioner and centralized heating circulation system, etc.

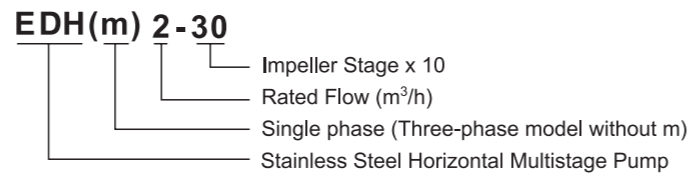
Pump

- AISI 304 shaft
- Max. liquid temperature: +85°C
- Altitude: up to 1000 m
- Max. suction: 8 m
- Max. inlet pressure: limited by max. operating pressure

Motor

- Motor with copper winding
- Built-in thermal protector for single phase motor
- Insulation class: F
- Protection class: IP55
- Max. ambient temperature: +40°C

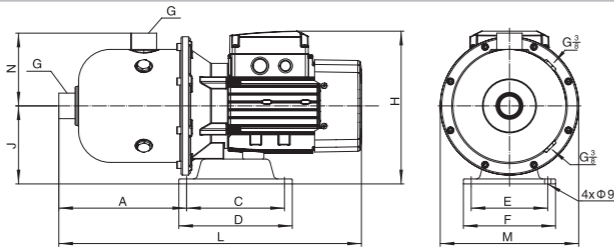
Identification Codes



Technical Data

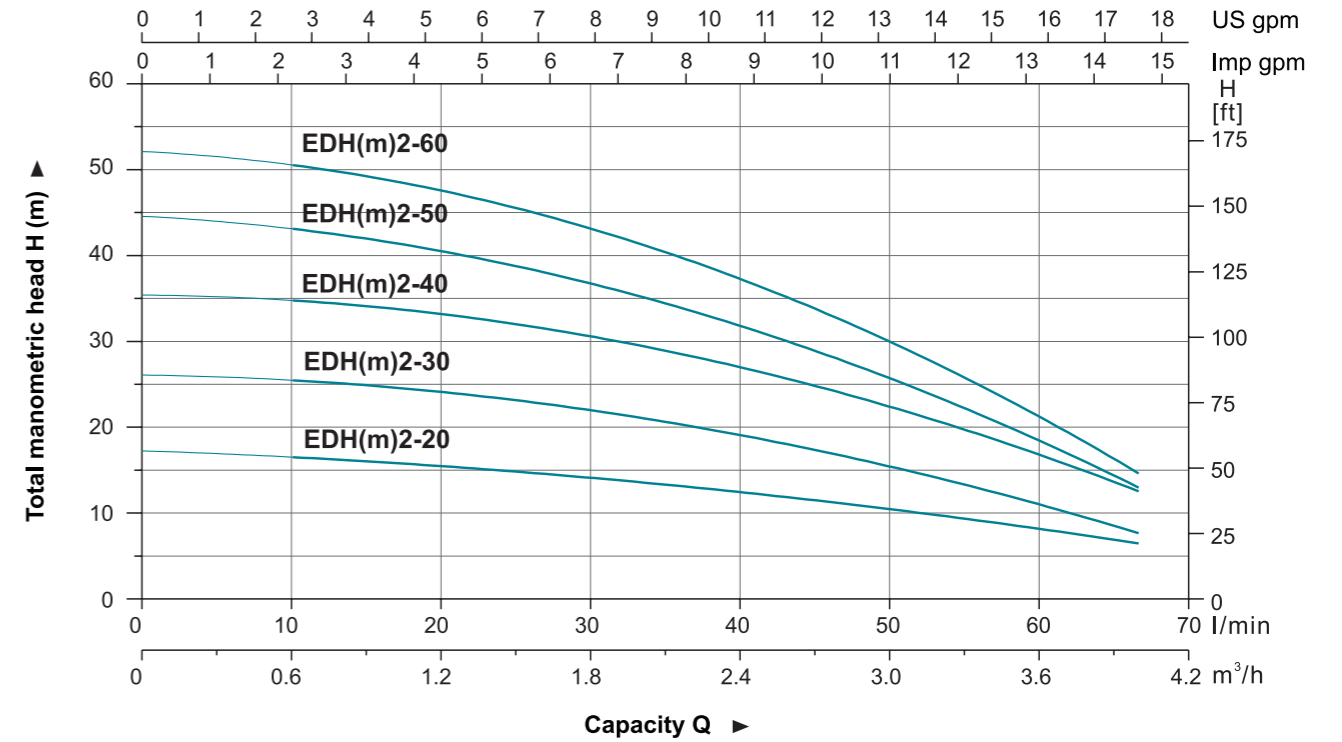
Model	Power (P2)		Q (m³/h)	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0
	kW	HP									
				8.3	16.7	25	33.3	41.7	50	58.3	66.7
EDH(m)2-20	0.37	0.5	H (m)	16.7	16.2	15	14	11	10.6	8.8	6.5
EDH(m)2-30	0.37	0.5		25.8	24.3	23.8	21.3	17	16.1	12.5	7.2
EDH(m)2-40	0.55	0.75		34.8	34.1	33.2	30.7	23	22.9	18.4	12.6
EDH(m)2-50	0.55	0.75		43.5	42.1	39.5	35.9	29	25.7	19.6	13.5
EDH(m)2-60	0.75	1.0		50.8	49.2	45.6	41.5	35	30.4	23.4	14.3

Dimension



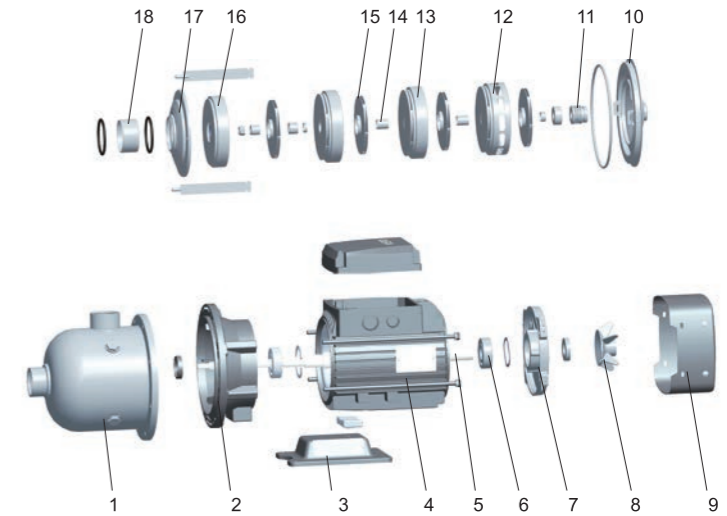
Model	L	A	C	D	E	F	G	H	J	M	N
EDH(m)2-20	427	180	138	160	108	130	G1	216	110	Φ195	103
EDH(m)2-30	427	180	138	160	108	130	G1	216	110	Φ195	103
EDH(m)2-40	427	180	138	160	108	130	G1	216	110	Φ195	103
EDH(m)2-50	427	180	138	160	108	130	G1	216	110	Φ195	103
EDH(m)2-60	427	180	138	160	108	130	G1	216	110	Φ195	103

Hydraulic Performance Curves



Materials Table

No.	Part	Material
1	Pump body	AISI 304
2	Support	ZL102
3	Bottom plate	Cast iron
4	Stator	
5	Rotor	
6	Bearing	
7	Rear cover	ZL102
8	Fan	PP
9	Fan cover	08F
10	Bracket cover	AISI 304
11	Mechanical seal	Carbon/Ceramic
12	Diffuser 3	AISI 304
13	Diffuser 2	AISI 304
14	Sleeve	AISI 304
15	Impeller	AISI 304
16	Diffuser 1	AISI 304
17	Pressure plate	AISI 304
18	Spacer bush	AISI 304



Package Information

Model	GW (Kgs)	L (mm)	W (mm)	H (mm)	Quantity (PCS/20 TEU)
EDH(m)2-20	10.7	465	225	270	1044
EDH(m)2-30	11.1	465	225	270	1044
EDH(m)2-40	12.4	465	225	270	1044
EDH(m)2-50	12.8	465	225	270	1044
EDH(m)2-60	13.8	465	225	270	1044



EDH

Stainless Steel Horizontal Multistage Pump



Application

- It is applicable to household water supply, equipment support, pipeline pressurization, garden watering, vegetable greenhouse watering, fish farming and poultry raising, industrial and mining, water supply and drainage of enterprises and high-rise buildings, central air conditioner and centralized heating circulation system, etc.

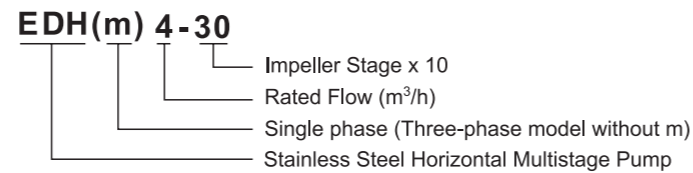
Pump

- AISI 304 shaft
- Max. liquid temperature: +85°C
- Altitude: up to 1000 m
- Max. suction: 8 m
- Max. inlet pressure: limited by max. operating pressure

Motor

- Motor with copper winding
- Built-in thermal protector for single phase motor
- Insulation class: F
- Protection class: IP55
- Max. ambient temperature: +40°C

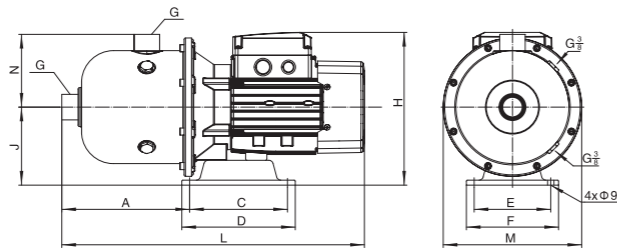
Identification Codes



Technical Data

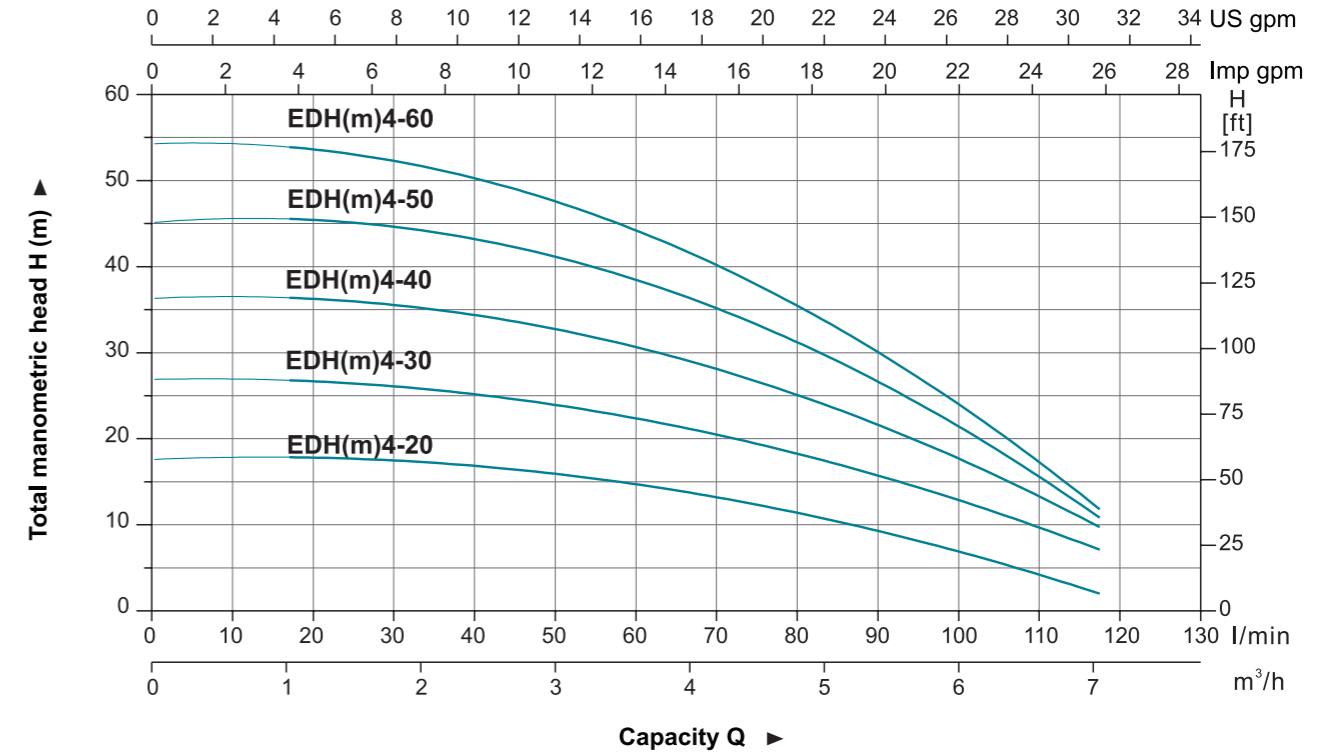
Model	Power (P2)		Q (m³/h)	1.0	2.0	3.0	4.0	4.5	5.0	6.0	7.0
	kW	HP		Q (l/min)	17	33	50	67	75	83	100
EDH(m)4-20	0.55	0.75	H (m)	17.8	17.2	16.1	14.3	12	11.3	6.3	2.3
EDH(m)4-30	0.55	0.75		26.7	26.4	24.6	22.1	18	16.8	13.5	7.3
EDH(m)4-40	0.7	1.0		36.1	35.2	32.9	29.9	25	24.7	18.6	9.2
EDH(m)4-50	1.1	1.5		45.7	43.6	40.5	37	32	31.8	21.8	10
EDH(m)4-60	1.1	1.5		53.6	52	47	42.5	37	35	23	12

Dimension



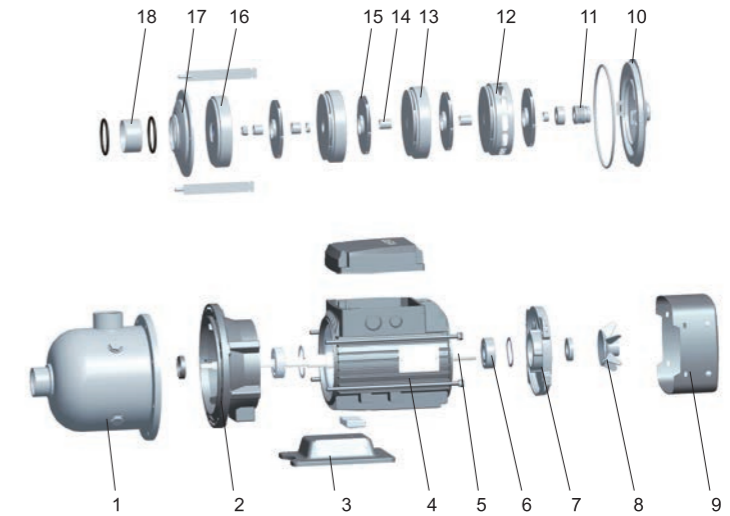
Model	L	A	C	D	E	F	G	H	J	M	N
EDH(m)4-20	427	180	138	160	108	130	G1¼	216	110	Φ195	103
EDH(m)4-30	427	180	138	160	108	130	G1¼	216	110	Φ195	103
EDH(m)4-40	427	180	138	160	108	130	G1¼	216	110	Φ195	103
EDH(m)4-50	480	180	138	160	108	130	G1¼	245	120	Φ195	103
EDH(m)4-60	480	180	138	160	108	130	G1¼	245	120	Φ195	103

Hydraulic Performance Curves



Materials Table

No.	Part	Material
1	Pump body	AISI 304
2	Support	ZL102
3	Bottom plate	Cast iron
4	Stator	
5	Rotor	
6	Bearing	
7	Rear cover	ZL102
8	Fan	PP
9	Fan cover	08F
10	Bracket cover	AISI 304
11	Mechanical seal	Carbon/Ceramic
12	Diffuser 3	AISI 304
13	Diffuser 2	AISI 304
14	Steeve	AISI 304
15	Impeller	AISI 304
16	Diffuser 1	AISI 304
17	Pressure plate	AISI 304
18	Spacer bush	AISI 304



Package Information

Model	GW (Kgs)	L (mm)	W (mm)	H (mm)	Quantity (PCS/20 TEU)
EDH(m)4-20	11.5	465	225	270	1044
EDH(m)4-30	12.9	465	225	270	1044
EDH(m)4-40	13.8	465	225	270	1044
EDH(m)4-50	18.2	515	225	297	870
EDH(m)4-60	18.6	515	225	297	870



EDH

Stainless Steel Horizontal Multistage Pump



Application

- It is applicable to household water supply, equipment support, pipeline pressurization, garden watering, vegetable greenhouse watering, fish farming and poultry raising, industrial and mining, water supply and drainage of enterprises and high-rise buildings, central air conditioner and centralized heating circulation system, etc.

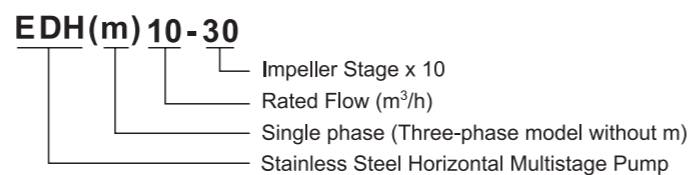
Pump

- AISI 304 shaft
- Max. liquid temperature: +85°C
- Altitude: up to 1000 m
- Max. suction: 8 m
- Max. inlet pressure: limited by max. operating pressure

Motor

- Motor with copper winding
- Built-in thermal protector for single phase motor
- Insulation class: F
- Protection class: IP55
- Max. ambient temperature: +40°C

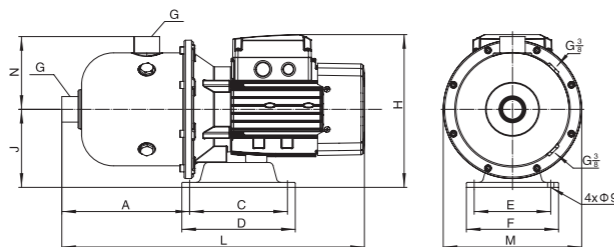
Identification Codes



Technical Data

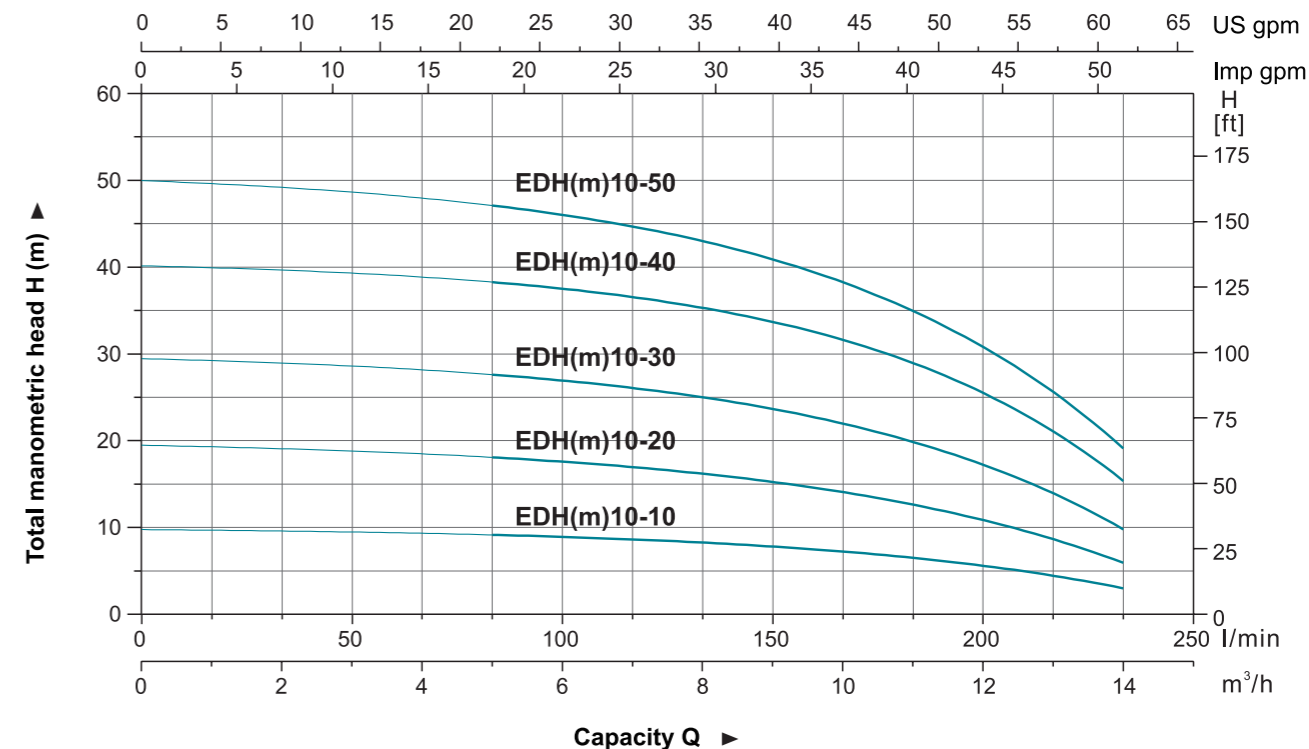
Model	Power		Q (m³/h) Q (l/min)	6	7	8	9	10	11	12	13	14
	kW	HP		H (m)	100	117	133	150	167	183	200	217
EDH(m)10-10	0.75	1.0	H (m)	9.1	8.7	8.3	7.8	7.1	6.4	5.4	4.4	3.1
EDH(m)10-20				17.9	17.1	16.3	15.3	13.9	12.4	10.7	8.4	6.2
EDH(m)10-30	1.1	1.5		27.5	26.5	25.2	23.6	21.7	19.3	17	14	10
EDH(m)10-40	1.5	2.0		38.7	37.2	35.9	33.9	31.6	28.7	24.9	19.7	15.9
EDH(m)10-50	2.2	3.0		47.2	45.4	43.6	41	38.2	34.2	30	24.5	18

Dimension



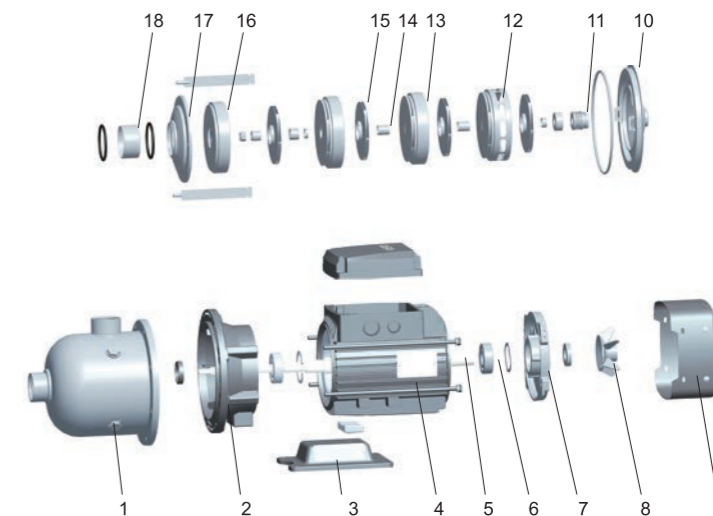
Model	L	A	C	D	E	F	G	H	J	M	N
EDH(m)10-10	568	278	138	160	108	130	G2	245	120	Φ233	140
EDH(m)10-20	568	278	138	160	108	130	G2	245	120	Φ233	140
EDH(m)10-30	568	278	138	160	108	130	G2	245	120	Φ233	140
EDH(m)10-40	626	287	138	160	108	130	G2	248	120	Φ233	140
EDH(m)10-50	626	287	138	160	108	130	G2	248	120	Φ233	140

Hydraulic Performance Curves



Materials Table

No.	Part	Material
1	Pump body	AISI 304
2	Support	ZL102
3	Bottom plate	Cast iron
4	Stator	
5	Rotor	
6	Bearing	
7	Rear cover	ZL102
8	Fan	PP
9	Fan cover	08F
10	Bracket cover	AISI 304
11	Mechanical seal	Carbon/Ceramic
12	Diffuser 3	AISI 304
13	Diffuser 2	AISI 304
14	Sleeve	AISI 304
15	Impeller	AISI 304
16	Diffuser 1	AISI 304
17	Pressure plate	AISI 304
18	Spacer bush	AISI 304



Package Information

Model	GW (Kgs)	L (mm)	W (mm)	H (mm)	Quantity (PCS/20 TEU)
EDH(m)10-10	21.5	610	265	317	540
EDH(m)10-20	22	610	265	317	540
EDH(m)10-30	23	610	265	317	540
EDH(m)10-40	29	660	265	317	480
EDH(m)10-50	30.7	660	265	317	480



EDH

Stainless Steel Horizontal Multistage Pump



Application

- It is applicable to household water supply, equipment support, pipeline pressurization, garden watering, vegetable greenhouse watering, fish farming and poultry raising, industrial and mining, water supply and drainage of enterprises and high-rise buildings, central air conditioner and centralized heating circulation system, etc.

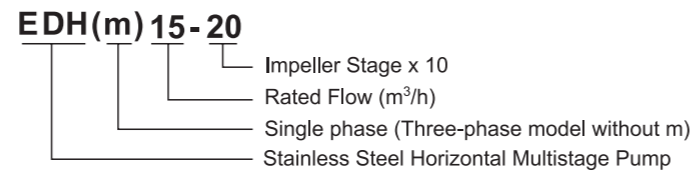
Pump

- AISI 304 shaft
- Max. liquid temperature: +85°C
- Altitude: up to 1000 m
- Max. suction: 8 m
- Max. inlet pressure: limited by max. operating pressure

Motor

- Motor with copper winding
- Built-in thermal protector for single phase motor
- Insulation class: F
- Protection class: IP55
- Max. ambient temperature: +40°C

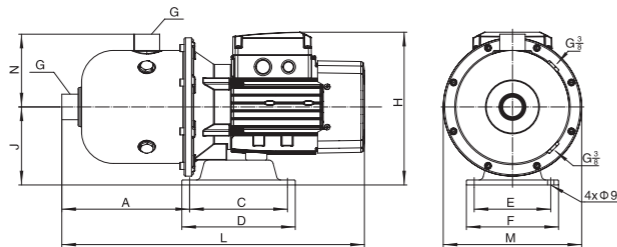
Identification Codes



Technical Data

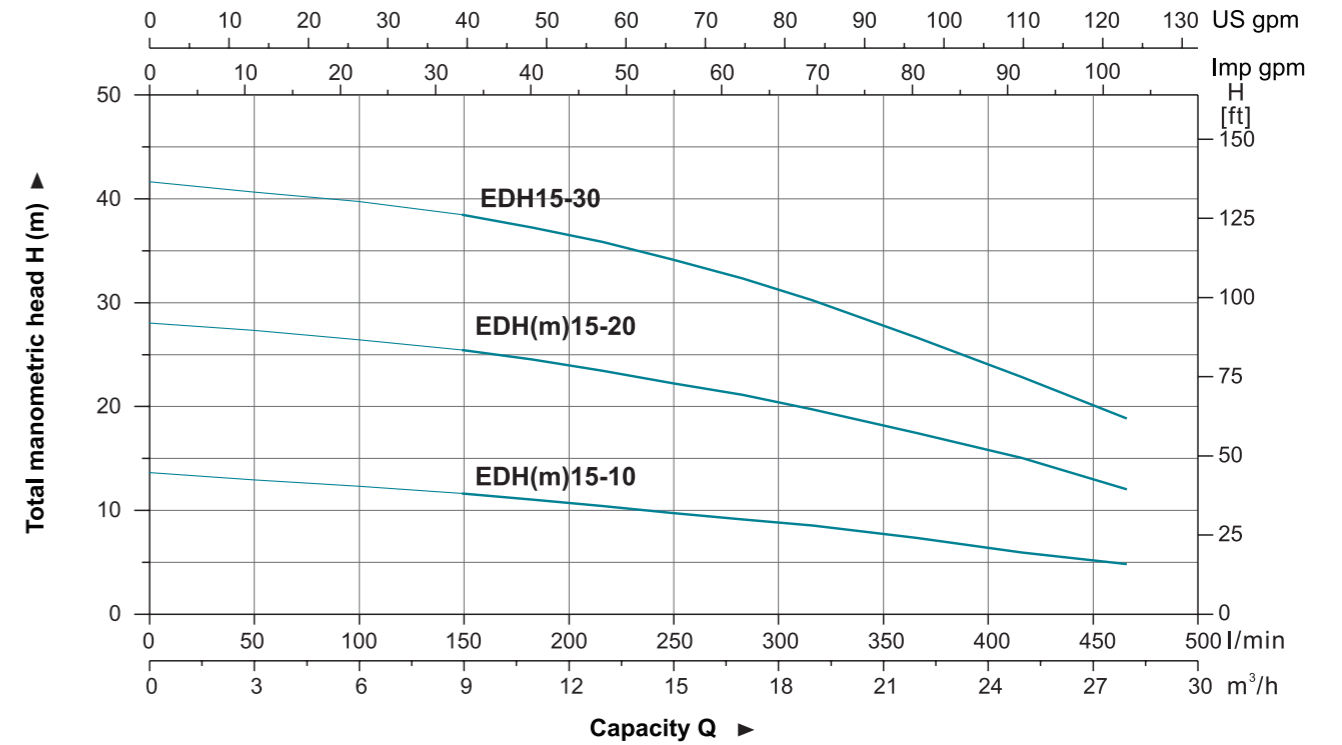
Model	Power		Q (m³/h) Q (l/min)	9	11	13	15	17	19	22	25	28
	kW	HP		H (m)								
EDH(m)15-10	1.1	1.5		11.6	11	10.4	9.7	9.1	8.5	7.7	5.9	4.8
EDH(m)15-20	2.2	3.0		25.4	24.5	23.4	22.2	21.1	19.7	17.4	15	12
EDH15-30	3.0	4.0		38.4	37.2	35.8	34.1	32.3	30.2	26.6	22.8	18.8

Dimension



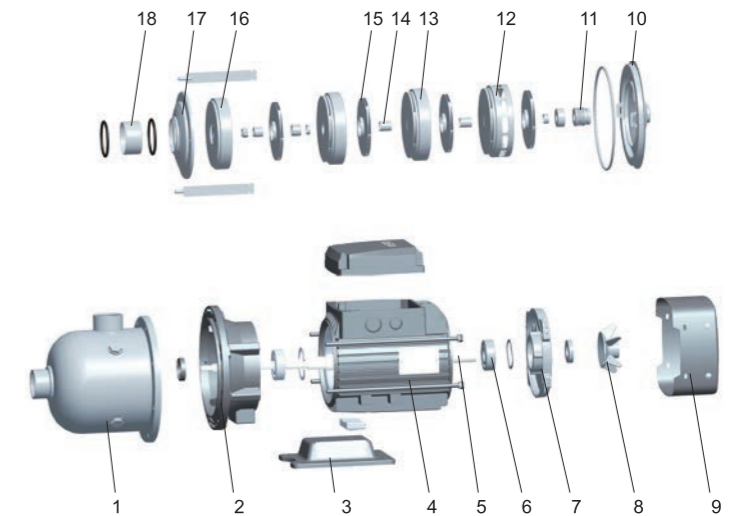
Model	L	A	C	D	E	F	G	H	J	M	N
EDH(m)15-10	568	278	138	160	108	130	G2	245	120	Φ233	140
EDH(m)15-20	626	287	138	160	108	130	G2	248	120	Φ233	140
EDH15-30	626	287	138	160	108	130	G2	248	120	Φ233	140

Hydraulic Performance Curves



Materials Table

No.	Part	Material
1	Pump body	AISI 304
2	Support	ZL102
3	Bottom plate	Cast iron
4	Stator	
5	Rotor	
6	Bearing	
7	Rear cover	ZL102
8	Fan	PP
9	Fan cover	08F
10	Bracket cover	AISI 304
11	Mechanical seal	Carbon/Ceramic
12	Diffuser 3	AISI 304
13	Diffuser 2	AISI 304
14	Sleeve	AISI 304
15	Impeller	AISI 304
16	Diffuser 1	AISI 304
17	Pressure plate	AISI 304
18	Spacer bush	AISI 304



Package Information

Model	GW (Kgs)	L (mm)	W (mm)	H (mm)	Quantity (PCS/20 TEU)
EDH(m)15-10	20.5	610	265	317	540
EDH(m)15-20	28.8	660	265	317	480
EDH15-30	33	660	265	317	480



EDH

Stainless Steel Horizontal Multistage Pump



Application

- It is applicable to household water supply, equipment support, pipeline pressurization, garden watering, vegetable greenhouse watering, fish farming and poultry raising, industrial and mining, water supply and drainage of enterprises and high-rise buildings, central air conditioner and centralized heating circulation system, etc.

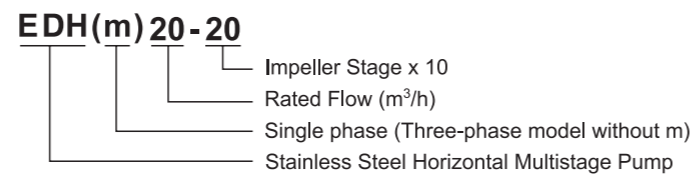
Pump

- AISI 304 shaft
- Max. liquid temperature: +85°C
- Altitude: up to 1000 m
- Max. suction: 8 m
- Max. inlet pressure: limited by max. operating pressure

Motor

- Motor with copper winding
- Built-in thermal protector for single phase motor
- Insulation class: F
- Protection class: IP55
- Max. ambient temperature: +40°C

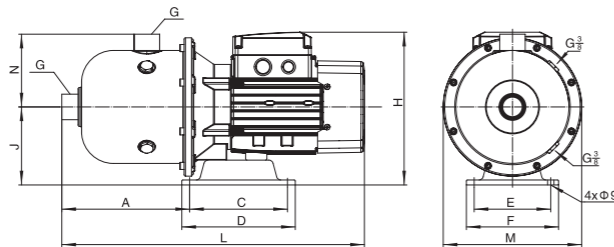
Identification Codes



Technical Data

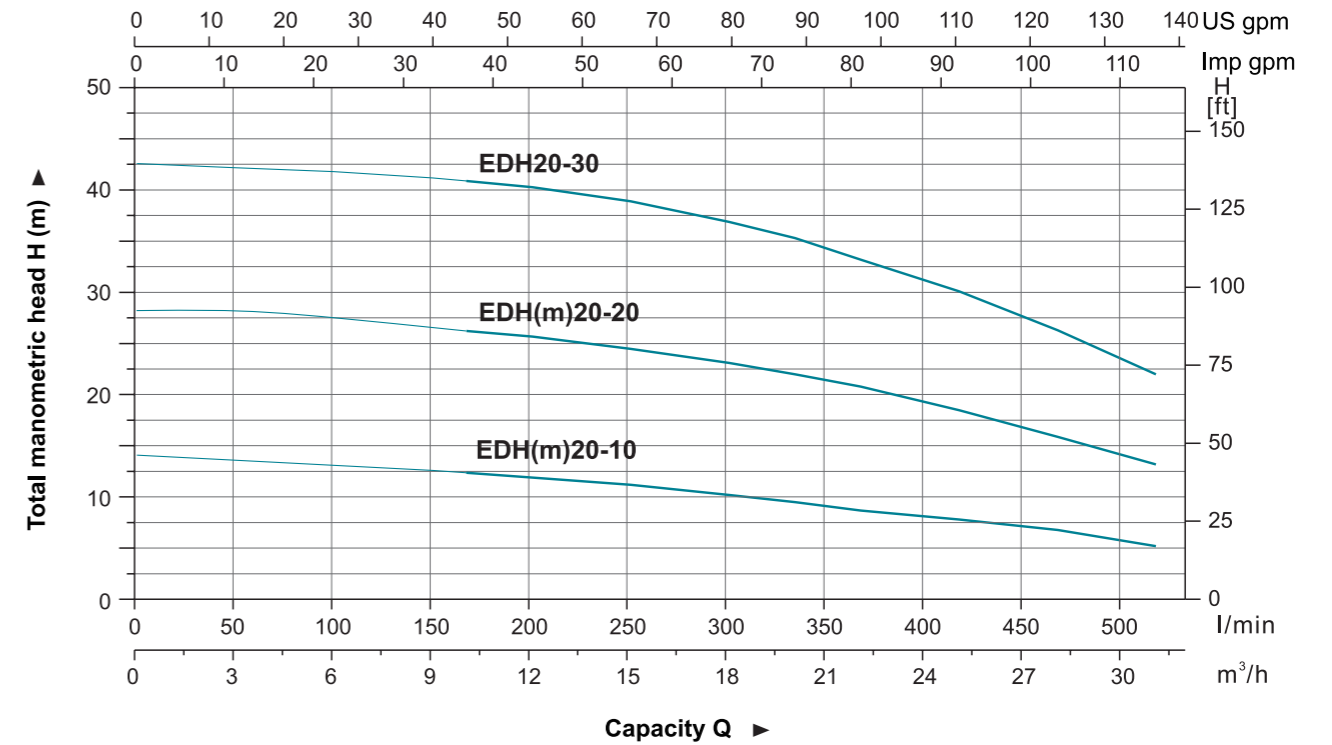
Model	Power		Q (m³/h) Q (l/min)	9	12	15	18	20	22	25	28	31
	kW	HP		H (m)								
EDH(m)20-10	1.1	1.5		12.6	11.9	11.2	10.2	9.8	8.7	8	6.8	5.2
EDH(m)20-20	2.2	3.0		26.5	25.7	24.5	23.1	22	20.8	18.5	15.9	13.2
EDH20-30	4.0	5.5		41.2	40.3	38.9	36.9	35.3	33.2	30.1	26.3	22

Dimension



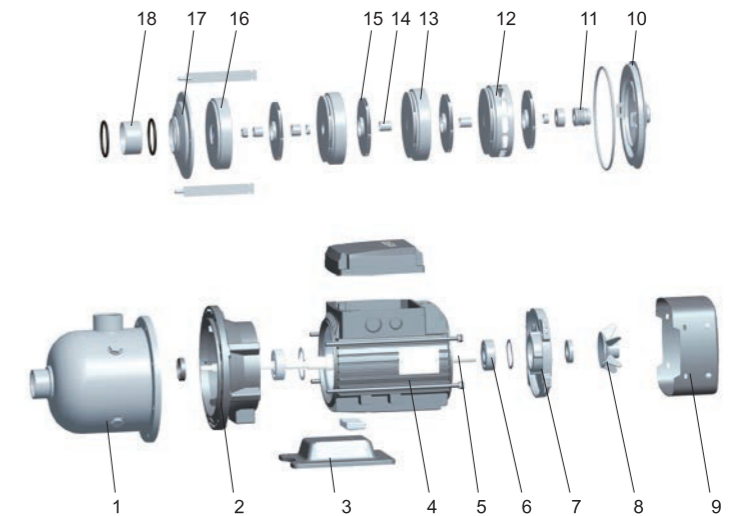
Model	L	A	C	D	E	F	G	H	J	M	N
EDH(m)20-10	568	278	138	160	108	130	G2	245	120	Φ233	140
EDH(m)20-20	626	287	138	160	108	130	G2	248	120	Φ233	140
EDH20-30	642	278	190	220	170	200	G2	240	120	Φ233	140

Hydraulic Performance Curves



Materials Table

No.	Part	Material
1	Pump body	AISI 304
2	Support	ZL102
3	Bottom plate	Cast iron
4	Stator	
5	Rotor	
6	Bearing	
7	Rear cover	ZL102
8	Fan	PP
9	Fan cover	08F
10	Bracket cover	AISI 304
11	Mechanical seal	Carbon/Ceramic
12	Diffuser 3	AISI 304
13	Diffuser 2	AISI 304
14	Sleeve	AISI 304
15	Impeller	AISI 304
16	Diffuser 1	AISI 304
17	Pressure plate	AISI 304
18	Spacer bush	AISI 304



Package Information

Model	GW (Kgs)	L (mm)	W (mm)	H (mm)	Quantity (PCS/20 TEU)
EDH(m)20-10	20.5	610	265	317	540
EDH(m)20-20	28.8	660	265	317	480
EDH20-30	37.5	675	265	317	480





Application

- It is applicable to household water supply, equipment support, pipeline pressurization, garden watering, vegetable greenhouse watering, fish farming and poultry raising, industrial and mining, water supply and drainage of enterprises and high-rise buildings, central air conditioner and centralized heating circulation system, etc.

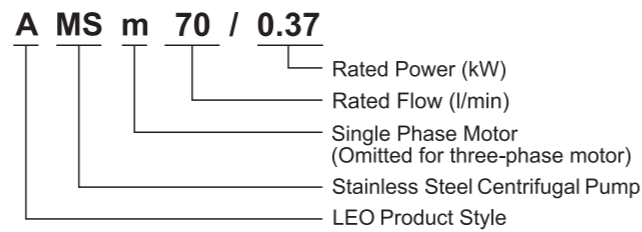
Pump

- AISI 304 pump body
- AISI 304 shaft
- Max. liquid temperature: +85°C
- Altitude: up to 1000 m

Motor

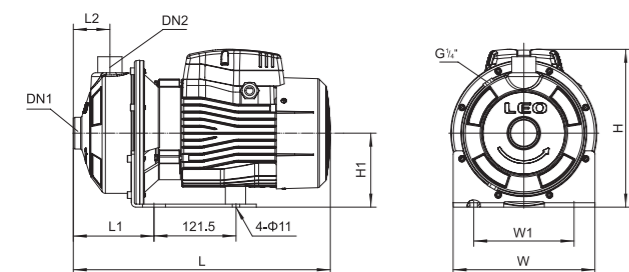
- C&U bearing
- Motor with copper winding
- Built-in thermal protector for single phase motor
- Insulation class: F
- Protection class: IPX4
- Max. temperature: +40°C

Identification Codes



Technical Data

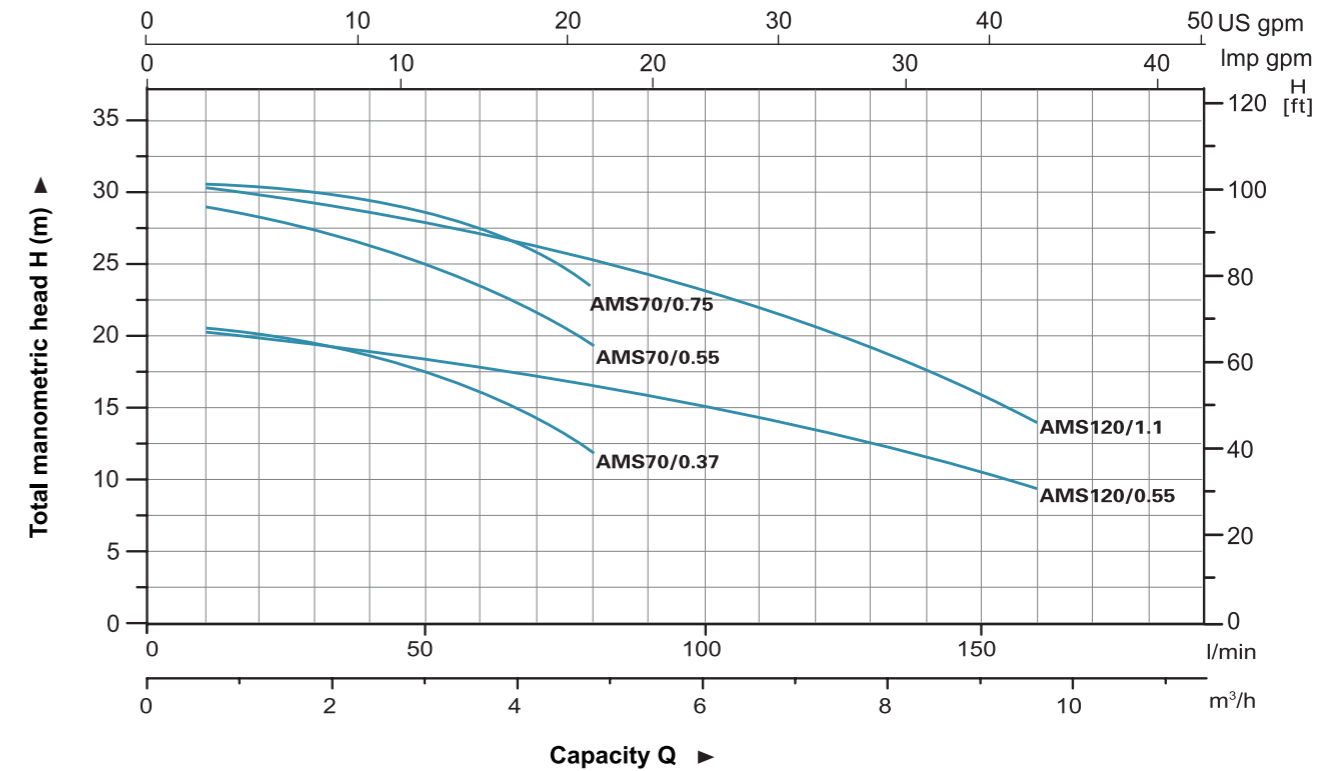
MODEL		POWER		Q (m³/h)															
Single Phase	Three Phase	kW	HP	Q (l/min)															
				0	1.8	2.4	3.6	4.8	6	7.2	8.4	9.6	10.8	0	30	40	60	80	100
AMS70/0.37	AMS70/0.37	0.37	0.5	H (m)															
AMS70/0.55	AMS70/0.55	0.55	0.75																
AMS70/0.75	AMS70/0.75	0.75	1.0																
AMS120/0.55	AMS120/0.55	0.55	0.75																
AMS120/1.1	AMS120/1.1	1.1	1.5																



Dimension

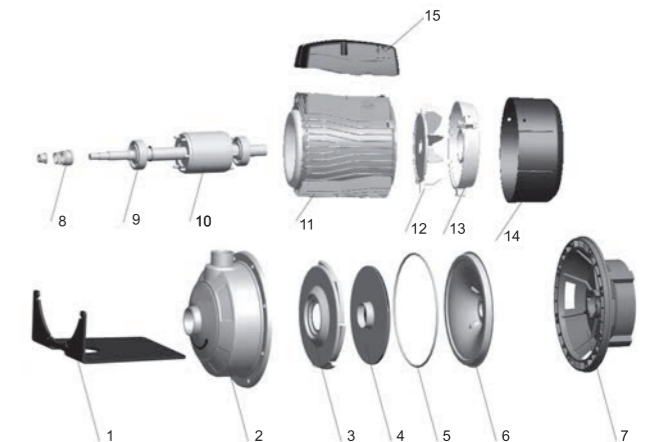
Model	Ports		L (mm)	W (mm)	H (mm)	L ₁ (mm)	L ₂ (mm)	W ₁ (mm)	H ₁ (mm)
	DN1	DN2							
AMS70/0.37	1 1/4"	1"	332	210	224	119	55	149	110
AMS70/0.55	1 1/4"	1"	332	210	224	119	55	149	110
AMS70/0.75	1 1/4"	1"	381	210	234	119	55	149	110
AMS120/0.55	1 1/4"	1"	332	210	224	119	55	149	110
AMS120/1.1	1 1/4"	1"	381	210	234	119	55	149	110

Hydraulic Performance Curves



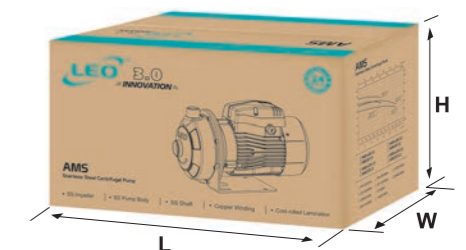
Materials Table

No.	Part	Material
1	Bottom support	Steel
2	Pump body	AISI 304
3	Diffuser	AISI 304
4	Impeller	AISI 304
5	O-ring	NBR
6	Airproof plate	AISI 304
7	Support	ZL102
8	Mechanical seal	Silicon/Carbon
9	Ball bearing	
10	Rotor	
11	Stator	
12	Fan	PP
13	Rear housing	ZL102
14	Fan cover	PP
15	Terminal box	ABS



Package Information

Model	GW (Kgs)	L (mm)	W (mm)	H (mm)	Quantity (PCS/20 TEU)
AMS70/0.37	10	380	240	270	1200
AMS70/0.55	11	380	240	270	1200
AMS70/0.75	14	410	240	270	1104
AMS120/0.55	11	380	240	270	1200
AMS120/1.1	15	410	240	270	1104





Application

- It is applicable to household water supply, equipment support, pipeline pressurization, garden watering, vegetable greenhouse watering, fish farming and poultry raising, industrial and mining, water supply and drainage of enterprises and high-rise buildings, central air conditioner and centralized heating circulation system, etc.

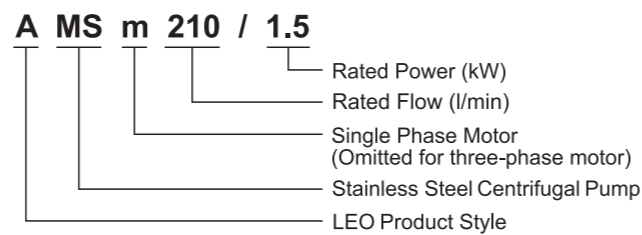
Pump

- AISI 304 pump body
- AISI 304 shaft
- Max. liquid temperature: +85°C
- Altitude: up to 1000 m

Motor

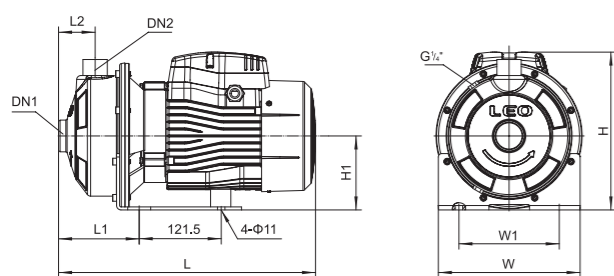
- C&U bearing
- Motor with copper winding
- Built-in thermal protector for single phase motor
- Insulation class: F
- Protection class: IPX4
- Max. temperature: +40°C

Identification Codes



Technical Data

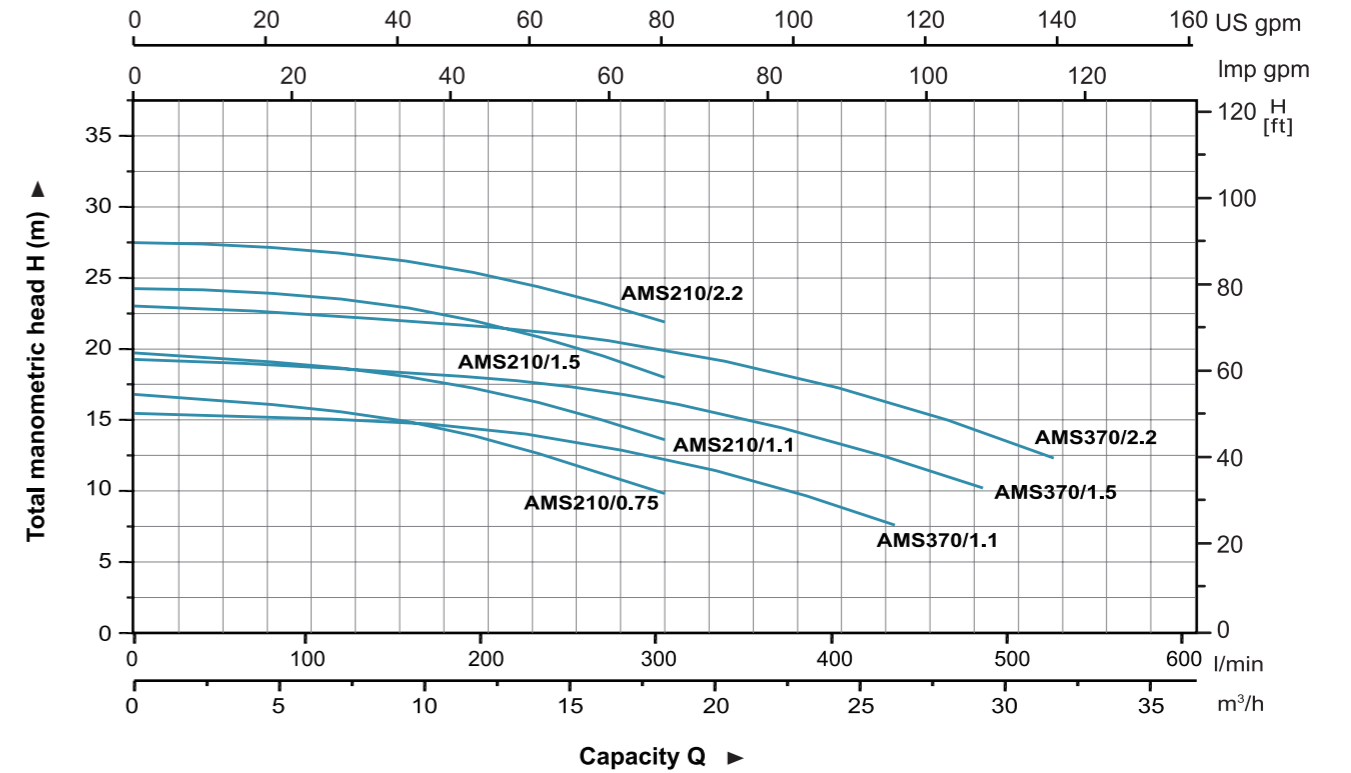
MODEL		POWER		Q (m³/h)																
Single Phase	Three Phase	kW	HP	0	1.8	3.6	6	7.2	8.4	9.6	10.8	12	15	18	21	24	26	29	31	
				H (m)																
				0	30	60	100	120	140	160	180	200	250	300	350	400	430	480	520	
AMSm210/0.75	AMS210/0.75	0.75	1.0	16.8	-	-	-	15.6	15.2	14.8	14.2	13.6	11.9	9.8	-	-	-	-	-	
AMSm210/1.1	AMS210/1.1	1.1	1.5	19.7	-	-	-	18.7	18.3	18.0	17.5	17.1	15.6	13.6	-	-	-	-	-	
AMSm210/1.5	AMS210/1.5	1.5	2.0	24.2	-	-	-	23.5	23.2	22.8	22.4	21.8	20.2	18.0	-	-	-	-	-	
AMSm210/2.2	AMS210/2.2	2.2	3.0	27.5	-	-	-	26.7	26.5	26.1	25.7	25.2	23.8	21.9	-	-	-	-	-	
AMSm370/1.1	AMS370/1.1	1.1	1.5	15.4	-	-	-	-	-	-	14.7	14.4	13.5	12.3	10.8	8.9	7.6	-	-	
AMSm370/1.5	AMS370/1.5	1.5	2.0	19.3	-	-	-	-	-	-	-	18.1	17.3	16.3	15.0	13.3	12.3	10.2	-	
AMSm370/2.2	AMS370/2.2	2.2	3.0	23.1	-	-	-	-	-	-	-	21.7	20.9	20.0	18.8	17.2	16.2	14.2	12.3	



Dimension

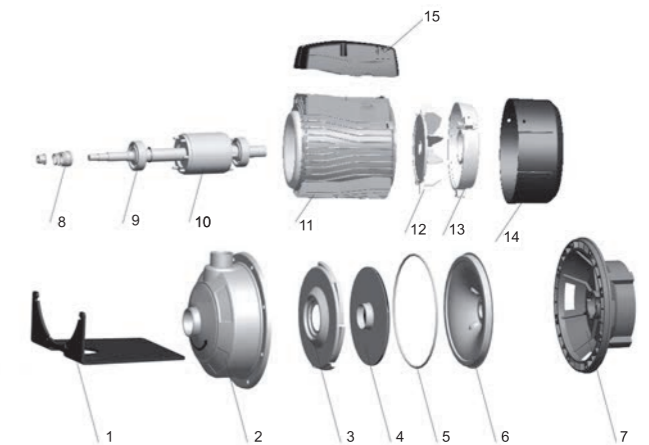
Model	Ports		L (mm)	W (mm)	H (mm)	L ₁ (mm)	L ₂ (mm)	W ₁ (mm)	H ₁ (mm)
	DN1	DN2							
AMS210/0.75	1 1/2"	1 1/4"	392	210	234	129	55	149	110
AMS210/1.1	1 1/2"	1 1/4"	392	210	234	129	55	149	110
AMS210/1.5	1 1/2"	1 1/4"	440	210	250	129	55	149	110
AMS210/2.2	1 1/2"	1 1/4"	440	210	250	129	55	149	110
AMS370/1.1	2"	1 1/4"	392	210	234	129	55	149	110
AMS370/1.5	2"	1 1/4"	440	210	250	129	55	149	110
AMS370/2.2	2"	1 1/4"	440	210	250	129	55	149	110

Hydraulic Performance Curves



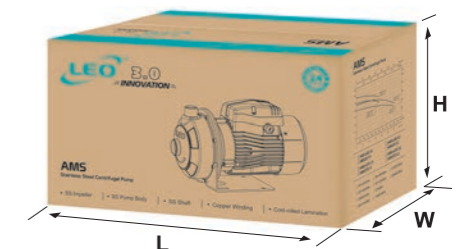
Materials Table

No.	Part	Material
1	Bottom support	Steel
2	Pump body	AISI 304
3	Diffuser	AISI 304
4	Impeller	AISI 304
5	O-ring	NBR
6	Airproof plate	AISI 304
7	Support	ZL102
8	Mechanical seal	Silicon/Carbon
9	Ball bearing	
10	Rotor	
11	Stator	
12	Fan	PP
13	Rear housing	ZL102
14	Fan cover	PP
15	Terminal box	ABS



Package Information

Model	GW (Kgs)	L (mm)	W (mm)	H (mm)	Quantity (PCS/20 TEU)
AMS210/0.75	14	410	240	270	1104
AMS210/1.1	15	410	240	270	1104
AMS210/1.5	18	465	240	270	968
AMS210/2.2	20	465	240	270	968
AMS370/1.1	15	410	240	270	1104
AMS370/1.5	18	465	240	270	968
AMS370/2.2	20	465	240	270	968





Application

- Suitable for cleaning systems for production lines and transfer of liquid medium containing impurities

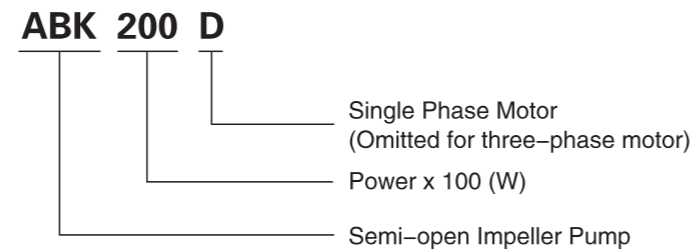
Pump

- AISI 304 pump body
- AISI 304 shaft
- Max. liquid temperature: +35°C

Motor

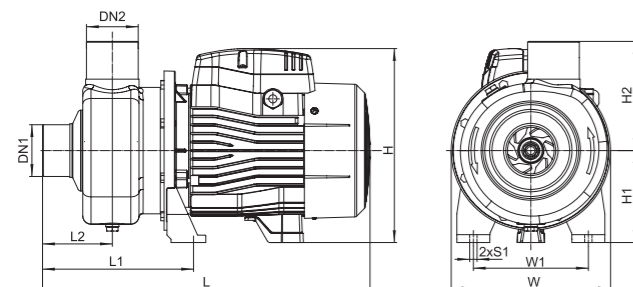
- Motor with copper winding
- Built-in thermal protector for single phase motor
- Insulation class: F
- Protection class: IPX4
- Max. temperature: +40°C

Identification Codes



Technical Data

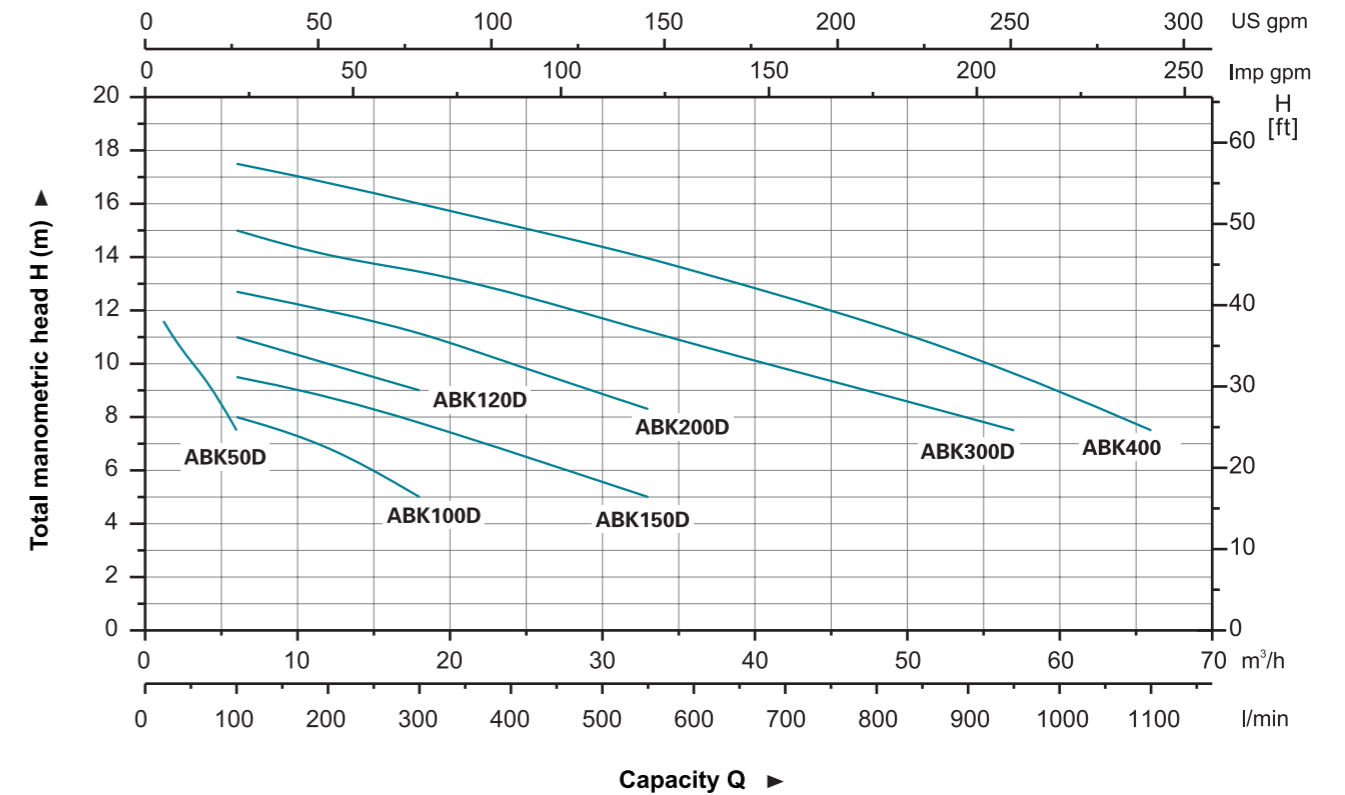
MODEL		POWER		Q (m³/h)		1.2	2.4	3.6	4.8	6	12	18	24	33	42	48	57	66
Single Phase	Three Phase	kW	HP	Q (l/min)	H (m)	20	40	60	80	100	200	300	400	550	700	800	950	1100
ABK50D	ABK50	0.37	0.5	11.6	10.5	9.7	8.7	7.5	-	-	-	-	-	-	-	-	-	-
ABK100D	ABK100	0.75	1	-	-	-	-	8	7	5	-	-	-	-	-	-	-	-
ABK120D	ABK120	0.9	1.2	-	-	-	-	11	10	9	-	-	-	-	-	-	-	-
ABK150D	ABK150	1.1	1.5	-	-	-	-	9.5	8.8	7.8	6.7	5	-	-	-	-	-	-
ABK200D	ABK200	1.5	2	-	-	-	-	12.7	12	11.2	10	8.3	6.5	-	-	-	-	-
ABK300D	ABK300	2.2	3	-	-	-	-	15	14	13.5	12.7	11.2	9.8	8.9	7.5	-	-	-
-	ABK400	3	4	-	-	-	-	17.5	16.8	16	15.2	14	12.5	11.5	9.7	7.5	-	-



Dimension

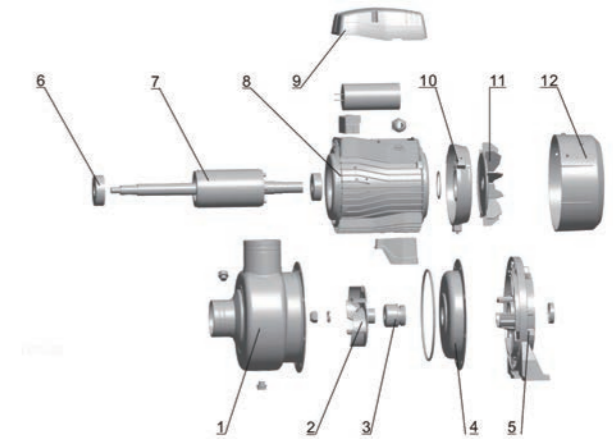
Model	Ports		L (mm)	L ₁ (mm)	L ₂ (mm)	H (mm)	H ₁ (mm)	H ₂ (mm)	W (mm)	W ₁ (mm)	S ₁ (mm)
	DN1	DN2									
ABK50(D)	1 1/4"	1"	280	123	50	180	90	106	170	105	9
ABK100(D)	1 1/2"	1 1/2"	332	160	76	212	100	118	170	120	9
ABK120(D)	1 1/2"	1 1/2"	332	160	76	212	100	118	170	120	9
ABK150(D)	2"	2"	400	184	85	235	112	133	195	140	9
ABK200(D)	2"	2"	400	184	85	235	112	133	195	140	9
ABK300(D)	2 1/2"	2"	450	184	85	252	117	133	195	140	9
ABK400	2 1/2"	2"	450	184	85	252	117	133	195	140	9

Hydraulic Performance Curves



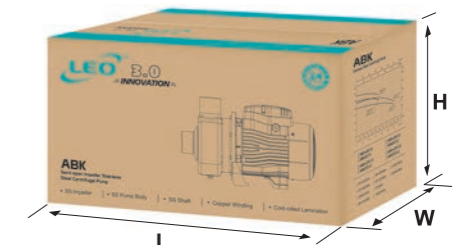
Materials Table

No.	Part	Material
1	Pump body	AISI 304
2	Impeller	AISI 304
3	Mechanical seal	
4	Bracket cover	AISI 304
5	Support	ZL102
6	Bearing	
7	Rotor	
8	Stator	
9	Terminal box	PC/ABS
10	Rear cover	ZL102
11	Fan	PP-GF30
12	Fan cover	08F



Package Information

Model	GW (Kgs)	L (mm)	W (mm)	H (mm)	Quantity (PCS/20 TEU)
ABK50(D)	6.5	310	190	215	2130
ABK100(D)	9.6	360	200	235	1566
ABK120(D)	10.7	360	200	235	1566
ABK150(D)	14	420	235	265	1032
ABK200(D)	15.7	420	235	265	1032
ABK300(D)	20.7	475	230	275	864
ABK400	21.8	475	230	275	864





Application

- HVAC: Circulation of hot water, boiler mix-flow, temperature mix-flow, intermittent heat supply, etc
- Air conditioning system: Cooling water circulation
- Water supply system: Filtration and transfer at waterworks; Pressure boosting in main pipe
- Industrial applications: Washing & cleaning systems, boiler feeding, cooling water circulation, water treatment systems, and auxiliary systems
- Fire-fighting system

Pump

- Flow: up to 760 m³/h
- Head: up to 85 m
- Power range: 0.37 – 132 kW
- Liquid temperature: 0°C – +90°C
- Max ambient temperature: + 40°C
- Max operation pressure: 16 bar
- Altitude: up to 1000 m

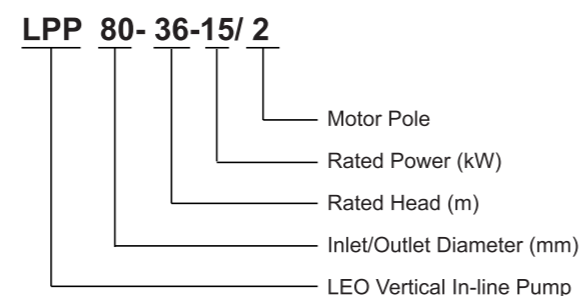
Motor

- Closed construction
- Insulation class: F
- Protection class: IP 55
- IE 2 motor as standard. IE 3 motor is available on request

Flange

- EN 1092 and DIN 2576 standard

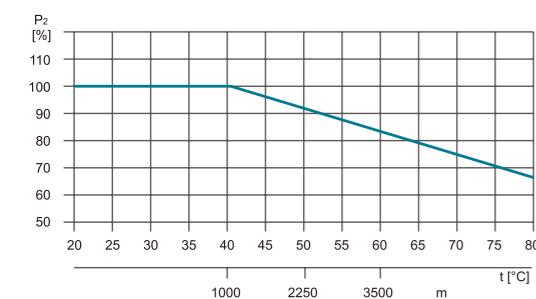
Identification Codes



Ambient Temperature

Max. Ambient temperature: +40°C. Ambient temperature above 40°C, or installation at altitude of more than 1000 m above sea level, require the use of an oversize motor. Because of low air density and poor cooling effects, the motor output power P2 will be decreased. See the picture.

For example, when the pump is installed at altitude of more than 3500 m above sea level, P2 will be decrease to 88%. When the ambient temperature is 70°C, P2 will be decreased to 78%.

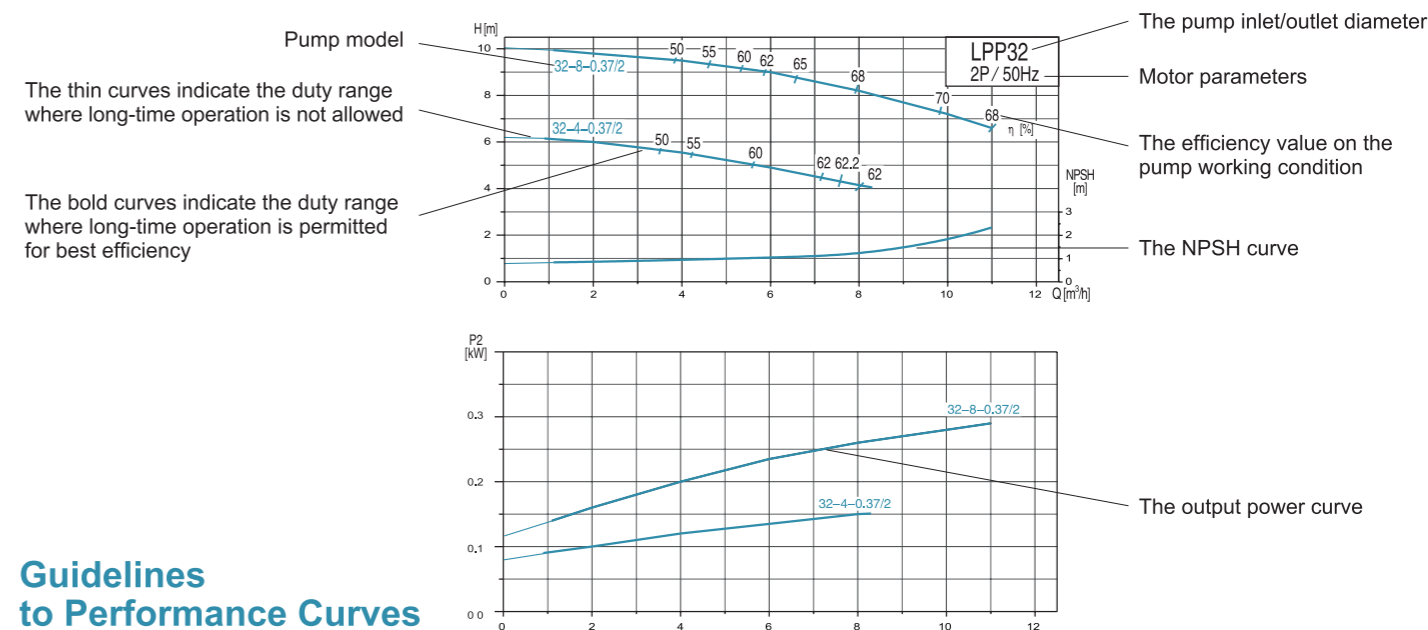


Materials Table

No.	Part	Materials
1	Pump body	Cast iron
2	Impeller	Cast iron
3	Mechanical seal	Carbon/Silicon carbide
4	Pump shaft	Steel/AISI 304
5	Clamp ring	Steel
6	Motor base	Cast iron
7	Motor	



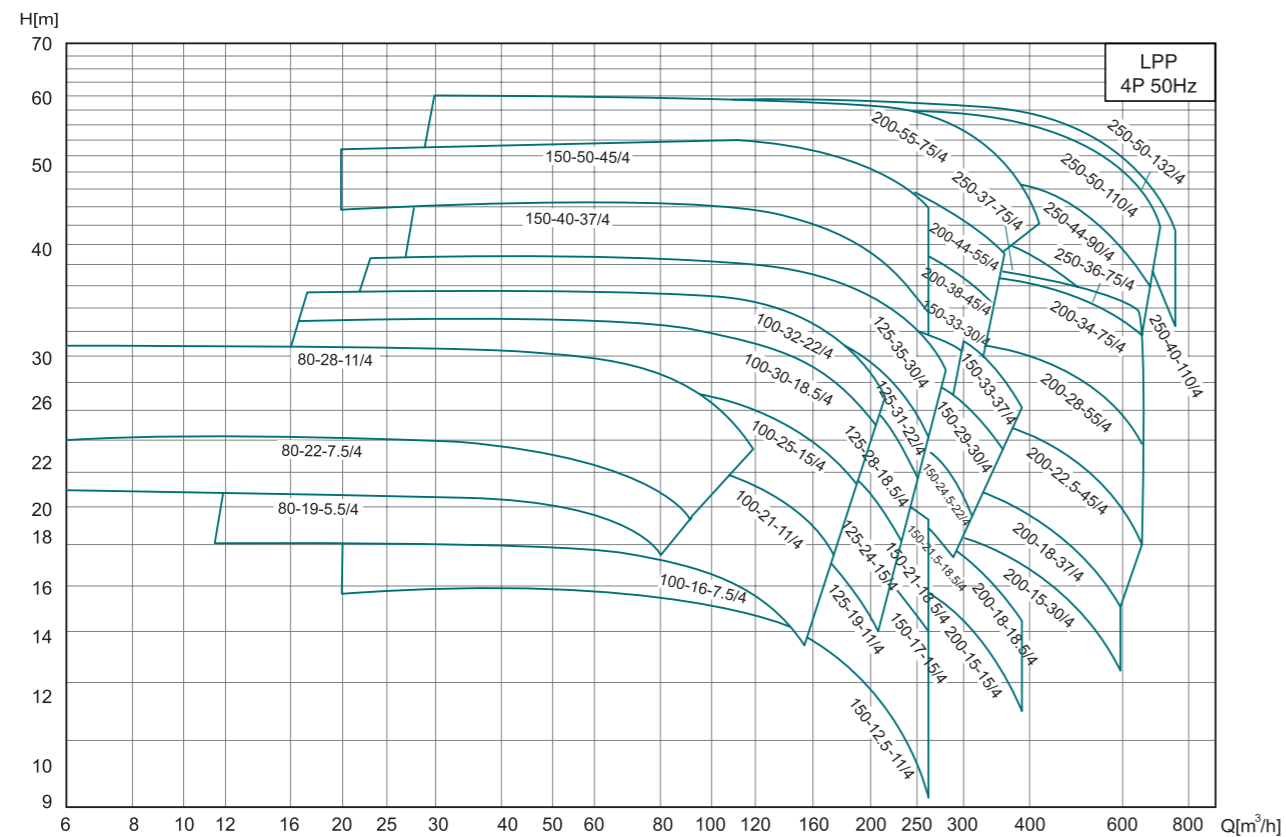
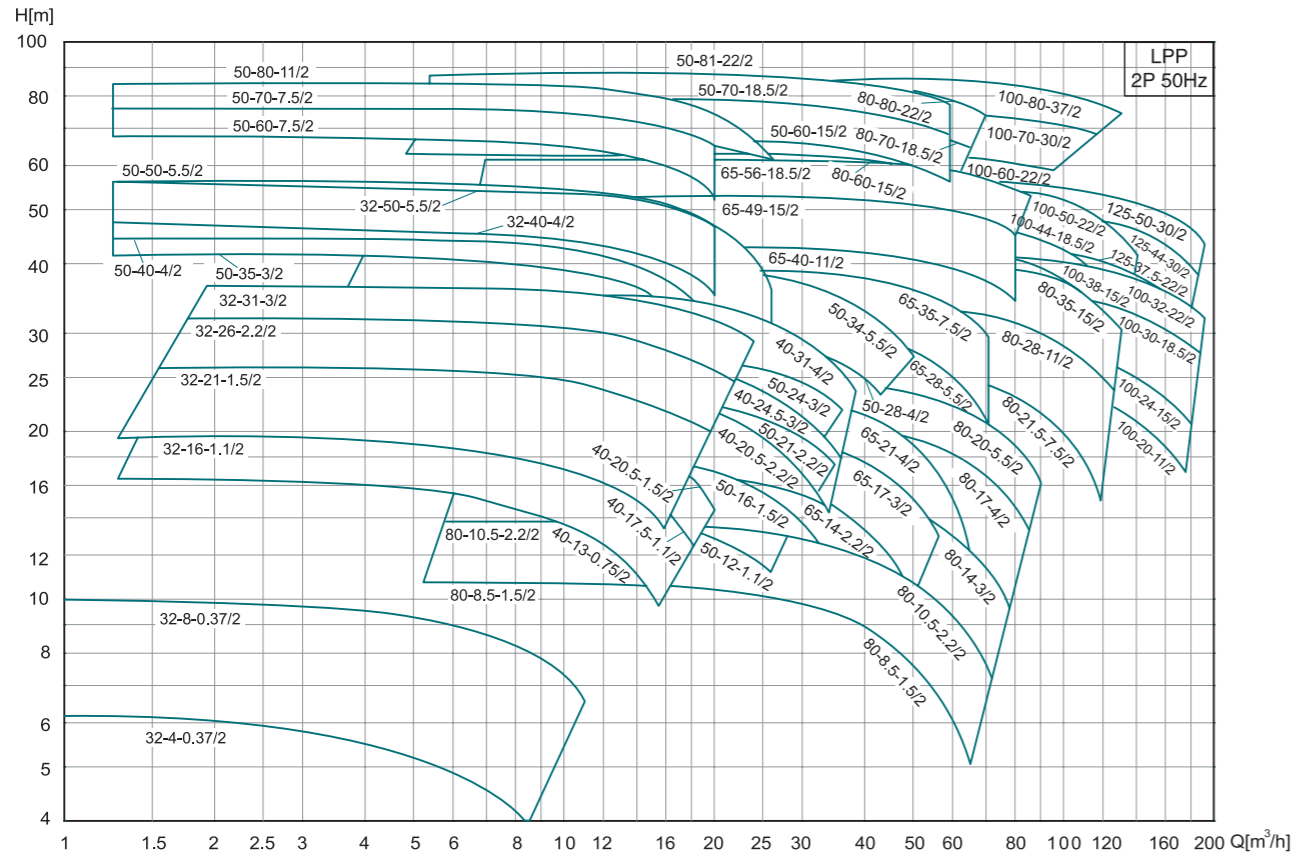
How to Read The Curve Charts



Guidelines to Performance Curves

Tolerances to ISO 9906, Annex A. Measurements have been made with airless water at a temperature of 20°C and kinematic viscosity of 1mm²/s. To avoid overheating of the motor, the pump should not be use against a high head for a long time.

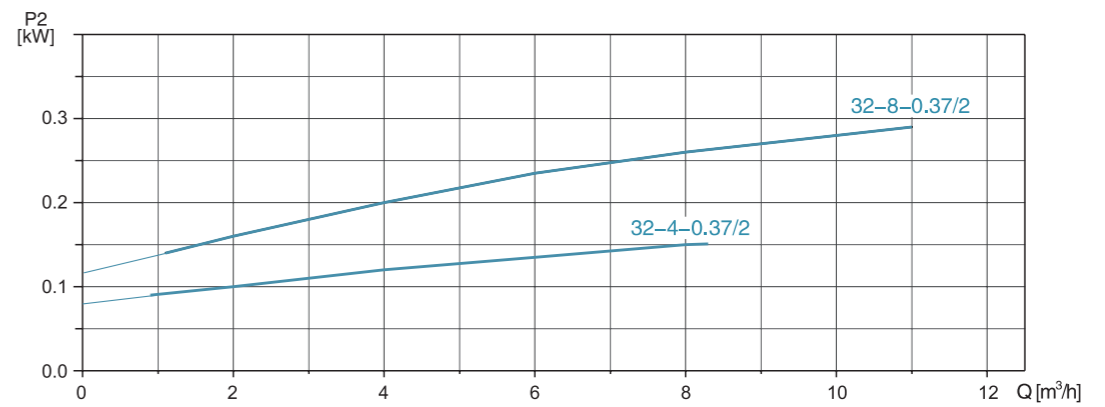
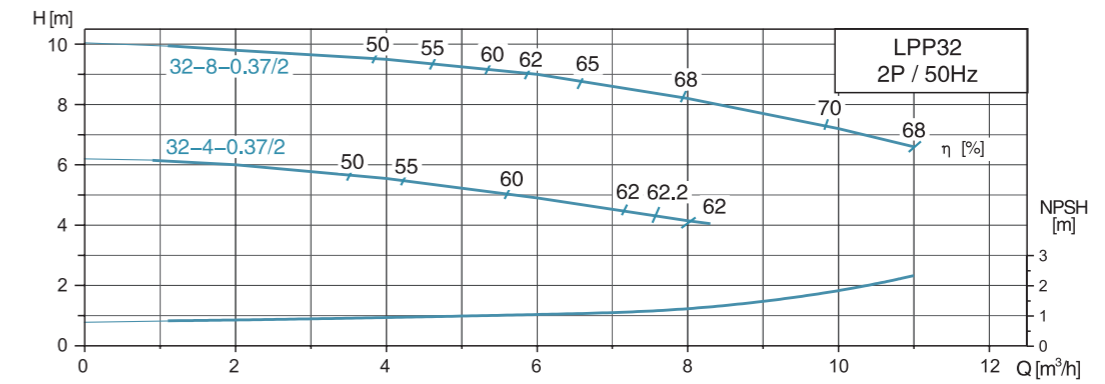
Hydraulic Performance Curves



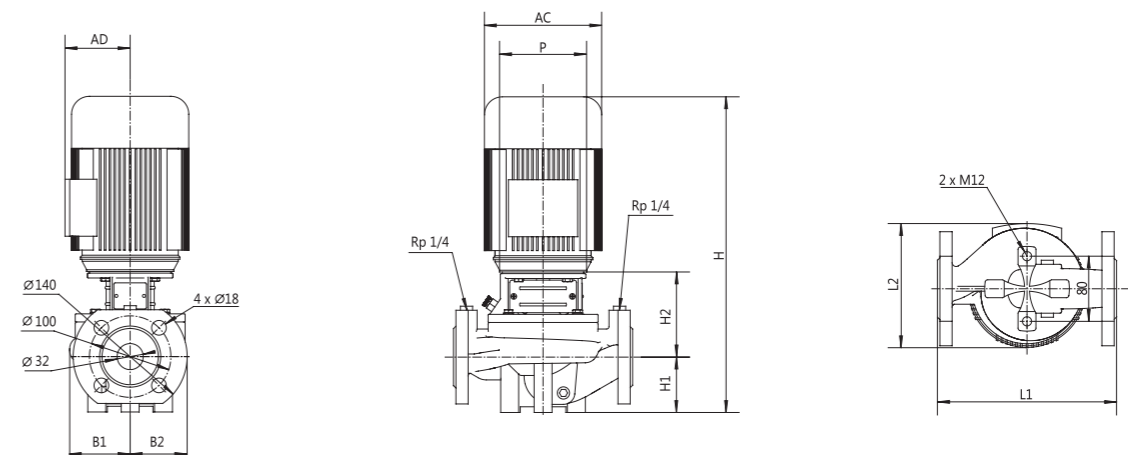
Hydraulic Performance Curves

LPP32

2900r/min

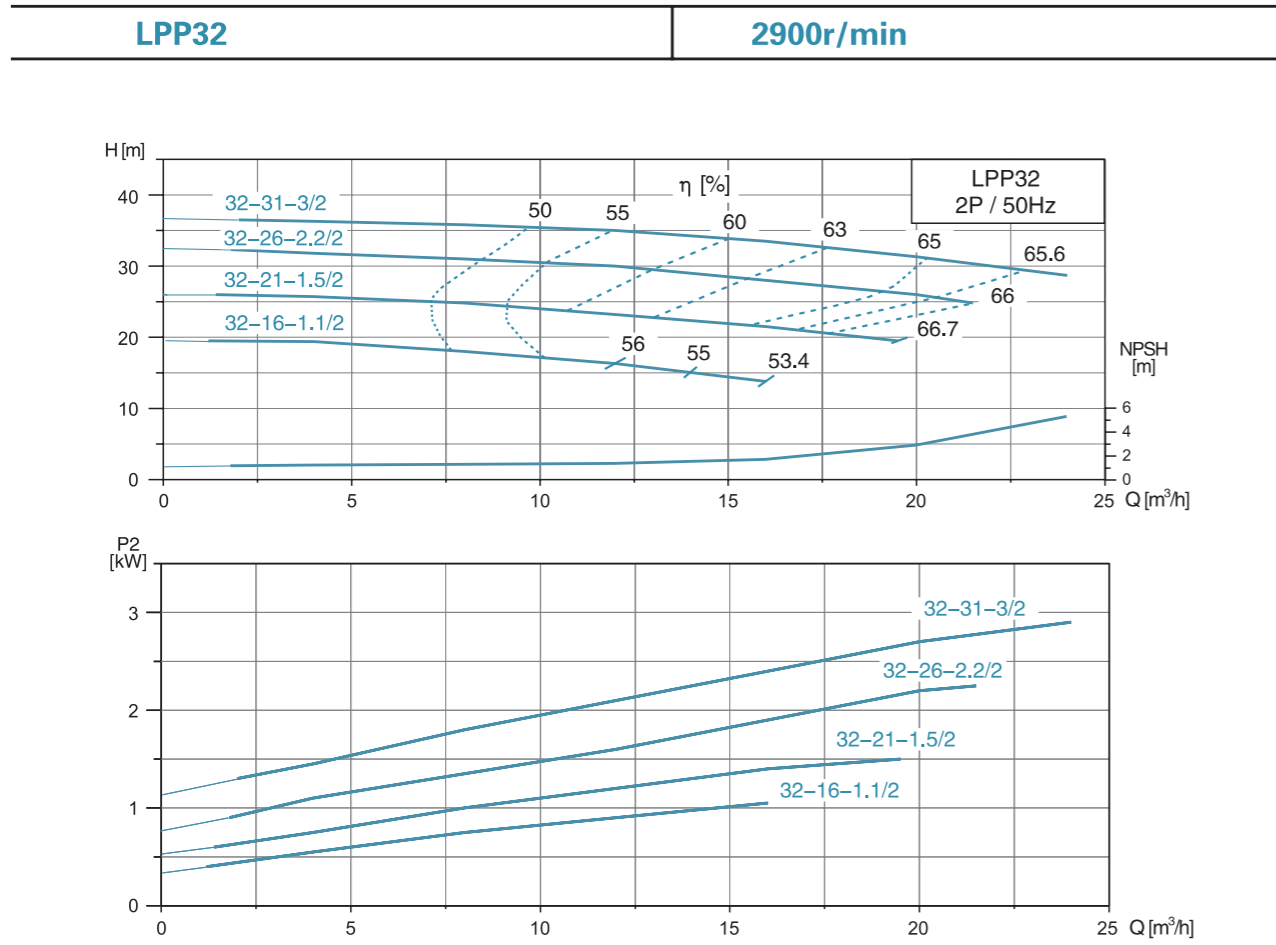


Dimension Drawing

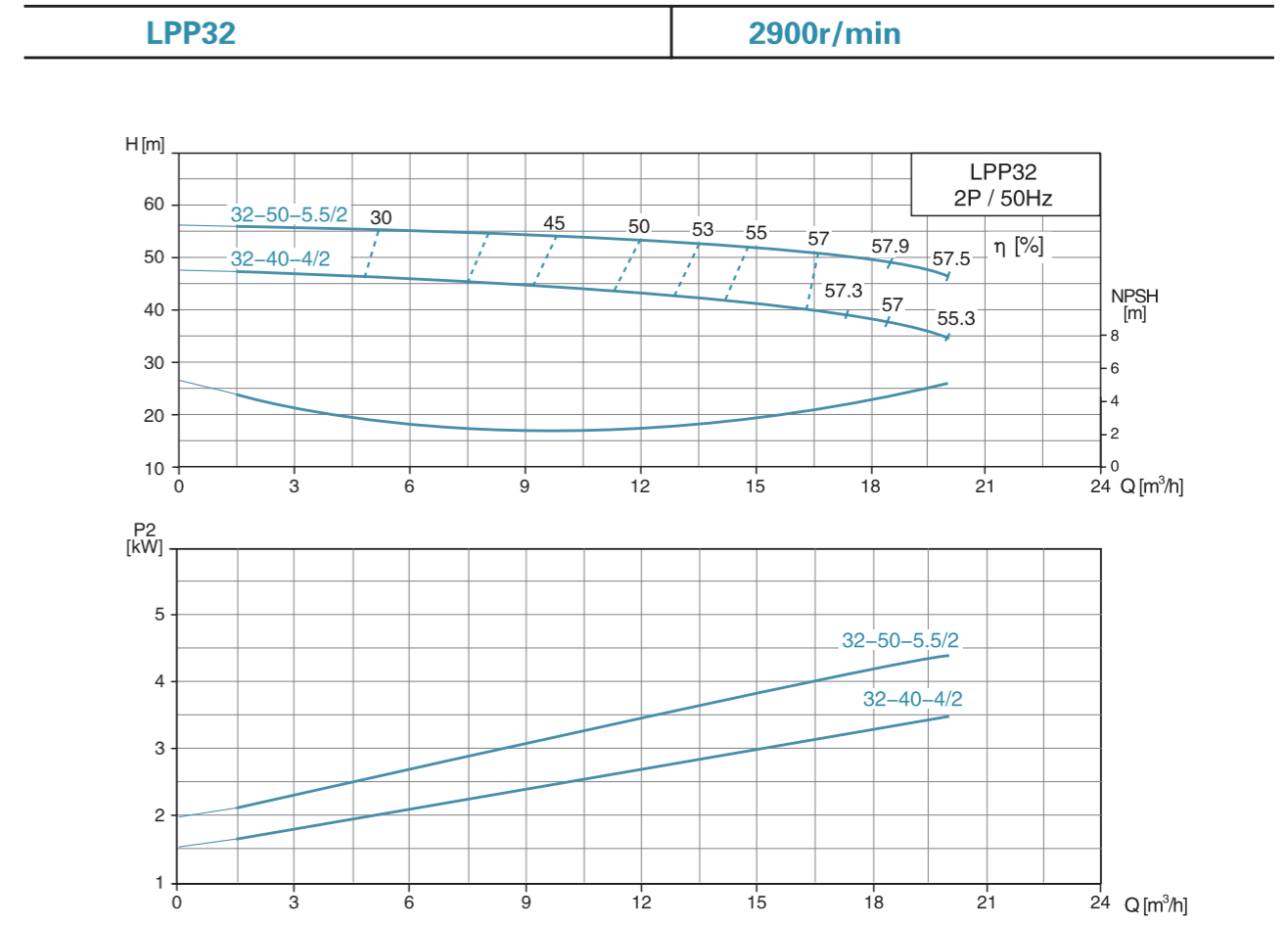


Model	L1 (mm)	L2 (mm)	H (mm)	H1 (mm)	H2 (mm)	B1 (mm)	B2 (mm)	P (mm)	AD (mm)	AC (mm)
LPP32-8-0.37/2	220	156	393	68	104.5	75	70	105	86	135
LPP32-4-0.37/2										

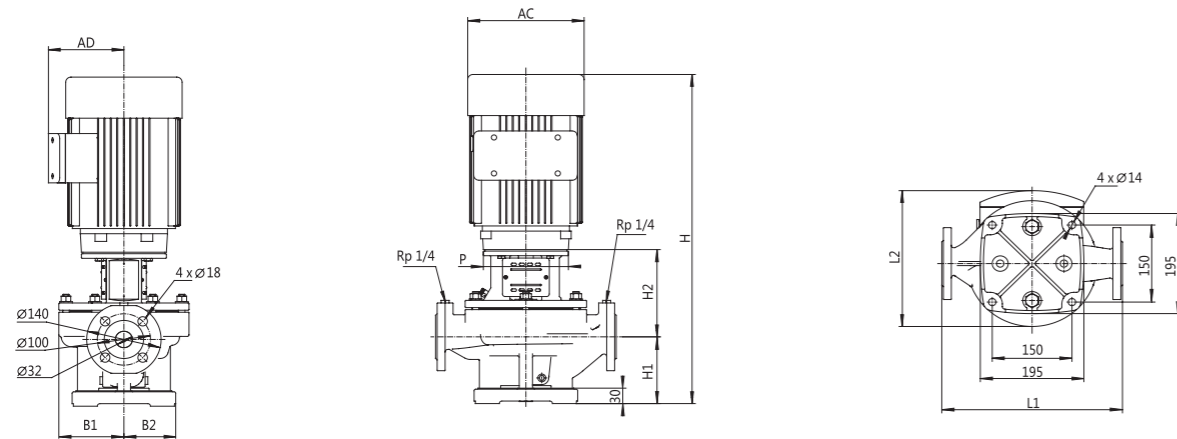
Hydraulic Performance Curves



Hydraulic Performance Curves

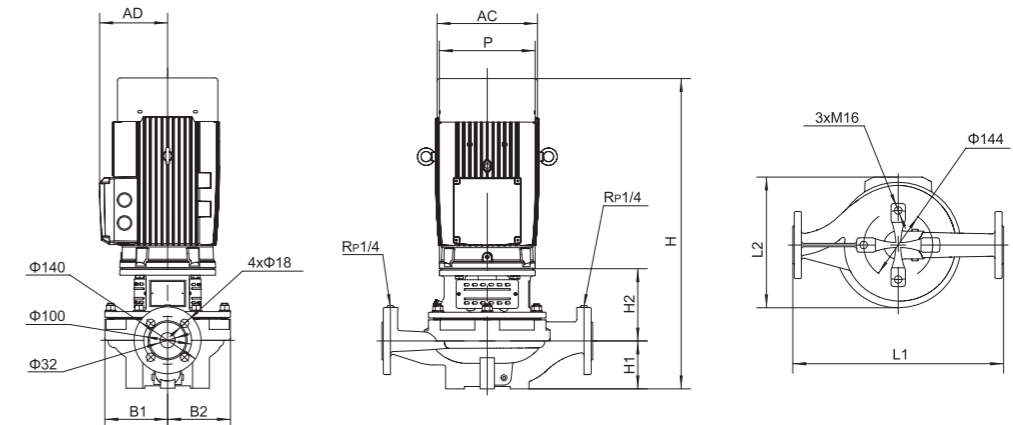


Dimension Drawing



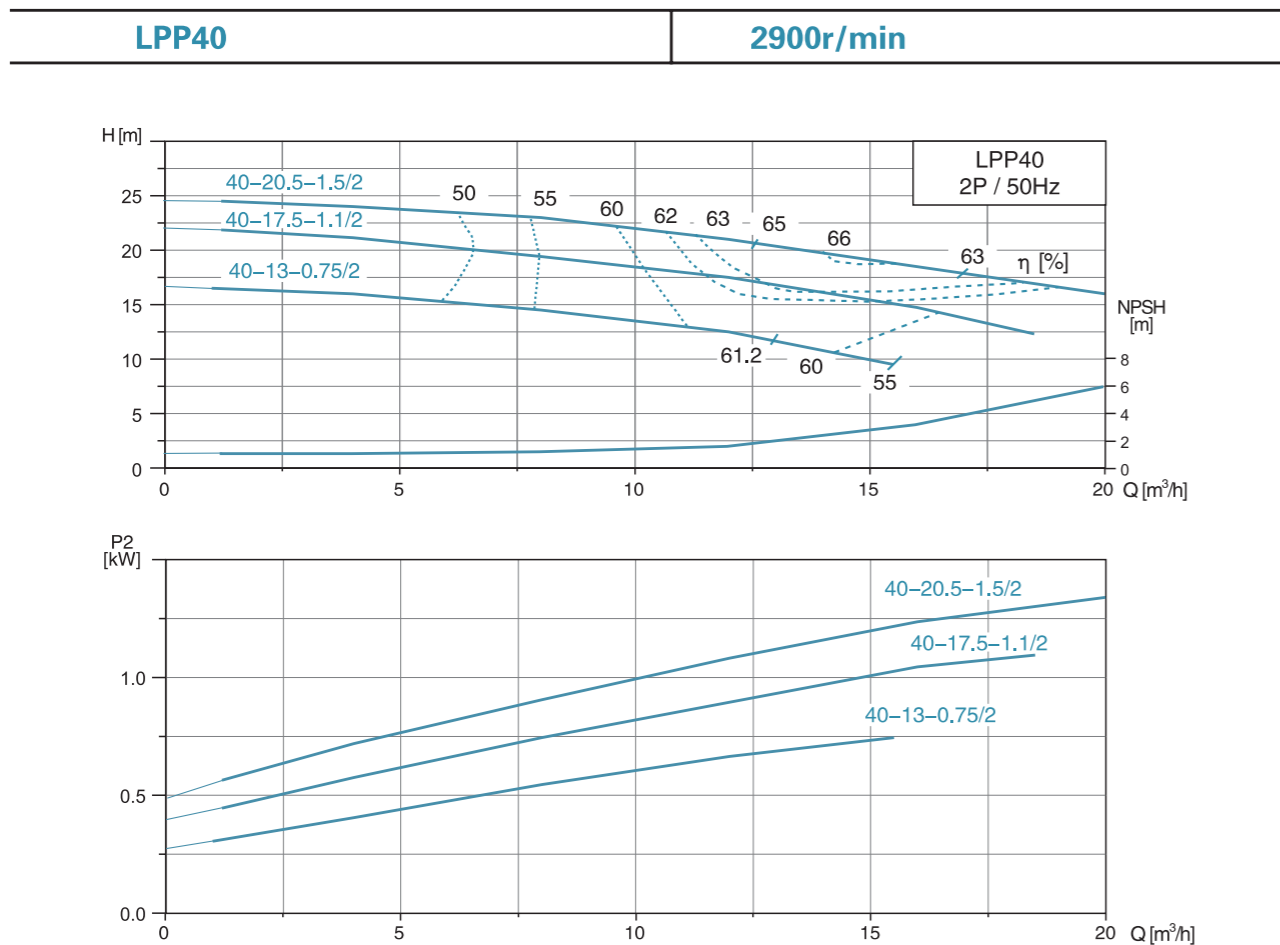
Model	L1 (mm)	L2 (mm)	H (mm)	H1 (mm)	H2 (mm)	B1 (mm)	B2 (mm)	P (mm)	AD (mm)	AC (mm)
LPP32-31-3/2	340	251	626	130	171	123	123	160	128	191
LPP32-26-2.2/2	340	246	601	130	171	123	123	140	115	166
LPP32-21-1.5/2	340	246	601	130	171	123	123	140	115	166
LPP32-16-1.1/2	340	246	556	130	171	123	123	120	96	148

Dimension Drawing

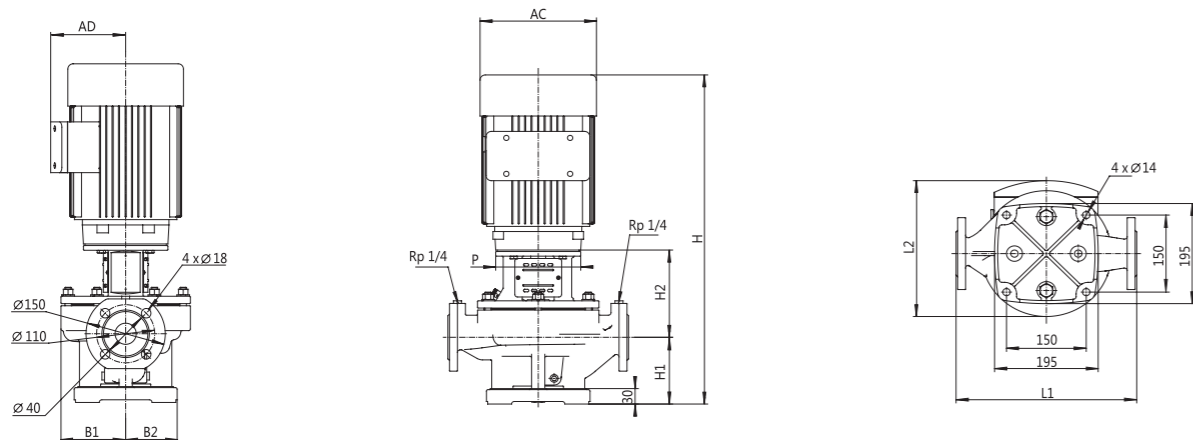


Model	L1 (mm)	L2 (mm)	H (mm)	H1 (mm)	H2 (mm)	B1 (mm)	B2 (mm)	P (mm)	AD (mm)	AC (mm)
LPP32-50-5.5/2	440	274	648	100	151	131	131	200	143	216
LPP32-40-4/2	440	262	606	100	166	131	131	160	119	192

Hydraulic Performance Curves

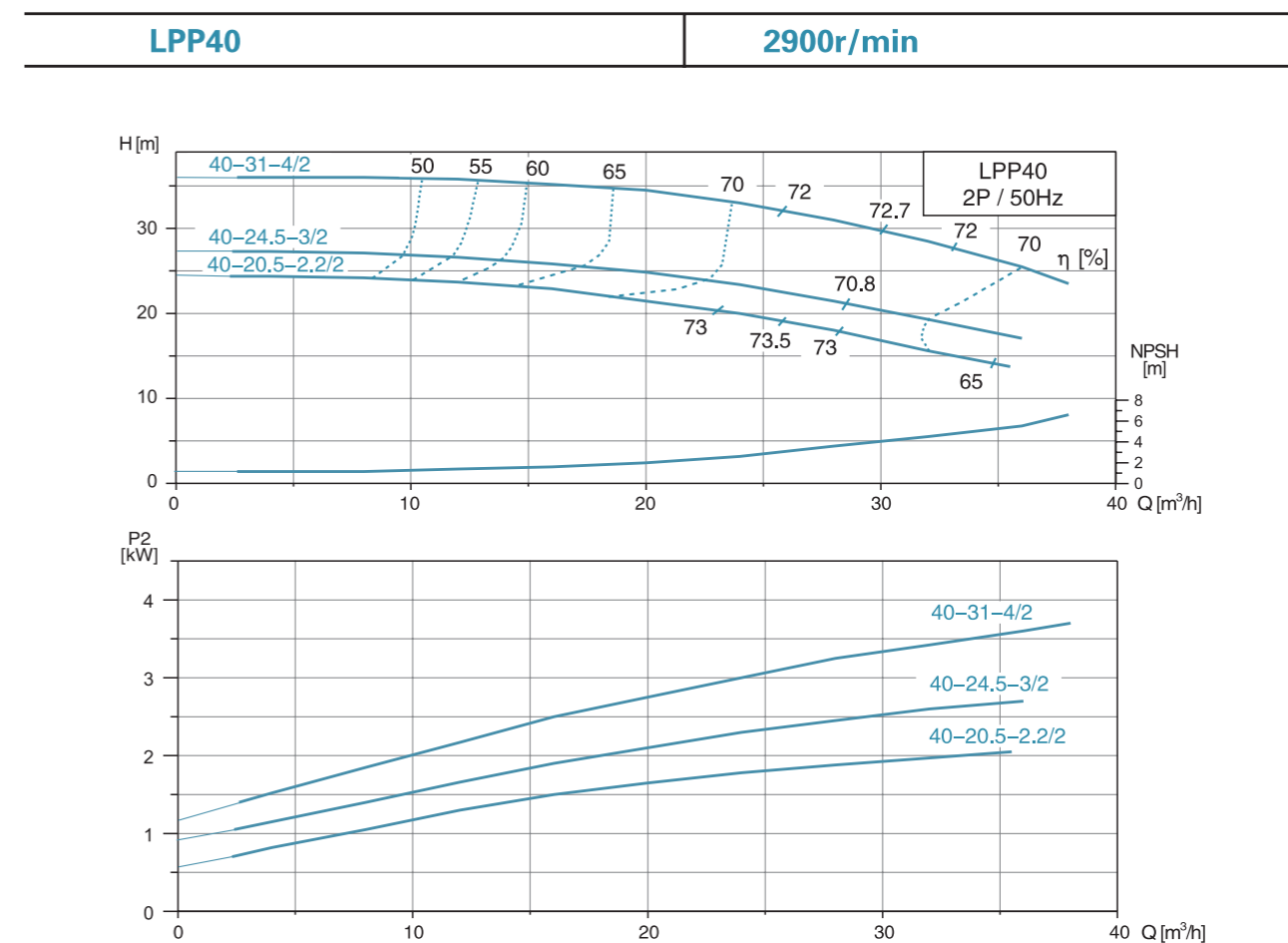


Dimension Drawing

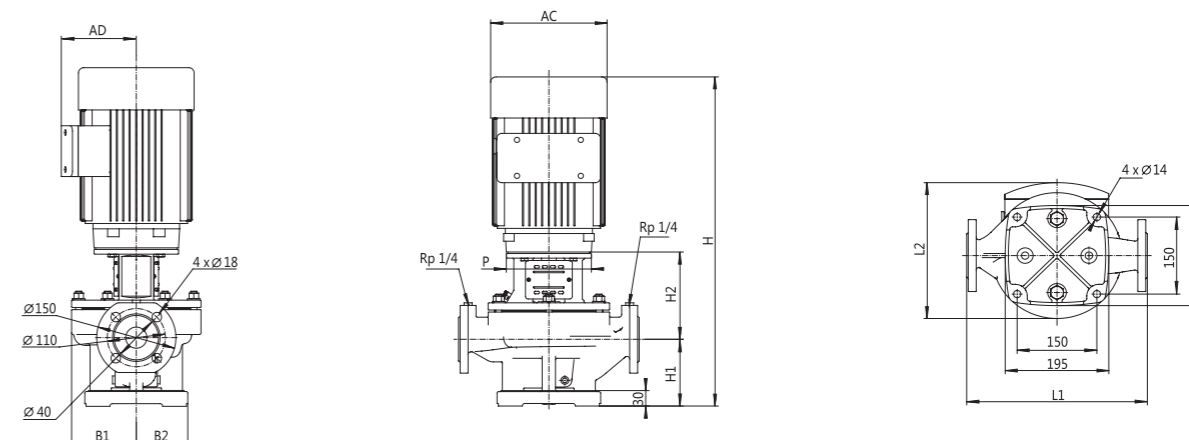


Model	L1 (mm)	L2 (mm)	H (mm)	H1 (mm)	H2 (mm)	B1 (mm)	B2 (mm)	P (mm)	AD (mm)	AC (mm)
LPP40-20.5-1.5/2	340	246	591	130	161	123	123	140	115	166
LPP40-17.5-1.1/2	340	246	546	130	161	123	123	120	96	148
LPP40-13-0.75/2	340	246	546	130	161	123	123	120	96	148

Hydraulic Performance Curves

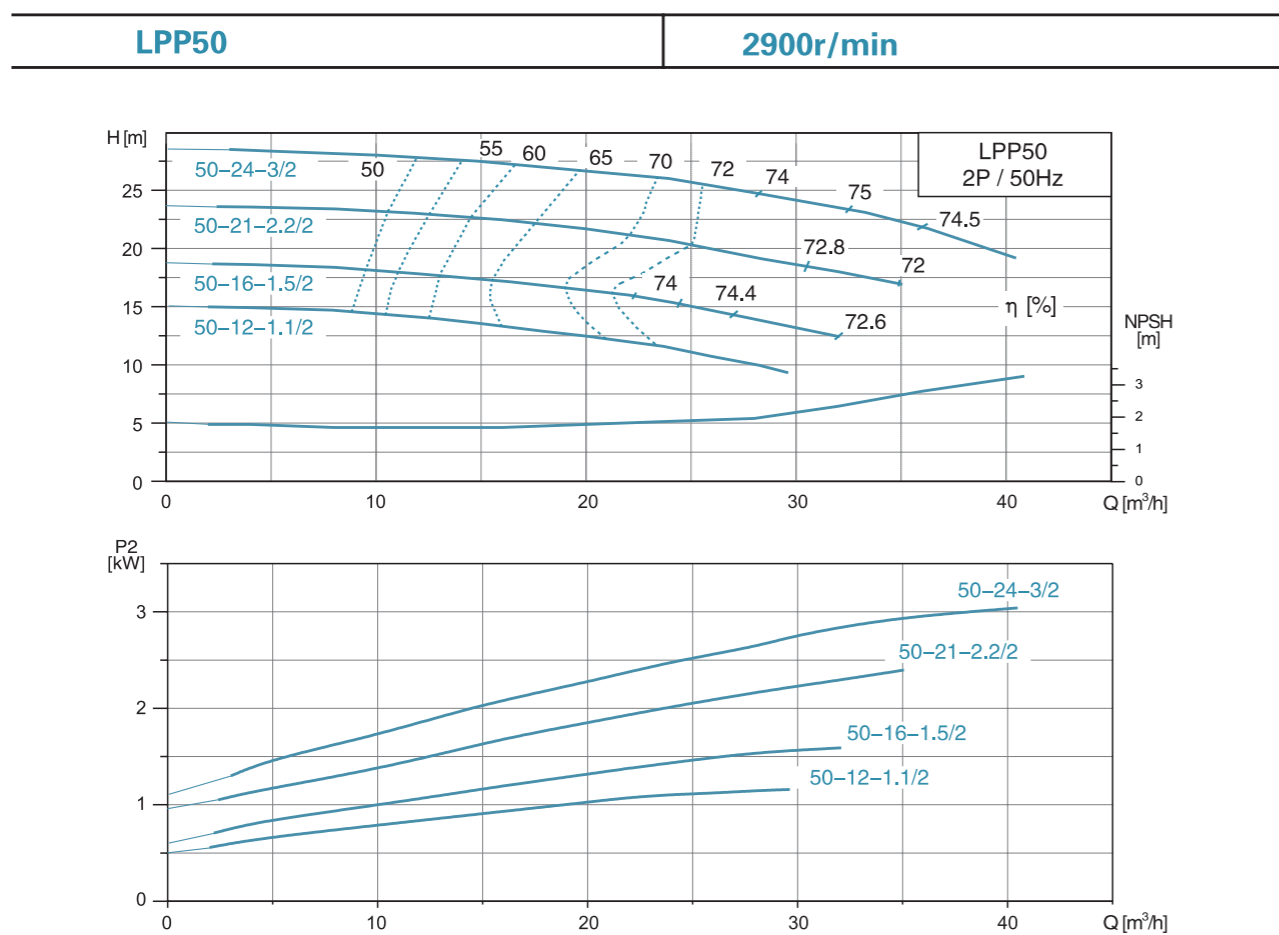


Dimension Drawing

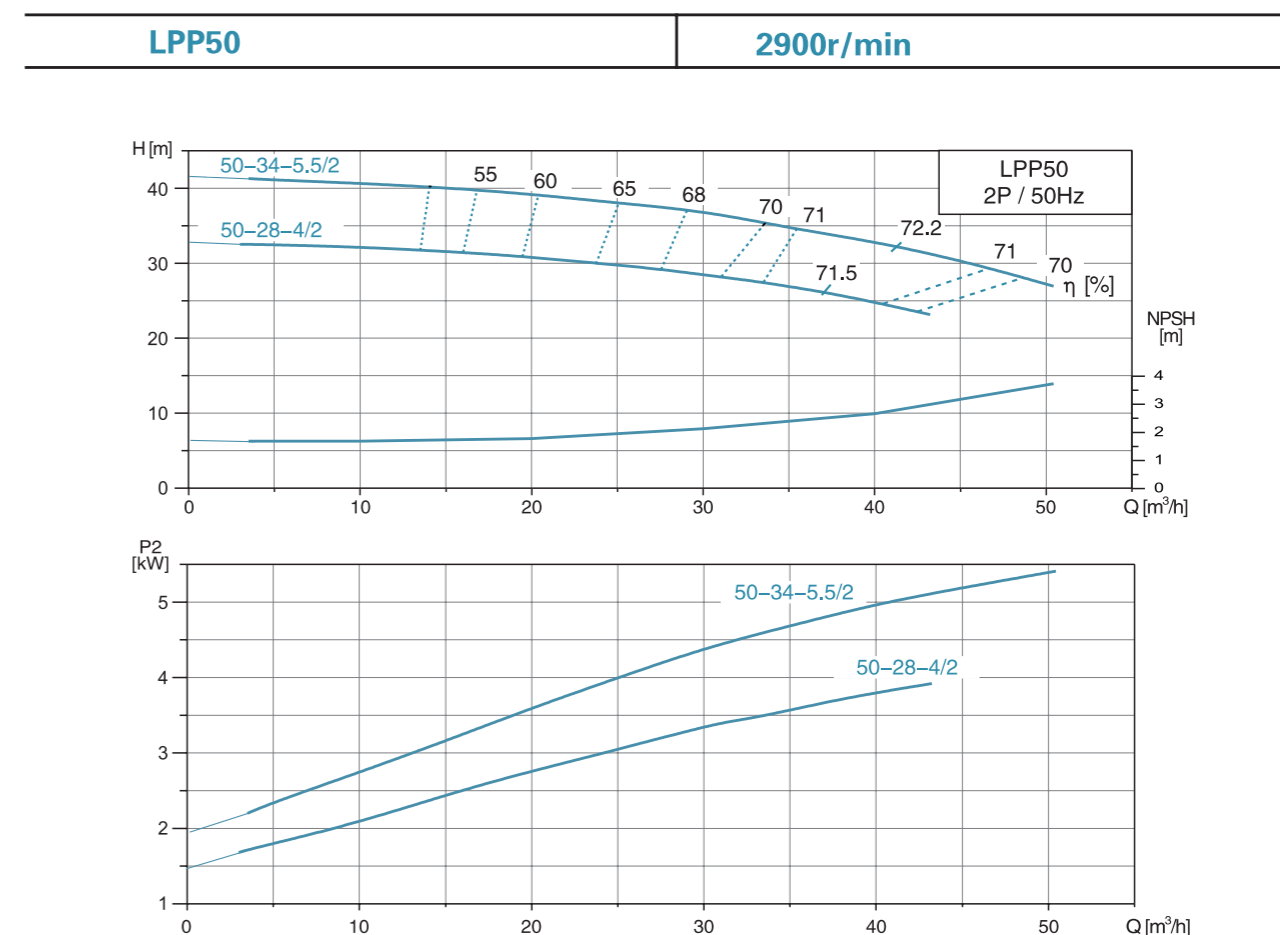


Model	L1 (mm)	L2 (mm)	H (mm)	H1 (mm)	H2 (mm)	B1 (mm)	B2 (mm)	P (mm)	AD (mm)	AC (mm)
LPP40-31-4/2	340	263	655	130	170	123	123	160	140	212
LPP40-24.5-3/2	340	246	625	130	170	123	123	160	115	191
LPP40-20.5-2.2/2	340	246	600	130	170	123	123	140	115	166

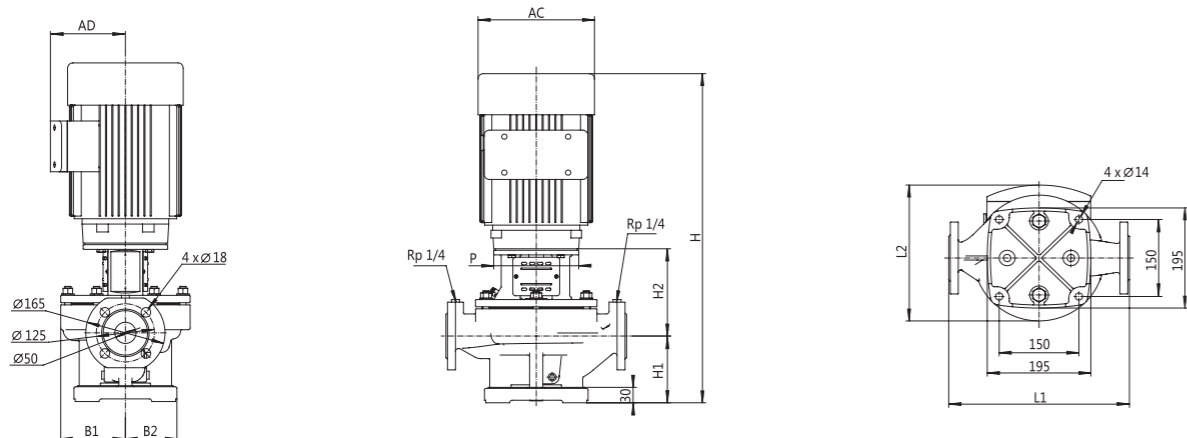
Hydraulic Performance Curves



Hydraulic Performance Curves

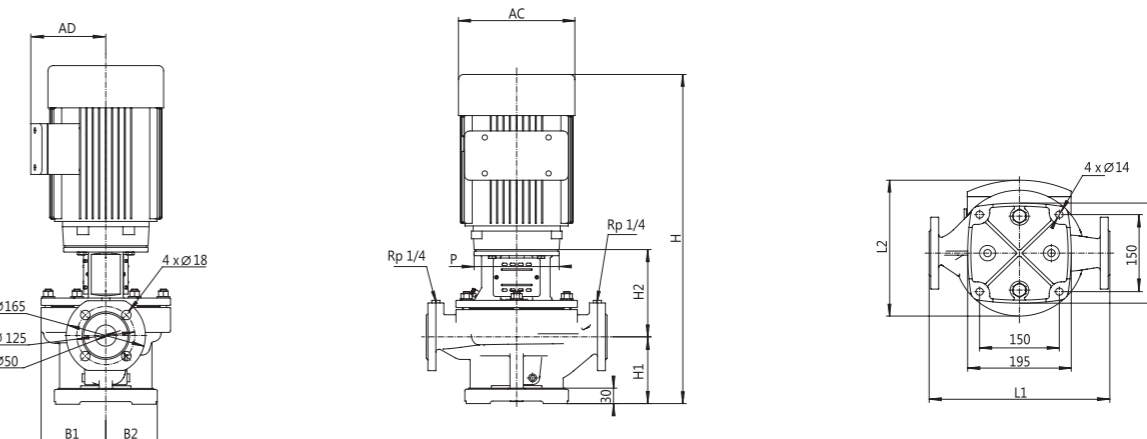


Dimension Drawing



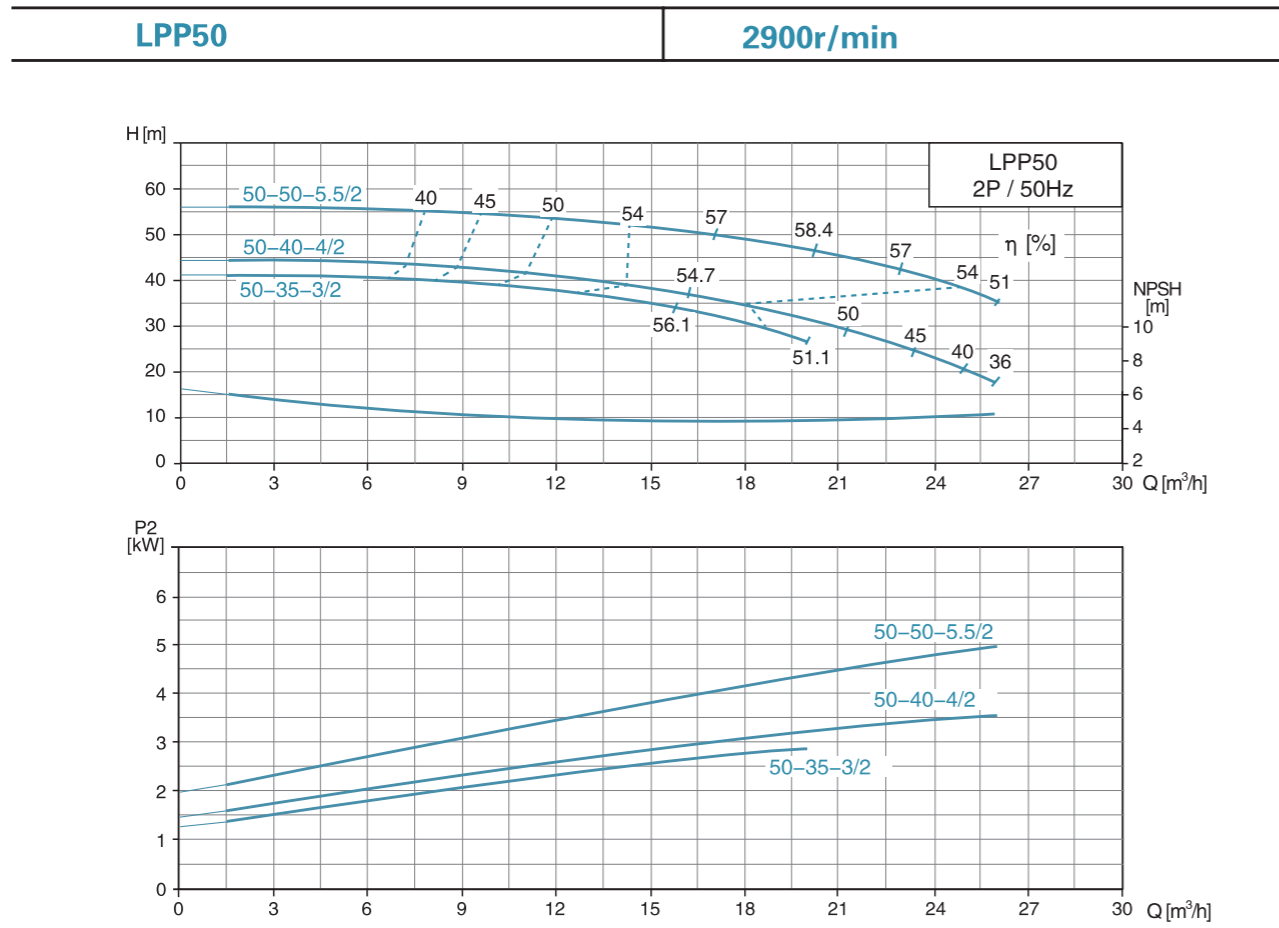
Model	L1 (mm)	L2 (mm)	H (mm)	H1 (mm)	H2 (mm)	B1 (mm)	B2 (mm)	P (mm)	AD (mm)	AC (mm)
LPP50-24-3/2	340	251	648	145	178	123	123	160	128	191
LPP50-21-2.2/2	340	246	623	145	178	123	123	140	115	166
LPP50-16-1.5/2	340	246	623	145	178	123	123	140	115	166
LPP50-12-1.1/2	340	246	578	145	178	123	123	120	96	148

Dimension Drawing

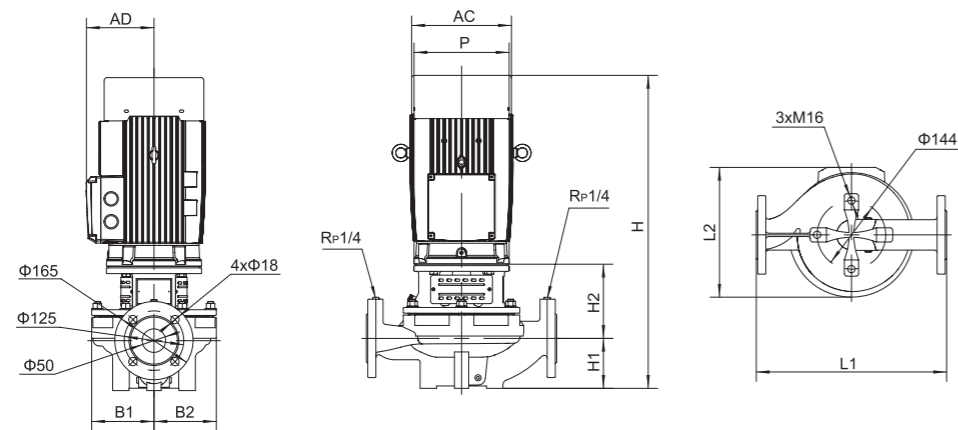


Model	L1 (mm)	L2 (mm)	H (mm)	H1 (mm)	H2 (mm)	B1 (mm)	B2 (mm)	P (mm)	AD (mm)	AC (mm)
LPP50-34-5.5/2	340	292	747	145	172	129	123	200	163	258
LPP50-28-4/2	340	263	687	145	187	129	123	160	140	212

Hydraulic Performance Curves

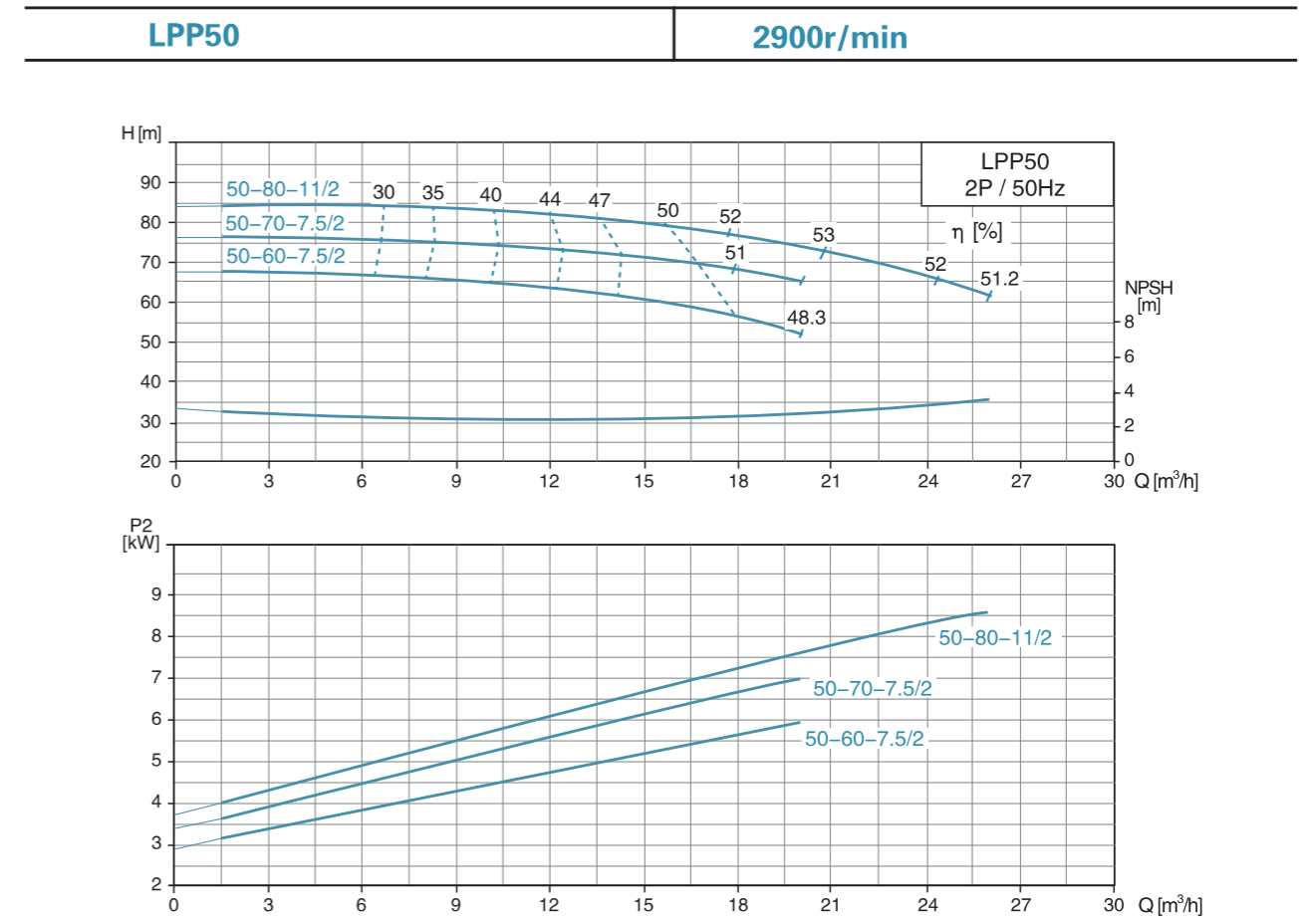


Dimension Drawing

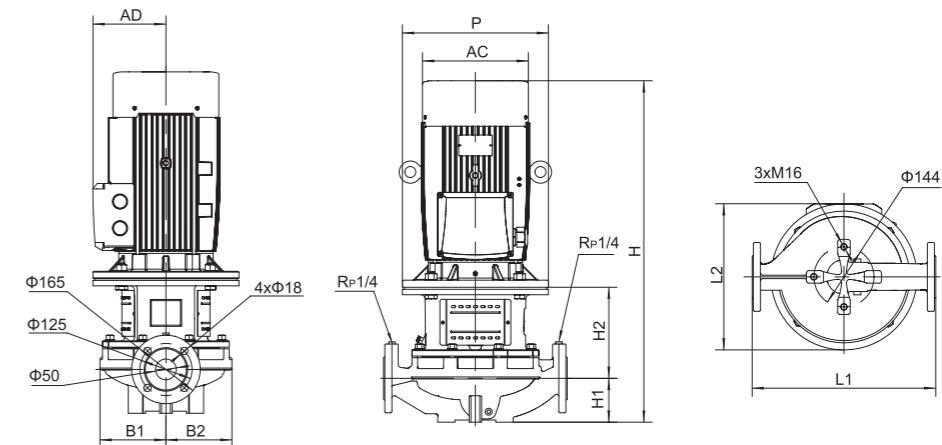


Model	L1 (mm)	L2 (mm)	H (mm)	H1 (mm)	H2 (mm)	B1 (mm)	B2 (mm)	P (mm)	AD (mm)	AC (mm)
LPP50-50-5.5/2	400	274	658	105	156	131	131	200	143	216
LPP50-40-4/2	400	262	616	105	171	131	131	160	119	192
LPP50-35-3/2	400	262	616	105	171	131	131	160	119	192

Hydraulic Performance Curves

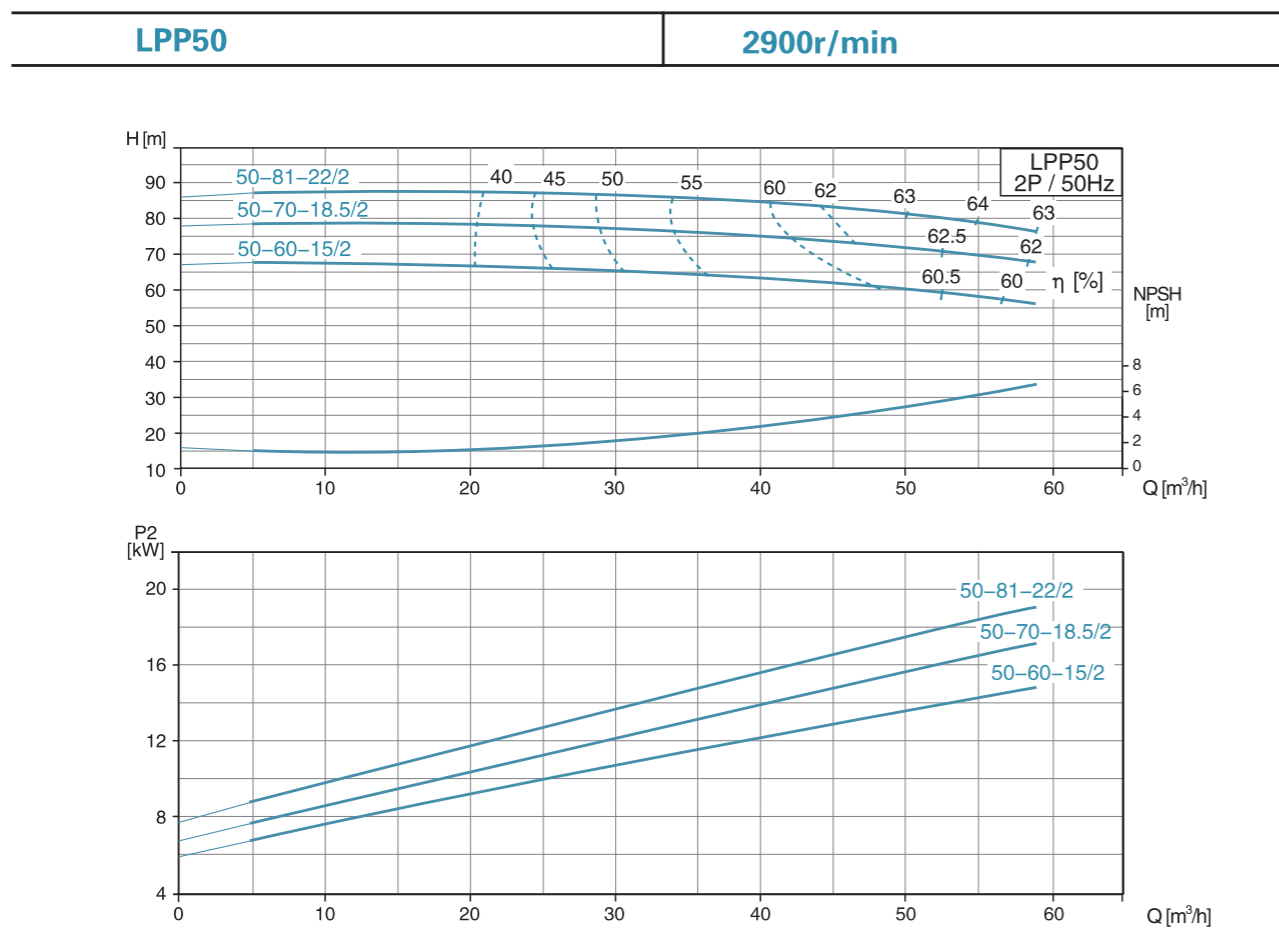


Dimension Drawing

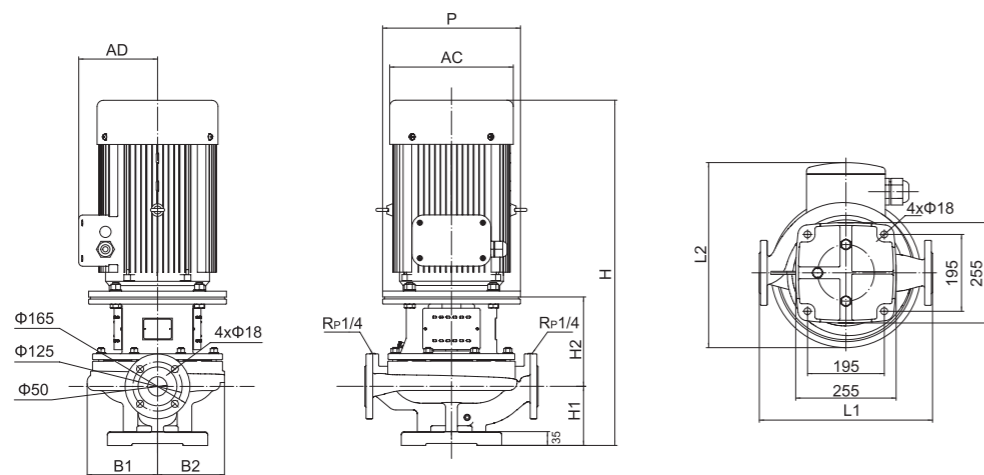


Model	L1 (mm)	L2 (mm)	H (mm)	H1 (mm)	H2 (mm)	B1 (mm)	B2 (mm)	P (mm)	AD (mm)	AC (mm)
LPP50-80-11/2	440	351	817	105	218.5	158	158	350	176	253
LPP50-70-7.5/2	440	316	681	105	178.5	158	158	300	158	210
LPP50-60-7.5/2	440	316	681	105	178.5	158	158	300	158	210

Hydraulic Performance Curves

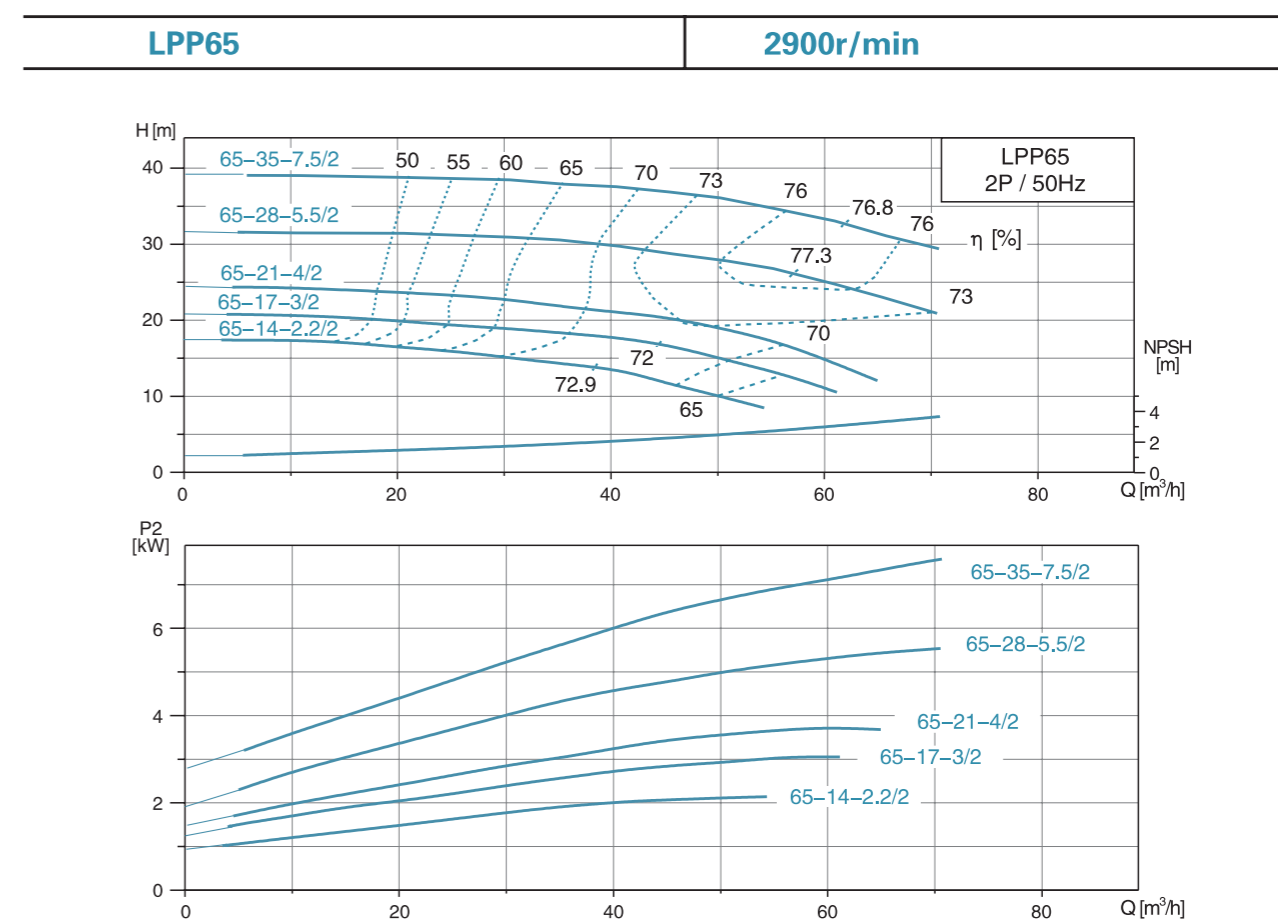


Dimension Drawing

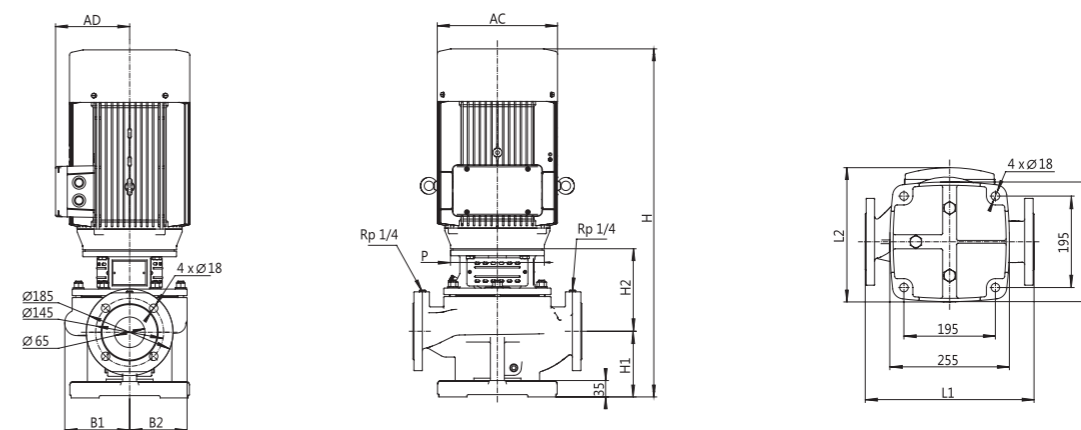


Model	L1 (mm)	L2 (mm)	H (mm)	H1 (mm)	H2 (mm)	B1 (mm)	B2 (mm)	P (mm)	AD (mm)	AC (mm)
LPP50-81-22/2	440	470	1007	150	227	179	170	350	280	380
LPP50-70-18.5/2	440	425	967	150	227	179	170	350	280	380
LPP50-60-15/2	440	425	967	150	227	179	170	350	280	380

Hydraulic Performance Curves

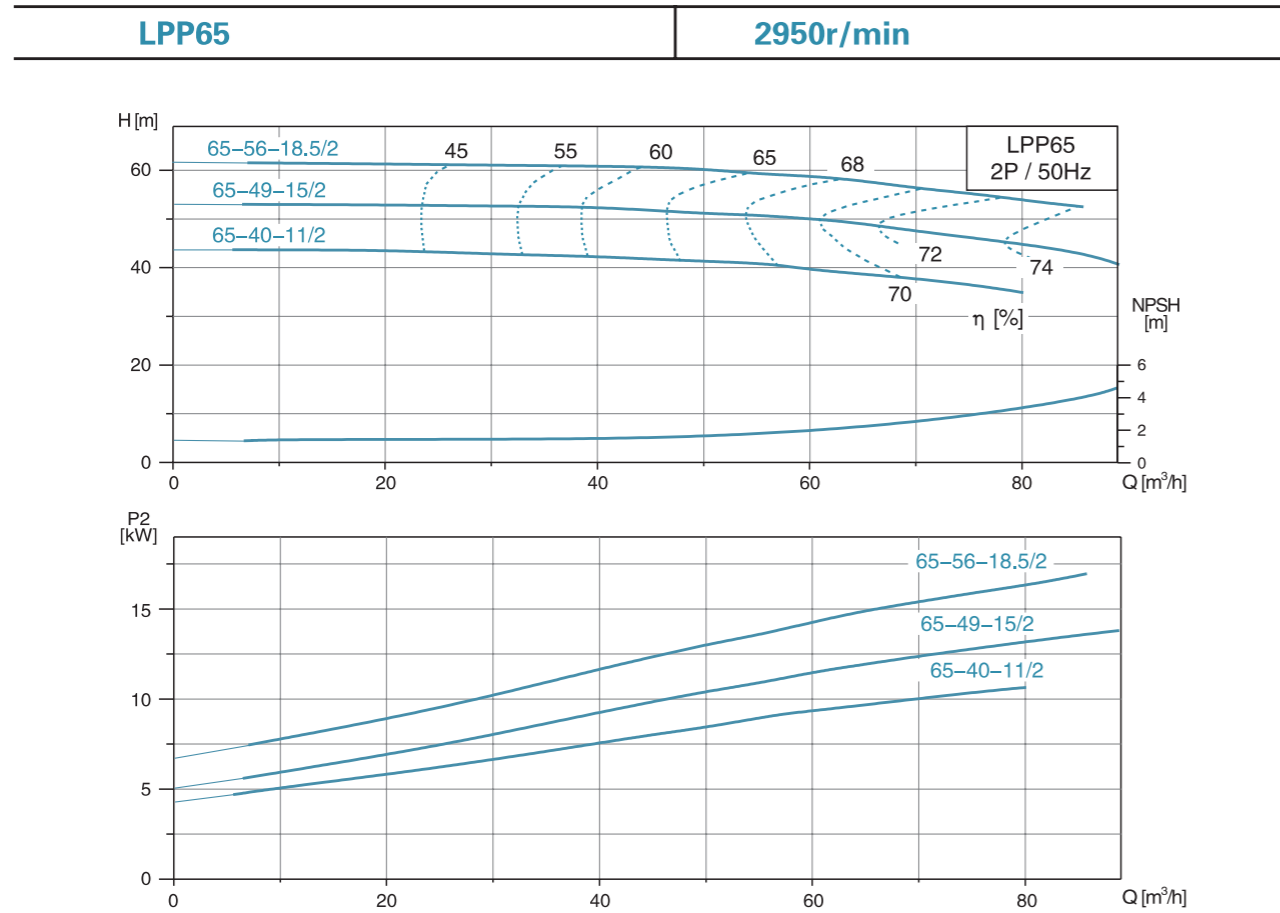


Dimension Drawing

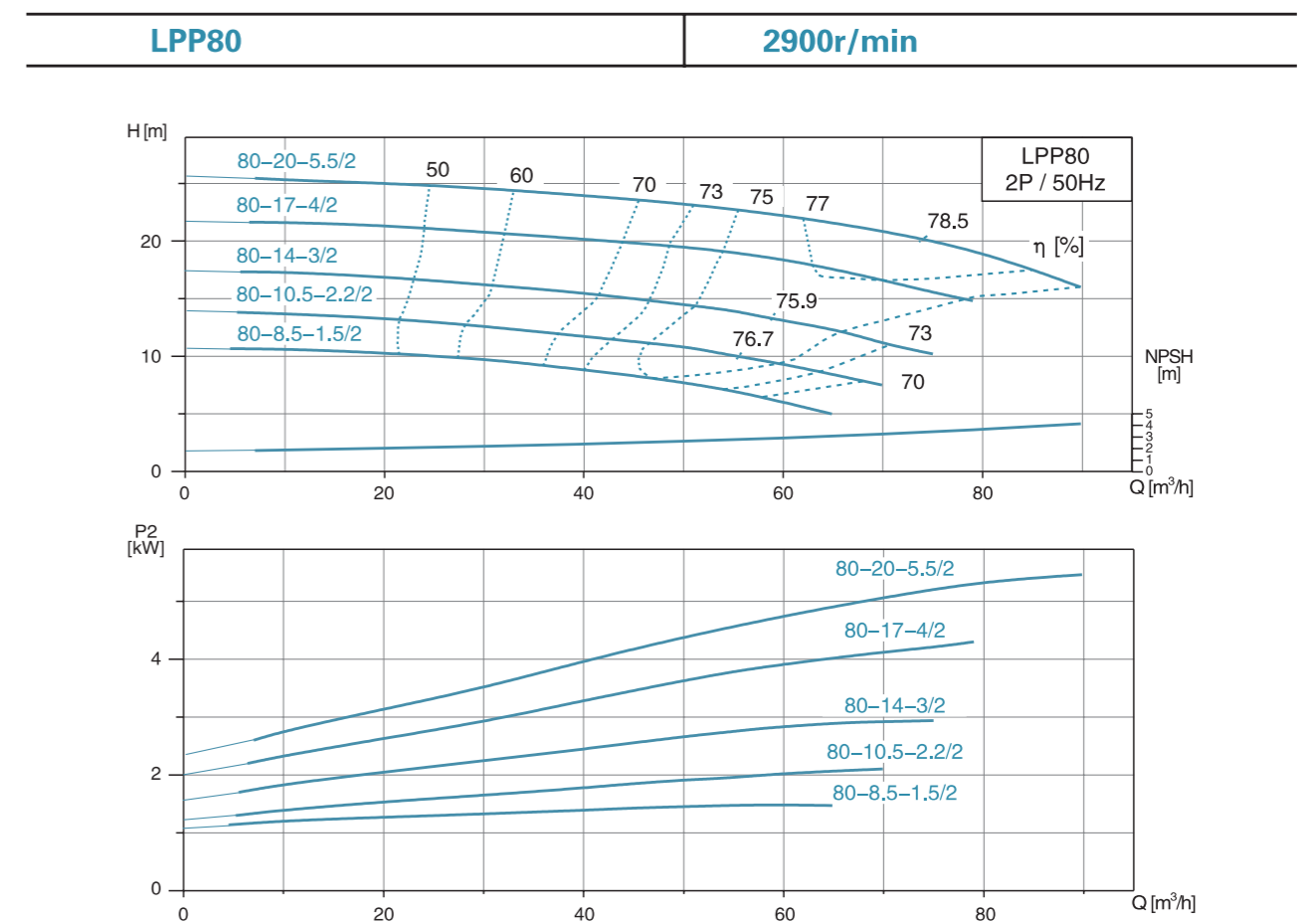


Model	L1 (mm)	L2 (mm)	H (mm)	H1 (mm)	H2 (mm)	B1 (mm)	B2 (mm)	P (mm)	AD (mm)	AC (mm)
LPP65-35-7.5/2	360	292	841	140	176	138	123	200	163	258
LPP65-28-5.5/2	360	292	841	140	176	138	123	200	163	258
LPP65-21-4/2	360	268	668	140	191	138	123	160	140	212
LPP65-17-3/2	360	266	636	140	191	138	123	160	128	191
LPP65-14-2.2/2	360	266	611	140	191	138	123	140	115	166

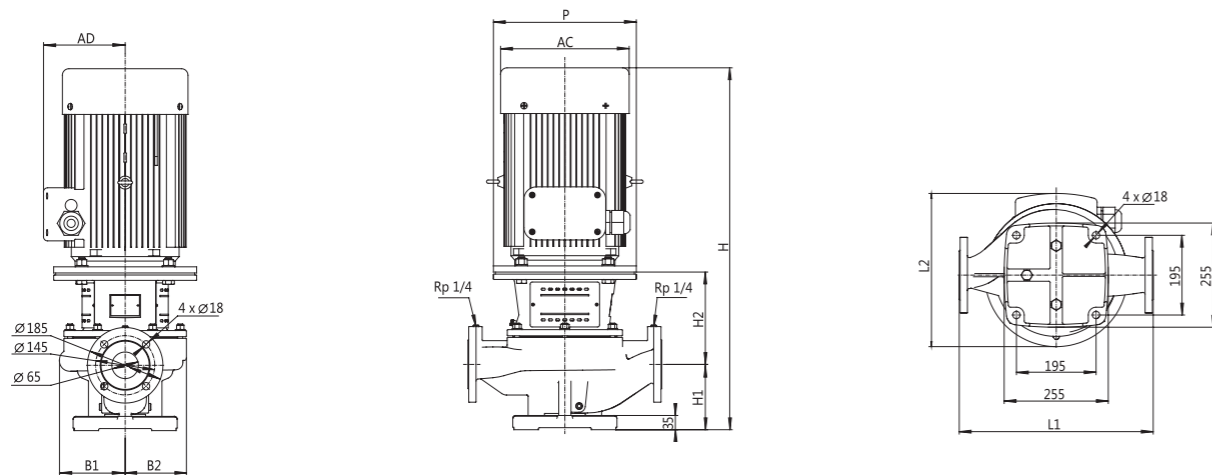
Hydraulic Performance Curves



Hydraulic Performance Curves

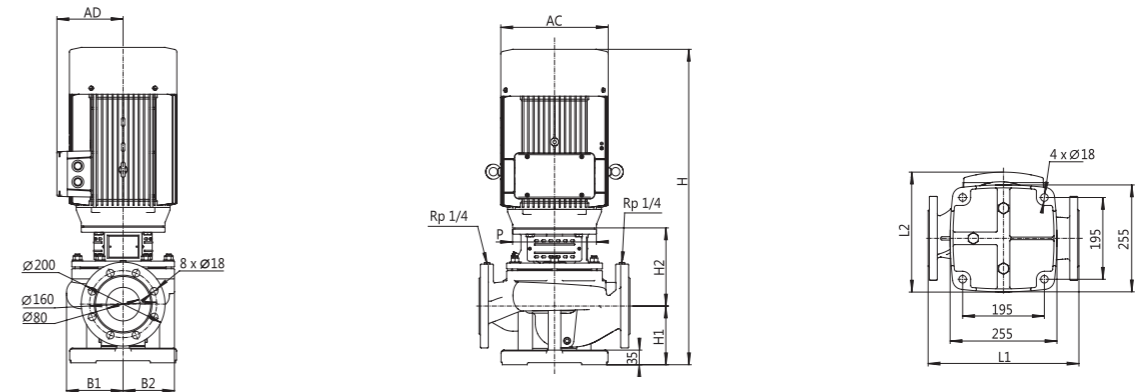


Dimension Drawing



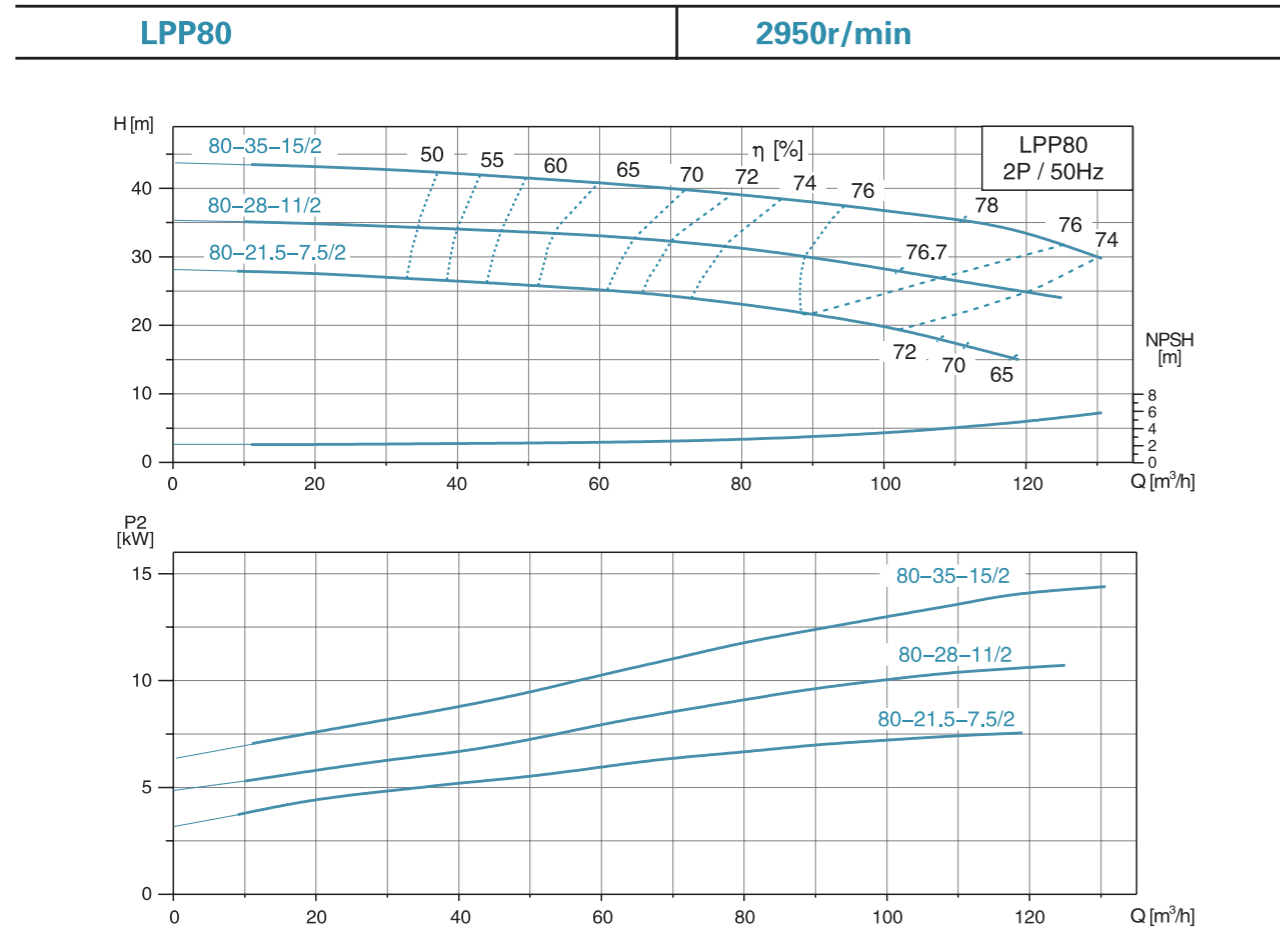
Model	L1 (mm)	L2 (mm)	H (mm)	H1 (mm)	H2 (mm)	B1 (mm)	B2 (mm)	P (mm)	AD (mm)	AC (mm)
LPP65-56-18.5/2	475	426	928	160	226	161	145	350	251	314
LPP65-49-15/2	475	426	884	160	226	161	145	350	251	314
LPP65-40-11/2	475	426	884	160	226	161	145	350	251	314

Dimension Drawing

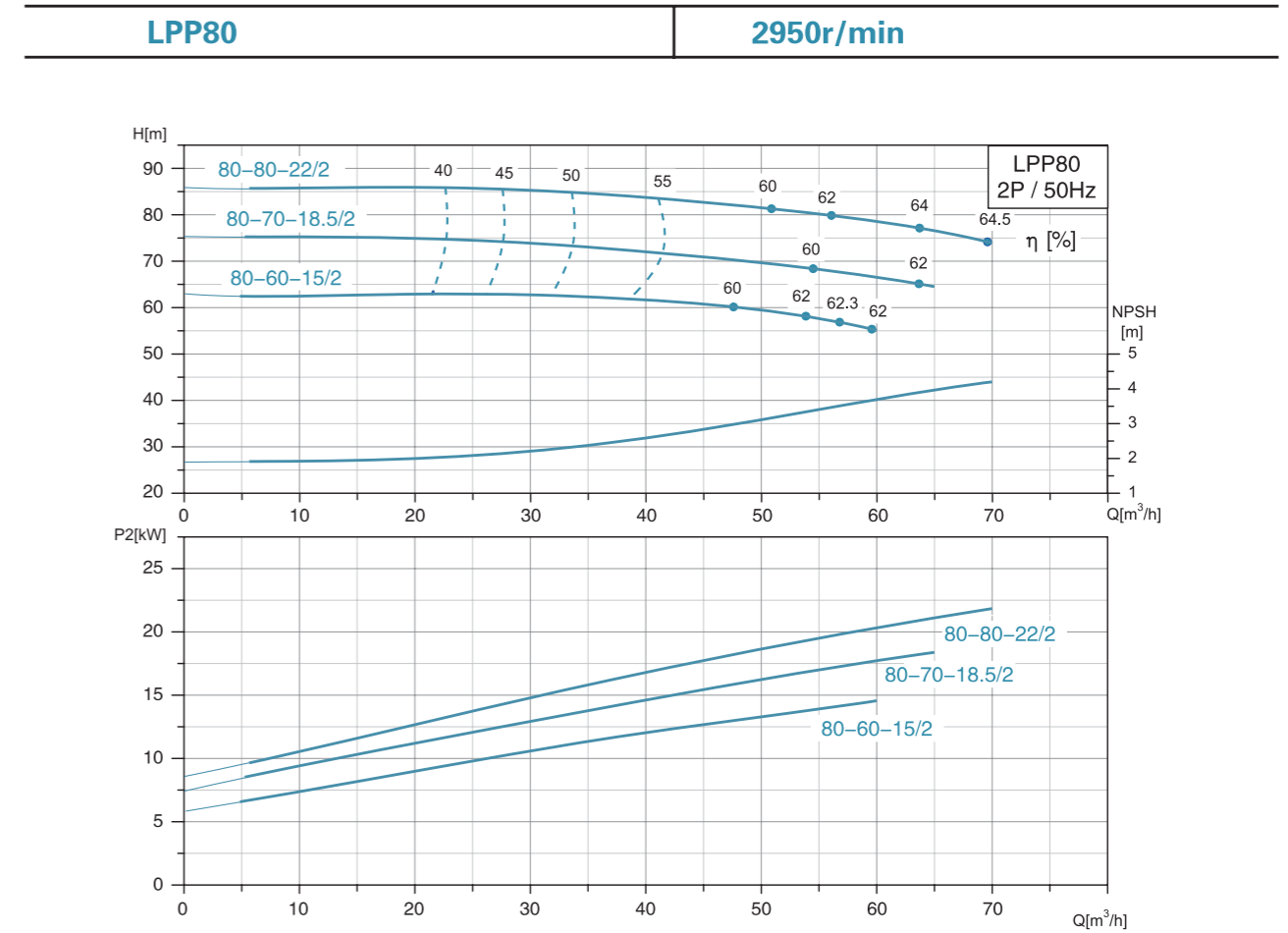


Model	L1 (mm)	L2 (mm)	H (mm)	H1 (mm)	H2 (mm)	B1 (mm)	B2 (mm)	P (mm)	AD (mm)	AC (mm)
LPP80-21-5.5/2	360	292	756.5	140	186.5	135	124	200	163	258
LPP80-17-4/2	360	268	697	140	202	135	124	160	140	212
LPP80-14-3/2	360	263	667	140	202	135	124	160	128	191
LPP80-10.5-2.2/2	360	263	642	140	202	135	124	140	115	166
LPP80-8.5-1.5/2	360	263	642	140	202	135	124	140	115	166

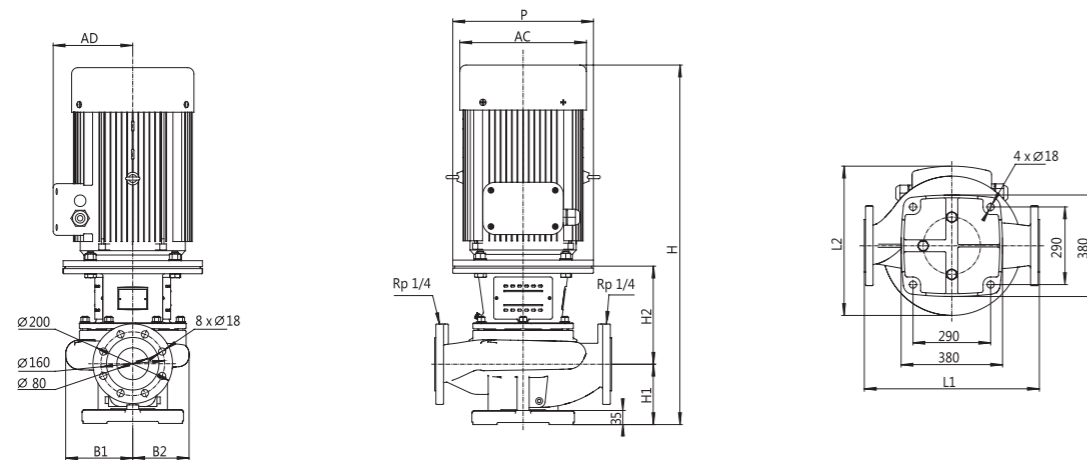
Hydraulic Performance Curves



Hydraulic Performance Curves

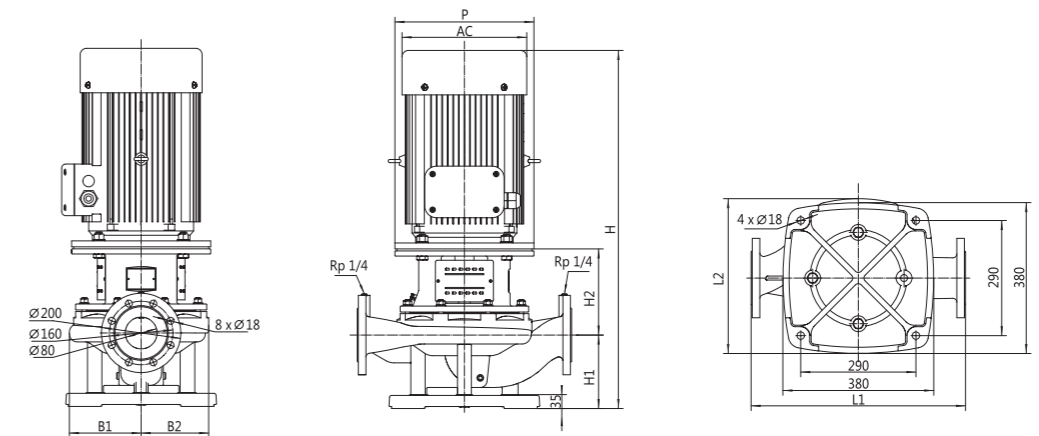


Dimension Drawing



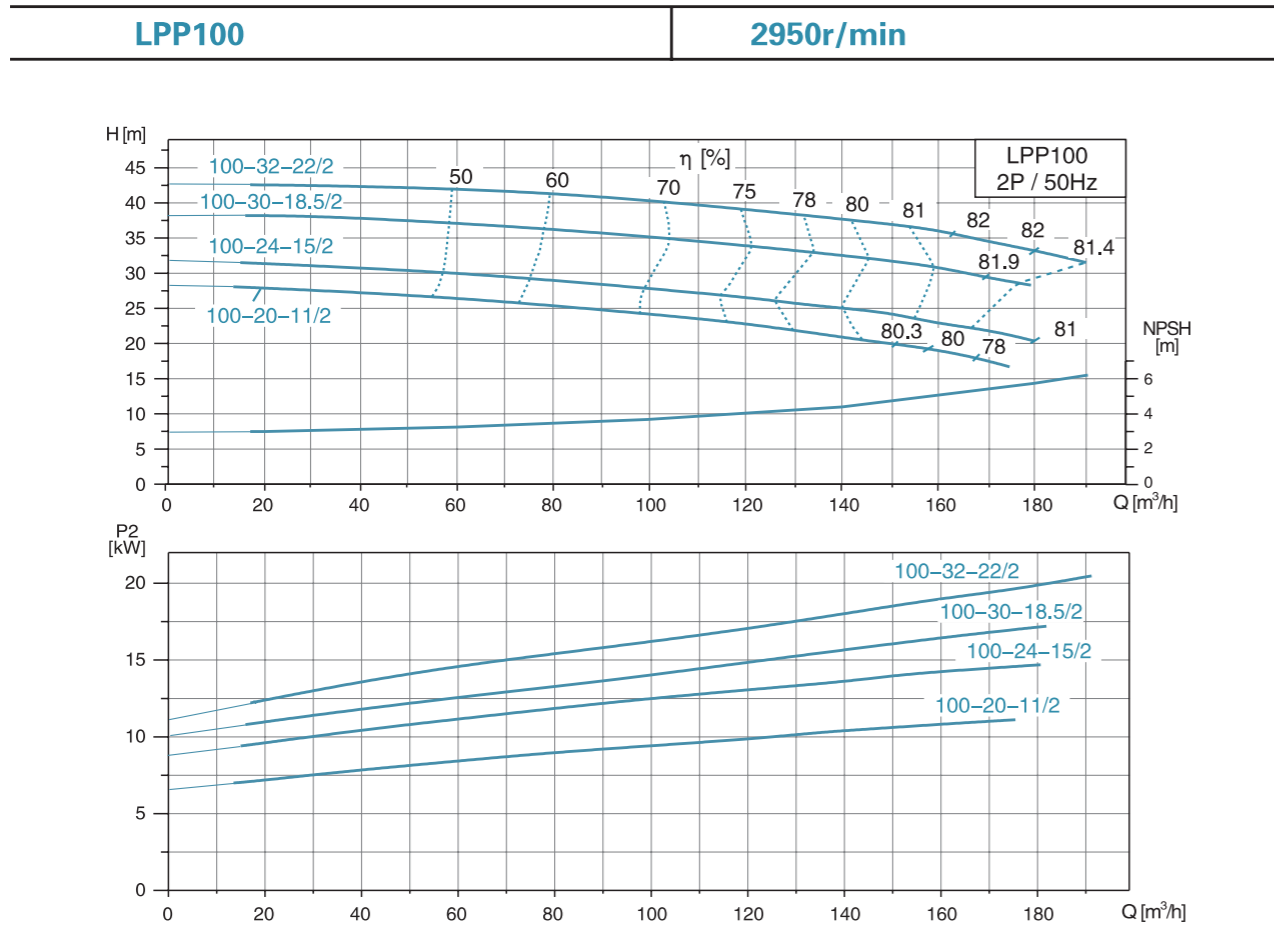
Model	L1 (mm)	L2 (mm)	H (mm)	H1 (mm)	H2 (mm)	B1 (mm)	B2 (mm)	P (mm)	AD (mm)	AC (mm)
LPP80-35-15/2	440	426	892	150	244	169	142	350	251	314
LPP80-28-11/2	440	426	892	150	244	169	142	350	251	314
LPP80-21.5-7.5/2	440	343	759	150	214	169	142	300	203	258

Dimension Drawing

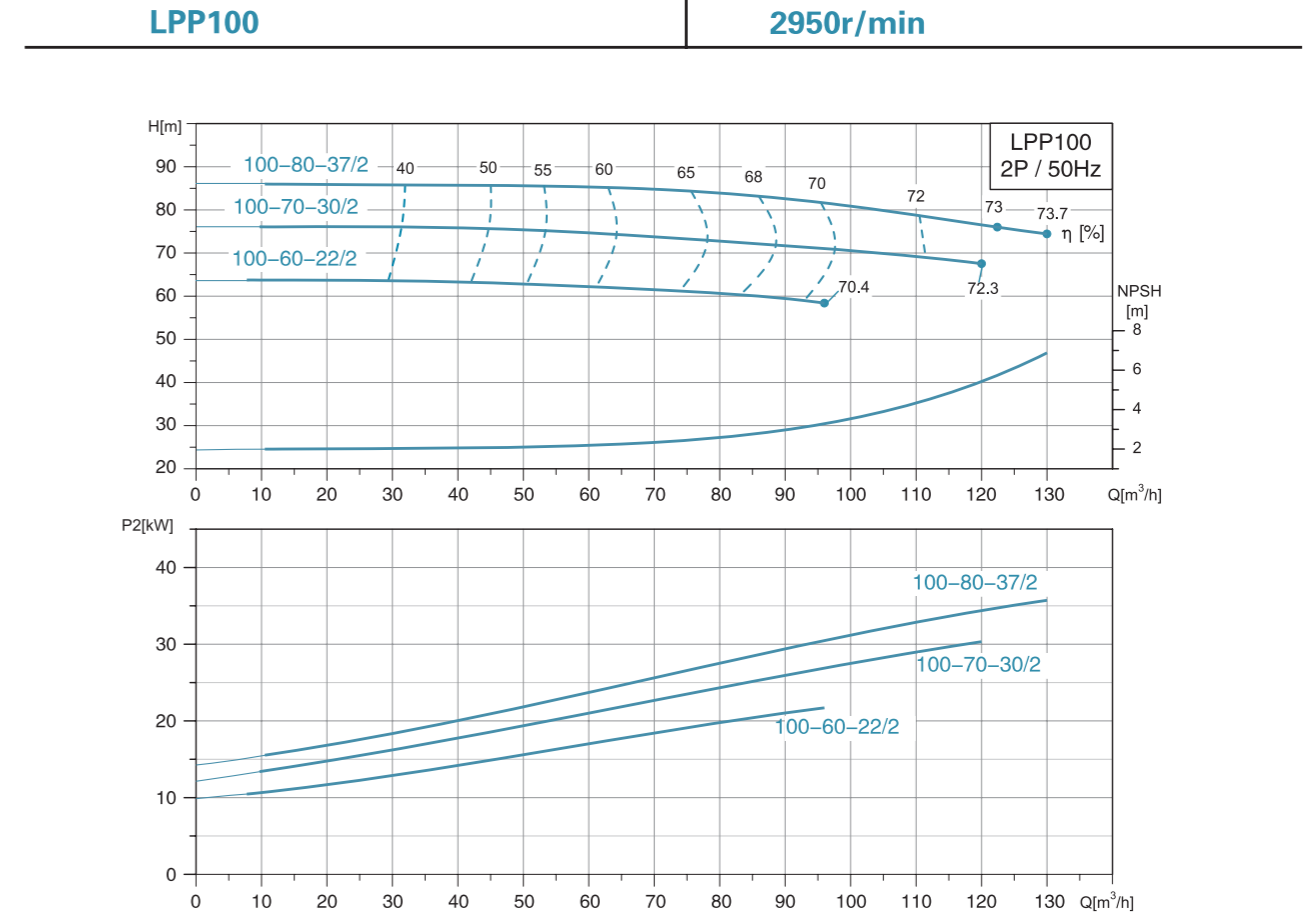


Model	L1 (mm)	L2 (mm)	H (mm)	H1 (mm)	H2 (mm)	B1 (mm)	B2 (mm)	P (mm)	AD (mm)	AC (mm)
LPP80-80-22/2	540	470	1032	185	217	181	170	350	280	380
LPP80-70-18.5/2	540	445	962	185	217	181	170	350	255	330
LPP80-60-15/2	540	440	907	185	217	181	170	350	250	330

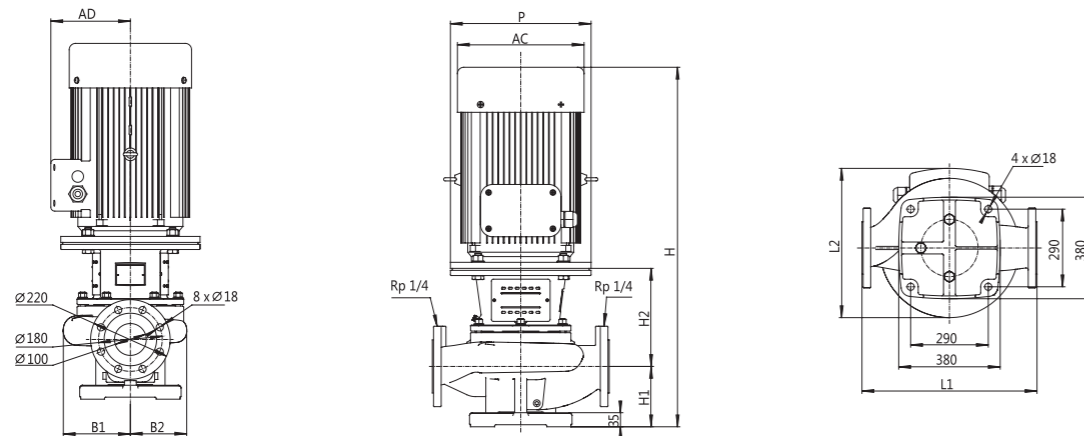
Hydraulic Performance Curves



Hydraulic Performance Curves

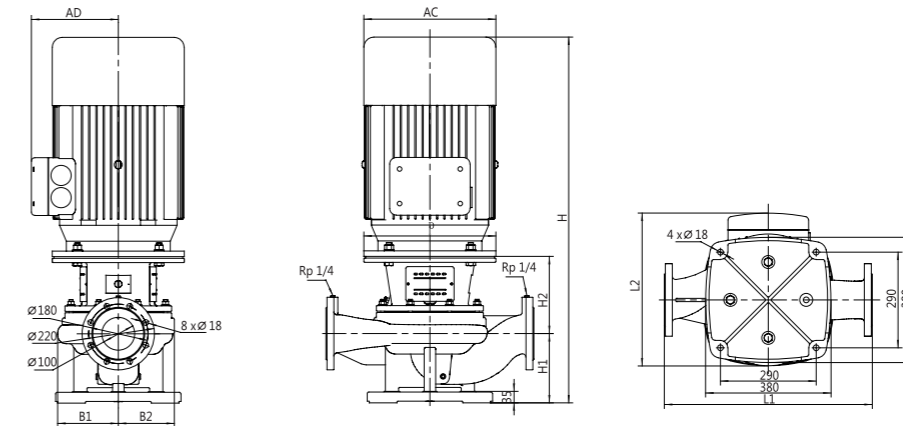


Dimension Drawing



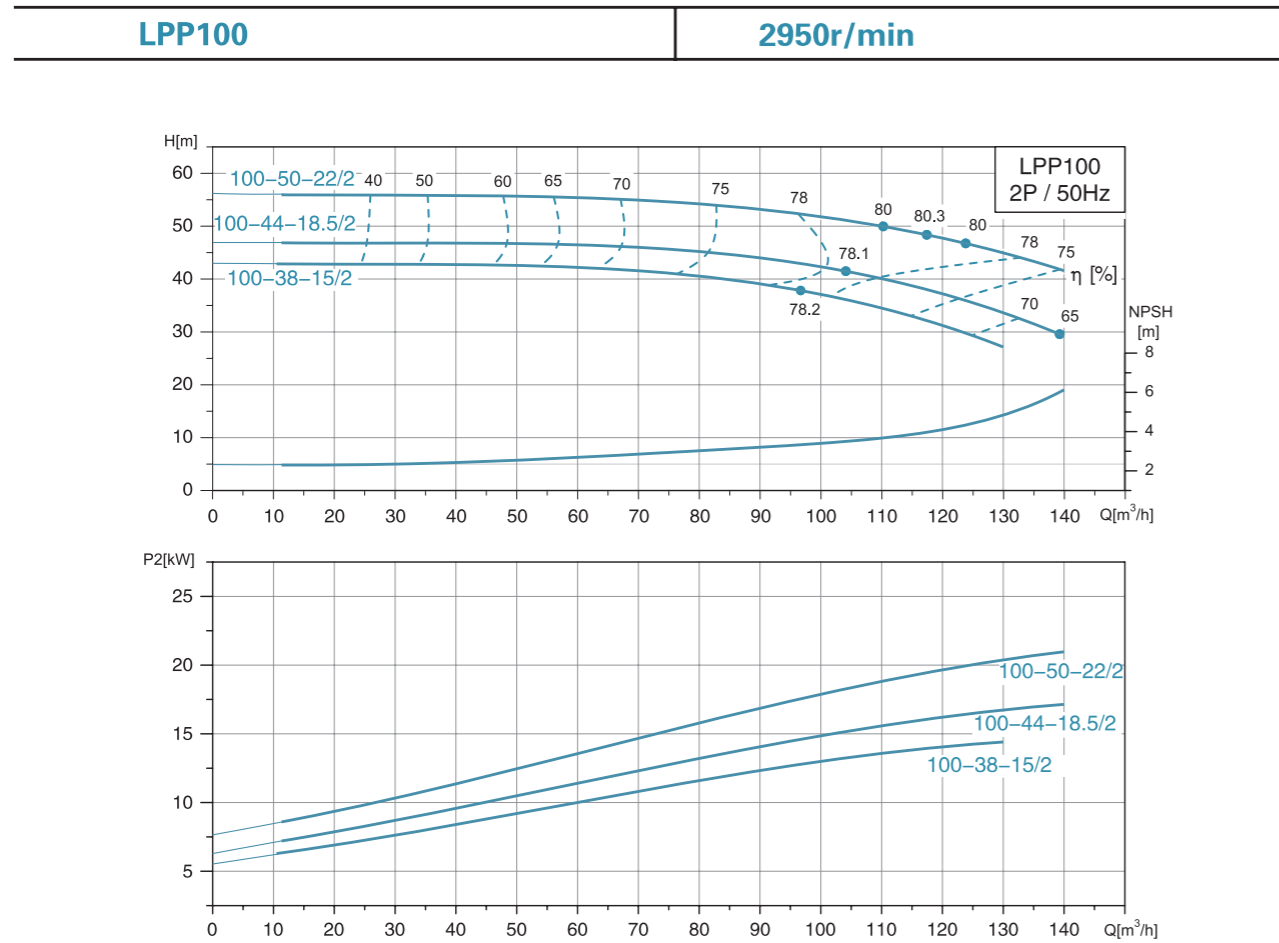
Model	L1 (mm)	L2 (mm)	H (mm)	H1 (mm)	H2 (mm)	B1 (mm)	B2 (mm)	P (mm)	AD (mm)	AC (mm)
LPP100-32-22/2	500	457	1025	175	272	183	144	350	267	355
LPP100-30-18.5/2	500	441	989	175	272	183	144	350	251	314
LPP100-24-15/2	500	441	945	175	272	183	144	350	251	314
LPP100-20-11/2	500	441	945	175	272	183	144	350	251	314

Dimension Drawing

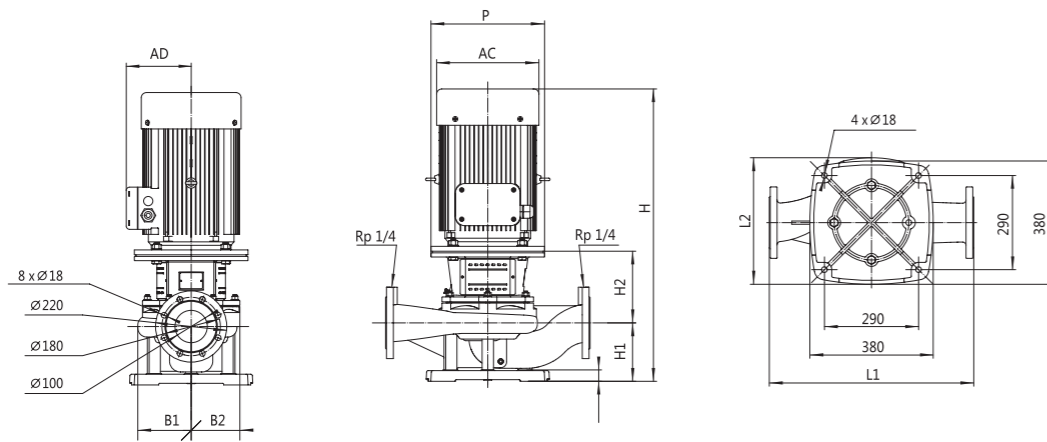


Model	L1 (mm)	L2 (mm)	H (mm)	H1 (mm)	H2 (mm)	B1 (mm)	B2 (mm)	P (mm)	AD (mm)	AC (mm)
LPP100-80-37/2	630	515	1104	210	234	184	170	400	305	420
LPP100-70-30/2	630	515	1104	210	234	184	170	400	305	420
LPP100-60-22/2	630	470	1067	210	227	184	170	350	280	380

Hydraulic Performance Curves

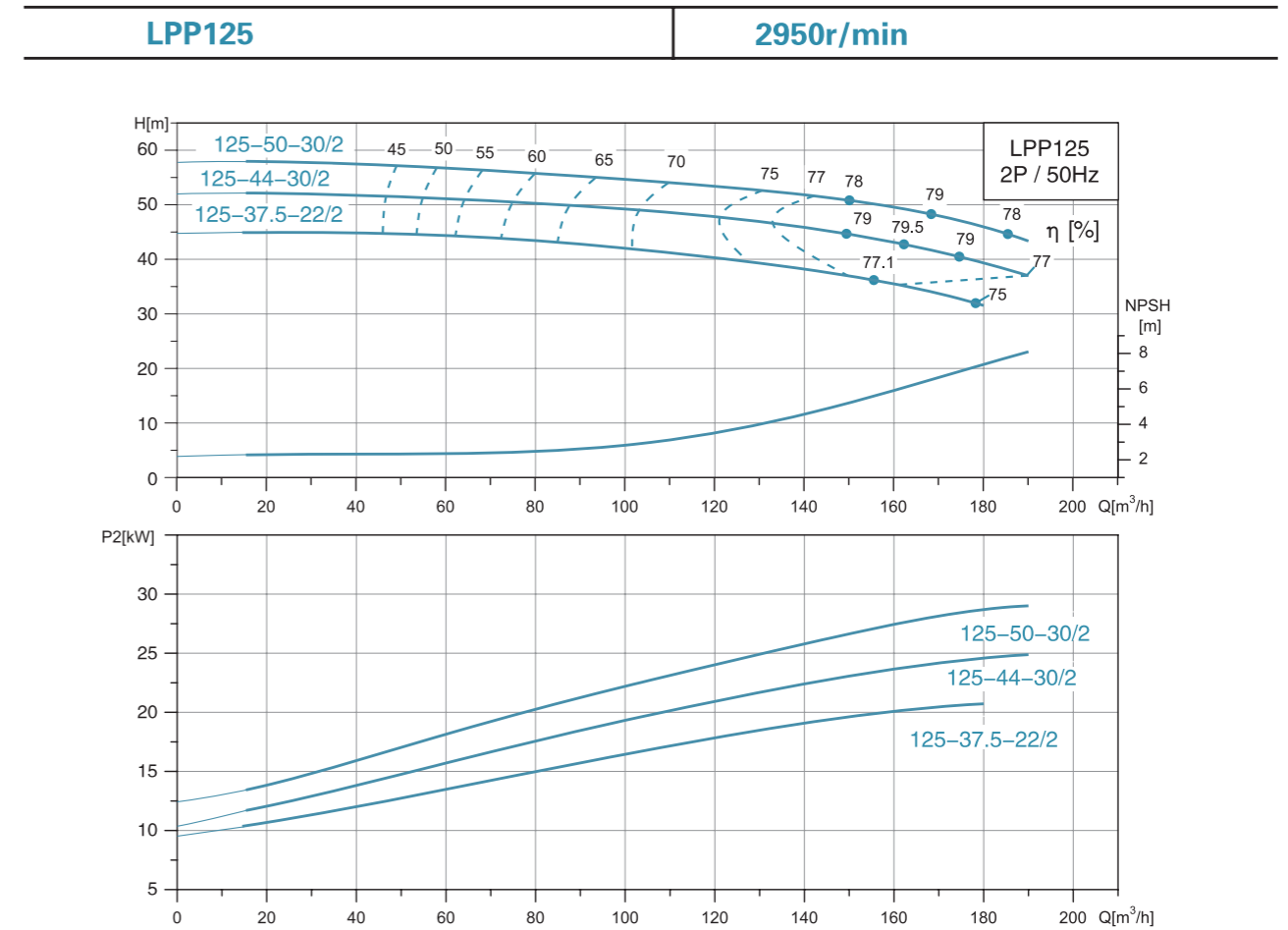


Dimension Drawing

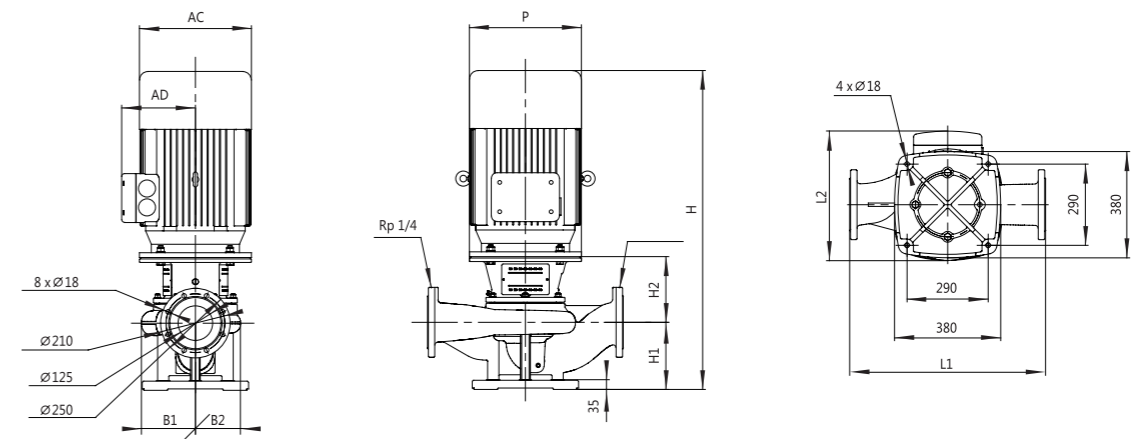


Model	L1 (mm)	L2 (mm)	H (mm)	H1 (mm)	H2 (mm)	B1 (mm)	B2 (mm)	P (mm)	AD (mm)	AC (mm)
LPP100-50-22/2	630	470	938	180	210	165	150	350	280	380
LPP100-44-18.5/2	630	445	898	180	210	165	150	350	255	330
LPP100-38-15/2	630	440	848	180	210	165	150	350	250	330

Hydraulic Performance Curves

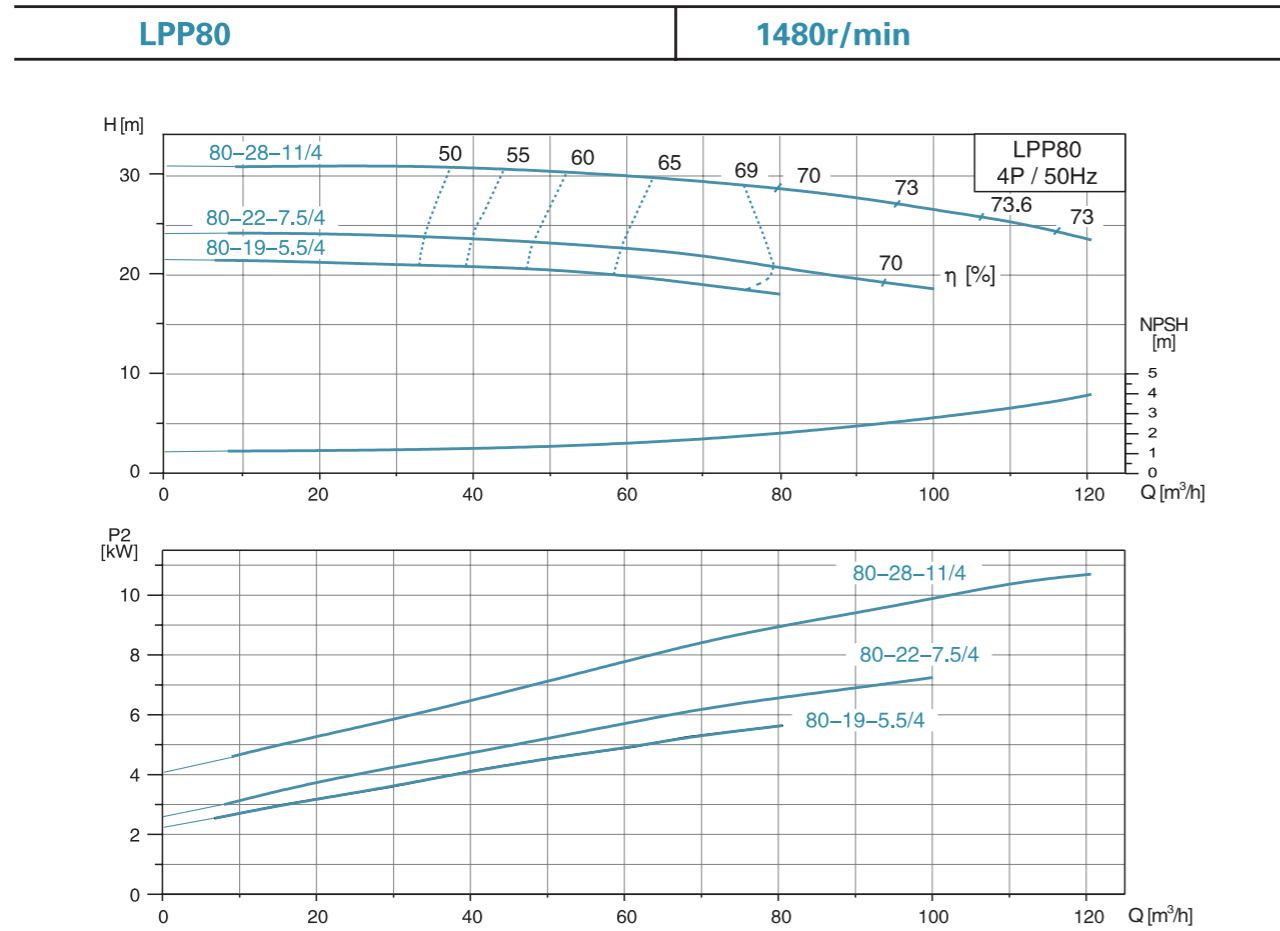


Dimension Drawing

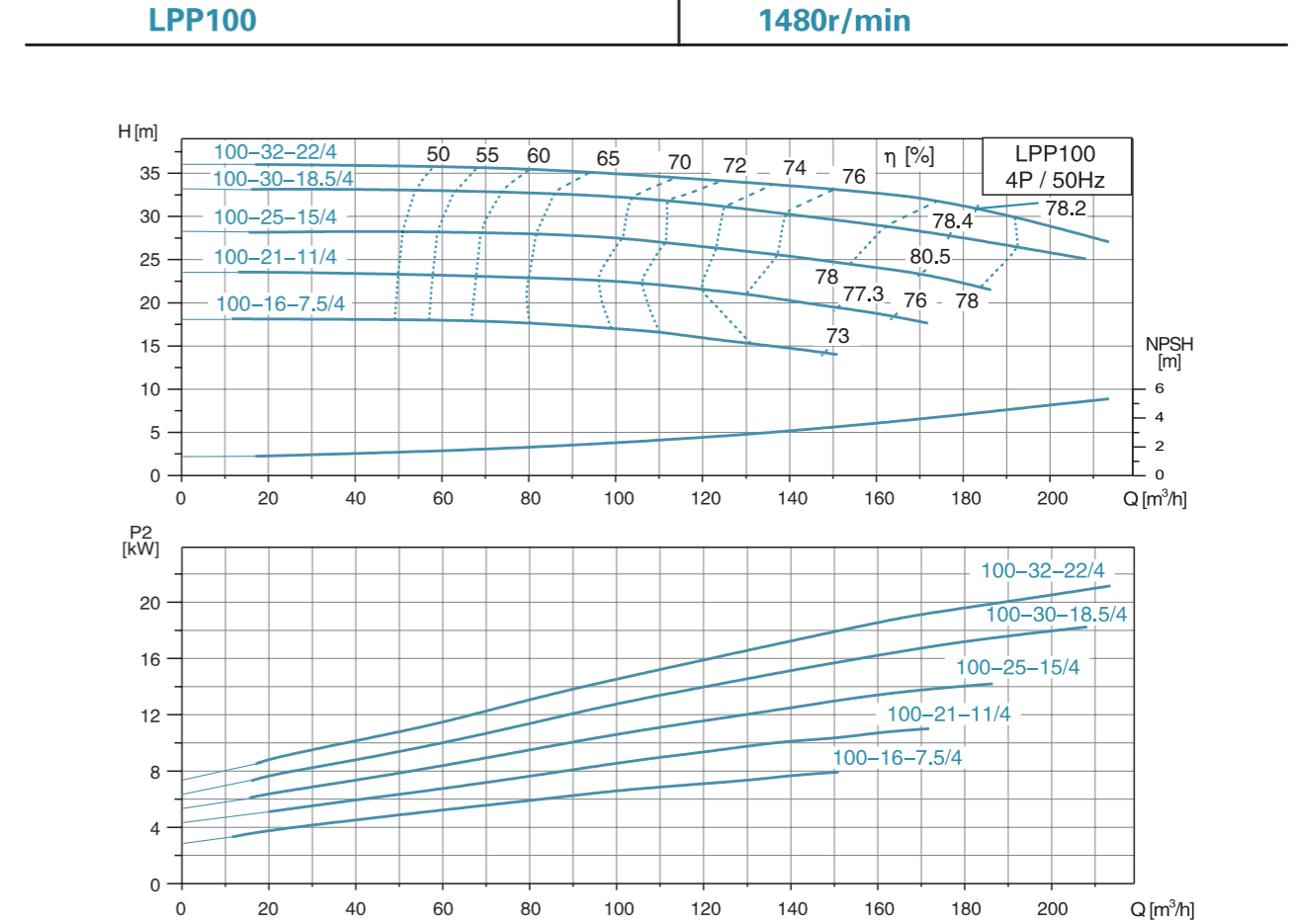


Model	L1 (mm)	L2 (mm)	H (mm)	H1 (mm)	H2 (mm)	B1 (mm)	B2 (mm)	P (mm)	AD (mm)	AC (mm)
LPP125-50-37/2	700	515	1135	240	235	193	161	400	305	420
LPP125-44-30/2	700	515	1135	240	235	193	161	400	305	420
LPP125-37.5-22/2	700	470	1098	240	228	193	161	350	280	380

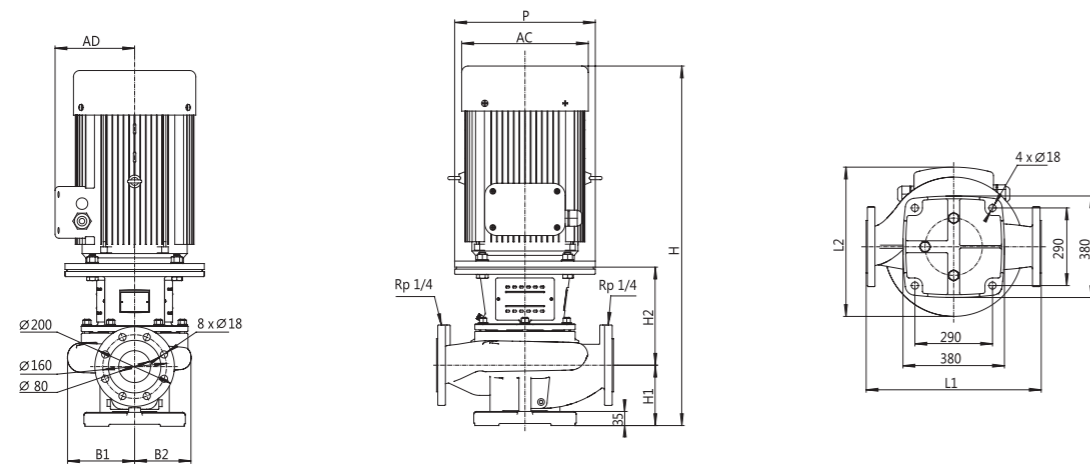
Hydraulic Performance Curves



Hydraulic Performance Curves

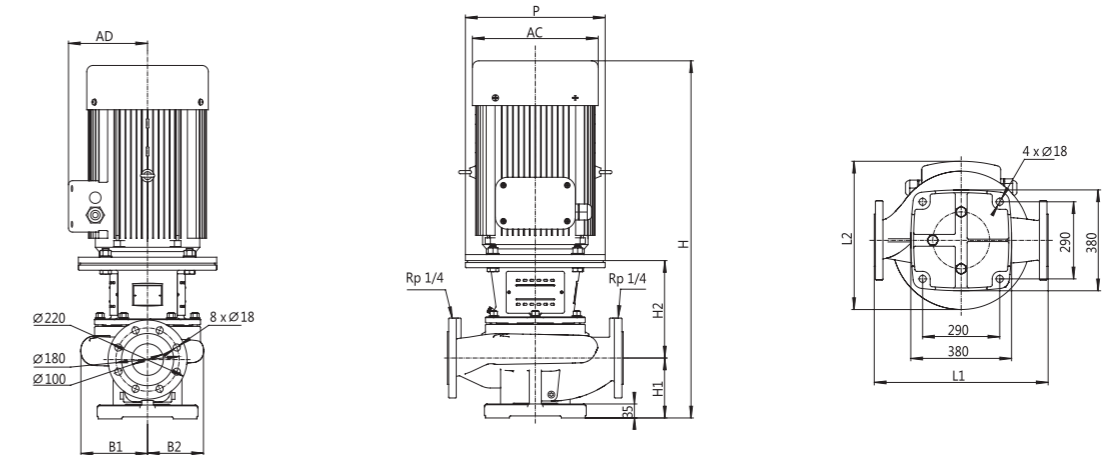


Dimension Drawing



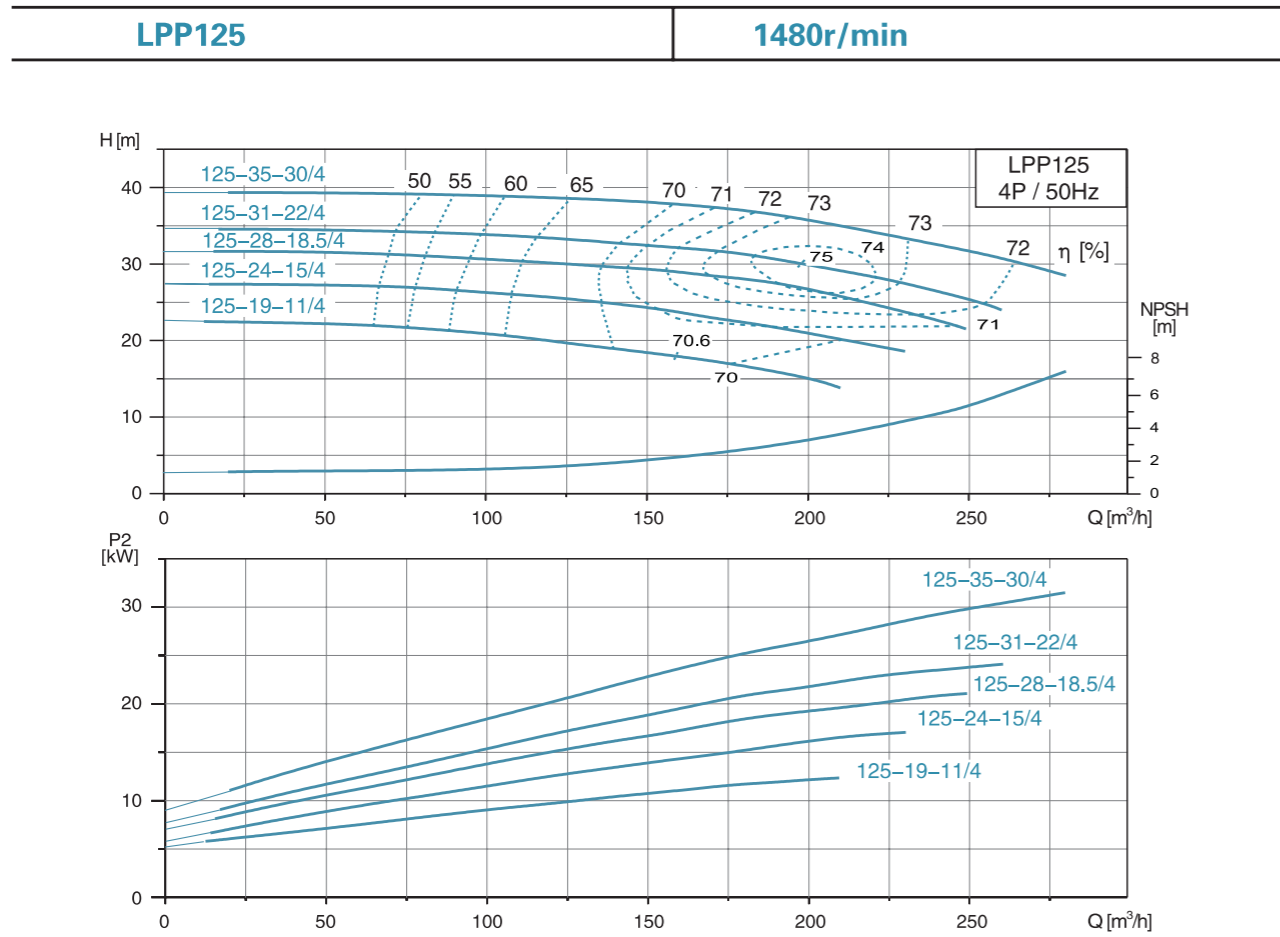
Model	L1 (mm)	L2 (mm)	H (mm)	H1 (mm)	H2 (mm)	B1 (mm)	B2 (mm)	P (mm)	AD (mm)	AC (mm)
LPP80-28-11/4	620	469	935	175	262	224	218	350	251	314
LPP80-22-7.5/4	620	442	840	175	232	224	218	300	203	258
LPP80-19-5.5/4	620	442	802	175	232	224	218	300	203	258

Dimension Drawing

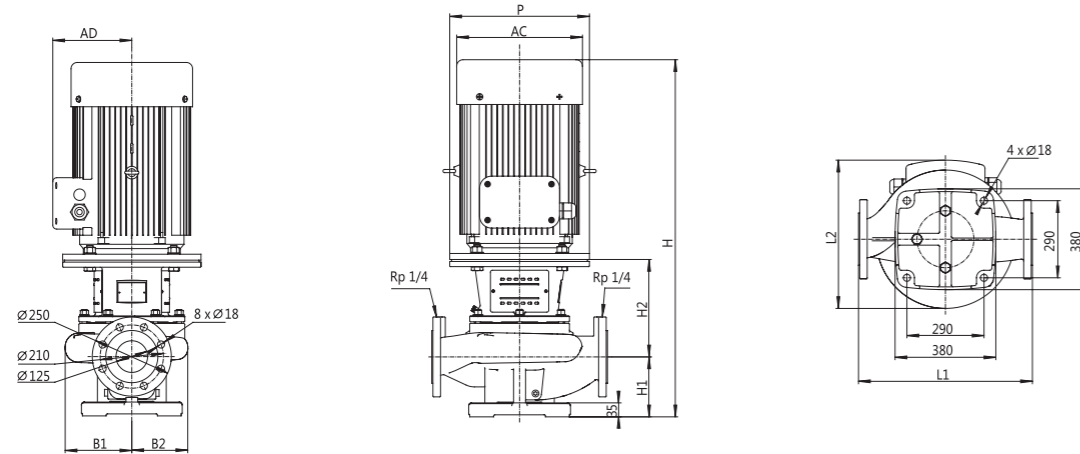


Model	L1 (mm)	L2 (mm)	H (mm)	H1 (mm)	H2 (mm)	B1 (mm)	B2 (mm)	P (mm)	AD (mm)	AC (mm)
LPP100-32-22/4	670	486	1103	210	277	253	219	350	267	355
LPP100-30-18.5/4	670	486	1065	210	277	253	219	350	267	355
LPP100-25-15/4	670	472	1029	210	277	253	219	350	251	314
LPP100-21-11/4	670	472	985	210	277	253	219	350	251	314
LPP100-16-7.5/4	670	472	890	210	277	253	219	300	203	258

Hydraulic Performance Curves

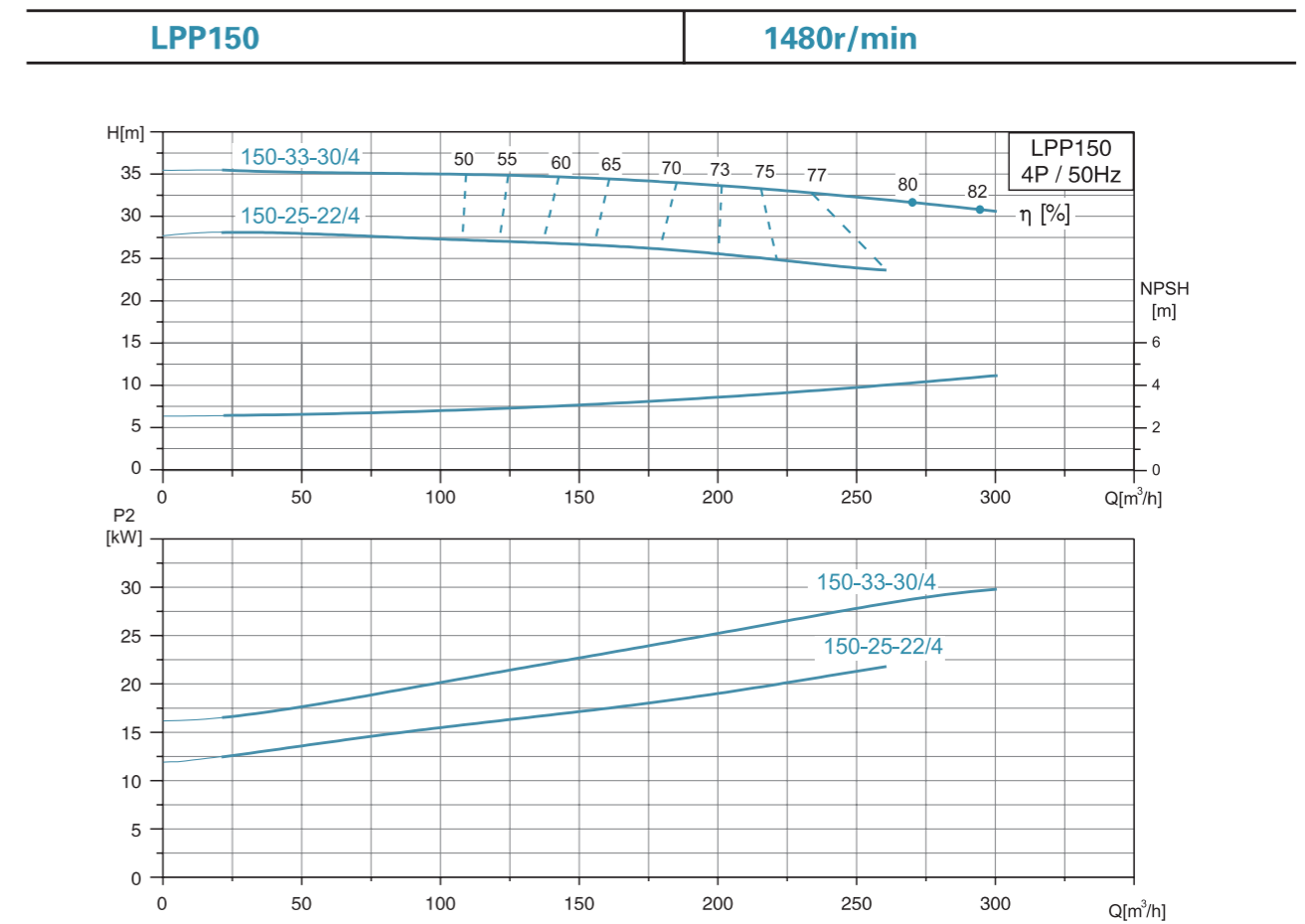


Dimension Drawing

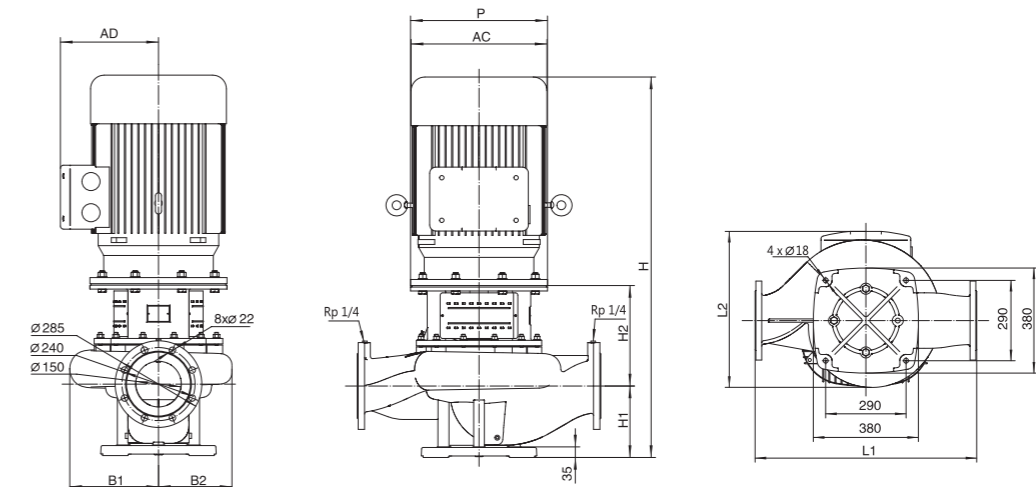


Model	L1 (mm)	L2 (mm)	H (mm)	H1 (mm)	H2 (mm)	B1 (mm)	B2 (mm)	P (mm)	AD (mm)	AC (mm)
LPP125-35-30/4	800	527	1191	250	280	265	228	400	299	397
LPP125-31-22/4	800	495	1141	250	275	265	228	350	267	355
LPP125-28-18.5/4	800	495	1095	250	275	265	228	350	267	355
LPP125-24-15/4	800	493	1067	250	275	265	228	350	251	314
LPP125-19-11/4	800	493	1023	250	275	265	228	350	251	314

Hydraulic Performance Curves

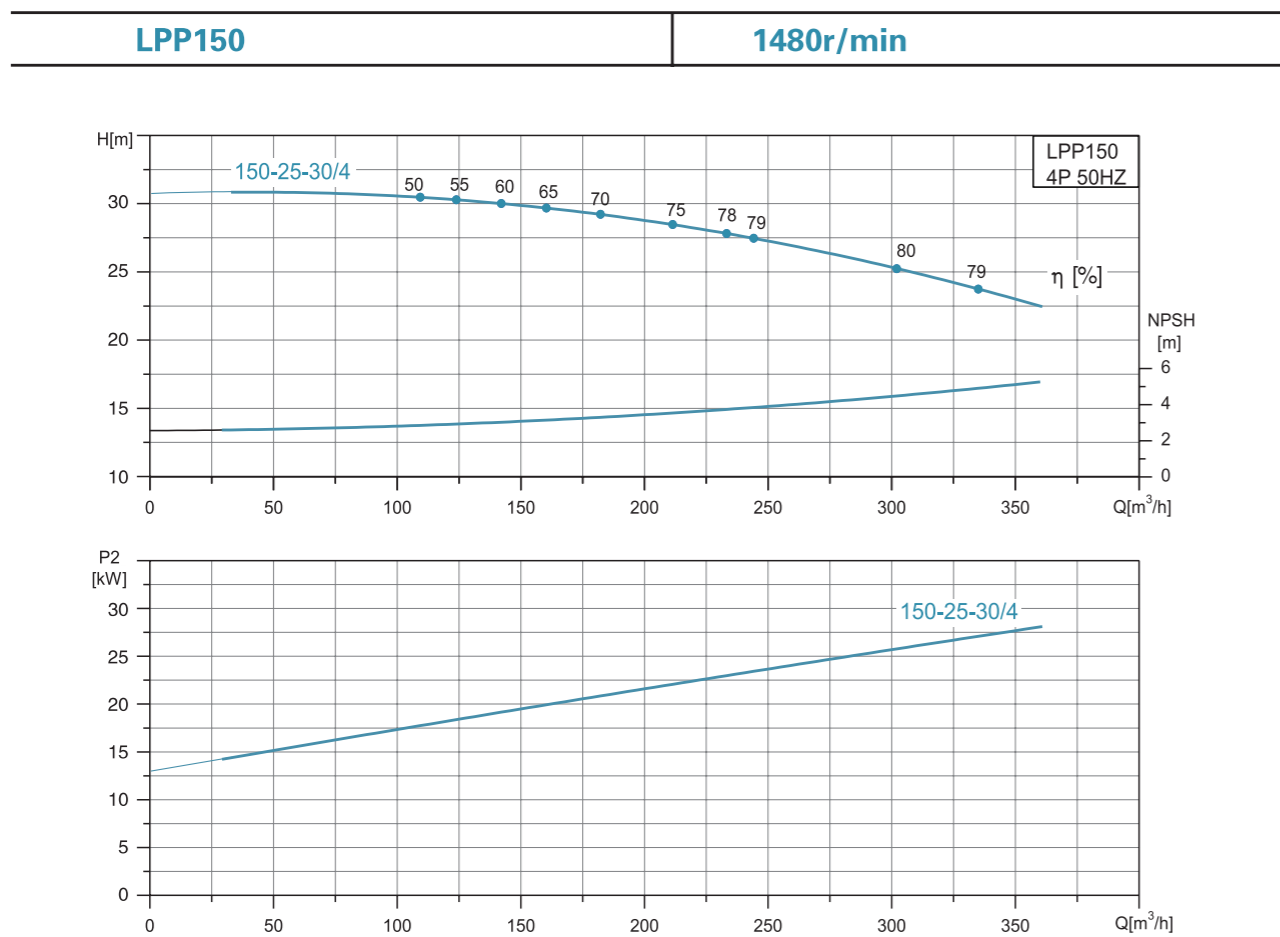


Dimension Drawing

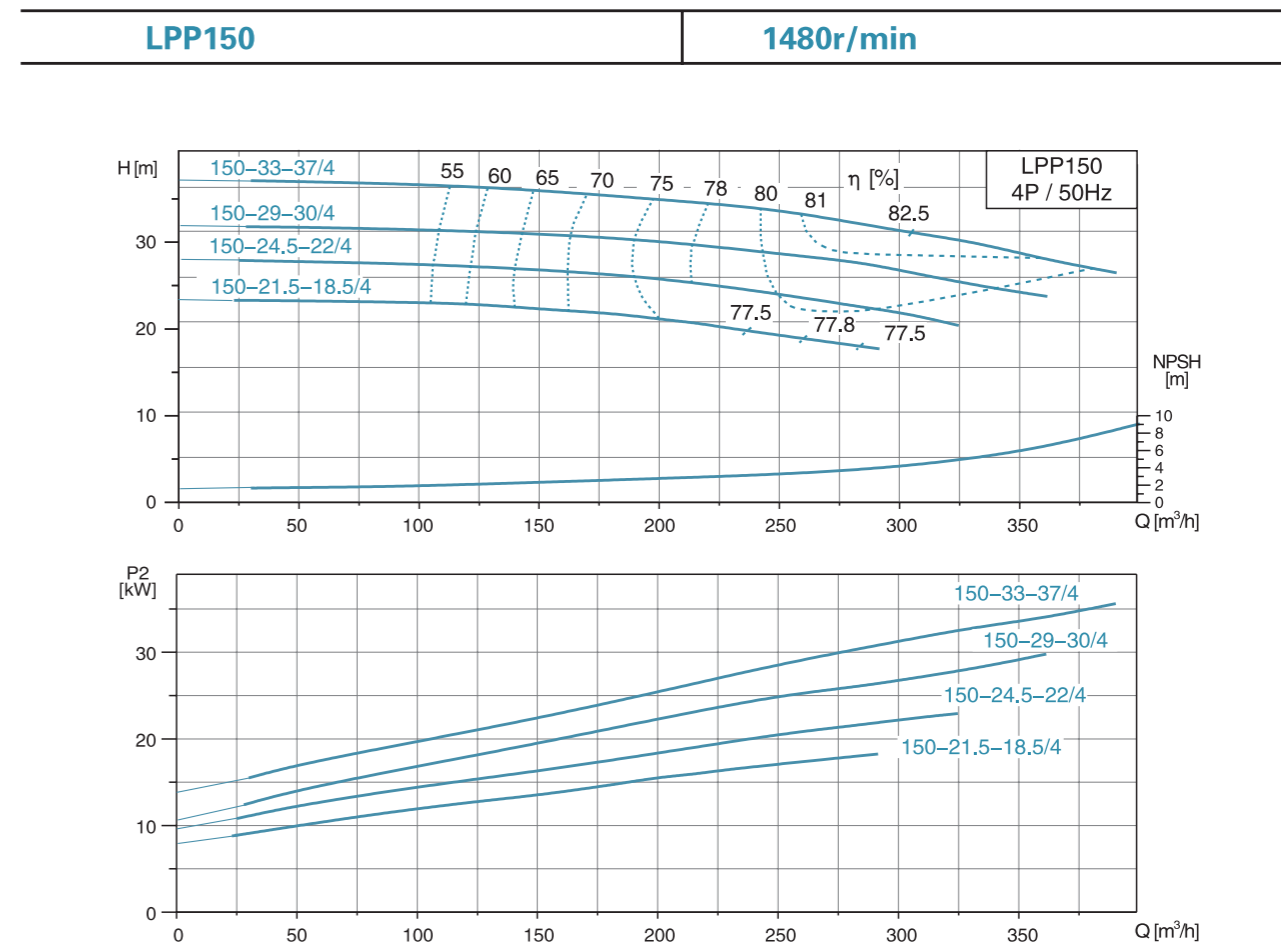


Model	L1 (mm)	L2 (mm)	H (mm)	H1 (mm)	H2 (mm)	B1 (mm)	B2 (mm)	P (mm)	AD (mm)	AC (mm)
LPP150-33-30/4	800	545	1195	235	300	291	240	400	305	420
LPP150-25-22/4	800	531	1165	235	295	291	240	350	280	380

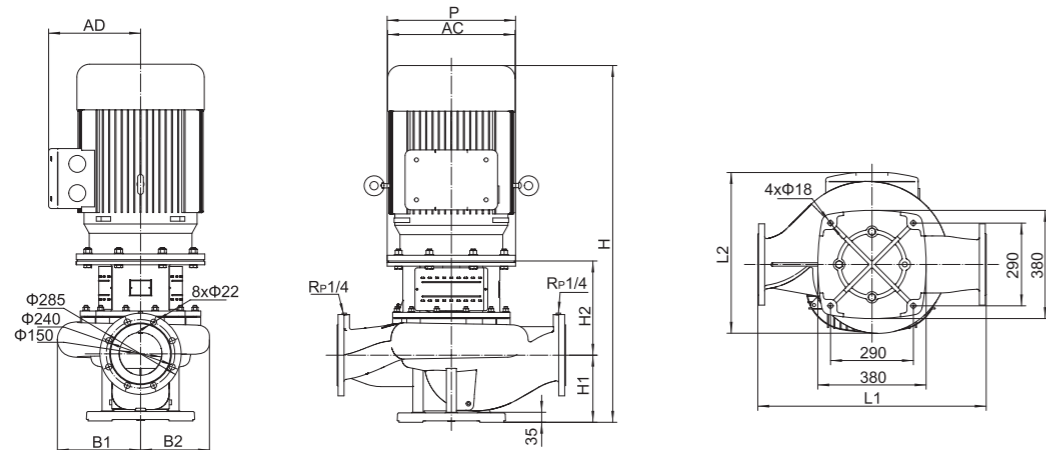
Hydraulic Performance Curves



Hydraulic Performance Curves

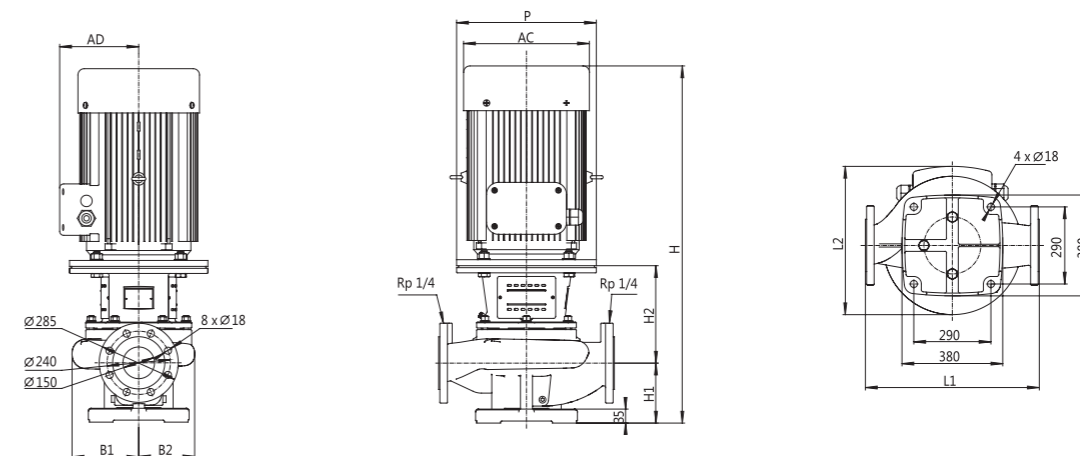


Dimension Drawing



Model	L1 (mm)	L2 (mm)	H (mm)	H1 (mm)	H2 (mm)	B1 (mm)	B2 (mm)	P (mm)	AD (mm)	AC (mm)
LPP150-25-30/4	800	545	1195	235	300	291	240	400	305	420

Dimension Drawing

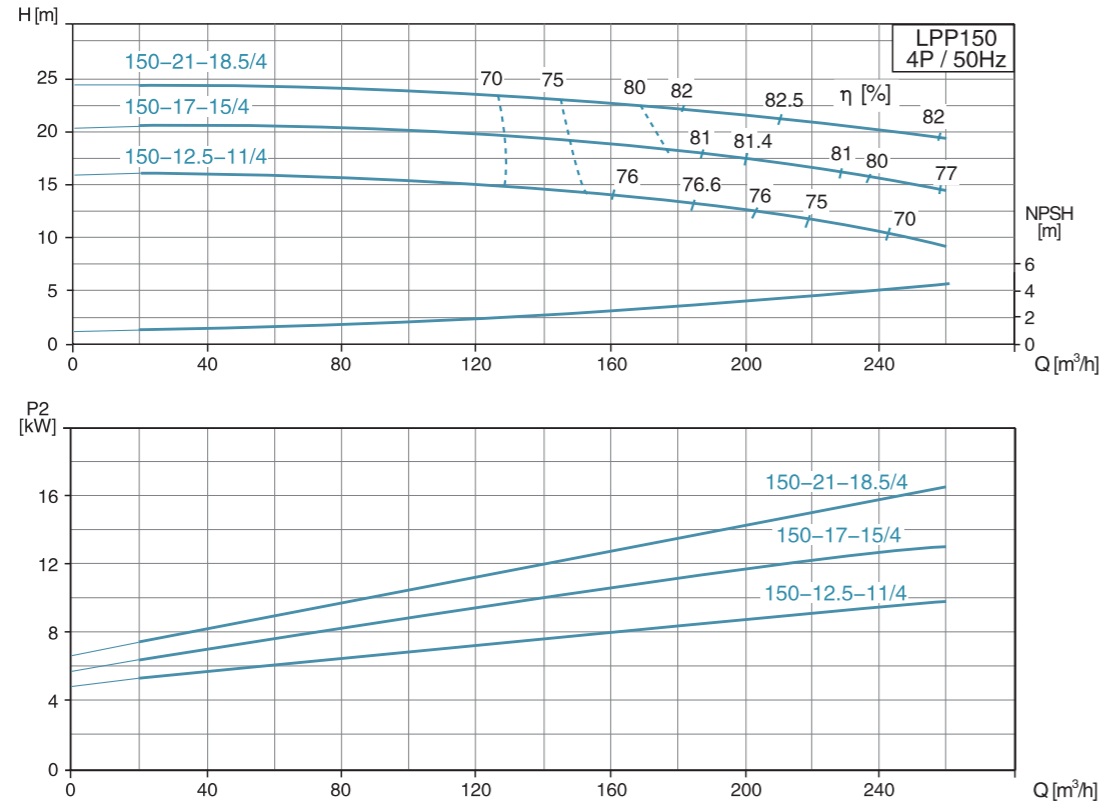


Model	L1 (mm)	L2 (mm)	H (mm)	H1 (mm)	H2 (mm)	B1 (mm)	B2 (mm)	P (mm)	AD (mm)	AC (mm)
LPP150-33-37/4	800	562	1250	235	330	291	240	450	322	446
LPP150-29-30/4	800	539	1196	235	300	291	240	400	299	397
LPP150-24.5-22/4	800	531	1146	235	295	291	240	350	267	355
LPP150-21.5-18.5/4	800	531	1108	235	295	291	240	350	267	355

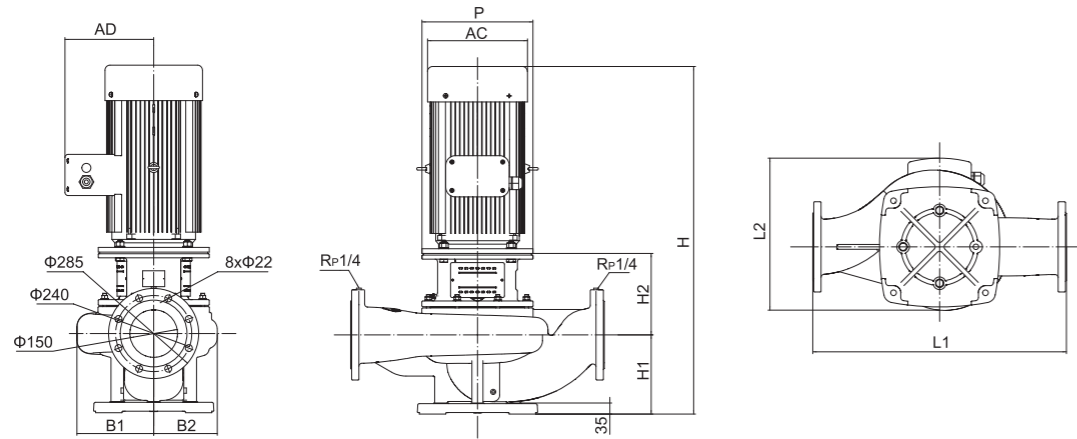
Hydraulic Performance Curves

LPP150

1480r/min



Dimension Drawing

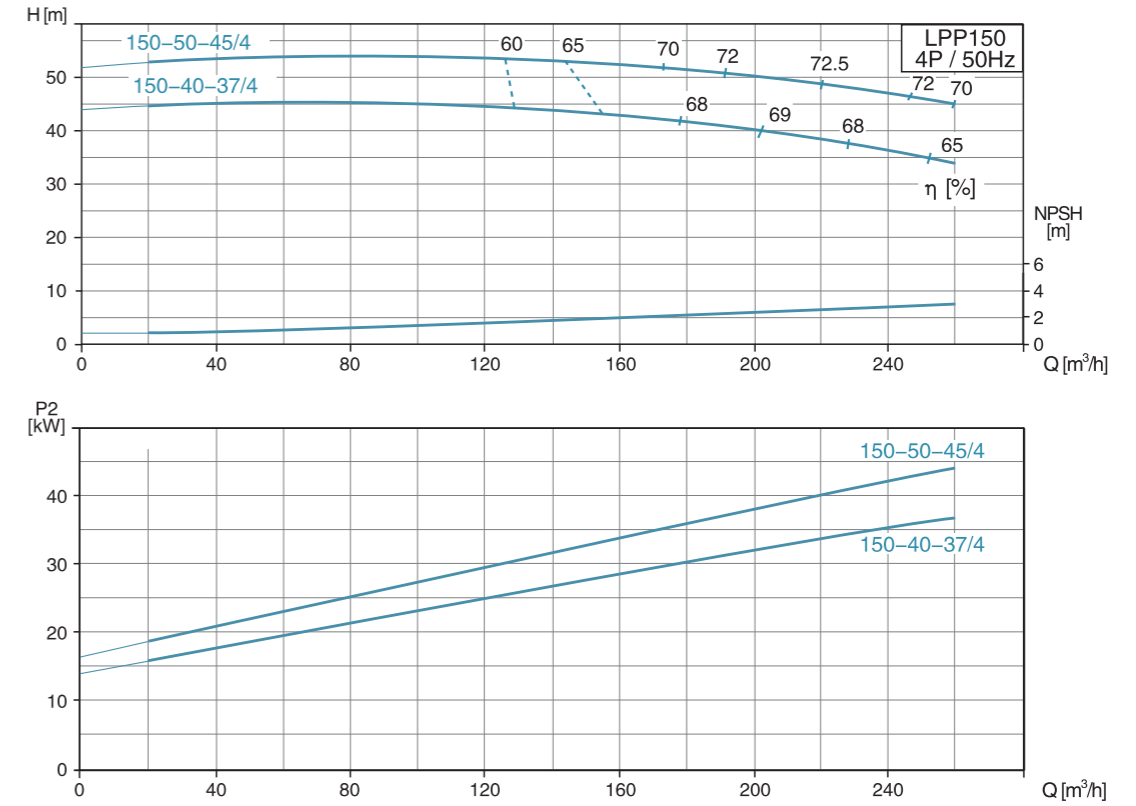


Model	L1 (mm)	L2 (mm)	H (mm)	H1 (mm)	H2 (mm)	B1 (mm)	B2 (mm)	P (mm)	AD (mm)	AC (mm)
LPP150-21-18.5/4	800	479	1097	250	257	241	199	350	280	380
LPP150-17-15/4	800	449	1067	250	257	241	199	350	250	330
LPP150-12.5-11/4	800	449	1012	250	257	241	199	350	250	330

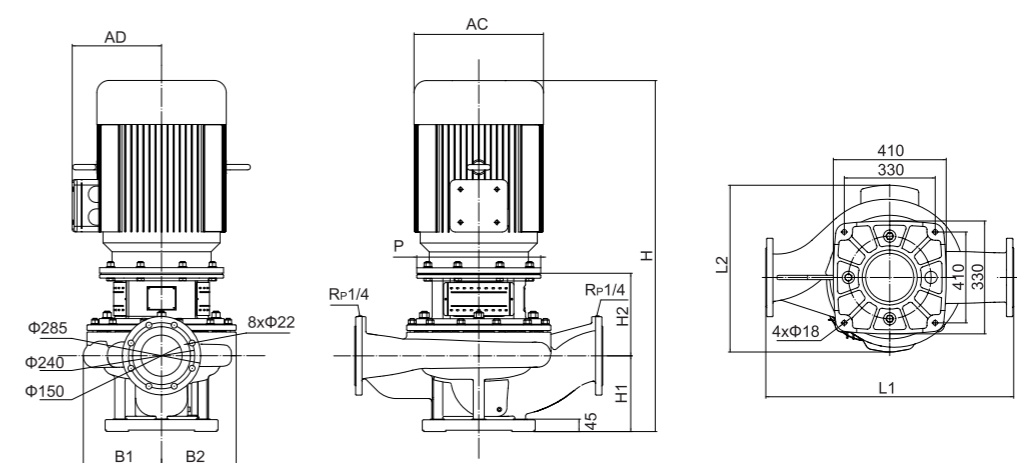
Hydraulic Performance Curves

LPP150

1480r/min

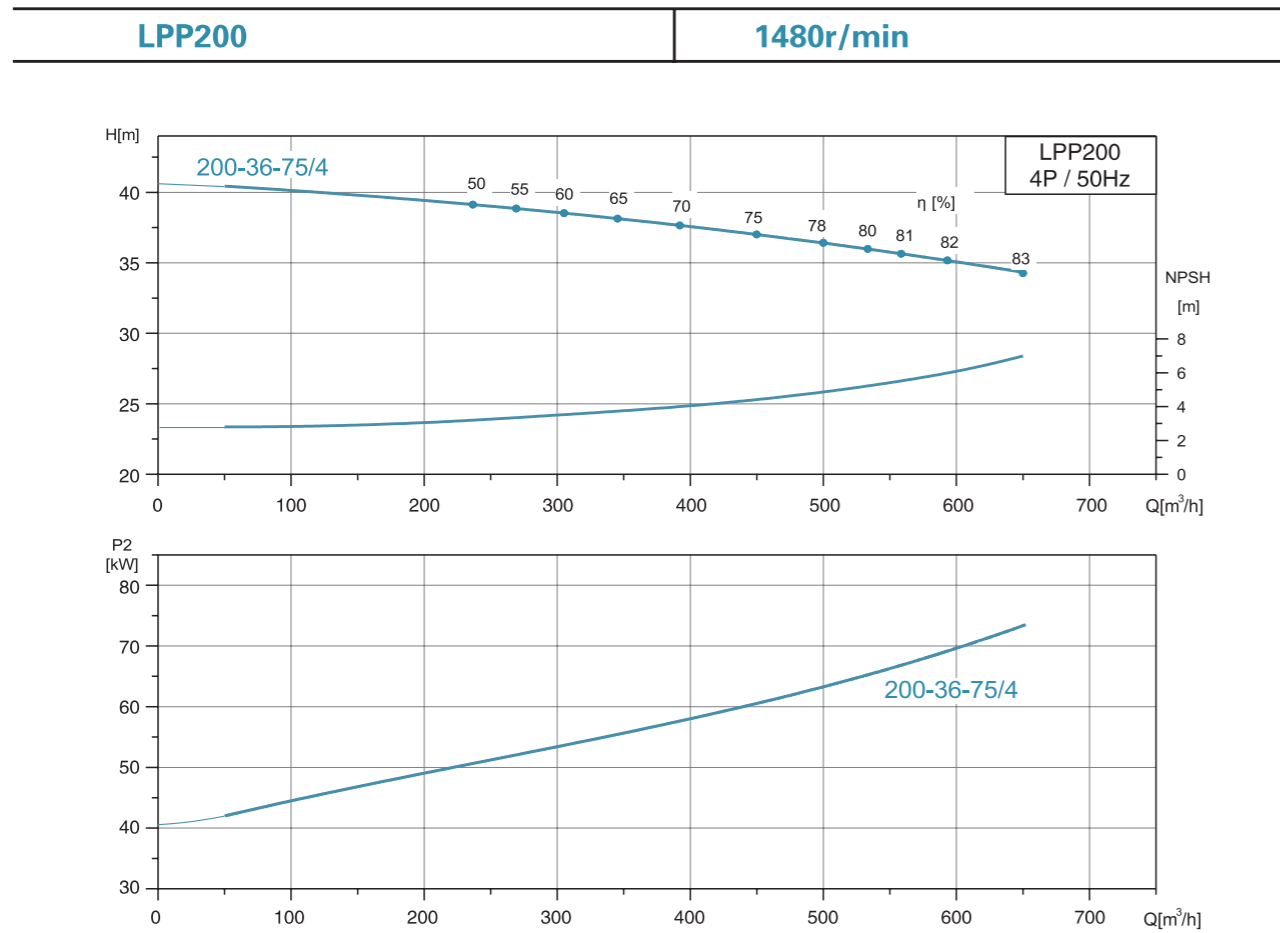


Dimension Drawing

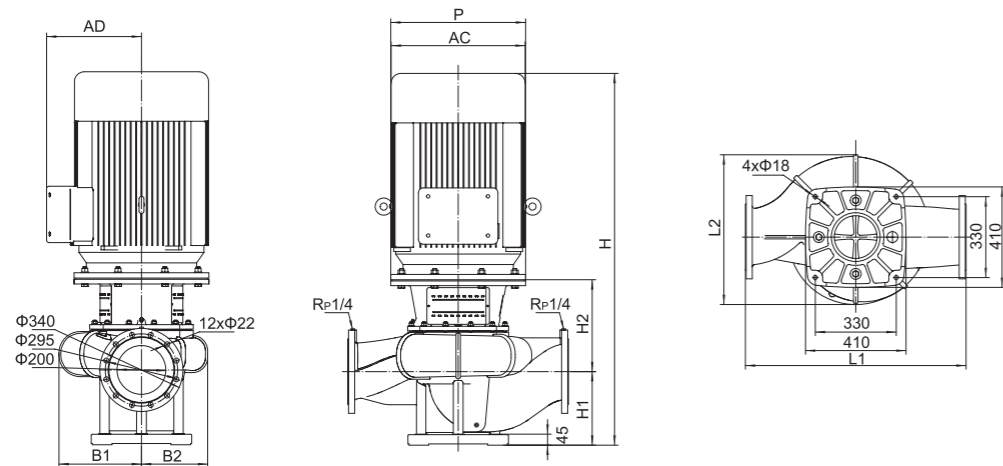


Model	L1 (mm)	L2 (mm)	H (mm)	H1 (mm)	H2 (mm)	B1 (mm)	B2 (mm)	P (mm)	AD (mm)	AC (mm)
LPP150-50-45/4	900	606	1275	275	300	335	271	450	335	470
LPP150-40-37/4	900	606	1250	275	300	335	271	450	335	470

Hydraulic Performance Curves

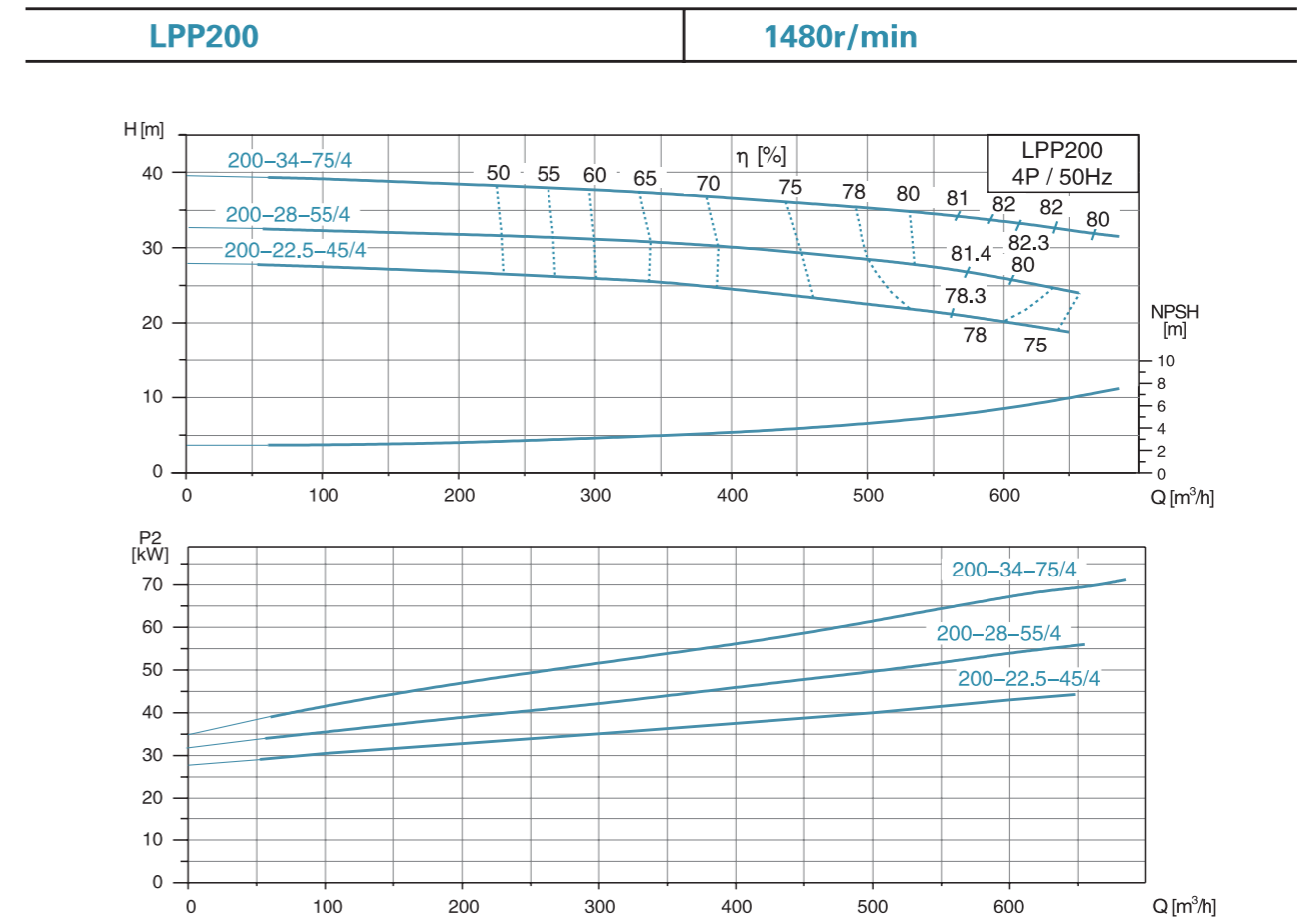


Dimension Drawing

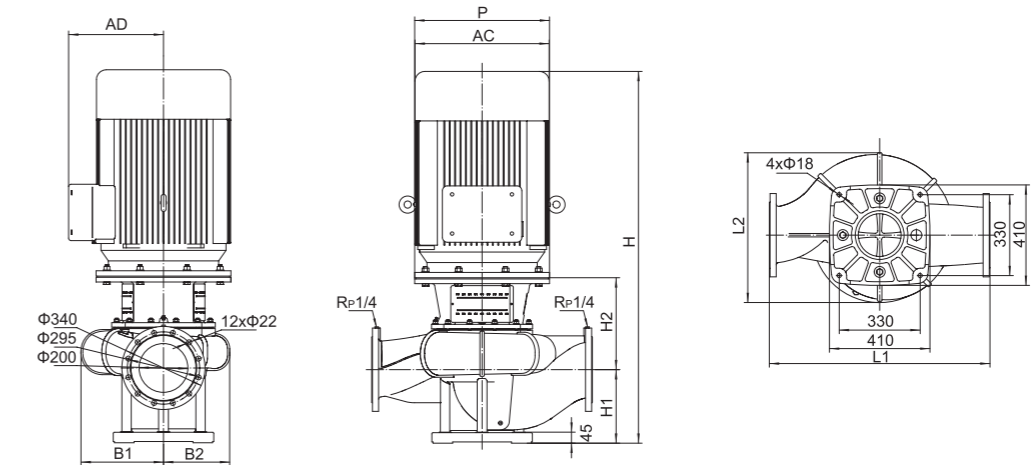


Model	L1 (mm)	L2 (mm)	H (mm)	H1 (mm)	H2 (mm)	B1 (mm)	B2 (mm)	P (mm)	AD (mm)	AC (mm)
LPP200-36-75/4	900	700	1520	300	375	337	270	550	410	580

Hydraulic Performance Curves

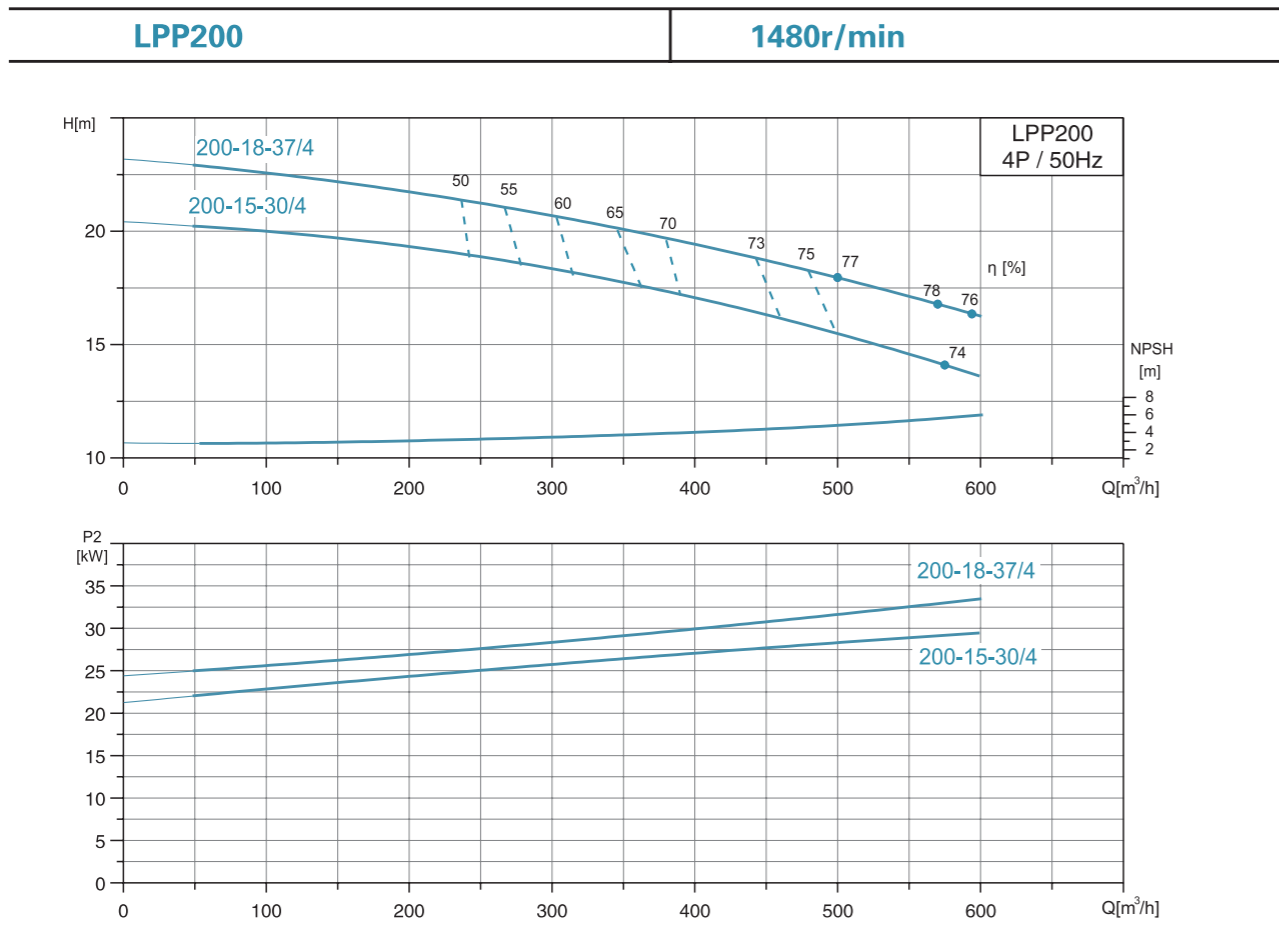


Dimension Drawing

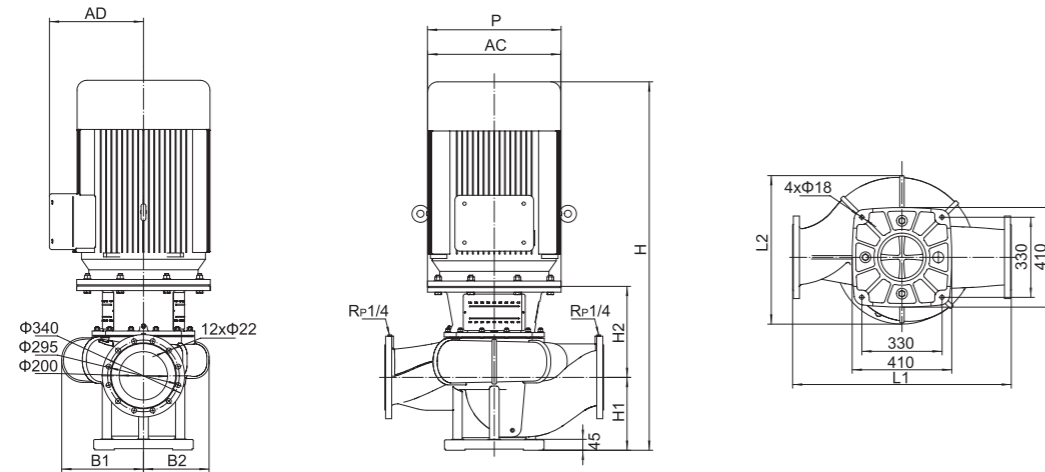


Model	L1 (mm)	L2 (mm)	H (mm)	H1 (mm)	H2 (mm)	B1 (mm)	B2 (mm)	P (mm)	AD (mm)	AC (mm)
LPP200-34-75/4	900	662	1517	300	375	337	270	550	387	547
LPP200-28-55/4	900	633	1445	300	375	337	270	550	358	485
LPP200-22.5-45/4	900	607	1375	300	365	337	270	450	322	446

Hydraulic Performance Curves

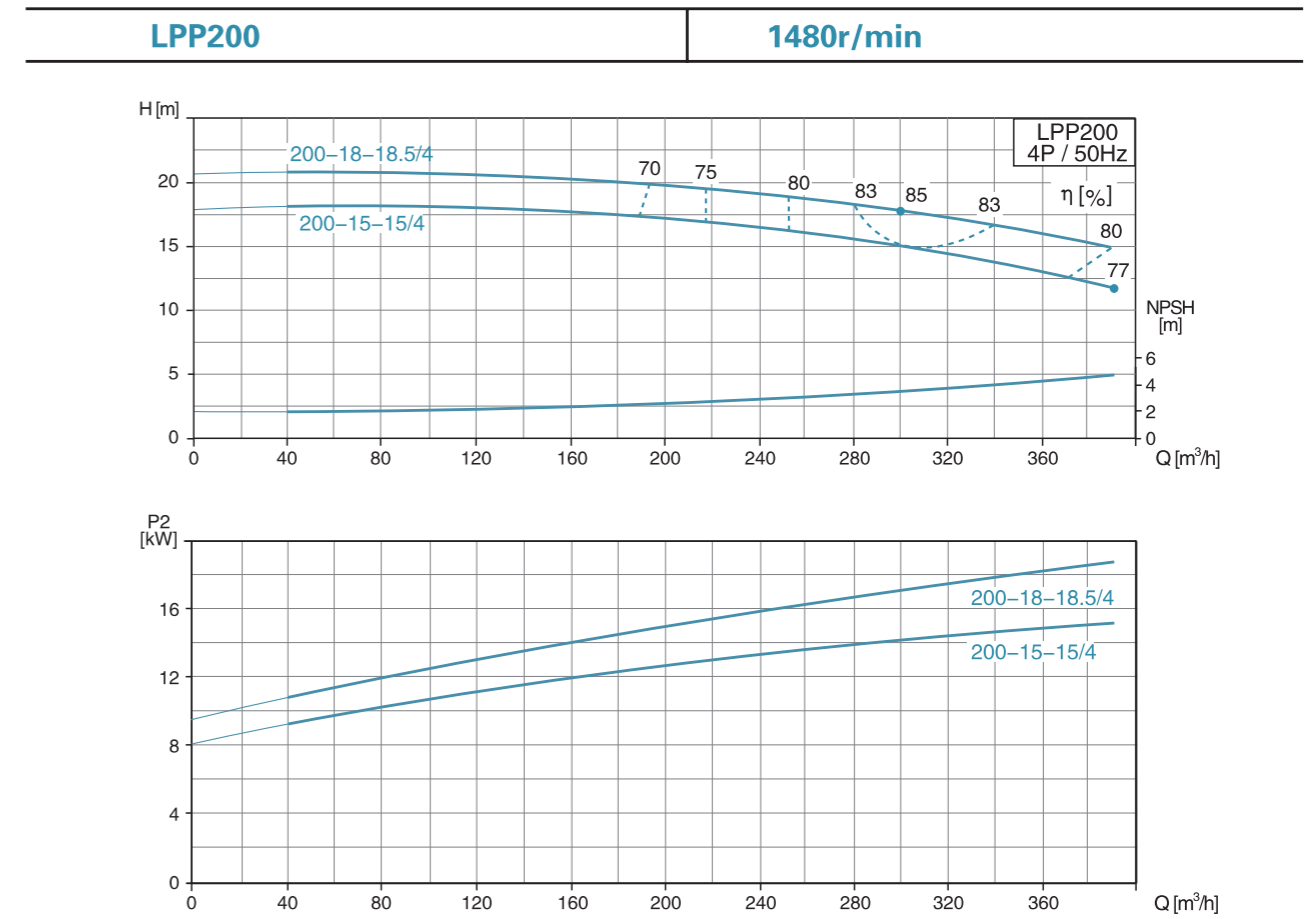


Dimension Drawing

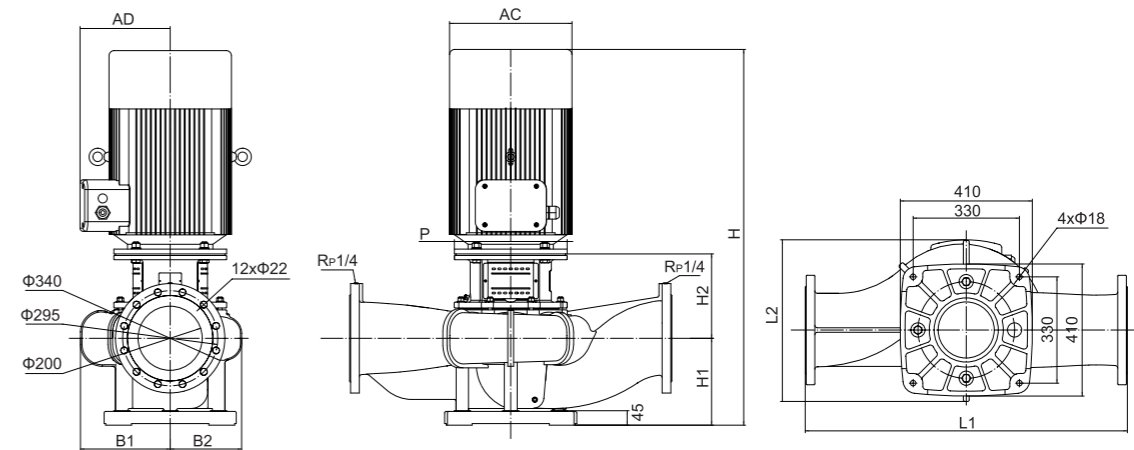


Model	L1 (mm)	L2 (mm)	H (mm)	H1 (mm)	H2 (mm)	B1 (mm)	B2 (mm)	P (mm)	AD (mm)	AC (mm)
LPP200-18-37/4	900	607	1340	300	365	337	270	450	335	470
LPP200-15-30/4	900	607	1295	300	335	337	270	400	305	420

Hydraulic Performance Curves



Dimension Drawing

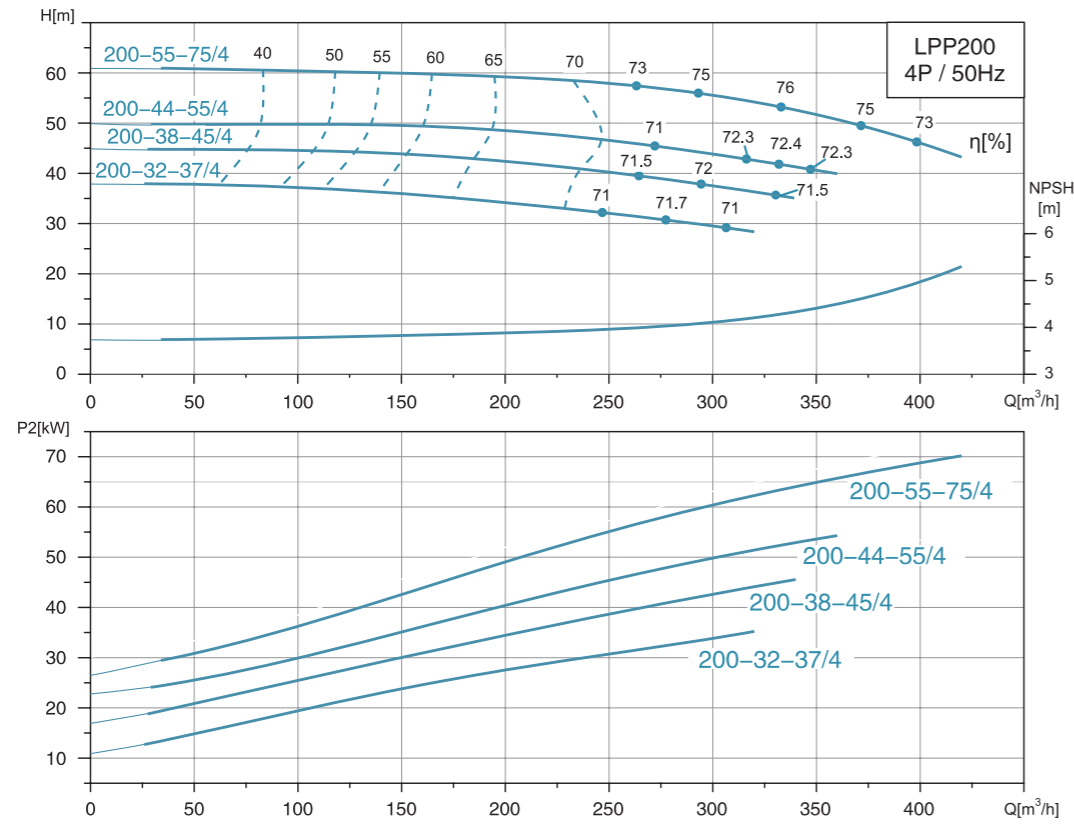


Model	L1 (mm)	L2 (mm)	H (mm)	H1 (mm)	H2 (mm)	B1 (mm)	B2 (mm)	P (mm)	AD (mm)	AC (mm)
LPP200-18-18.5/4	1000	502	1122	270	262	278.5	221.5	350	280	380
LPP200-15-15/4	1000	502	1092	270	262	278.5	221.5	350	280	380

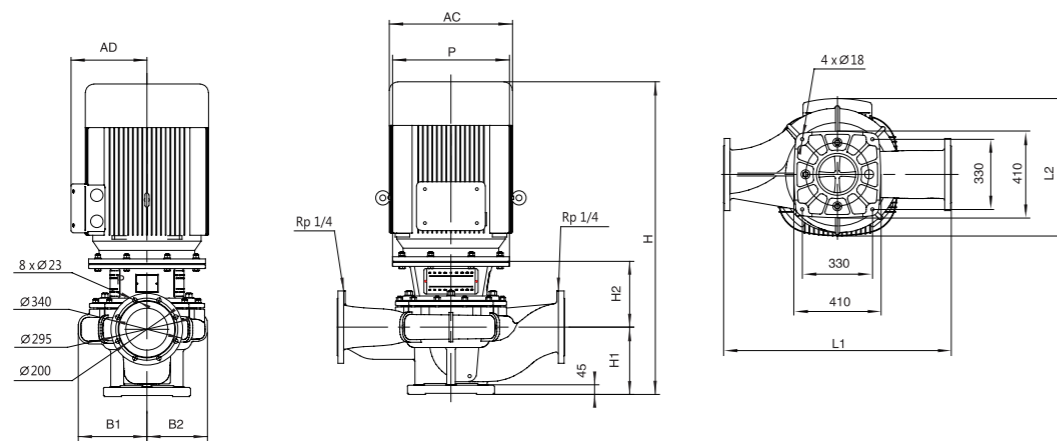
Hydraulic Performance Curves

LPP200

1480r/min



Dimension Drawing

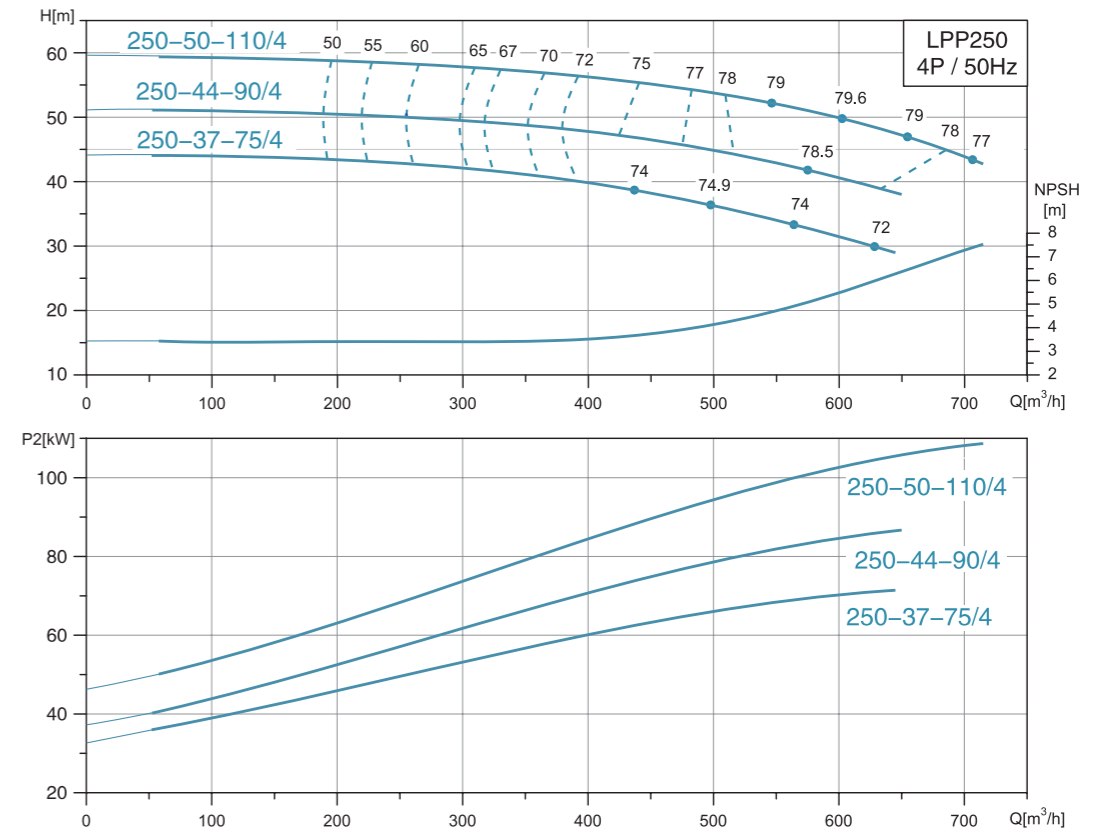


Model	L1 (mm)	L2 (mm)	H (mm)	H1 (mm)	H2 (mm)	B1 (mm)	B2 (mm)	P (mm)	AD (mm)	AC (mm)
LPP200-55-75/4	1070	700	1471	317	309	323	284	550	410	580
LPP200-44-55/4	1070	654	1396	317	309	323	284	550	370	510
LPP200-38-45/4	1070	619	1326	317	309	323	284	450	335	470
LPP200-32-37/4	1070	619	1301	317	309	323	284	450	335	470

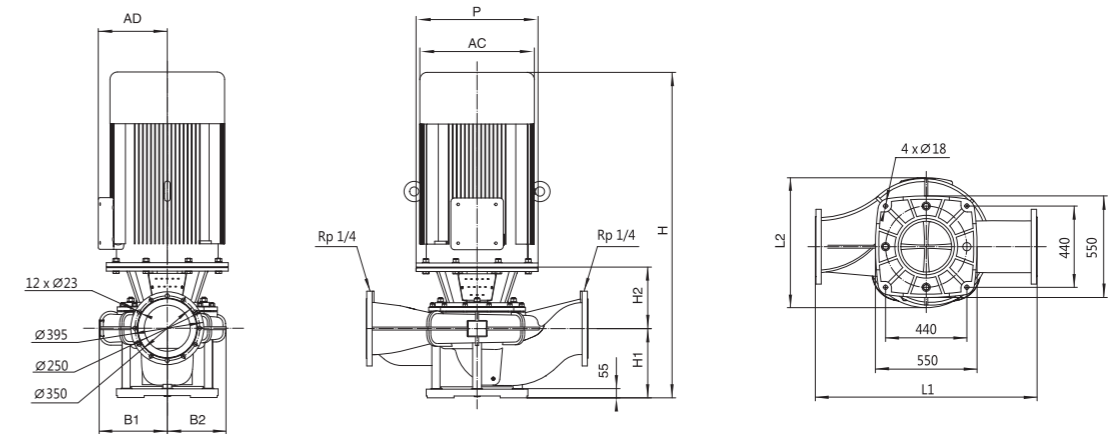
Hydraulic Performance Curves

LPP250

1480r/min

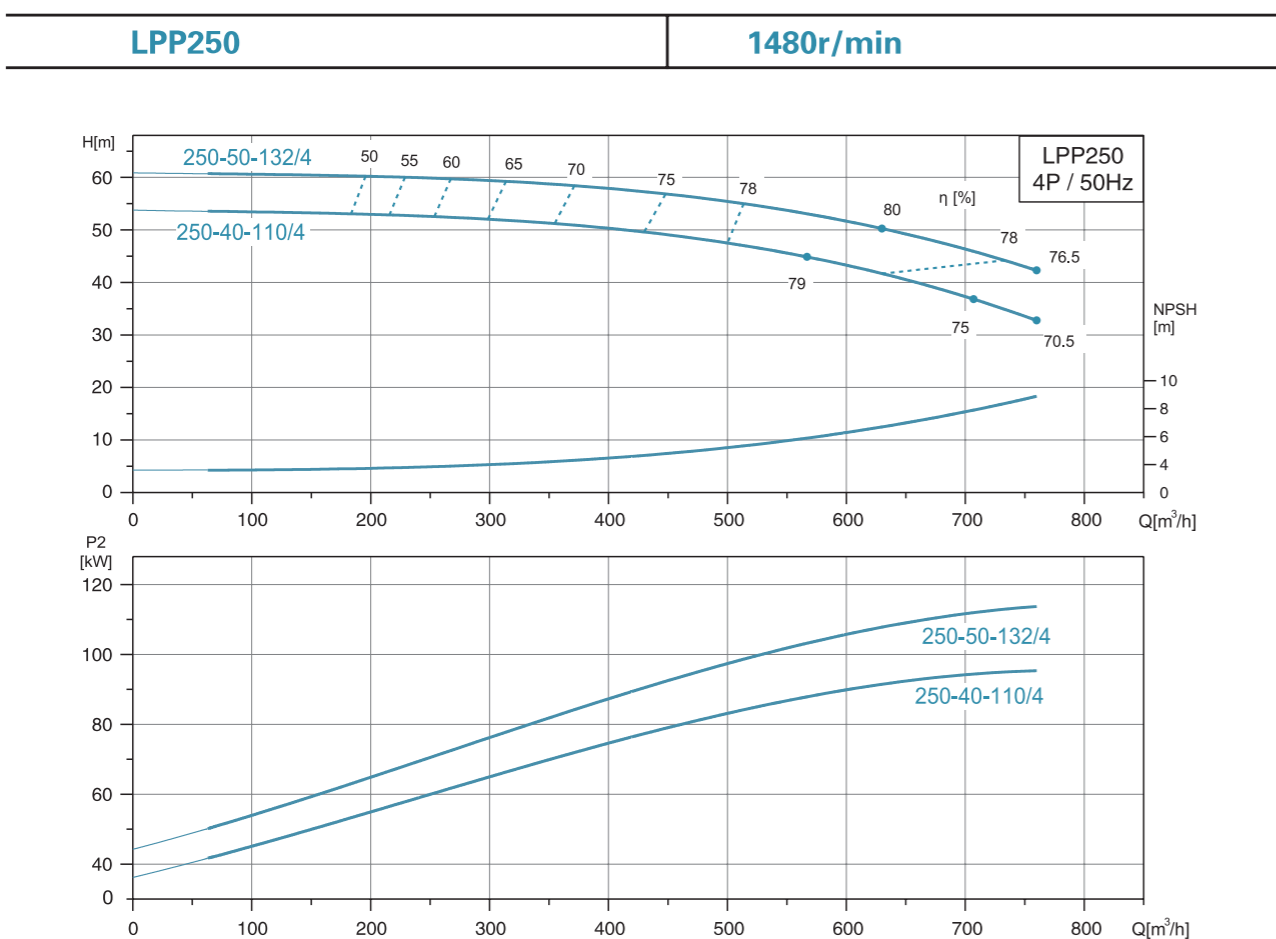


Dimension Drawing

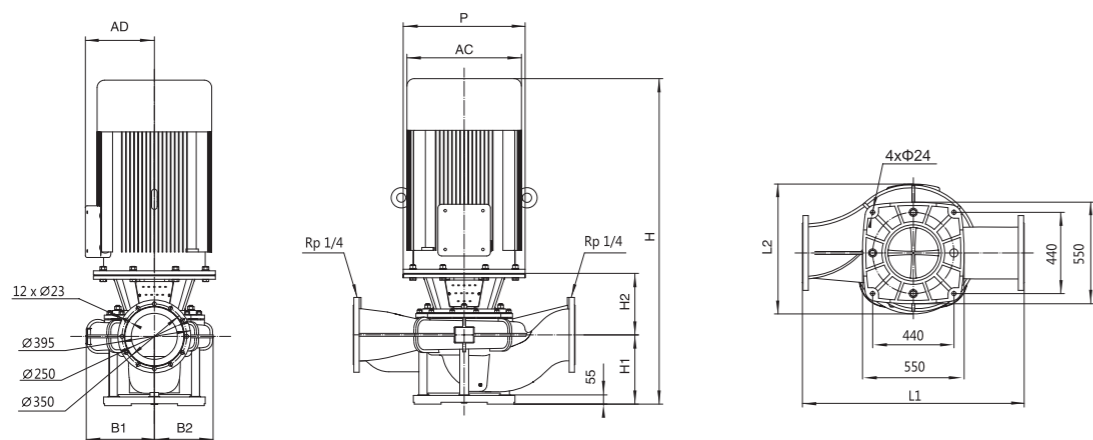


Model	L1 (mm)	L2 (mm)	H (mm)	H1 (mm)	H2 (mm)	B1 (mm)	B2 (mm)	P (mm)	AD (mm)	AC (mm)
LPP250-50-110/4	1200	860	1808	375	333	361	317	660	530	645
LPP250-44-90/4	1200	727	1573	375	303	361	317	550	410	580
LPP250-37-75/4	1200	727	1523	375	303	361	317	550	410	580

Hydraulic Performance Curves



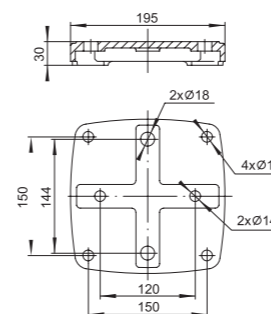
Dimension Drawing



Model	L1 (mm)	L2 (mm)	H (mm)	H1 (mm)	H2 (mm)	B1 (mm)	B2 (mm)	P (mm)	AD (mm)	AC (mm)
LPP250-50-132/4	1200	860	1868	375	333	361	317	660	530	645
LPP250-40-110/4	1200	860	1868	375	333	361	317	660	530	645

Base Plate Installation

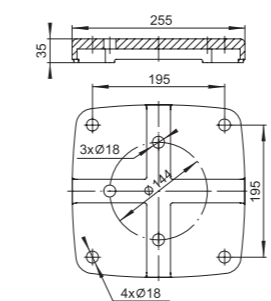
Base Plate 1



Model
LPP32-31-3/2
LPP32-26-2.2/2
LPP32-21-1.5/2
LPP32-16-1.1/2
LPP40-31-4/2
LPP40-24.5-3/2
LPP40-20.5-2.2/2
LPP40-20.5-1.5/2

Model
LPP40-17.5-1.1/2
LPP40-13-0.75/2
LPP50-34-5.5/2
LPP50-28-4/2
LPP50-24-3/2
LPP50-21-2.2/2
LPP50-16-1.5/2
LPP50-12-1.1/2

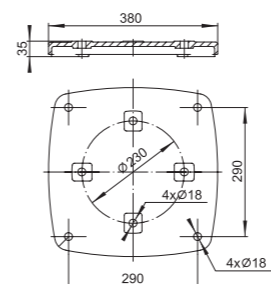
Base Plate 2



Model
LPP32-50-5.5/2
LPP32-40-4/2
LPP50-81-22/2
LPP50-70-18.5/2
LPP50-60-15/2
LPP50-80-11/2
LPP50-70-7.5/2
LPP50-60-7.5/2
LPP50-50-5.5/2
LPP50-40-4/2
LPP50-35-3/2

Model
LPP65-56-18.5/2
LPP65-49-15/2
LPP65-40-11/2
LPP65-35-7.5/2
LPP65-28-5.5/2
LPP65-21-4/2
LPP65-17-3/2
LPP65-14-2.2/2
LPP80-35-15/2
LPP80-28-11/2
LPP80-21.5-7.5/2
LPP80-20-5.5/2
LPP80-17-4/2
LPP80-14-3/2
LPP80-10.5-2.2/2
LPP80-8.5-1.5/2

Base Plate 3

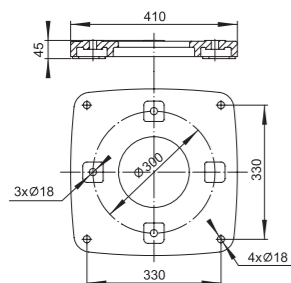


Model
LPP80-80-22/2
LPP80-70-18.5/2
LPP80-60-15/2
LPP80-28-11/4
LPP80-22-7.5/4
LPP80-19-5.5/4
LPP100-80-37/2
LPP100-70-30/2
LPP100-60-22/2
LPP100-50-22/2
LPP100-32-22/2
LPP100-32-22/4
LPP100-44-18.5/2
LPP100-30-18.5/2
LPP100-30-18.5/4
LPP100-38-15/2
LPP100-24-15/2

Model
LPP100-25-15/4
LPP100-21-11/4
LPP100-20-11/2
LPP100-16-7.5/4
LPP125-50-30/2
LPP125-44-30/2
LPP125-37.5-22/2
LPP125-35-30/4
LPP125-31-22/4
LPP125-28-18.5/4
LPP125-24-15/4
LPP125-19-11/4
LPP150-33-37/4
LPP150-29-30/4
LPP150-24.5-22/4
LPP150-21.5-18.5/4
LPP150-33-30/4
LPP150-25-22/4
LPP150-25-30/4

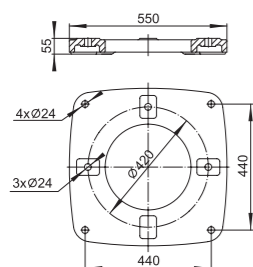
Base Plate Installation

Base Plate 4



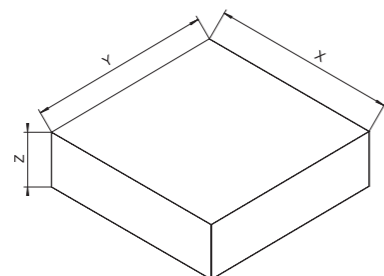
Model	Model
LPP150-50-45/4	LPP200-18-37/4
LPP150-40-37/4	LPP200-15-30/4
LPP200-55-75/2	LPP200-18-18.5/4
LPP200-36-75/4	LPP200-15-15/4
LPP200-34-75/4	
LPP200-44-55/4	
LPP200-28-55/4	
LPP200-38-45/4	
LPP200-22.5-45/4	
LPP200-32-37/4	

Base Plate 5



Model
LPP250-50-132/4
LPP250-50-110/4
LPP250-40-110/4
LPP250-44-90/4
LPP250-37-75/4

Pedestal Installation



Model	Weight (kg)	X (mm)	Y (mm)	Z (mm)
LPP50-81-22/2	245	670	670	330
LPP50-70-18.5/2	206	670	670	330
LPP50-60-15/2	158	565	565	280
LPP65-56-18.5/2	186	565	565	280
LPP65-49-15/2	180	565	565	280
LPP65-40-11/2	176	565	565	280
LPP80-35-15/2	187	565	565	280
LPP80-28-11/2	173	565	565	280
LPP80-21.5-7.5/2	128	565	565	280
LPP80-28-11/4	238	670	670	330
LPP80-22-7.5/4	181	565	565	280
LPP80-19-5.5/4	168	565	565	280
LPP80-80-22/2	265	710	710	360

Pedestal Installation

Model	Weight (kg)	X (mm)	Y (mm)	Z (mm)
LPP80-70-18.5/2	220	670	670	330
LPP80-60-15/2	178	565	565	280
LPP100-50-22/2	267	710	710	360
LPP100-44-18.5/2	222	670	670	330
LPP100-38-15/2	180	565	565	280
LPP100-80-37/2	341	750	750	375
LPP100-70-30/2	330	750	750	375
LPP100-60-22/2	276	710	710	360
LPP100-32-22/2	330	750	750	375
LPP100-30-18.5/2	293	710	710	360
LPP100-24-15/2	270	710	710	360
LPP100-20-11/2	256	670	670	330
LPP100-32-22/4	345	750	750	375
LPP100-30-18.5/4	327	750	750	375
LPP100-25-15/4	286	710	710	360
LPP100-21-11/4	261	670	670	330
LPP100-16-7.5/4	222	670	670	330
LPP125-35-30/4	415	780	780	390
LPP125-31-22/4	352	750	750	375
LPP125-28-18.5/4	335	750	750	375
LPP125-24-15/4	305	710	710	360
LPP125-19-11/4	286	710	710	360
LPP125-50-30/2	347	750	750	375
LPP125-44-30/2	346	750	750	375
LPP125-37.5-22/2	290	710	710	360
LPP150-50-45/4	634	970	970	470
LPP150-40-37/4	570	870	870	440
LPP150-33-37/4	503	840	840	420
LPP150-29-30/4	475	840	840	420
LPP150-33-30/4	459	840	840	420
LPP150-25-22/4	377	780	780	390
LPP150-25-30/4	457	840	840	420
LPP150-24.5-22/4	410	780	780	390
LPP150-21.5-18.5/4	390	780	780	390
LPP150-21-18.5/4	346	750	750	375
LPP150-17-15/4	311	750	750	375
LPP150-12.5-11/4	293	710	710	360
LPP200-36-75/4	894	1050	1050	510
LPP200-34-75/4	860	1050	1050	510
LPP200-28-55/4	700	970	970	470
LPP200-22.5-45/4	570	870	870	440
LPP200-18-37/4	570	870	870	440
LPP200-15-30/4	531	870	870	440
LPP200-18-18.5/4	411	780	780	390
LPP200-15-15/4	376	780	780	390
LPP200-55-75/4	957	1050	1050	510
LPP200-44-55/4	762	970	970	470
LPP200-38-45/4	654	970	970	470
LPP200-32-37/4	633	970	970	470
LPP250-50-132/4	1608	1250	1250	620
LPP250-40-110/4	1512	1250	1250	620
LPP250-50-110/4	1512	1250	1250	620
LPP250-44-90/4	1134	1100	1100	550
LPP250-37-75/4	1092	1100	1100	550



Application

- Circulation and transfer of clean, chemically non-aggressive water and other liquids
- Water supply & irrigation
- Water circulation in air conditioning systems

Operating conditions

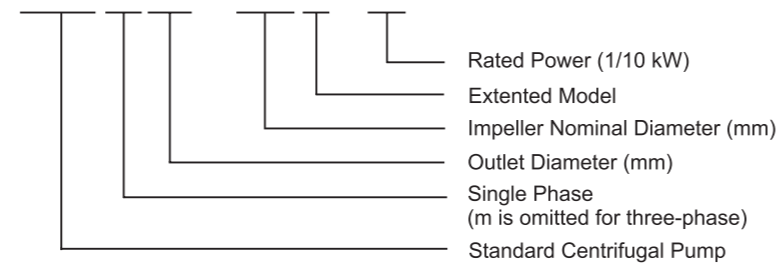
- Delivery: up to 220 m³/h
- Head: up to 95 m
- Liquid temperature:
 - Standard: -10°C to 85°C
- Maximum operating pressure: 12 bar (PN12)
 - Anti-clockwise rotation when facing pump's suction port
- Impeller: AISI304/HT200
- Mechanical seal in compliance with DIN 24960
- Lubricated by internal recirculating pumped liquid
- Counter flange available on request

Motor

- Closed construction, external ventilation
- Insulation class: F
- Protection class: IP54
- Performance in compliance with CEI 2-3 (IEC 34.1)
- Max. ambient temperature: +40°C
- Overload protection

Identification Codes

XST m 32 – 125 K / 11

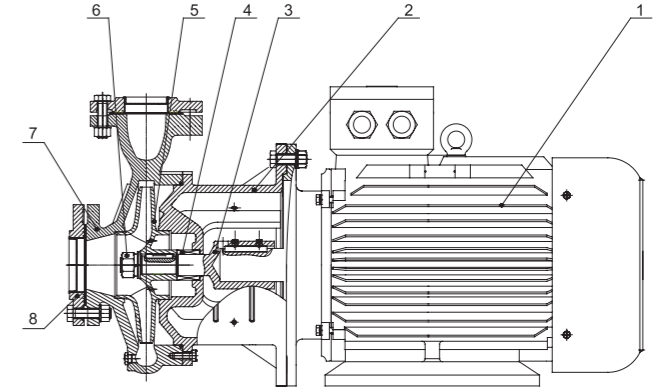


Accessories on Request

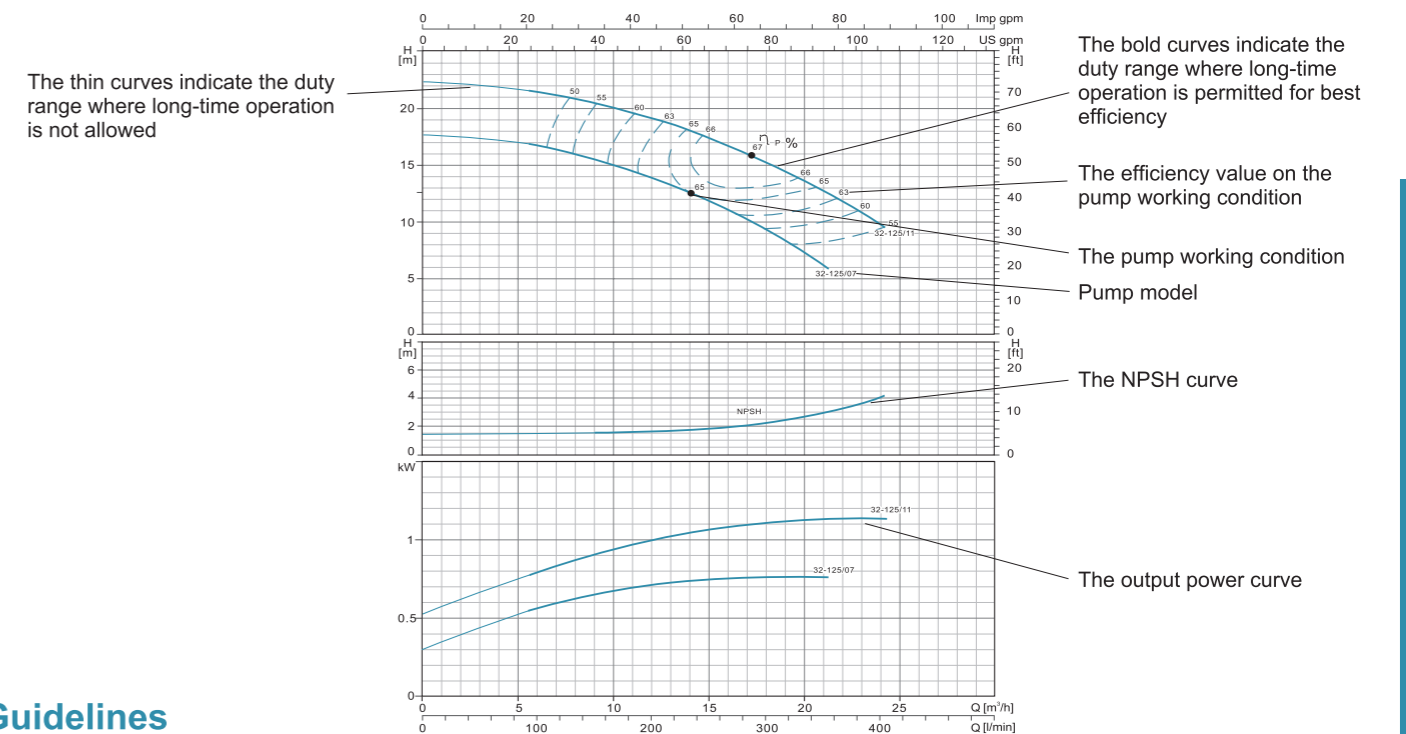
- Galvanised iron threaded counter flanges
- Flanged tapered coupling
- Pump and motor sealing gasket

Materials Table

No.	Part	Material
1	Motor	
2	Support	HT 200
3	Pump shaft	Steel/AISI 304
4	Mechanical seal	Carbon/Silicon carbide
5	Impeller	HT 200/Stainless Steel
6	Nut	AISI 304
7	Pump body	HT 200
8	Flange	HT 200



How to Read The Curve Charts



Guidelines to Performance Curves

Tolerances to ISO 9906, Annex A. Measurements have been made with airless water at a temperature of 20°C and kinematic viscosity of 1mm²/s. To avoid overheating of the motor, the pump should not be use against a high head for a long time.

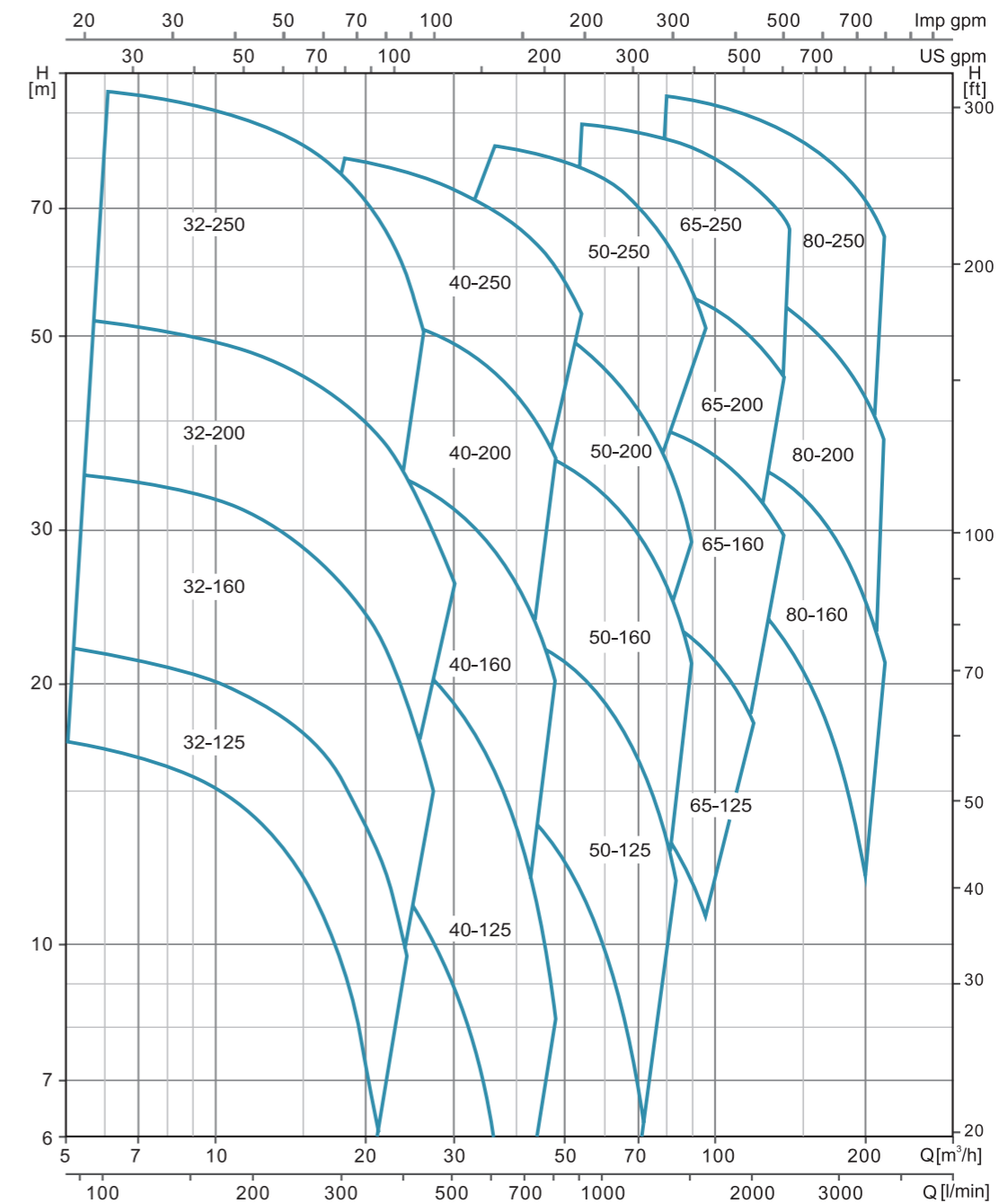
Technical Data

PUMP TYPE	POWER kW HP	l/min m ³ /h	Q=DELIVERY																			
			0	100	150	250	300	400	450	600	700	800	900	1200	1400	1500	1800	2000	2300	3000	3500	
32-125/07★	0.75 1		17.5	16.7	15	12	9															
32-125/11★	1.1 1.5		22	21	19.7	16.5	14.5	9														
32-160/15★	1.5 2		25.4	23.7	22.5	18.5	15.8															
32-160/22★	2.2 3		31	29.6	28.5	24.5	22	15														
32-160/30★	3 4		35	34.3	34	28	25.5	19	15													
32-200/30★	3 4		44.2	43	39.8	35.2	32.2	24.6	19.8													
32-200/40★	4 5.5		54.5	52	50	45.5	41.9	35	30.3													
32-250/55★	5.5 7.5		79.5	74.7	71.8	63	56	37.5														
32-250/75★	7.5 10		99.5	95	91.8	83	76	57.8														
40-125/11	1.1 1.5		14.7				13.5	11.5	10.1	5.8												
40-125/15	1.5 2		18.1				17	15	13.9	9.6	6											
40-125/22	2.2 3		24.5				23.2	21.5	20.2	16	13	8.3										
40-160/30	3 4		31.8				29.5	27.5	26.3	21.5	17.5											
40-160/40	4 5.5		38				36	34	33	28.5	25	20.1										
40-200/55★	5.5 7.5		46				43.8	41.3	40.1	35	30											
40-200/75★	7.5 10		57				53.6	51.5	50	45	41	36.5										
40-250/92★	9.2 12.5		64				59	56.5	55	49.5	45	39.8										
40-250/110★	11 15		72				67.5	65	63.5	57.5	52.2	47										
40-250/150★	15 20		84.5				80	77.3	75.2	71	65	61										
50-125/22	2.2 3		17							15.4	14	12.8	11.5	6.5								
50-125/30	3 4		20							18.8	18	17	15.6	11								
50-125/40	4 5.5		24							23.1	23	21.5	20.3	15.8	11.8							
50-160/55	5.5 7.5		32							30.6	30	28	26.6	20.5	14.8							
50-160/75	7.5 10		40							38	37	36	34.4	29	24	21						
50-200/92★	9.2 12.5		50.5							46.8	45	43	40.9	32.5	25.7							
50-200/110★	11 15		57.5							53.5	52	50	47.5	40	33	29						
50-250/150★	15 20		68.5							64	63	61.5	59	50	41							
50-250/185★	18.5 25		77							73.2	72	70	68	60.5	51.5	47						
50-250/220★	22 30		86.3							83	81.5	80.8	78.7	70	61.9	57						
65-125/40	4 5.5		19									17.3	16.8	14.5	13	11.8						
65-125/55	5.5 7.5		23									21.3	20.9	19	17.5	16.7	13.7					
65-125/75	7.5 10		27									26	25.6	24.5	23	22.5	20	18				
65-160/92	9.2 12.5		33										31.5	30	28	27.1	24	21.5				
65-160/110	11 15		36										34.5	33	31.5	30.8	28	25.5				
65-160/150	15 20		42										41	40	38.5	37.8	35	33	29.5			
65-200/150	15 20		45.5										46	43.5	41	39.2	33					
65-200/185	18.5 25		53										53.5	51.2	48.3	47	41.5					
65-200/220	22 30		59										59.5	57.2	54	53	47	43.5				
65-200K/185	18.5 25		41.2										42	41.2	40.6	38.2	36.5	34				
65-200K/220	22 30		48											48	47.5	46	44	41				
65-200K/300	30 40		59.5												59	58.5	58	56.2	54			
65-250/220	22 30		62												61.5	58.2	56.5	54	49	45		
65-250/300	30 40		76												75	73	71.5	69.5	64.5	61.5	54	
65-250/370	37 50		90												88.3	86.5	84	83	78	75	68	
80-160/110	11 15		27													27.3	26	24.5	22.5	16		
80-160/150	15 20		32.8													32.5	31.3	30.2	28.5	22.1	16.7	
80-160/185	18.5 25		39													38	36.8	36.7	33.8	28.8	23.5	
80-200/220	22 30		48													47.5	45.5	43.5	41	32.5	24.5	
80-200/300	30 45		60													59.5	58	57	54.5	47	40.5	
80-250/370	37 50		71.5													70.5	67.5	65.5	61.5	49.5	38.5	
80-250/450	45 61		80													80.5	78.5	76.5	73.4	63.2	51	
80-250/550	55 75		92.5													93.5	91.2	89.8	86.8	77.6	68.3	

★ = Stainless steel impeller

Characteristic Curves

XST	~2900rpm	ISO 9906 Annex A
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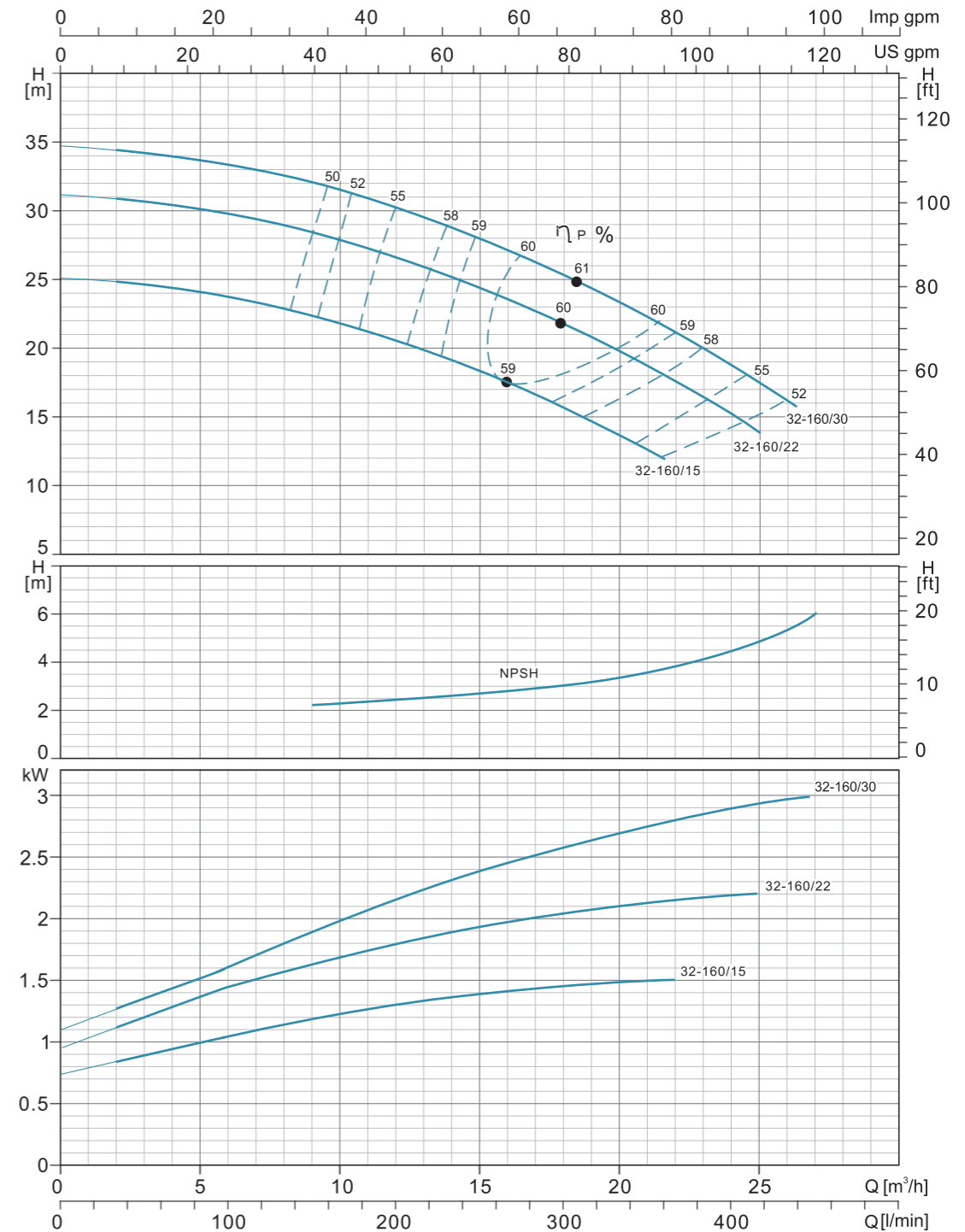
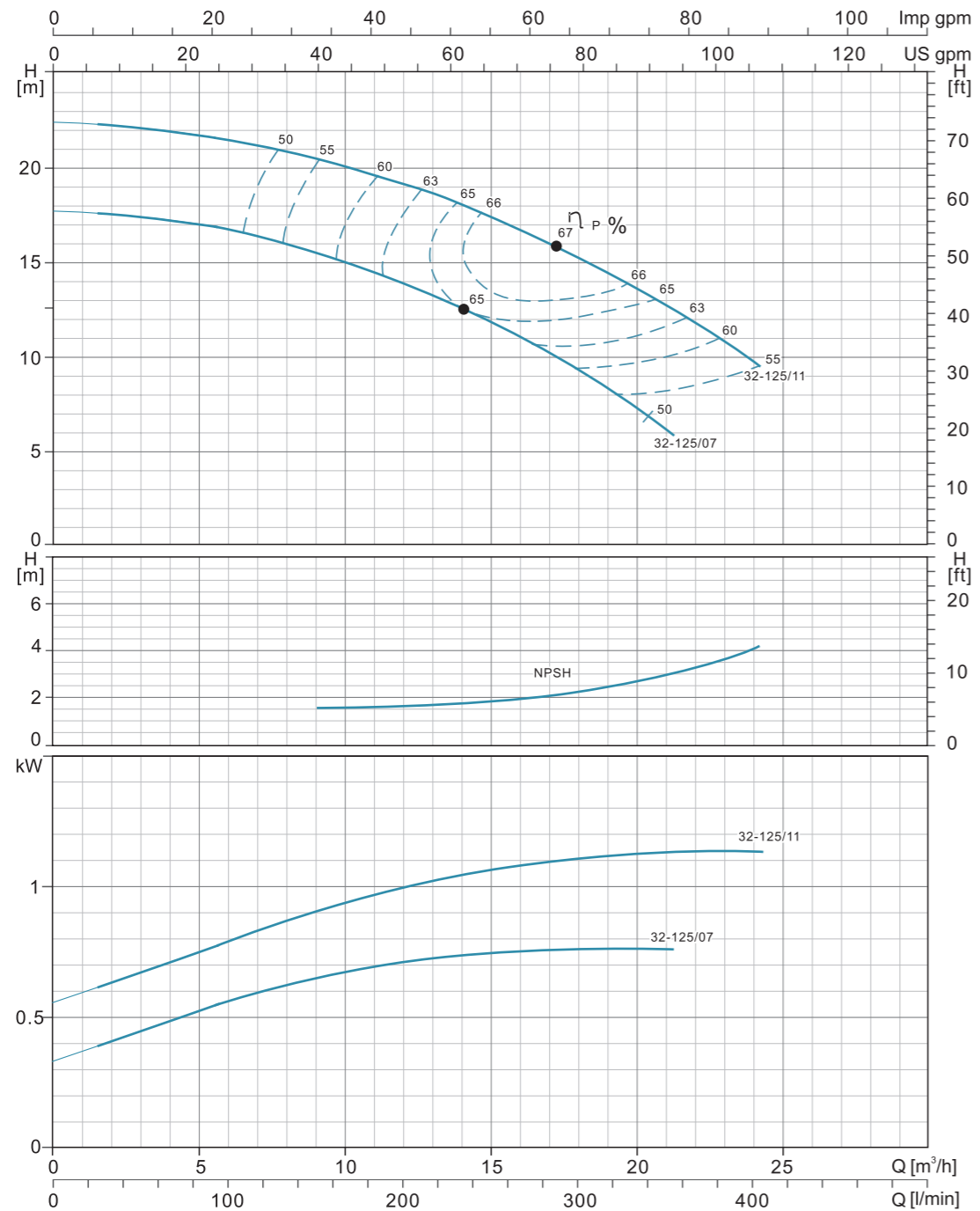


Hydraulic Performance Curves

Hydraulic Performance Curves

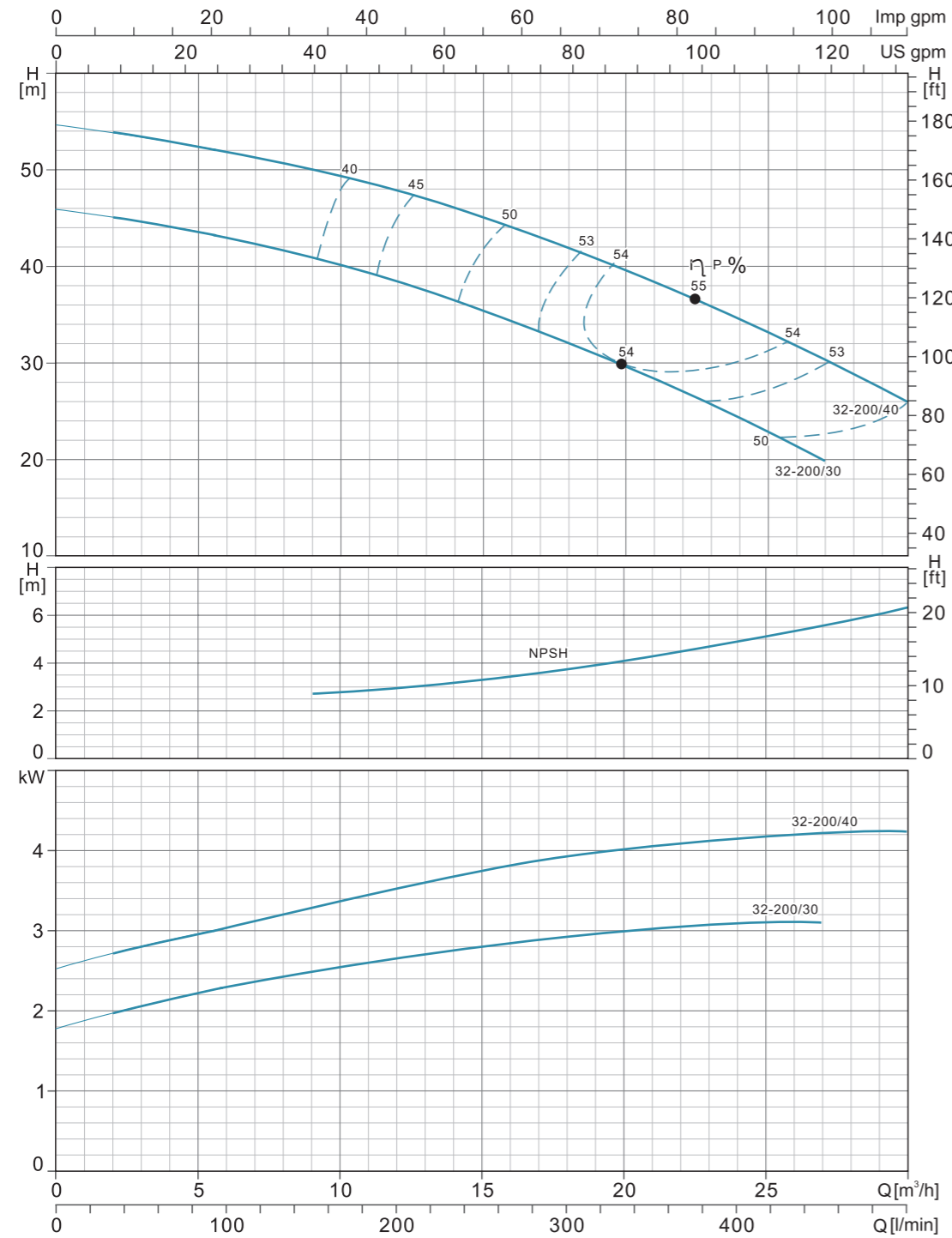
XST32-125	~2900rpm	ISO 9906 Annex A
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XST32-160	~2900rpm	ISO 9906 Annex A
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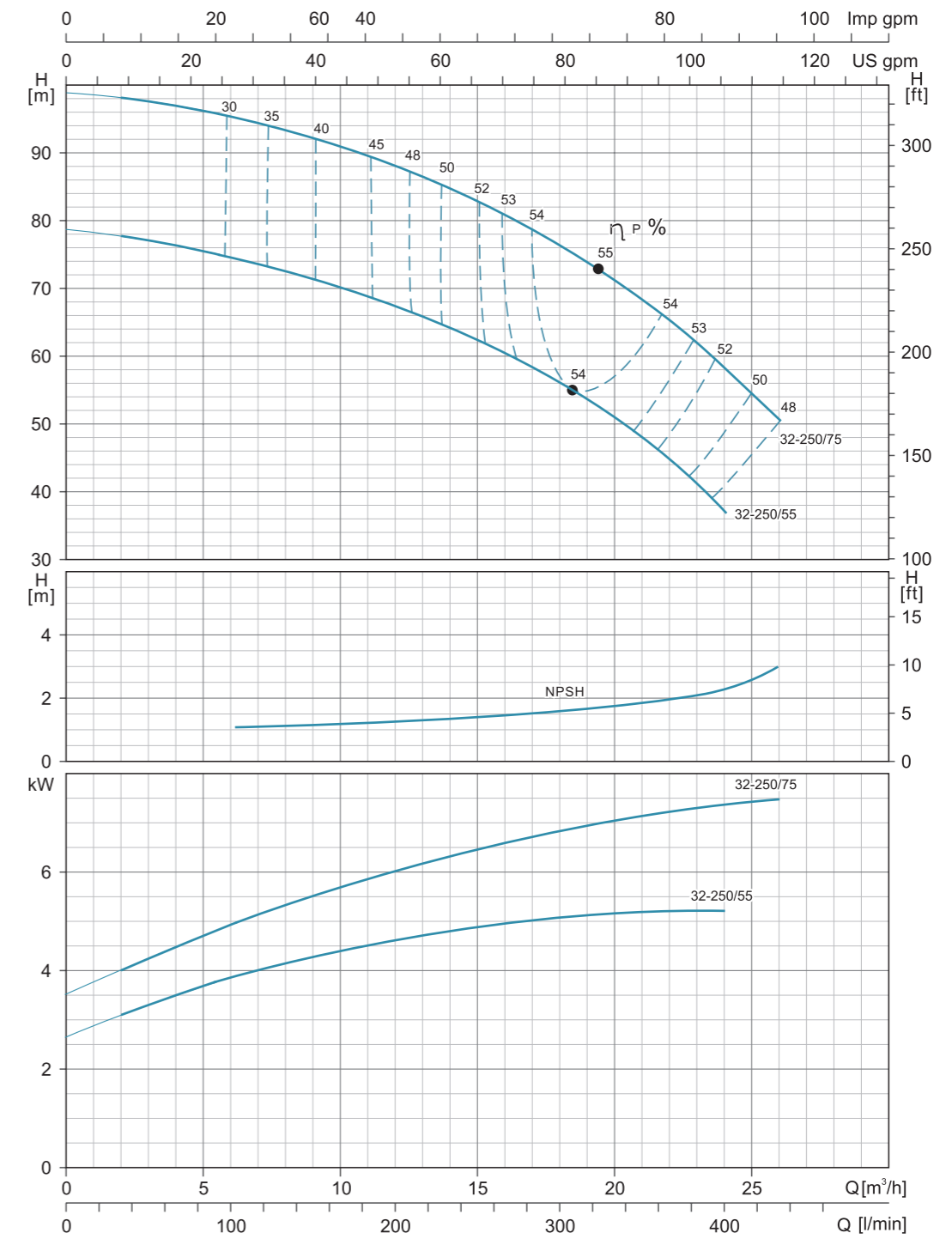
Hydraulic Performance Curves

XST32-200	~2900rpm	ISO 9906 Annex A
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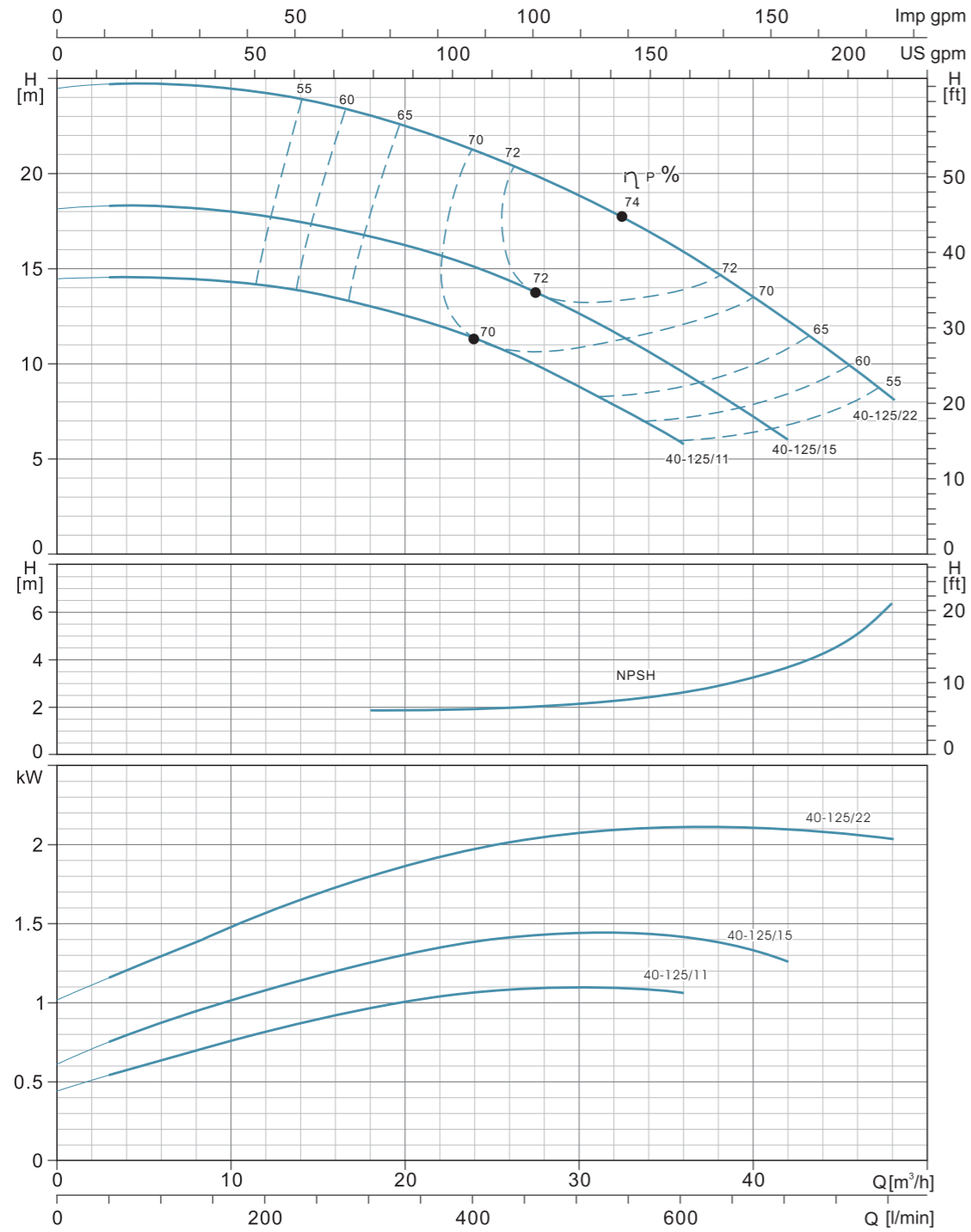
Hydraulic Performance Curves

XST32-250	~2900rpm	ISO 9906 Annex A
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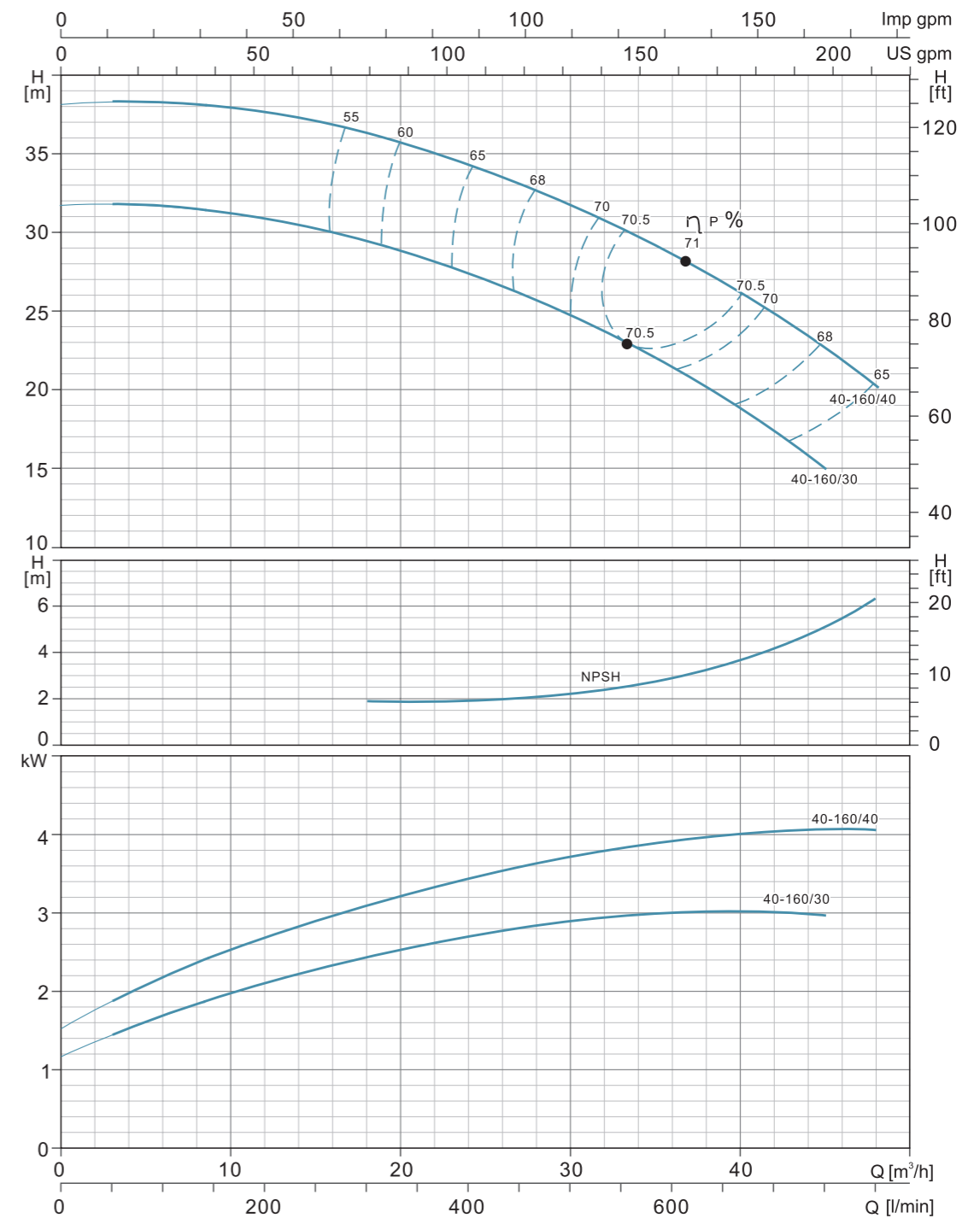
Hydraulic Performance Curves

XST40-125	~2900rpm	ISO 9906 Annex A
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Hydraulic Performance Curves

XST40-160	~2900rpm	ISO 9906 Annex A
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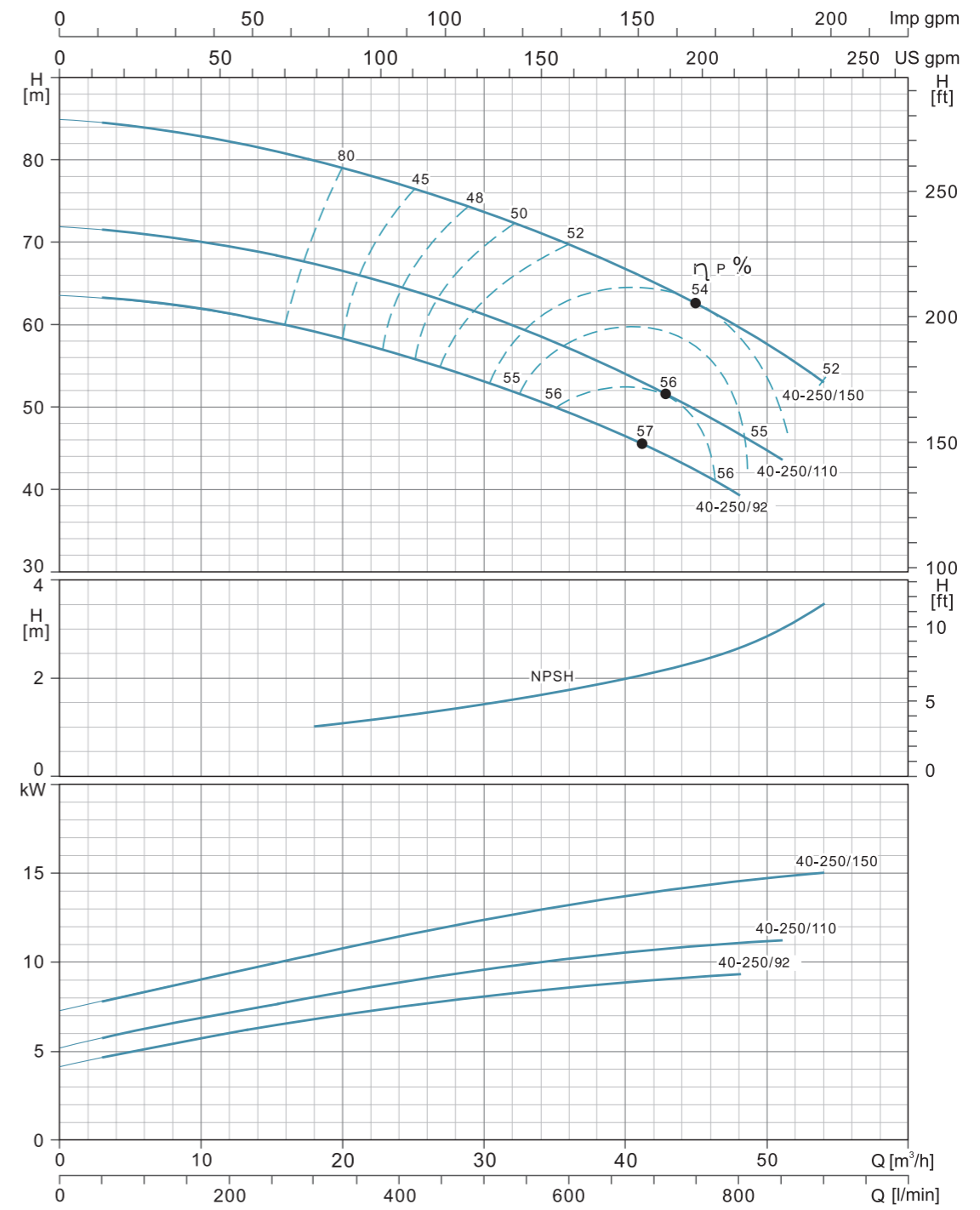
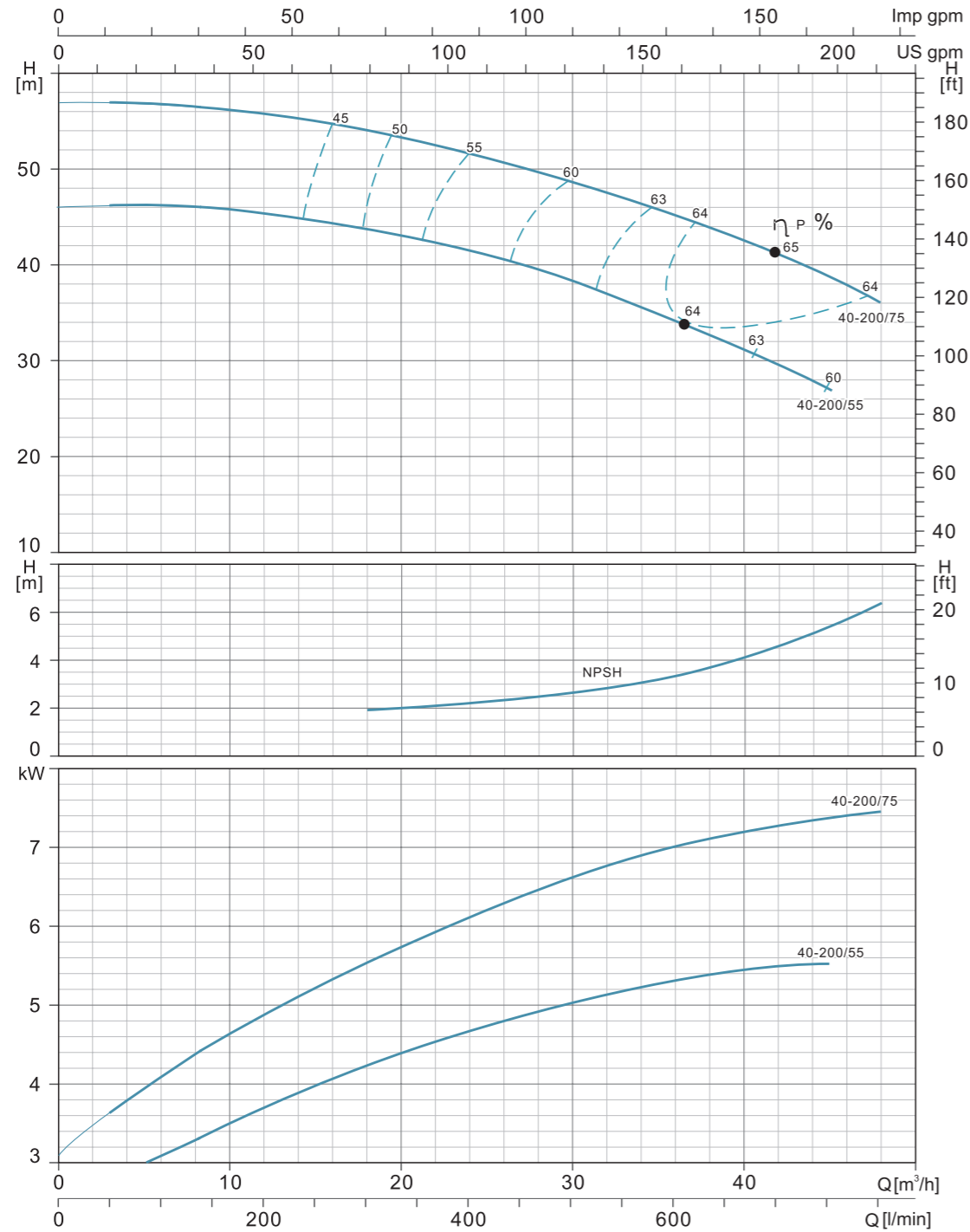


Hydraulic Performance Curves

Hydraulic Performance Curves

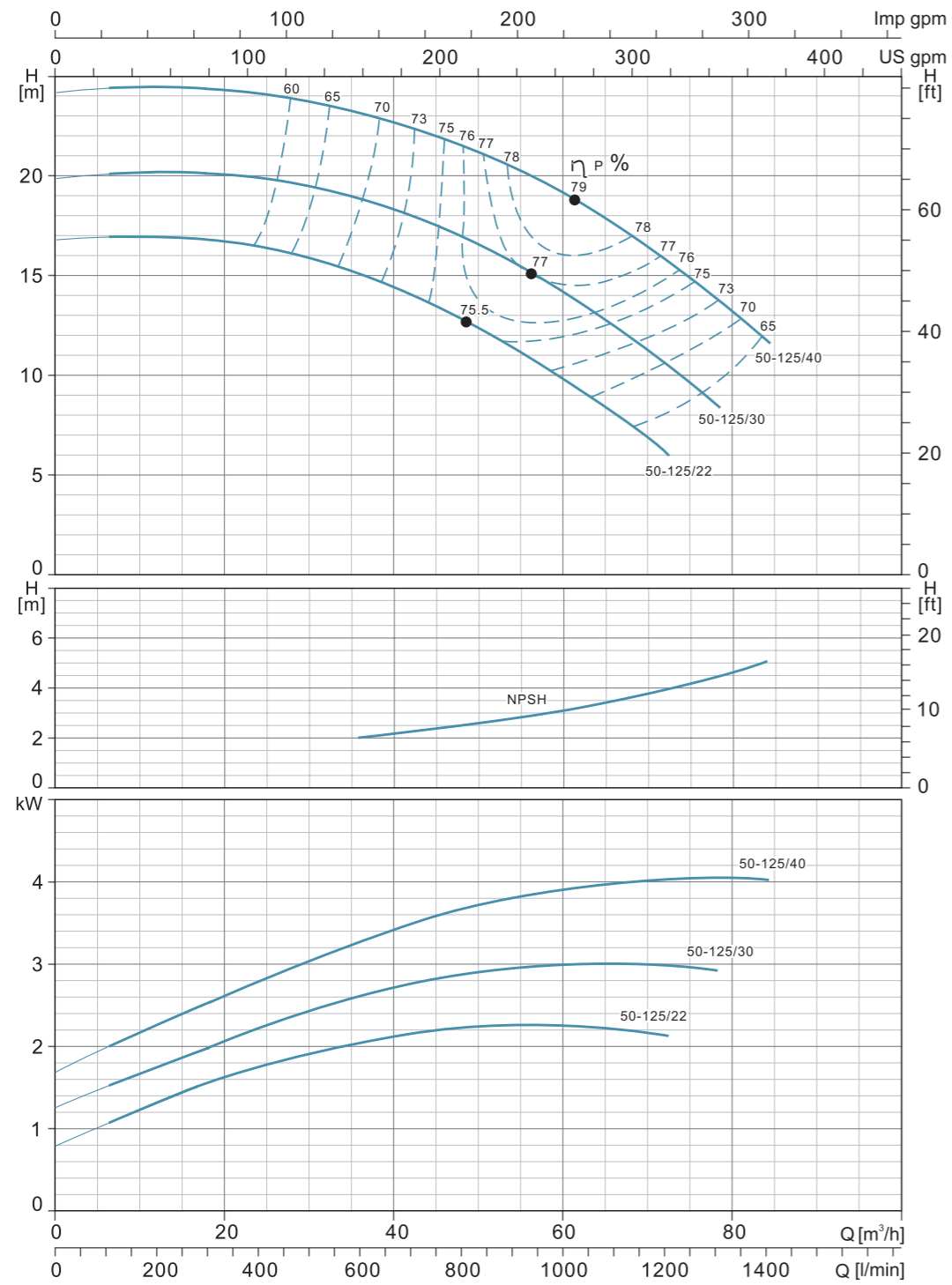
XST40-200 **~2900rpm** **ISO 9906 Annex A**

XST40-250 **~2900rpm** **ISO 9906 Annex A**



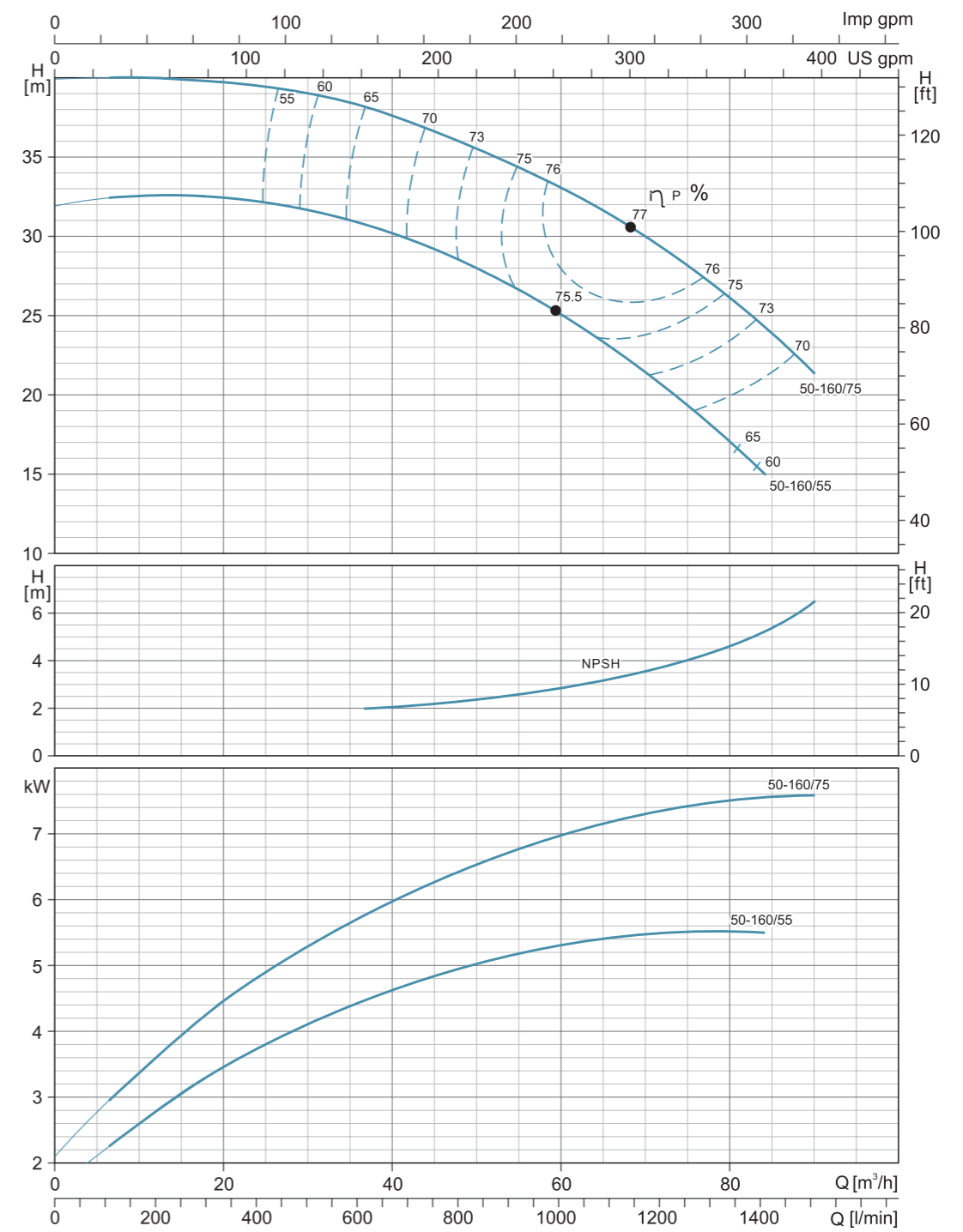
Hydraulic Performance Curves

XST50-125 **~2900rpm** **ISO 9906 Annex A**



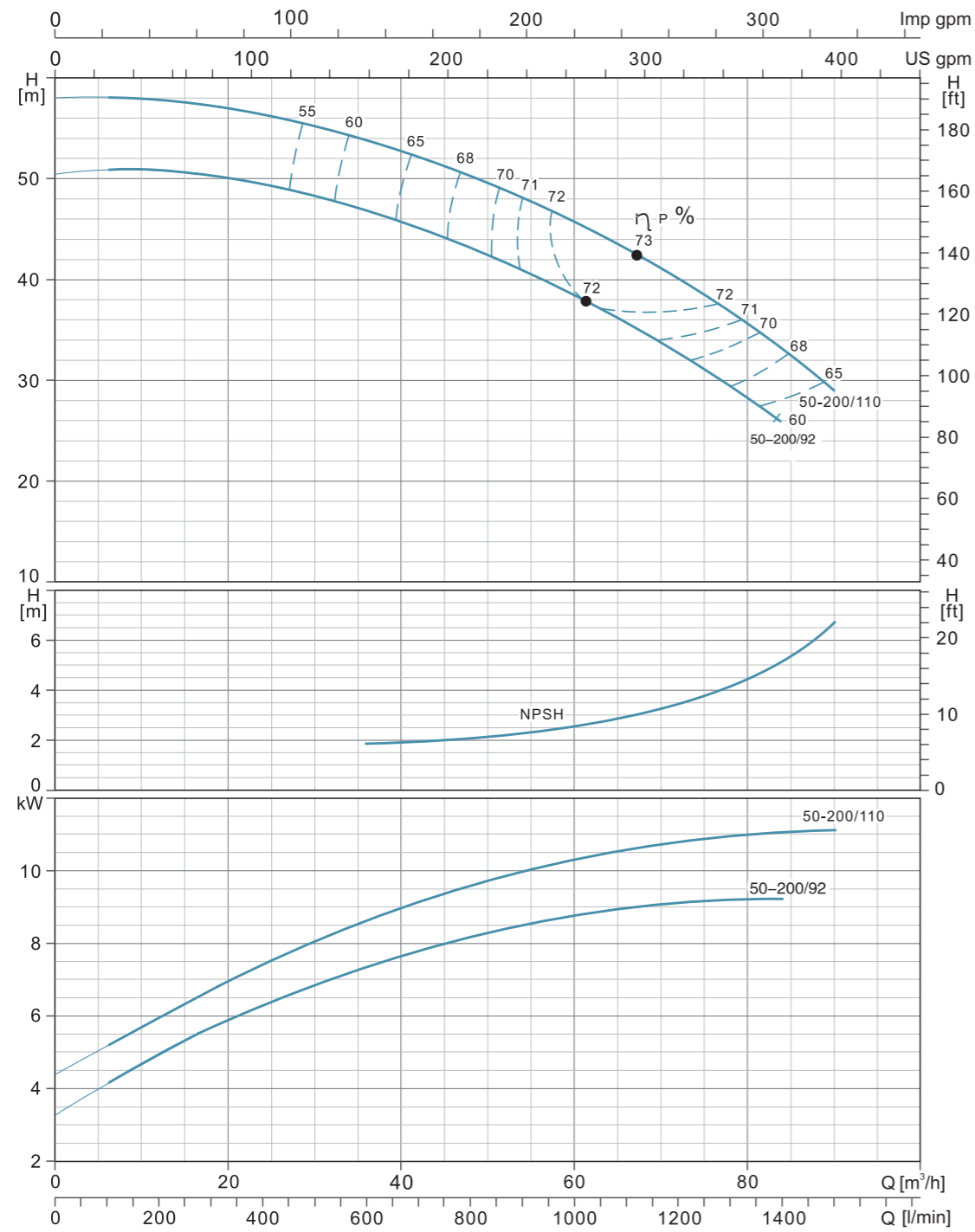
Hydraulic Performance Curves

XST50-160 **~2900rpm** **ISO 9906 Annex A**



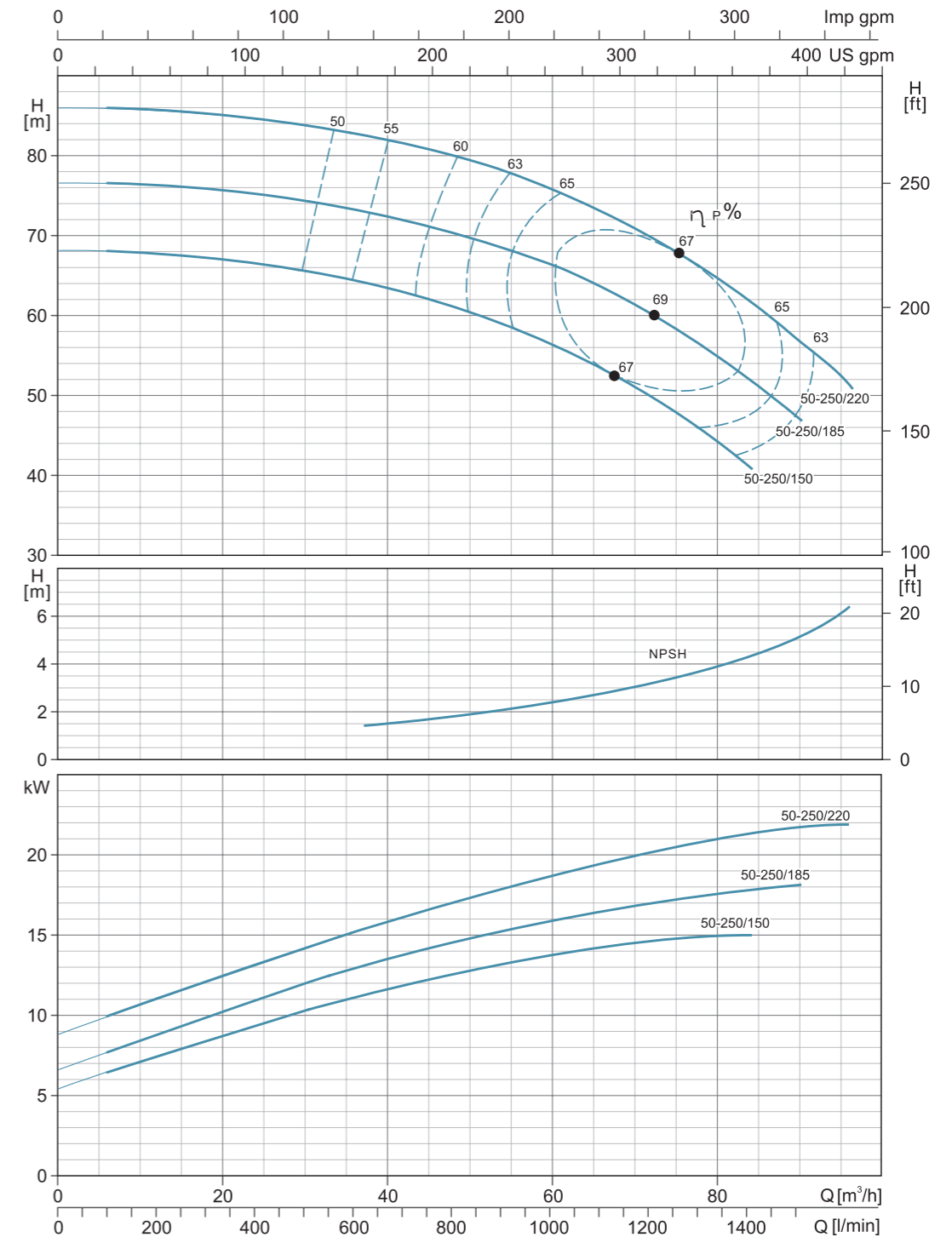
Hydraulic Performance Curves

XST50-200	~2900rpm	ISO 9906 Annex A
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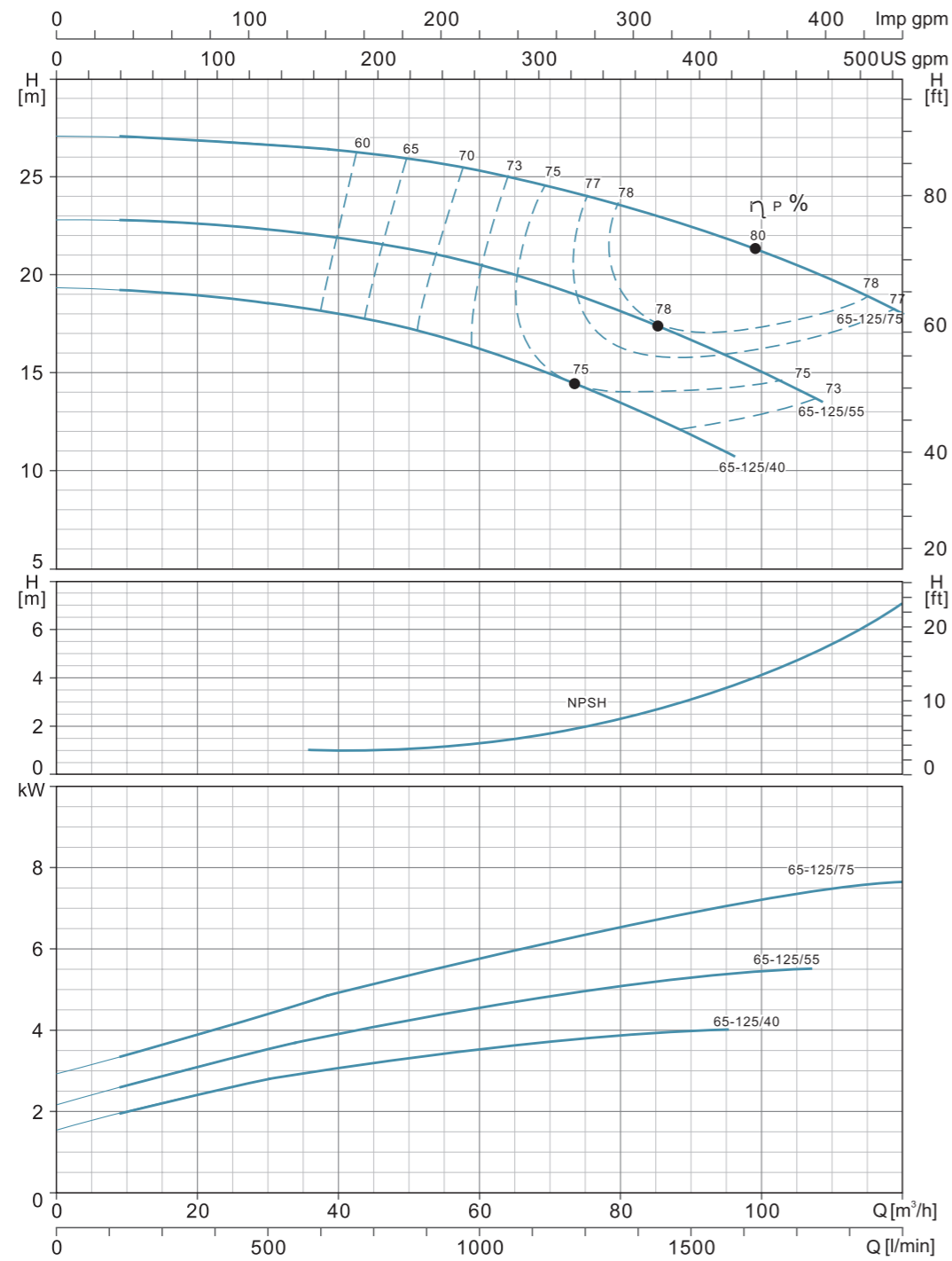
Hydraulic Performance Curves

XST50-250	~2900rpm	ISO 9906 Annex A
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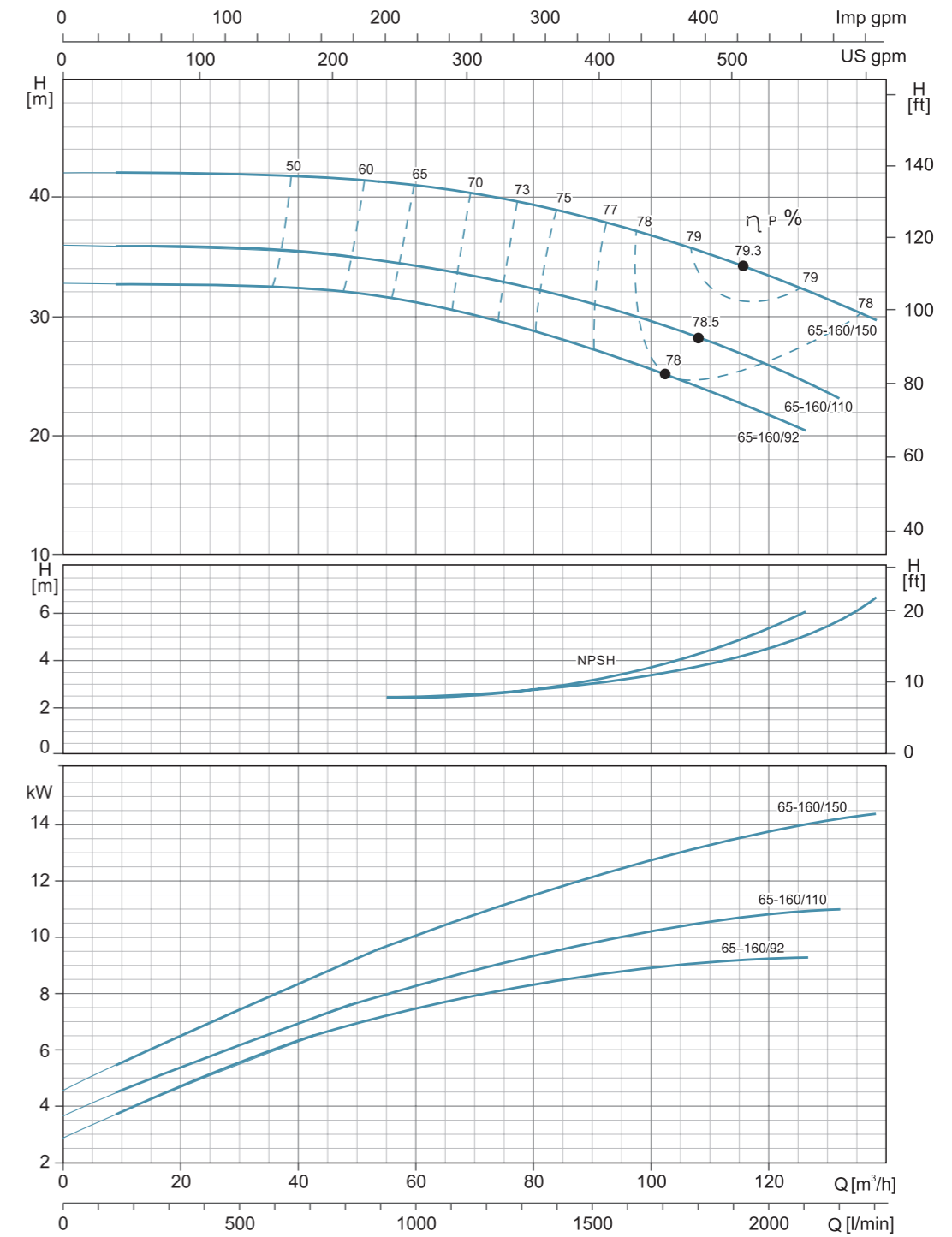
Hydraulic Performance Curves

XST65-125 ~2900rpm ISO 9906 Annex A



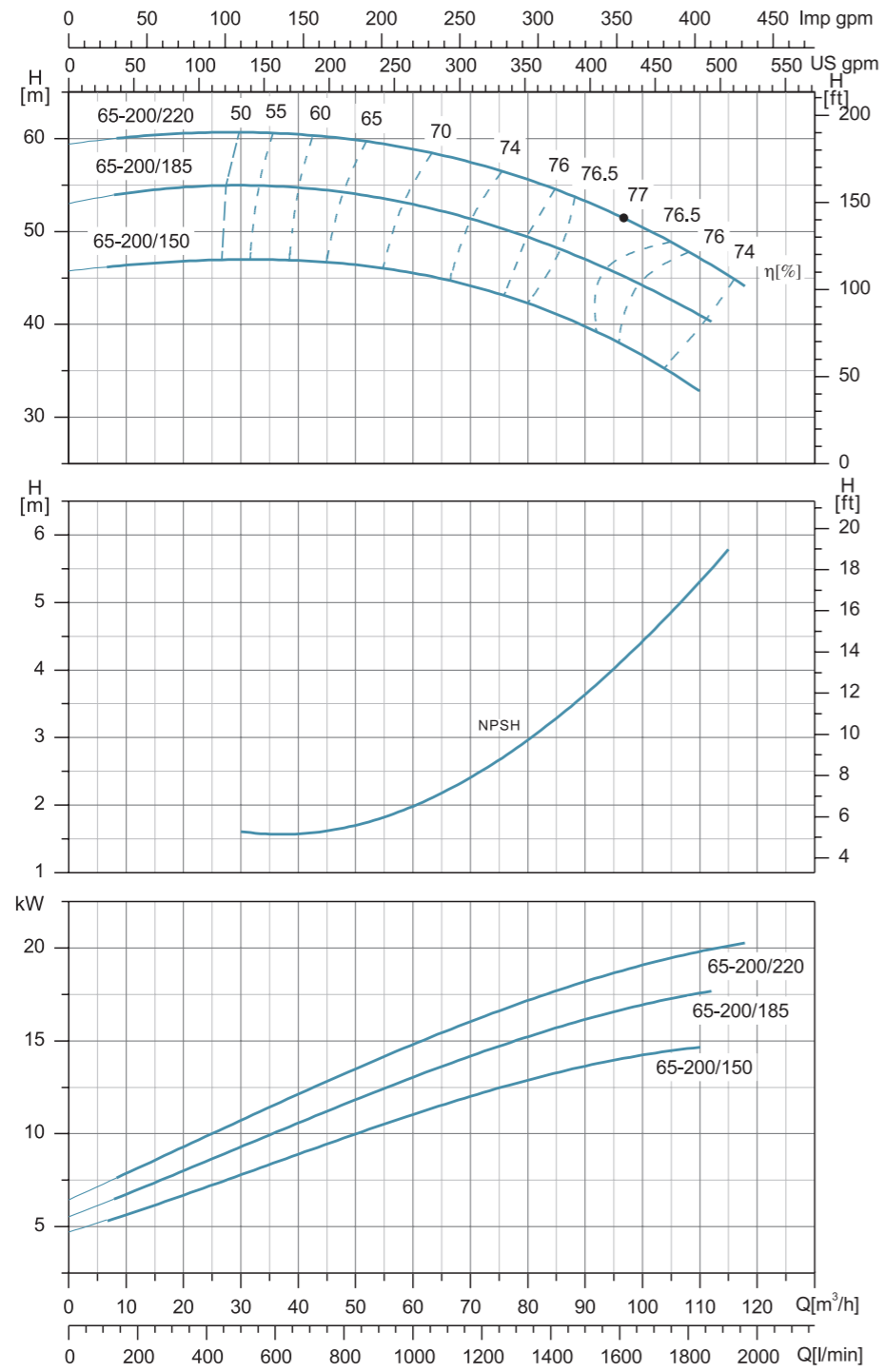
Hydraulic Performance Curves

XST65-160 ~2900rpm ISO 9906 Annex A



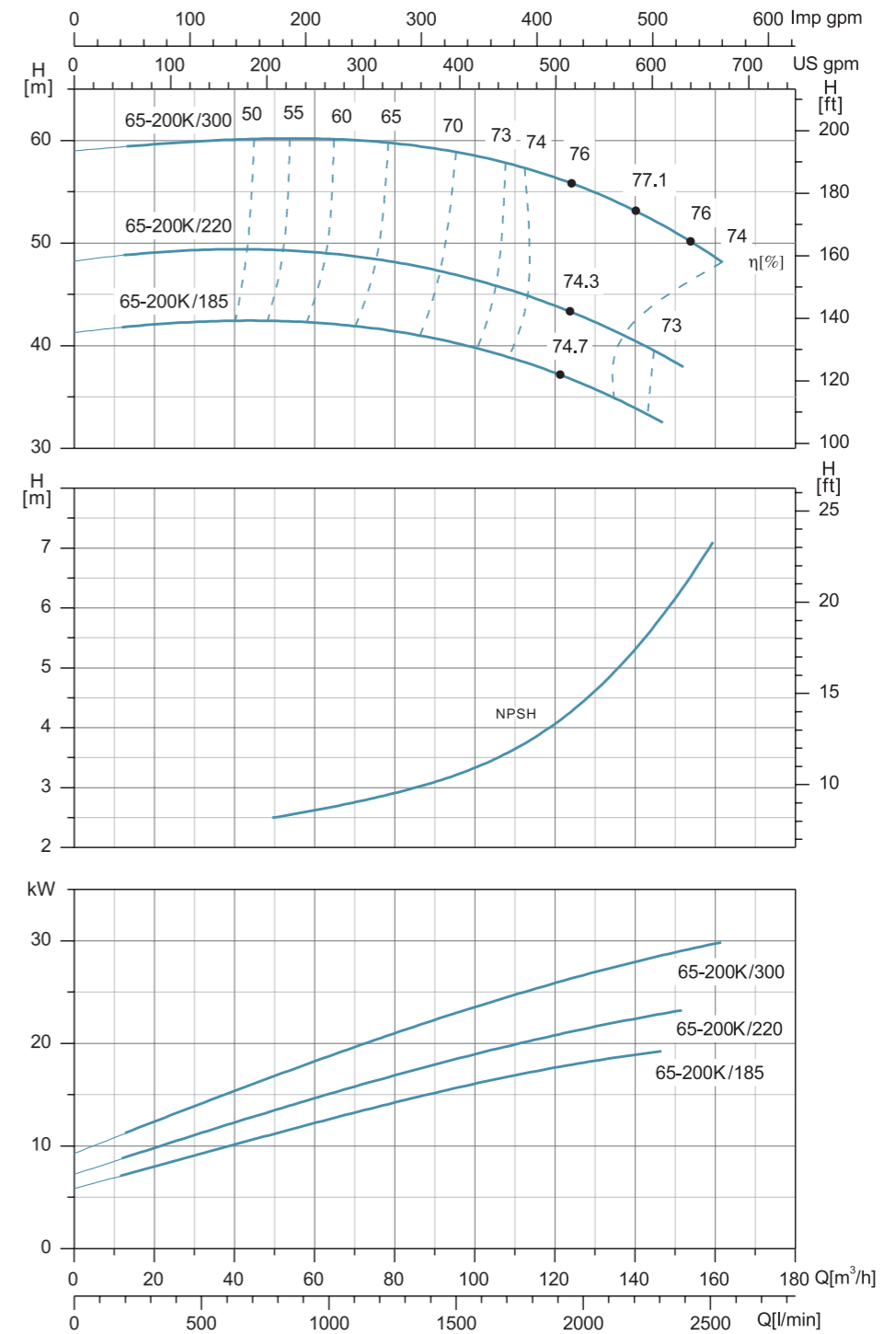
Hydraulic Performance Curves

XST65-200	~2900rpm	ISO 9906 Annex A
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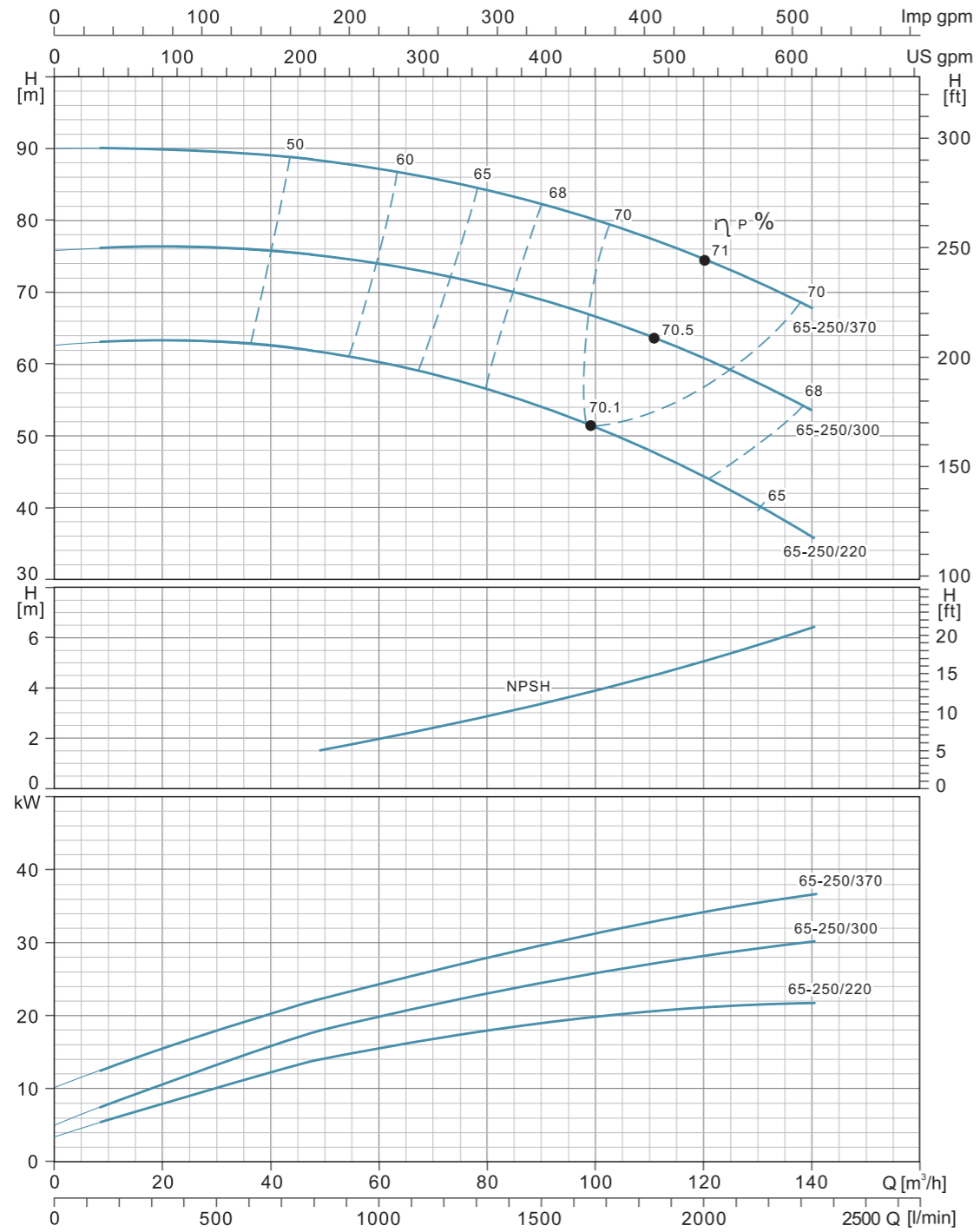
Hydraulic Performance Curves

XST65-200K	~2900rpm	ISO 9906 Annex A
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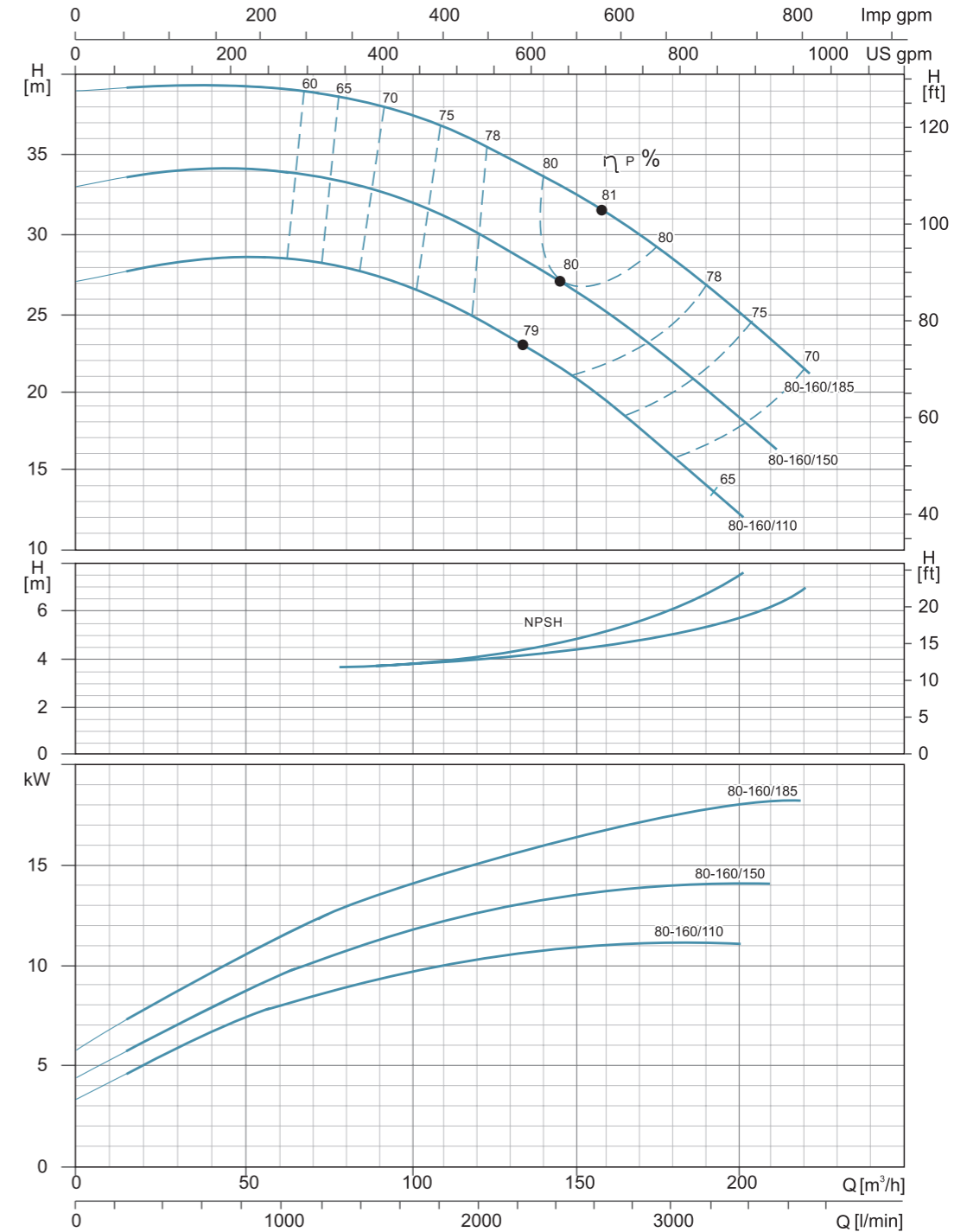
Hydraulic Performance Curves

XST65-250	~2900rpm	ISO 9906 Annex A
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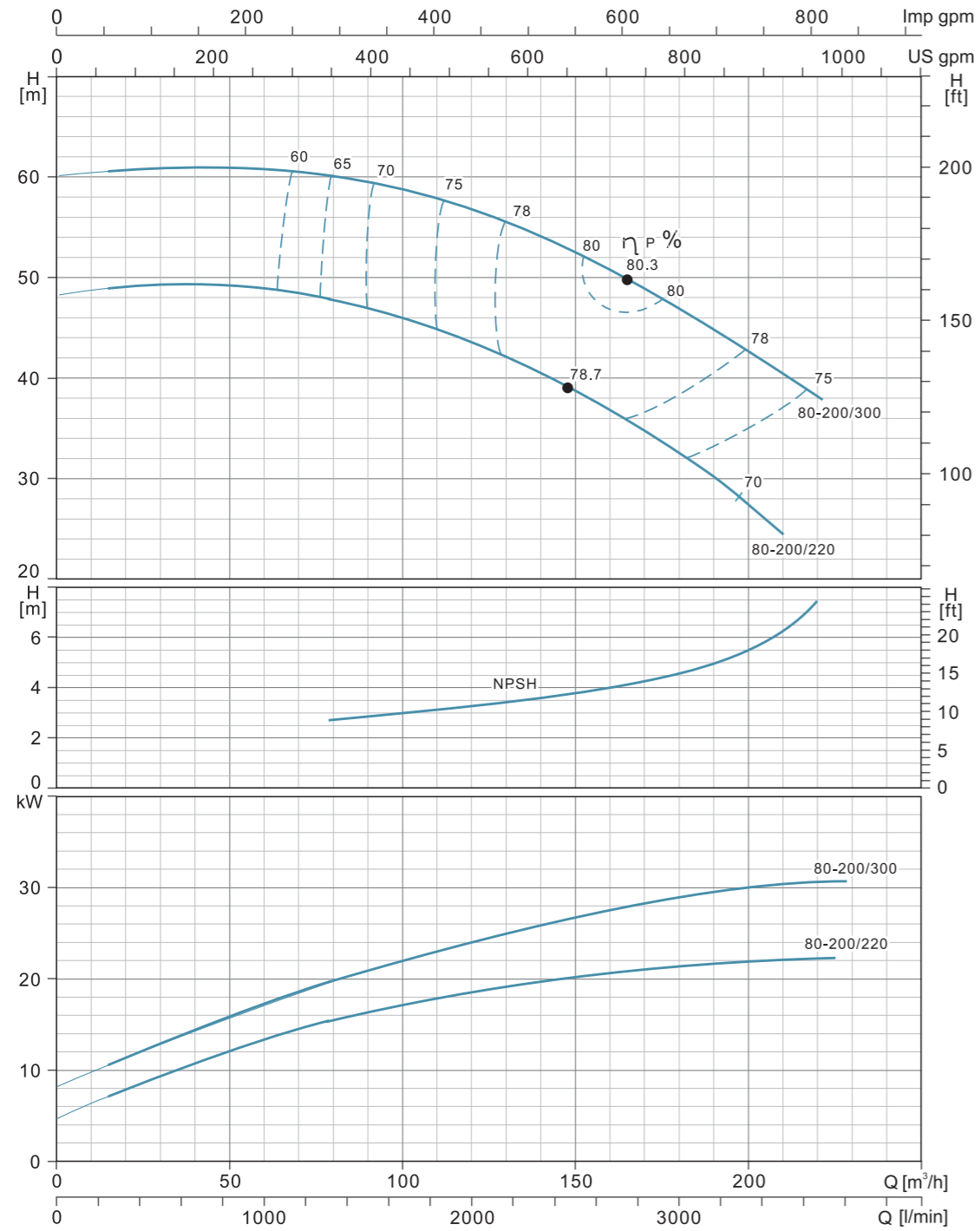
Hydraulic Performance Curves

XST80-160	~2900rpm	ISO 9906 Annex A
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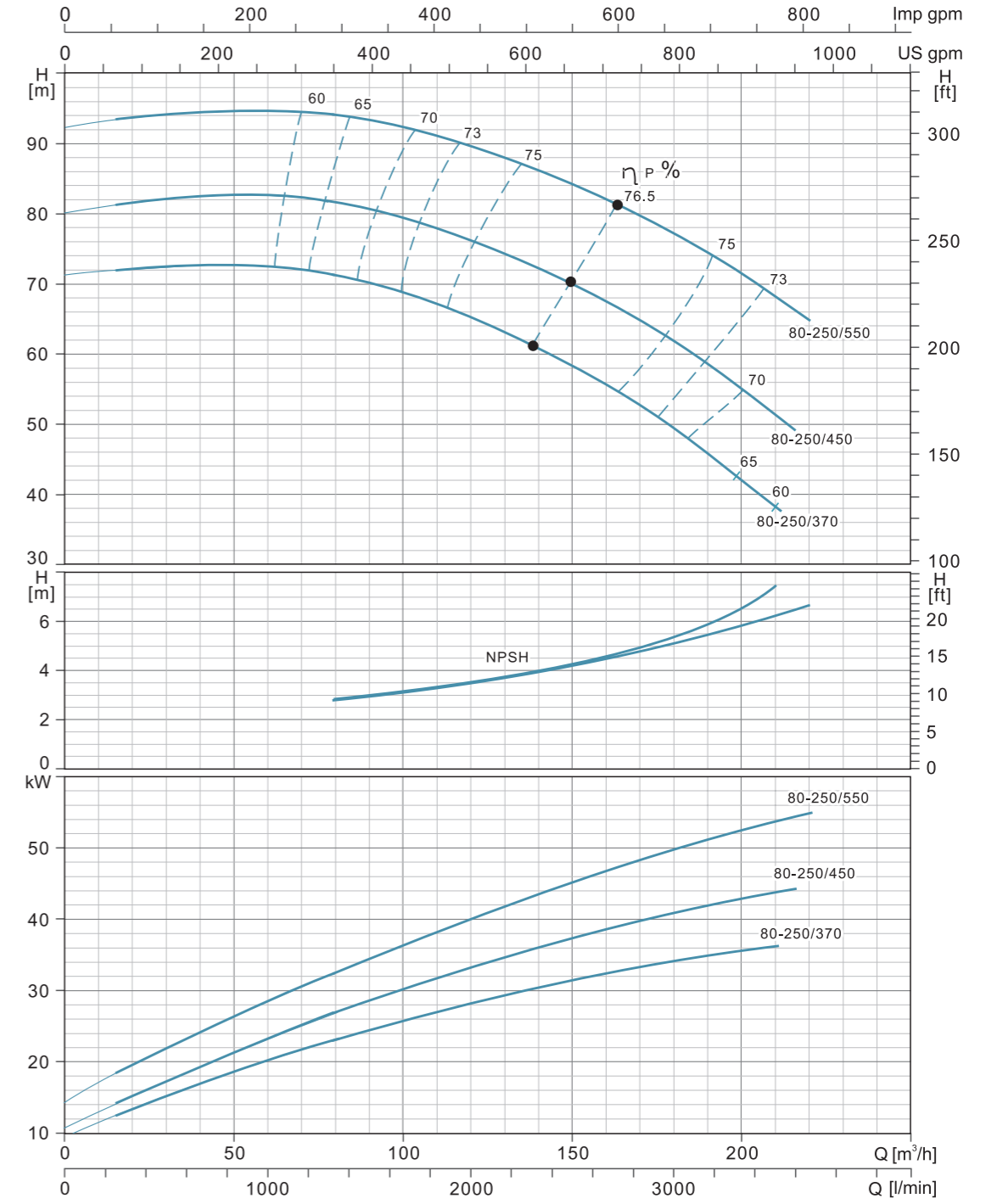
Hydraulic Performance Curves

XST80-200	~2900rpm	ISO 9906 Annex A
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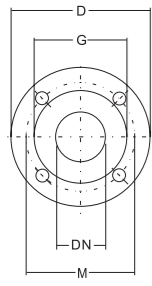


Hydraulic Performance Curves

XST80-250	~2900rpm	ISO 9906 Annex A
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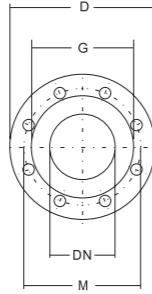


Flange Dimensions



PN16 FLANGES

DN	D	M	G	HOLES N°	Ø	MAX. THICKNESS
32	140	100	78	4	18	18
40	150	110	88	4	18	18
50	165	125	102	4	18	20
65	185	145	122	4	18	20

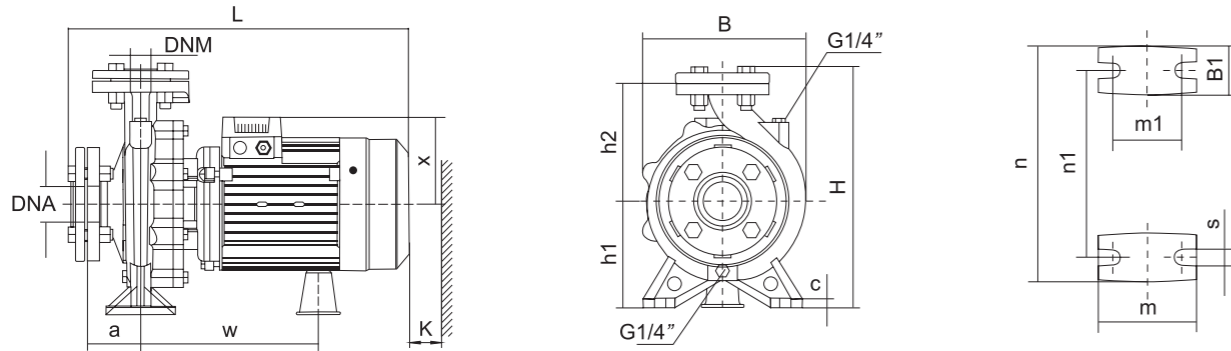


PN16 FLANGES

DN	D	M	G	HOLES N°	Ø	MAX. THICKNESS
80	200	160	138	8	18	22
100	220	180	158	8	18	22

Installation Sketch

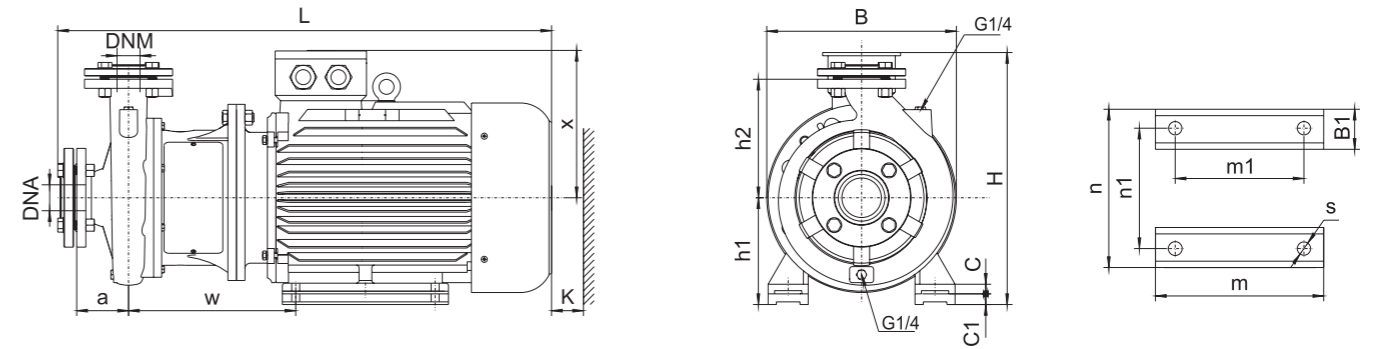
up to 7.5 kW included



MODEL	DNM	DNA	a	w	x	h2	B1	c	h1	m	m1	n	n1	s	B	H	L	K													
32-125/7	32	50	80	223	113	140	48	12	112	100	70	190	140	15	192	281	427	85													
32-125/11				231	123	160	50	16	132																						
32-160/15				266	141																										
32-160/22				266	141																										
32-160/30				266	141																										
32-200/30			155	264	180	258	127	180	48	12	160	15	272	212		308	386	610	60												
32-200/40						272	212	640																							
32-250/55																															
32-250/75																															
40-125/11						40	65	80	255	127	140									45		112	100	70	210	160		218	282	489	95
40-125/15	238	127	168	48	12				132																						
40-125/22	238	127	168	48	12				132																						
40-160/30	238	127	168	48	12				132																						
40-160/40	238	127	168	48	12				132																						
40-200/55	100	259	180	259	180			180	50		160	15	264	212	15	275	370	553	105												
40-200/75				275	370			583																							
50-125/22				50	65			100	262	127	160									50		132	100	70	240	190		243	322	518	110
50-125/30									262	127	160									50	12	132									
50-125/40									262	127	160									50	12	132									
50-160/55	262	180	180			52			160	272	370	556																			
50-160/75	262	180	180			52			160																						
65-125/40	65	80	100			265	180	180	68	14	160	125	95	280	212		283	372	564	120											
65-125/55						265	180	180	68	14	160																				
65-125/55						265	180	180	68	14	160																				
65-125/75						265	180	180	68	14	160																				

Installation Sketch

From 7.5 kW



MODEL	DNM	DNA	a	w	x	h2	B1	C	C1	h1	m	m1	n	n1	s	B	H	L	K																							
40-250/92	40	65	100	310	260	225	65	20	20	180	260	210	320	254	14.5	350	440	845	110																							
40-250/110																																										
40-250/150																																										
50-200/92	50	65	100	310	260	200	65	20	-	160	260	210	320	254	14.5	350	420	845	120																							
50-200/110																																										
50-250/150																																										
50-250/185						225	70	25	-	180	304	254	355	279	311	241	355	279	14.5	350	440	895	110																			
50-250/220																																										
65-160/92																								65	80	100	310	260	200	65	20	-	160	260	210	320	254	14.5	350	420	845	125
65-160/110																																										
65-160/150																																										
65-200/150	225	70	22	-	180	304	254	355	279	311	241	355	279	14.5	350	440	895	125																								
65-200/185																																										
65-200/220																																										
65-200K/185																																										
65-200K/220	70	25	22	-	180	304	254	320	254	311	241	355	279	18.5	355	455	950	125																								
65-200K/300																																										
65-250/220																																										
65-250/300	250	25	25	25	200	369	305	395	318	18.5	400	505	1026	14.5	455	956	125																									
65-250/370																																										
80-160/110																		80	100	125	315	260	225	65	20	-	160	260	210	320	254	14.5	350	420	870	130						
80-160/150																																										
80-160/185																																										
80-200/220	250	70	22	25	180	311	241	355	279	355	461	978	110	14.5	350	420	870																									
80-200/300																																										
80-250/370																																										
80-250/450																																										
80-250/550	280	80	30	30	280	450	349	490	406	24	550	646	1192	24	550	646	1192																									



Application

- Water supply: filtration and transfer at waterworks, regional water supply and pressure boosting in main pipe
- Industrial pressure boosting: Water system, cleaning system
- Industrial water supply: boiler feeding, cooling system, air conditioning, transportation of light acid and alkali liquid
- Water treatment: distillation systems, separators, swimming pools
- Agricultural irrigation, petrochemical industry, medicine and sanitation, etc.

Operating Conditions

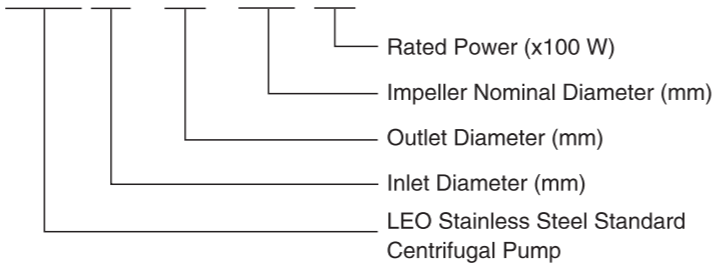
- Thin, clean, non-flammable and explosive, not containing the liquid with solid particles and fibers
- Liquid temperature: -15°C - +80°C
- Flow range: 0.7 - 132 m³/h
- Head range: 9 - 58 m
- Ambient temperature range: -15°C - + 40°C
- Max. operation: 33 bar
- Altitude: up to 1000 m

Motor

- IE 2 motor (IE 3 motor optional)
- Totally enclosed & fan-cooled
- Protection class: IP55
- Insulation class: F

Identification Codes

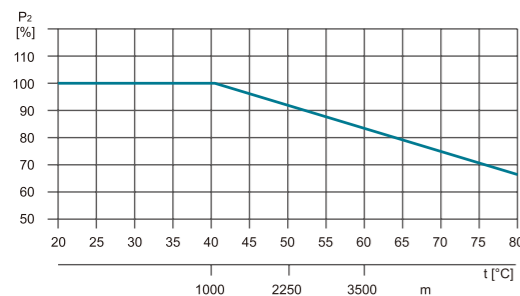
XZS 65- 50- 160/40



Ambient Temperature

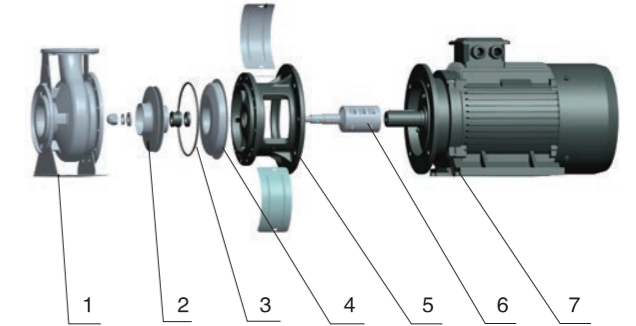
Max. Ambient temperature: +40°C. Ambient temperature above 40°C, or installation at altitude of more than 1000 m above sea level, require the use of an oversize motor. Because of low air density and poor cooling effects, the motor output power P2 will be decreased. See the picture.

For example, when the pump is installed at altitude of more than 3500 m above sea level, P2 will be decrease to 88%. When the ambient temperature is 70°C, P2 will be decreased to 78%.

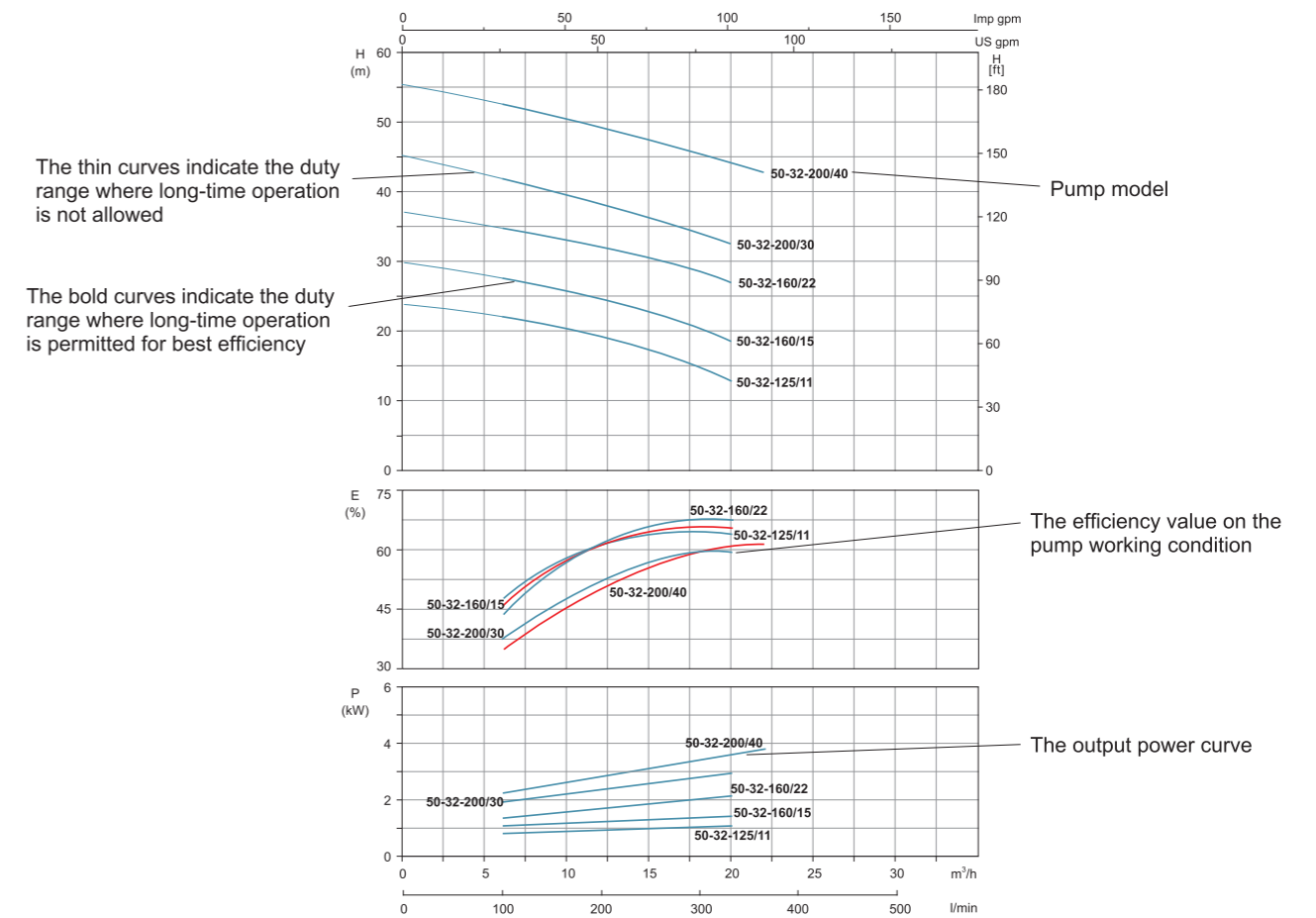


Materials Table

No.	Part	Material
1	Pump body	AISI 304
2	Impeller	AISI 304
3	Mechanical seal	
4	Rear cover	AISI 304
5	Support	HT 200
6	Pump shaft	AISI 304/45#
7	Motor	



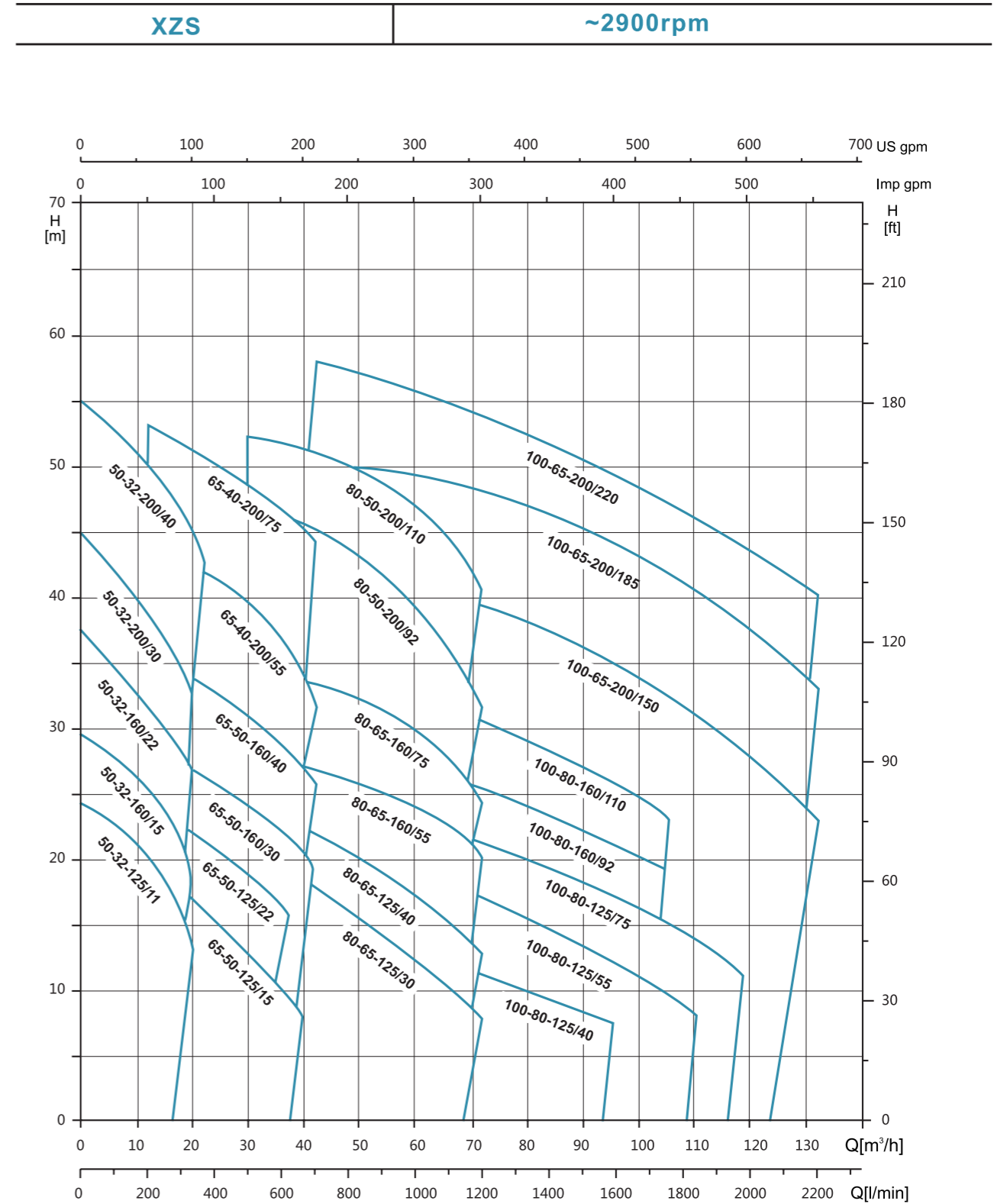
How to Read The Curve Charts



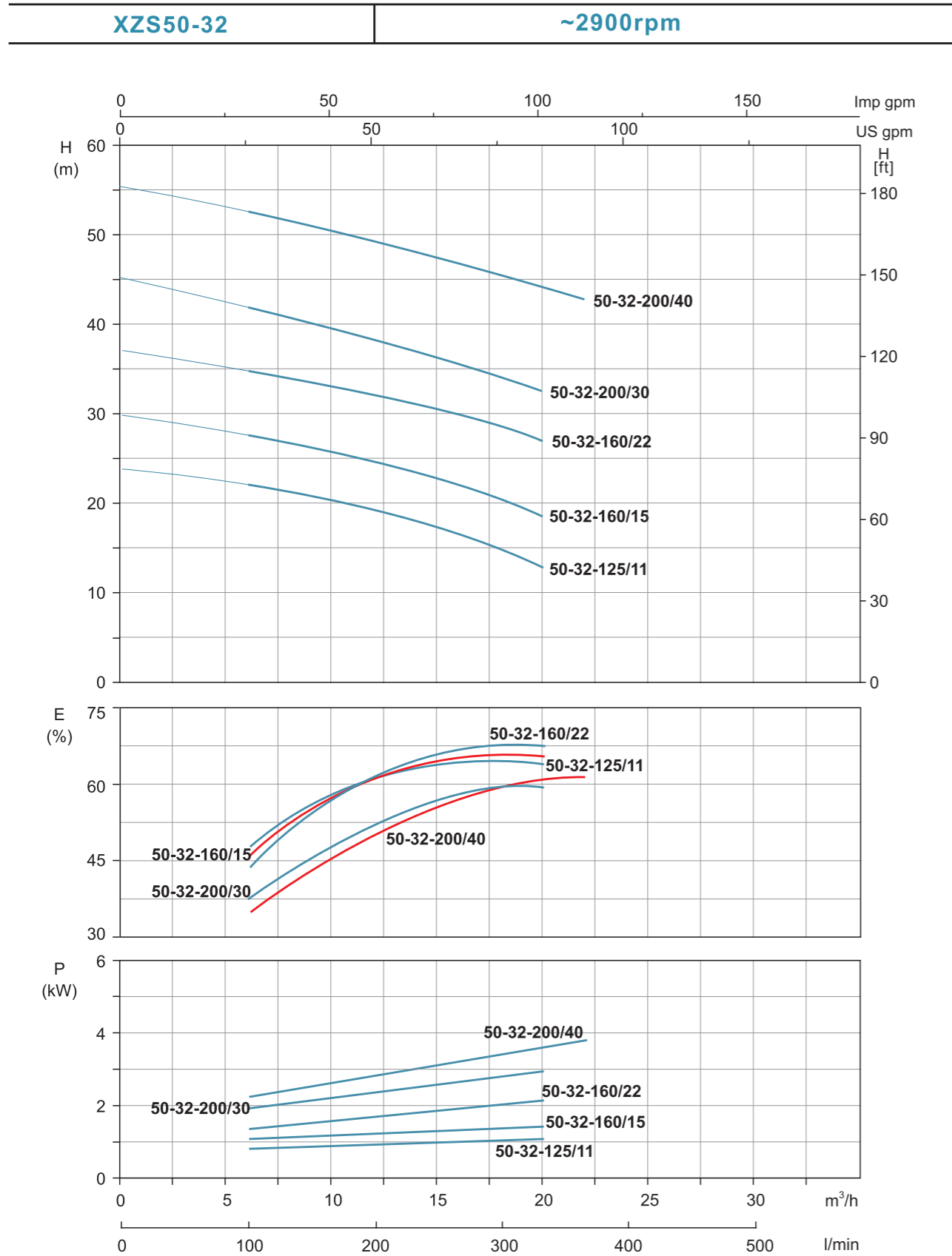
Technical Data

MODEL	Power		Q (m³/h)	Q=DELIVERY																			
	kW	HP		Q [l/min]																			
				0	6	9	12	18	20	22	24	27	30	36	42	48	60	72	90	108	114	120	126
XZS50-32-125/11	1.1	1.5	24.0	21.5	20.5	19.5	16.0	13.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
XZS50-32-160/15	1.5	2	29.5	27.0	26.0	25.0	21.0	18.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
XZS50-32-160/22	2.2	3	37.0	33.5	32.5	32.0	28.5	27.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
XZS50-32-200/30	3	4	45.0	41.0	40.0	38.0	34.0	32.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
XZS50-32-200/40	4	5.5	55.0	51.0	50.0	49.0	46.0	45.0	43.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
XZS65-50-125/15	1.5	2	20.0	-	-	19.0	18.0	17.0	16.5	15.0	14.0	12.5	10.0	-	-	-	-	-	-	-	-	-	-
XZS65-50-125/22	2.2	3	26.0	-	-	23.5	22.5	22.0	21.5	21	20.5	19.5	16.5	-	-	-	-	-	-	-	-	-	-
XZS65-50-160/30	3	4	31.0	-	-	29.0	27.5	27.0	26.5	25.5	25.0	24.0	22.0	19.0	-	-	-	-	-	-	-	-	-
XZS65-50-160/40	4	5.5	39.0	-	-	35.5	34.5	34.0	33.5	32.5	32.0	31.0	29.0	26.0	-	-	-	-	-	-	-	-	-
XZS65-40-200/55	5.5	7.5	47.0	-	-	43.0	42.5	42.0	41.5	41.0	40.5	39.0	37.0	33.0	-	-	-	-	-	-	-	-	-
XZS65-40-200/75	7.5	10	57.0	-	-	53.0	52.5	52.0	51.0	50.0	49.0	48.0	46.5	44.5	-	-	-	-	-	-	-	-	-
XZS80-65-125/30	3	4	22.5	-	-	-	-	-	-	20.0	19.5	19.0	18.5	17.5	16.0	13.0	9.0	-	-	-	-	-	-
XZS80-65-125/40	4	5.5	25.5	-	-	-	-	-	-	23.0	22.5	22.0	21.5	20.5	20.0	17.0	13.5	-	-	-	-	-	-
XZS80-65-160/55	5.5	7.5	33.0	-	-	-	-	-	-	29.5	29.0	28.5	28.0	27.0	26.0	24.0	20.0	-	-	-	-	-	-
XZS80-65-160/75	7.5	10	39.0	-	-	-	-	-	-	36.0	35.0	34.5	34.0	33.5	32.5	29.0	24.0	-	-	-	-	-	-
XZS80-50-200/92	9.2	12.5	53.0	-	-	-	-	-	-	-	-	48.0	47.5	46.5	44.5	39.5	34.0	-	-	-	-	-	-
XZS80-50-200/110	11	15	57.5	-	-	-	-	-	-	-	-	53.0	51.0	50.5	50.0	47.0	41.0	-	-	-	-	-	-
XZS100-80-125/40	4	5.5	20.0	-	-	-	-	-	-	-	-	-	17.5	16.5	15.5	14.0	12.0	7.0	-	-	-	-	-
XZS100-80-125/55	5.5	7.5	23.0	-	-	-	-	-	-	-	-	-	21.5	20.5	20.0	18.0	16.0	12.0	7.5	-	-	-	-
XZS100-80-125/75	7.5	10	29.0	-	-	-	-	-	-	-	-	-	27.5	26.5	25.5	23.5	21.5	17.5	13.0	12.0	-	-	-
XZS100-80-160/92	9.2	12.5	33.0	-	-	-	-	-	-	-	-	-	-	31.0	30.0	28.0	26.0	23.0	-	-	-	-	-
XZS100-80-160/110	11	15	38.5	-	-	-	-	-	-	-	-	-	-	36.0	35.0	33.0	31.0	28.0	-	-	-	-	-
XZS100-65-200/150	15	20	47.0	-	-	-	-	-	-	-	-	-	-	44.0	43.0	41.0	39.0	36.0	32.0	30.0	28.0	26.0	23.0
XZS100-65-200/185	18.5	25	53.0	-	-	-	-	-	-	-	-	-	-	51.0	50.0	49.0	48.0	45.0	41.0	39.0	37.0	35.0	33.0
XZS100-65-200/220	22	30	58.0	-	-	-	-	-	-	-	-	-	-	57.0	56.0	55.0	54.0	51.0	47.0	45.5	44.0	42.0	40.0

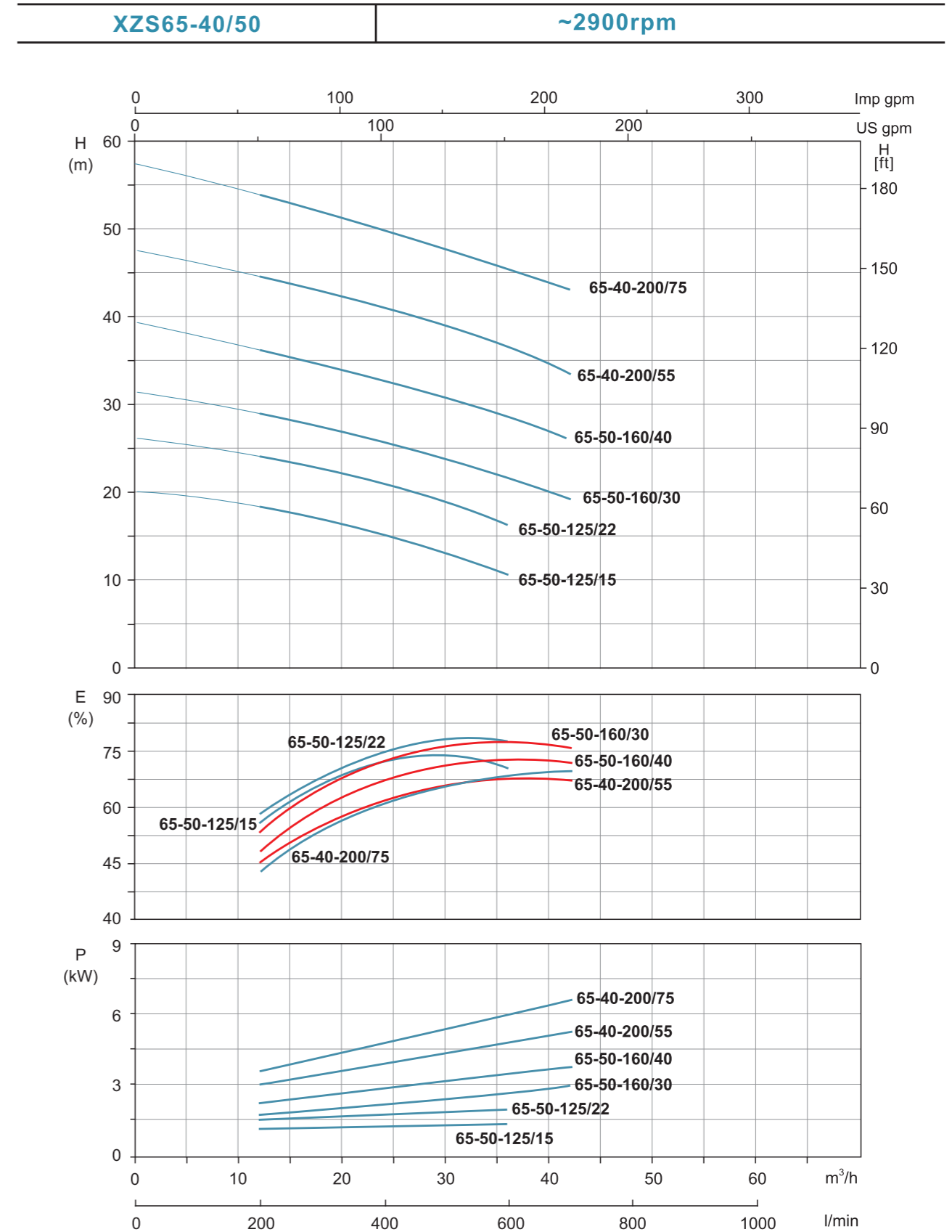
Characteristic Curves



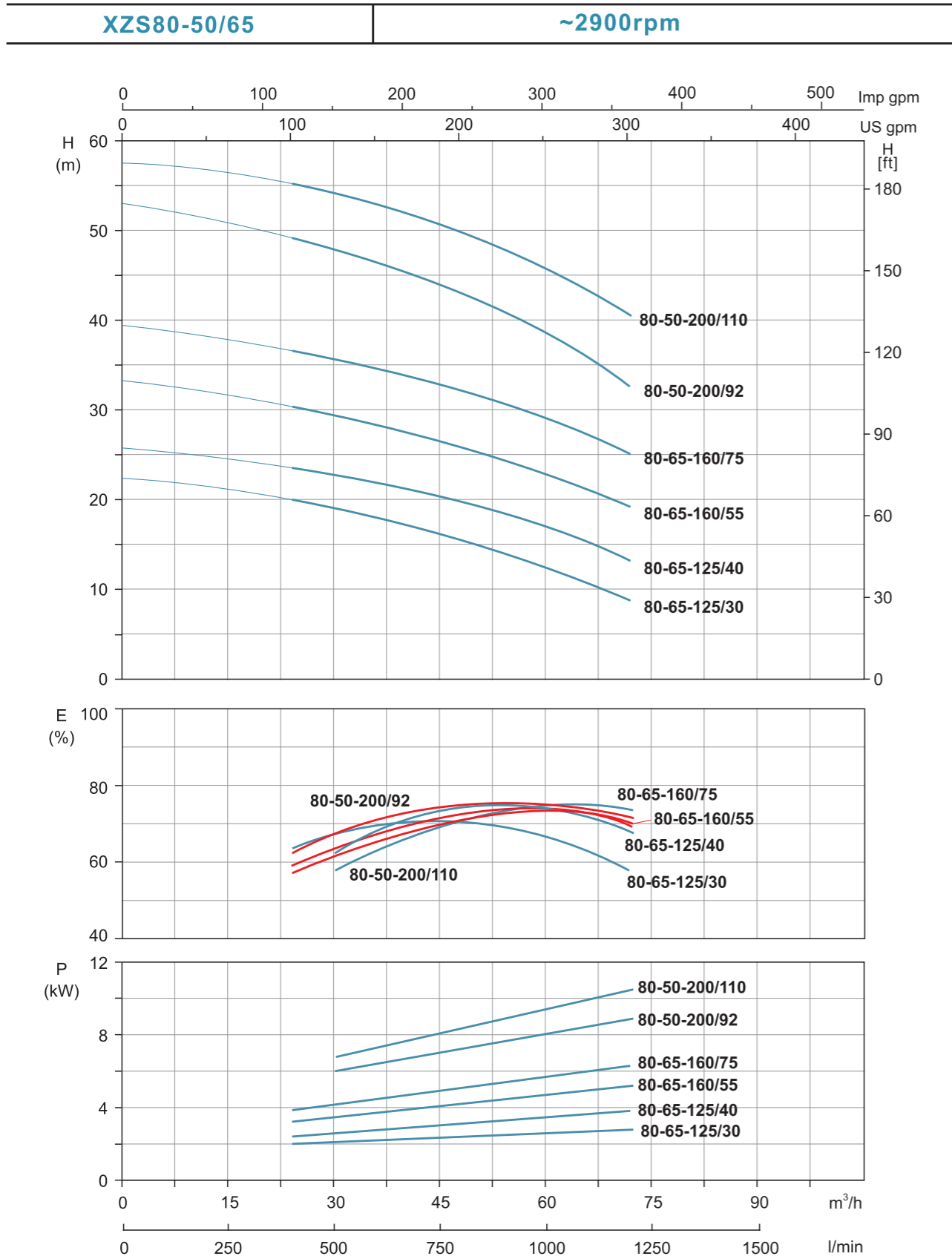
Hydraulic Performance Curves



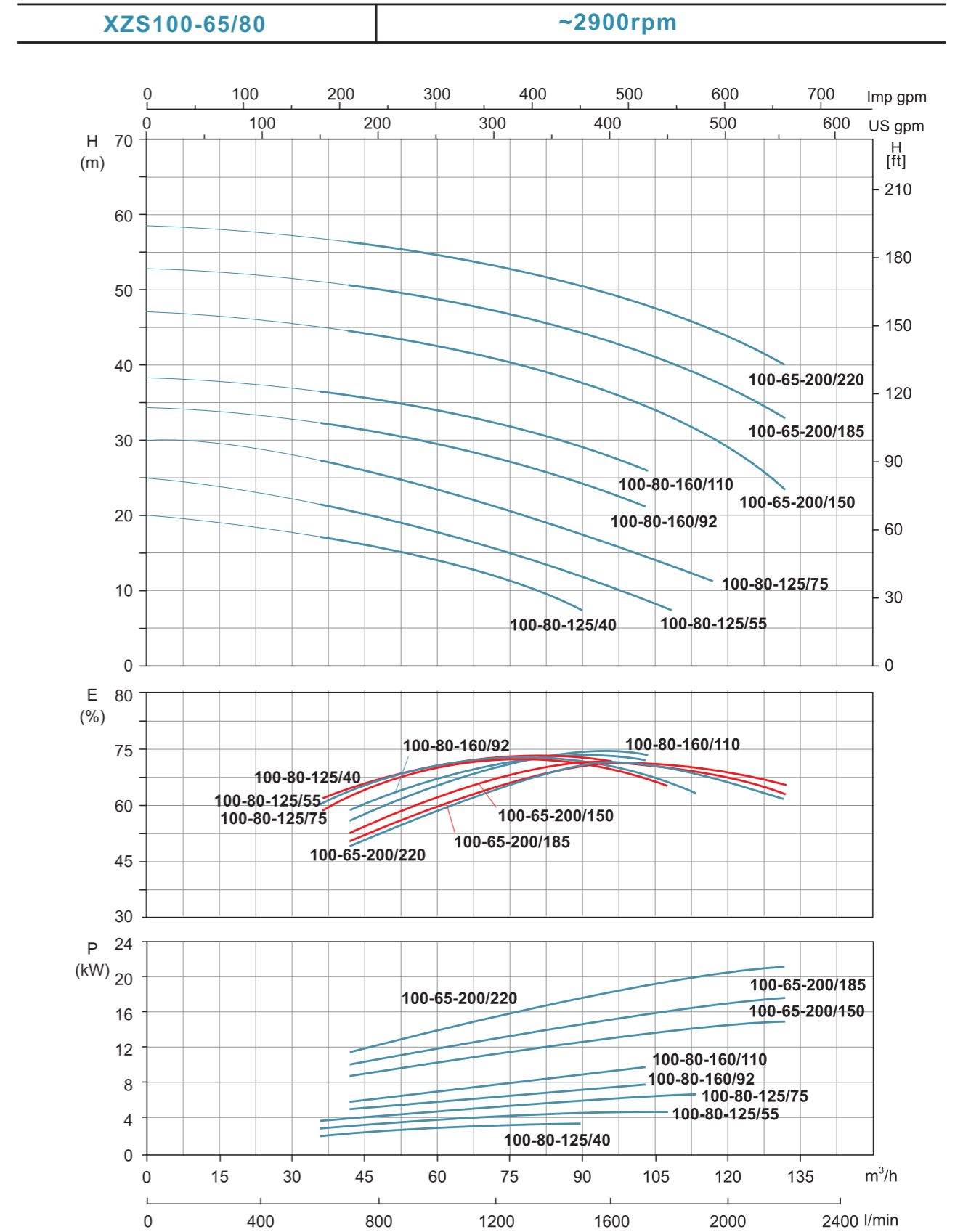
Hydraulic Performance Curves



Hydraulic Performance Curves

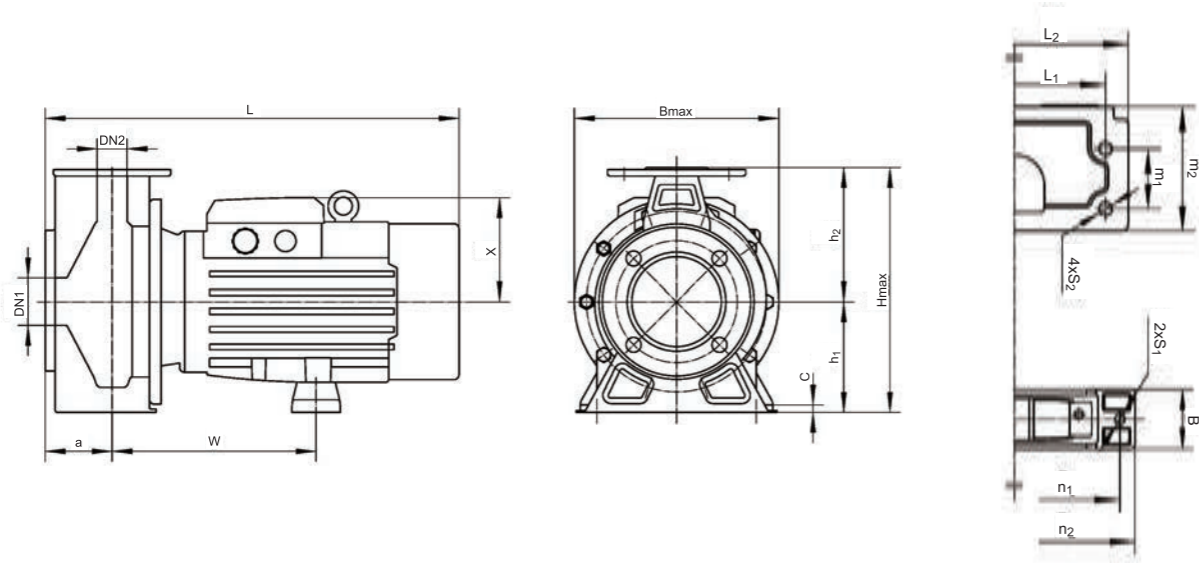


Hydraulic Performance Curves



Installation Sketch

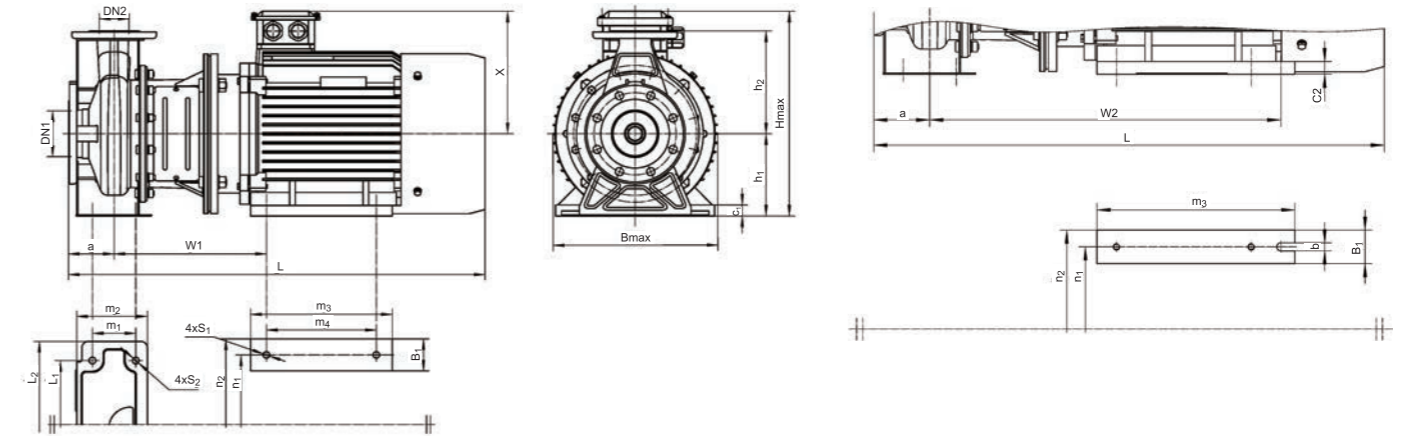
Up to 7.5 kW included



Model	DN1	DN2	a	w	L1	L2	m1	m2	n1	n2	h1	h2	2-S1	4-S2	B	C	X	Bmax	Hmax	L								
XZS50-32-125/11	50	32	80	205	140	190	70	122	205	240	112	140	2-Ø12	4-Ø15	65	12	127	240	250	475								
XZS50-32-160/15				207	190	240					132	160						244	292	477								
XZS50-32-160/22				244	124	225					260	160						180	75	15	124	295	340	492				
XZS50-32-200/30				205	160	210					121	205						240	112	140	65	12	127	240	252	475		
XZS50-32-200/40				244	190	240					123	225						260	132	160	75	15	124	260	292	492		
XZS65-50-125/15				65	50	100					205	160						210	70	121	205	240	112	140	2-Ø12	4-Ø15	65	12
XZS65-50-125/22	244	190	240				123	225	260	132	160	75	15	124	260	292	492											
XZS65-50-160/30	246	212	265				146	245	280	160	180	70	142	295	340	563												
XZS65-50-160/40	254	190	240				158	225	260	132	160	75	15	124	260	292	522											
XZS65-40-200/55	256	265	150				245	280	160	180	70	142	295	340	563													
XZS65-40-200/75	258	280	95				155	225	260	132	160	75	15	124	260	292	522											
XZS80-65-125/30	80	65	100	254	190	240	70	158	225	260	132	160	2-Ø12	4-Ø15	75	15	124	260	292	522								
XZS80-65-125/40				256	265	150					245	280						160	180	70	142	295	340	563				
XZS80-65-160/55				258	280	95					155	225						260	132	160	75	15	124	260	292	522		
XZS80-65-160/75				258	280	95					155	245						280	160	180	70	142	295	340	563			
XZS100-80-125/40				100	80	100					258	280						95	155	245	280	160	180	70	142	295	340	563
XZS100-80-125/55											258	280						95	155	245	280	160	180	70	142	295	340	563
XZS100-80-125/75	258	280	95				155	245	280	160	180	70	142	295	340	563												

Installation Sketch

From 7.5 kW



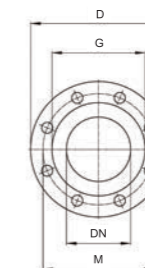
Model	DN1	DN2	a	w1	w2	L1	L2	m1	m2	m3	m4	n1	n2	h1	h2	4-S1	4-S2	B1	b	c1	c2	X	Bmax	Hmax	L
XZS80-50-200/92	80	50	314			265	70	146	210	260															816
XZS80-50-200/110					-	212								320	160	200	4-Ø14.5	65	-	20	-				420
XZS100-80-160/92		80	321			280			260	210	254						4-Ø14					260	350		823
XZS100-80-160/110		100																							
XZS100-65-200/150	100			581			95	155	310																440
XZS100-65-200/185	65			625	250	320			354			314		180	225			60	14.5	-	20				868
XZS100-65-200/220			334						311	241	279	355				4-Ø14.5		70	-	22	-	280	355	460	913

Flange Dimensions



PN16 FLANGES

DN	D	M	G	Holes		Max. Thickness
				N	Ø	
Ø32	140	100	76	4	18	14
Ø40	150	110	84	4	18	14.5
Ø50	165	125	99	4	18	15
Ø65	185	145	118	4	18	16
Ø80	200	160	132	4	18	18



PN16 FLANGES

DN	D	M	G	Holes		Max. Thickness
				N	Ø	
Ø100	220	180	152	8	18	18



Application

- Water supply systems
- Pressure boosting
- Heating systems for commercial buildings and district heating
- Cooling plants for industrial processing and air-conditioning units
- General transport for industrial processes
- Fire fighting system

Pump

- Liquid PH value: 4 - 10
- Liquid temperature: 0°C - 90°C
- Power range: 2.2 - 30 kW
- Max head: 36.5 m
- Max operation pressure: 16 bar
- Altitude: up to 1,000 m

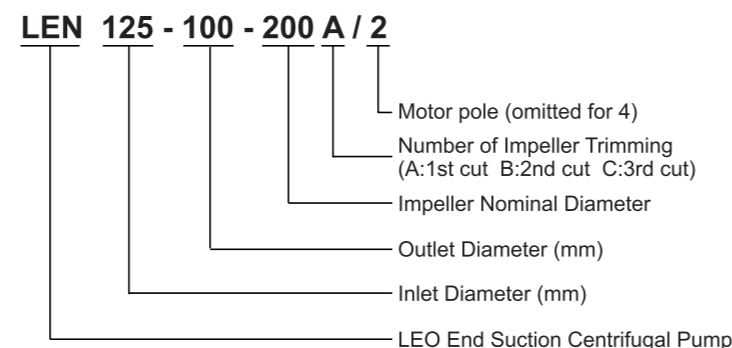
Motor

- Insulation class: F
- Protection class: IP55
- IE 2 motor as standard. IE 3 motor is available on request

Flange

- EN 1092 and DIN 2576 standard

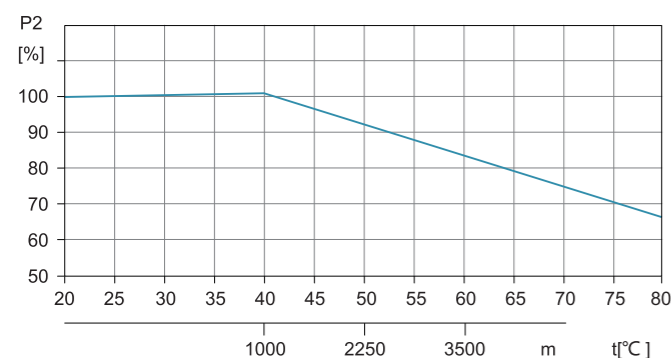
Identification Codes



Ambient Temperature

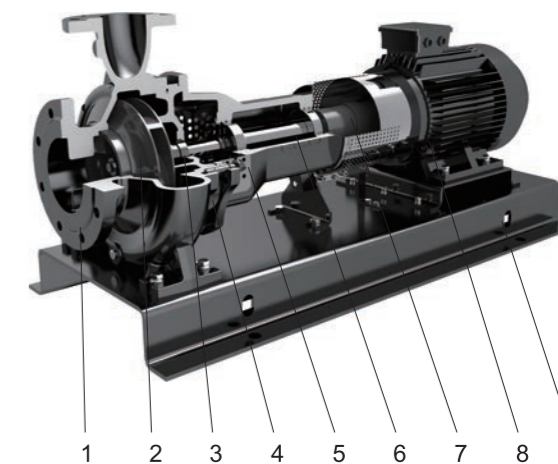
Max. Ambient temperature: +40°C. Ambient temperature above 40°C, or installation at altitude of more than 1000 m above sea level, require the use of an oversize motor. Because of low air density and poor cooling effects, the motor output power P2 will be decreased. See the picture.

For example, when the pump is installed at altitude of more than 3500 m above sea level, P2 will be decrease to 88%. When the ambient temperature is 70°C, P2 will be decreased to 78%.



Materials Table

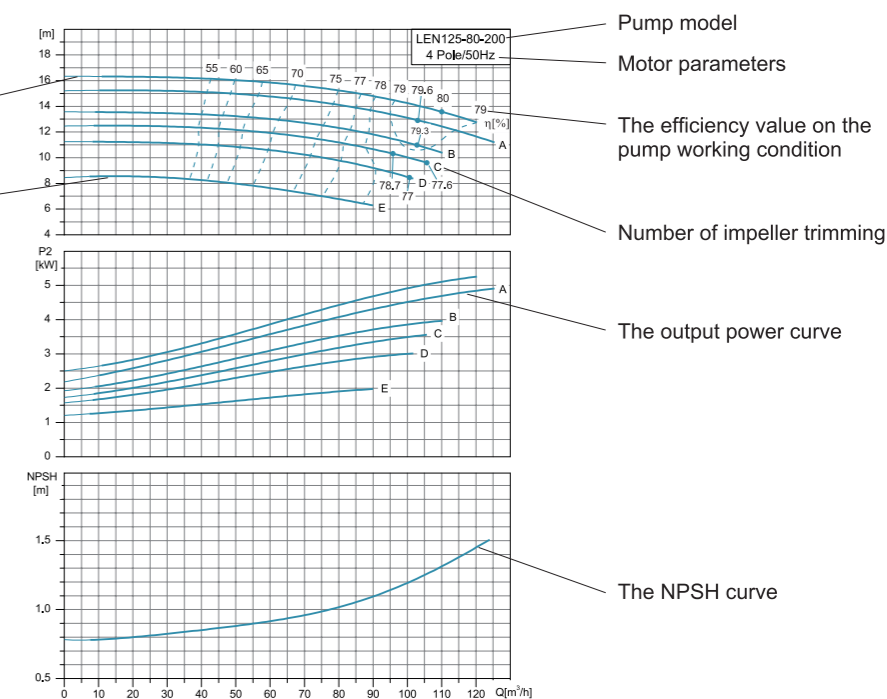
No.	Part	Material
1	Pump body	Cast iron
2	Impeller	Cast iron
3	Mechanical seal	Carbon/Silicon carbide
4	Pump cover	Cast iron
5	Bearing base	Cast iron
6	Pump shaft	Steel/AISI 304
7	Coupling	
8	Motor	
9	Base plate	Iron



How to Read The Curve Charts

The thin curves indicate the duty range where long-time operation is not allowed

The bold curves indicate the duty range where long-time operation is permitted for best efficiency

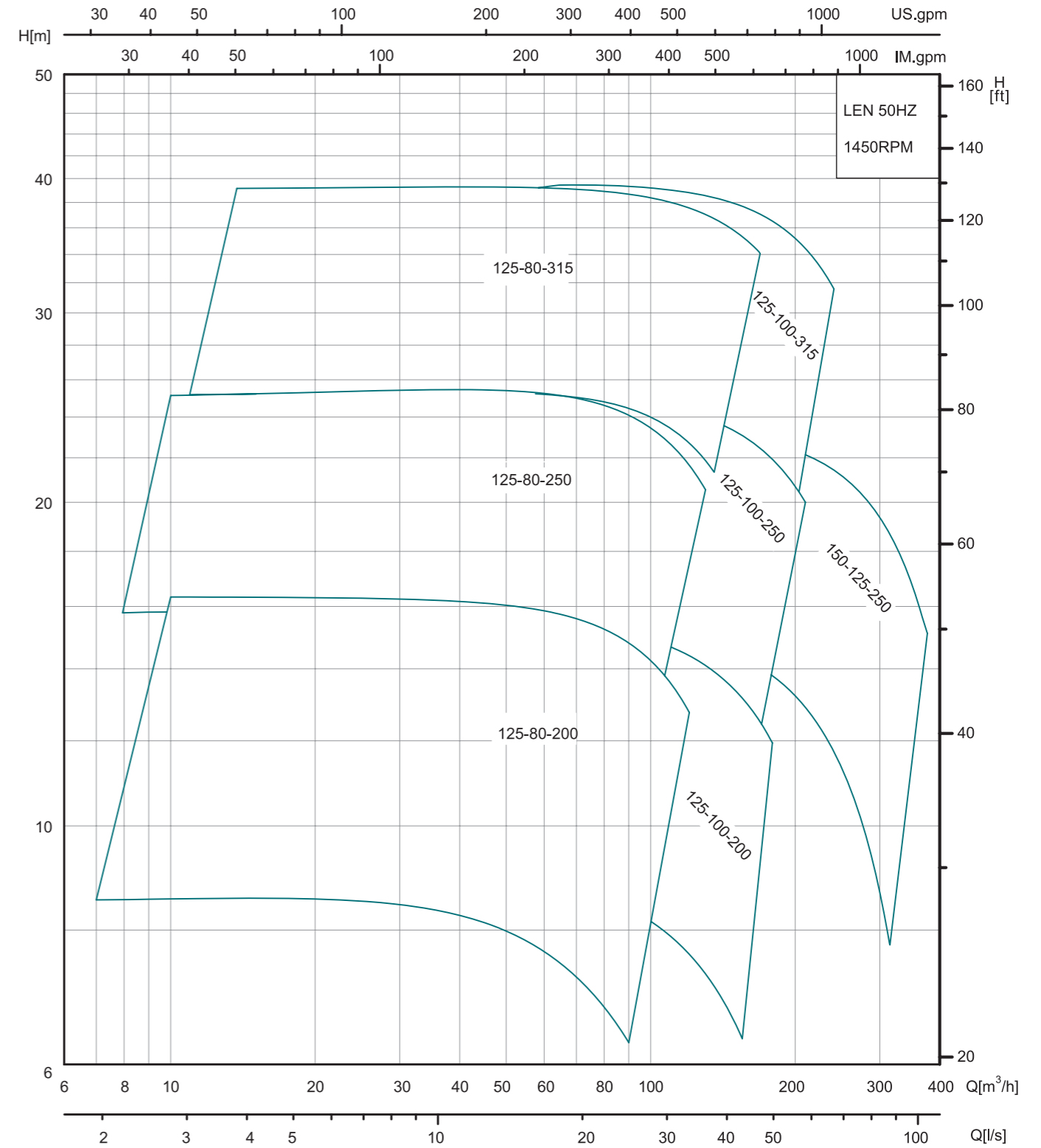


Guidelines to Performance Curves

Tolerances to ISO 9906, Annex A. Measurements have been made with airless water at a temperature of 20°C and kinematic viscosity of 1mm²/s. To avoid overheating of the motor, the pump should not be use against a high head for a long time.

Model	Power (kW)	Rated Flow (m³/h)	Rated Head (m)	Max. Flow (m³/h)	Min. Flow (m³/h)	NPSH (m)
LEN125-80-200	5.5	100	14.5	120	70	2
LEN125-80-200A	5.5	95	13	123.5	66.5	2
LEN125-80-200B	4	90	11.5	108	63	2
LEN125-80-200C	4	85	10.5	110.5	59.5	2
LEN125-80-200D	3	82	9.5	98.5	57.4	2
LEN125-80-200E	2.2	70	7.5	91	49	2
LEN125-100-200	7.5	150	13.5	180	105	2.8
LEN125-100-200A	7.5	145	12	188.5	101.5	2.3
LEN125-100-200B	5.5	140	10.5	168	98	2.3
LEN125-100-200C	5.5	135	9.5	175.5	94.5	2.3
LEN125-100-200D	4	130	7	156	91	2.3
LEN125-80-250	11	100	22.5	130	70	2
LEN125-80-250A	11	96	20.5	125	67.2	2
LEN125-80-250B	7.5	90	18	117	63	2
LEN125-80-250C	7.5	85	16	110.5	59.5	2
LEN125-80-250D	5.5	82	15	98.5	57.4	2
LEN125-80-250E	5.5	78	14	101.5	54.6	2
LEN125-100-250	15	160	21	208	112	2
LEN125-100-250A	15	154	19	200	107.8	2
LEN125-100-250B	11	146	17.5	190	102.2	2
LEN125-100-250C	11	140	16	182	98	2
LEN125-100-250D	11	135	14.5	175.5	94.5	2
LEN125-100-250E	7.5	130	13	156	91	2
LEN125-100-250F	7.5	128	12	166.5	89.6	2
LEN150-125-250	22	290	19	377	203	3.5
LEN150-125-250A	18.5	280	17	336	196	3.5
LEN150-125-250B	18.5	270	15.5	351	189	3.5
LEN150-125-250C	15	256	14	333	179.2	3.5
LEN150-125-250D	15	250	12.5	325	175	3.5
LEN150-125-250E	11	242	11	315	169.4	3.5
LEN125-80-315	22	130	36	169	91	2
LEN125-80-315A	18.5	125	32	162.5	87.5	2
LEN125-80-315B	15	122	29	146.5	85.4	2
LEN125-80-315C	15	116	26.5	151	81.2	2
LEN125-80-315D	15	112	24	145.5	78.4	2
LEN125-80-315E	11	106	22	138	74.2	2
LEN125-100-315	30	185	35	240.5	129.5	2.2
LEN125-100-315A	22	178	30.5	213.5	124.6	2.2
LEN125-100-315B	22	172	28	223.5	120.4	2.2
LEN125-100-315C	18.5	166	28	199	116.2	2.2
LEN125-100-315D	18.5	162	24	210.5	113.4	2.2
LEN125-100-315E	15	158	22	205.5	110.6	2.2

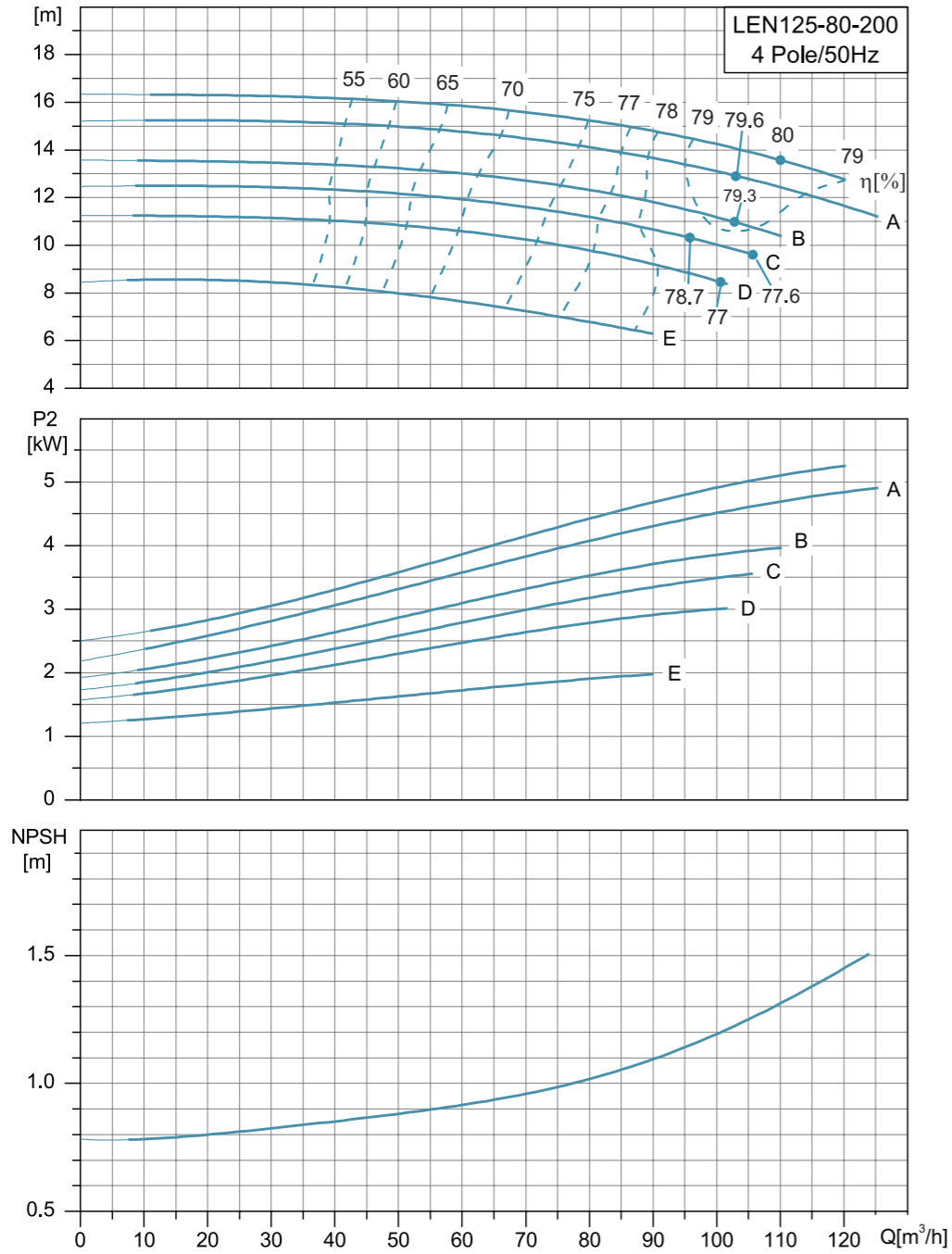
Hydraulic Performance Curves



Hydraulic Performance Curves

LEN125-80-200

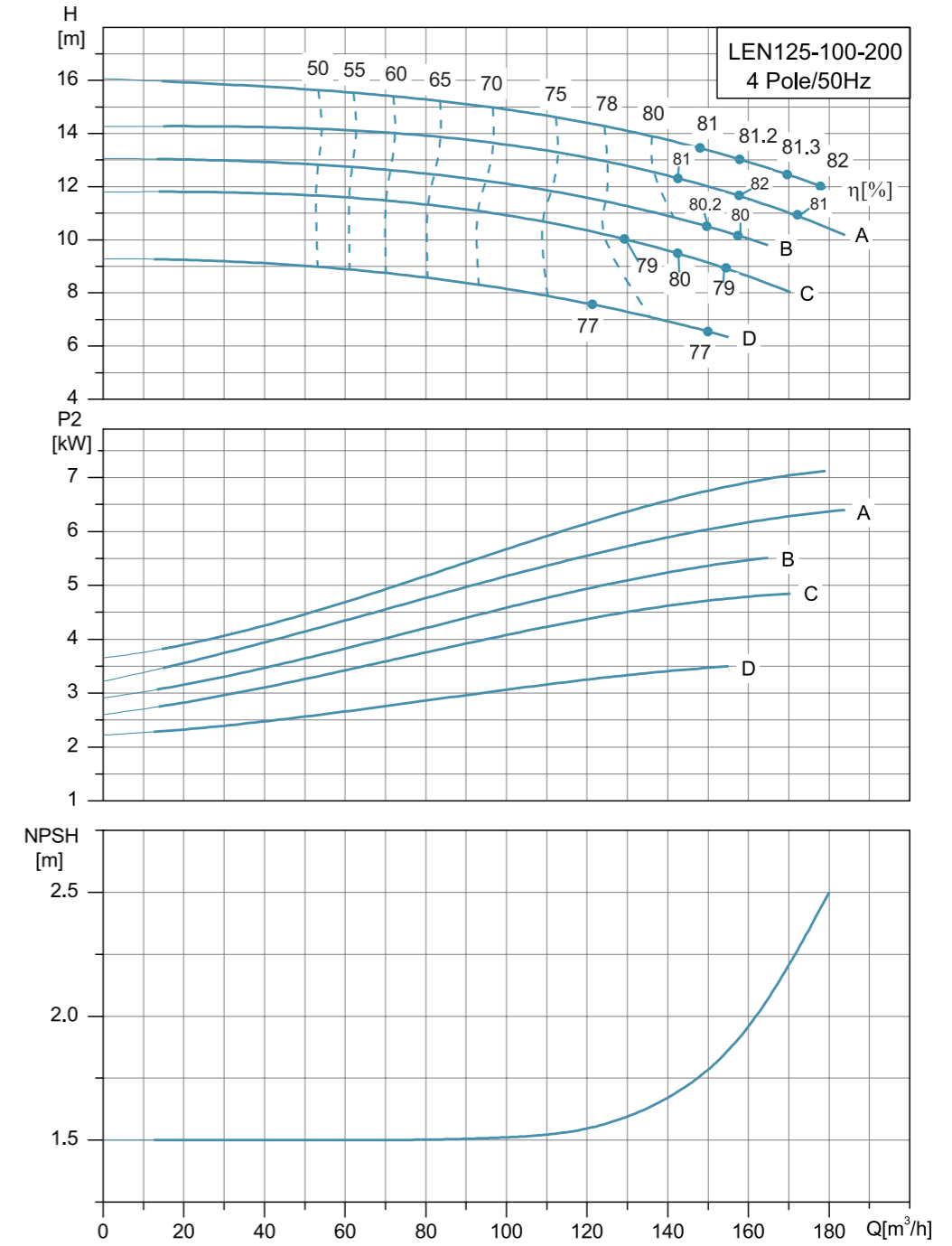
1450r/min



Hydraulic Performance Curves

LEN125-100-200

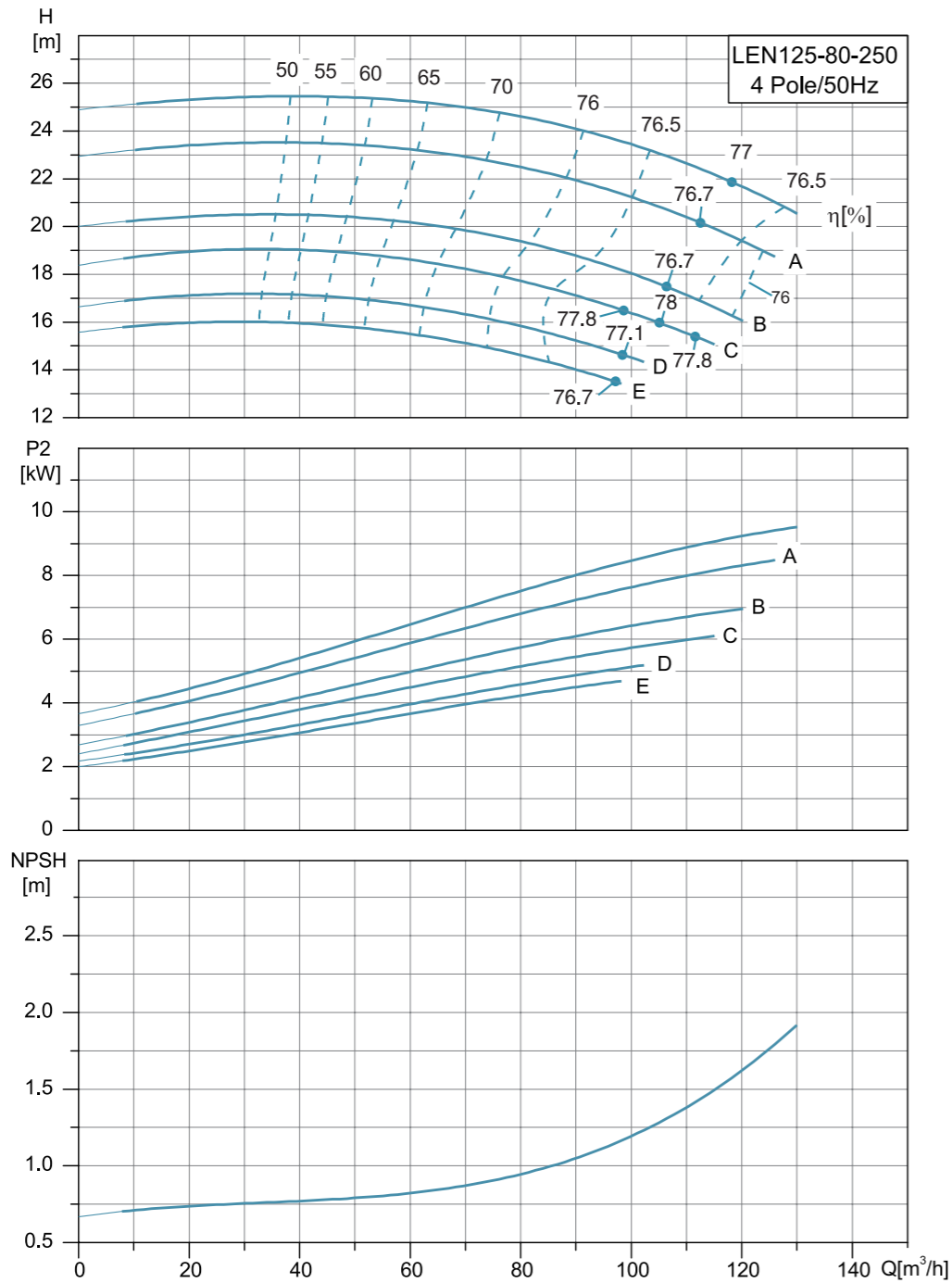
1450r/min



Hydraulic Performance Curves

LEN125-80-250

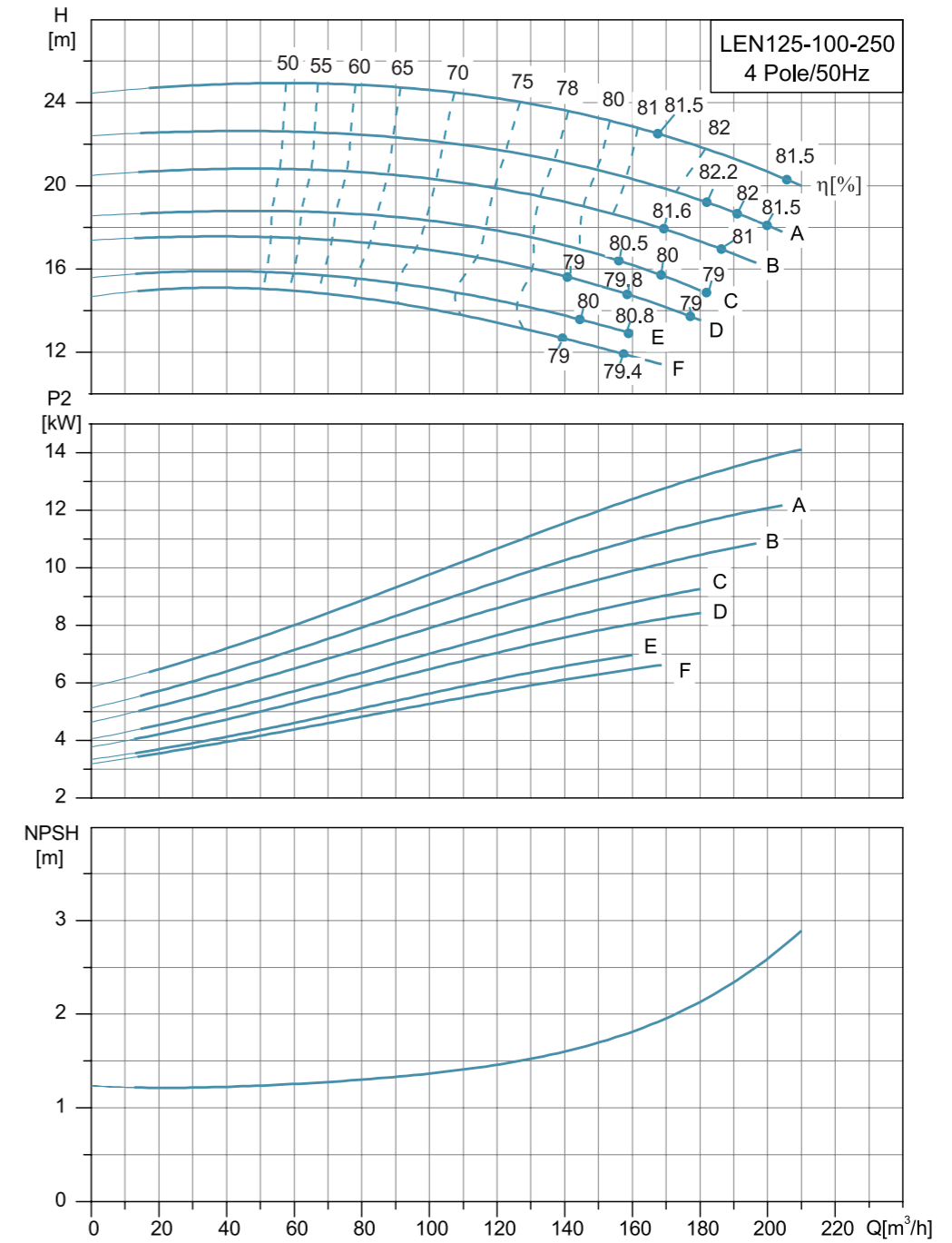
1450r/min



Hydraulic Performance Curves

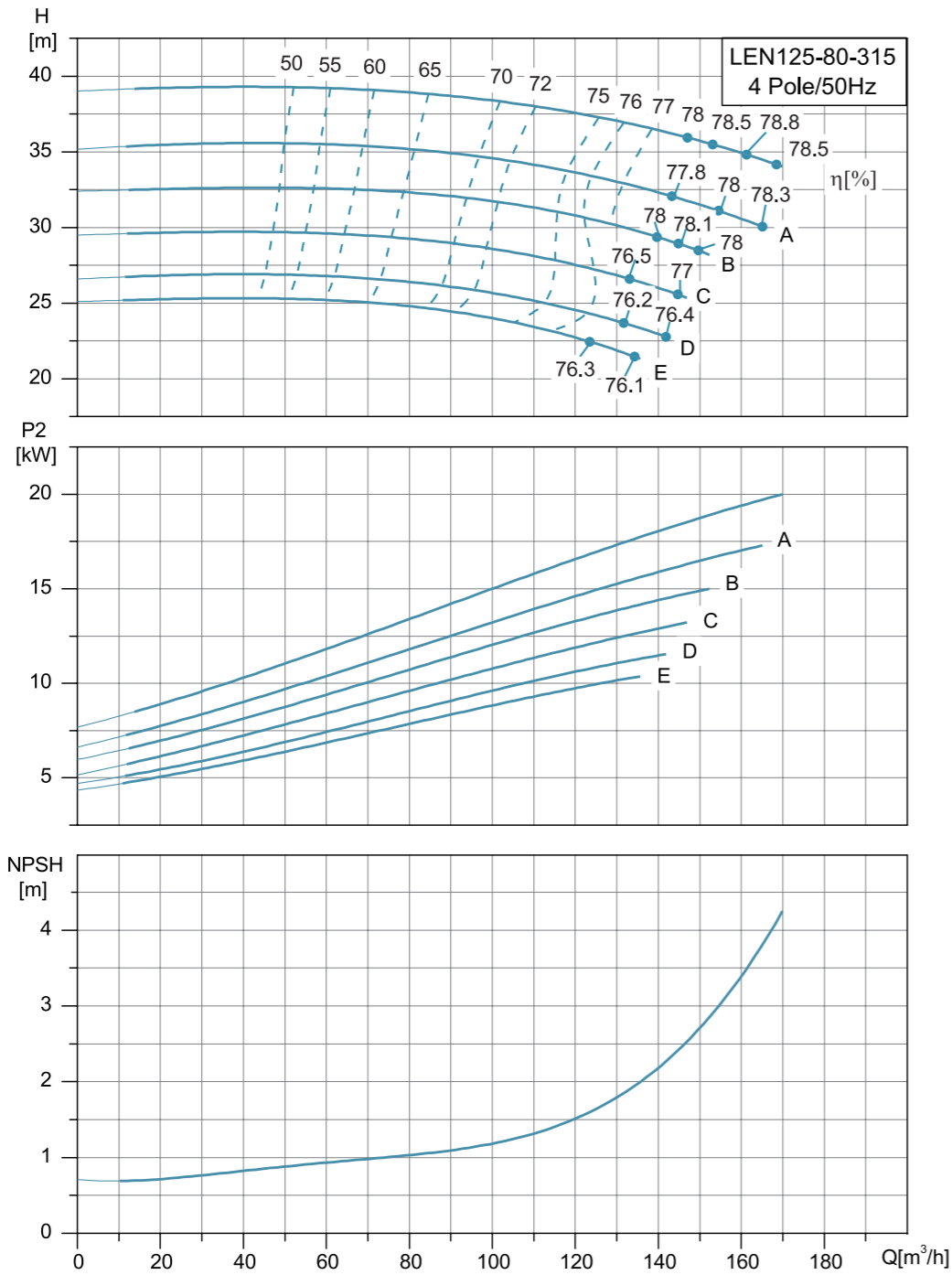
LEN125-100-250

1450r/min



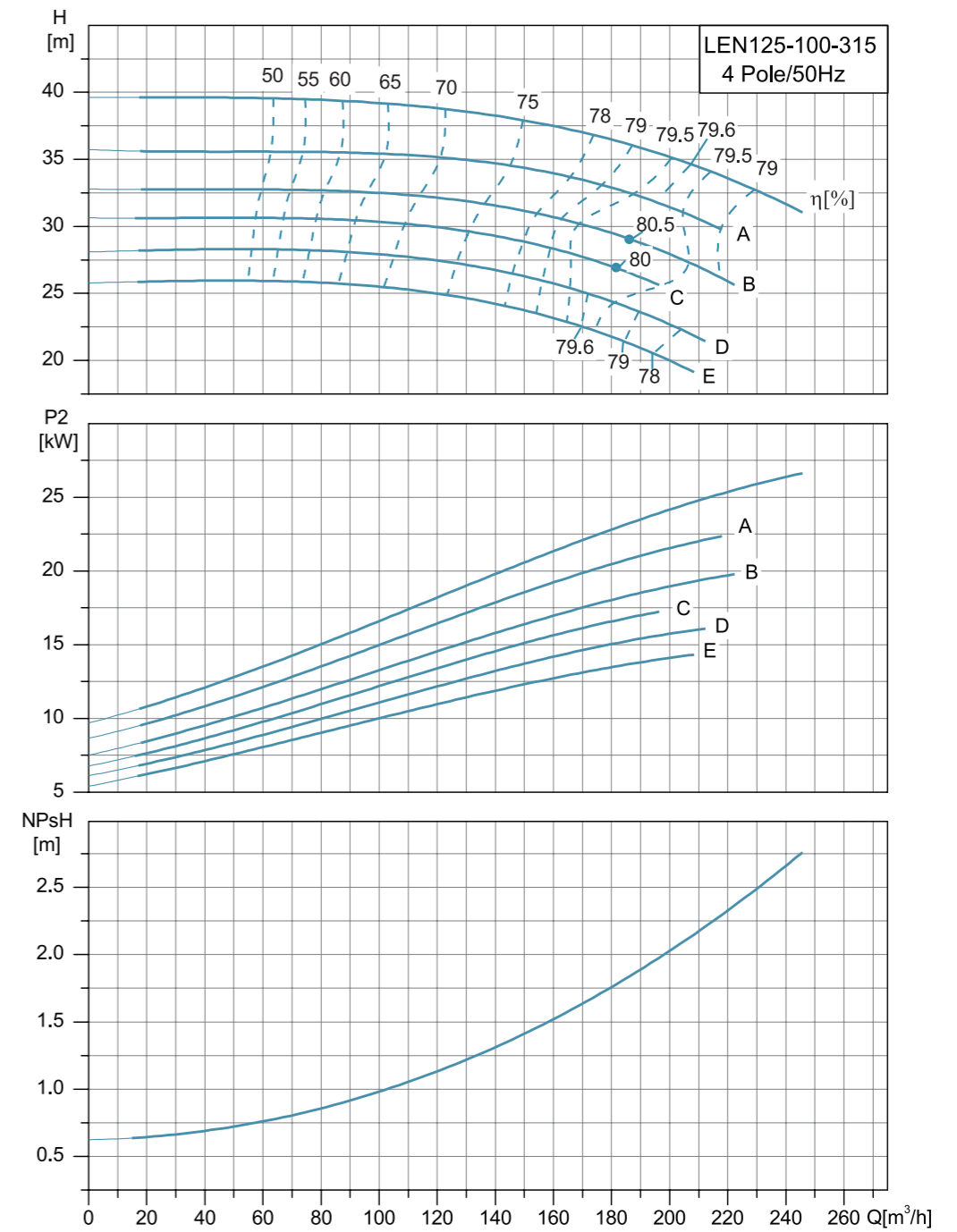
Hydraulic Performance Curves

LEN125-80-315	1450r/min
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Hydraulic Performance Curves

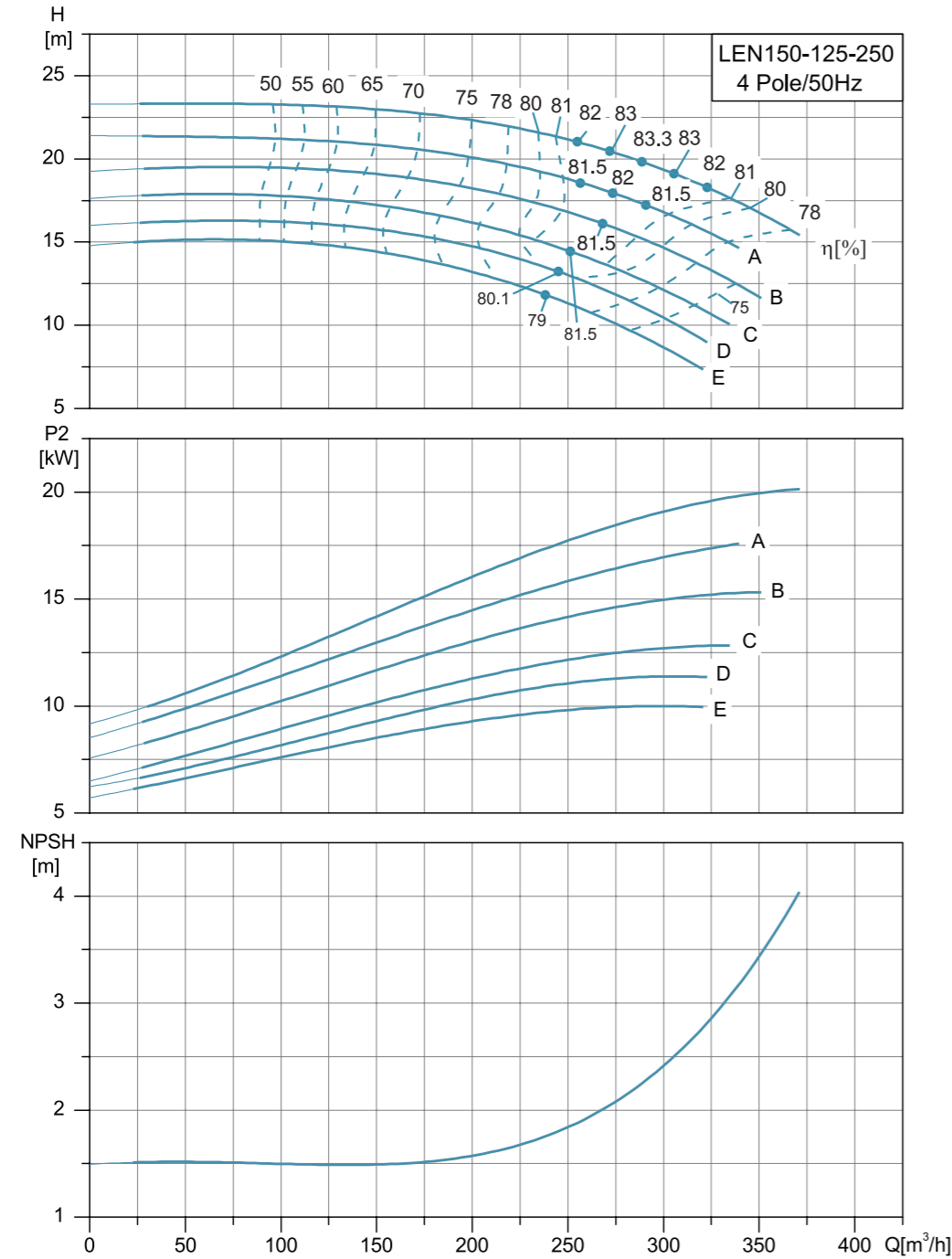
LEN125-100-315	1450r/min
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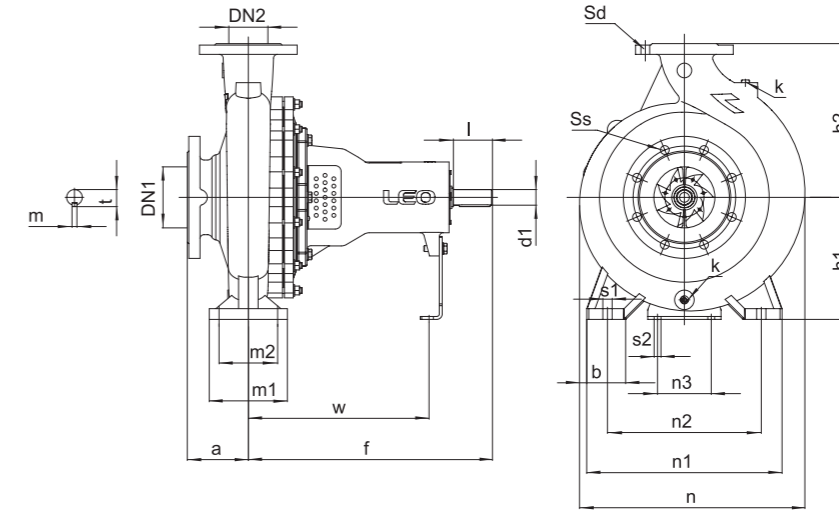
Hydraulic Performance Curves

LEN150-125-250

1450r/min

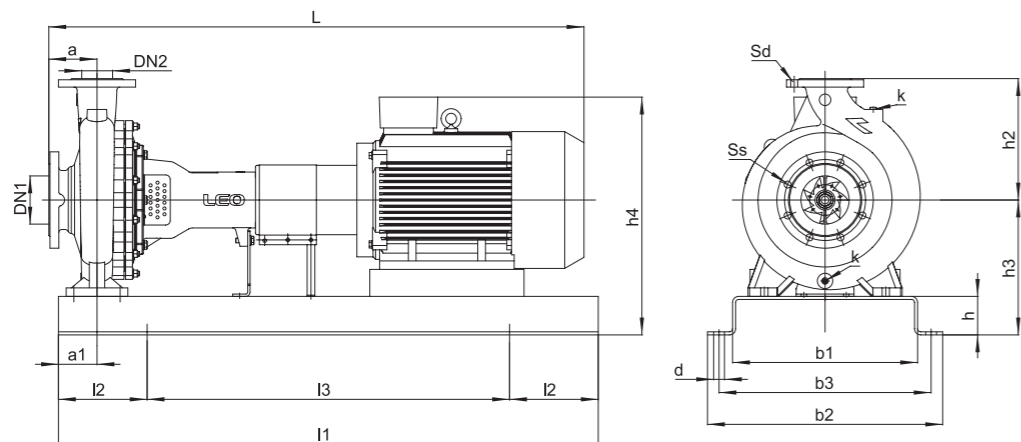


Pump Size



Model	DN1	DN2	a	f	h1	h2	b	m1	m2	n	n1	n2	n3	w	s1	s2	d1	l	m	t	Sd	Ss	k	
LEN125-80-200																								
LEN125-80-200A																								
LEN125-80-200B					180	250	65	125	95	368	345	280			14									
LEN125-80-200C																								
LEN125-80-200D																								
LEN125-80-200E																								
LEN125-80-250																								
LEN125-80-250A		80			225	280				408														
LEN125-80-250B																								
LEN125-80-250C																								
LEN125-80-250D																								
LEN125-80-250E			125								400	315												
LEN125-80-315																								
LEN125-80-315A																								
LEN125-80-315B					250	315				462														
LEN125-80-315C																								
LEN125-80-315D																								
LEN125-80-315E																								
LEN125-100-200		125																						
LEN125-100-200A																								
LEN125-100-200B					200					390	360	280	110	370	14	Ø32	80	10	35		8-Ø18		R3/8	
LEN125-100-200C				500																				
LEN125-100-200D																								
LEN125-100-250																								
LEN125-100-250A					280	80	160	120						19										
LEN125-100-250B																								
LEN125-100-250C																								
LEN125-100-250D																								
LEN125-100-250E																								
LEN125-100-250F																								
LEN125-100-315																								
LEN125-100-315A																								
LEN125-100-315B																								
LEN125-100-315C																								
LEN125-100-315D																								
LEN125-100-315E																								
LEN125-100-315F																								
LEN150-125-250					250																			
LEN150-125-250A																								
LEN150-125-250B		150	125																				8-Ø22	
LEN150-125-250C																								
LEN150-125-250D																								
LEN150-125-250E																								

Dimension



Model	DN1	a	a1	h4	L	l1	l2	l3	DN2	Ss	Sd	h2	h3	h	d	b1	b3	b2	k								
LEN125-80-200	125	125	100	468	1128	1120	190	740	8-018	8-018	300	250	280	100	4-024	380	440	490	R3/8								
LEN125-80-200A				449	1053																						
LEN125-80-200B				431	1035																						
LEN125-80-200C				100	125	125	567	1265				1250	205		840	8-018	8-018	280		325	315	350	4-028	480	550	610	R3/8
LEN125-80-200D							513	1128																			
LEN125-80-200E							617	1388																			
LEN125-80-250							513	1128				1250	205		840					100		4-024	430	490	540		
LEN125-80-250A							617	1350																			
LEN125-80-250B							592	1309																			
LEN125-80-250C				140	140	100	592	1265				1400	230		940	8-022	8-022	315		350	350	4-028	480	550	610	R3/8	
LEN125-80-250D							513	1181																			
LEN125-80-250E							649	1462																			
LEN125-80-250F	150	150	125				617	1403	1250	205	840	8-022	8-022	355	350				350	4-028		480	550	610	R3/8		
LEN125-100-200							592	1324																			
LEN125-100-200A							617	1365																			
LEN125-100-200B							592	1324	1280	1250	205				840					100		4-024	430	490			540
LEN125-100-200C							513	1181																			
LEN125-100-200D							617	1403																			
LEN125-100-250	150	150	125				617	1365	1400	230	940	8-022	8-022	355	350				350	4-028		480	550	610	R3/8		
LEN125-100-250A							592	1324																			
LEN125-100-250B							513	1181																			
LEN125-100-250C				617	1403	1280	1250	205	840	100	4-024				430	490	540										
LEN125-100-250D				513	1181																						
LEN125-100-250E				592	1324																						
LEN125-100-250F	150	150	125	592	1324	1400	230	940	8-022	8-022	355	350	350	4-028	480	550	610	R3/8									
LEN125-100-315				617	1403																						
LEN125-100-315A				592	1324																						
LEN125-100-315B				513	1181																						
LEN125-100-315C				617	1403	1280	1250	205				840		100	4-024	430	490		540								
LEN125-100-315D				513	1181																						
LEN125-100-315E	592	1324																									
LEN125-100-315F	150	150	125	592	1324	1400	230	940	8-022	8-022	355	350	350	4-028	480	550	610	R3/8									
LEN125-100-315G				617	1403																						
LEN125-100-315H				592	1324																						
LEN125-100-315I				513	1181																						
LEN125-100-315J				617	1403	1280	1250	205				840		100	4-024	430	490		540								
LEN125-100-315K				513	1181																						
LEN125-100-315L	592	1324																									
LEN150-125-250	150	150	125	617	1365	1400	230	940	8-022	8-022	355	350	350	4-028	480	550	610	R3/8									
LEN150-125-250A				592	1324																						
LEN150-125-250B				513	1181																						
LEN150-125-250C				617	1403	1280	1250	205				840		100	4-024	430	490		540								
LEN150-125-250D				513	1181																						
LEN150-125-250E				592	1324																						

Application

It is widely used for

- Pressure boosting for domestic water supply
- Floor heating system
- Solar pumping system

Pump

- Automatic pressure boosting
- Anti-rust cast iron pump body
- Noryl impeller with heat resistance up to 150°C
- 99% alumina ceramic shaft
- Liquid temperature: 2°C - 60°C

Motor

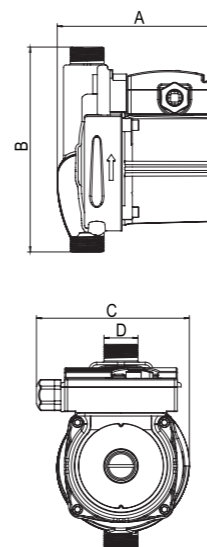
- Insulation class: H
- Protection class: IP42
- 99% alumina ceramic bearing
- Copper winding



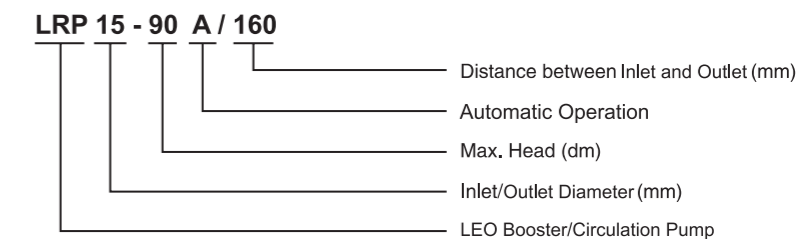
Connectors on request



Dimension Drawing



Identification Codes

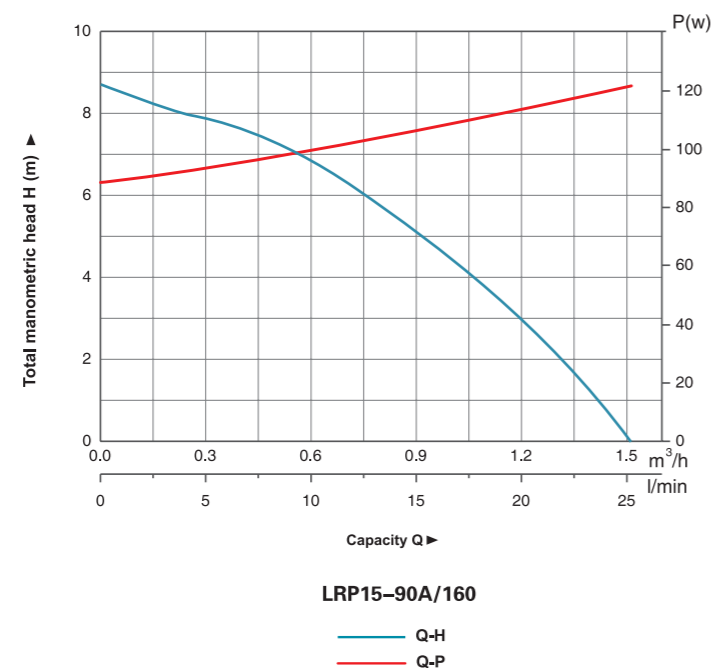
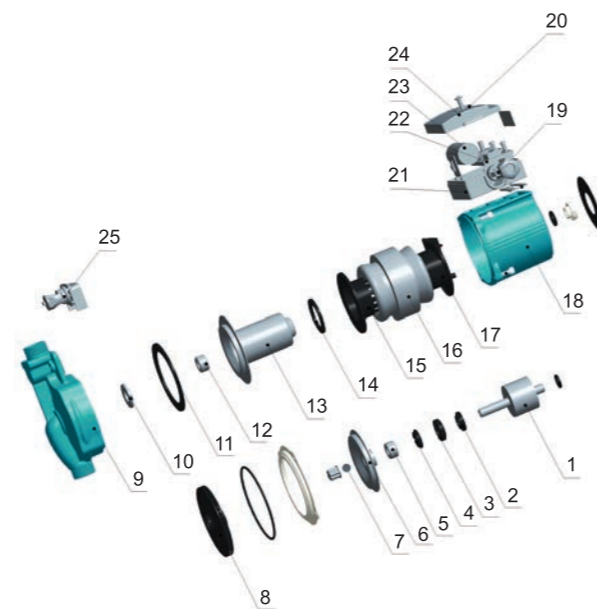


MODEL	A (mm)	B (mm)	C (mm)	D
LRP15-90A/160	129	160	120	G ^{3/4}

MODEL	Voltage/Frequency	Power(W)	Max. Flow (l/min)	Max. Head (m)	Inlet/Outlet (mm)	Pipe Size (inch)
LRP15-90A/160	1~230V/50Hz	123	25	9	Φ15	1/2

Materials Table

No.	Part	Material
1	Rotor	
2	Thrust bearing adjusting mat	Noryl
3	Thrust bearing rubber mat	Silicon rubber
4	Thrust bearing	Graphite
5	Front bearing	Alumina
6	Pump support cover	Stainless steel
7	Check ball	Silicon rubber
8	Impeller	PPO
9	Pump body	Cast iron/bronze
10	Pump body insert	Stainless steel
11	Body gasket	
12	Rear bearing	HT200
13	Can brg asm	Stainless steel
14	Can brg asm seal	Silicon rubber
15	Stator cover(front)	PA66
16	Motor stator with winding	
17	Stator cover(back)	PA66
18	Housing	ADC12
19	Cable outlet nut	ABS
20	Button	ABS
21	Terminal box	PA6
22	Regulation switch	
23	Capacitor	
24	Terminal cover	ABS
25	Flow switch assembly	



Application

- It is widely used for heating ventilating and air conditioning (HVAC) circulation, pressure boosting of hot water in family, homes powered by solar energy, industrial auxiliary equipment cold and hot water circulation and so forth
- Water circulation for the central and district heating system
- Domestic hot water circulation

Pump

- Bronze or anti-rust cast iron pump body
- Noryl impeller with heat resistance up to 150°C
- 99% alumina ceramic shaft
- Liquid temperature: 2°C - 110°C

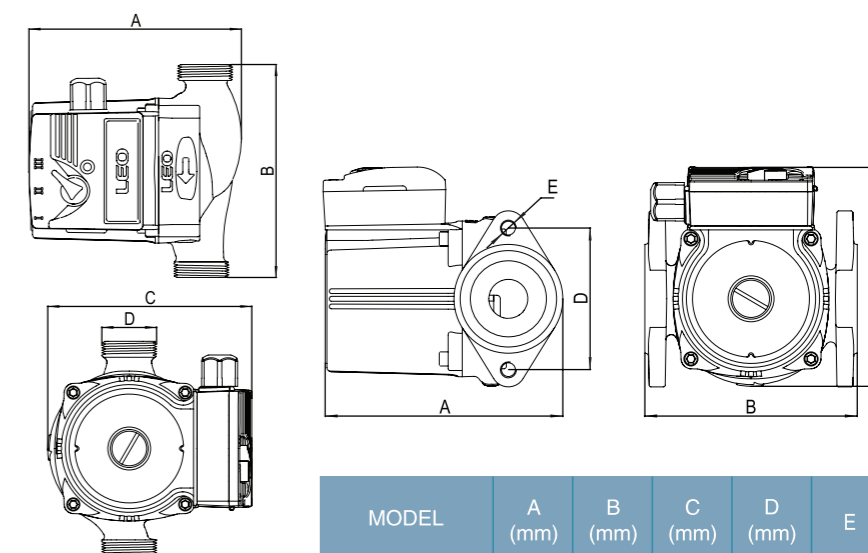
Motor

- Insulation class: H
- Protection class: IP44
- 99% alumina ceramic bearing
- Copper winding
- Three speed motor

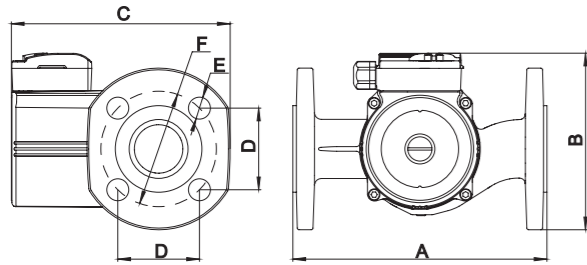


MODEL	A (mm)	B (mm)	C (mm)	D
LRP15-40/130	130	130	125	G1
LRP15-40B/130	130	130	125	G1
LRP20-40/130	130	130	125	G1.25
LRP25-40/130	130	130	125	G1.5
LRP25-40/180	130	180	125	G1.5
LRP32-40/180	135	180	125	G2
LRP15-50/130	130	130	125	G1
LRP15-50B/130	130	130	125	G1
LRP20-50/130	130	130	125	G1.25
LRP25-50/130	130	130	125	G1.5
LRP25-50/180	130	180	125	G1.5
LRP32-50/180	135	180	125	G2
LRP15-60/130	130	130	125	G1
LRP15-60B/130	130	130	125	G1
LRP20-60/130	130	130	125	G1.25
LRP25-60/130	130	130	125	G1.5
LRP25-60/180	130	180	125	G1.5
LRP32-60/180	135	180	125	G2
LRP25-70/130	130	130	125	G1.5
LRP25-70/180	130	180	125	G1.5
LRP32-70/180	135	180	125	G2
LRP25-80/180	154	180	134	G1.5
LRP25-120/180	155	180	148	G1.5
LRP32-80/180	168	180	137	G2

Dimension Drawing



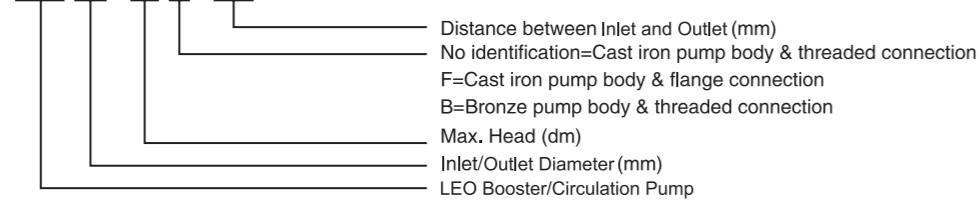
MODEL	A (mm)	B (mm)	C (mm)	D (mm)	E
LRP21-40F/120	130	120	125	80	M10
LRP21-50F/120	130	120	125	80	M10
LRP21-60F/120	130	120	125	80	M10
LRP21-70F/120	130	120	125	80	M10



MODEL	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)
LRP32-80F/220	220	150	191.5	70.7	Ø19	Ø100
LRP36-80F/200	200	138	174.5	63.6	Ø11.5	Ø90
LRP40-80F/250	250	155	196.5	77.8	Ø19	Ø110

Identification Codes

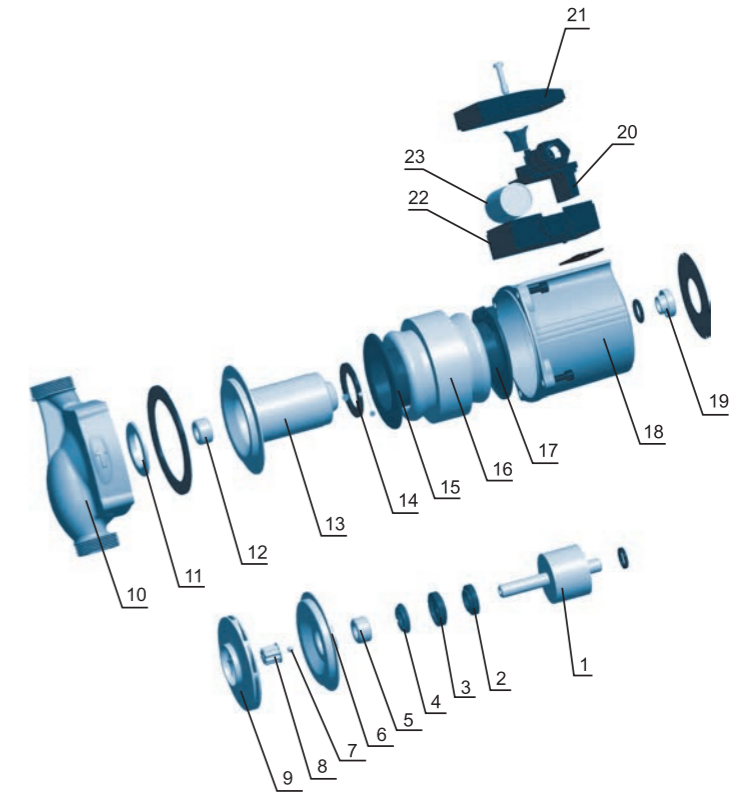
LRP 15 - 50 B / 130



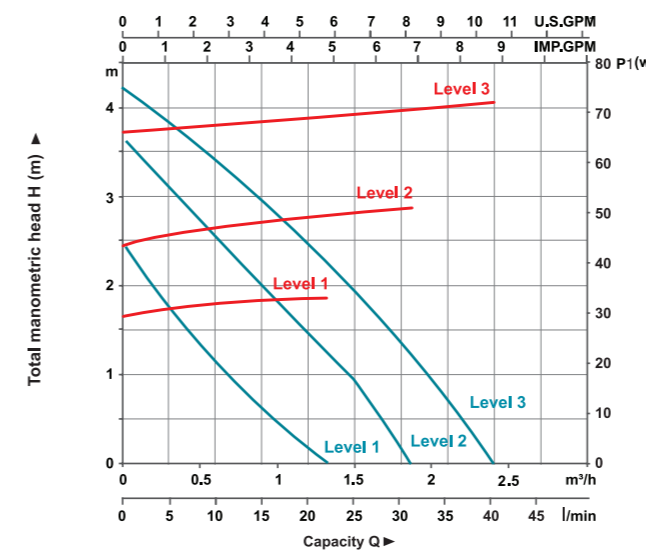
MODEL	POWER	POWER (W)			Max. Flow (l/min)	Max. Head (m)	Inlet/Outlet (mm)	Pipe Size (inch)	N.W. (kgs)	G.W. (kgs)	Packing Size (mm)
		3	2	1							
LRP15-40/130	1~230V/50Hz	74	54	34	40/30/22	4.0/3.3/2.3	Ø15	1	2.32	2.45	154x143x153
LRP15-40B/130	1~230V/50Hz	74	54	34	40/30/22	4.0/3.3/2.3	Ø15	1	2.41	2.54	154x143x153
LRP20-40/130	1~230V/50Hz	74	54	34	45/35/25	4.0/3.3/2.3	Ø20	1.25	2.37	2.5	154x143x153
LRP21-40F/120	1~230V/50Hz	74	54	34	55/42/30	4.0/3.3/2.3	Ø21	1.25	2.65	2.78	154x143x153
LRP25-40/130	1~230V/50Hz	74	54	34	52/42/30	4.0/3.3/2.3	Ø25	1.5	2.44	2.57	154x143x153
LRP25-40/180	1~230V/50Hz	74	54	34	55/42/30	4.0/3.3/2.3	Ø25	1.5	2.55	2.705	198x143x160
LRP32-40/180	1~230V/50Hz	74	54	34	55/42/30	4.0/3.3/2.3	Ø32	2	2.73	2.885	198x143x160
LRP15-50/130	1~230V/50Hz	85	60	40	40/32/23	4.5/3.8/2.5	Ø15	1	2.32	2.45	154x143x153
LRP15-50B/130	1~230V/50Hz	85	60	40	40/32/23	4.5/3.8/2.5	Ø15	1	2.41	2.54	154x143x153
LRP20-50/130	1~230V/50Hz	85	60	40	47/37/25	4.5/3.8/2.5	Ø20	1.25	2.37	2.5	154x143x153
LRP21-50F/120	1~230V/50Hz	85	60	40	58/45/32	4.5/3.8/2.5	Ø21	1.25	2.65	2.78	154x143x153
LRP25-50/130	1~230V/50Hz	85	60	40	55/43/28	4.5/3.8/2.5	Ø25	1.5	2.44	2.57	154x143x153
LRP25-50/180	1~230V/50Hz	85	60	40	60/47/32	4.5/3.8/2.5	Ø25	1.5	2.55	2.705	198x143x160
LRP32-50/180	1~230V/50Hz	85	60	40	60/47/32	4.5/3.8/2.5	Ø32	2	2.73	2.885	198x143x160
LRP15-60/130	1~230V/50Hz	96	69	45	40/32/23	5.5/4.5/2.8	Ø15	1	2.32	2.45	154x143x153
LRP15-60B/130	1~230V/50Hz	96	69	45	40/32/23	5.5/4.5/2.8	Ø15	1	2.41	2.54	154x143x153
LRP20-60/130	1~230V/50Hz	96	69	45	53/37/25	5.5/4.5/2.8	Ø20	1.25	2.37	2.5	154x143x153
LRP21-60F/120	1~230V/50Hz	96	69	45	60/45/32	5.5/4.5/2.8	Ø21	1.25	2.65	2.78	154x143x153
LRP25-60/130	1~230V/50Hz	96	69	45	58/43/28	5.5/4.5/2.8	Ø25	1.5	2.44	2.57	154x143x153
LRP25-60/180	1~230V/50Hz	96	69	45	66/47/32	5.5/4.5/2.8	Ø25	1.5	2.55	2.705	198x143x160
LRP32-60/180	1~230V/50Hz	96	69	45	66/47/32	5.5/4.5/2.8	Ø32	2	2.73	2.885	198x143x160
LRP21-70F/120	1~230V/50Hz	150	130	105	67/50/37	6.3/6.0/5.2	Ø21	1.5	2.65	2.805	154x143x153
LRP25-70/130	1~230V/50Hz	150	130	105	67/50/37	6.3/6.0/5.2	Ø25	1.5	2.45	2.605	154x143x153
LRP25-70/180	1~230V/50Hz	150	130	105	67/50/37	6.3/6.0/5.2	Ø25	1.5	2.57	2.725	198x143x160
LRP32-70/180	1~230V/50Hz	150	130	105	67/50/34	6.3/6.0/5.2	Ø32	2	2.75	2.905	198x143x160
LRP25-80/180	1~230V/50Hz	200	190	160	120/100/60	7.1/6.5/5.5	Ø28	1.5	4.23	4.57	192x170x190
LRP32-80/180	1~230V/50Hz	270	245	160	167/100/60	7.3/6.7/5.4	Ø42	2	4.75	5.09	192x170x190
LRP32-80F/220	1~230V/50Hz	270	245	160	170/113/65	7.3/6.7/5.4	Ø42	2	7.57	8	235x181x207
LRP36-80F/200	1~230V/50Hz	270	245	160	170/113/65	7.3/6.7/5.4	Ø42	2	5.98	6.36	214x170x190
LRP40-80F/250	1~230V/50Hz	270	245	160	170/113/65	7.3/6.7/5.4	Ø42	2	8.27	8.74	264x186x212
LRP25-120/180	1~230V/50Hz	270	245	160	67/38/22.5	11.5/10/6.3	Ø18	1.5	4.62	4.96	192x170x190

Materials Table

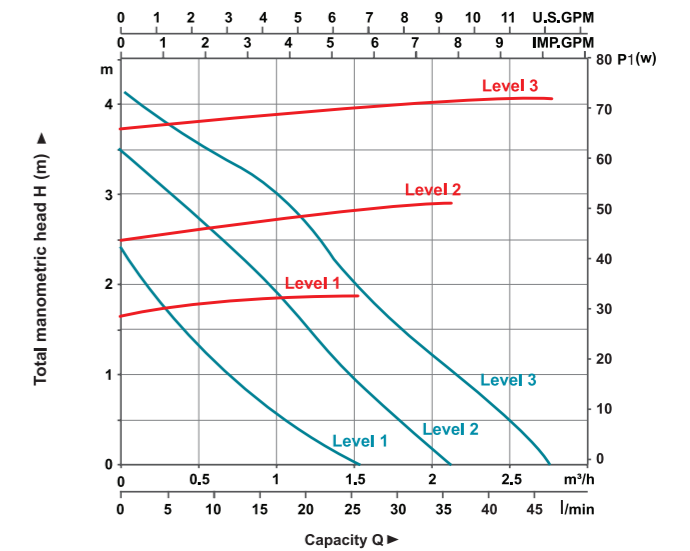
No.	Part	Material
1	Rotor	
2	Thrust bearing adjusting mat	Noryl
3	Thrust bearing rubber mat	Silicon rubber
4	Thrust bearing	Graphite
5	Front bearing	Alumina
6	Pump support cover	Stainless steel
7	Check ball	Silicon rubber
8	Locking	Stainless steel
9	Impeller	PPO
10	Pump body	Cast iron/Bronze
11	Pump body insert	Stainless steel
12	Back bearing	Alumina
13	Can brg asm	Stainless steel
14	Can brg asm seal	Silicon rubber
15	Stator cover(front)	PA66
16	Stator	
17	Stator cover(back)	PA66
18	Housing	ADC12
19	Drain plug	Copper
20	Speed regulation board	
21	Terminal cover	ABS
22	Terminal box	PC
23	Capacitor	



Hydraulic Performance Curves

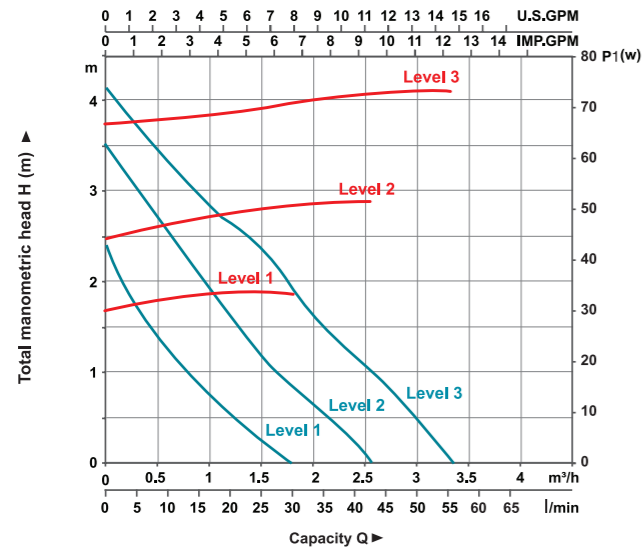


LRP15-40B/130
 LRP15-40/130
 — Q-H
 — Q-P

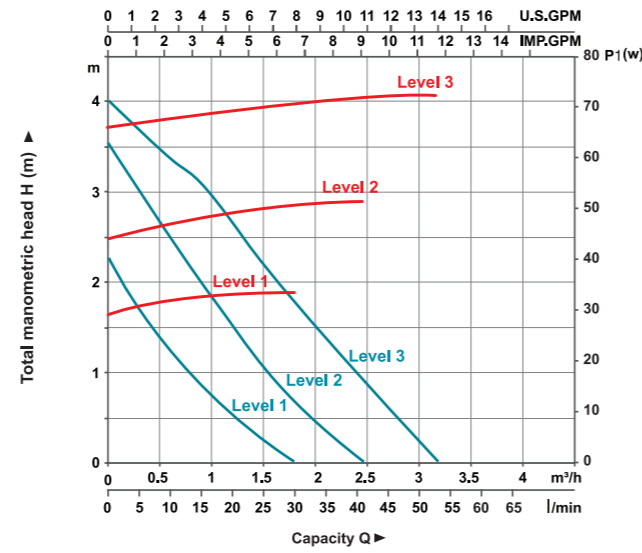


LRP20-40/130
 — Q-H
 — Q-P

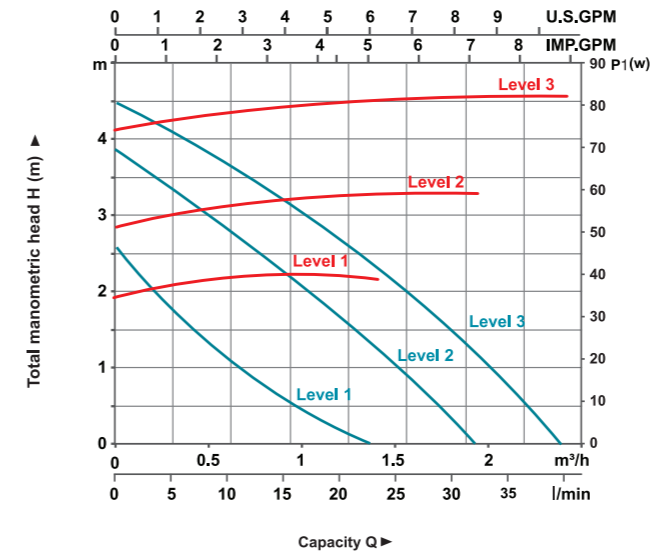
Hydraulic Performance Curves



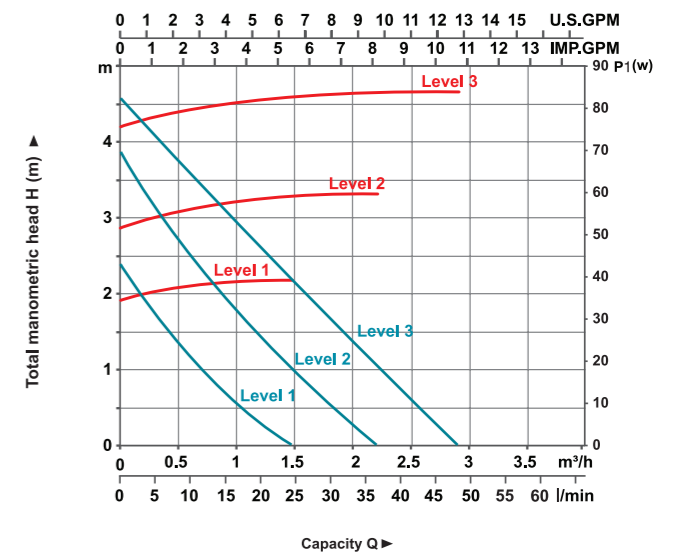
LRP21-40F/120
— Q-H
— Q-P



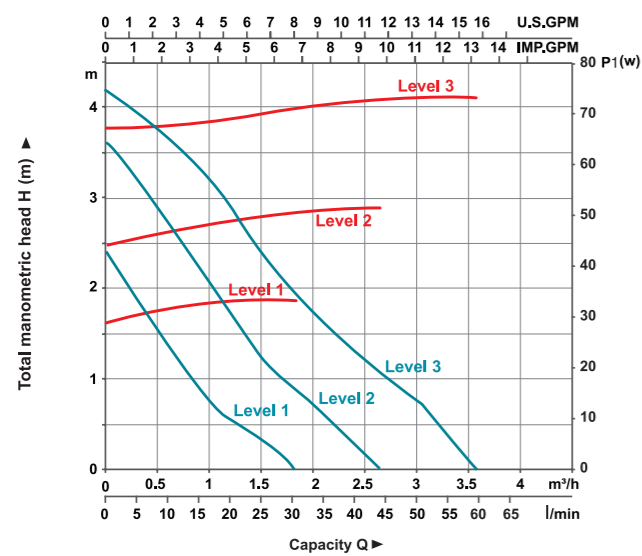
LRP25-40/130
— Q-H
— Q-P



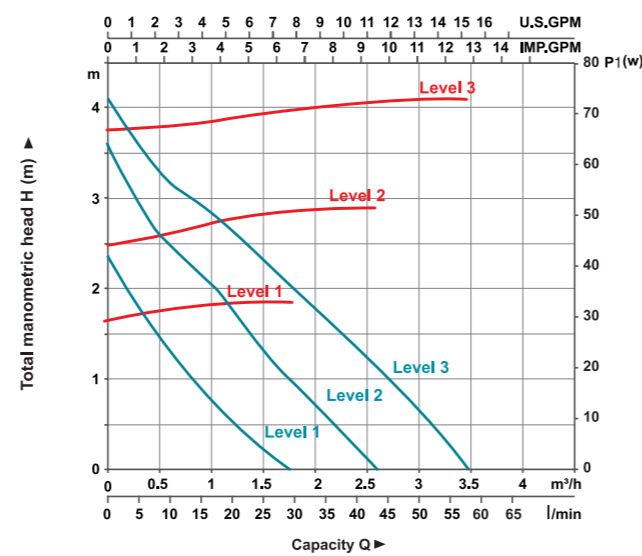
LRP15-50B/130
LRP15-50/130
— Q-H
— Q-P



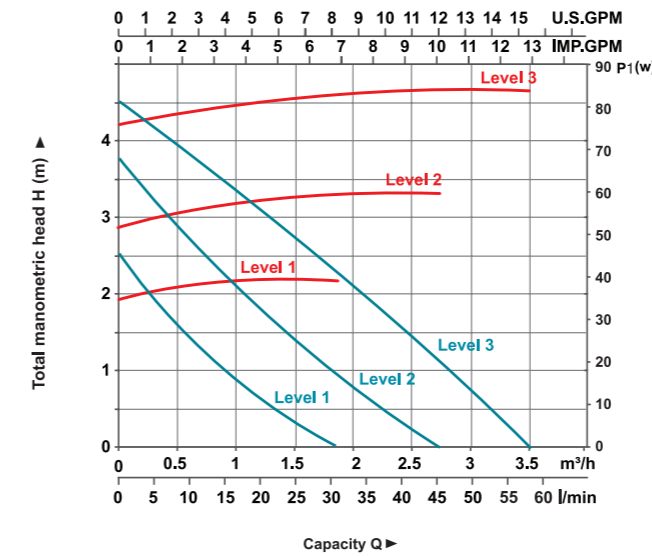
LRP20-50/130
— Q-H
— Q-P



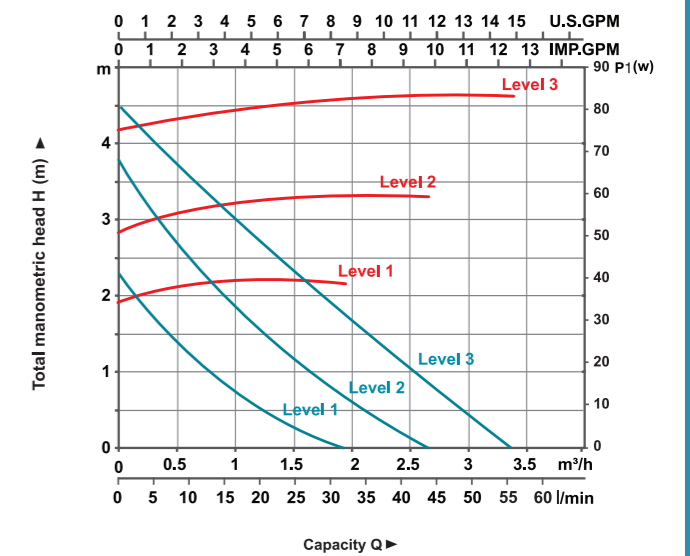
LRP25-40/180
— Q-H
— Q-P



LRP32-40/180
— Q-H
— Q-P

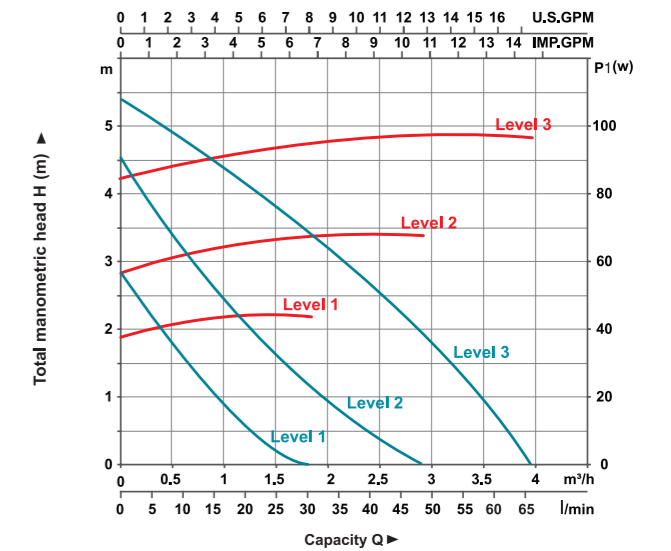
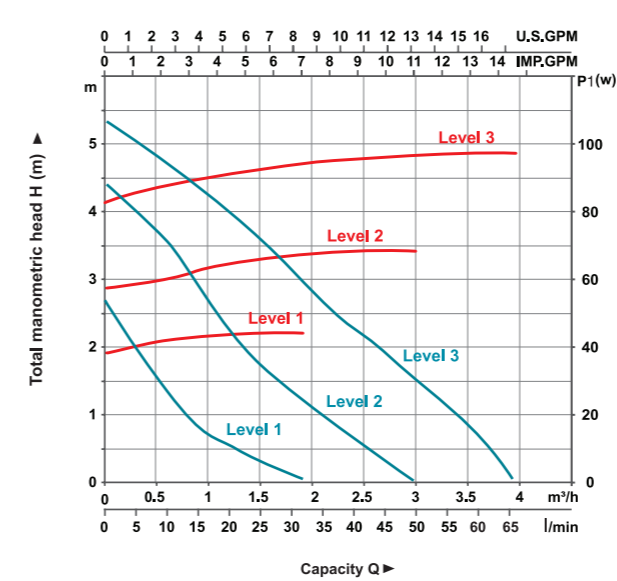
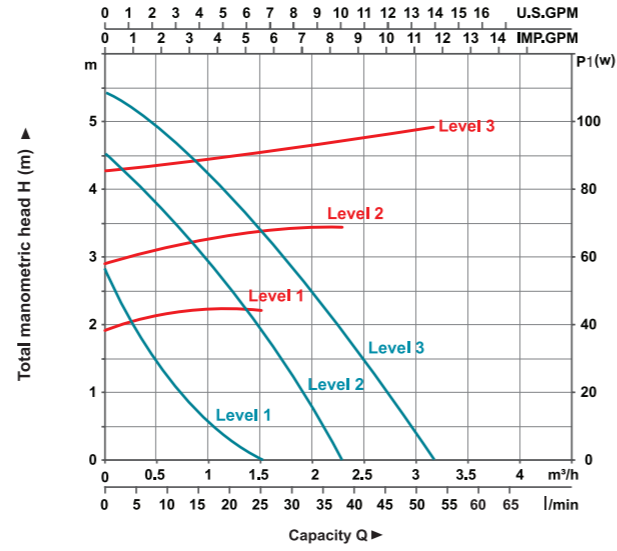
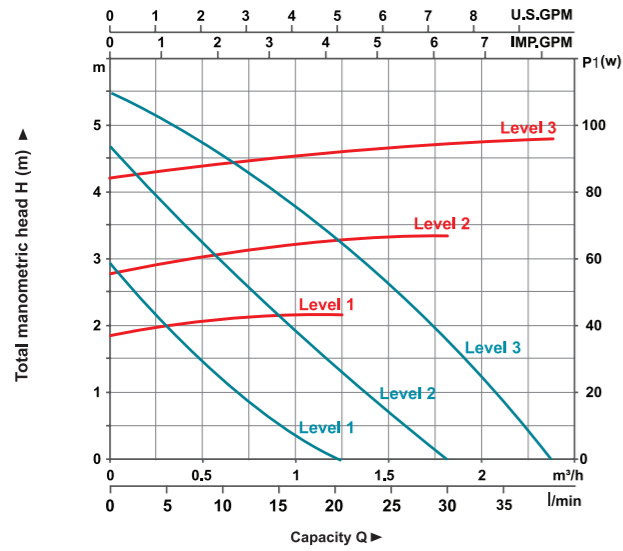
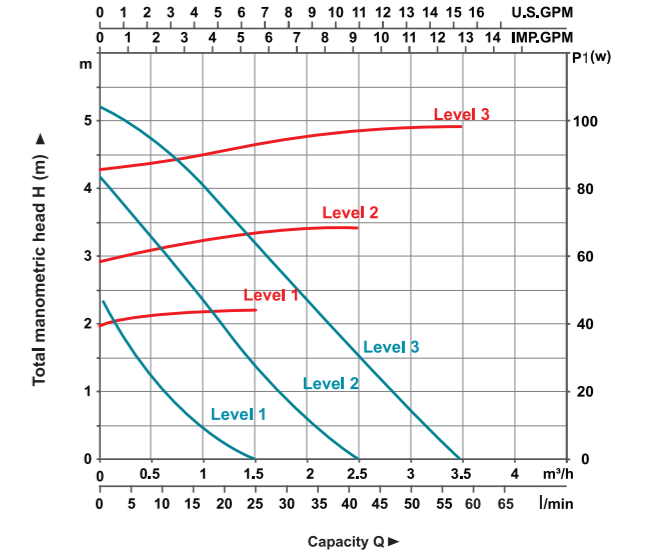
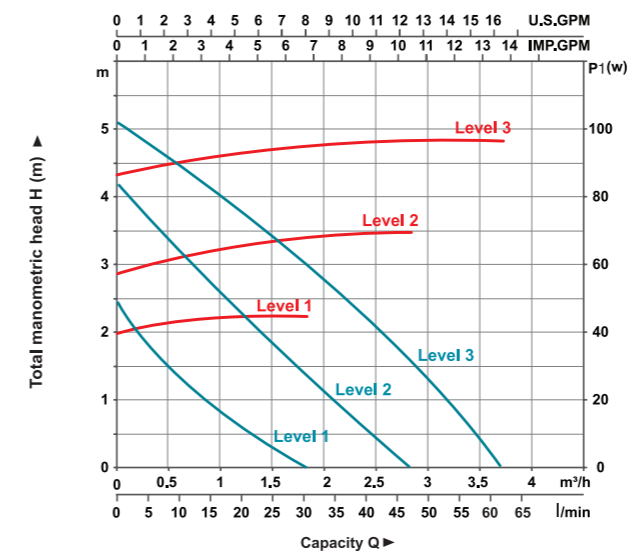
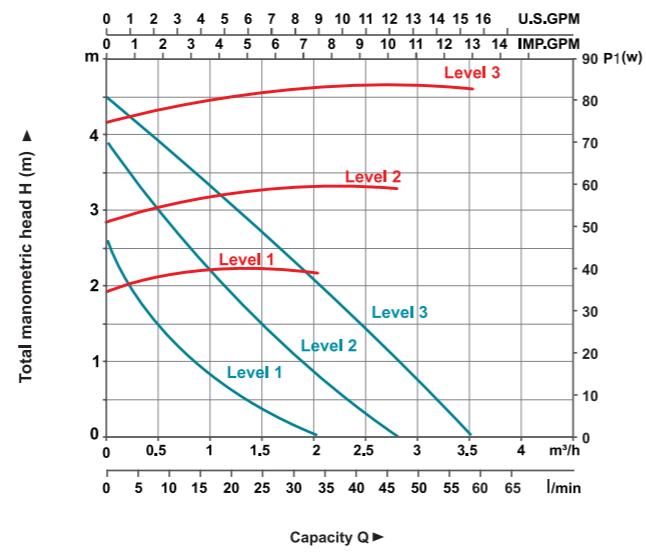
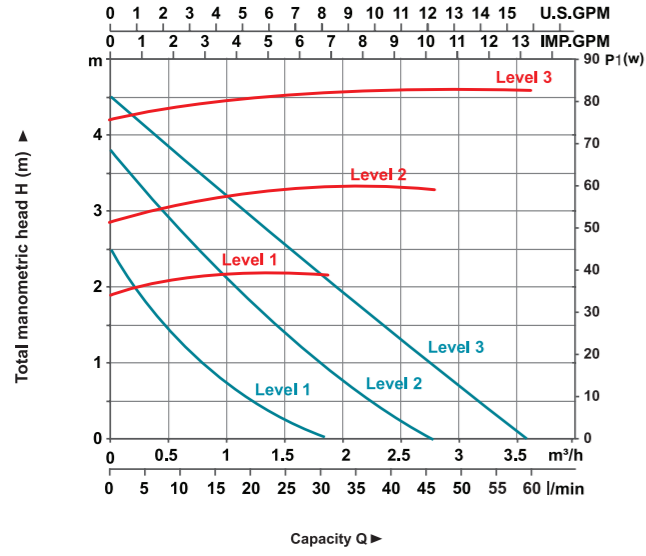


LRP21-50F/120
— Q-H
— Q-P

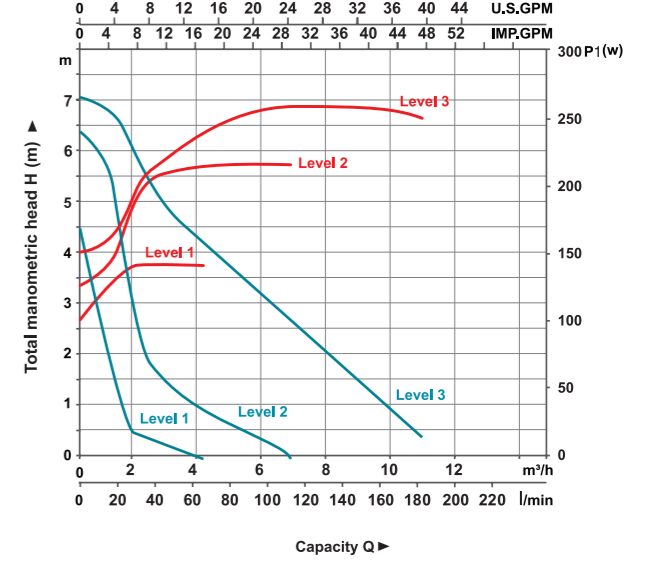
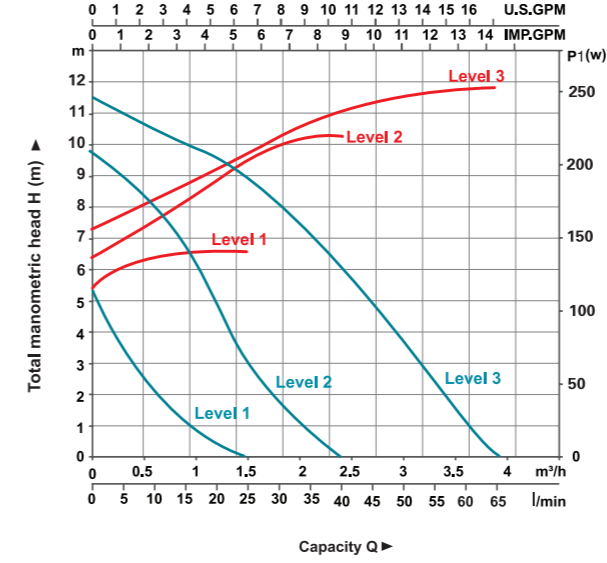
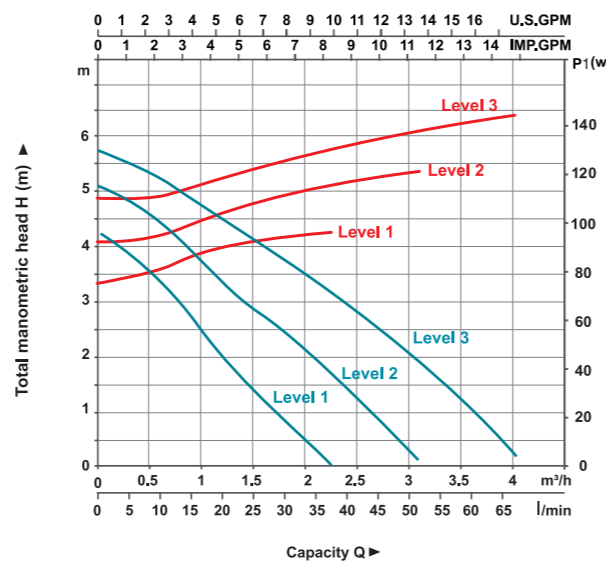
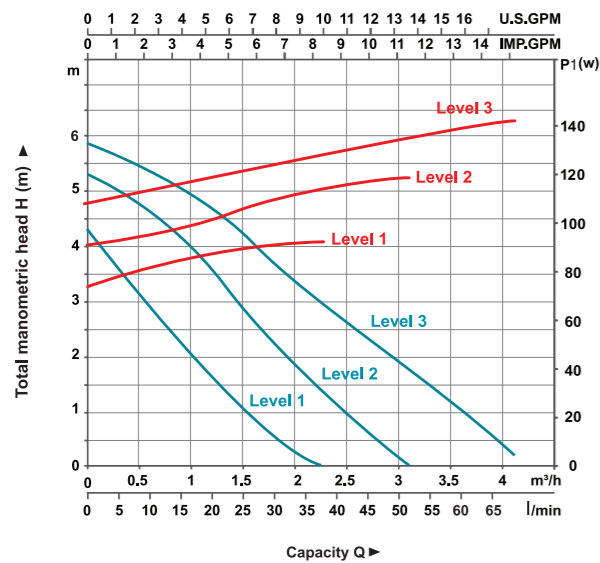
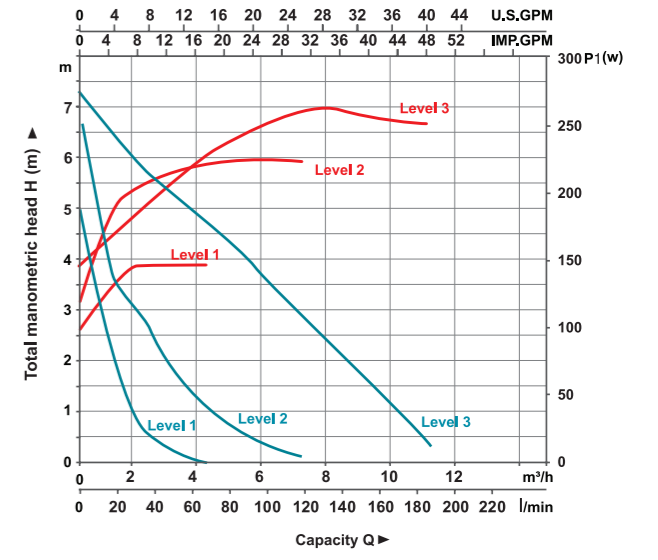
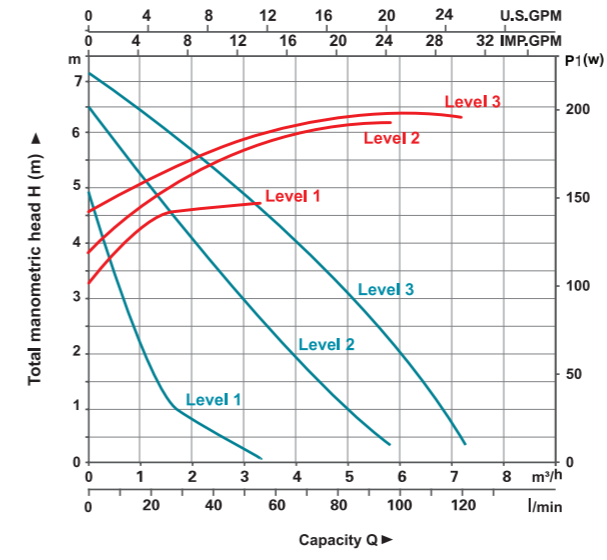
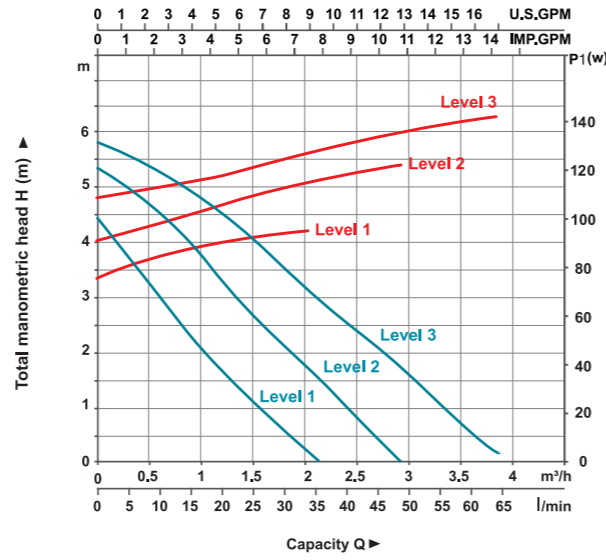
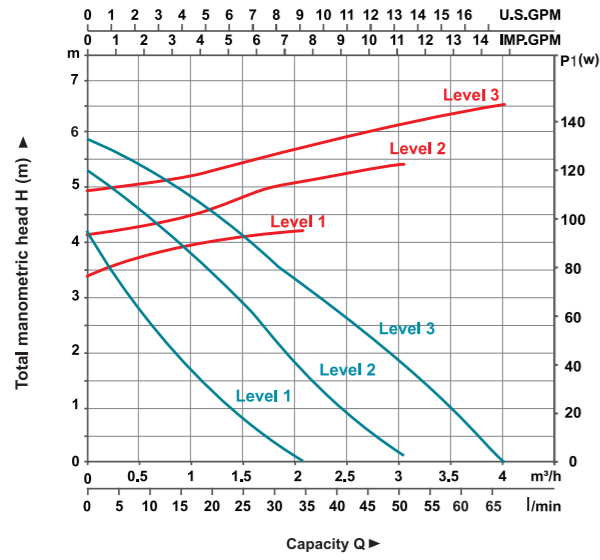


LRP25-50/130
— Q-H
— Q-P

Hydraulic Performance Curves



Hydraulic Performance Curves





Application

- Hot water circulation and heating system
- Air-conditioning system
- Industrial circulation system
- General pressure boosting in household

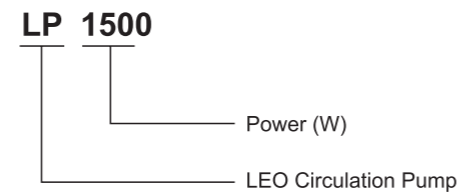
Pump

- Cast iron pump body and support under special anti-rust treatment
- AISI 304 shaft
- Liquid temperature: 2°C - 100°C

Motor

- Insulation class: B
- Protection class: IP44

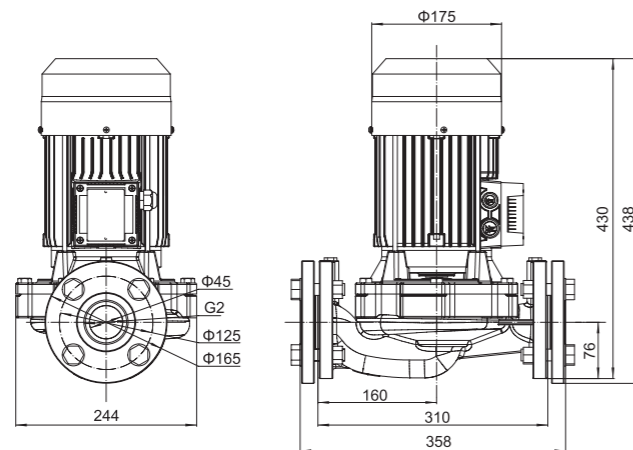
Identification Codes



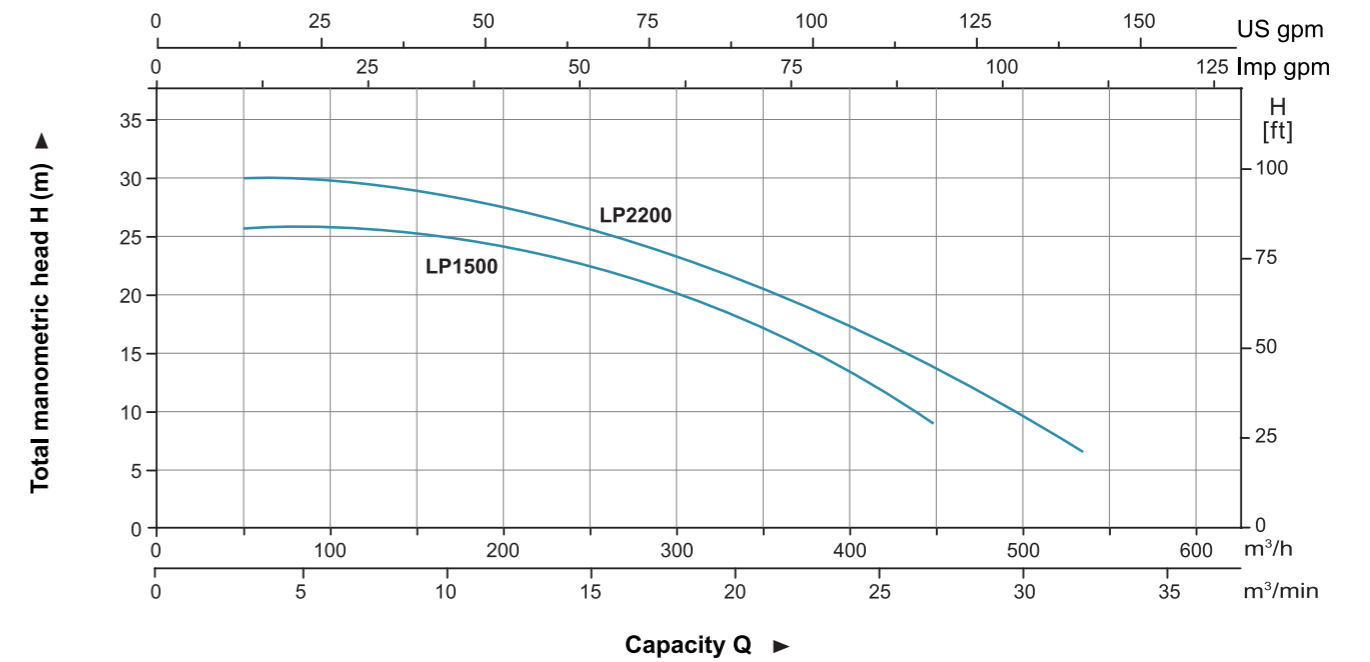
Technical Data

Model	Power		Q(m³/h)	Q(l/min)											
	kW	HP		0	6	9	12	15	18	21	24	30	32		
LP1500	1.5	2	H (m)	26	25	24	23	21	19	17	13	5	0		
LP2200	2.2	3		34	33	32	30	28	26	23	20	12	8		

Dimension

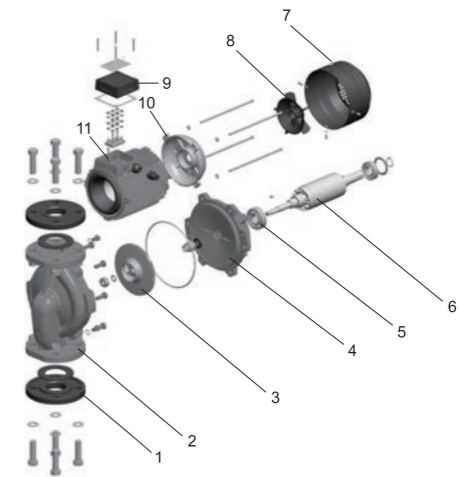


Hydraulic Performance Curves



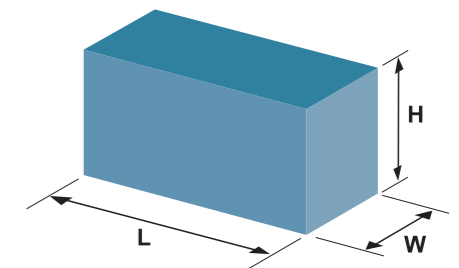
Materials Table

No.	Part	Material
1	Flange	HT 200
2	Pump body	HT 200
3	Impeller	Brass
4	Support	HT 200
5	Bearing	
6	Rotor	
7	Fan cover	08F
8	Fan	PP
9	Terminal box	ABS
10	Rear cover	ZL102
11	Stator	



Package Information

Model	G.W (kg)	L (mm)	W (mm)	H (mm)
LP1500	37	450	325	375
LP2200	38.8	450	325	375





Application

- Civil engineering
- Mines, quarries, coal ore & slurries
- Sewage treatment plants
- General pumping purposes

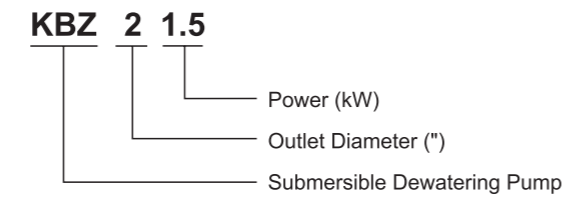
Pump

- Max. liquid temperature: +40°C
- Flow: up to 60 m³/h
- Head: up to 57 m
- Power: 1.5 kW (2 HP) to 15 kW (20 HP)
- Max. Immersion depth: 25 m
- Optional cable length

Motor

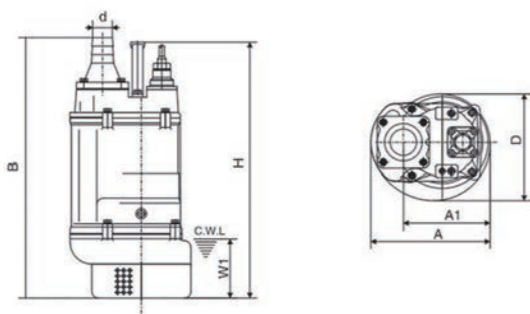
- Copper winding
- Insulation class: B
- Protection class: IP68

Identification Codes



Technical Data

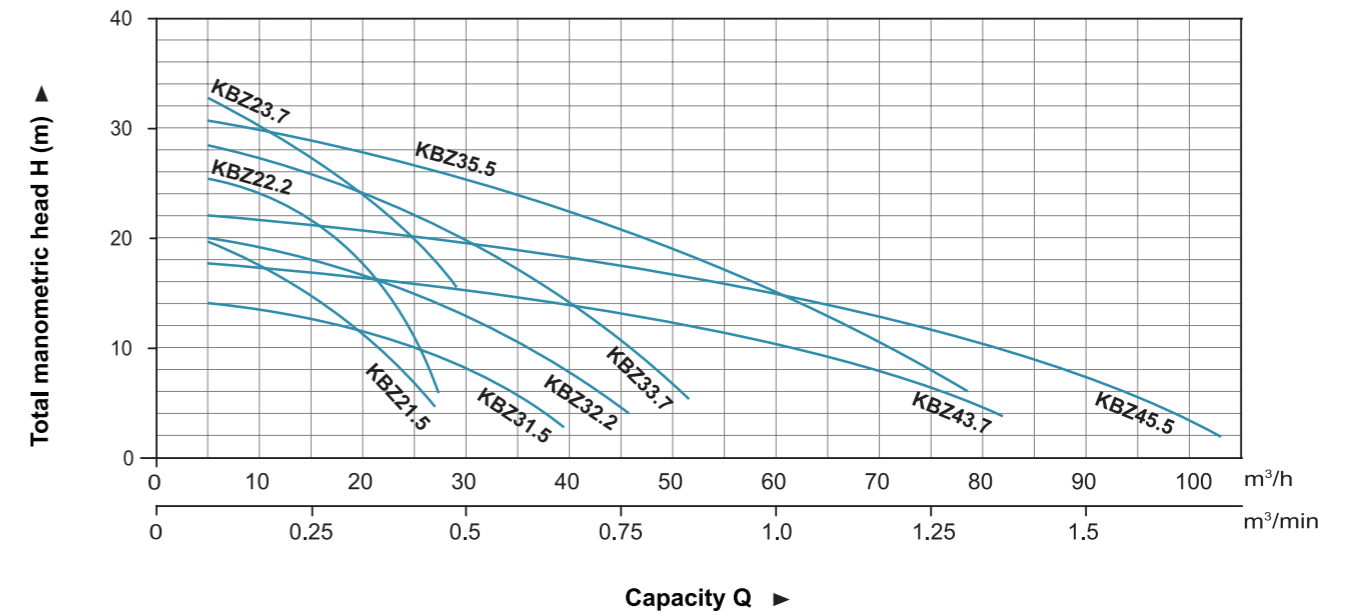
Model	Outlet mm	Power		Max head m	Max flow		Impeller passage mm
		kW	HP		m³/h	m³/min	
KBZ21.5	50	1.5	2	22	27	0.45	8.5
KBZ22.2	50	2.2	3	26	27	0.45	8.5
KBZ23.7	50	3.7	5	34	29	0.48	8.5
KBZ31.5	80	1.5	2	14.5	40	0.67	8.5
KBZ32.2	80	2.2	3	21	50	0.83	8.5
KBZ33.7	80	3.7	5	29	55	0.92	8.5
KBZ35.5	80	5.5	7.5	32	70	1.17	8.5
KBZ43.7	100	3.7	5	18	90	1.5	8.5
KBZ45.5	100	5.5	7.5	23	105	1.75	8.5



Dimension

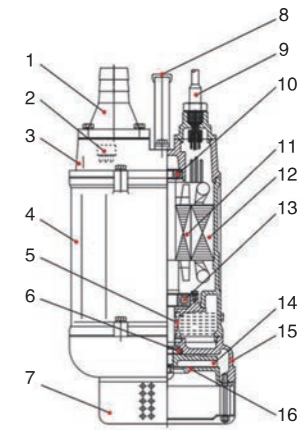
Model	d	A	A1	B	D	H	W1
KBZ21.5	50	235	173	517	216	486	120
KBZ31.5	80	235	173	517	216	486	120
KBZ22.2	50	235	173	517	216	486	120
KBZ32.2	80	235	173	517	216	486	120
KBZ23.7	50	283	208	628	252	638	150
KBZ33.7	80	283	208	628	252	638	150
KBZ43.7	100	283	208	642	252	638	150
KBZ35.5	80	306	218	671	259	598	150
KBZ45.5	100	306	218	686	259	598	150

Hydraulic Performance Curves



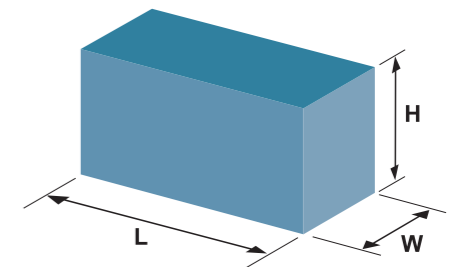
Materials Table

No.	Part	Material	No.	Part	Material
1	Hose coupling	Cast iron	9	Cable	
2	Thermal protector		10	Bearing	
3	Upper cover	Cast iron	11	Rotor	
4	Motor cover	Cast iron	12	Stator	
5	Oil seal		13	Bearing	
6	Mechanical seal	Sic-Sic/Carbon-Sic (≤2.2 kW) Sic-Sic/Sic-Sic (≥3.7 kW)	14	Impeller	High chrome alloy
7	Strainer	Steel	15	Pump body	Cast iron
8	Handle	Steel	16	Inlet plate	Ductile iron



Package Information

Model	N.W (kg)	G.W (kg)	L (mm)	W (mm)	H (mm)	Quantity (PCS/20 TEU)
KBZ21.5	34.5	37.5	585	270	270	648
KBZ22.2	36	39	585	270	270	648
KBZ23.7	60	65	685	325	300	406
KBZ31.5	34.5	37	585	270	270	648
KBZ32.2	36	39	585	270	270	648
KBZ33.7	60	65	685	325	300	406
KBZ35.5	77	84	725	355	370	288
KBZ43.7	61	66	685	325	300	406
KBZ45.5	78	85	725	355	370	288





Application

- Civil engineering
- Mines, quarries, coal ore & slurries
- Sewage treatment plants
- General pumping purposes

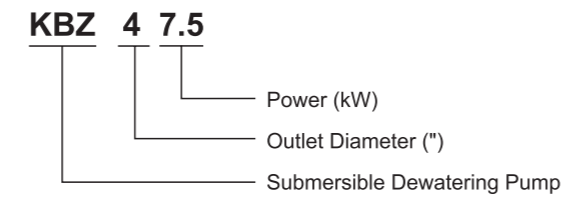
Pump

- Max. liquid temperature: +40°C
- Flow: up to 60 m³/h
- Head: up to 57 m
- Power: 1.5 kW (2 HP) to 15 kW (20 HP)
- Max. Immersion depth: 25 m
- Optional cable length

Motor

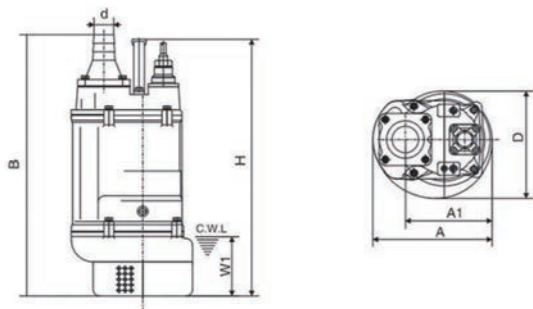
- Copper winding
- Insulation class: B
- Protection class: IP68

Identification Codes



Technical Data

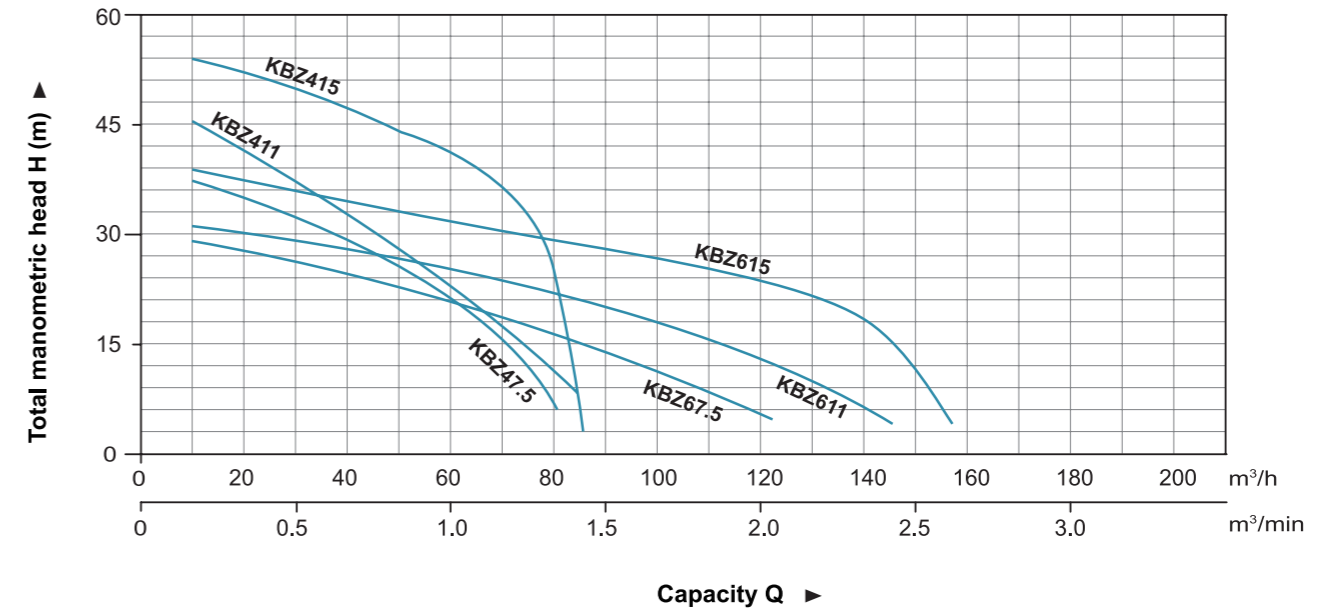
Model	Outlet mm	Power		Max head m	Max flow		Impeller passage mm
		kW	HP		m³/h	m³/min	
KBZ47.5	100	7.5	10	40	84	1.4	11.5
KBZ411	100	11	15	48.5	86.4	1.44	11.5
KBZ415	100	15	20	56	86.4	1.44	11.5
KBZ67.5	150	7.5	10	31	124.8	2.08	19.5
KBZ611	150	11	15	32	147	2.45	19.5
KBZ615	150	15	20	40	156	2.6	19.5



Dimension

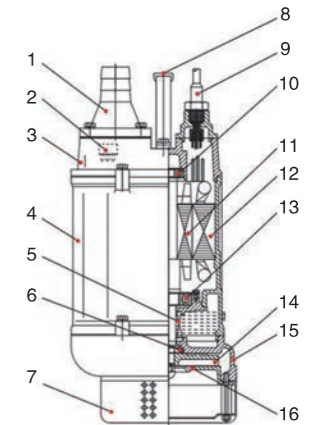
Model	d	A	A1	B	D	H	W1
KBZ47.5	100	330	240	764	314	676	190
KBZ411	100	373	255	807	350	695	190
KBZ67.5	150	330	240	790	314	676	190
KBZ611	150	373	255	807	350	695	190
KBZ415	100	373	255	842	350	755	190
KBZ415	100	373	255	842	350	755	190
KBZ615	150	373	255	842	350	755	190
KBZ615	150	373	255	842	350	755	190

Hydraulic Performance Curves



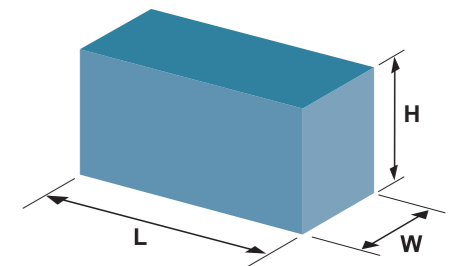
Materials Table

No.	Part	Material	No.	Part	Material
1	Hose coupling	Cast iron	9	Cable	
2	Thermal protector		10	Bearing	
3	Upper cover	Cast iron	11	Rotor	
4	Motor cover	Cast iron	12	Stator	
5	Oil seal		13	Bearing	
6	Mechanical seal	Sic-Sic/Carbon-Sic (≤2.2 kW) Sic-Sic/Sic-Sic (≥3.7 kW)	14	Impeller	High chrome alloy
7	Strainer	Steel	15	Pump body	Cast iron
8	Handle	Steel	16	Inlet plate	Ductile iron



Package Information

Model	N.W (kg)	G.W (kg)	L (mm)	W (mm)	H (mm)	Quantity (PCS/20' TEU)
KBZ47.5	105	114	805	365	390	215
KBZ411	130	140	895	415	440	160
KBZ415	142	153	895	415	440	160
KBZ67.5	106	114	835	365	390	205
KBZ611	133	143	855	415	440	160
KBZ615	145	156	895	415	440	160





Application

- Civil engineering
- Mines, quarries, coal ore & slurries
- Sewage treatment plants
- General pumping purposes
- Pumping fluid: sludge, liquids containing mud and bentonite

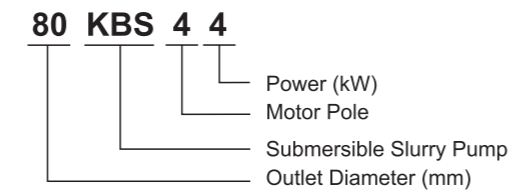
Pump

- Max. liquid temperature: +40°C
- Flow: up to 60 m³/h
- Head: up to 57 m
- Power: 1.5 kW (2 HP) to 15 kW (20 HP)
- Max. Immersion depth: 25 m
- Optional cable length

Motor

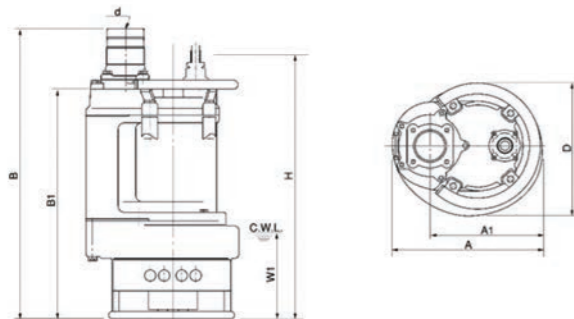
- Copper winding
- Insulation class: B
- Protection class: IP68

Identification Codes



Technical Data

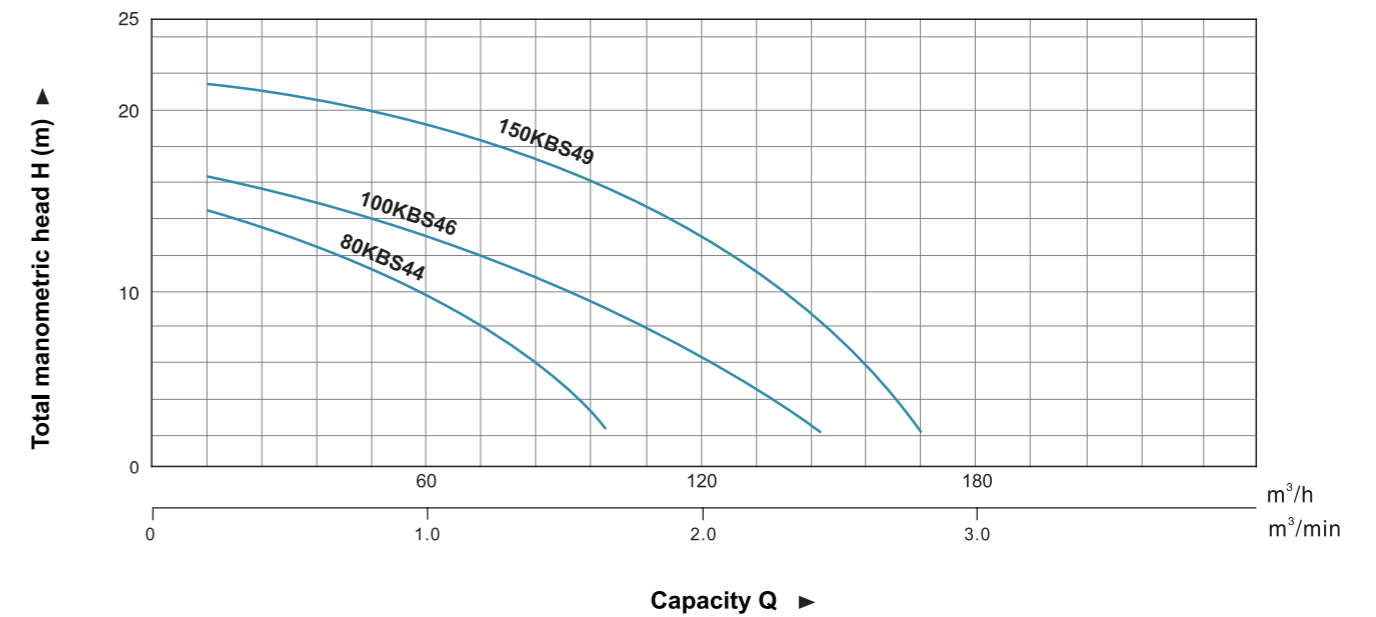
Model	Outlet mm	Power		Max head m	Max flow		Impeller passage mm
		kW	HP		m³/h	m³/min	
80KBS44	80	4	5.5	14.8	99	1.65	30
100KBS46	100	6	8	16.9	150	2.50	30
150KBS49	150	9	12	21.5	168	2.80	30



Dimension

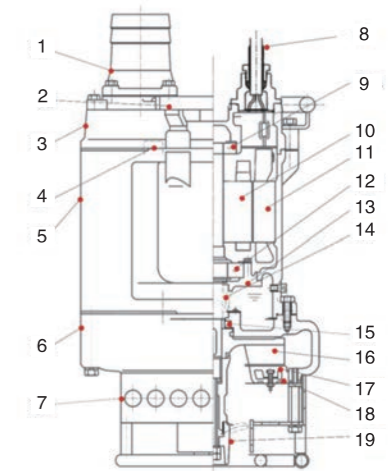
Model	d	A	A1	B	B1	D	H	W1
80KBS44	80	350	260	816	666	326	730	250
100KBS46	100	415	305	844	688	373	730	250
150KBS49	150	434	324	889	709	407	776	250

Hydraulic Performance Curves



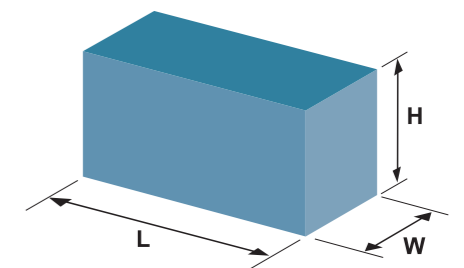
Materials Table

No.	Part	Material	No.	Part	Material
1	Hose coupling	Cast iron	11	Stator	
2	Handle	Steel	12	Bearing	
3	Upper cover	Cast iron	13	Bearing house	Cast iron
4	Motor protector		14	Mechanical seal	Sic-Sic/Sic-Sic
5	Motor body	Cast iron	15	Oil seal	
6	Pump body	Cast iron	16	Impeller	High chrome alloy
7	Strainer	Steel	17	Inlet plate	High chrome alloy
8	Cable		18	Inlet base	Cast iron
9	Bearing		19	Agitator	High chrome alloy
10	Rotor				



Package Information

Model	N.W (kg)	G.W (kg)	L (mm)	W (mm)	H (mm)	Quantity (PCS/20' TEU)
80KBS44	105	113	855	415	400	190
100KBS46	145	156	415	475	990	143
150KBS49	170	184	475	475	1050	118





Application

- Wastewater drainage in factories, construction sites and commercial facilities
- Drainage system in municipal sewage treatment plants
- Drainage station in residential quarters
- Municipal projects
- Methane pools and field irrigation in countryside

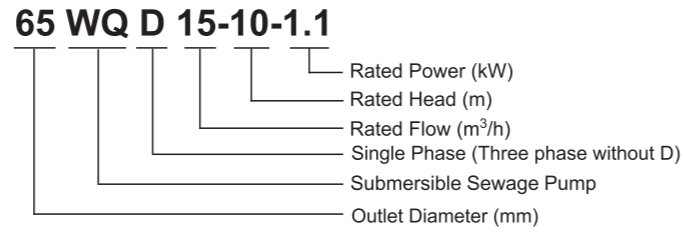
Pump

- Max. immersion depth: 5 m
- Max. liquid temperature: +40°C
- Liquid pH value: 5 – 9
- Max. liquid density: 1.2x10³kg/m³

Motor

- Copper winding
- Insulation class: B
- Protection class: IP68

Identification Codes



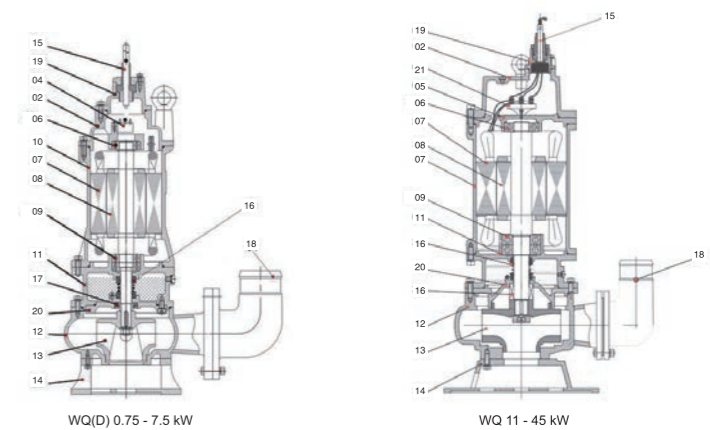
Technical Data

Model	Voltage	Motor Power		Outlet	Guide Rial Fitting	Max flow	Max head	Speed	Impeller passage	N.W	Packing dimension
	V	kW	HP								
50WQ10-10-0.75	380	0.75	1	2	50-50	28	13	3000	25	18	500*260*240
50WQD10-10-0.75	220	0.75	1	2	50-50	28	13	3000	25	19	500*260*240
50WQ8-16-1.1	380	1.1	1.5	2	50-50	25	19	3000	20	23.5	510*260*240
50WQD8-16-1.1	220	1.1	1.5	2	50-50	25	19	3000	20	24.5	520*260*240
65WQ15-10-1.1	380	1.1	1.5	2 1/2	50-65	28	15	3000	25	23.5	510*260*240
65WQD15-10-1.1	220	1.1	1.5	2 1/2	50-65	28	15	3000	25	24.5	520*260*240
50WQ8-20-1.5	380	1.5	2	2	50-50	25	22	3000	20	25	520*260*240
50WQD8-20-1.5	220	1.5	2	2	50-50	25	22	3000	20	26	520*260*240
65WQ15-15-1.5	380	1.5	2	2 1/2	50-65	35	20	3000	25	25	520*260*240
65WQD15-15-1.5	220	1.5	2	2 1/2	50-65	35	20	3000	25	26	520*260*240
50WQ15-20-2.2	380	2.2	3	2	50-50	38	23	3000	25	44	680*260*300
65WQ25-17-2.2	380	2.2	3	2 1/2	65-65	44	22	3000	25	42	680*260*300
80WQ40-9-2.2	380	2.2	3	3	65-80	65	16	3000	30	41	710*260*290
50WQ15-26-3	380	3	4	2	50-50	47	29	3000	25	49	710*260*290
65WQ25-22-3	380	3	4	2 1/2	65-65	55	26	3000	30	52	710*260*290
80WQ40-13-3	380	3	4	3	80-80	72	21	3000	30	51	740*240*290
100WQ60-9-3	380	3	4	4	80-100	88	19	3000	30	53	740*240*290
65WQ25-28-4	380	4	5.5	2 1/2	65-65	55	32	3000	25	61	770*260*230
80WQ40-18-4	380	4	5.5	3	80-80	80	24	3000	30	64	800*260*290
100WQ60-13-4	380	4	5.5	4	80-100	89	24	3000	30	65	800*260*290
50WQ15-40-5.5	380	5.5	7.5	2	50-50	50	43	3000	25	73	790*290*310
80WQ30-30-5.5	380	5.5	7.5	3	80-80	47	37	3000	30	73	810*290*320

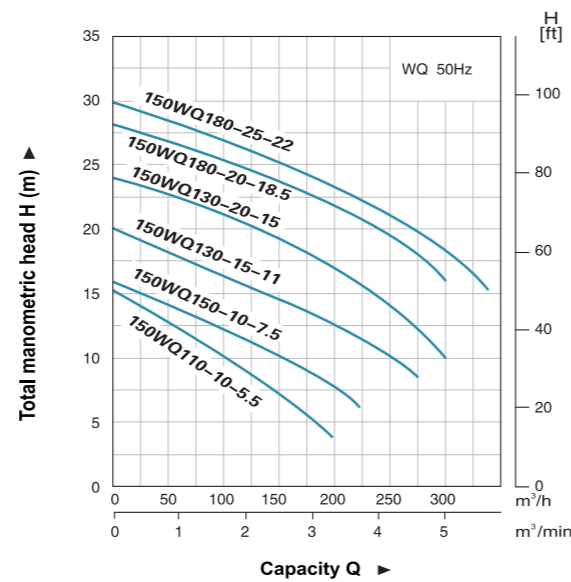
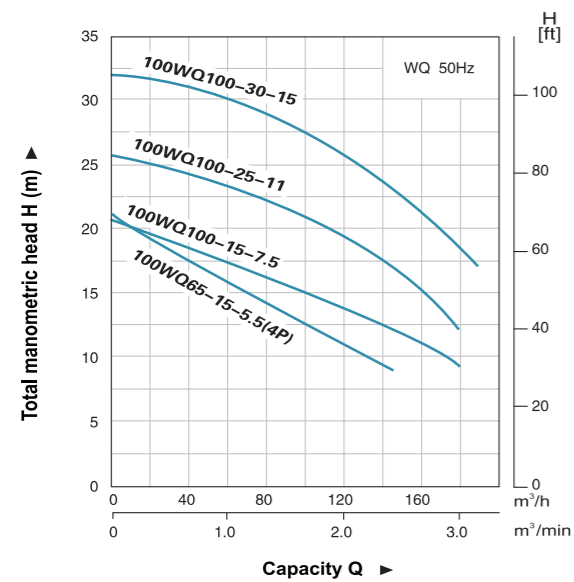
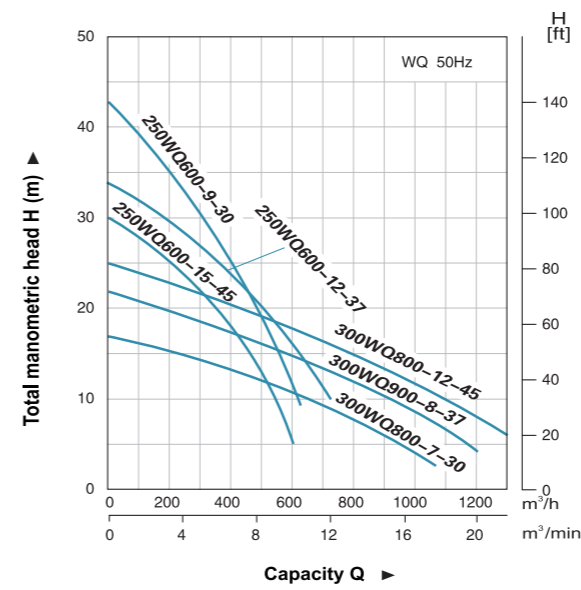
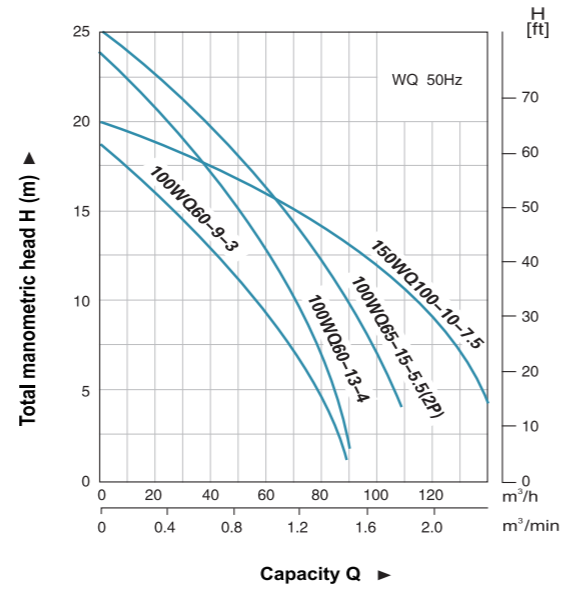
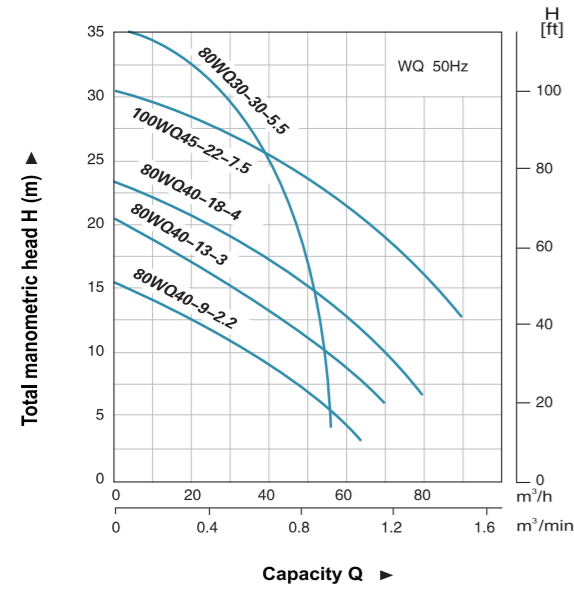
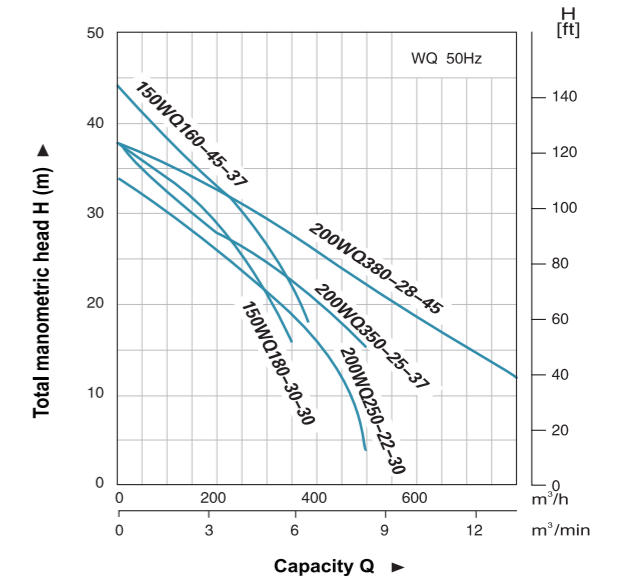
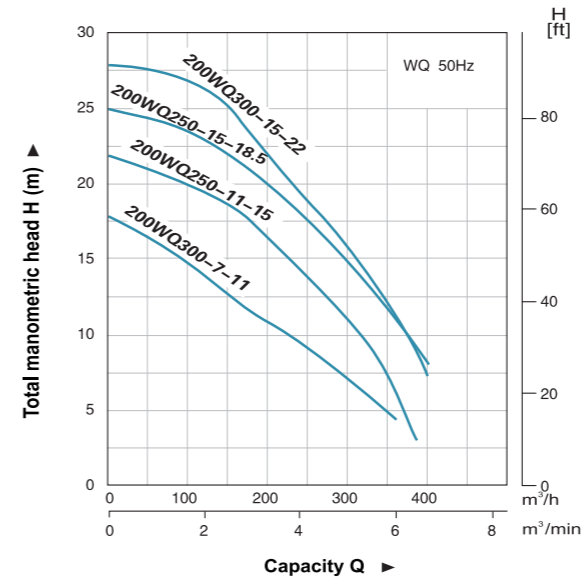
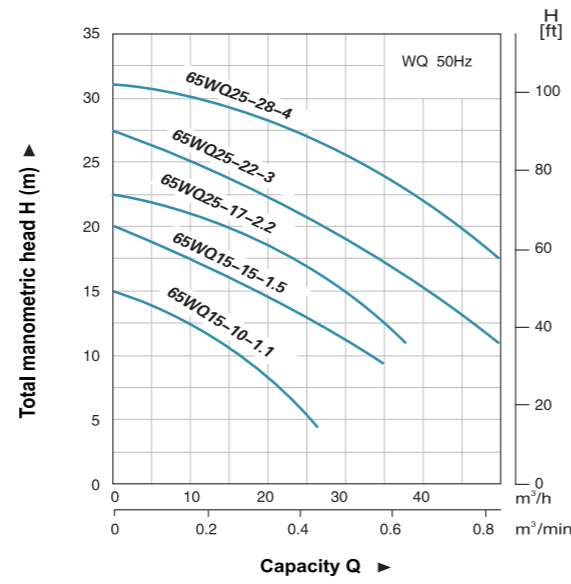
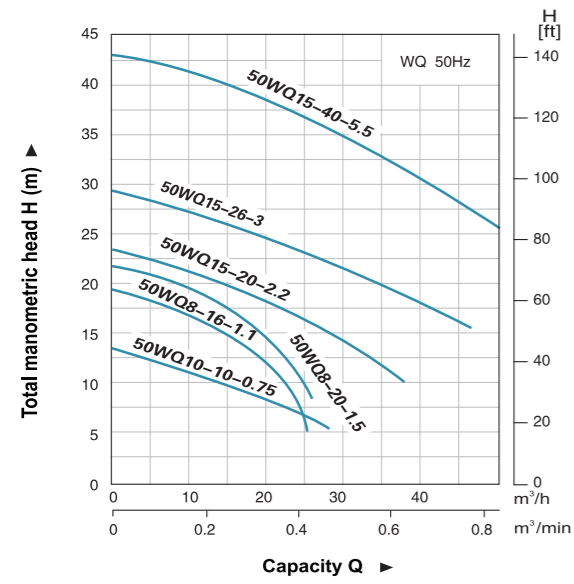
Model	Voltage	Motor Power		Outlet	Guide Rial Fitting	Max flow	Max head	Speed	Impeller passage	N.W	Packing dimension
	V	kW	HP								
100WQ65-15-5.5	380	5.5	7.5	4	100-100A	108	25	3000	30	79	820*300*350
100WQ45-22-7.5	380	7.5	10	4	100-100A	90	31	3000	35	115	1000*360*380
150WQ100-10-7.5	380	7.5	10	6	150-150	140	20	3000	35	115	1010*370*410
100WQ65-15-5.5(4P)	380	5.5	7.5	4	100-100	145	21	1500	55	126	1030*450*530
150WQ110-10-5.5(4P)	380	5.5	7.5	6	150-150	200	16	1500	55	153	1030*450*530
100WQ100-15-7.5(4P)	380	7.5	10	4	100-100	170	21	1500	55	156	1030*450*530
150WQ150-10-7.5(4P)	380	7.5	10	6	150-150	220	16	1500	75	163	1050*500*600
100WQ100-25-11(4P)	380	11	15	4	100-100	180	26	1500	50	221	500*600*1050
150WQ130-15-11(4P)	380	11	15	6	150-150	270	20	1500	50	239	500*600*1180
200WQ300-7-11(4P)	380	11	15	8	200-200	360	18	1500	65	252	500*600*1180
100WQ100-30-15(4P)	380	15	20	4	100-100	190	32	1500	50	239	500*600*1180
150WQ130-20-15(4P)	380	15	20	6	150-150	300	23	1500	50	259	500*600*1180
200WQ250-11-15(4P)	380	15	20	8	200-200	380	22	1500	65	274	500*600*1180
150WQ180-20-18.5(4P)	380	18.5	25	6	150-150	300	26	1500	50	300	510*640*1210
200WQ250-15-18.5(4P)	380	18.5	25	8	200-200	400	25	1500	65	300	510*640*1210
150WQ180-25-22(4P)	380	22	30	6	150-150	330	28	1500	50	324	510*640*1250
200WQ300-15-22(4P)	380	22	30	8	200-200	450	28	1500	65	324	510*640*1250
150WQ180-30-30(4P)	380	30	40	6	150-150	350	38	1500	70	445	630*660*1360
200WQ250-22-30(4P)	380	30	40	8	200-200	500	34	1500	70	446	660*690*1360
250WQ600-9-30(4P)	380	30	40	10	250-250	600	28	1500	70	446	660*710*1360
300WQ800-7-30(4P)	380	30	40	12	300-300	1000	18	1500	80	486	700*750*1450
150WQ160-45-37(4P)	380	37	50	6	150-150	380	43	1500	70	490	630*660*1360
200WQ350-25-37(4P)	380	37	50	8	200-200	500	38	1500	70	492	660*690*1360
250WQ600-12-37(4P)	380	37	50	10	250-250	720	32	1500	70	495	660*710*1360
300WQ900-8-37(4P)	380	37	50	12	300-300	1200	22	1500	80	535	700*750*1450
200WQ380-28-45(4P)	380	45	60	8	200-200	800	38	1500	70	545	660*710*1450
250WQ600-15-45(4P)	380	45	60	10	250-250	600	43	1500	70	545	660*710*1500
300WQ800-12-45(4P)	380	45	60	12	300-300	1300	25	1500	80	575	700*750*1600

Materials Table

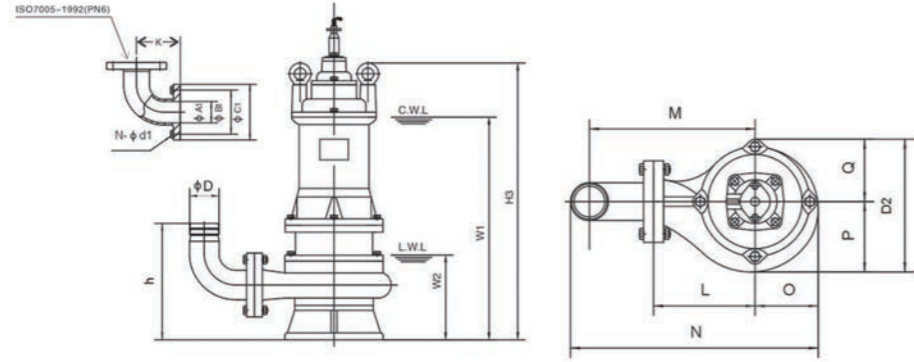
Item No.	Part Name	Material
01	Handle	Steel
02	Upper cover	Cast iron
03	Capacitor	
04	Thermal protector	
05	Upper bearing seat	Cast iron
06	Bearing	
07	Stator	
08	Rotor	
09	Bearing	
10	Motor body	Cast iron
11	Bearing seat	Cast iron
12	Pump body	Cast iron
13	Impeller	Cast iron
14	Base	Cast iron
15	Cable	
16	Mechanical seal	Sic-Sic/Carbon-Ceramic(<7.5 kW) Sic-Sic/Sic-Sic(>7.5 kW)
17	Oil seal	
18	Hose coupling	Cast iron
19	Terminal box	Cast iron
20	Seal bracket	Cast iron
21	Wiring terminal	



Hydraulic Performance Curves

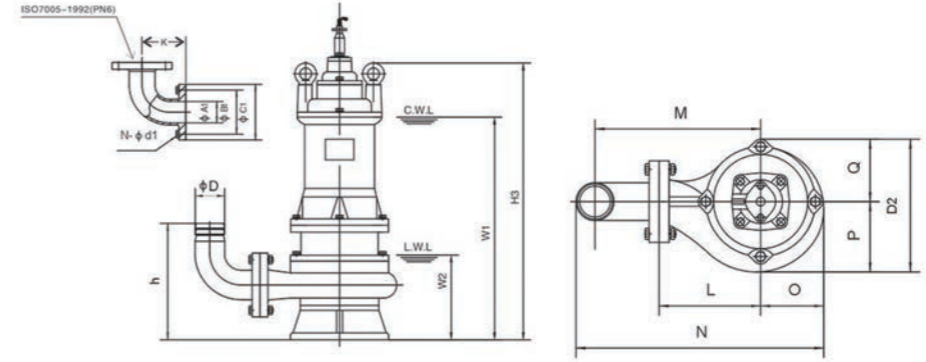


Dimension



Model	ΦD	ΦA1	ΦB1	ΦC1	n-Φd1	h	W1	W2	H3	K	N	O	P	Q	L	M	D2
50WQ10-10-0.75	50	50	110	140	4-Φ14	204	340	136	450	100	330	95	100	85	140	205	185
50WQD10-10-0.75	50	50	110	140	4-Φ14	204	340	136	450	100	330	95	100	85	140	205	185
50WQ8-16-1.1	50	50	110	140	4-Φ14	202	350	142	460	100	340	90	105	82	145	210	187
50WQD8-16-1.1	50	50	110	140	4-Φ14	202	370	142	480	100	340	90	105	82	145	210	187
65WQ15-10-1.1	65	50	110	140	4-Φ14	212	350	142	460	122	345	90	105	82	145	208	187
65WQD15-10-1.1	65	50	110	140	4-Φ14	212	370	142	480	122	345	90	105	82	145	208	187
50WQ8-20-1.5	50	50	110	140	4-Φ14	202	370	142	480	100	340	90	105	82	145	210	187
50WQD8-20-1.5	50	50	110	140	4-Φ14	202	390	142	500	100	340	90	105	82	145	210	187
65WQ15-15-1.5	65	50	110	140	4-Φ14	212	370	142	480	122	345	90	105	82	145	208	187
65WQD15-15-1.5	65	50	110	140	4-Φ14	212	390	142	500	122	345	90	105	82	145	208	187
50WQ15-20-2.2	50	50	110	140	4-Φ14	213	445	150	550	100	360	105	114	98	165	230	212
65WQ25-17-2.2	65	65	130	160	4-Φ14	223	445	150	550	122	365	105	115	100	165	228	215
80WQ40-9-2.2	80	65	130	160	4-Φ14	251	455	158	560	122	385	105	112	96	160	245	208
50WQ15-26-3	50	50	110	140	4-Φ14	212	464	150	570	100	360	105	115	97	165	230	212
65WQ25-22-3	65	65	130	160	4-Φ14	222	464	150	570	122	365	105	115	98	165	228	213
80WQ40-13-3	80	80	150	190	4-Φ18	262	490	177	595	140	380	105	115	98	155	235	213
100WQ60-9-3	100	80	150	190	4-Φ18	292	490	177	595	150	410	105	115	98	155	255	213
65WQ25-28-4	65	65	130	160	4-Φ14	241	502	170	612	122	390	115	125	110	180	243	235
80WQ40-18-4	80	80	150	190	4-Φ18	272	528	195	640	140	375	105	112	98	150	230	210
100WQ60-13-4	100	80	150	190	4-Φ18	302	528	195	640	150	405	105	112	98	150	250	210
50WQ15-40-5.5	50	50	110	140	4-Φ14	237	523	165	645	100	390	120	125	115	180	245	240
80WQ30-30-5.5	80	80	150	190	4-Φ18	270	540	182	660	140	405	110	115	105	175	255	220
100WQ65-15-5.5	100	100	170	210	4-Φ18	305	555	197	675	150	461	130	140	115	181	281	255
100WQ65-22-7.5	100	100	170	210	4-Φ18	340	660	265	820	150	495	140	150	130	205	305	280
150WQ100-10-7.5	150	150	225	265	8-Φ18	560	670	280	830	230	565	145	160	135	210	345	295

Dimension



Model	ΦD	ΦA1	ΦB1	ΦC1	n-Φd1	h	W1	W2	H3	K	N	O	P	Q	L	M	D2
100WQ65-15-5.5(4P)	100	100	170	210	4-Φ18	362	677	268	835	150	620	190	200	175	280	380	375
150WQ110-10-5.5(4P)	150	150	225	265	8-Φ18	415	697	288	855	230	680	195	210	170	275	410	380
100WQ100-10-7.5(4P)	100	100	170	210	4-Φ18	382	695	286	853	150	675	205	225	190	320	420	415
150WQ150-10-7.5(4P)	150	150	225	265	8-Φ18	420	708	300	866	230	705	195	216	170	300	345	386
100WQ100-25-11(4P)	100	100	170	210	4-Φ18	370	730	278	980	150	680	210	240	220	320	420	460
150WQ130-15-11(4P)	150	150	225	265	8-Φ18	450	780	331	1020	230	760	200	240	190	350	458	430
200WQ300-7-11(4P)	200	200	280	320	8-Φ18	590	780	327	1020	260	875	205	240	190	370	570	430
100WQ100-30-15(4P)	100	100	170	210	4-Φ18	370	770	278	1010	150	680	210	240	220	320	420	460
150WQ130-20-15(4P)	150	150	225	265	8-Φ18	450	820	331	1060	230	760	200	240	190	350	485	430
200WQ250-11-15(4P)	200	200	280	320	8-Φ18	590	820	327	1060	260	875	205	240	190	370	570	430
150WQ180-20-18.5(4P)	150	150	225	265	8-Φ18	450	885	331	1130	230	760	200	240	190	350	485	430
200WQ250-15-18.5(4P)	200	200	280	320	8-Φ18	590	885	327	1130	260	875	205	240	190	370	570	430
150WQ180-25-22(4P)	150	150	225	265	8-Φ18	450	915	331	1160	230	760	200	240	190	350	485	430
200WQ300-15-22(4P)	200	200	280	320	8-Φ18	590	915	327	1160	260	875	205	240	190	370	570	430
150WQ180-30-30(4P)	150	150	225	265	8-Φ18	463	972	390	1200	230	810	240	270	230	360	495	500
200WQ250-22-30(4P)	200	200	280	320	8-Φ18	593	960	380	1200	260	950	250	310	220	400	600	530
250WQ600-9-30(4P)	250	250	335	375	12-Φ18	665	1020	434	1250	300	1030	260	330	240	410	615	570
300WQ800-7-30(4P)	300	300	395	440	12-Φ18	750	1070	455	1300	350	1040	270	330	240	410	620	570
150WQ160-45-37(4P)	150	150	225	265	28-Φ18	463	972	390	1185	230	810	240	270	230	360	495	500
200WQ350-25-37(4P)	200	200	280	320	8-Φ18	593	960	380	1170	260	950	250	310	220	400	600	530
250WQ600-12-37(4P)	250	250	335	375	12-Φ18	665	1020	434	1230	300	1000	260	330	240	410	615	570
300WQ900-8-37(4P)	300	300	395	440	12-Φ22	750	1070	455	1280	350	1040	270	330	240	410	620	570
200WQ380-28-45(4P)	200	200	280	320	8-Φ18	560	1045	412	1250	260	950	250	310	220	400	600	530
250WQ600-15-45(4P)	250	250	335	375	12-Φ18	665	1065	434	1230	300	1000	260	330	240	410	615	570
300WQ800-12-45(4P)	300	300	395	440	12-Φ22	750	1110	455	1350	350	1040	270	330	240	410	620	570



Impeller

(Hose coupling as standard.
Flange elbow is available on request.)

Applications

- Drainage of wastewater from the attenuation tank, purifying tank and sewage tank in water treatment plant
- Drainage of waste water containing fibrous additives from leather factory and food processing factory.
- Sewage management, accumulated water, septic tank, stock farm.
- Pumping sewage form hotels, restaurants, schools and public buildings

Features

- High efficient and anti-clogging Enclosed Channel impeller design
- Flexible installations with hoses, pipes or quick-coupling systems
- Flow switch included for single phase pump with motor power ≤ 1.1 kW

Working Conditions

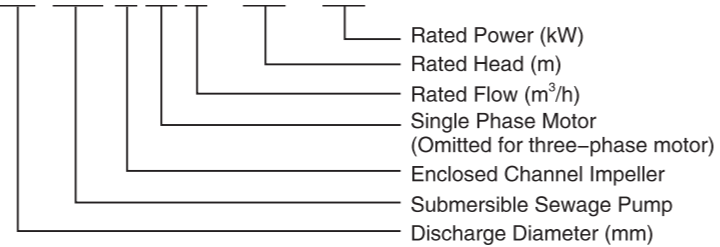
- Liquid temperature: 0 - 40 °C
- Max immersion depth: 5 m

Motor

- Frequency/Pole number: 50 Hz/2
- Insulation class: F
- Protection class: IPX8
- Bearing: Ball type
- Mechanical seal: Double-end mechanical seals

Identification Codes

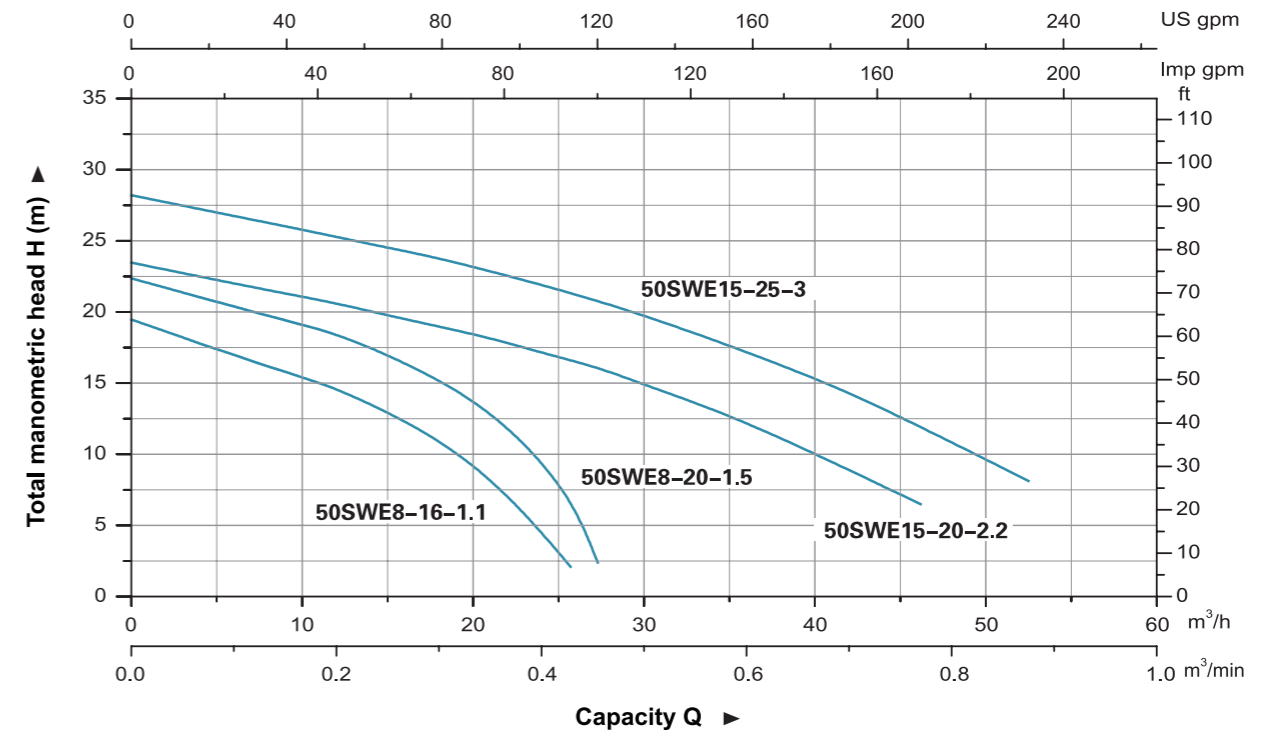
50 SW E m 8 - 16 - 1.1



Technical Data

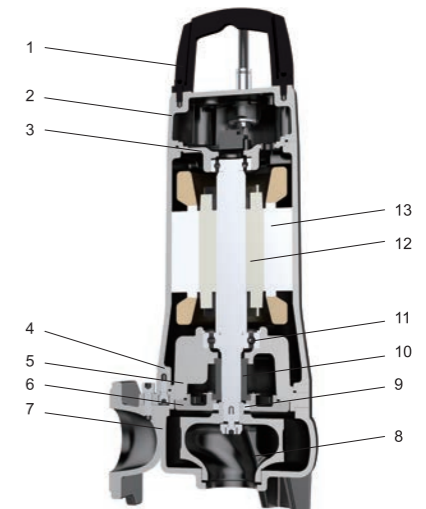
Model		Power		Discharge mm (inch)	Rated Flow (m³/h)	Rated Head (m)	Solid Passage (mm)
Single Phase	Three Phase	kW	HP				
50SWEm8-16-1.1	50SWE8-16-1.1	1.1	1.5	50 (2")	8	16	15
50SWEm8-20-1.5	50SWE8-20-1.5	1.5	2	50 (2")	8	20	15
50SWEm15-20-2.2	50SWE15-20-2.2	2.2	3	50 (2")	15	20	25
-	50SWE15-25-3	3	4	50 (2")	15	26	25

Hydraulic Performance Curves

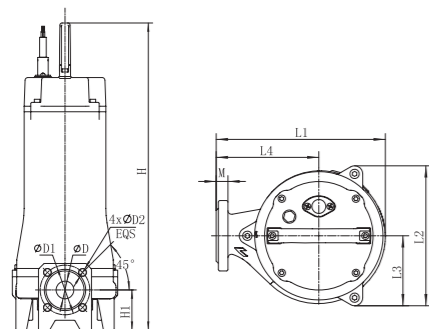


Materials Table

No.	Part	Material
1	Handle	ZG304
2	Upper cover	HT200
3	Upper bearing seat	HT200
4	Motor body	HT200
5	Oil chamber	HT200
6	Pump cover	HT200
7	Pump body	HT200
8	Impeller	HT200
9	Oil seal	
10	Mechanical seal	Upper:SiC/Carbon Lower:SiC/SiC
11	Bearing	
12	Rotor	
13	Stator	



Dimension



Model	L1	L2	L3	L4	H	H1	D	D1	D2	M
50SWE8-16-1.1	223	191	96	135	559	88	50	110	14	16
50SWEm8-16-1.1										
50SWE8-20-1.5										
50SWEm8-20-1.5										
50SWE15-20-2.2	270	223	113	163	570	75	50	110	14	16
50SWEm15-20-2.2										
50SWE15-25-3										

Package Information

Model	GW (Kgs)	L (mm)	W (mm)	H (mm)	Quantity (PCS/20"TEU)
50SWE8-16-1.1	39.3	750	290	368	372
50SWEm8-16-1.1	42.5	750	290	368	372
50SWE8-20-1.5	50.5	848	358	311	294
50SWEm8-20-1.5	53	848	358	311	294
50SWE15-20-2.2	56	848	358	311	294
50SWEm15-20-2.2	57	848	358	311	294
50SWE15-25-3	62	848	358	311	294



Impeller

(Hose coupling as standard.
Flange elbow is available on request.)



Applications

- Drainage of wastewater from the attenuation tank, purifying tank and sewage tank in water treatment plant
- Drainage of waste water containing fibrous additives from leather factory and food processing factory.
- Sewage management, accumulated water, septic tank, stock farm.
- Pumping sewage form hotels, restaurants, schools and public buildings

Features

- High efficient and anti-clogging Enclosed Channel impeller design
- Flexible installations with hoses, pipes or quick-coupling systems
- Flow switch included for single phase pump with motor power ≤ 1.1 kW

Working Conditions

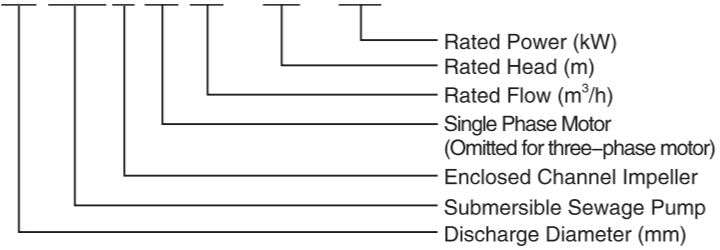
- Liquid temperature: 0 - 40 °C
- Max immersion depth: 5 m

Motor

- Frequency/Pole number: 50 Hz/2
- Insulation class: F
- Protection class: IPX8
- Bearing: Ball type
- Mechanical seal: Double-end mechanical seals

Identification Codes

65 SW E m 15 - 10 - 1.1

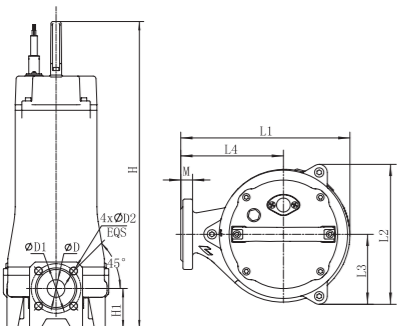


- Rated Power (kW)
- Rated Head (m)
- Rated Flow (m³/h)
- Single Phase Motor (Omitted for three-phase motor)
- Enclosed Channel Impeller
- Submersible Sewage Pump
- Discharge Diameter (mm)

Technical Data

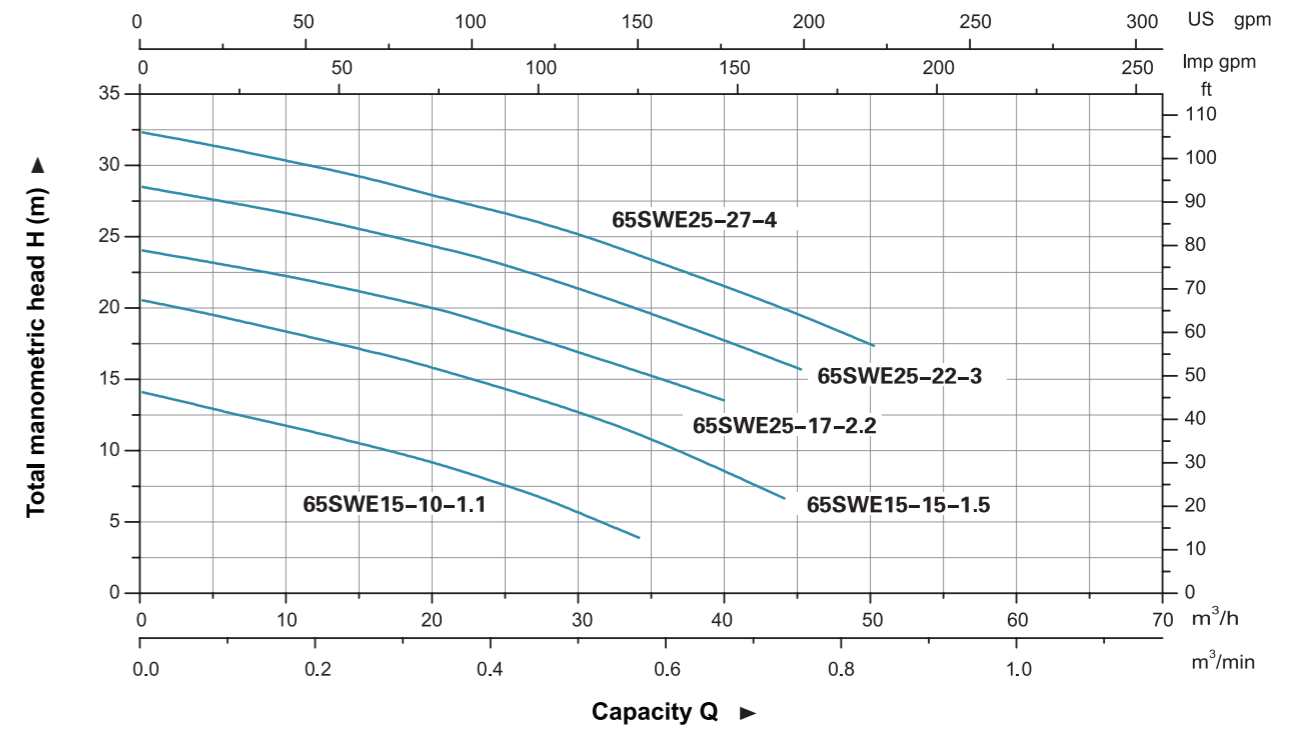
Model		Power		Discharge mm (inch)	Rated Flow (m ³ /h)	Rated Head (m)	Solid Passage (mm)
Single Phase	Three Phase	kW	HP				
65SWE15-10-1.1	65SWE15-10-1.1	1.1	1.5	65 (2.5")	15	10	25
65SWE15-15-1.5	65SWE15-15-1.5	1.5	2	65 (2.5")	15	15	25
-	65SWE25-17-2.2	2.2	3	65 (2.5")	25	17	25
-	65SWE25-22-3	3	4	65 (2.5")	25	22	25
-	65SWE25-27-4	4	5.5	65 (2.5")	25	28	25

Dimension



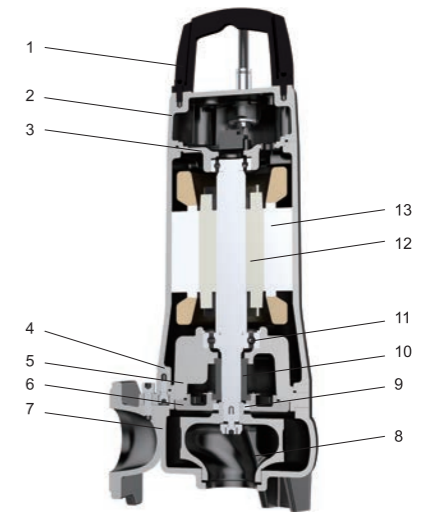
Model	L1	L2	L3	L4	H	H1	D	D1	D2	M
65SWE15-10-1.1					557					
65SWE15-15-1.5					581					
65SWE15-15-1.5	291	226	117	178	622	85	65	130	14	16
65SWE25-17-2.2					581					
65SWE25-22-3					610					
65SWE25-27-4										

Hydraulic Performance Curves



Materials Table

No.	Part	Material
1	Handle	ZG304
2	Upper cover	HT200
3	Upper bearing seat	HT200
4	Motor body	HT200
5	Oil chamber	HT200
6	Pump cover	HT200
7	Pump body	HT200
8	Impeller	HT200
9	Oil seal	
10	Mechanical seal	Upper:SiC/Carbon Lower:SiC/SiC
11	Bearing	
12	Rotor	
13	Stator	



Package Information

Model	GW (Kgs)	L (mm)	W (mm)	H (mm)	Quantity (PCS/20'TEU)
65SWE15-10-1.1	46	750	290	368	372
65SWE15-10-1.1	48	750	290	368	372
65SWE15-15-1.5	57	848	290	368	372
65SWE15-15-1.5	60	848	290	368	372
65SWE25-17-2.2	61	848	358	311	294
65SWE25-22-3	67	848	358	311	294
65SWE25-27-4	68	848	358	311	294



Applications

- Drainage of wastewater from the attenuation tank, purifying tank and sewage tank in water treatment plant
- Drainage of waste water containing fibrous additives from leather factory and food processing factory.
- Sewage management, accumulated water, septic tank, stock farm.
- Pumping sewage form hotels, restaurants, schools and public buildings

Features

- High efficient and anti-clogging Enclosed Channel impeller design
- Flexible installations with hoses, pipes or quick-coupling systems

Working Conditions

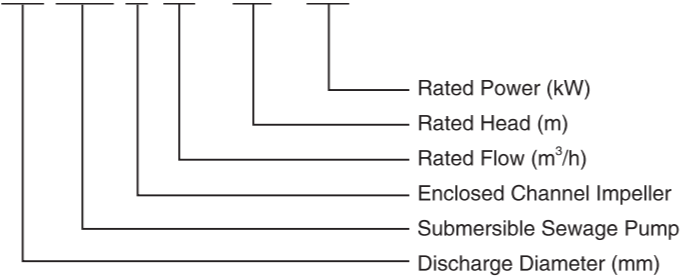
- Liquid temperature: 0 - 40 °C
- Max immersion depth: 5 m

Motor

- Frequency/Pole number: 50 Hz/2
- Insulation class: F
- Protection class: IPX8
- Bearing: Ball type
- Mechanical seal: Double-end mechanical seals

Identification Codes

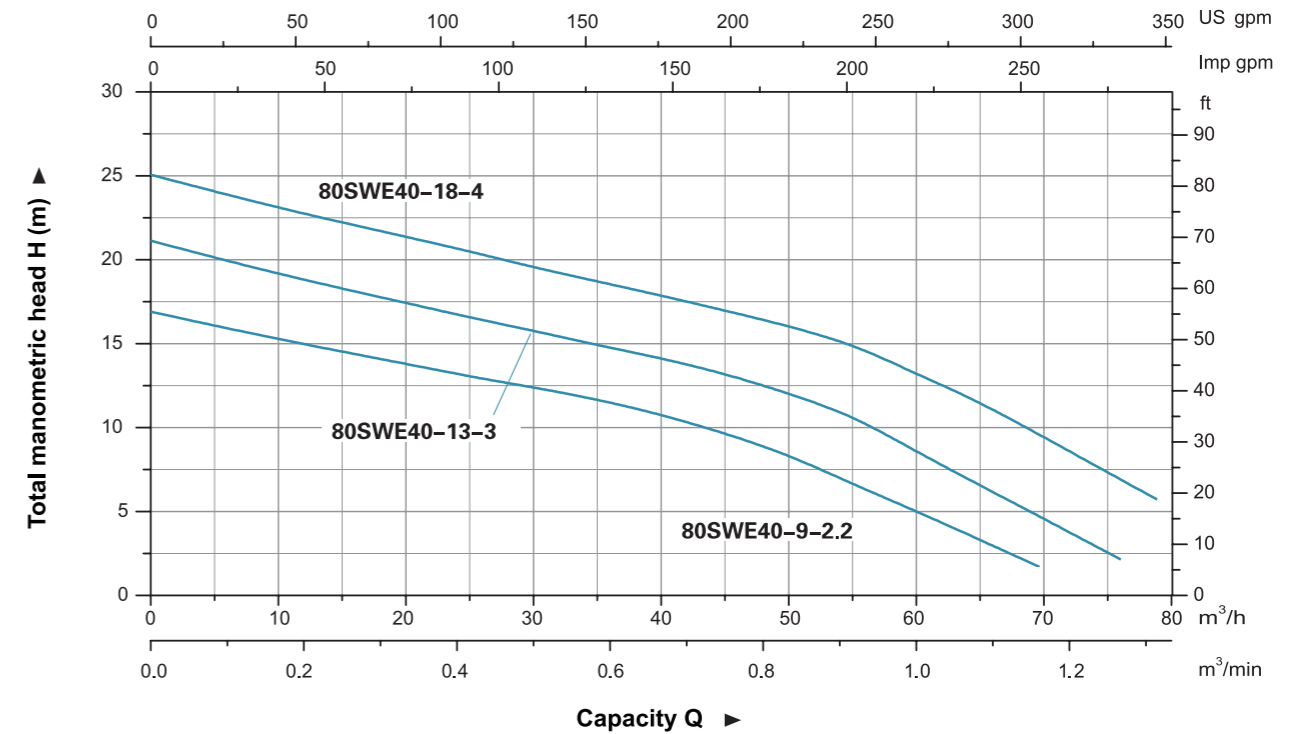
80 SW E 40 - 9 - 2.2



Technical Data

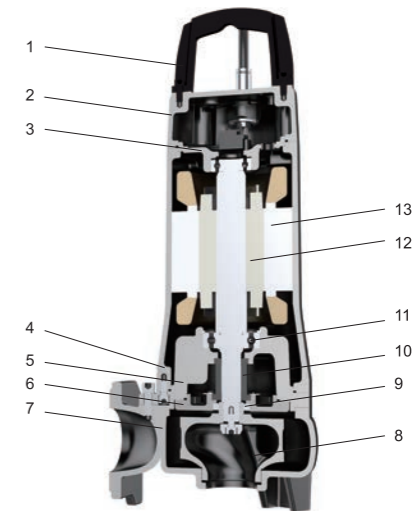
Model	Power		Discharge mm (inch)	Rated Flow (m³/h)	Rated Head (m)	Solid Passage (mm)
	kW	HP				
80SWE40-9-2.2	2.2	3	80 (3")	40	9	30
80SWE40-13-3	3	4	80 (3")	40	13	30
80SWE40-18-4	4	5.5	80 (3")	40	18	30

Hydraulic Performance Curves



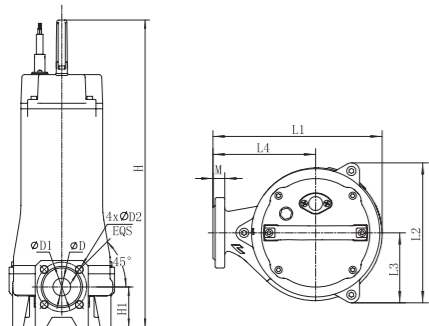
Materials Table

No.	Part	Material
1	Handle	ZG304
2	Upper cover	HT200
3	Upper bearing seat	HT200
4	Motor body	HT200
5	Oil chamber	HT200
6	Pump cover	HT200
7	Pump body	HT200
8	Impeller	HT200
9	Oil seal	
10	Mechanical seal	Upper:SiC/Carbon Lower:SiC/SiC
11	Bearing	
12	Rotor	
13	Stator	



Package Information

Model	GW (Kgs)	L (mm)	W (mm)	H (mm)	Quantity (PCS/20' TEU)
80SWE40-9-2.2	70	848	358	311	294
80SWE40-13-3	68.5	848	358	311	294
80SWE40-18-4	62	848	358	311	294



Dimension

Model	L1	L2	L3	L4	H	H1	D	D1	D2	M
80SWE40-9-2.2	266	224	113	160	594	86	80	150	18	18
80SWE40-13-3	266	224	113	160	620	86	80	150	18	18
80SWE40-18-4	266	224	113	160	620	86	80	150	18	18



Applications

- Drainage of wastewater from the attenuation tank, purifying tank and sewage tank in water treatment plant
- Drainage of waste water containing fibrous additives from leather factory and food processing factory.
- Sewage management, accumulated water, septic tank, stock farm.
- Pumping sewage form hotels, restaurants, schools and public buildings

Features

- Semi-open Vortex Impeller design, suitable for transfer of liquid containing impurities and long fiber substance
- Flexible installations with hoses, pipes or quick-coupling systems
- Flow switch included for single phase pump with motor power ≤ 1.1 kW

Working Conditions

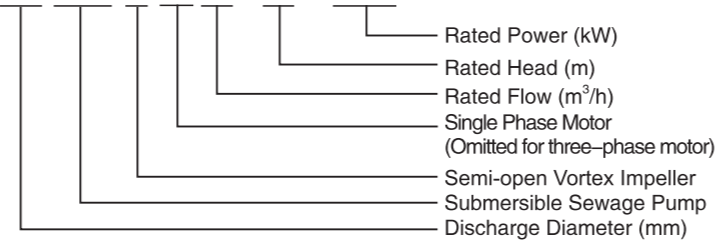
- Liquid temperature: 0 - 40 °C
- Max immersion depth: 5 m

Motor

- Frequency/Pole number: 50 Hz/2
- Insulation class: F
- Protection class: IPX8
- Bearing: Ball type
- Mechanical seal: Double-end mechanical seals

Identification Codes

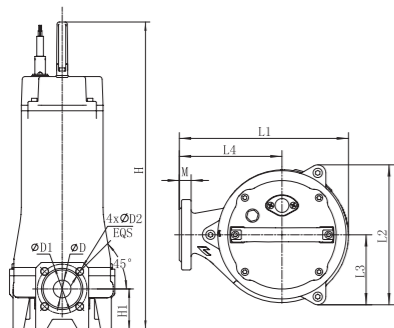
50 SW U m 9 - 6 - 0.37



Technical Data

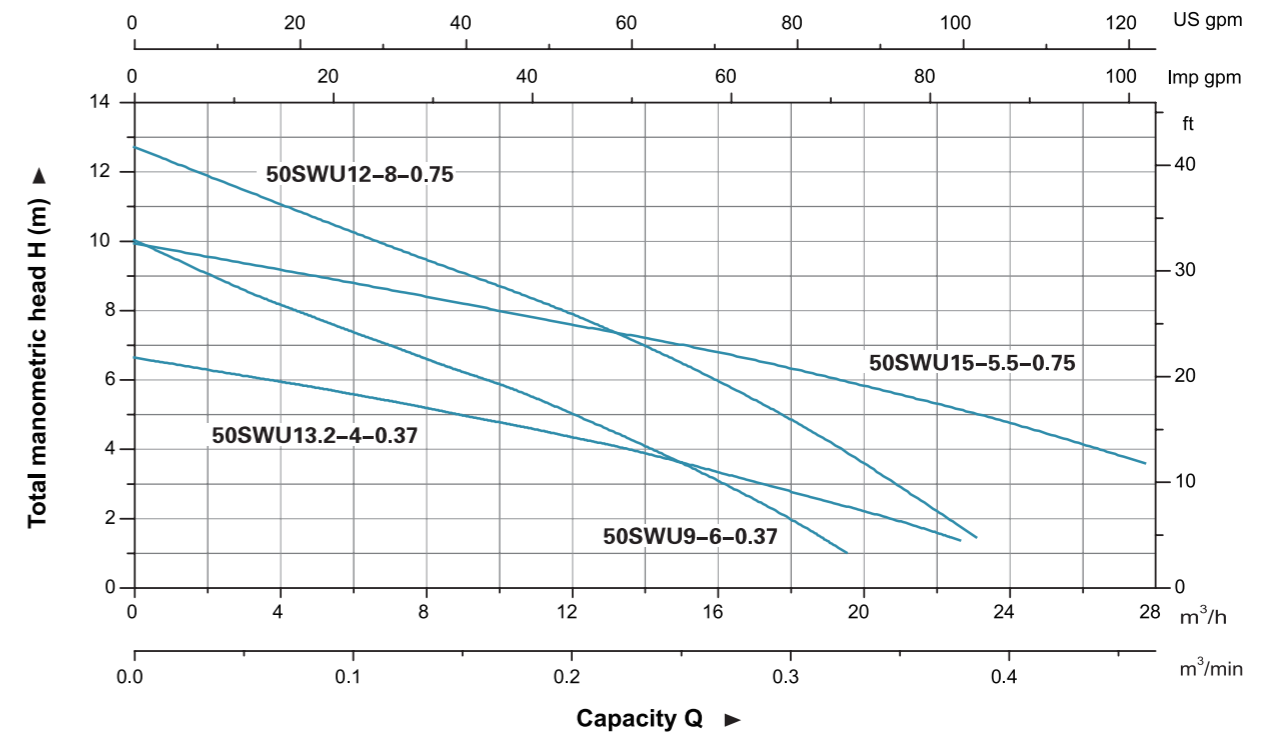
Model		Power		Discharge mm (inch)	Rated Flow (m ³ /h)	Rated Head (m)	Solid Passage (mm)
Single Phase	Three Phase	kW	HP				
50SWUm9-6-0.37	50SWU9-6-0.37	0.37	0.5	50 (2")	9	6	35
50SWUm13.2-4-0.37	50SWU13.2-4-0.37	0.37	0.5	50 (2")	13.2	4	50
50SWUm12-8-0.75	50SWU12-8-0.75	0.75	1	50 (2")	12	8	35
50SWUm15-5.5-0.75	50SWU15-5.5-0.75	0.75	1	50 (2")	15	5.5	50

Dimension



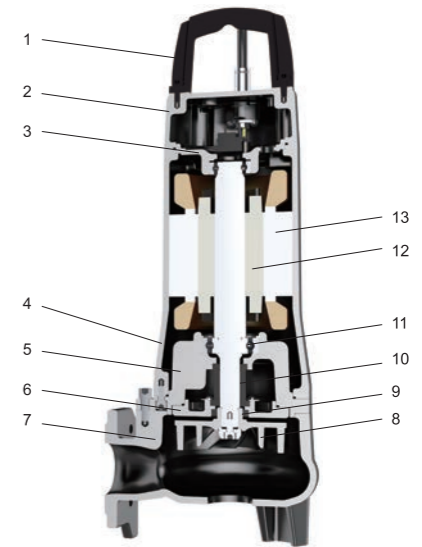
Model	L1	L2	L3	L4	H	H1	D	D1	D2	M
50SWU9-6-0.37	203	178	89	121	560	75	50	110	14	16
50SWUm9-6-0.37										
50SWU13.2-4-0.37					575	80				
50SWUm13.2-4-0.37										
50SWU12-8-0.75					560	75				
50SWUm12-8-0.75										
50SWU15-5.5-0.75					575	80				
50SWUm15-5.5-0.75										

Hydraulic Performance Curves



Materials Table

No.	Part	Material
1	Handle	ZG304
2	Upper cover	HT200
3	Upper bearing seat	HT200
4	Motor body	HT200
5	Oil chamber	HT200
6	Pump cover	HT200
7	Pump body	HT200
8	Impeller	HT200
9	Oil seal	
10	Mechanical seal	Upper:SiC/Carbon Lower:SiC/SiC
11	Bearing	
12	Rotor	
13	Stator	



Package Information

Model	GW (Kgs)	L (mm)	W (mm)	H (mm)	Quantity (PCS/20'TEU)
50SWU9-6-0.37	36	750	290	368	372
50SWUm9-6-0.37	37	750	290	368	372
50SWU13.2-4-0.37	36	750	290	368	372
50SWUm13.2-4-0.37	37	750	290	368	372
50SWU12-8-0.75	38	750	290	368	372
50SWUm12-8-0.75	39	750	290	368	372
50SWU15-5.5-0.75	38	750	290	368	372
50SWUm15-5.5-0.75	39	750	290	368	372



Applications

- Drainage of wastewater from the attenuation tank, purifying tank and sewage tank in water treatment plant
- Drainage of waste water containing fibrous additives from leather factory and food processing factory.
- Sewage management, accumulated water, septic tank, stock farm.
- Pumping sewage from hotels, restaurants, schools and public buildings

Features

- Semi-open Vortex Impeller design, suitable for transfer of liquid containing impurities and long fiber substance
- Flexible installations with hoses, pipes or quick-coupling systems

Working Conditions

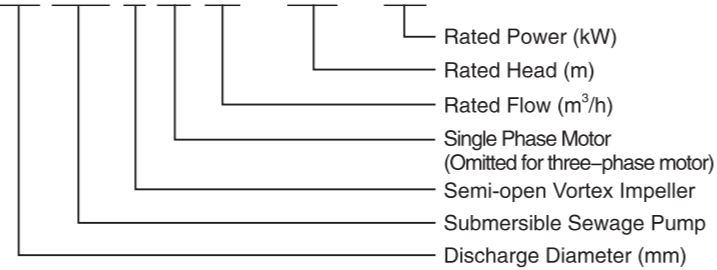
- Liquid temperature: 0 - 40 °C
- Max immersion depth: 5 m

Motor

- Frequency/Pole number: 50 Hz/2
- Insulation class: F
- Protection class: IPX8
- Bearing: Ball type
- Mechanical seal: Double-end mechanical seals

Identification Codes

65 SW U m 24 - 8.5 - 1.5

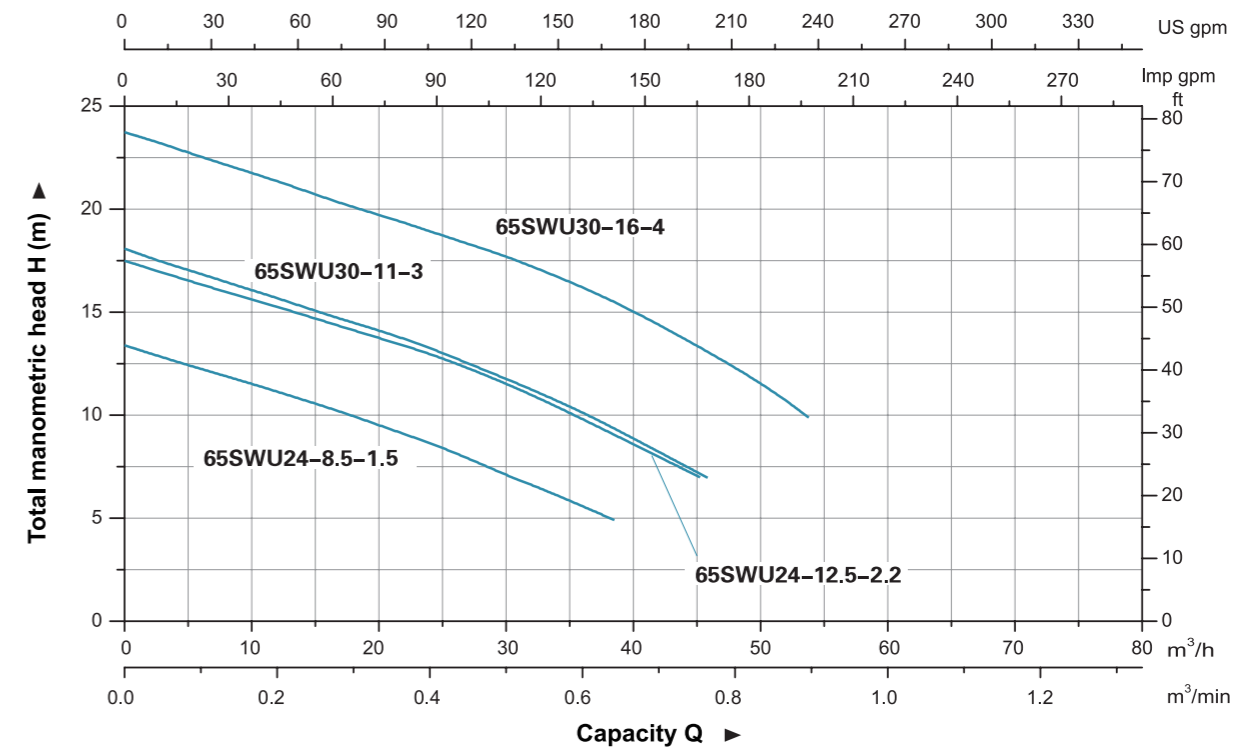


(Hose coupling as standard.
Flange elbow is available on request.)

Technical Data

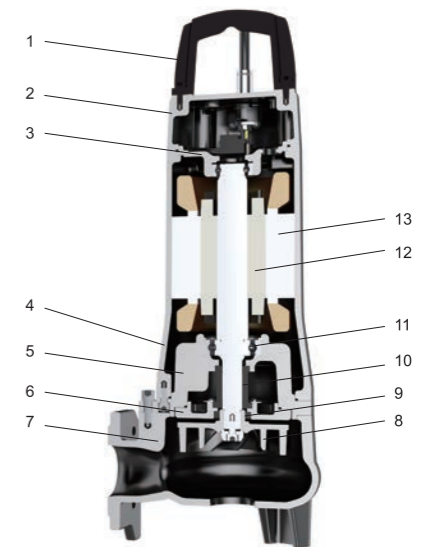
Model		Power		Discharge mm (inch)	Rated Flow (m ³ /h)	Rated Head (m)	Solid Passage (mm)
Single Phase	Three Phase	kW	HP				
65SWUm24-8.5-1.5	65SWU24-8.5-1.5	1.5	2	65 (2.5")	24	8.5	50
65SWUm24-12.5-2.2	65SWU24-12.5-2.2	2.2	3	65 (2.5")	24	12.5	50
-	65SWU30-11-3	3	4	65 (2.5")	30	11	55
-	65SWU30-16-4	4	5.5	65 (2.5")	30	16	55

Hydraulic Performance Curves



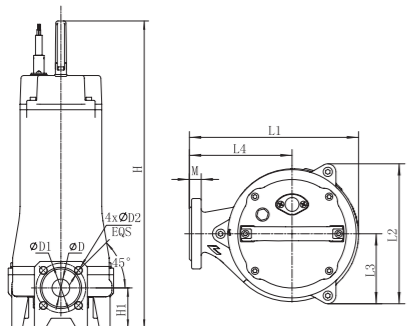
Materials Table

No.	Part	Material
1	Handle	ZG304
2	Upper cover	HT200
3	Upper bearing seat	HT200
4	Motor body	HT200
5	Oil chamber	HT200
6	Pump cover	HT200
7	Pump body	HT200
8	Impeller	HT200
9	Oil seal	
10	Mechanical seal	Upper:SiC/Carbon Lower:SiC/SiC
11	Bearing	
12	Rotor	
13	Stator	



Package Information

Model	GW (Kgs)	L (mm)	W (mm)	H (mm)	Quantity (PCS/20'TEU)
65SWU24-8.5-1.5	58	848	358	311	294
65SWUm24-8.5-1.5	60	848	358	311	294
65SWU24-12.5-2.2	60	848	358	311	294
65SWUm24-12.5-2.2	62	918	338	306	294
65SWU30-11-3	68	848	358	311	294
65SWU30-16-4	69	918	338	306	294



Dimension

Model	L1	L2	L3	L4	H	H1	D	D1	D2	M
65SWU24-8.5-1.5	268	219	111	161	626	93	65	130	14	16
65SWUm24-8.5-1.5					667					
65SWU24-12.5-2.2					626					
65SWUm24-12.5-2.2					667					
65SWU30-11-3	260	218	118	149	806	122	80	150	18	18
65SWU30-16-4										



Applications

- Drainage of wastewater from the attenuation tank, purifying tank and sewage tank in water treatment plant
- Drainage of waste water containing fibrous additives from leather factory and food processing factory.
- Sewage management, accumulated water, septic tank, stock farm.
- Pumping sewage form hotels, restaurants, schools and public buildings

Features

- Semi-open Vortex Impeller design, suitable for transfer of liquid containing impurities and long fiber substance
- Flexible installations with hoses, pipes or quick-coupling systems

Working Conditions

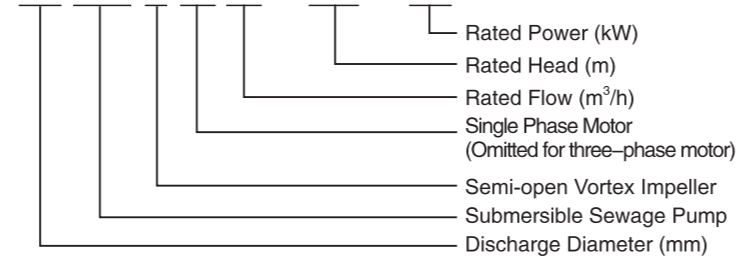
- Liquid temperature: 0 - 40 °C
- Max immersion depth: 5 m

Motor

- Frequency/Pole number: 50 Hz/2
- Insulation class: F
- Protection class: IPX8
- Bearing: Ball type
- Mechanical seal: Double-end mechanical seals

Identification Codes

80 SW U m 30 - 4.5 - 1.5

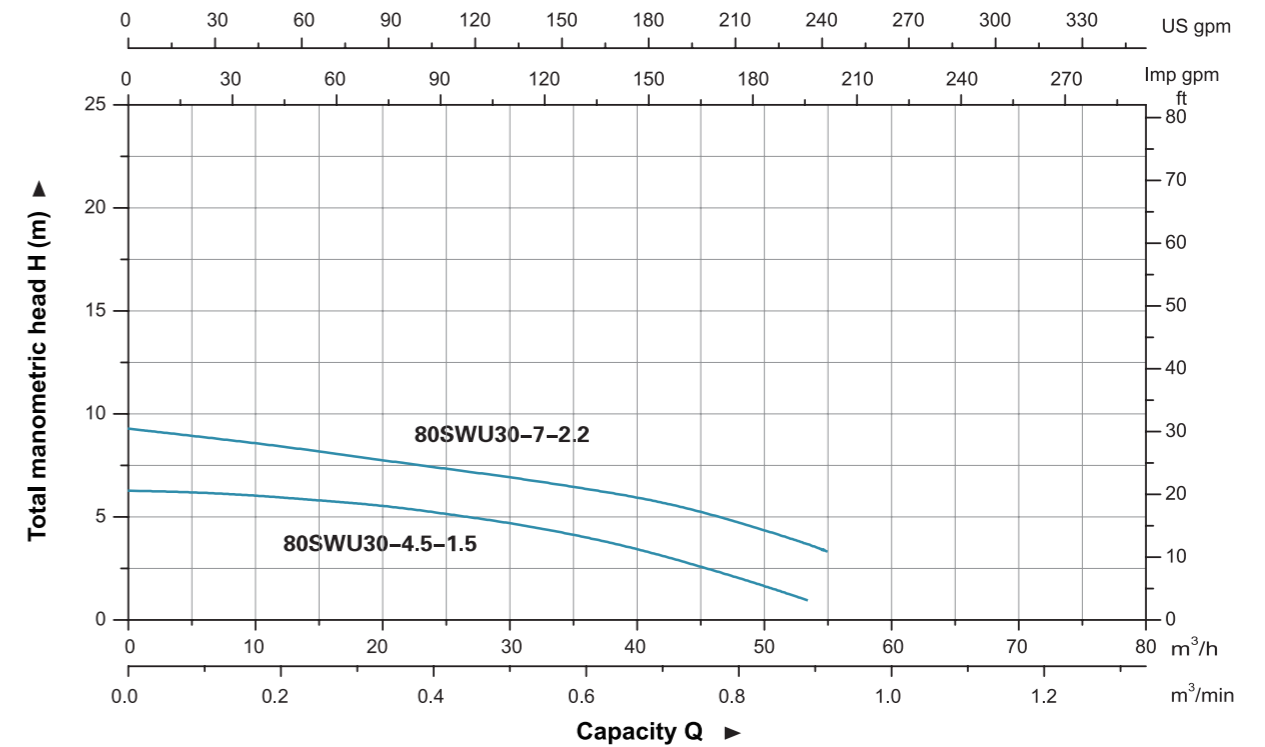


(Hose coupling as standard.
Flange elbow is available on request.)

Technical Data

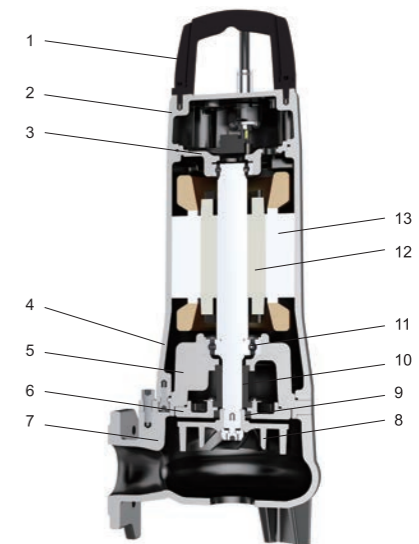
Model		Power		Discharge mm (inch)	Rated Flow (m ³ /h)	Rated Head (m)	Solid Passage (mm)
Single Phase	Three Phase	kW	HP				
80SWUm30-4.5-1.5	80SWU30-4.5-1.5	1.5	2	80 (3")	30	4.5	76
80SWUm30-7-2.2	80SWU30-7-2.2	2.2	3	80 (3")	30	7	76

Hydraulic Performance Curves



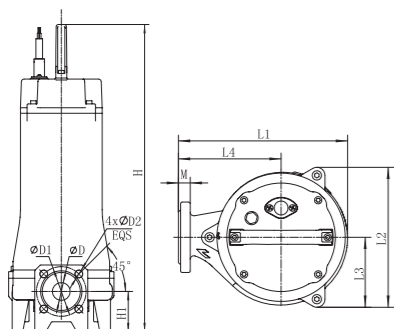
Materials Table

No.	Part	Material
1	Handle	ZG304
2	Upper cover	HT200
3	Upper bearing seat	HT200
4	Motor body	HT200
5	Oil chamber	HT200
6	Pump cover	HT200
7	Pump body	HT200
8	Impeller	HT200
9	Oil seal	
10	Mechanical seal	Upper:SiC/Carbon Lower:SiC/SiC
11	Bearing	
12	Rotor	
13	Stator	



Package Information

Model	GW (Kgs)	L (mm)	W (mm)	H (mm)	Quantity (PCS/20'TEU)
80SWU30-4.5-1.5	58	918	338	306	294
80SWUm30-4.5-1.5	61	918	338	306	294
80SWU30-7-2.2	62	918	338	306	294
80SWUm30-7-2.2	63	918	338	306	294



Dimension

Model	L1	L2	L3	L4	H	H1	D	D1	D2	M
80SWU30-4.5-1.5	260	218	118	149	665	122	80	150	18	18
80SWUm30-4.5-1.5					706					
80SWU30-7-2.2					665					
80SWUm30-7-2.2					706					



Applications

- Used In pressure sewage system
- Drainage of wastewater from individual residences, apartment buildings, recreational developments, models
- Transferring wastewater of commercial buildings, industrial plants, wastewater sampling, small hospitals
- Schools, federal, state and local parks, wastewater drainage
- To transfer various wastewater and sewage

Features

- The pump has a semi-open impeller design with a reliable grinding system.
- The large-diameter impeller generates a high pressure and the grinding system grinds solids into small pieces, which can be drained without clogging the pipes.
- The pumps can be connected to pipes directly or to an auto-coupling system.
- Flow switch included for single phase pump with motor power ≤ 1.1 kW

Working Conditions

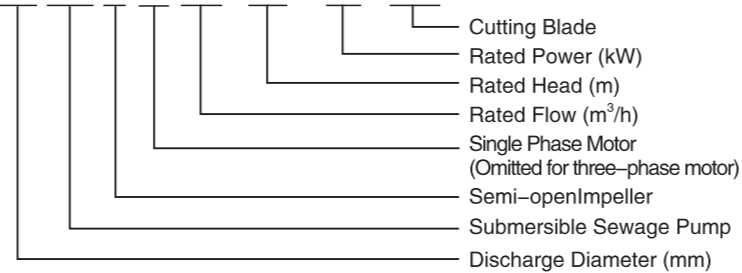
- Liquid temperature: 0 - 40 °C
- Max immersion depth: 5 m

Motor

- Frequency/Pole number: 50 Hz/2
- Insulation class: F
- Protection class: IPX8
- Bearing: Ball type
- Mechanical seal: Double-end mechanical seals

Identification Codes

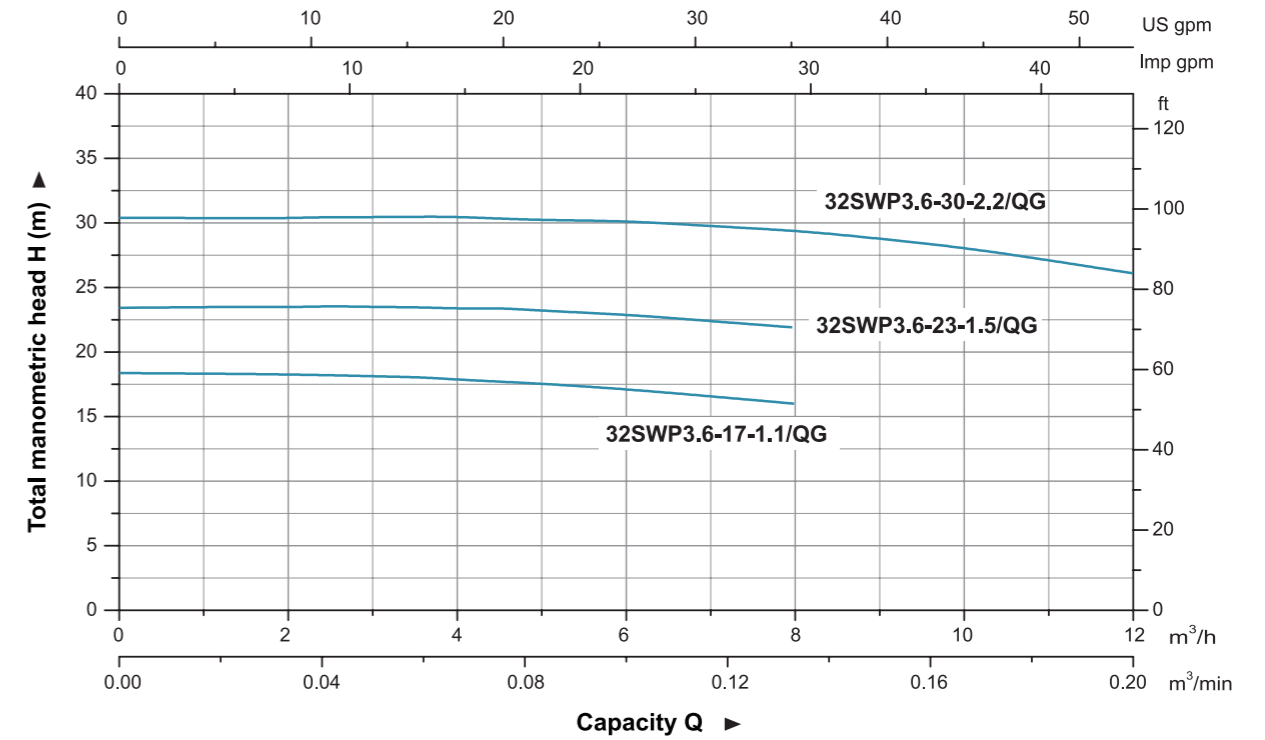
32 SW P m 3.6 – 17 – 1.1 /QG



Technical Data

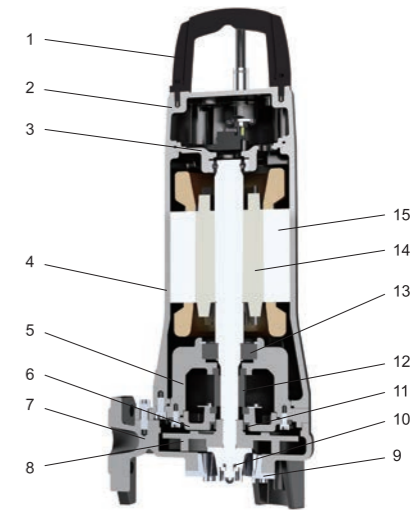
Model		Power		Discharge mm (inch)	Rated Flow (m³/h)	Rated Head (m)	Solid Passage (mm)
Single Phase	Three Phase	kW	HP				
32SWPm3.6-17-1.1/QG	32SWP3.6-17-1.1/QG	1.1	1.5	32 (1 1/4")	3.6	17	-
32SWPm3.6-23-1.5/QG	32SWP3.6-23-1.5/QG	1.5	2	32 (1 1/4")	3.6	23	-
32SWPm3.6-30-2.2/QG	32SWP3.6-30-2.2/QG	2.2	3	32 (1 1/4")	3.6	30	-

Hydraulic Performance Curves



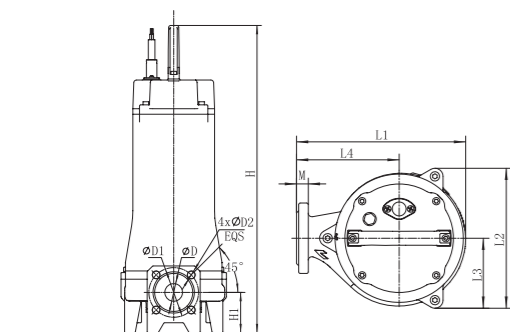
Materials Table

No.	Part	Material
1	Handle	ZG304
2	Upper cover	HT200
3	Upper bearing seat	HT200
4	Motor body	HT200
5	Oil chamber	HT200
6	Pump cover	HT200
7	Pump body	HT200
8	Impeller	HT200
9	Cutting ring	AISI304
10	Radial cutter	AISI304
11	Oil seal	
12	Mechanical seal	Upper:SiC/Carbon Lower:SiC/SiC
13	Bearing	
14	Rotor	
15	Stator	



Package Information

Model	GW (Kgs)	L (mm)	W (mm)	H (mm)	Quantity (PCS/20' TEU)
32SWP3.6-17-1.1/QG	38	848	358	311	294
32SWPm3.6-17-1.1/QG	39	848	358	311	294
32SWP3.6-23-1.5/QG	48	848	358	311	294
32SWPm3.6-23-1.5/QG	50	848	358	311	294
32SWP3.6-30-2.2/QG	50.5	848	358	311	294
32SWPm3.6-30-2.2/QG	52	848	358	311	294



Dimension

Model	L1	L2	L3	L4	H	H1	D	D1	D2	M
32SWP3.6-17-1.1/QG	231	192	96	140	535	73	32	90	14	16
32SWPm3.6-17-1.1/QG										
32SWP3.6-23-1.5/QG										
32SWPm3.6-23-1.5/QG										
32SWP3.6-30-2.2/QG										
32SWPm3.6-30-2.2/QG										



Applications

- Used In pressure sewage system
- Drainage of wastewater from individual residences, apartment buildings, recreational developments, models
- Transferring wastewater of commercial buildings, industrial plants, wastewater sampling, small hospitals
- Schools, federal, state and local parks, wastewater drainage
- To transfer various wastewater and sewage

Features

- The pump has a semi-open impeller design with a reliable grinding system.
- The large-diameter impeller generates a high pressure and the grinding system grinds solids into small pieces, which can be drained without clogging the pipes.
- The pumps can be connected to pipes directly or to an auto-coupling system.

Working Conditions

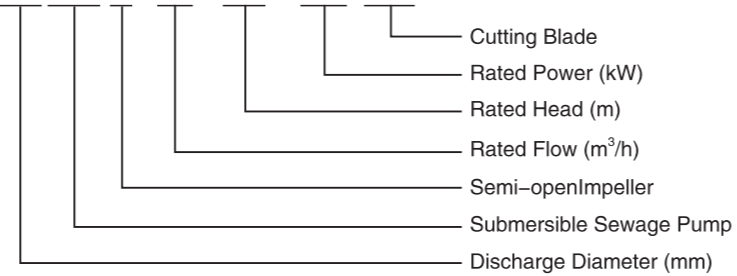
- Liquid temperature: 0 - 40 °C
- Max immersion depth: 5 m

Motor

- Frequency/Pole number: 50 Hz/2
- Insulation class: F
- Protection class: IPX8
- Bearing: Ball type
- Mechanical seal: Double-end mechanical seals

Identification Codes

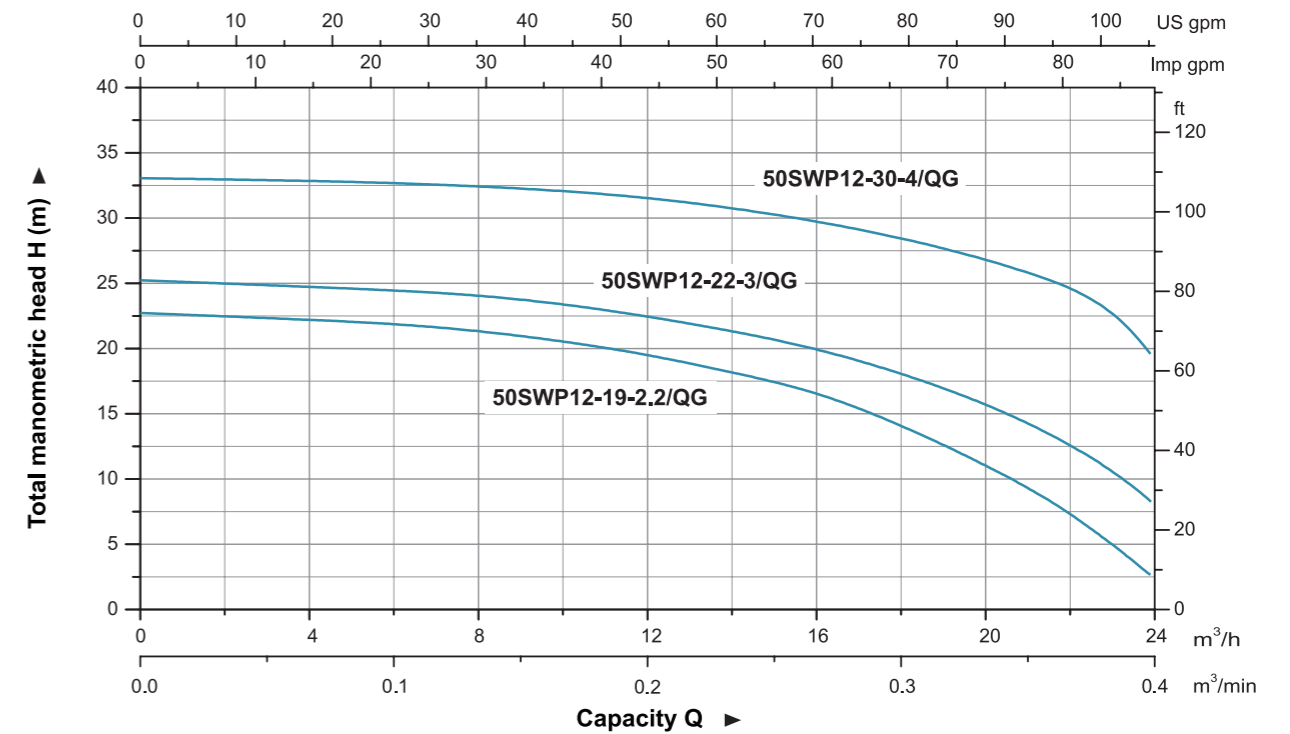
50 SW P 12 - 19 - 2.2/QG



Technical Data

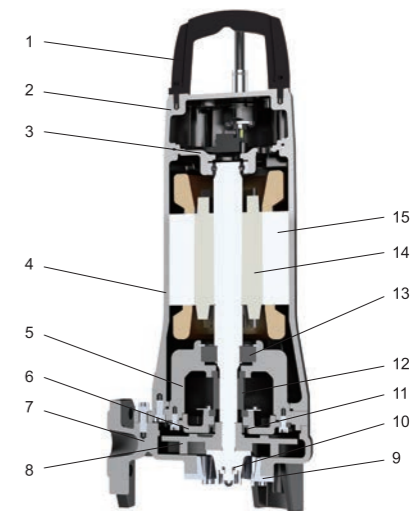
Model	Power		Discharge mm (inch)	Rated Flow (m³/h)	Rated Head (m)	Solid Passage (mm)
	kW	HP				
50SWP12-19-2.2/QG	2.2	3	50 (2")	12	19	-
50SWP12-22-3/QG	3	4	50 (2")	12	22	-
50SWP12-30-4/QG	4	5.5	50 (2")	12	30	-

Hydraulic Performance Curves



Materials Table

No.	Part	Material
1	Handle	ZG304
2	Upper cover	HT200
3	Upper bearing seat	HT200
4	Motor body	HT200
5	Oil chamber	HT200
6	Pump cover	HT200
7	Pump body	HT200
8	Impeller	HT200
9	Cutting ring	AISI304
10	Radial cutter	AISI304
11	Oil seal	
12	Mechanical seal	Upper:SiC/Carbon Lower:SiC/SiC
13	Bearing	
14	Rotor	
15	Stator	

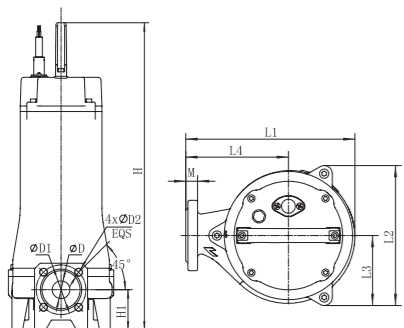


Package Information

Model	GW (Kgs)	L (mm)	W (mm)	H (mm)	Quantity (PCS/20'TEU)
50SWP12-19-2.2/QG	53	848	358	311	294
50SWP12-22-3/QG	60	848	358	311	294
50SWP12-30-4/QG	63	848	358	311	294

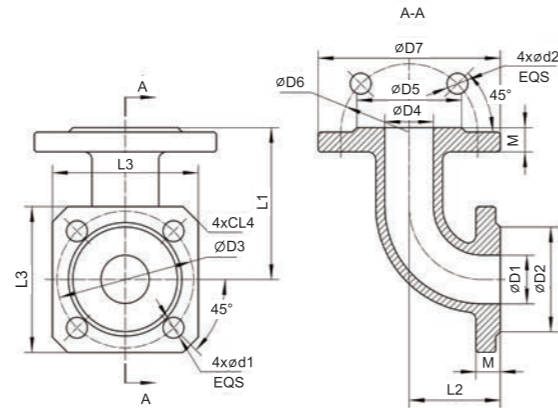
Dimension

Model	L1	L2	L3	L4	H	H1	D	D1	D2	M
50SWP12-19-2.2/QG	243	212	106	145	559	73	40	100	14	16
50SWP12-22-3/QG	243	212	106	145	588	73	40	100	14	16
50SWP12-30-4/QG	243	212	106	145	588	73	40	100	14	16



Flange Elbow

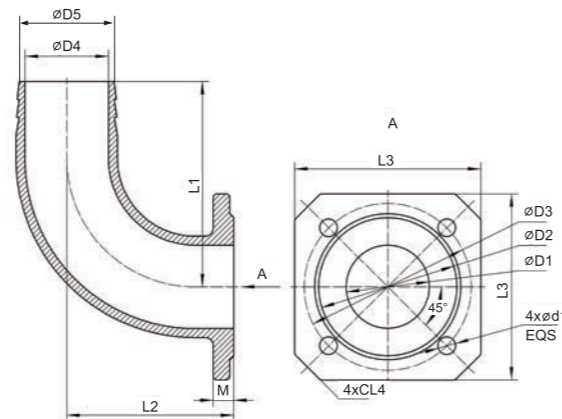
Dimension



Model	D1	D2	D3	D4	D5	D6	D7	L1	L2	L3	L4	M	d1	d2
32-32 Flange Elbow	32	69	90	32	69	90	120	100	60	96	10	16	14	14
40-50 Flange Elbow	40	78	100	50	88	110	140	120	60	110	15	16	14	14
50-50 Flange Elbow	50	88	110	50	88	110	140	105	105	120	15	16	14	14
65-65 Flange Elbow	65	108	130	65	108	130	160	130	130	145	20	16	14	14
80-80 Flange Elbow	80	124	150	80	124	150	190	155	155	145	15	18	18	18

Hose Coupling

Dimension



Model	D1	D2	D3	D4	D5	L1	L2	L3	L4	M	d1
• 50-40 Hose Coupling	50	88	110	38	48	115	65	120	15	16	14
• 65-50 Hose Coupling	65	108	130	51	61	125	68	145	20	16	14
• 80-60 Hose Coupling	80	124	150	60	70	140	75	145	15	16	18
50-50 Hose Coupling	50	88	110	50	58	140	120	120	15	16	14
65-65 Hose Coupling	65	108	130	65	74	160	130	145	20	18	14
80-80 Hose Coupling	80	124	150	80	87	190	135	145	15	18	18

• Product standard

Control Box

- The device is specially designed for automatic water drainage in pump stations, elevator shafts, sewage pits, etc.

Features

- Liquid level control
- Excellent anti-interference performance
- The primary pump and standby pumps can be set arbitrarily. In case the primary pump is failed or water output is less than input, the standby pump(s) start to run automatically
- Display of Power and Operating status
- Manual and automatic operation mode for selection
- Protection of earth leakage, overcurrent, overvoltage, overheating and phase loss
- Audible and visual alarm

Operating Conditions

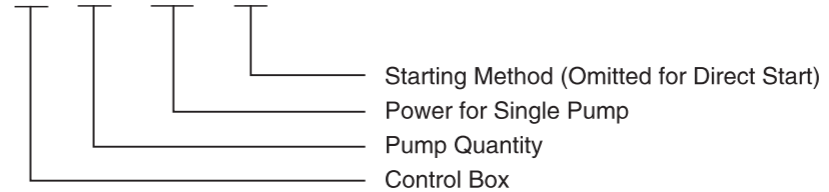
- Ambient temperature: 5 ~ 40°C
- Humidity: ≤90%
- Operating voltage: 380 V ± 10%
- Ambient environment: Freedom from corrosive gases and/or conductive dust.

Instructions

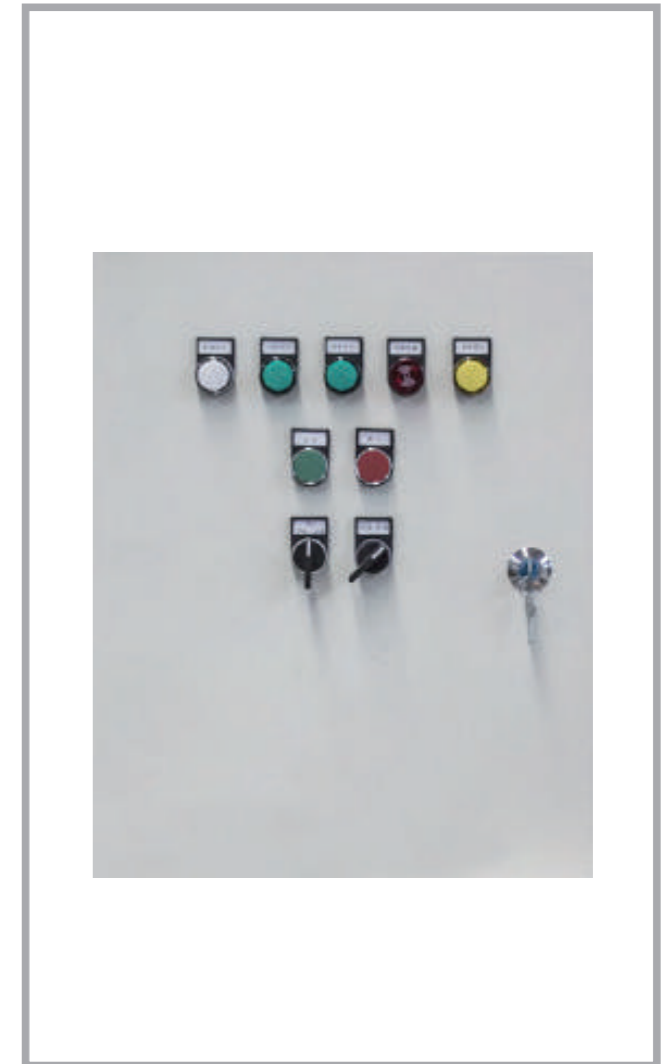
- DOL (Direct On Line): High starting current. Applicable for pumps with power up to 15 kW.
- Autotransformer Starter: Small starting current. Applicable for pumps with power more than 15 kW.
- Soft Starter: Smooth starting current with small influence on the grid. Applicable for pumps with power more than 15 kW.

Identification Codes

LEO - D - 2 - 1.5 - Z



	Q	Z	R
Starting Method	Direct on Line	Autotransformer Starter	Soft Starter
Controlled Quantity	1	2	3
Control Mode	For One Pump	For Two Pumps	For Three Pumps



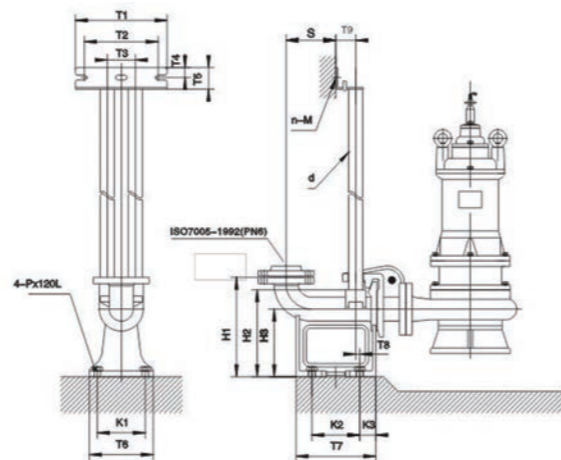


Guide Rail System

- Suitable for pumps with flange conforming ISO7005-92 standard.
- Automatic engagement with flanged elbow

Includes

- Duck-foot bend
- Guide hook
- Flange connector
- Upper guide support
- Bolts and lock washers
(Foundation bolts and guide pipes are not included)



Model	T1	T2	T3	T4	T5	T6	T7	T8	T9	K1	K2	K3	S	H1	H2	H3	D	n-M	P	A
50-50	288	185	70	25	63	160	200	10	50	120	120	40	125	250	203	170	25	2-M10x40	M16	Φ110/4-Φ14
50-65	288	185	70	25	63	160	200	10	50	120	120	40	125	250	203	170	25	2-M10x40	M16	Φ110/4-Φ14
65-65	288	195	80	25	63	190	220	10	60	120	120	40	130	250	203	175	32	2-M10x40	M16	Φ130/4-Φ14
65-80	288	195	80	25	63	190	220	10	60	120	120	40	130	270	220	175	32	2-M10x40	M16	Φ130/4-Φ14
80-80	288	195	80	25	63	220	250	15	60	170	170	40	165	290	242	192	32	2-M10x40	M16	Φ150/4-Φ18
80-100	288	195	80	25	63	220	250	15	60	170	170	40	165	290	242	192	32	2-M10x40	M16	Φ150/4-Φ18
100-100	410	315	170	30	60	320	385	17	90	260	300	48	200	305	245	200	32	2-M12x50	M18	Φ170/4-Φ18
150-150	410	260	280	30	60	400	410	90	100	300	300	55	300	480	388	300	40	2-M12x60	M20	Φ225/8-Φ18
200-200	410	260	280	30	60	400	450	100	100	320	300	54	350	550	432	320	40	2-M12x60	M22	Φ280/8-Φ18
250-250	410	260	280	30	60	460	560	100	100	360	430	65	380	630	453	335	40	2-M12x60	M22	Φ335/12-Φ18

General

The series of intelligent pressure boosting system BWS-HY is developed based on PDI control technology, to control the pump pressure within a certain range according to the water consumption with features of complete functions, reliable quality, stable operation and easy maintenance.

About BWS

BWS, the abbreviation of Building Water System or Best Water System, implies the LEO's ambition to build up the image of best quality product range for water supply system in the market.

BWS series includes WG Non-negative Water Supply System, WX Water Non-negative Supply System, HY Constant Water Supply System and ZY Boosting Water Supply System. Together with WQ sewage pumps, XBD firefighting pumps, LPP in-line pumps and LEN end suction pumps, we have full range to satisfy the applications of secondary water supply, drainage, fire-fighting and HVAC.

Product Composition

The complete device is composed from a pump unit, a pressure tank, a pressure sensor, PDI and accessories. If necessary, auxiliary pumps or pressure tanks can be added in the device.



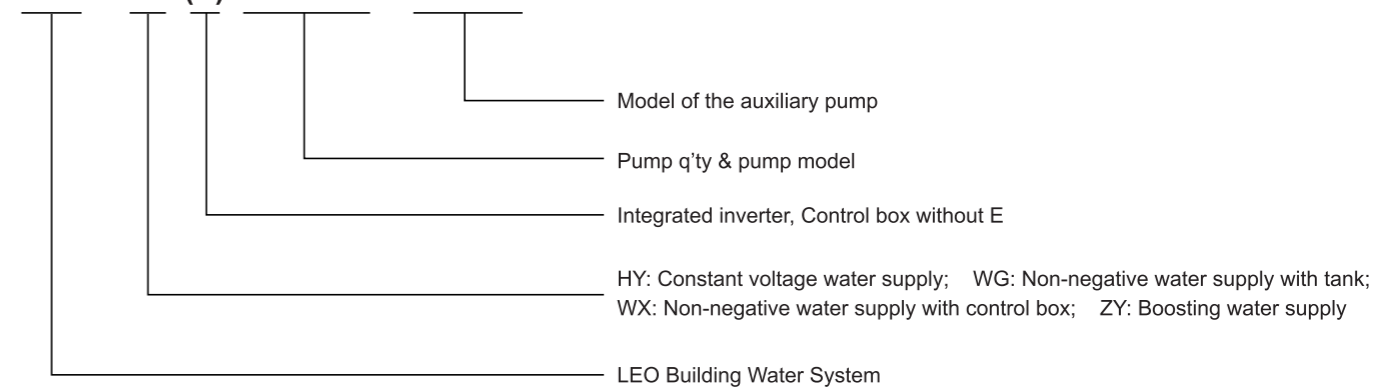
BWS-HY(E)



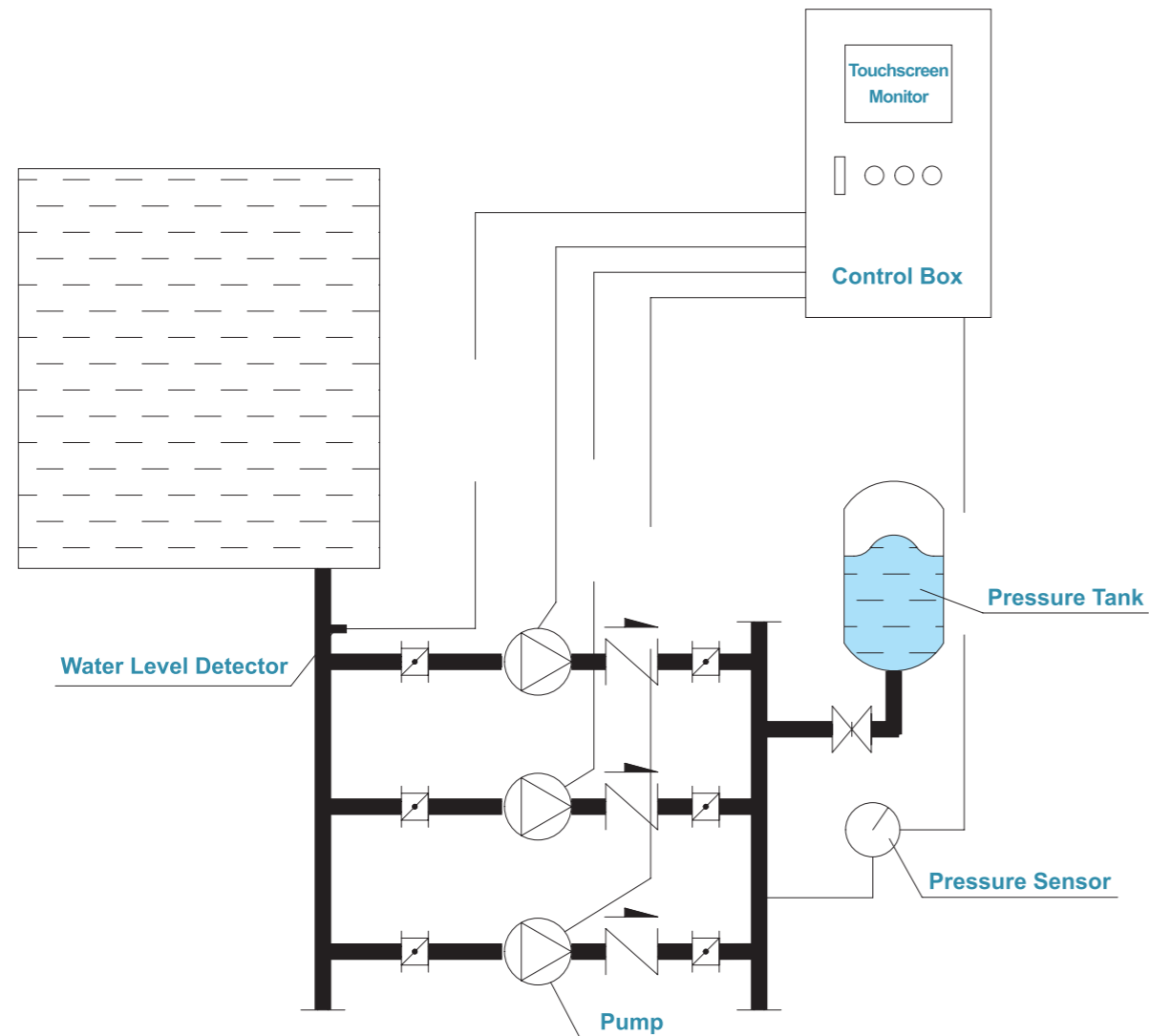
BWS-HY

Identification Codes

BWS - HY (E) 2LVS15-8 / LVS3-10



Working Principle



Product Overview

The pressure value on the pump outlet is set as a parameter in the water supply equipment. The output frequency is controlled by PID inverter and the rotating speed of pump motor is consequently adjusted to keep the water system pressure constant as the preset pressure value. When the water consumption increases, the frequency is increased accordingly to accelerate pump speed. On the contrary, when the water consumption reduces, the frequency is decreased to reduce the pump speed. In this way, a sufficient pressure (same as the preset value) and water supply (which fluctuates according to the water consumption of the users) in the entire network is guaranteed.

Product Features

This device features stable pressure, non-frequent operation, high efficiency, energy saving and low noise, which can be used to replace traditional high-positioned water tanks or water towers.

- 24 hours constant pressure and automatic activation of auxiliary pumps according to pressure signals
- Smooth start, which eliminates water hammer and extends the service life of motors and pumps
- Protection against under or over voltage, overcurrent, overheat, overpressure as well as no-load of water
- Optional functions available on customer's demand, such as motors in-turn running, sleep mode, etc.
- Digital PID control, which is better than PLC logical control
- Stable operation and easy handling due to high automation and intelligence level
- 100% factory tested with very low failure rate

Applications

- Communities, villas, office buildings, high buildings, hotels, restaurants, etc.
- Boilers (cold and hot water)
- Pressure boosting in water plant
- Industrial production
- Cooling water circulation system
- Fire fighting

Operating Conditions

- Power: 380 V, 50 Hz (60 Hz on request)
- Ambient temperature: 0 - 40°C, relative humidity up to 90%, no condensation
- Medium: Clean water or other liquids similar to water in physical and chemical properties
- PH value: 5 - 9
- Liquid temperature: 0 - 70°C
- Altitude: up to 1000 m, slope of the base up to 5 degree

Product Functions

- **Constant pressure water supply**
The pressure of pipe network is controlled within a certain range.
- **Alternative operation**
The pumps work by turns according to the present timing. The operation time for each pump is roughly equal to prolong the service life of the device.
- **Timing function**
Working pressure values in different time can be set to meet the demand of water supply.
- **Sleep mode**
The device goes into sleep mode for energy-saving during the night or the water consumption is very few.
- **Automatic wake-up**
When the pressure of water network reduces to the preset value, the device will be waken up automatically and start to operate.
- **Automatic reset**
In the event of an inverter failure, the controller will reset the inverter automatically. If the reset time is more than preset number, a display of inverter failure will be generated by the system. Maintenance of the inverter is necessary.

- **Automatic operation at power frequency**

In the event of malfunction of the inverter or pressure sensor, the device will operate at power frequency automatically to ensure water supply and sound an alarm.

- **Manual/Automatic operation**

The device has two operation modes (manual and automatic) for selection.

- **Automatic start/stop**

In case of low water level in the water source, the device will stop the working pumps and sound alarm. When the water level recovers, the device will restart automatically.

- **Overload protection**

When the current of the motor exceeds the preset value for a specified period of time, the controller will shut down the related pump and sound an alarm.

- **Water-load protection**

If the device has no water or high gas content for a specified period of time, the controller will shut down the entire device. The device runs automatically again, when the water is recovered and the gas inside is exhausted.

- **Overpressure protection**

When the pressure is higher than preset value for some reason during operation, the device will be shut down automatically to avoid any damage of pipelines.

- **Low pressure protection**

When the pressure of the pipelines is lower than preset value, the device will judge it as a leakage on the pipe network and will be shut down automatically to save the water.

- **Alarm function**

Any fault during operation will be alarmed and displayed on the LCD screen automatically.

- **Information storage**

All alarm information can be saved in the controller for inspection.

- **Password setting**

The device is protected by a password. Only the administrator is authorized to change the parameter.

- **Reset of parameter values**

In case of abnormal operation due to change of parameter values by users, the values can be reset to the factory default settings for safe operation.

- **Overvoltage & Undervoltage protection**

If the voltage is 10% higher or lower than normal voltage, the device will stop working to avoid any damage of the components.

- **Phase sequence and phase-lacking protection**

In case of wrong phase sequence or lack of phase at power supply, the inner control components will protect the device and ensure it's normal operation.

- **Remote monitoring**

The device can be equipped with a remote monitoring system.

Main Parts

A standard BWS-HY system is composed of 2 - 6 pcs of pumps which are installed on the same base in parallel and necessary accessories as well as a control box (A pressure tank must be included during installation).

No.	Description	Q'ty
1	Vertical Multistage Pump	2 - 6 pcs
2	PID Control Box	1 pc
3	Base	1 pc
4	Main Inlet Pipe	1 pc
5	Main Outlet Pipe	1 pc
6	Non Return Valve	1 pc per pump
7	Ball Valve or Butterfly Valve	2 pcs per pump
8	Water Level Detector	1 pc
9	Pressure Sensor	1 pc
10	Pressure Tank	1 pc



Pump Unit

The key operation part of the water supply system. Stainless steel pipelines, flanges, valves and pumps are assembled by unique swing welding technology.



PID Control Box

The key control part of the water supply system. The inverter, circuit breaker, relay, contactor, alarm device, signal indicator and remote monitoring device are integrated with reasonable layout inside the control box.



Pressure Tank

A sealed pressure vessel made of SS 400 or STS 307 for water storage and elimination of water hammer. The membrane is from BUTYL or EPDM. The tank has the effect of compensation of water and pressure, when the system shuts down or the flow becomes small.



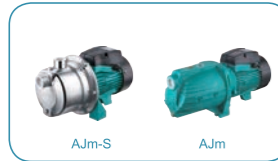
• Peripheral Pump



• Self-Priming Peripheral Pump



• Self-Priming Peripheral Pump



• Jet Pump



• Jet Pump for Deep Wells



• Centrifugal Pump



• Multistage Centrifugal Pump



• Self-Priming Centrifugal Pump



• Stainless Steel Multistage Centrifugal Pump



• Stainless Steel Centrifugal Pump



• Stainless Steel Multistage Centrifugal Pump



• Gasoline Engine Pump



• Diesel Engine Pump



• Domestic Lifting Station



• Pool Pump



• Garden Submersible Pump

CONTENTS



- Garden Jet Pump



- Pressure Booster System



- Submersible Dewatering Pump



- Submersible Slurry Pump



- Submersible Sewage Pump



- Stainless Steel Submersible Sewage Pump



- Stainless Steel Submersible Pump



- Submersible Pump

CONTENTS



- Submersible Borehole Pump



- Standard Centrifugal Pump



- Booster Pump/Circulation Pump



- Accessories