



COMMERCIAL PUMP

INTELLIGENT FLOW FOR GOOD

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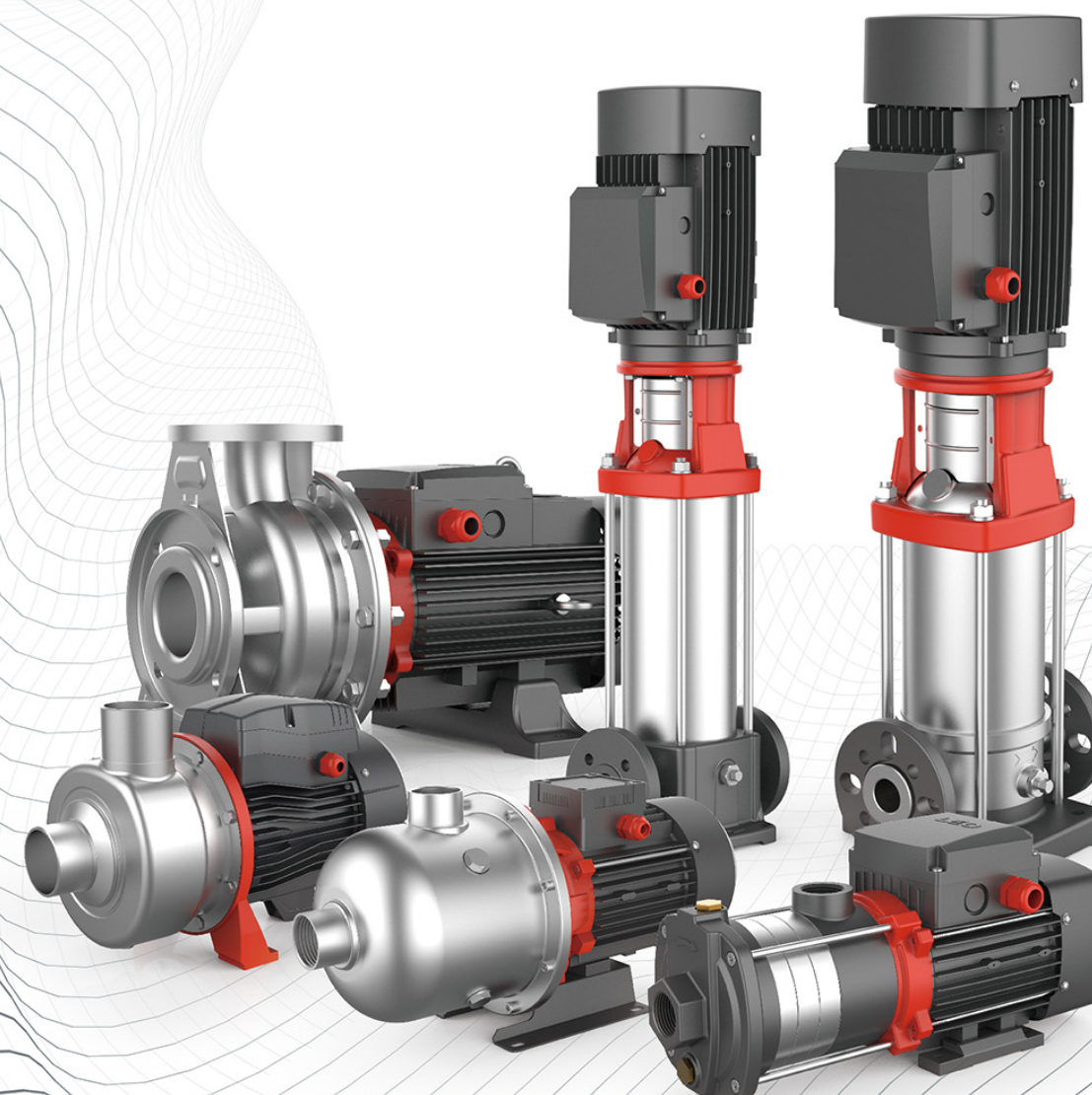


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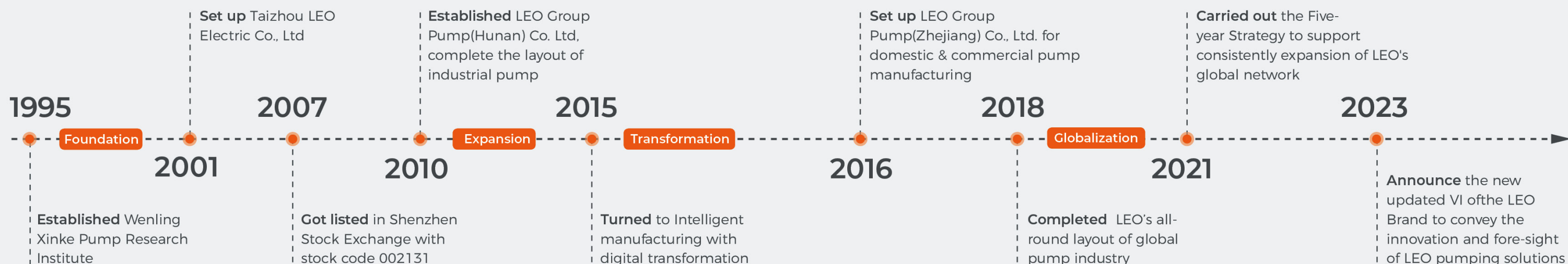


Intelligent Flow For Good

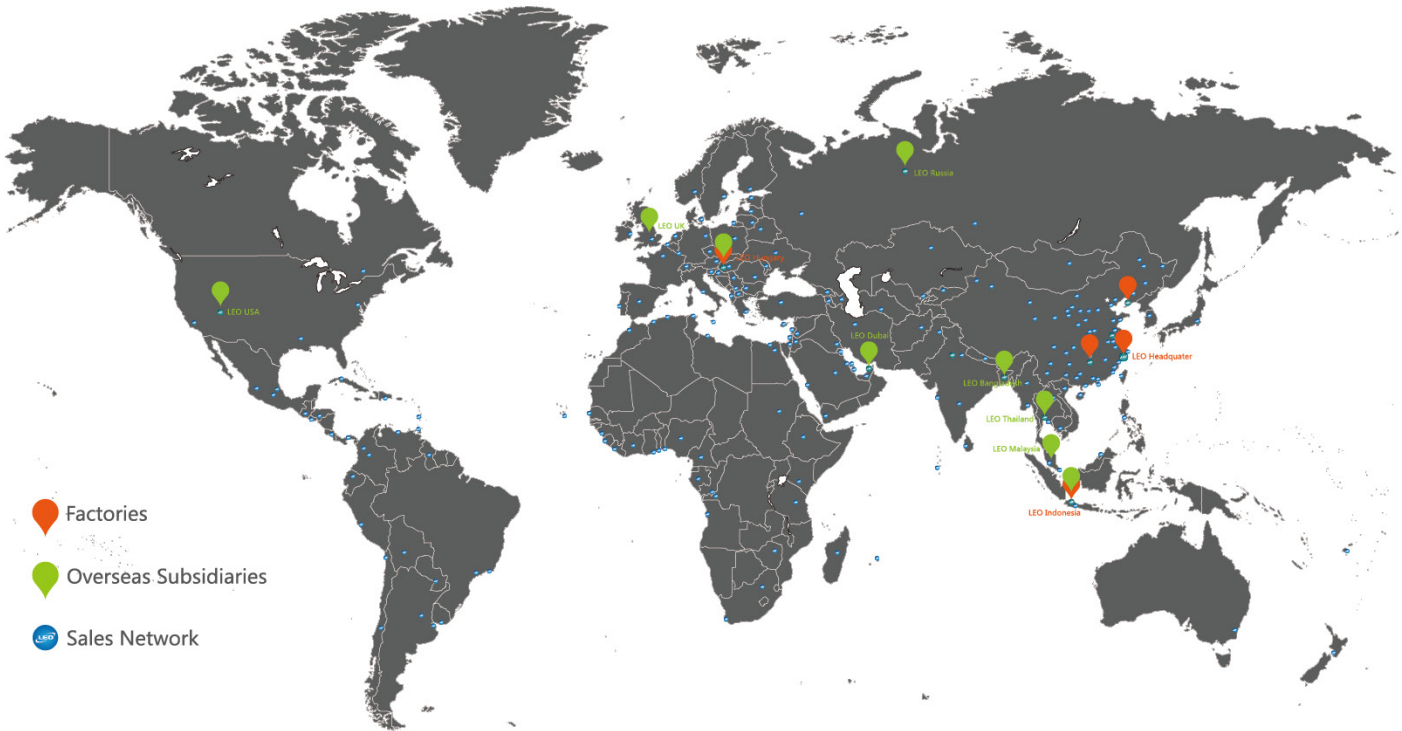
LEO PUMP, founded in 1995, is a leading professional pump & system solution provider, engaged in R&D, manufacture, sales and service of all series pumps and systems. Our products are widely used in water conservancy & water resources, power plants, petrochemical industry, mining & metallurgical industry, civilian water applications, garden machinery and solar pump& system.

With more than 28 years' profession and experience, LEO has become one of the world's famous pump brands. We have set up many production and sales subsidiaries in key regional markets, such as Dubai, Indonesia, Thailand, Malaysia, Bangladesh, USA, Hungary and Russia. Our innovations have brought changes to more than 150 countries and regions, served over 500 million end-users.

We keep adhering to philosophy of "run business with virtue, pursue success with perfection, win victory with efficiency, and go forward with right actions" and focus on developing safe and high-efficiency pump and system, being a sustainable development industry leader. Going forward we will continue our consistent creativity and development ability in each pump for human's health!



LEO WORLD



LEO IN NUMBERS

5 Production Bases	9 Overseas subsidiaries	6,000,000⁺ Pumps produced yearly
150 Countries	15,000⁺ Global sales outlets	500⁺ Million end-users served

Globally we have 5 production plants and relevant professional sales and technical teams with over 500 technicians to support global sales and service. Besides, we also set up several sales and production subsidiaries in key regional markets in Asia, Europe, and America with global employees over 6,000.

With the devoting experience and extraordinary comprehensive strength, LEO has obtained over 700 patents and become a leading pioneer among pump manufacturers and we will keep focus on the development of safe and high-efficient pump&system, being a sustainable enterprise in the industry!



Pump Manufacturing Base for Domestic and Commercial Applications



Pump Manufacturing Base for General Industrial Pumps



Pump Manufacturing Base for Petrochemical Industry

LVS/LVR
Stainless Steel Vertical
Multistage Pump



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

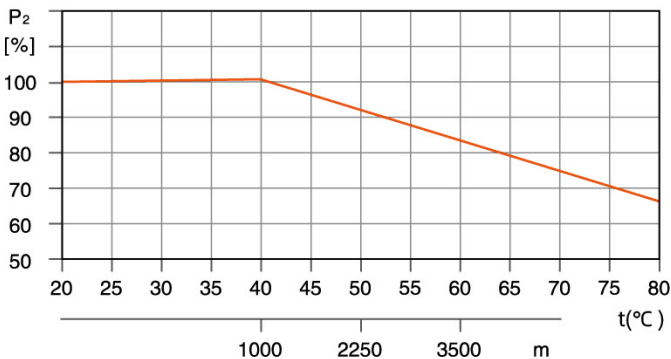
- Low viscosity, non-inflammable and non-explosive liquids not containing solid particles or fibers. The liquids must not chemically attack the pump materials. When pumping liquids with a density or viscosity is higher than that of water, a motor with a higher output power rating shall be used
- Liquid temperature: - 20°C ~+ 120°C
- Flow ranges: 0.7- 240 m³/h
- Liquid pH value: 4 - 10
- Max. ambient temperature: +40°C
- Max. operating 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 1x220V / 3x380V

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%.

Identification Codes

LVS 45 - 10 - 2 - B - K
Pipeline Port Code (Omitted for DIN flange)
AISI316 Stainless Steel Material (Omitted for AISI304)
Small Impeller Stages
Impeller Stages
Rated Flow (m³/h)
LVS,LVR Vertical Multistage Pump

LVS 200 - 3 - C - D
Small impeller D
Small impeller C
Impeller Stages
Rated Flow(m³/h)
LVS, LVR Vertical Multistage Pump

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

Minimum Inlet Pressure-NPSH

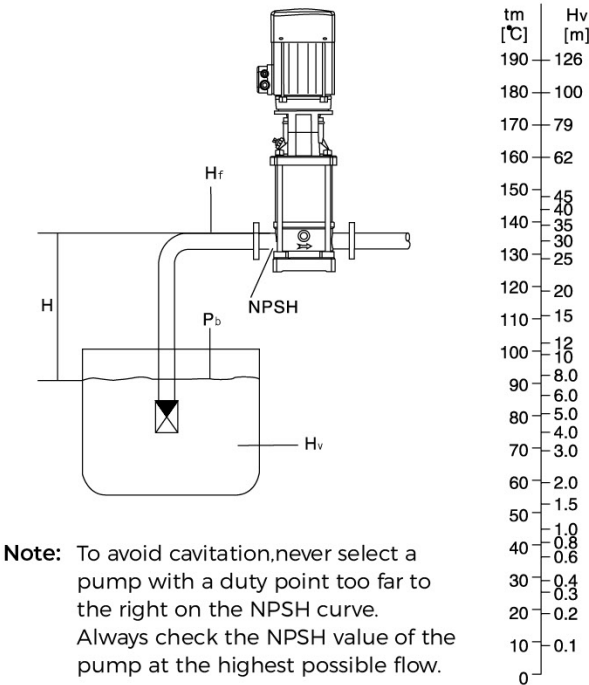
Calculation of the inlet pressure"H" is recommended in these situations:

- 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 = Pb x 10.2-NPSH-Hf-Hv-Hs
- Pb = Barometric pressure in bar. (Barometric pressure can be set to 1 bar). In closed systems, Pb 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.)
- Hf = Friction loss in suction pipe in meters head. (At the highest flow the pump will be delivering.)
- Hv = Vapor pressure in meters head. (To be read from the vapor pressure scale. "Hv" depends on the liquid temperature "tm")
- Hs = 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.

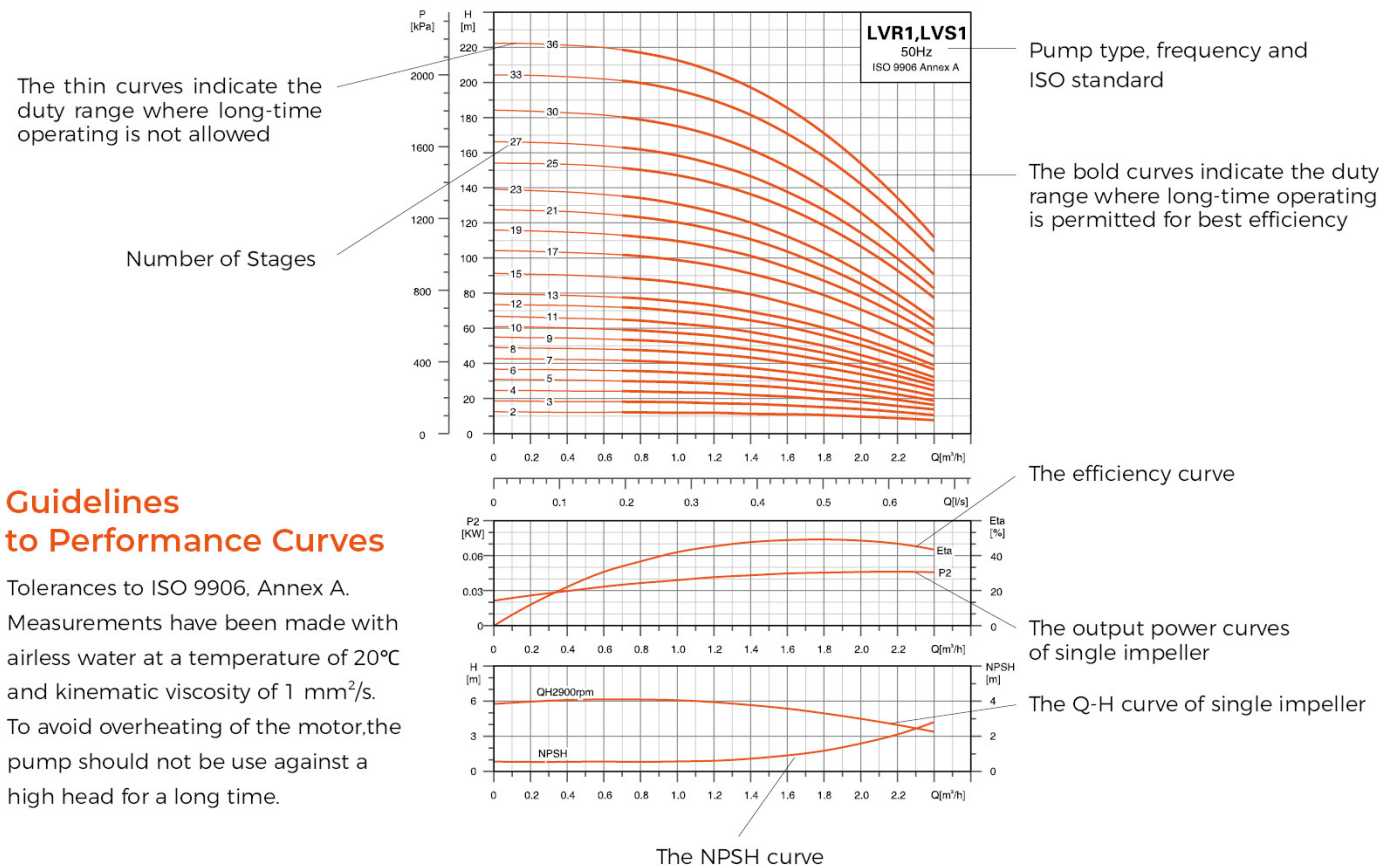
Maximum Inlet Pressure

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.

Table with 2 columns: Model, Max. Inlet Pressure (bar). Rows include various LVR(S) and LVS(S) models and their corresponding maximum inlet pressures.

Table with 4 columns: Model, LVR Max. Operating pressure (bar) - Oval Flange, LVR Max. Operating pressure (bar) - DIN Flange, LVS Max. Operating pressure (bar). Rows include various LVR(S) and LVS(S) models and their corresponding maximum operating pressures.

How to Read the Curve Charts



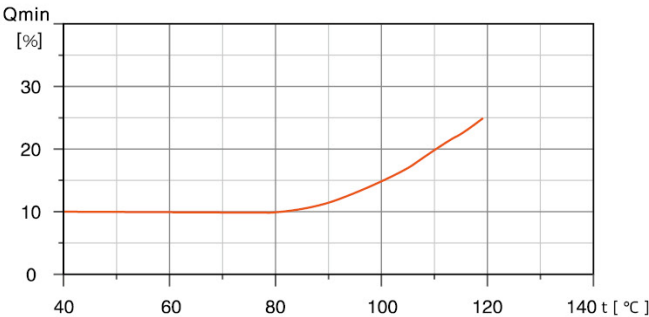
Guidelines to Performance Curves

Tolerances to ISO 9906, Annex A.
Measurements have been made with
airless water at a temperature of 20°C
and kinematic viscosity of 1 mm²/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.

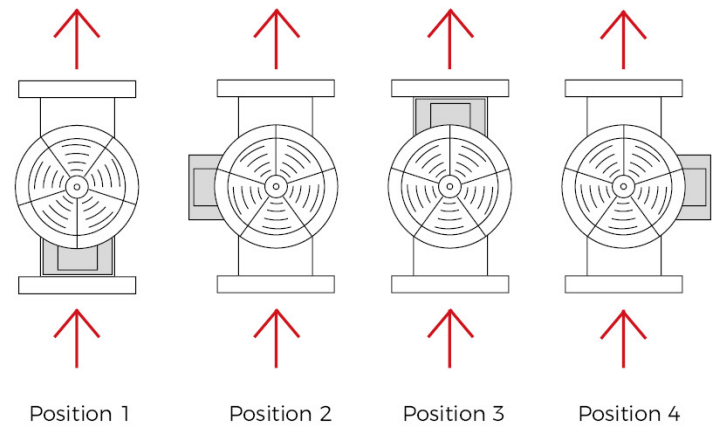
Air cooling apparatus



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

Terminal Box Positions

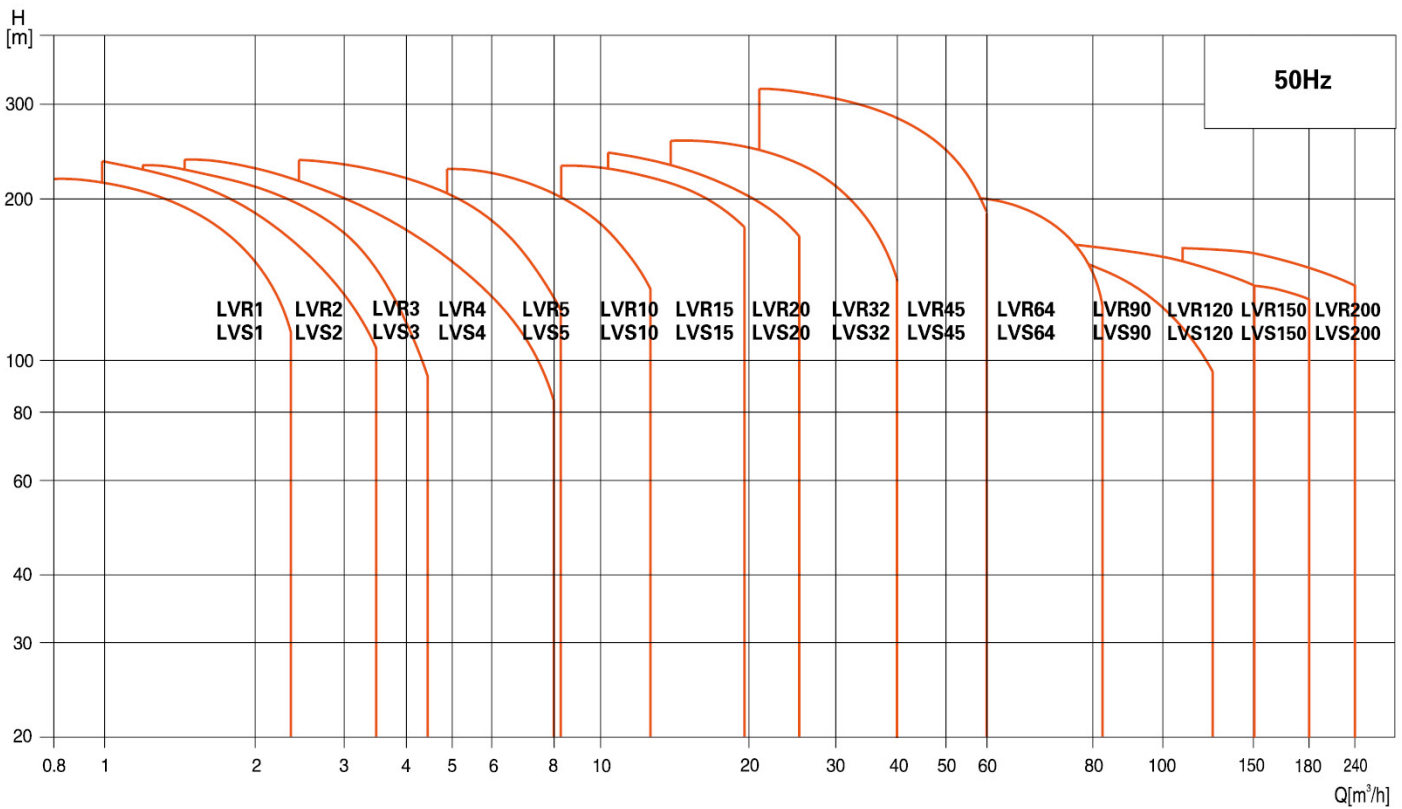
(Note: set to position 1 before delivery)



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(m³/h)	1	2	3	4	5	10	15	20	32	45	64	90	120	150	200
Flow range(m³/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(%)	42	47.5	57.5	57.5	62.5	68.5	70.3	72.9	74.6	77.7	78.8	78.9	72	72	76
Pipe connection-LVR															
Oval flange	G1	G1	G1	G1 1/4	G1 1/4	-	-	-	-	-	-	-	-	-	-
DIN flange	DN25/32	DN25/32	DN25/32	DN25/32	DN25/32	DN40	DN50	DN50	DN65	DN80	DN100	DN100	DN125	DN125	DN150
Pipe connection-LVS															
DIN flange	DN25/32	DN25/32	DN25/32	DN25/32	DN25/32	DN40	DN50	DN50	DN65	DN80	DN100	DN100	DN125	DN125	DN150
Clamp connector	Φ42	Φ42	Φ42	Φ42	Φ42	-	-	-	-	-	-	-	-	-	-
Threaded connector	R ₂ 1 1/4	R ₂ 1 1/4	R ₂ 1 1/4	R ₂ 1 1/4	R ₂ 1 1/4	-	-	-	-	-	-	-	-	-	-

Scope of Performance-LVR,LVS



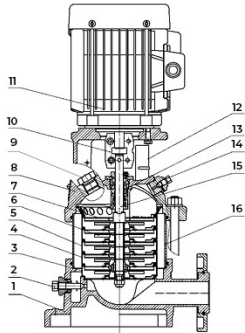
LVS/LVR

Stainless Steel Vertical

Multistage Pump

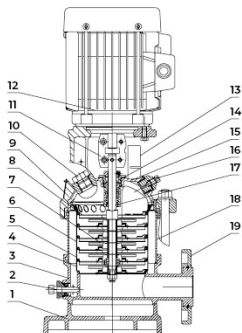


Cross Section



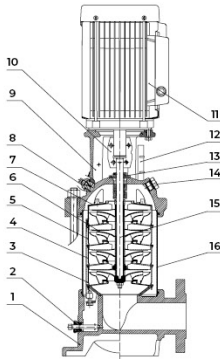
MODEL: LVR1 (2.3.4.5)

No.	Part	Material
1	Base	HT 200
2	Drain bolt assembly	AISI 304
3	Primary diffuser	AISI 304
4	Diffuser with bearing	AISI 304
5	Medium diffuser	AISI 304
6	Impeller	AISI 304
7	Final diffuser	AISI 304
8	Motor base	HT 200
9	Filling plug(optional)	
10	Coupling	Iron based powder metallurgy
11	Motor	
12	Guard plate	AISI 304
13	Cartridge seal	
14	Vent valve assembly	AISI 304
15	Pump shaft	AISI 316
16	Pump barrel	AISI 304



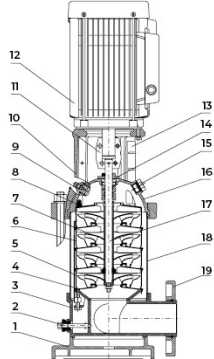
MODEL: LVS1 (2.3.4.5)

No.	Part	Material	Optional Material
1	Base plate	ADC 12	
2	Drain bolt assembly	AISI 304	AISI 316
3	Pedestal	AISI 304	AISI 316
4	Primary diffuser	AISI 304	AISI 316
5	Diffuser with bearing	AISI 304	AISI 316
6	Medium diffuser	AISI 304	AISI 316
7	Impeller	AISI 304	AISI 316
8	Final diffuser	AISI 304	AISI 316
9	Motor base	HT 200	
10	Filling plug(optional)		
11	Coupling	Iron based powder metallurgy	
12	Motor		
13	Guard plate	AISI 304	
14	Cartridge seal		
15	Pump cover	AISI 304	AISI 316
16	Vent valve assembly	AISI 304	AISI 316
17	Pump shaft	AISI 316	
18	Pump barrel	AISI 304	AISI 316
19	Flange	ZG 35	



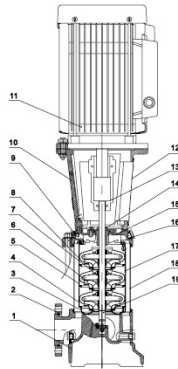
MODEL: LVR10 (15.20)

No.	Part	Material
1	Base	HT 200
2	Drain bolt assembly	AISI 304
3	Primary diffuser	AISI 304
4	Diffuser with bearing	AISI 304
5	Medium diffuser	AISI 304
6	Impeller	AISI 304
7	Final diffuser	AISI 304
8	Vent valve assembly	AISI 304
9	Motor base	HT 200
10	Coupling	Iron based powder metallurgy/QT400
11	Motor	
12	Guard plate	AISI 304
13	Cartridge seal	
14	Filling plug(optional)	
15	Pump shaft	AISI 316
16	Pump barrel	AISI 304



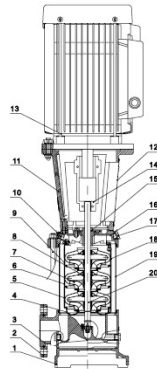
MODEL: LVS10 (15.20)

No.	Part	Material	Optional Material
1	Base plate	ADC 12	
2	Drain bolt assembly	AISI 304	AISI 316
3	Pedestal	AISI 304	AISI 316
4	Primary diffuser	AISI 304	AISI 316
5	Diffuser with bearing	AISI 304	AISI 316
6	Medium diffuser	AISI 304	AISI 316
7	Impeller	AISI 304	AISI 316
8	Final diffuser	AISI 304	AISI 316
9	Vent valve assembly	AISI 304	AISI 316
10	Motor base	HT 200	
11	Coupling	Iron based powder metallurgy/QT400	
12	Motor		
13	Guard plate	AISI 304	
14	Cartridge seal		
15	Filling plug(optional)		
16	Pump cover	AISI 304	AISI 316
17	Pump shaft	AISI 316	
18	Pump barrel	AISI 304	AISI 316
19	Flange	ZG 35	



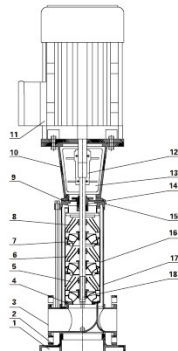
MODEL: LVR32 (45.64.90)

No.	Part	Material
1	Base	HT 200
2	Flange	ZG 35
3	Primary diffuser	AISI 304
4	Medium diffuser	AISI 304
5	Diffuser with bearing	AISI 304
6	Impeller	AISI 304
7	Driver	
8	Final diffuser	AISI 304
9	Filling plug	AISI 304
10	Motor base	HT 200
11	Motor	
12	Guard plate	AISI 304
13	Coupling	QT 400
14	Cartridge seal	
15	Pump head	HT 200
16	Water injection plug	AISI 304
17	Tension strip	AISI 304
18	Pump barrel	AISI 304
19	Pump shaft	AISI 304



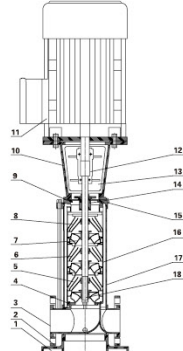
MODEL: LVS32 (45.64.90)

No.	Part	Material	Optional Material
1	Base plate	HT 200	
2	Flange	ZG35	
3	Pedestal	AISI 304	AISI 316
4	Primary diffuser	AISI 304	AISI 316
5	Medium diffuser	AISI 304	AISI 316
6	Diffuser with bearing	AISI 304	AISI 316
7	Impeller	AISI 304	AISI 316
8	Driver		
9	Final diffuser	AISI 304	AISI 316
10	Filling plug	AISI 304	AISI 316
11	Motor base	HT 200	
12	Guard plate	AISI 304	
13	Motor		
14	Coupling	QT 400	
15	Cartridge seal		
16	Pump head	AISI 304	AISI 316
17	Water injection plug	AISI 304	AISI 316
18	Tension strip	AISI 304	AISI 316
19	Pump barrel	AISI 304	AISI 316
20	Pump shaft	AISI 304	AISI 316



MODEL: LVR120 (150.200)

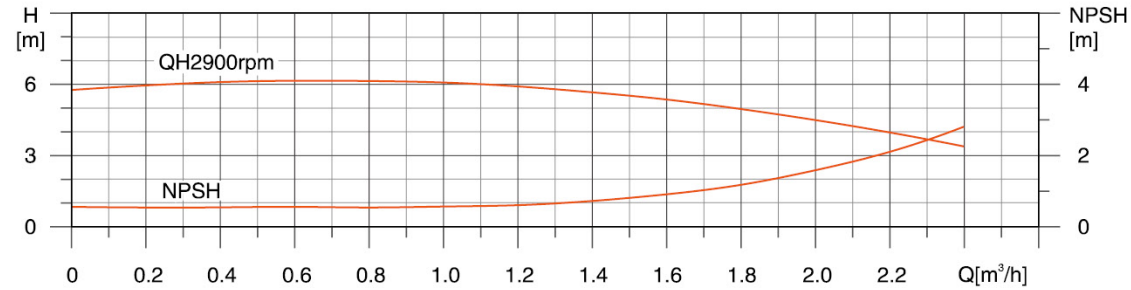
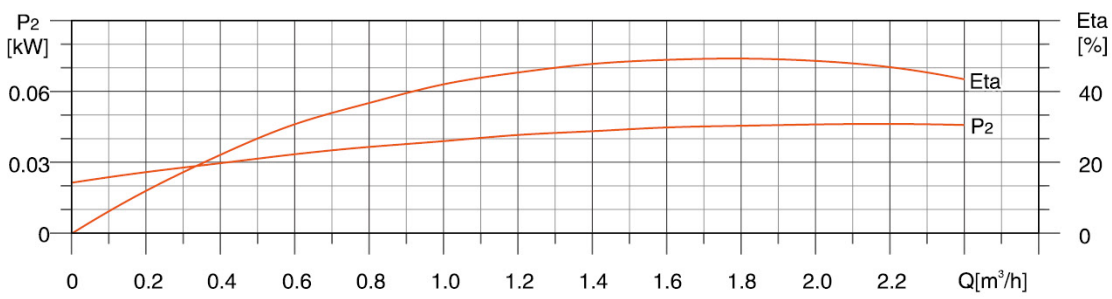
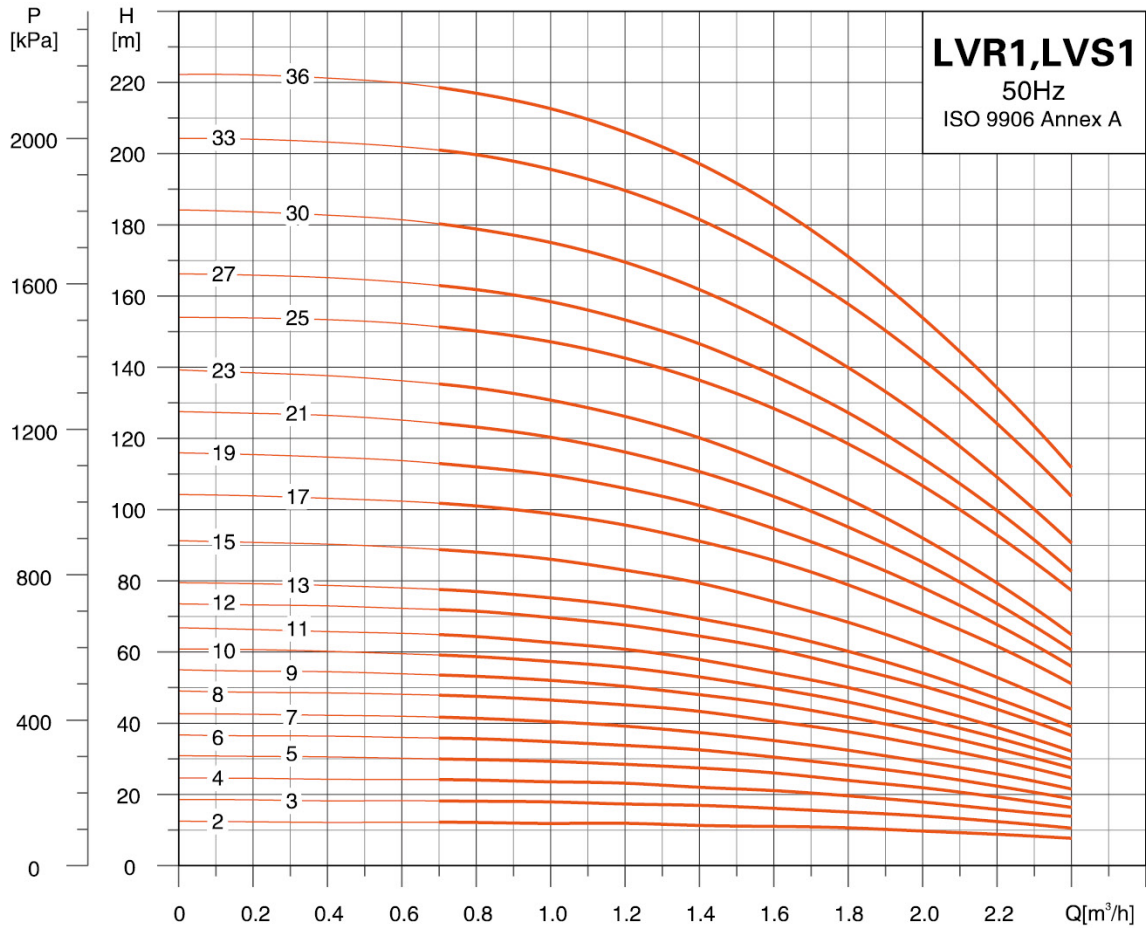
No.	Part	Material
1	Base plate	HT 200
2	Flange	ZG 35
3	Base	HT 200
4	Primary diffuser	AISI 304
5	Diffuser with bearing	AISI 304
6	Medium diffuser	AISI 304
7	Impeller	AISI 304
8	Final diffuser	AISI 304
9	Pump head	HT 200
10	Motor base	HT 200
11	Motor	
12	Coupling	QT 400
13	Guard plate	AISI 304
14	Cartridge seal	
15	Water injection plug	AISI 304
16	Tension strip	AISI 304
17	Pump barrel	AISI 304
18	Pump shaft	AISI 304



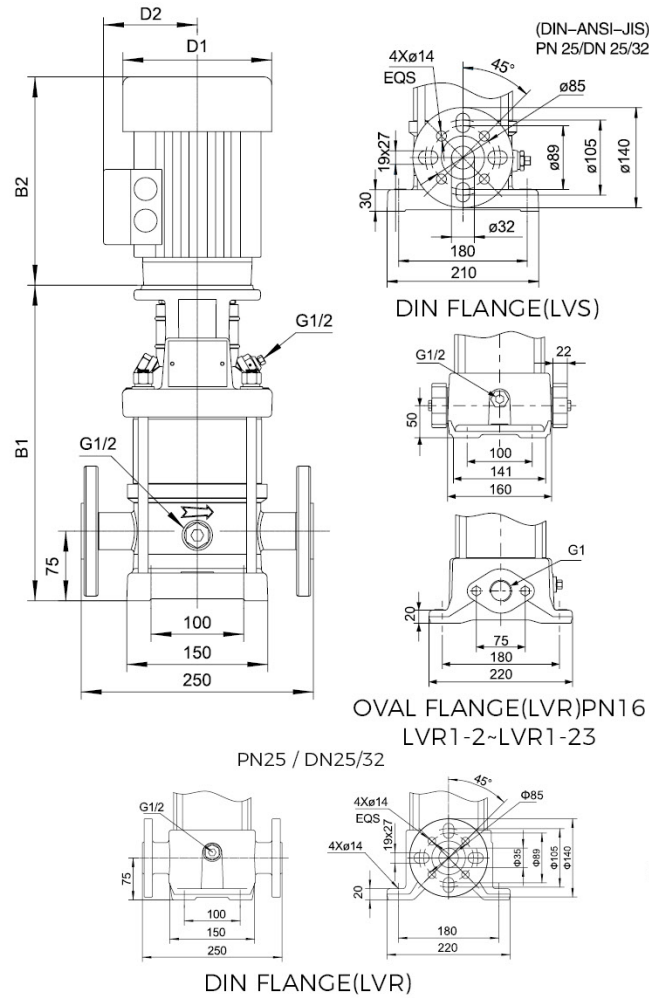
MODEL: LVS120 (150.200)

No.	Part	Material	Optional Material
1	Base plate	HT 200	
2	Flange	ZG 35	
3	Pedestal	AISI 304	AISI 316
4	Primary diffuser	AISI 304	AISI 316
5	Diffuser with bearing	AISI 304	AISI 316
6	Medium diffuser	AISI 304	AISI 316
7	Impeller	AISI 304	AISI 316
8	Final diffuser	AISI 304	AISI 316
9	Pump head	AISI 304	AISI 316
10	Motor base	HT 200	
11	Motor		
12	Coupling	QT 400	
13	Guard plate	AISI 304	
14	Cartridge seal		
15	Water injection plug	AISI 304	AISI 316
16	Tension strip	AISI 304	AISI 316
17	Pump barrel	AISI 304	AISI 316
18	Pump shaft	AISI 304	AISI 316

Hydraulic Performance Curves

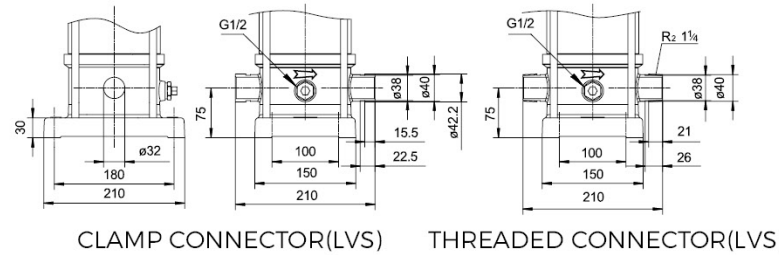


Dimension Drawing



Model	OVAL FLANGE (LVR)		DIN FLANGE (LVR, LVS)		D1	D2	N.W. (kgs)	Motor Mounting Code
	B1	B1+B2	B1	B1+B2				
1-2	256	470	282	496	130	105	20.4	V18
1-3	256	470	282	496	130	105	21.2	
1-4	274	488	300	514	130	105	21.8	
1-5	292	506	318	532	130	105	22.4	
1-6	310	524	336	550	130	105	22.4	
1-7	328	542	354	568	130	105	24.2	
1-8	346	560	372	586	130	105	24.5	
1-9	364	578	390	604	130	105	24.7	
1-10	382	596	408	622	130	105	25.1	
1-11	400	614	426	640	130	105	25.5	
1-12	422	690	448	716	150	124.5	27.8	
1-13	440	708	466	734	150	124.5	28.2	
1-15	476	744	502	770	150	124.5	29.1	
1-17	512	780	538	806	150	124.5	31.5	
1-19	548	816	574	842	150	124.5	33	
1-21	584	852	610	878	150	124.5	33	
1-23	620	888	646	914	150	124.5	34.9	
1-25	-	-	698	1016	163.6	127.4	41.5	
1-27	-	-	734	1052	163.6	127.4	43.6	
1-30	-	-	788	1106	163.6	127.4	43.9	
1-33	-	-	842	1160	163.6	127.4	46.9	
1-36	-	-	896	1214	163.6	127.4	47.9	

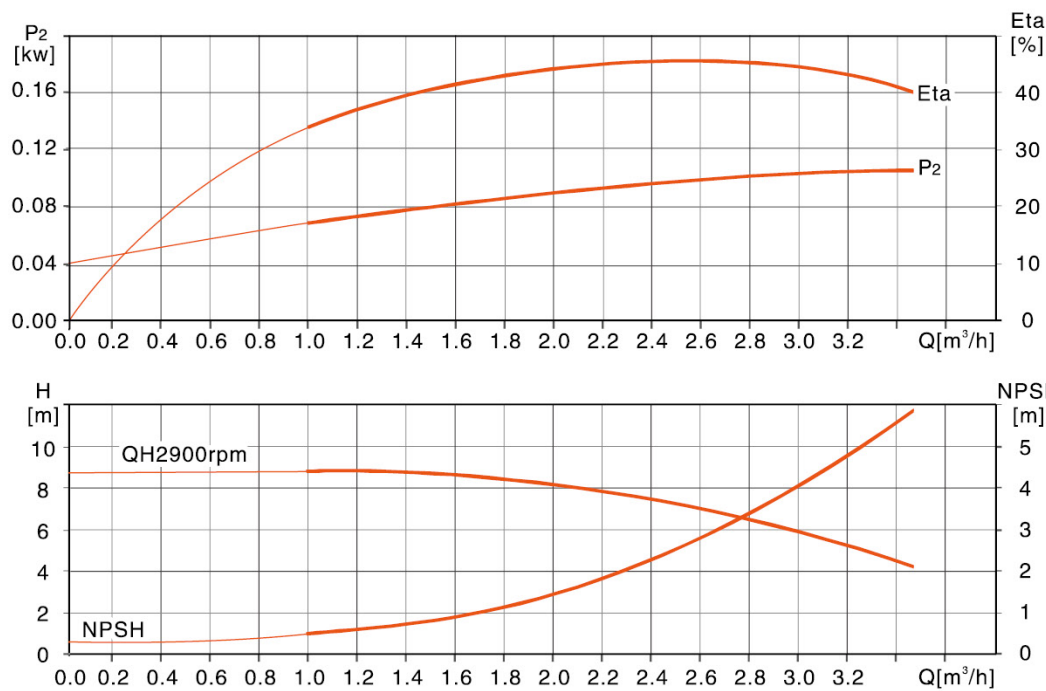
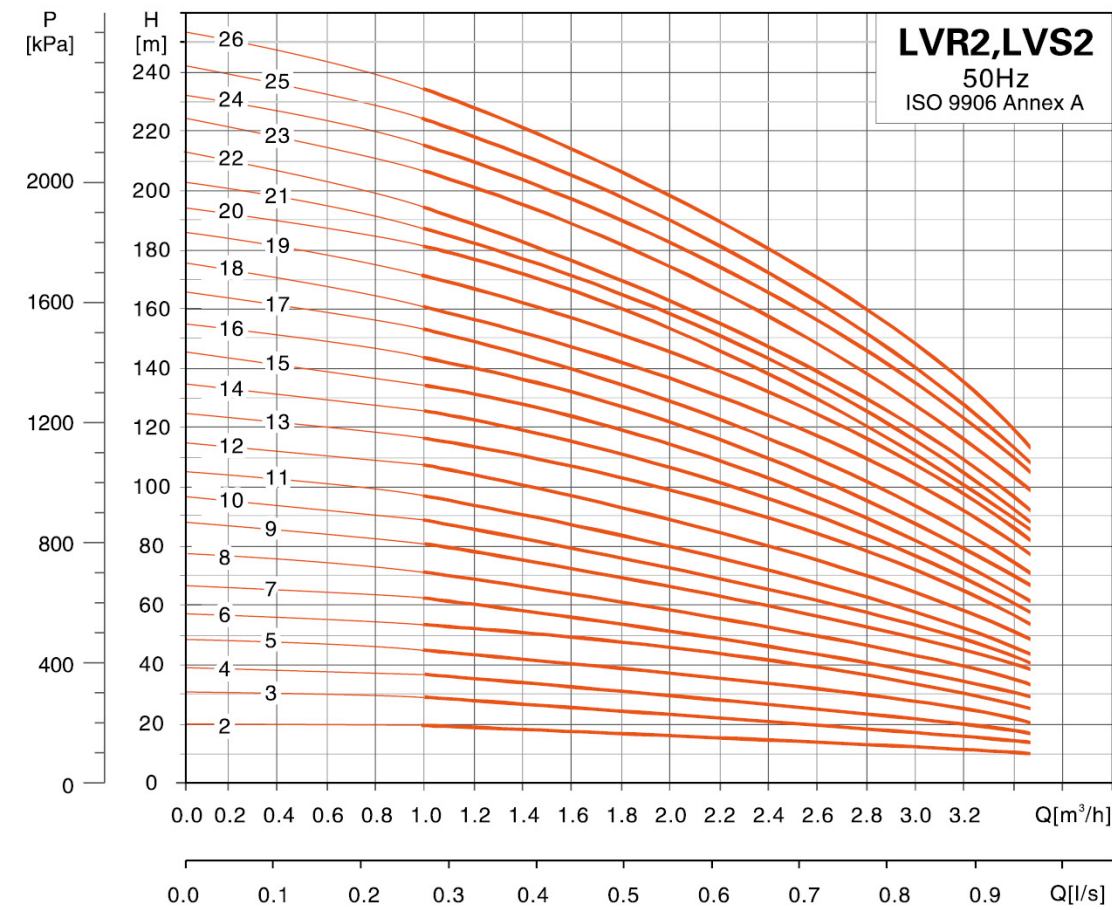
Note: B1 and B1+B2 of clamp connector and threaded connector are in compliance with that of DIN flange.



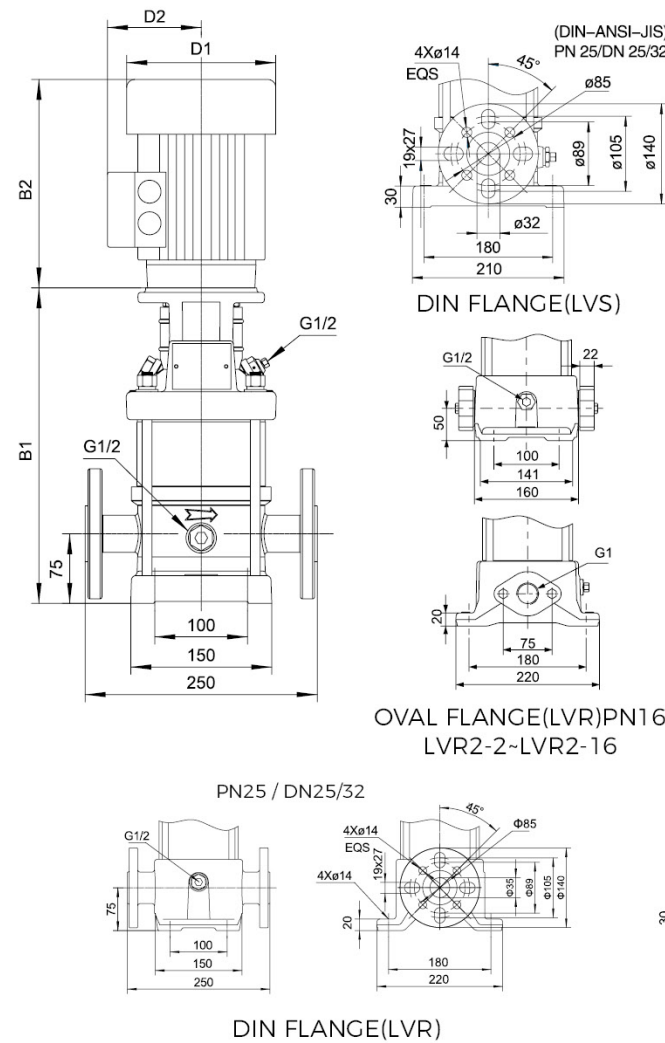
Technical Data

Model	Power	Q(m³/h)	0.7	0.8	1.0	1.2	1.4	1.6	1.8	2.0	2.2	2.4
LVR(S)1-2	0.37	H(m)	12	12	12	12	11	11	10	10	9	8
LVR(S)1-3	0.37		18	18	18	17	17	16	15	14	13	10.5
LVR(S)1-4	0.37		24	24	24	22	22	21	19	18	15	14
LVR(S)1-5	0.37		30	30	29.5	28	27	26	24	22	19	16
LVR(S)1-6	0.37		36	35	35	34	32	30	28	25	22	19
LVR(S)1-7	0.37		42	41	40.5	39	37	35	32	30	26	22
LVR(S)1-8	0.55		48	47	46.5	45	43	40	38	34	30	26
LVR(S)1-9	0.55		54	53	52	50	48	45	42	37	33	28
LVR(S)1-10	0.55		59	58	57.5	55	53	50	46	41	35	30
LVR(S)1-11	0.55		65	64	63	61	58	54	51	45	39	33
LVR(S)1-12	0.75		72	71	70	67	64	61	56	50	44	37
LVR(S)1-13	0.75		78	77	75	73	69	65	60	54	48	39.5
LVR(S)1-15	0.75		90	88	86	83	79	74	68	61	54	45
LVR(S)1-17	1.1		102	101	98	95	91	85	78	70	62	52
LVR(S)1-19	1.1		114	112	110	106	101	94	87	78	68	57
LVR(S)1-21	1.1		125	123	120	116	110	103	95	85	74	61
LVR(S)1-23	1.1		136	134	130	126	120	112	103	92	80	65
LVR(S)1-25	1.5		152	150	145	142	136	128	119	106	93	78
LVR(S)1-27	1.5		164	162	157	153	146	137	128	114	100	84
LVR(S)1-30	1.5		181	178	173	169	162	152	140	126	110	92
LVR(S)1-33	2.2		202	199	194	189	181	170	158	142	124	106
LVR(S)1-36	2.2		220	217	210	206	197	185	170	154	135	112

Hydraulic Performance Curves

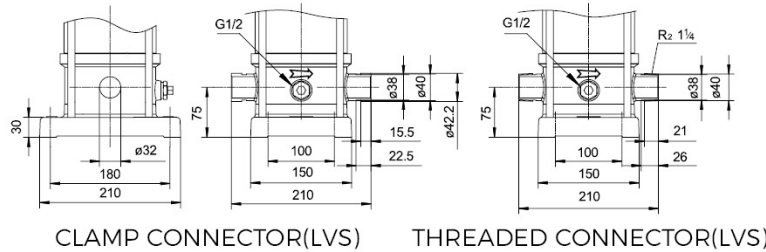


Dimension Drawing



Model	OVAL FLANGE (LVR)		DIN FLANGE (LVR, LVS)		D1	D2	N.W. (kgs)	Motor Mounting Code
	B1	B1+B2	B1	B1+B2				
2-2	256	470	282	496	130	105	22.3	V18
2-3	256	470	282	496	130	105	22.5	
2-4	274	488	300	514	130	105	22.3	
2-5	292	506	318	532	130	105	22.8	
2-6	314	582	340	608	149.6	124.5	26.6	
2-7	332	600	358	626	149.6	124.5	27.1	
2-8	350	618	376	644	150	124.5	29.1	
2-9	368	636	394	662	150	124.5	29.5	
2-10	386	654	412	680	150	124.5	30	
2-11	404	672	430	698	150	124.5	30.4	
2-12	438	756	464	782	163.6	127	35.9	
2-13	456	774	482	800	163.6	127	36.2	
2-14	474	792	500	818	163.6	127	37.8	
2-15	492	810	518	836	164	127	38.1	
2-16	510	828	536	854	164	127	40.9	
2-17	-	-	554	872	164	127	40.9	
2-18	-	-	572	890	164	127	41	
2-19	-	-	590	908	164	127	42.2	
2-20	-	-	608	926	164	127	42.7	
2-21	-	-	626	944	164	127	43.1	
2-22	-	-	644	962	164	127	46.6	
2-23	-	-	666	1006	185.5	120	50.4	
2-24	-	-	684	1024	185.5	120	50.8	
2-25	-	-	702	1042	185.5	120	51.2	
2-26	-	-	720	1060	185.5	120	51.6	

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



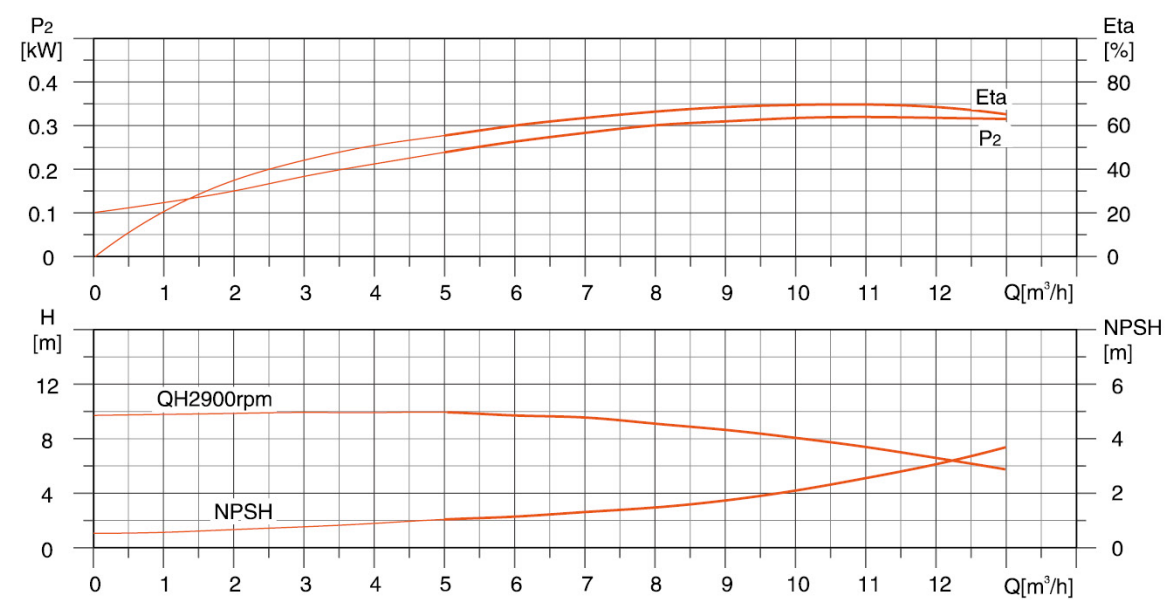
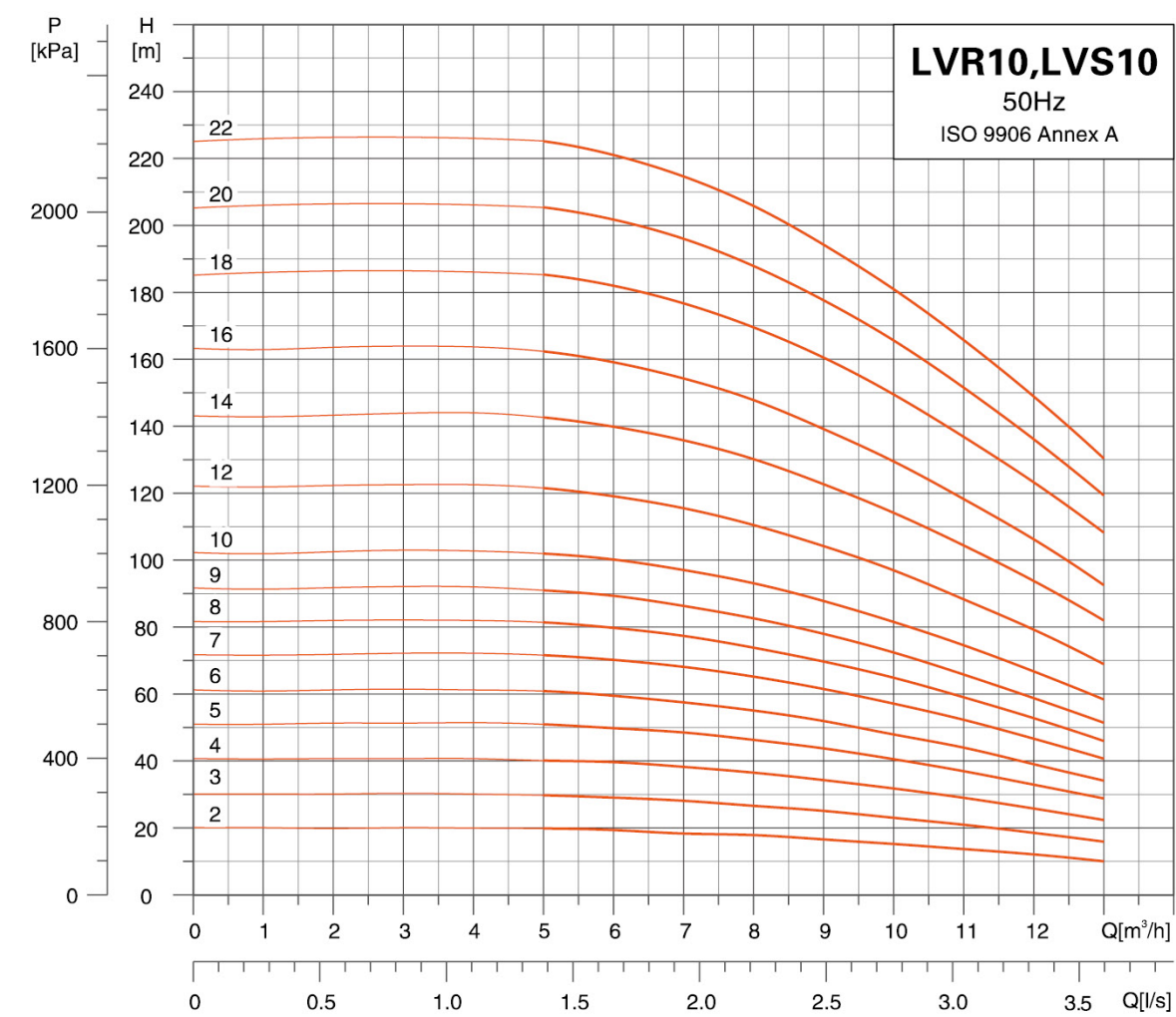
Technical Data

Model	Power	Q(m³/h)	1	1.2	1.6	2	2.5	2.8	3.2	3.5
LVR(S)2-2	0.37	H(m)	18	17	16	15.5	13.5	12	10	8
LVR(S)2-3	0.37		27	26	24	22.5	19.5	18	15	12
LVR(S)2-4	0.55		36	35	33	30.5	27	24	17	16
LVR(S)2-5	0.55		45	43	40	37	32.5	30	24	20
LVR(S)2-6	0.75		53	52	50	45.5	40	36	30	24
LVR(S)2-7	0.75		63	61	57	52	45.5	41	35	28
LVR(S)2-8	1.1		71	69	65	59	51	47	40	33
LVR(S)2-9	1.1		80	78	73	68.5	60	54	45	37
LVR(S)2-10	1.1		89	86	81	74	65	59	49	40
LVR(S)2-11	1.1		98	95	89	82	71.5	64	54	44
LVR(S)2-12	1.5		107	103	97	90	78	71	59	47
LVR(S)2-13	1.5		116	114	106	98	86.5	78	65	52
LVR(S)2-14	1.5		125	122	114	105	92	84	69	57
LVR(S)2-15	1.5		134	130	123	112	98	90	73	60
LVR(S)2-16	2.2		143	139	131	120	104	96	79	66
LVR(S)2-17	2.2		152	148	139	128	111	102	85	70
LVR(S)2-18	2.2		161	157	148	136	122	108	91	76
LVR(S)2-19	2.2		170	165	156	143	128	113	95	81
LVR(S)2-20	2.2		179	174	164	150	134	119	100	85
LVR(S)2-21	2.2		188	183	172	157	140	124	105	88
LVR(S)2-22	2.2		197	192	180	165	145	130	110	90
LVR(S)2-23	3		205	201	188	173	153	137	105	97
LVR(S)2-24	3		214	210	197	181	160	144	120	105
LVR(S)2-25	3		223	219	205	189	168	151	125	107
LVR(S)2-26	3		232	228	214	198	176	158	130	110

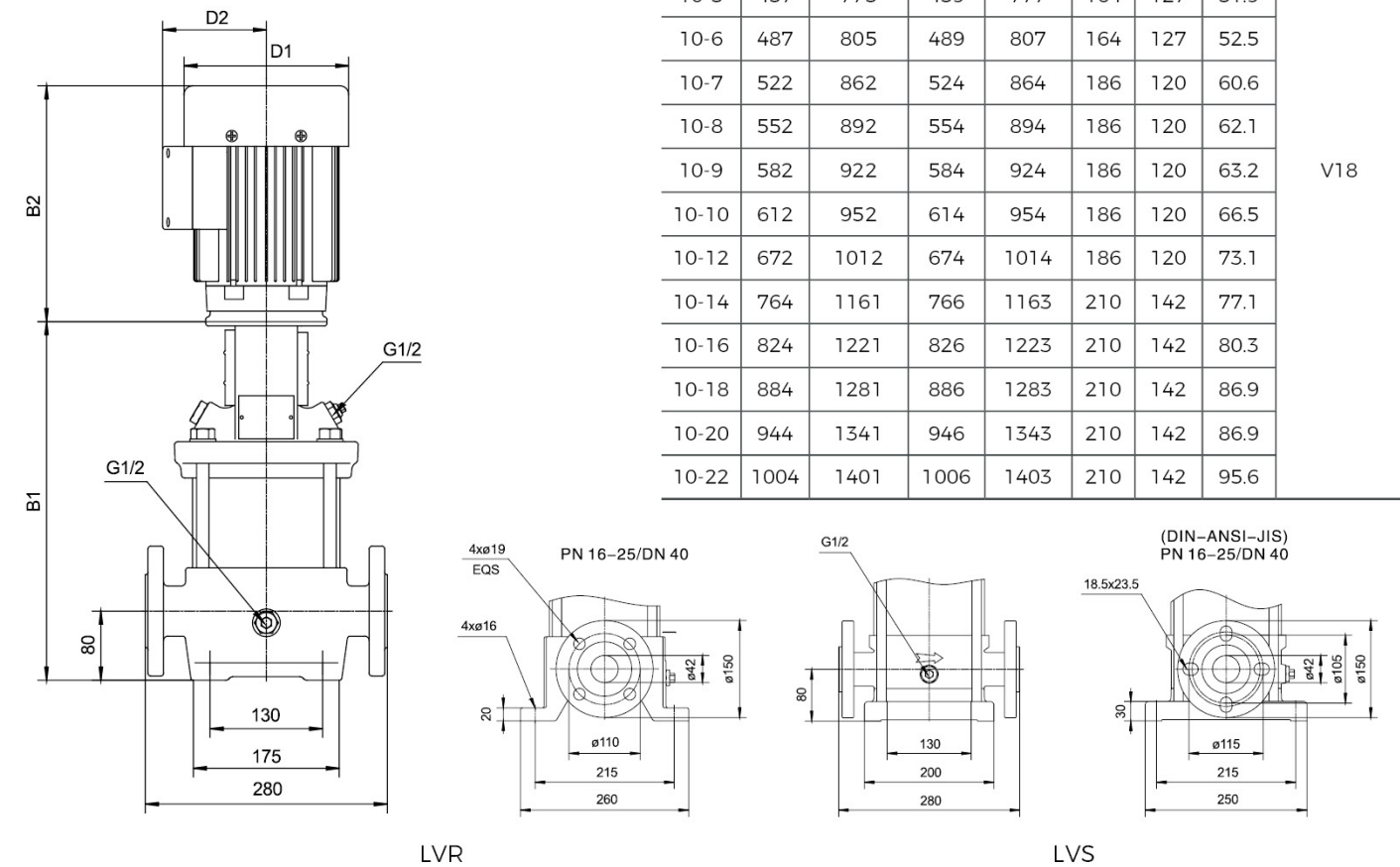
Model	Power	Q(m³/h)	1.2	1.6	2	2.4	2.8	3	3.6	4	4.5
LVR(S)3-2	0.37	H(m)	13	12	12	11	11	10	8	7.5	4
LVR(S)3-3	0.37		19	19	18	17	16	15	14	12	8
LVR(S)3-4	0.37		25	24	23	22	20	19	17	14	9
LVR(S)3-5	0.37		31	31	29	27	25	24	20	17	11
LVR(S)3-6	0.55		37	36	35	33	30	28	24	21	14
LVR(S)3-7	0.55		43	40	40	37	35	32	28	24	16
LVR(S)3-8	0.75		51	48	47	44	41	38	33	28	19
LVR(S)3-9	0.75		56	54	51	48	45	42	36	30	21
LVR(S)3-10	0.75		62	60	57	54	50	46	40	33	23
LVR(S)3-11	1.1		69	66	63	60	56	51	44	38	26
LVR(S)3-12	1.1		75	72	69	65	61	56	48	41	28
LVR(S)3-13	1.1		80	78	74	70	65	60	51	44	30
LVR(S)3-15	1.1		92	89	85	80	73	68	58	49	34
LVR(S)3-17	1.5		107	104	100	94	87	78	70	59	42
LVR(S)3-19	1.5		119	116	111	104	97	87	77	65	47
LVR(S)3-21	2.2		133	129	124	117	109	97	88	75	54
LVR(S)3-23	2.2		146	141	135	128	119	105	95	81	59
LVR(S)3-25	2.2		158	153	146	138	128	115	102	87	64
LVR(S)3-27	2.2		170	164	157	148	138	124	110	93	67
LVR(S)3-29	2.2		182	176	168	159	147	133	118	100	72
LVR(S)3-31	3	197	191	183	173	161	142	128	110	80	
LVR(S)3-33	3	210	203	194	194	170	152	137	116	84	
LVR(S)3-36	3	228	221	211	200	185	165	149	126	91	

Model	Power	Q(m³/h)	2.5	3	4	5	6	7	8	8.5
LVR(S)5-2	0.37	H(m)	12	12	10	9	7	6	4	3.5
LVR(S)5-3	0.55		19	18	16	15	12	10	8	6
LVR(S)5-4	0.55		24	24	22	19	16	14	10.5	9
LVR(S)5-5	0.75		31	30	28	24	22	18	15	12
LVR(S)5-6	1.1		38	37	34	28	27	23	19	15
LVR(S)5-7	1.1		44	42	40	32	30	27	22	19
LVR(S)5-8	1.1		50	48	45	40	36	31	25	21
LVR(S)5-9	1.5		59	56	53	47	44	37	31	26
LVR(S)5-10	1.5		65	62	59	53	48	41	34	29
LVR(S)5-11	2.2		73	70	66	59	54	47	38	35
LVR(S)5-12	2.2		78	76	72	63	59	51	42	38
LVR(S)5-13	2.2		85	82	78	68	64	55	45	40
LVR(S)5-14	2.2		91	89	83	74	69	60	48	43
LVR(S)5-15	2.2		98	95	89	79	74	63	52	46
LVR(S)5-16	2.2		103	101	95	85	78	68	55	49
LVR(S)5-18	3		118	115	109	98	90	78	65	58
LVR(S)5-20	3		130	127	120	108	100	87	72	64
LVR(S)5-22	4		145	142	134	120	112	97	80	72
LVR(S)5-24	4		158	154	146	132	122	106	88	78
LVR(S)5-26	4		170	166	157	145	132	115	95	85
LVR(S)5-29	4	192	188	178	155	149	131	109	98	
LVR(S)5-36	5.5	226	222	209	195	172	147	120	104	

Hydraulic Performance Curves



Dimension Drawing

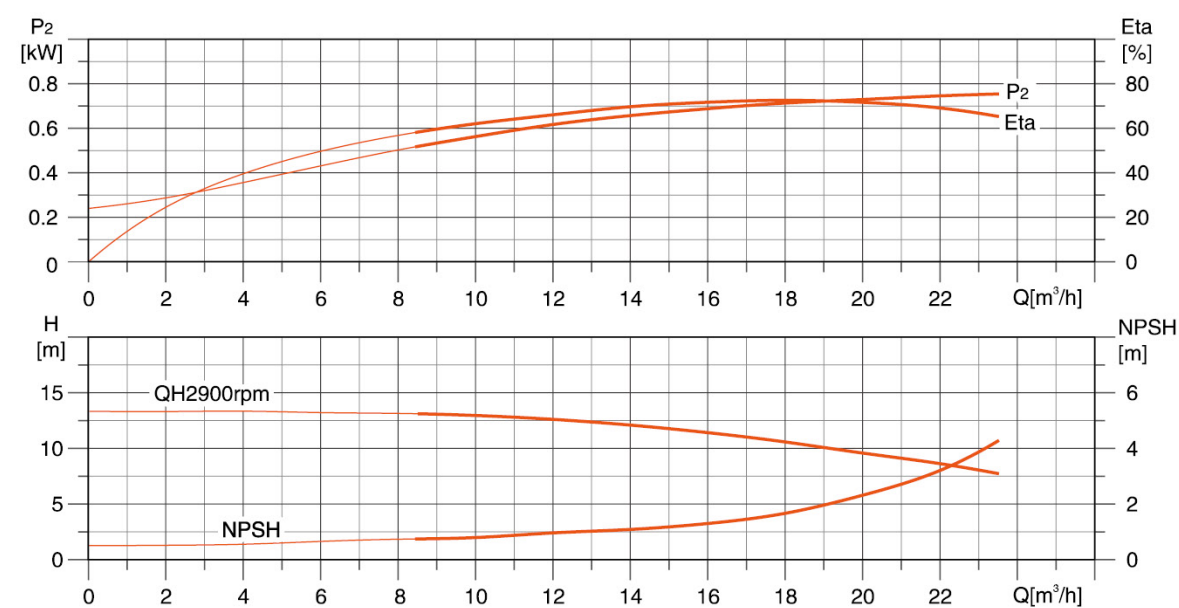
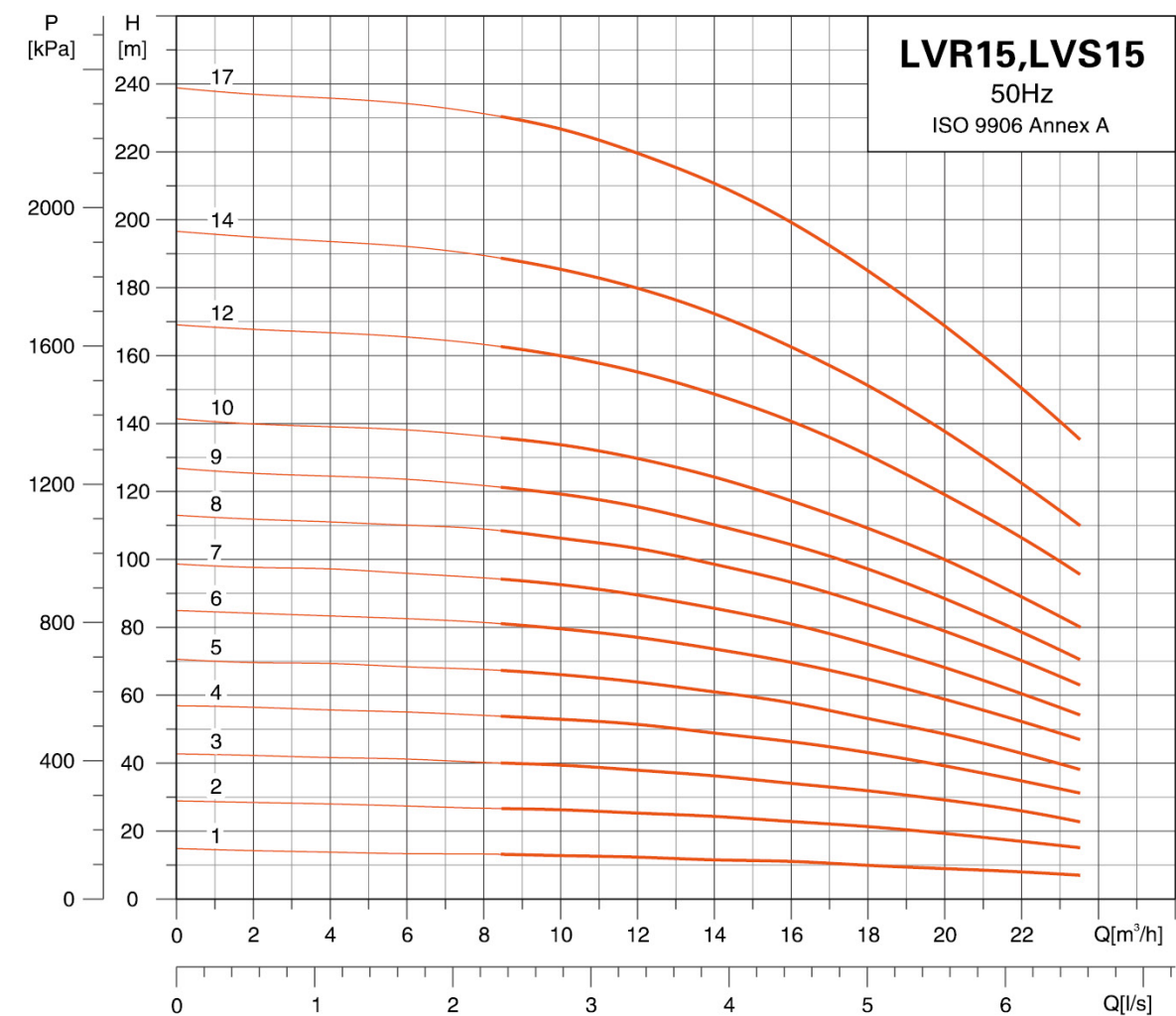


Model	DIN FLANGE (LVR)		DIN FLANGE (LVS)		D1	D2	N.W. (kgs)	Motor Mounting Code
	B1	B1+B2	B1	B1+B2				
10-2	351	619	353	621	150	125	40.6	V18
10-3	381	649	383	651	150	125	41.1	
10-4	427	745	429	747	164	127	48.5	
10-5	457	775	459	777	164	127	51.9	
10-6	487	805	489	807	164	127	52.5	
10-7	522	862	524	864	186	120	60.6	
10-8	552	892	554	894	186	120	62.1	
10-9	582	922	584	924	186	120	63.2	
10-10	612	952	614	954	186	120	66.5	
10-12	672	1012	674	1014	186	120	73.1	
10-14	764	1161	766	1163	210	142	77.1	
10-16	824	1221	826	1223	210	142	80.3	
10-18	884	1281	886	1283	210	142	86.9	
10-20	944	1341	946	1343	210	142	86.9	
10-22	1004	1401	1006	1403	210	142	95.6	

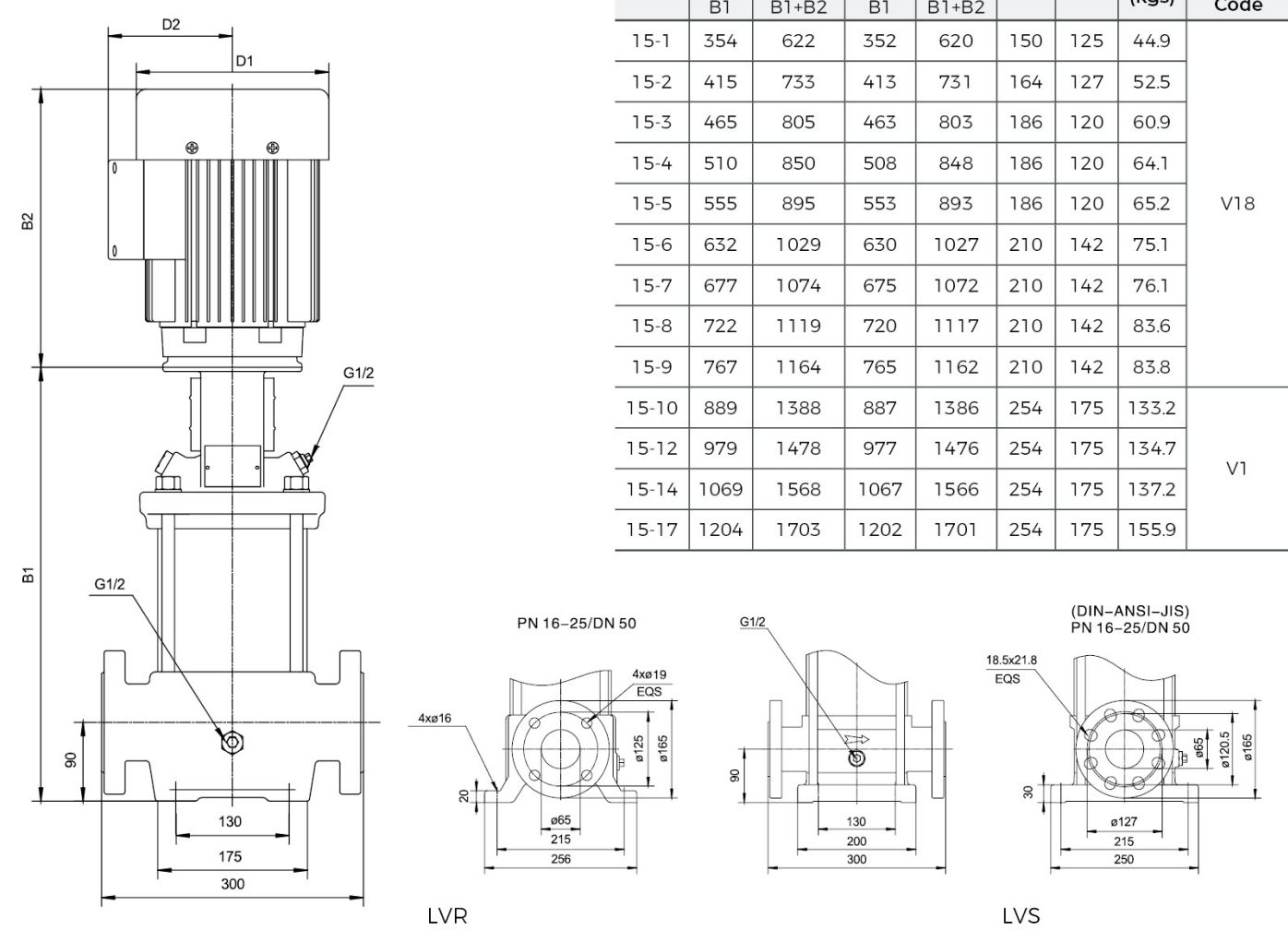
Technical Data

Model	Power	Q(m³/h)	5	6	8	10	12	13
LVR(S)10-2	0.75	H(m)	20	19	18	15	12	10
LVR(S)10-3	1.1		30	29	26	23	18	16
LVR(S)10-4	1.5		40	40	36	32	26	23
LVR(S)10-5	2.2		51	50	46	40	33	29
LVR(S)10-6	2.2		61	59	55	48	39	35
LVR(S)10-7	3		72	70	65	56	46	41
LVR(S)10-8	3		82	80	74	64	53	46
LVR(S)10-9	3		92	89	82	70	59	52
LVR(S)10-10	4		102	100	93	80	66	59
LVR(S)10-12	4		122	119	110	95	79	69
LVR(S)10-14	5.5		142	140	130	113	94	82
LVR(S)10-16	5.5		162	159	148	128	106	93
LVR(S)10-18	7.5		185	182	169	147	123	109
LVR(S)10-20	7.5		206	201	188	164	136	119
LVR(S)10-22	7.5		226	221	206	178	147	130

Hydraulic Performance Curves



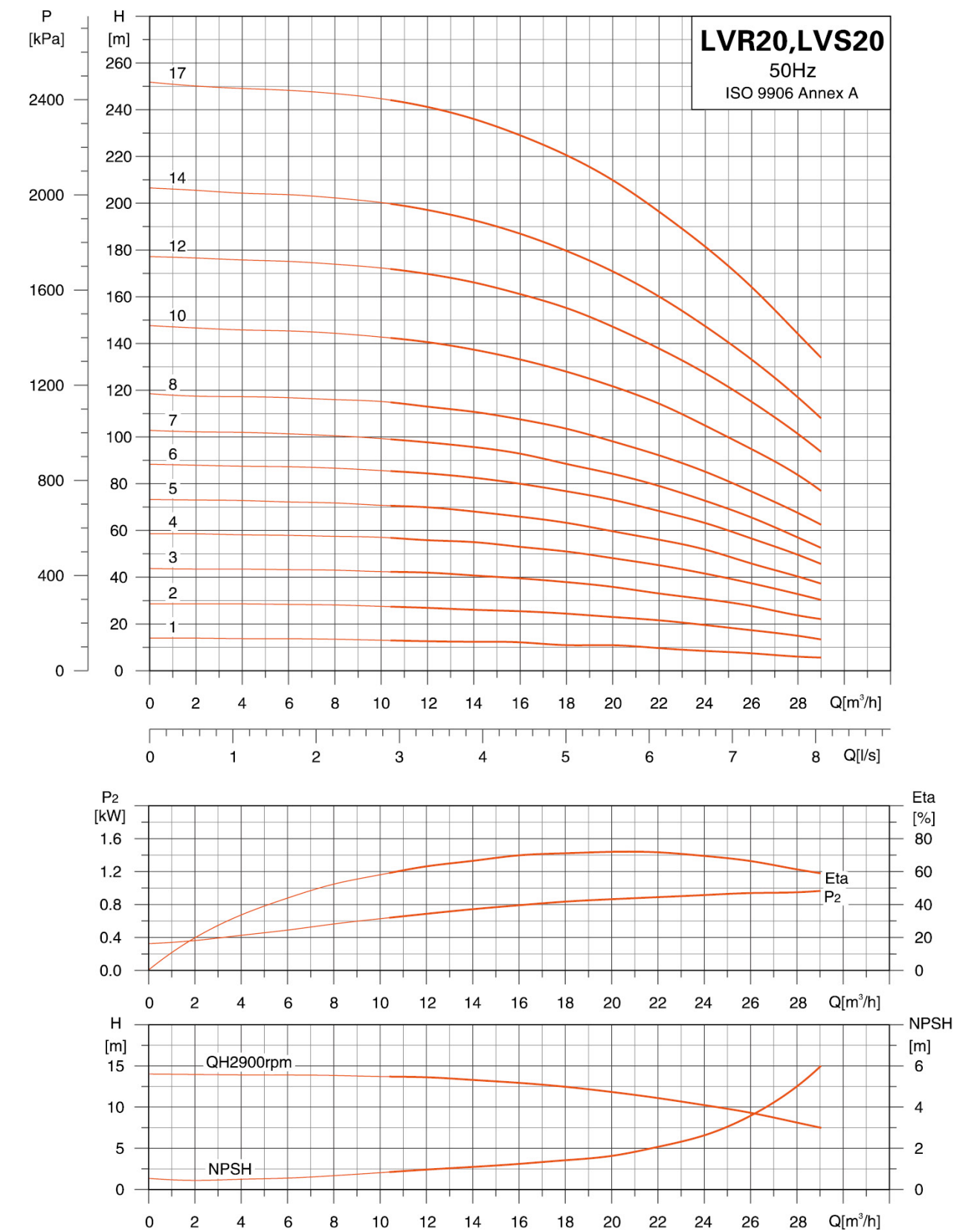
Dimension Drawing



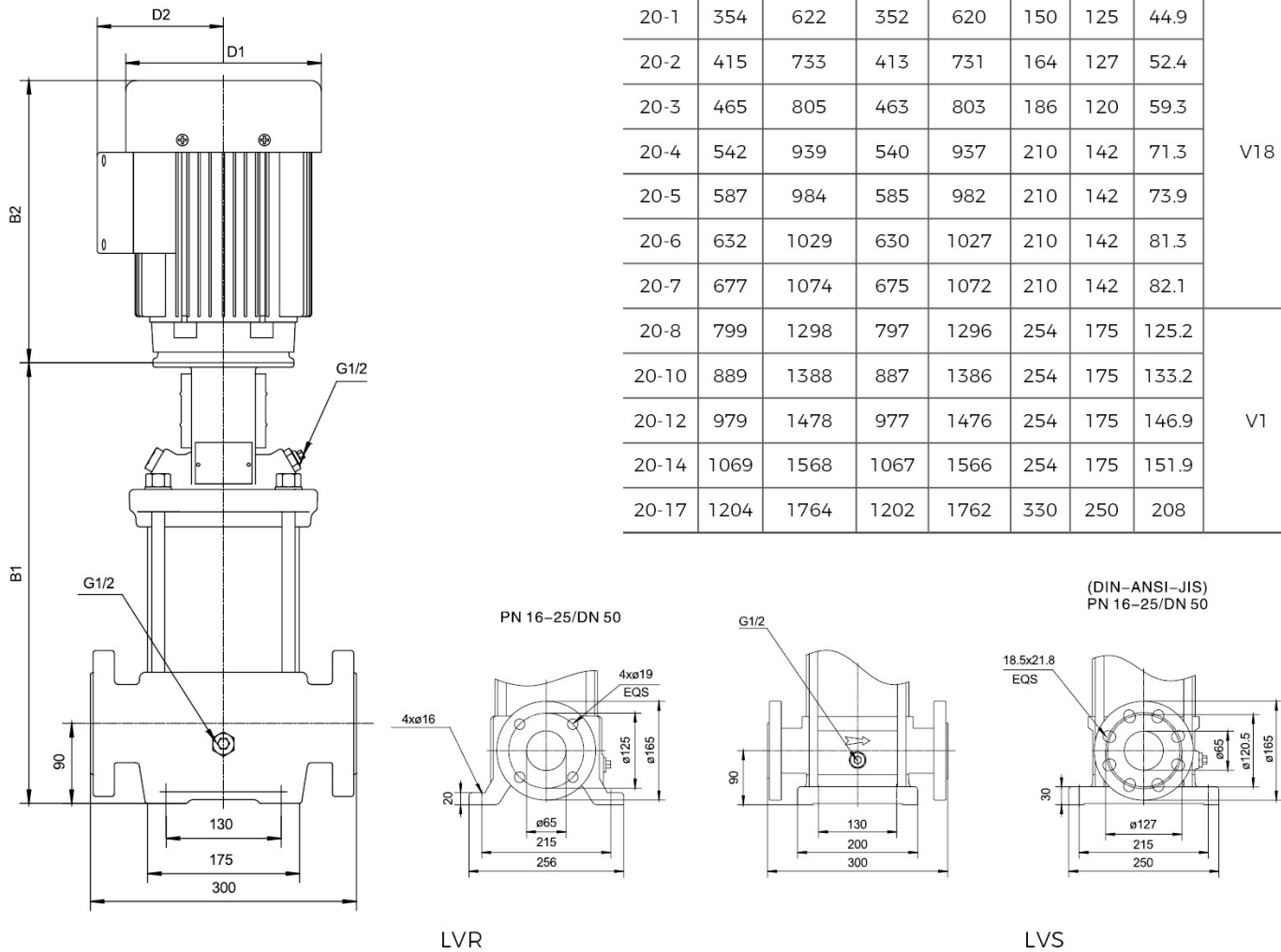
Technical Data

Model	Power	Q(m³/h)	8.5	12	15	18	21	23.5
LVR(S)15-1	1.1	H(m)	13	12	11	10	9	7
LVR(S)15-2	2.2		26	25	23	21	18	15
LVR(S)15-3	3		40	38	35	32	28	22
LVR(S)15-4	4		55	51	47	43	38	32
LVR(S)15-5	4		68	64	58	53	48	38
LVR(S)15-6	5.5		81	77	71	64	58	47
LVR(S)15-7	5.5		95	89	83	75	65	52
LVR(S)15-8	7.5		108	103	96	86	75	62
LVR(S)15-9	7.5		121	115	108	97	84	70
LVR(S)15-10	11		136	129	120	109	95	80
LVR(S)15-12	11		164	155	142	130	114	95
LVR(S)15-14	11		189	180	166	151	130	110
LVR(S)15-17	15		231	219	205	185	160	135

Hydraulic Performance Curves



Dimension Drawing

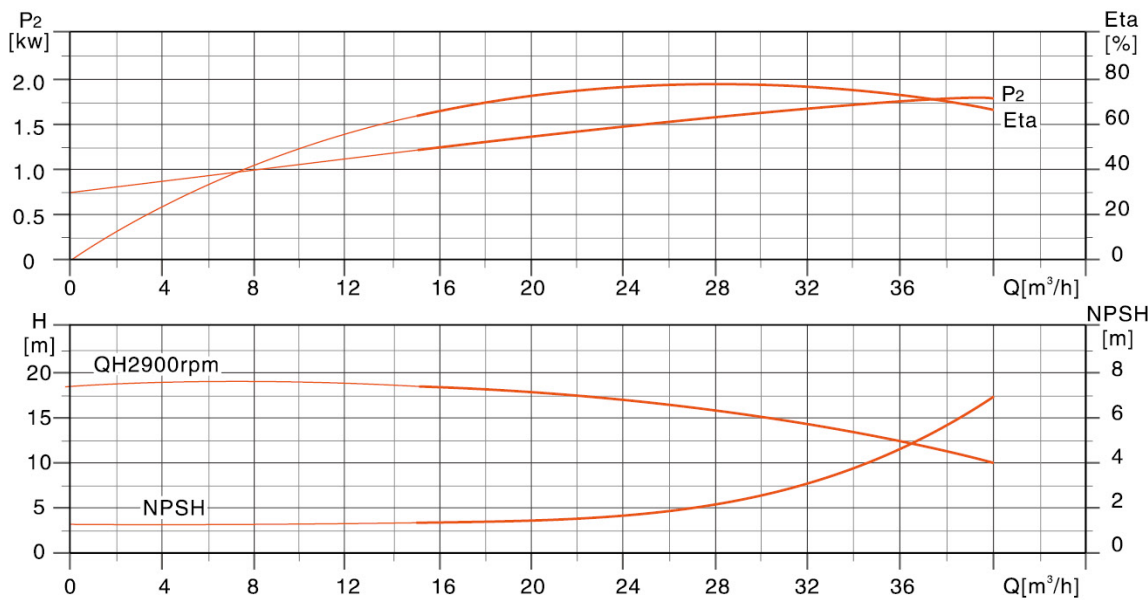
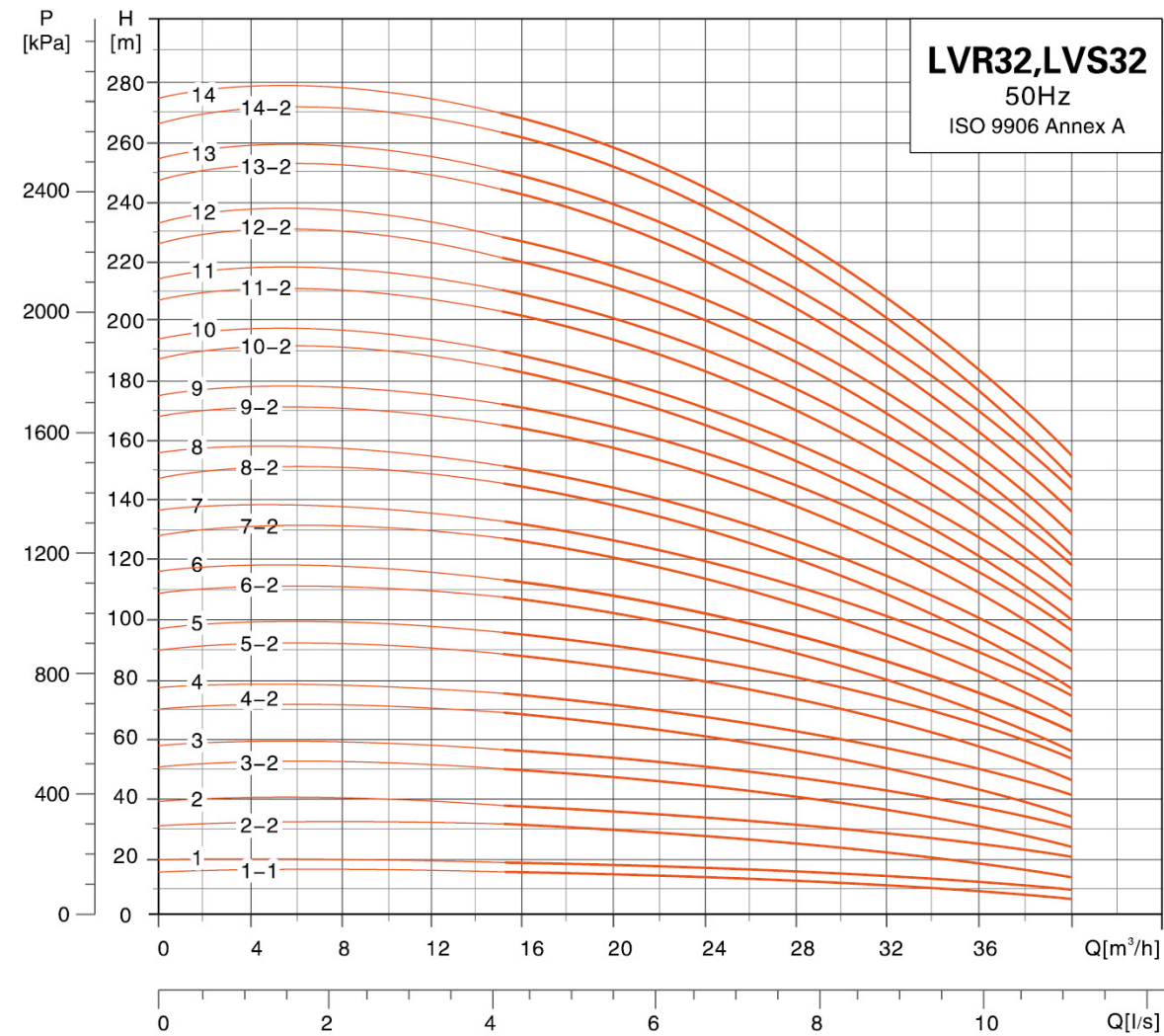


Model	DIN FLANGE (LVR)		DIN FLANGE (LVS)		D1	D2	N.W. (kgs)	Motor Mounting Code
	B1	B1+B2	B1	B1+B2				
20-1	354	622	352	620	150	125	44.9	V18
20-2	415	733	413	731	164	127	52.4	
20-3	465	805	463	803	186	120	59.3	
20-4	542	939	540	937	210	142	71.3	
20-5	587	984	585	982	210	142	73.9	
20-6	632	1029	630	1027	210	142	81.3	
20-7	677	1074	675	1072	210	142	82.1	
20-8	799	1298	797	1296	254	175	125.2	V1
20-10	889	1388	887	1386	254	175	133.2	
20-12	979	1478	977	1476	254	175	146.9	
20-14	1069	1568	1067	1566	254	175	151.9	
20-17	1204	1764	1202	1762	330	250	208	

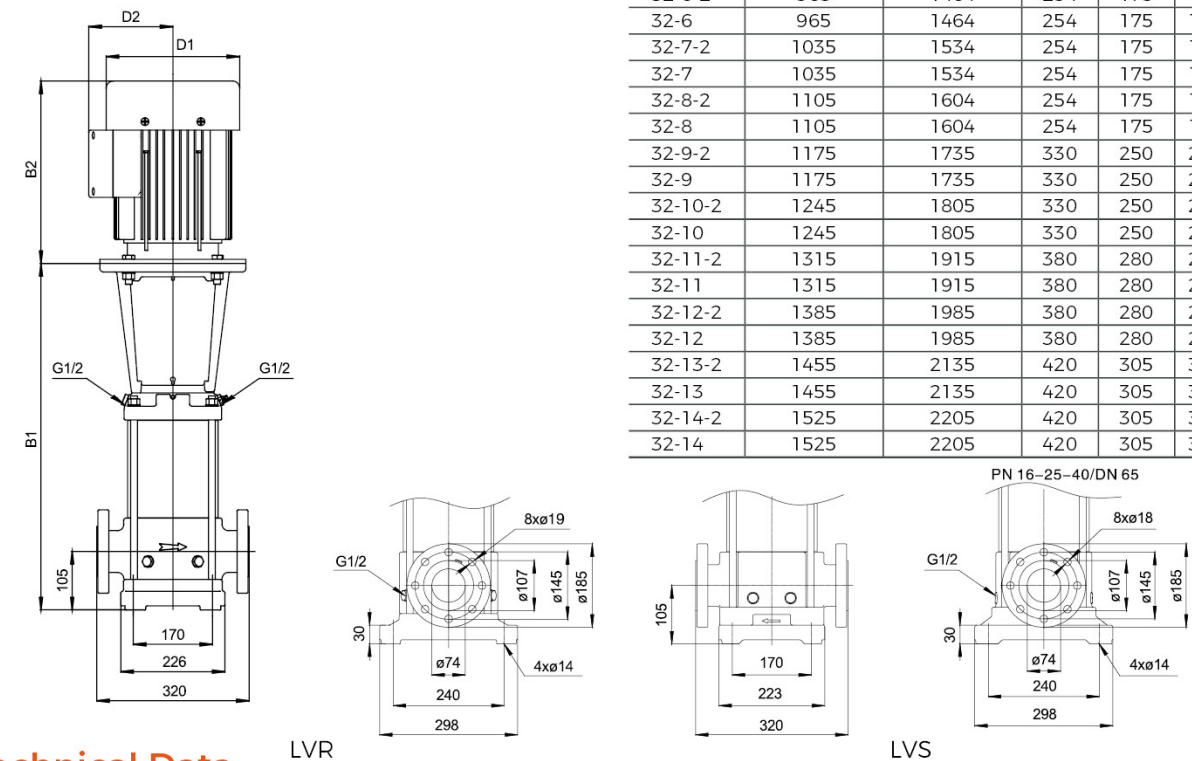
Technical Data

Model	Power	Q(m³/h)	10.5	12	16	20	24	28	28.5
LVR(S)20-1	1.1	H(m)	13	13	12	10.5	9	6.5	6
LVR(S)20-2	2.2		28	27	25	22.5	19	15	13
LVR(S)20-3	4		42	42	39	36	30	23	22
LVR(S)20-4	5.5		58	56	53	48	41	32	30
LVR(S)20-5	5.5		71	70	66	60	52	40	38
LVR(S)20-6	7.5		86	84	80	72	62	49	45
LVR(S)20-7	7.5		99	97	93	84	72	57	52
LVR(S)20-8	11		115	113	107	96	85	67	63
LVR(S)20-10	11		142	140	132	120	105	83	78
LVR(S)20-12	15		172	169	161	144	127	101	94
LVR(S)20-14	15		200	197	187	168	147	117	109
LVR(S)20-17	18.5		245	241	229	205	181	144	135

Hydraulic Performance Curves



Dimension Drawing

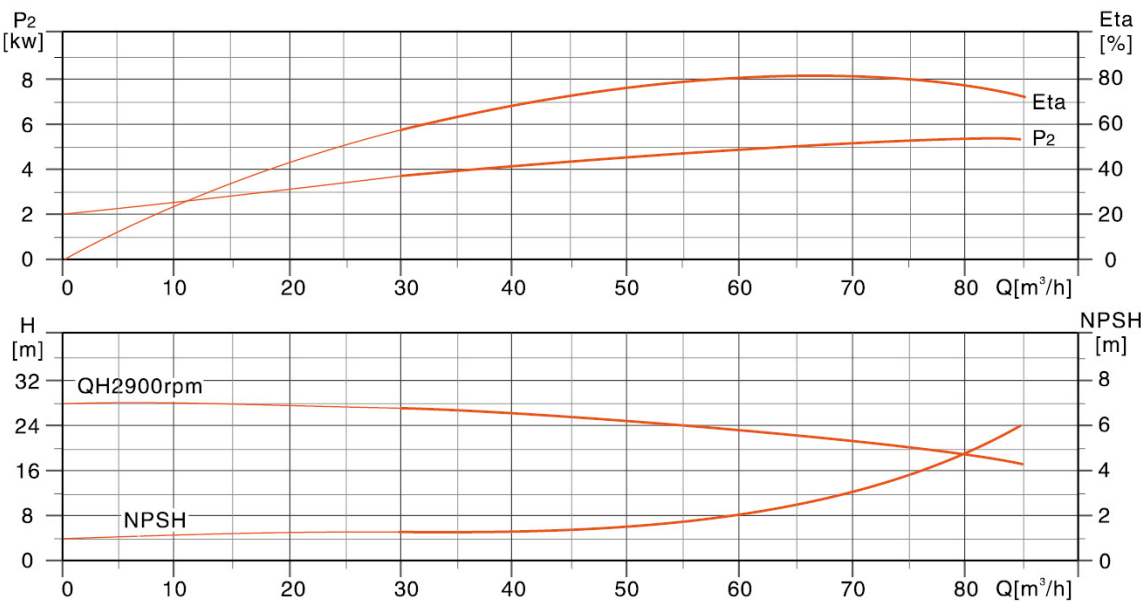
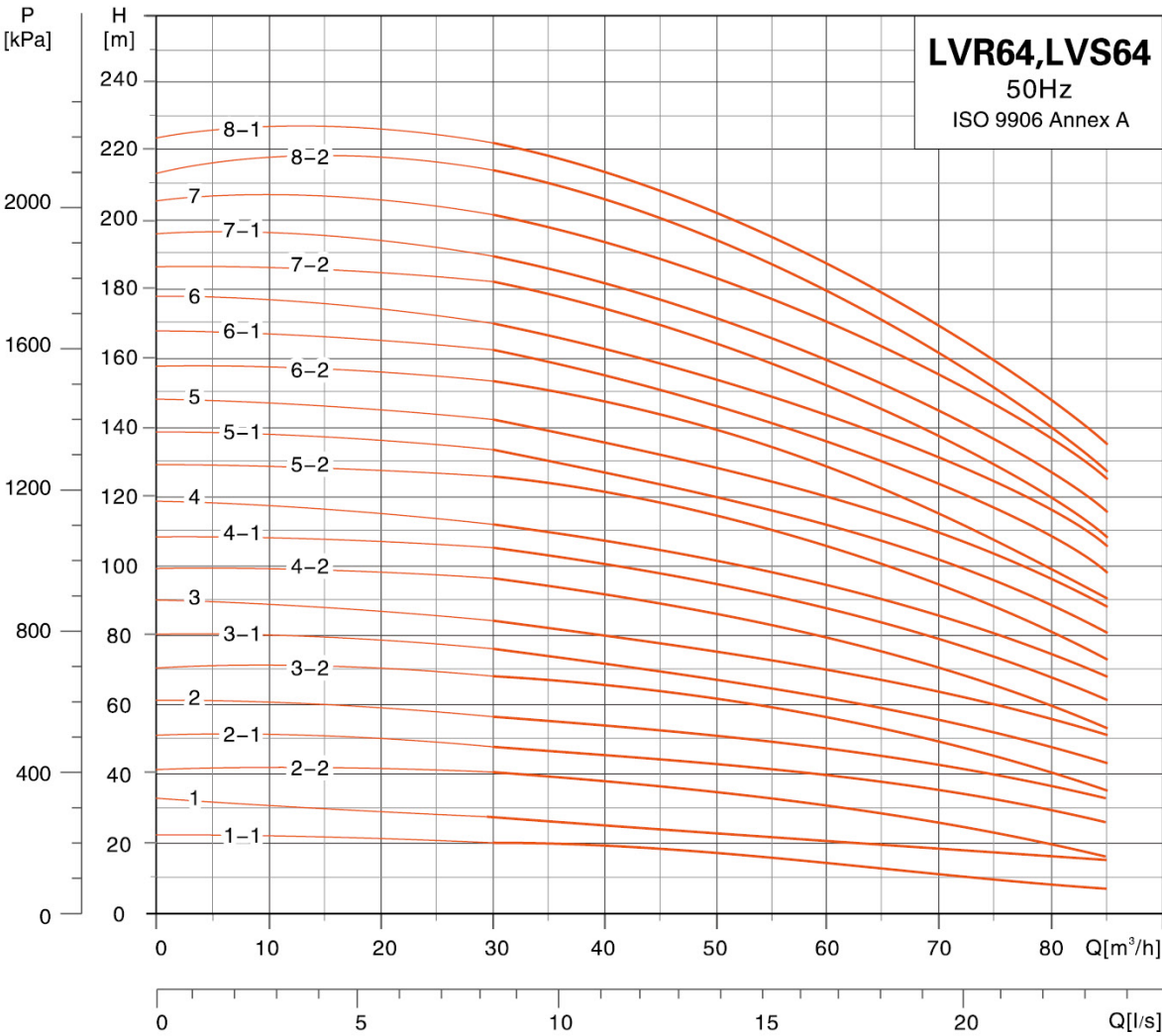


Model	DIN FLANGE(LVR, LVS)		D1	D2	N.W. (kgs)	Motor Mounting Code
	B1	B1+B2				
32-1-1	455	773	164	127	61.7	V18
32-1	455	773	164	127	63.7	
32-2-2	525	865	186	120	72.6	
32-2	525	865	186	120	74.9	
32-3-2	645	1042	210	142	100.9	V1
32-3	645	1042	210	142	100.6	
32-4-2	715	1112	210	142	108.7	
32-4	715	1112	210	142	108.7	
32-5-2	895	1394	254	175	149.2	
32-5	895	1394	254	175	149.2	
32-6-2	965	1464	254	175	152.1	
32-6	965	1464	254	175	152.1	
32-7-2	1035	1534	254	175	167.6	
32-7	1035	1534	254	175	167.6	
32-8-2	1105	1604	254	175	170.7	
32-8	1105	1604	254	175	170.7	
32-9-2	1175	1735	330	250	221.6	
32-9	1175	1735	330	250	221.6	
32-10-2	1245	1805	330	250	224.5	
32-10	1245	1805	330	250	224.5	
32-11-2	1315	1915	380	280	263.3	
32-11	1315	1915	380	280	263.4	
32-12-2	1385	1985	380	280	266.2	
32-12	1385	1985	380	280	266.2	
32-13-2	1455	2135	420	305	323.6	
32-13	1455	2135	420	305	323.6	
32-14-2	1525	2205	420	305	326.5	
32-14	1525	2205	420	305	326.5	

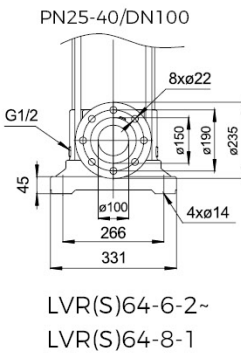
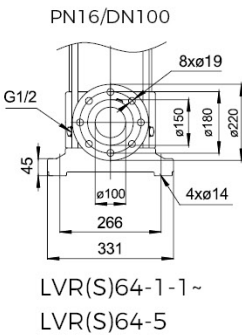
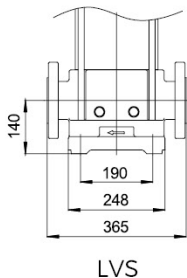
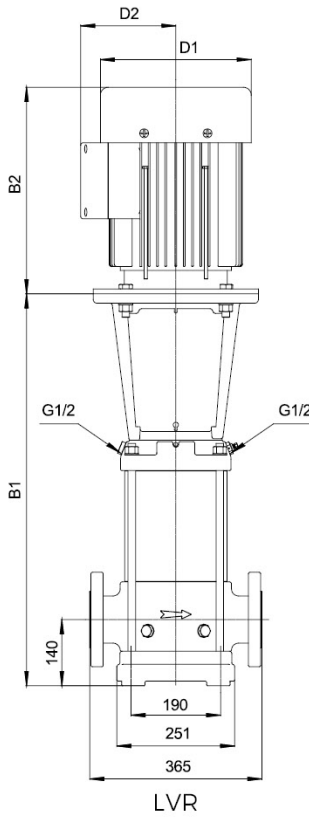
Technical Data

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

Hydraulic Performance Curves



Dimension Drawing

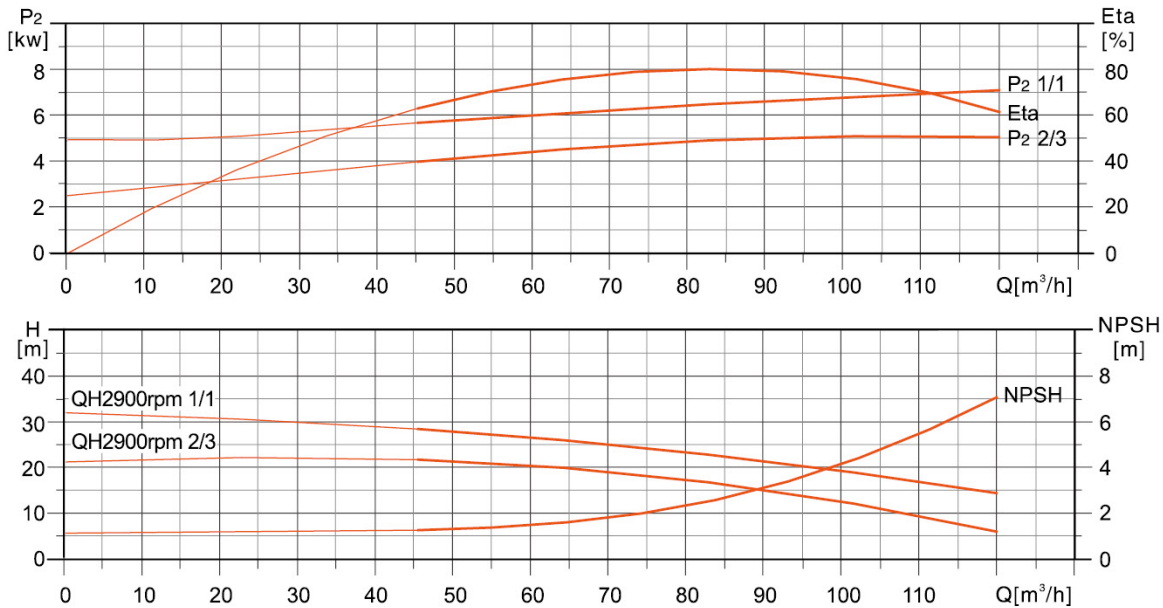
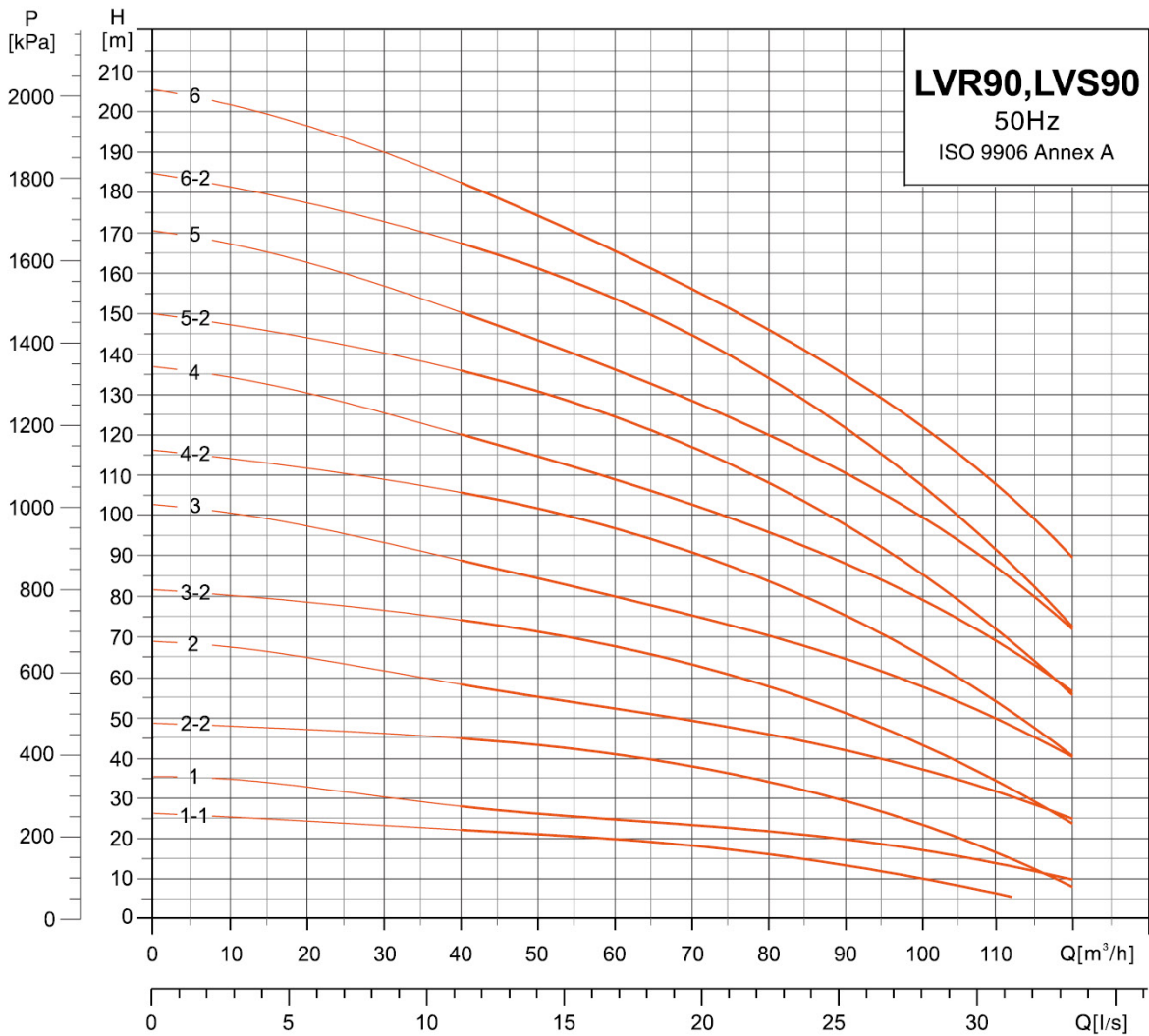


Model	DIN FLANGE(LVR, LVS)		D1	D2	N.W. (kgs)	Motor Mounting Code
	B1	B1+B2				
64-1-1	563	903	186	124	84.5	V18
64-1	563	960	210	142	110.2	
64-2-2	645	1042	210	142	117.4	
64-2-1	755	1254	254	175	156	
64-2	755	1254	254	175	156	
64-3-2	838	1337	254	175	171.9	
64-3-1	838	1337	254	175	171.9	
64-3	838	1398	330	250	221	
64-4-2	920	1480	330	250	223.9	V1
64-4-1	920	1520	380	280	261	
64-4	920	1520	380	280	261	
64-5-2	1003	1683	420	305	321.5	
64-5-1	1003	1683	420	305	321.5	
64-5	1003	1683	420	305	321.5	
64-6-2	1085	1765	420	305	324.5	
64-6-1	1085	1765	420	305	341.2	
64-6	1085	1765	420	305	341.2	
64-7-2	1168	1848	420	305	344.9	
64-7-1	1168	1848	420	305	345	
64-7	1168	1883	470	335	407.3	
64-8-2	1250	1965	470	335	410.7	
64-8-1	1250	1965	470	335	410.4	

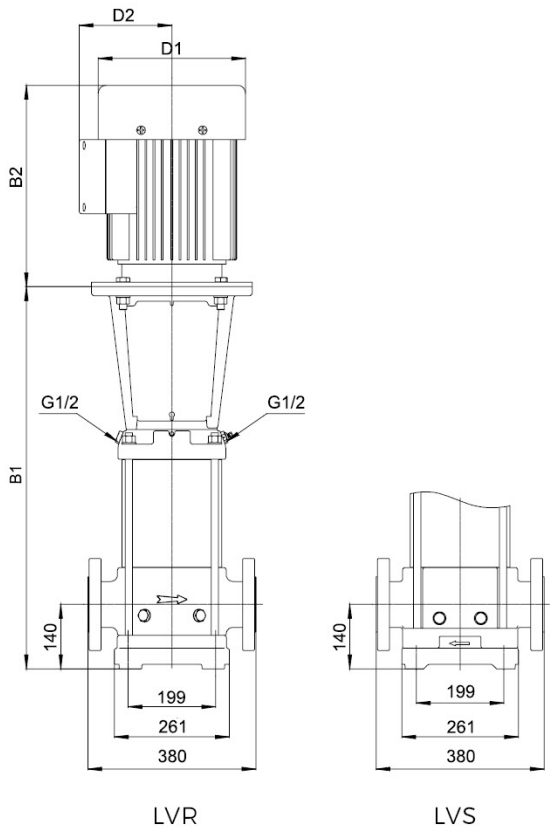
Technical Data

Model	Power	Q(m³/h)	30	40	50	64	70	80	85
LVR(S)64-1-1	4	H(m)	20	19	17.5	14	12	8.5	6
LVR(S)64-1	5.5		27	25.5	23.5	21	20	17	15
LVR(S)64-2-2	7.5		40	38	35.5	29	25.5	19	15
LVR(S)64-2-1	11		48	45.5	42.5	37	34.5	29	25
LVR(S)64-2	11		55	52.5	49.5	44	41.5	36	33
LVR(S)64-3-2	15		68	65.5	60	52.5	48.5	40	35
LVR(S)64-3-1	15		75.5	72	67.5	59.5	55.5	47	42
LVR(S)64-3	18.5		83.5	80	76	68	64	56	51
LVR(S)64-4-2	18.5		96	92.5	87	75.5	70	59	52
LVR(S)64-4-1	22		104	100	94.5	83.5	78.5	67.5	61
LVR(S)64-4	22		112	107	102	91	85.5	74.5	69
LVR(S)64-5-2	30		126	122	115	101	94	80.5	73
LVR(S)64-5-1	30		134	129	122	109	102	88	81
LVR(S)64-5	30		141	136	129	116	109	96	89
LVR(S)64-6-2	30		154	148	140	124	115	99	90
LVR(S)64-6-1	37		162	156	148	132	124	108	98
LVR(S)64-6	37		170	163	155	139	131	116	107
LVR(S)64-7-2	37	H(m)	182	176	166	147	138	119	109
LVR(S)64-7-1	37		190	183	173	155	145	126	110
LVR(S)64-7	45		202	194	184	165	155	136	126
LVR(S)64-8-2	45		214	207	196	174	163	140	128
LVR(S)64-8-1	45		222	214	203	181	170	148	135

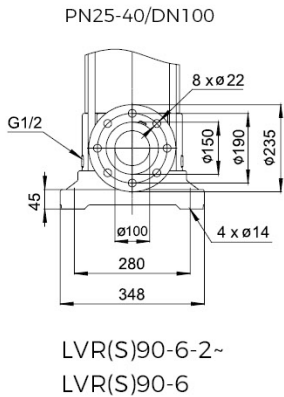
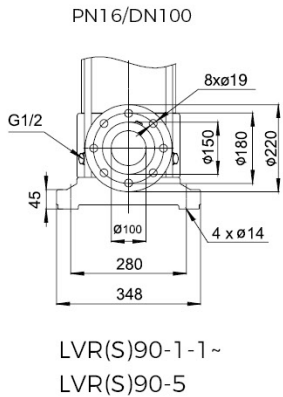
Hydraulic Performance Curves



Dimension Drawing



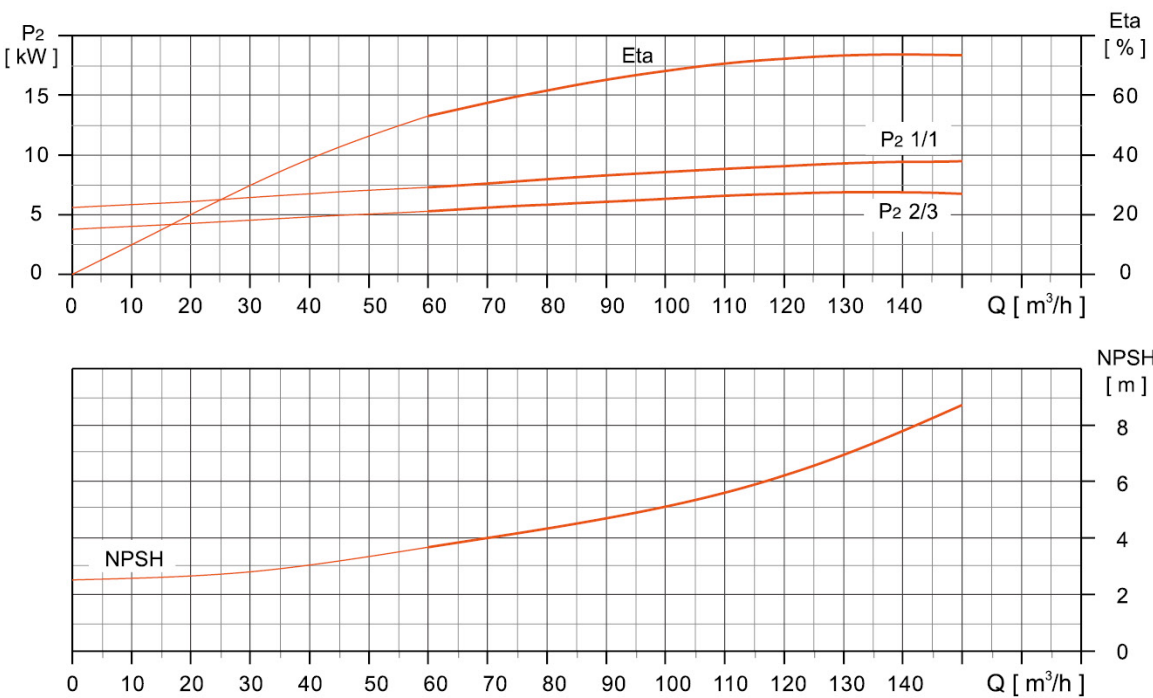
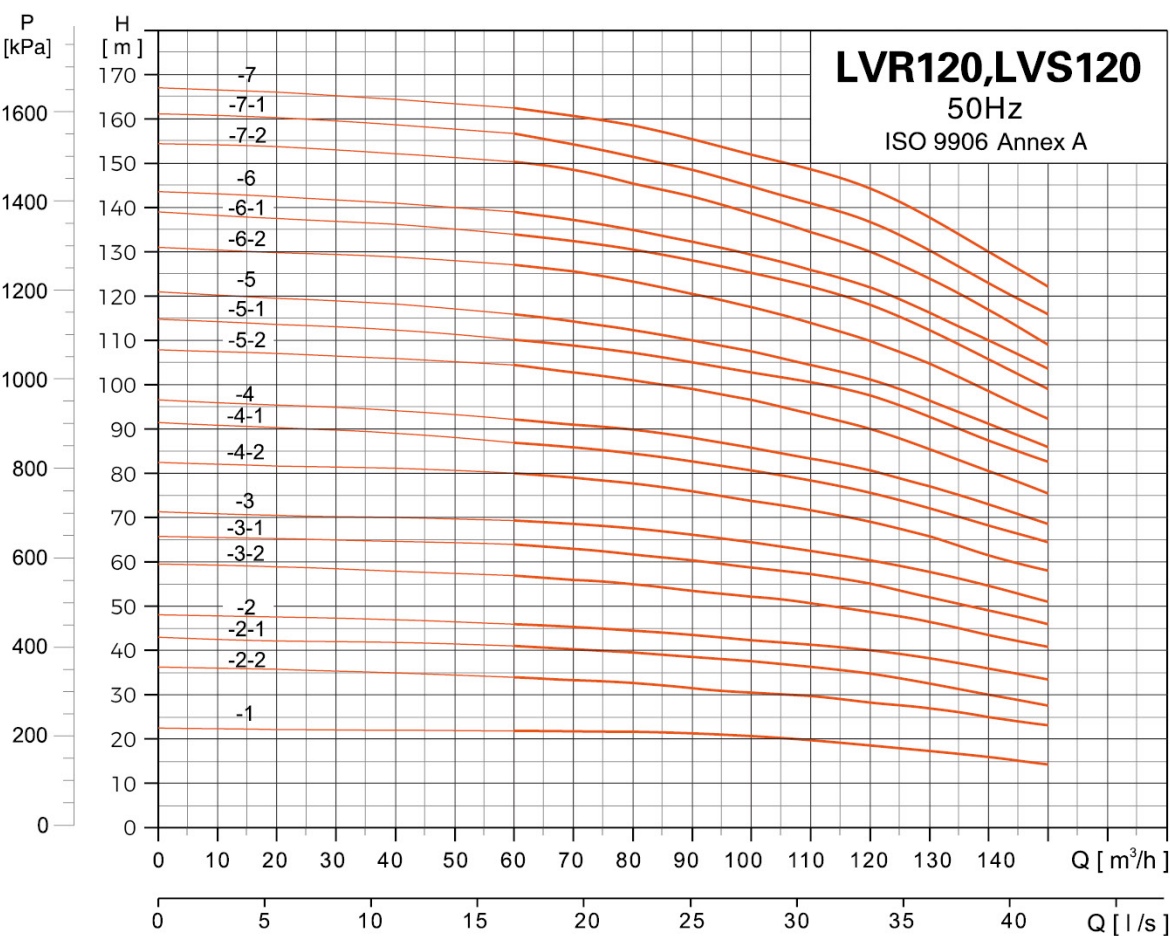
Model	DIN FLANGE(LVR, LVS)		D1	D2	N.W. (kgs)	Motor Mounting Code
	B1	B1+B2				
90-1-1	572.5	969.5	210	142	116	V1
90-1	572.5	969.5	210	142	121.2	
90-2-2	774.5	1273.5	254	175	162.2	
90-2	774.5	1273.5	254	175	174.9	
90-3-2	866.5	1426.5	330	250	228	
90-3	866.5	1466.5	380	280	264	
90-4-2	958.5	1638.5	420	305	326	
90-4	958.5	1638.5	420	305	326	
90-5-2	1051	1731	420	305	354	
90-5	1051	1731	420	305	354	
90-6-2	1143	1858	470	335	415	
90-6	1143	1858	470	335	415	



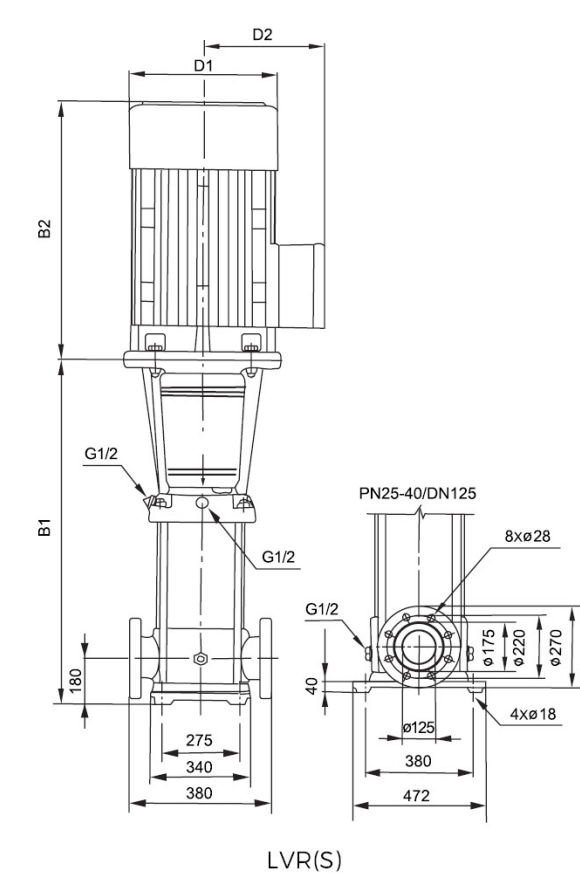
Technical Data

Model	Power	Q(m³/h)	40	50	60	70	80	90	100	110	120
LVR(S)90-1-1	5.5	H(m)	22	21	20	18	16	14	10.5	6.5	-
LVR(S)90-1	7.5		38	26	25	23.5	22	20	17.5	14	10
LVR(S)90-2-2	11		45	43	41	38	34.5	29.5	24	17	8
LVR(S)90-2	15		58	55	52	49	46	42	37.5	31.5	25
LVR(S)90-3-2	18.5		74	71.5	68	63.5	58	51	44	35	24
LVR(S)90-3	22		88	84.5	80	75.5	70.5	64	58.5	50.5	40
LVR(S)90-4-2	30		106	102	97	91	84.5	75	65.5	54	40
LVR(S)90-4	30		120	114	109	103	96	87.5	79.5	69.5	57
LVR(S)90-5-2	37		136	131	125	118	109	97	86.5	72	55
LVR(S)90-5	37		150	144	136	129	121	109.5	101	87	72
LVR(S)90-6-2	45		166	161	154	145	135	121	108	91.5	72
LVR(S)90-6	45		182	175	166	156	146	133	123	108	90

Hydraulic Performance Curves



Dimension Drawing

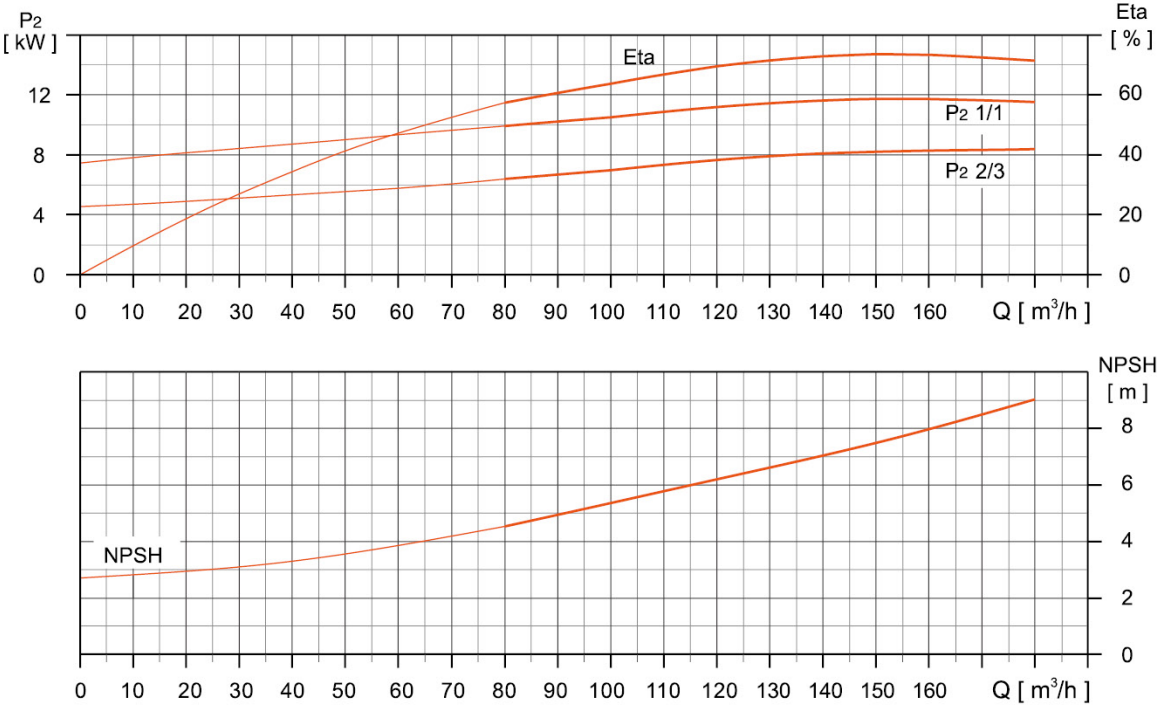
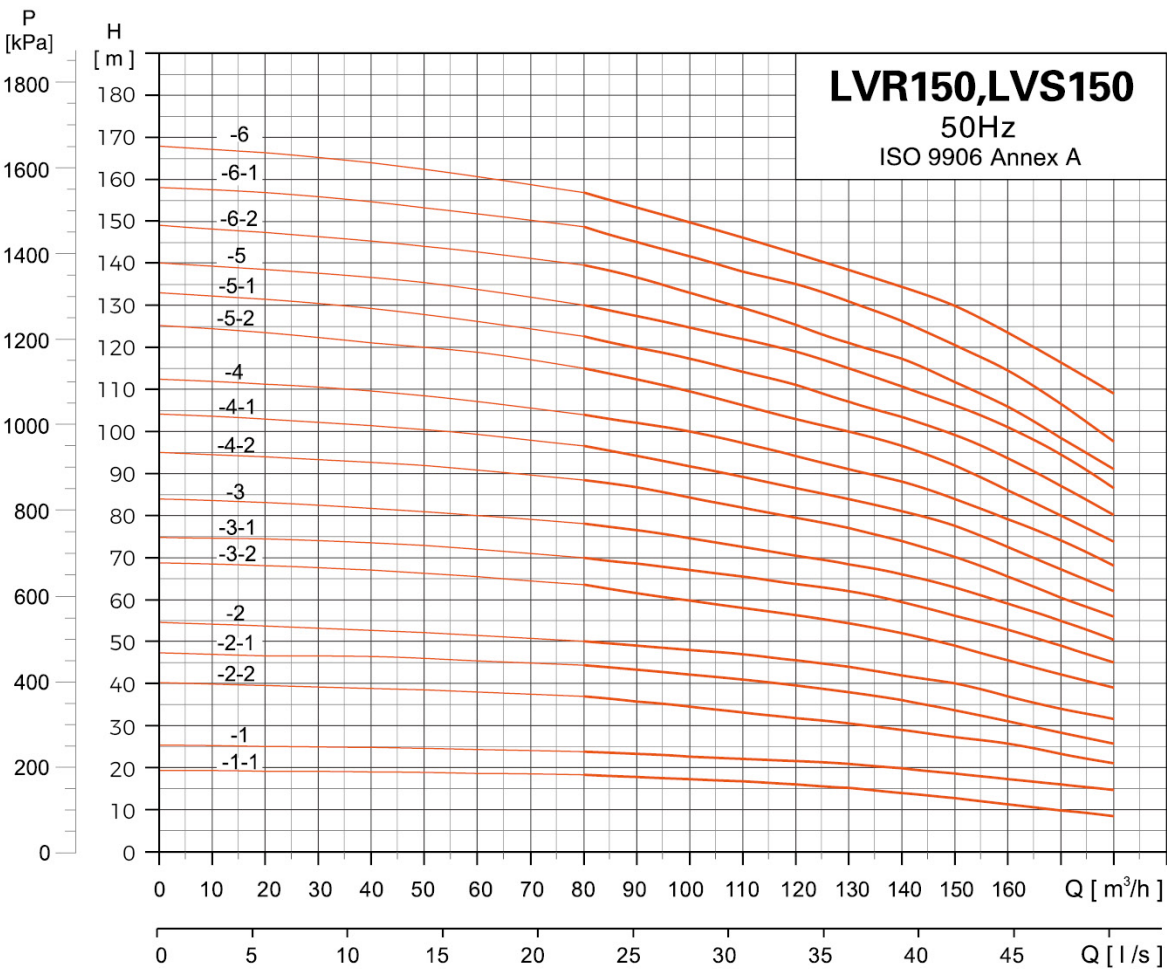


Model	DIN FLANGE(LVR, LVS)		D1	D2	N.W. (kgs)	Motor Mounting Code
	B1	B1+B2				
120-1	840	1339	254	175	186	V1
120-2-2	1000	1499	254	175	210	
120-2-1	1000	1560	330	250	250	
120-2	1000	1600	380	280	285	
120-3-2	1160	1840	420	305	326	
120-3-1	1160	1840	420	305	360	
120-3	1160	1840	420	305	360	
120-4-2	1320	2000	420	305	400	
120-4-1	1320	2000	420	305	400	
120-4	1320	2035	470	335	460	
120-5-2	1480	2195	470	335	470	
120-5-1	1480	2195	470	335	470	
120-5	1510	2295	510	370	575	
120-6-2	1670	2455	510	370	585	
120-6-1	1670	2455	510	370	585	
120-6	1670	2515	580	410	705	
120-7-2	1830	2675	580	410	715	
120-7-1	1830	2675	580	410	715	
120-7	1830	2675	580	410	715	

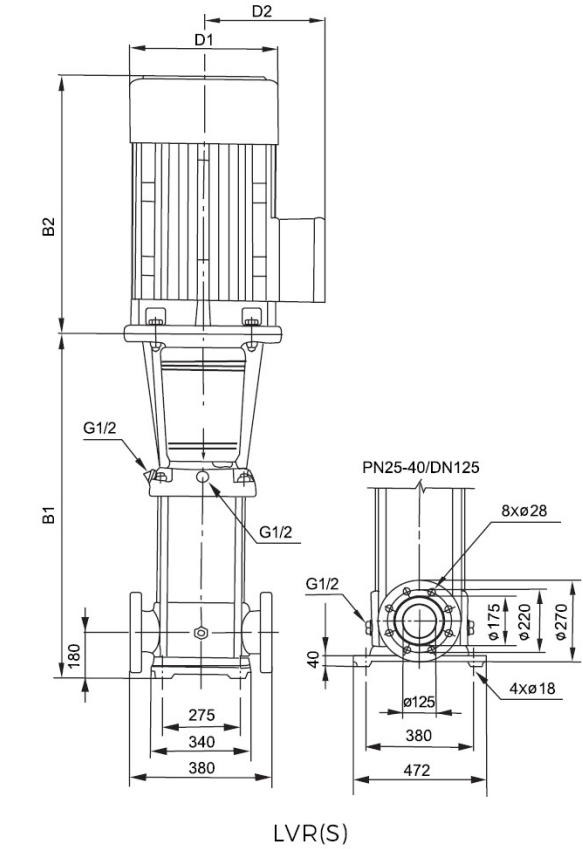
Technical Data

Model	Power	Q(m³/h)	60	70	80	90	100	110	120	130	140	150
LVR(S)120-1	11	H(m)	22	21.5	21.6	21	20.5	19.5	18.5	17	16	15
LVR(S)120-2-2	15		34	33.6	33	31	30.2	30	28.5	27	25	24
LVR(S)120-2-1	18.5		41	40	39.5	38.5	37	36.5	34.5	32.5	30	27.5
LVR(S)120-2	22		46	45	44.5	43.5	42.4	41	40	38	36	33.5
LVR(S)120-3-2	30		57	56	55	53.5	52	51	49	46.5	43.5	41
LVR(S)120-3-1	30		64	63	62	60	58.5	57.5	55.5	52	49	46
LVR(S)120-3	30		69.5	68.5	67.5	66	64.4	62.5	61	57.5	54.5	51
LVR(S)120-4-2	37		80.5	79	78	76	73.5	72	69	66	61.5	58
LVR(S)120-4-1	37		87	86	84.5	82	80	78	76	72	68	64.5
LVR(S)120-4	45		92.5	91	90	88	85.5	83	81	77	73	68.5
LVR(S)120-5-2	45		104.5	103	101	99	96	93	90	85.5	80.5	75.5
LVR(S)120-5-1	45		110.5	109	107.5	105	102	100	97	92	86.5	83
LVR(S)120-5	55		115.5	114	113	110	107.5	104.5	101.5	96	91	86
LVR(S)120-6-2	55		128	125.5	123	121	117.3	113.5	110	104.5	98.5	92.5
LVR(S)120-6-1	55		134	132	130.5	127	124	121	118	111	105	100
LVR(S)120-6	75		139	137	135	132	128.8	126	123	116	110	104
LVR(S)120-7-2	75		151	148	145.5	143	138.6	134	130	123.5	116.5	109
LVR(S)120-7-1	75		156.5	154	152	148.5	144.5	141	137.5	130	123	116.5
LVR(S)120-7	75		162.5	160.5	158.5	155	151	148	145	137	129	123

Hydraulic Performance Curves



Dimension Drawing

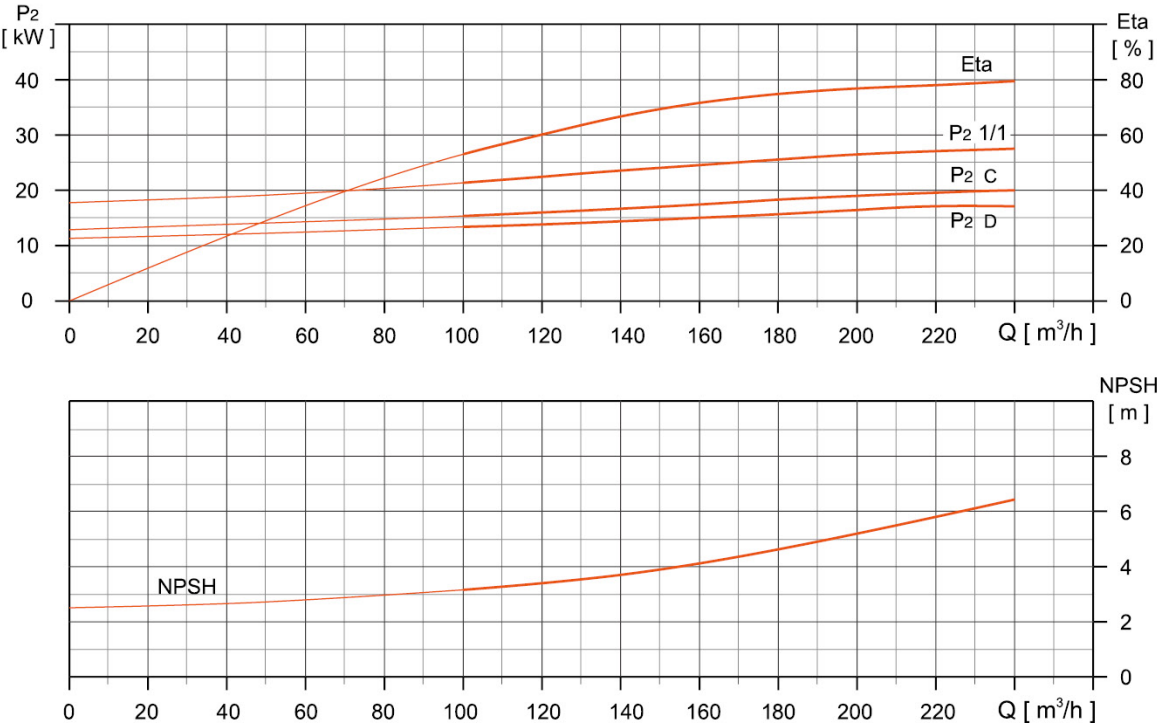
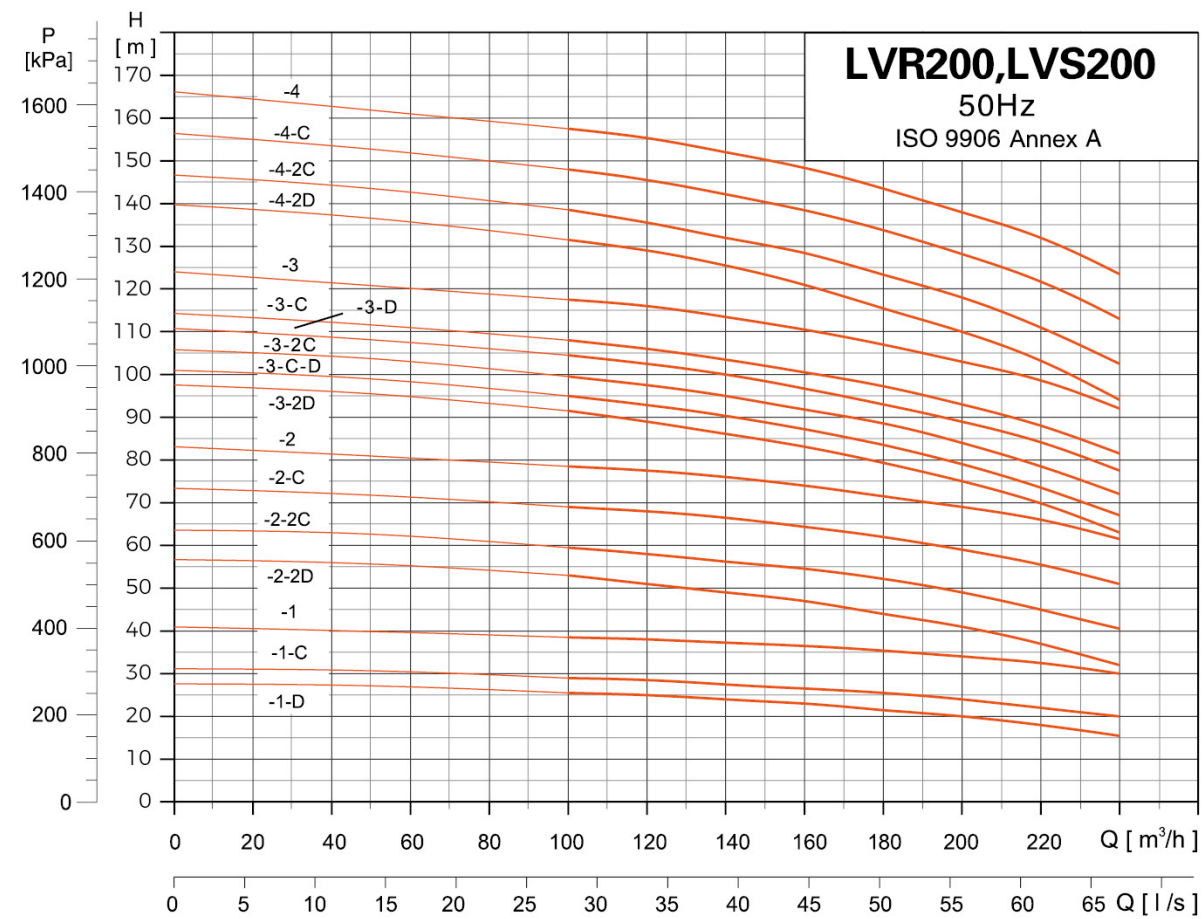


Model	DIN FLANGE(LVR, LVS)		D1	D2	N.W. (kgs)	Motor Mounting Code
	B1	B1+B2				
150-1-1	840	1339	254	175	186	V1
150-1	840	1339	254	175	200	
150-2-2	1000	1560	330	250	250	
150-2-1	1000	1600	380	280	295	
150-2	1000	1680	420	305	317	
150-3-2	1160	1840	420	305	360	
150-3-1	1160	1840	420	305	360	
150-3	1160	1840	420	305	385	
150-4-2	1320	2035	470	335	460	
150-4-1	1320	2035	470	335	460	
150-4	1350	2135	510	370	560	
150-5-2	1510	2295	510	370	570	
150-5-1	1510	2355	580	410	690	
150-5	1510	2355	580	410	690	
150-6-2	1670	2515	580	410	700	
150-6-1	1670	2515	580	410	700	
150-6	1670	2515	580	410	700	

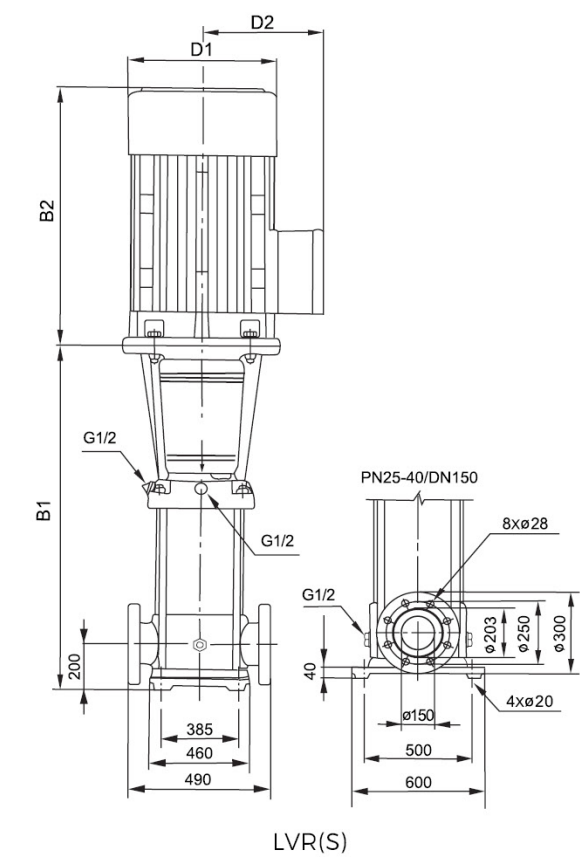
Technical Data

Model	Power	Q(m³/h)	80	90	100	110	120	130	140	150	160	170	180
LVR(S)150-1-1	11	H(m)	18.3	17.8	17.3	17	16	15	14	12.5	11	10	8.5
LVR(S)150-1	15		24	23	22.5	22	21.5	20.5	20	18.5	17	16	15
LVR(S)150-2-2	18.5		37	35.5	34	30	32	31	29	27.5	26	23	21
LVR(S)150-2-1	22		44.3	43	42	40	39	38.5	37.5	35	33	30	27
LVR(S)150-2	30		50	49	48	47	45.5	44	42	40	37	34	32
LVR(S)150-3-2	30		63.5	61	59	57.5	56	54.5	53	49	45.5	42	39
LVR(S)150-3-1	37		70	68	67	65	63	62	60	56	53	49	45
LVR(S)150-3	37		78	76.5	75	73	70.5	68	66	63	59	55	50.5
LVR(S)150-4-2	45		89	87	84	81.5	79	77	74.5	70.5	65.5	60	56
LVR(S)150-4-1	45		96.5	94	91.5	89	86.5	84	81.5	77	72.5	67	62
LVR(S)150-4	55		104	102	100	97	95	91	88	84	79.5	74	68
LVR(S)150-5-2	55		115.5	112	109	106	102.5	100	97	92	86	79	73.5
LVR(S)150-5-1	75		122.5	119.5	117	113.5	111.5	107.5	104.5	99	93.5	87	80
LVR(S)150-5	75		130	127.5	125	121	119	115	111.5	106.5	101	94.5	86.5
LVR(S)150-6-2	75		140	134	133	130	126	121	118	112	106	98	91
LVR(S)150-6-1	75		148.5	145	141.7	137.5	135	131	127	120.5	114.5	106.5	97.5
LVR(S)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	N.W. (kgs)	Motor Mounting Code
	B1	B1+B2				
200-1-D	907	1467	330	250	311	V1
200-1-C	907	1507	380	280	347	
200-1	907	1587	420	305	403	
200-2-2D	1101	1781	420	305	447	
200-2-2C	1101	1816	470	335	504	
200-2-C	1131	1916	510	370	595	
200-2	1131	1916	510	370	595	
200-3-2D	1325	2170	580	410	748	
200-3-C-D	1325	2170	580	410	748	
200-3-2C	1325	2170	580	410	748	
200-3-D	1325	2170	580	410	748	
200-3-C	1325	2170	580	410	748	
200-3	1325	2220	580	410	817	
200-4-2D	1519	2414	580	410	830	
200-4-2C	1519	2619	645	530	1180	
200-4-C	1519	2619	645	530	1180	
200-4	1519	2619	645	530	1180	

Technical Data

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

WTR/WTS
Stainless Steel Vertical
Multistage Pump For RO System



Application

- RO System, ultra-filtration systems, distillation systems, separators
- 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
- Sprinkler irrigation, drip-feed irrigation
- Food & beverage industry
- Fire fighting system

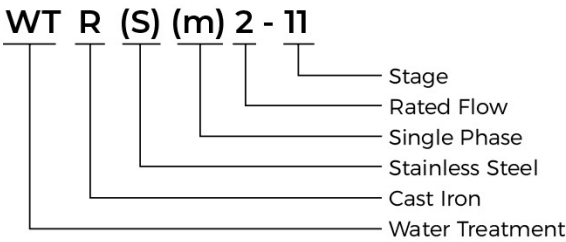
Operating Conditions

- 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: - 15°C ~+ 70°C
- Flow ranges: 1- 28.5 m³/h
- Liquid pH value: 3 - 9
- Max. ambient temperature: +40°C
- Max. operating pressure: 25 bar
- Altitude: up to 1000 m

Motor

- Totally enclosed & Fan-cooled
- Protection class: IPX4

Identification Codes



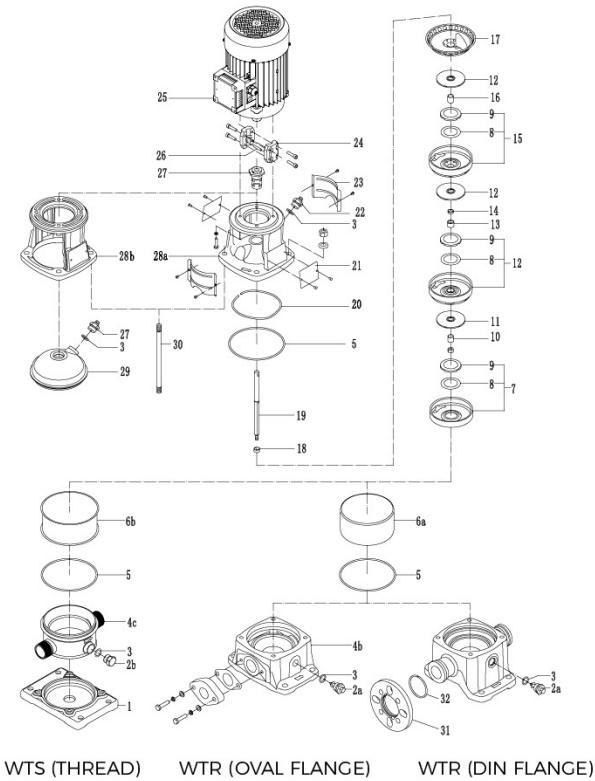
Maximum Inlet Pressure

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.

Table with 4 columns: Model, WTR Max. Operating Pressure (bar) (Oval Flange, DIN Flange), WTS Max. Operation Pressure (bar)

Table with 2 columns: Model, Max. Inlet Pressure (bar)

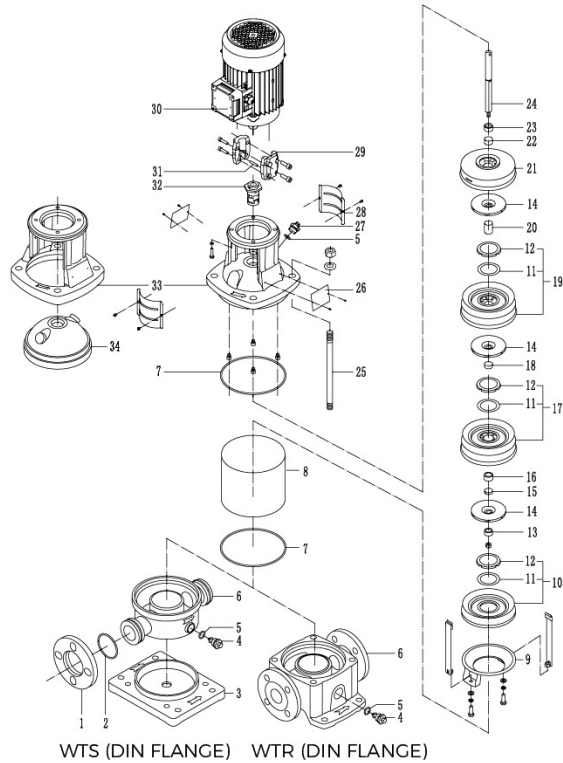
Materials Table



MODEL : WTS(R) 2, 3, 4, 5

Table with 2 columns: No., Part

Table with 2 columns: No., Part



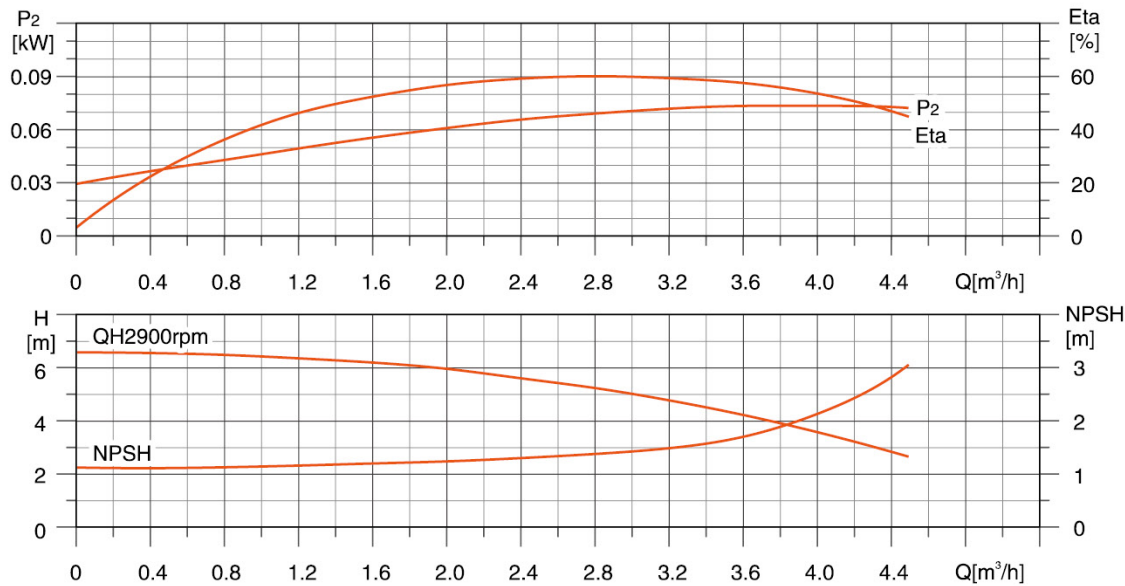
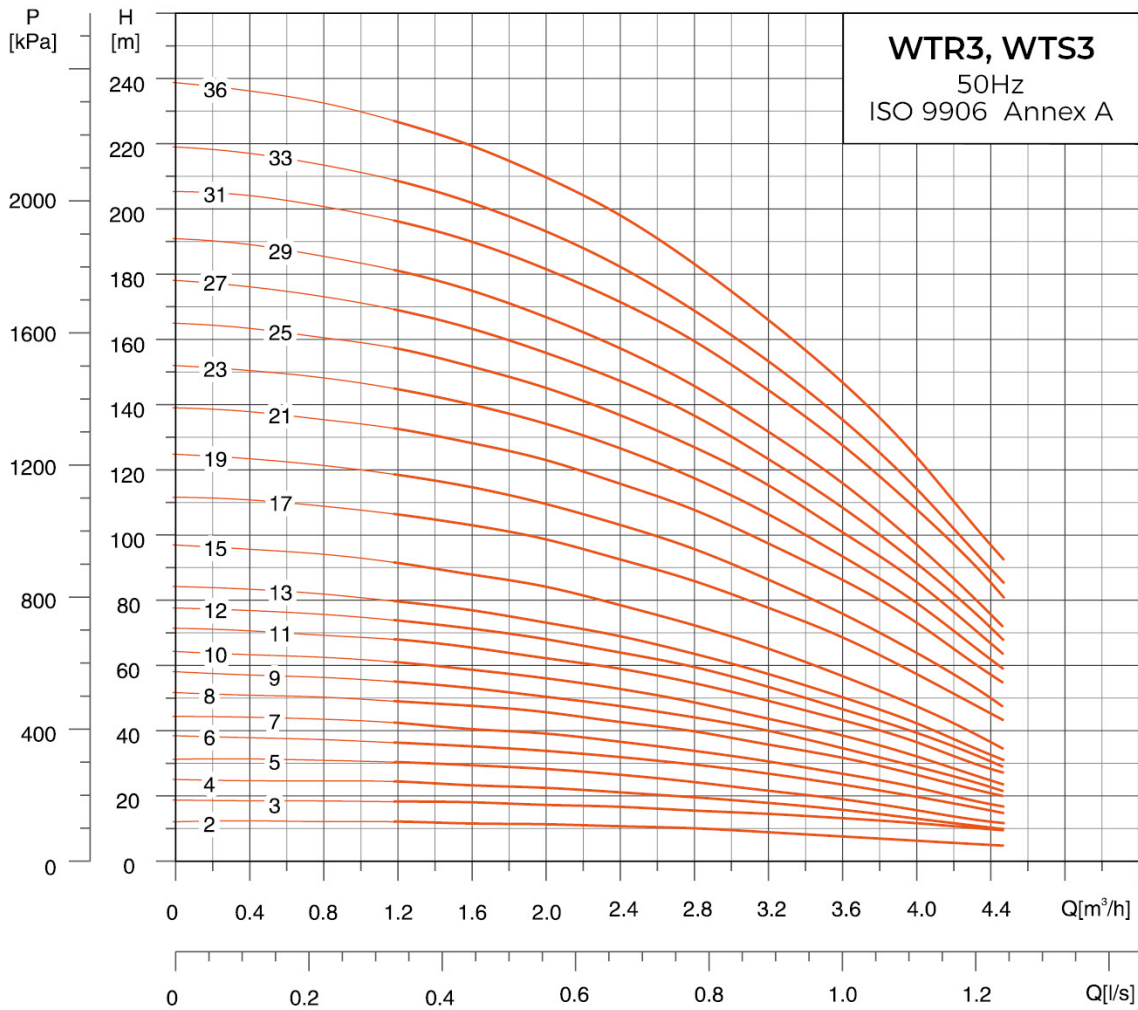
MODEL : WTS(R) 10, 15, 20

Table with 2 columns: No., Part

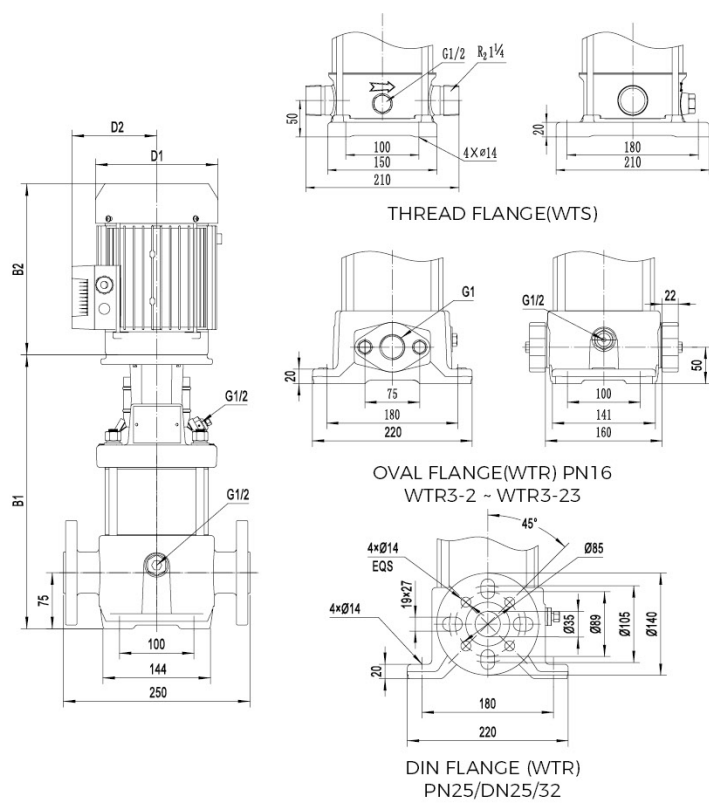
Table with 2 columns: No., Part

Model	Power (kW)	Q(m³/h)	1	1.2	1.6	2	2.5	2.8	3.2	3.5
WTR2-2	0.37	H(m)	18	17	16	15.5	13.5	12	10	8
WTR2-3	0.37		27	26	24	22.5	19.5	18	15	12
WTR 2-4	0.55		36	35	33	30.5	27	24	17	16
WTR 2-5	0.55		45	43	40	37	32.5	30	24	20
WTR2-6	0.75		53	52	50	45.5	40	36	30	24
WTR2-7	0.75		63	61	57	52	45.5	41	35	28
WTR(m)2-8	1.1		71	69	65	59	51	47	40	33
WTR(m)2-9	1.1		80	78	73	68.5	60	54	45	37
WTR/S(m)2-10	1.1		89	86	81	74	65	59	49	40
WTR/S(m)2-11	1.1		98	95	89	82	71.5	64	54	44
WTR/S(m)2-12	1.5		107	103	97	90	78	71	59	47
WTR/S(m)2-13	1.5		116	114	106	98	86.5	78	65	52
WTR/S(m)2-14	1.5		125	122	114	105	92	84	69	57
WTR/S(m)2-15	1.5		134	130	123	112	98	90	73	60
WTR/S(m)2-16	2.2		143	139	131	120	104	96	79	66
WTR/S(m)2-17	2.2		152	148	139	128	111	102	85	70
WTR/S(m)2-18	2.2		161	157	148	136	122	108	91	76
WTR/S(m)2-19	2.2		170	165	156	143	128	113	95	81
WTR/S(m)2-20	2.2		179	174	164	150	134	119	100	85
WTR/S(m)2-21	2.2		188	183	172	157	140	124	105	88
WTR/S(m)2-22	2.2		197	192	180	165	145	130	110	90
WTR/S2-23	3.0		205	201	188	173	153	137	105	97
WTR/S2-24	3.0		215	210	197	181	160	144	120	105
WTR/S2-25	3.0		223	219	205	189	168	151	125	107
WTR/S2-26	3.0		232	228	214	198	176	158	130	110

Hydraulic Performance Curves



Dimension



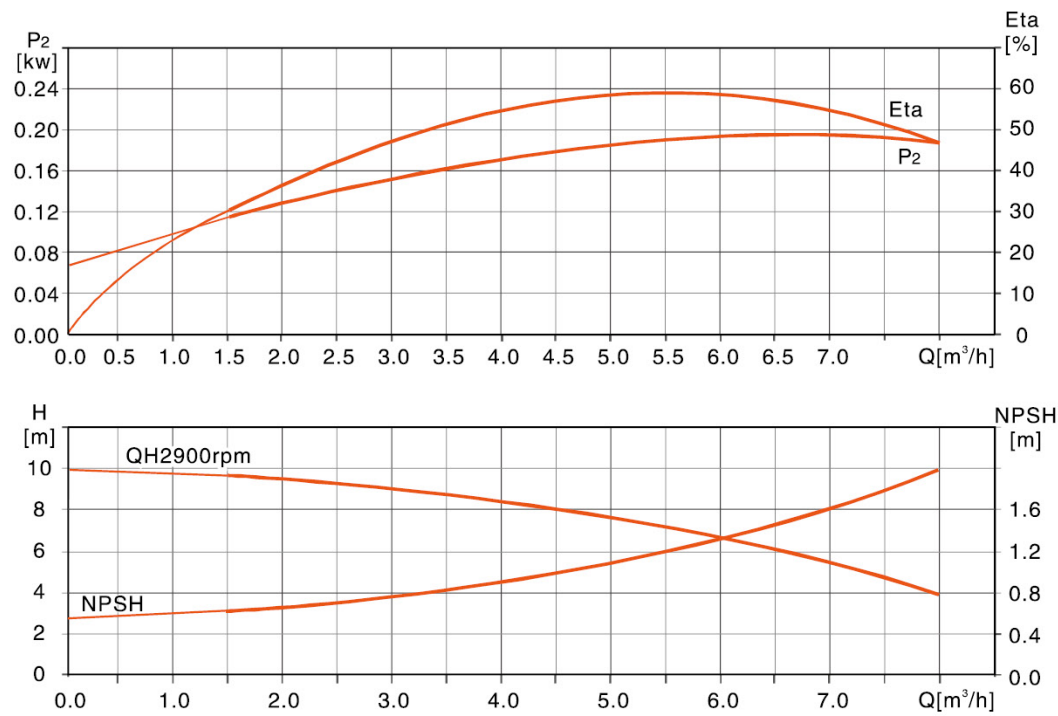
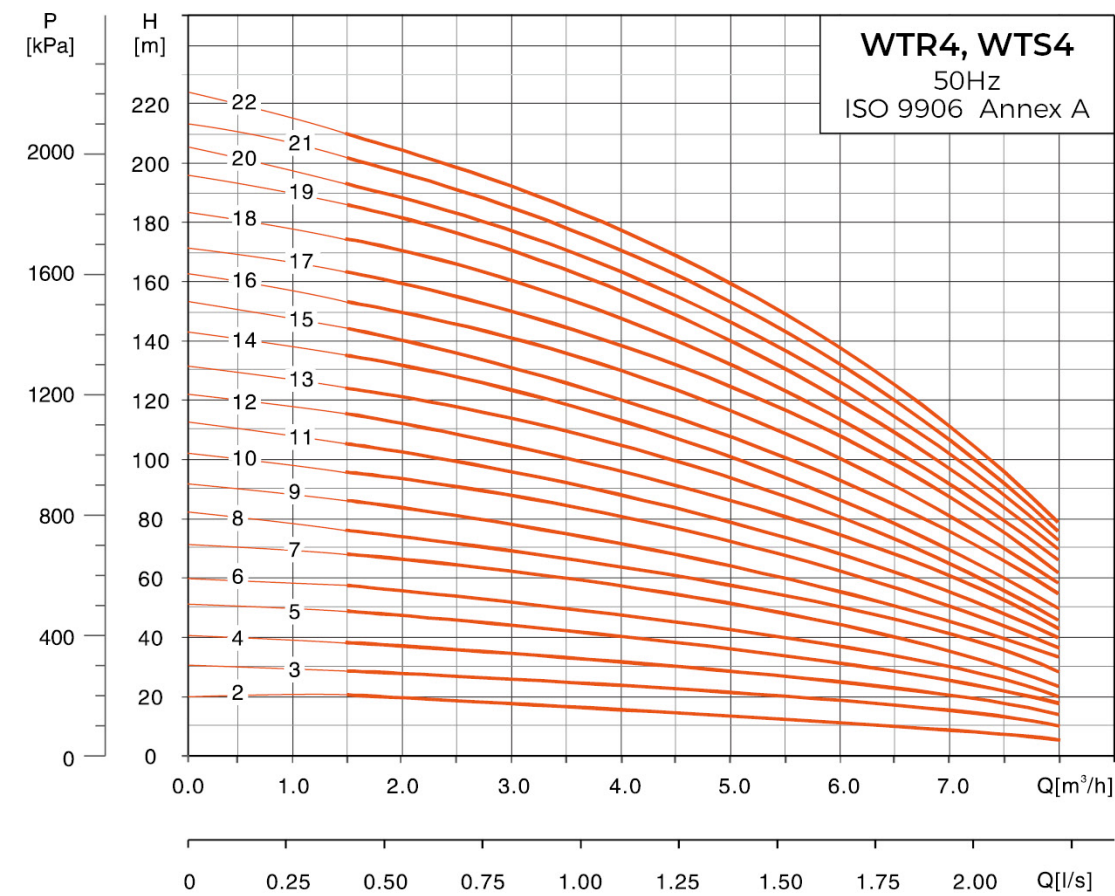
Model	Thread Connection (WTS)		DIN Flange (WTR)		D1	D2
	B1	B1+B2	B1	B1+B2		
WTR3-2	/	/	281	489	128	86
WTR3-3			281	489	128	86
WTR3-4			299	507	128	86
WTR3-5			317	525	128	86
WTR3-6			335	543	128	86
WTR3-7			353	561	128	86
WTR3-8			375	595	146	96
WTR3-9			393	613	146	96
WTR3-10			411	631	146	96
WTR/S(m)3-11	422	678	445	702	164	119
WTR/S(m)3-12	440	696	463	720	164	119
WTR/S(m)3-13	458	714	481	738	164	119
WTR/S(m)3-15	494	750	517	774	164	119
WTR/S(m)3-17	530	786	553	810	164	119
WTR/S(m)3-19	566	822	589	846	164	119
WTR/S(m)3-21	602	858	625	882	164	119
WTR/S(m)3-23	638	894	661	918	164	119
WTR/S(m)3-25	674	930	697	954	164	119
WTR/S(m)3-27	710	966	733	990	164	119
WTR/S(m)3-29	746	1002	769	1026	164	119
WTR/S3-31	786	1099	810	1123	175	119
WTR/S3-33	822	1135	846	1159	175	119
WTR/S3-36	876	1189	900	1213	175	119

Note: B1 and B1+B2 of Oval flange are in compliance with that of DIN flange

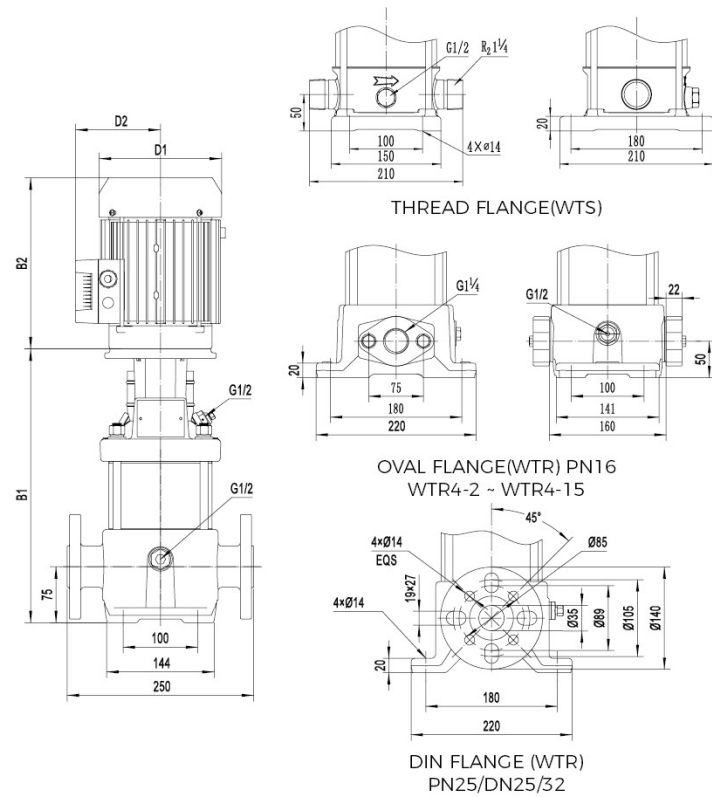
Technical Data

Model	Power (kW)	Q(m³/h)	1.2	1.6	2	2.4	2.8	3	3.6	4	4.5
WTR3-2	0.37	H(m)	13	12	12	11	11	10	8	7.5	4
WTR3-3	0.37		19	19	18	17	16	15	14	12	8
WTR3-4	0.37		25	24	23	22	20	19	17	17	9
WTR3-5	0.37		31	31	29	27	25	24	20	17	11
WTR3-6	0.55		37	36	35	33	30	28	24	21	14
WTR3-7	0.55		43	40	40	37	35	32	28	24	16
WTR3-8	0.75		51	48	47	44	41	38	33	28	19
WTR3-9	0.75		56	54	51	48	45	42	36	30	21
WTR3-10	0.75		62	60	57	54	50	46	40	33	23
WTR/S(m)3-11	1.1		69	66	63	60	56	51	44	38	26
WTR/S(m)3-12	1.1		75	72	69	65	61	56	48	41	28
WTR/S(m)3-13	1.1		80	78	74	70	65	60	51	44	30
WTR/S(m)3-15	1.1		92	89	85	80	73	68	58	49	34
WTR/S(m)3-17	1.5		107	104	100	94	87	78	70	59	42
WTR/S(m)3-19	1.5		119	116	111	104	97	87	77	65	47
WTR/S(m)3-21	2.2		133	129	124	117	109	97	88	75	54
WTR/S(m)3-23	2.2		146	141	135	128	119	105	95	81	59
WTR/S(m)3-25	2.2		158	153	146	138	128	115	102	87	64
WTR/S(m)3-27	2.2		170	164	157	148	138	124	110	93	67
WTR/S(m)3-29	2.2		182	176	168	159	147	133	118	100	72
WTR/S3-31	3.0		197	191	183	173	161	142	128	110	80
WTR/S3-33	3.0		210	203	194	194	170	152	137	116	84
WTR/S3-36	3.0		228	221	211	200	185	165	149	126	91

Hydraulic Performance Curves



Dimension



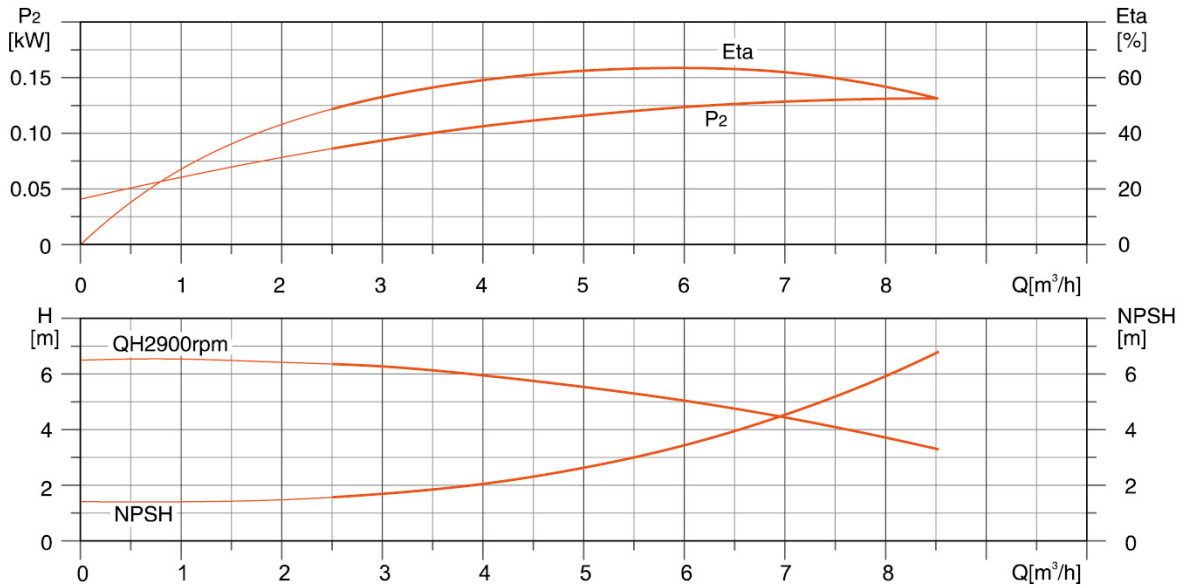
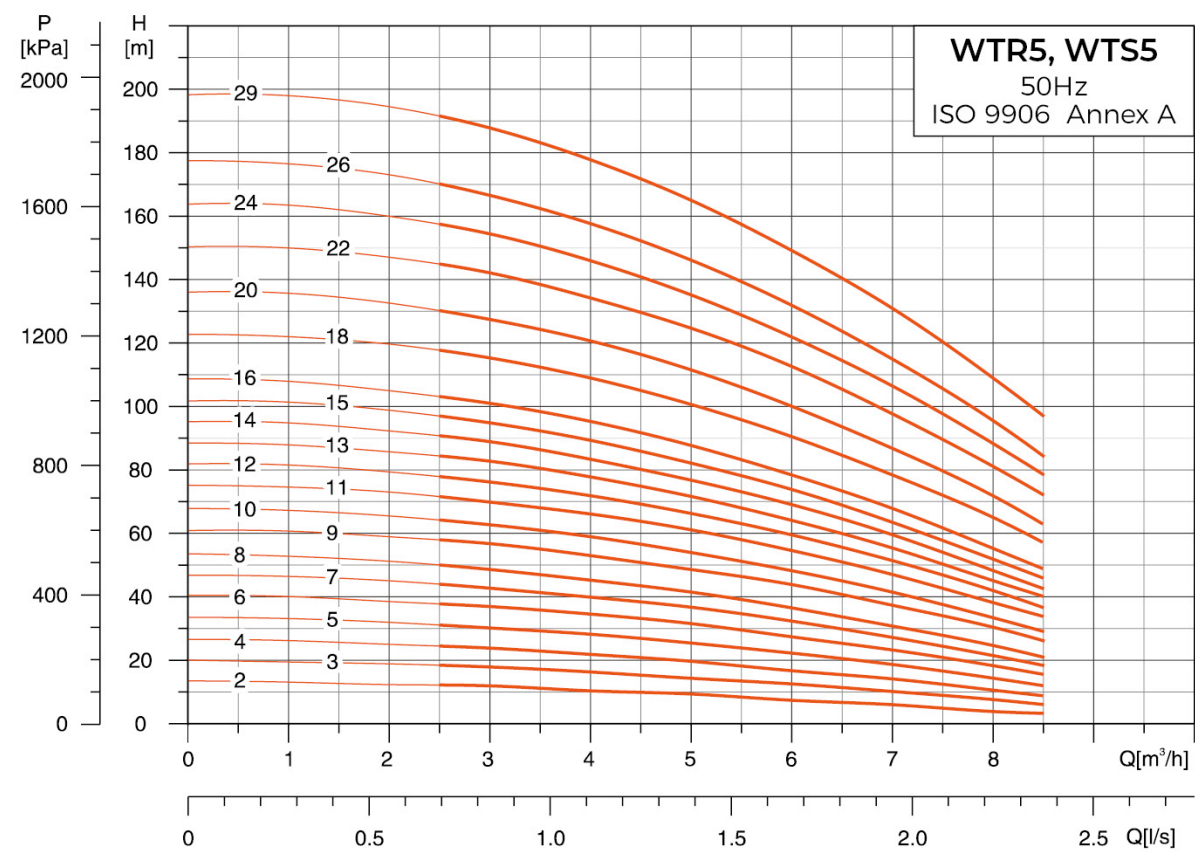
Model	Thread Connection (WTS)		DIN Flange (WTR)		D1	D2
	B1	B1+B2	B1	B1+B2		
WTR4-2	/		281	489	128	86
WTR4-3			308	516	128	86
WTR4-4			339	559	146	96
WTR(m)4-5			382	639	164	119
WTR(m)4-6			409	666	164	119
WTR/S(m)4-7	413	669	436	693	164	119
WTR/S(m)4-8	440	696	463	720	164	119
WTR/S(m)4-9	467	723	490	747	164	119
WTR/S(m)4-10	494	750	517	774	164	119
WTR/S(m)4-11	521	777	544	801	164	119
WTR/S(m)4-12	548	804	571	828	164	119
WTR/S4-13	579	892	603	916	175	119
WTR/S4-14	606	919	630	943	175	119
WTR/S4-15	633	946	657	970	175	119
WTR/S4-16	660	973	684	997	175	119
WTR/S4-17	687	1005	711	1029	194	128
WTR/S4-18	714	1032	738	1056	194	128
WTR/S4-19	741	1059	765	1083	194	128
WTR/S4-20	768	1086	792	1110	194	128
WTR/S4-21	795	1113	819	1137	194	128
WTR/S4-22	822	1140	846	1164	194	128

Note: B1 and B1+B2 of Oval flange are in compliance with that of DIN flange

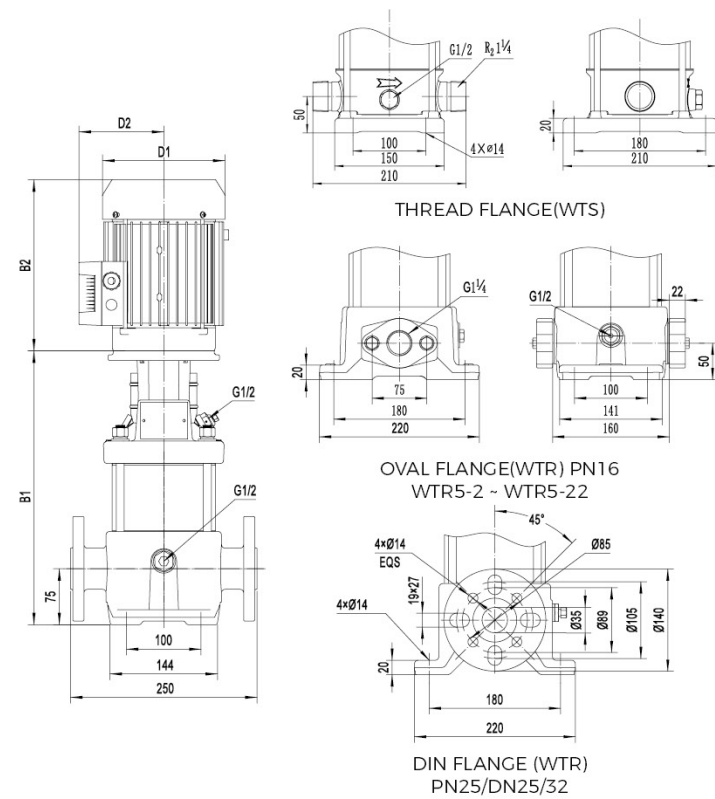
Technical Data

Model	Power (kW)	Q(m³/h)	1.5	2	3	4	5	6	7	8
WTR4-2	0.37	H(m)	19	18	17	14.5	13	10.5	8	6
WTR4-3	0.55		28	27	26	23.5	20	18	14	10
WTR4-4	0.75		38	36	34	31.5	27	24.5	18	13
WTR(m)4-5	1.1		47	45	43	40.5	34	31.5	23	17
WTR(m)4-6	1.1		56	54	52	47.5	41	36	28	20
WTR/S(m)4-7	1.5		66	63	61	57	48	44.5	34	24
WTR/S(m)4-8	1.5		74	72	70	64	55	49.5	38	27
WTR/S(m)4-9	2.2		86	81	78	72	63	56	44	32
WTR/S(m)4-10	2.2		96	90	87	81	71	64	50	34
WTR/S(m)4-11	2.2		105	99	95	88	78	69	53	39
WTR/S(m)4-12	2.2		114	108	104	96	85	75	57	41
WTR/S4-13	3.0		123	117	113	103	93	83	63	45
WTR/S4-14	3.0		136	126	122	114	101	90	69	48
WTR/S4-15	3.0		142	135	131	120	108	96	73	52
WTR/S4-16	3.0		152	144	140	129	115	102	78	55
WTR/S4-17	4.0		163	153	149	137	122	108	83	62
WTR/S4-18	4.0		175	162	158	145	129	115	89	65
WTR/S4-19	4.0		183	171	168	155	137	123	95	67
WTR/S4-20	4.0		192	180	176	161	144	128	99	72
WTR/S4-21	4.0		203	200	184	169	152	134	103	75
WTR/S4-22	4.0		211	210	192	177	160	139	108	79

Hydraulic Performance Curves



Dimension



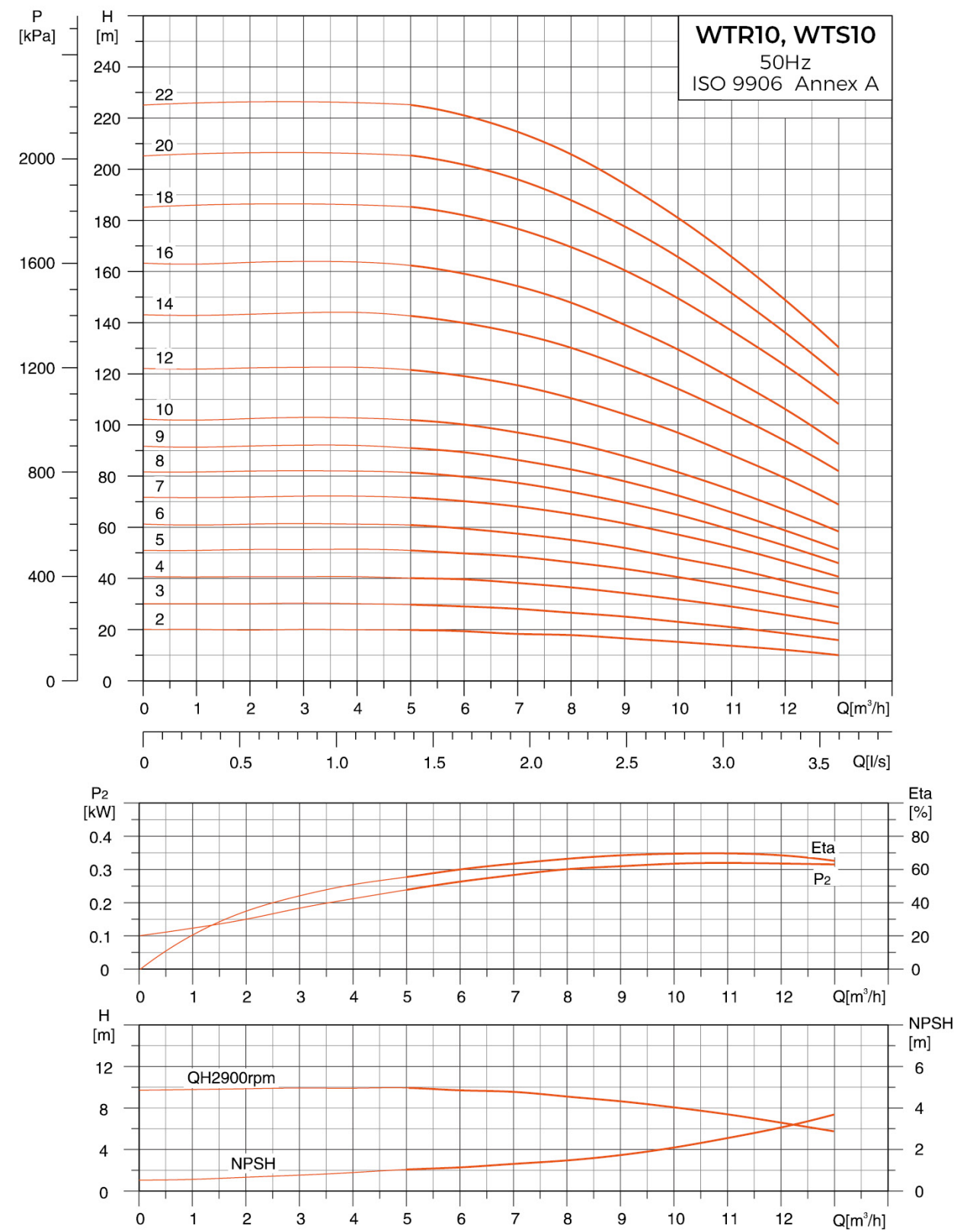
Model	Thread Connection (WTS)		DIN Flange (WTR)		D1	D2
	B1	B1+B2	B1	B1+B2		
WTR5-2	/		281	489	128	86
WTR5-3			308	516	128	86
WTR5-4			335	543	128	86
WTR5-5			366	586	146	96
WTR(m)5-6			409	666	164	119
WTR/S(m)5-7	413	669	436	693	164	119
WTR/S(m)5-8	440	696	463	720	164	119
WTR/S(m)5-9	467	723	490	747	164	119
WTR/S(m)5-10	494	750	517	774	164	119
WTR/S(m)5-11	521	777	544	801	164	119
WTR/S(m)5-12	548	804	571	828	164	119
WTR/S(m)5-13	575	831	598	855	164	119
WTR/S(m)5-14	602	858	625	882	164	119
WTR/S(m)5-15	629	885	652	909	164	119
WTR/S5-16	656	912	679	936	164	119
WTR/S5-18	714	1027	738	1051	175	119
WTR/S5-20	768	1081	792	1105	175	119
WTR/S5-22	822	1140	846	1164	194	128
WTR/S5-24	876	1194	900	1218	194	128
WTR/S5-26	930	1248	954	1272	194	128
WTR/S5-29	1011	1329	1035	1353	194	128

Note: B1 and B1+B2 of Oval flange are in compliance with that of DIN flange

Technical Data

Model	Power (kW)	Q(m³/h)	2.5	3	4	5	6	7	8	8.5
WTR5-2	0.37	H(m)	12	12	10	9	7	6	4	3.5
WTR5-3	0.55		19	18	16	15	12	10	8	6
WTR5-4	0.55		24	24	22	19	16	14	10.5	9
WTR5-5	0.75		31	30	28	24	22	18	15	12
WTR(m)5-6	1.1		38	37	34	28	27	23	19	15
WTR/S(m)5-7	1.1		44	42	40	32	32	27	22	19
WTR/S(m)5-8	1.1		50	48	45	40	36	31	25	21
WTR/S(m)5-9	1.5		59	56	53	47	44	37	31	26
WTR/S(m)5-10	1.5		65	62	59	53	48	41	34	29
WTR/S(m)5-11	2.2		73	70	66	59	54	47	38	35
WTR/S(m)5-12	2.2		78	76	72	63	59	51	42	38
WTR/S(m)5-13	2.2		85	82	78	68	64	55	45	40
WTR/S(m)5-14	2.2		91	89	83	74	69	60	58	53
WTR/S(m)5-15	2.2		98	95	89	79	74	63	52	46
WTR/S(m)5-16	2.2		103	101	95	85	78	68	55	49
WTR/S5-18	3.0		118	115	109	98	90	78	65	58
WTR/S5-20	3.0		130	127	120	108	100	87	72	64
WTR/S5-22	4.0		145	142	134	120	112	97	80	72
WTR/S5-24	4.0		158	154	146	132	122	106	88	78
WTR/S5-26	4.0		170	166	157	145	132	115	95	85
WTR/S5-29	4.0		192	188	178	155	149	131	109	98

Hydraulic Performance Curves



Dimension

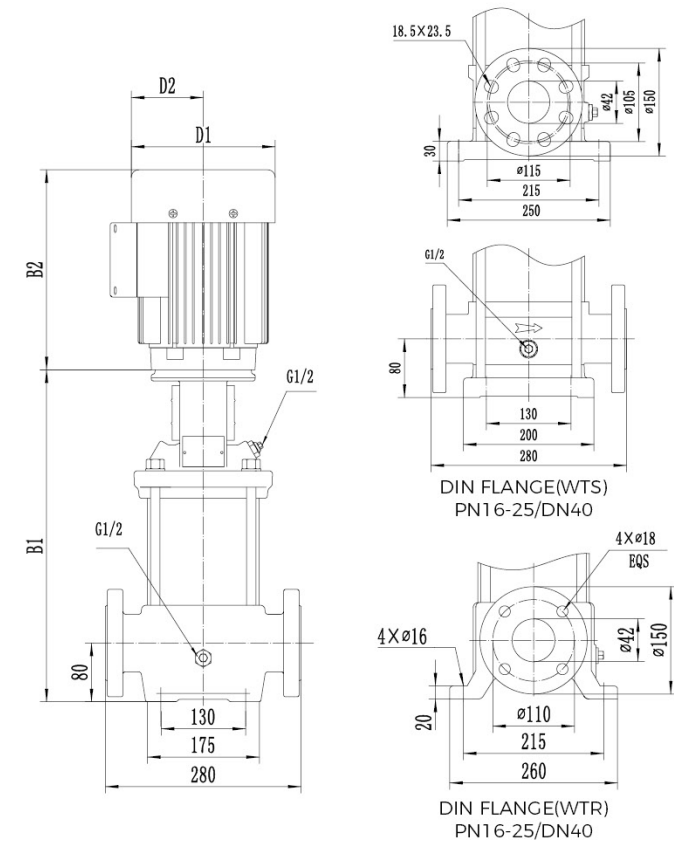
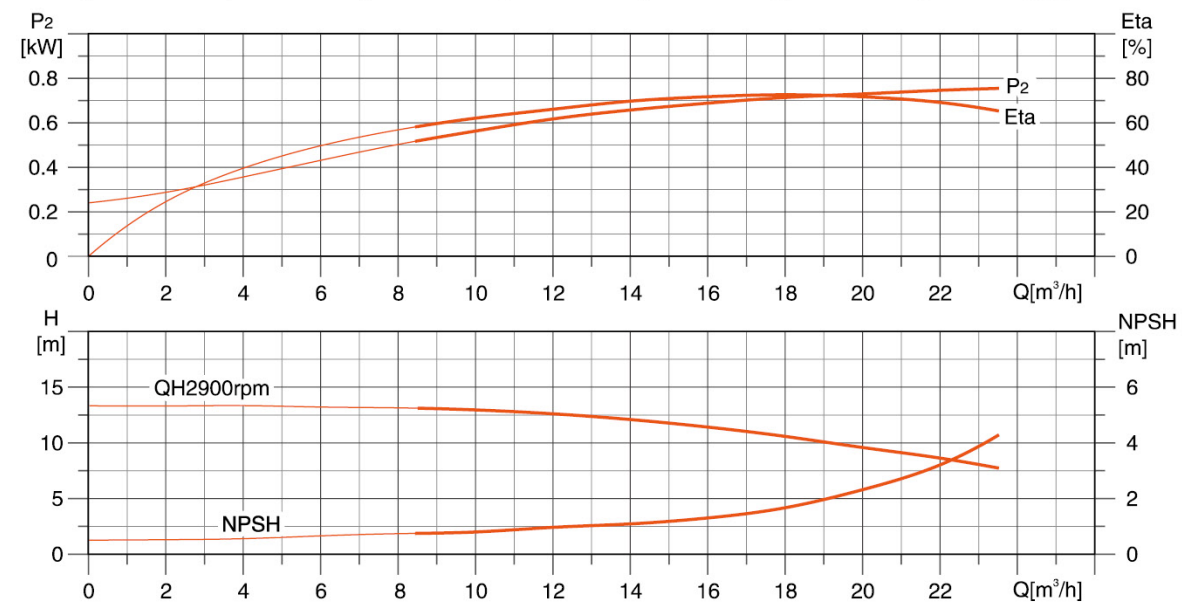
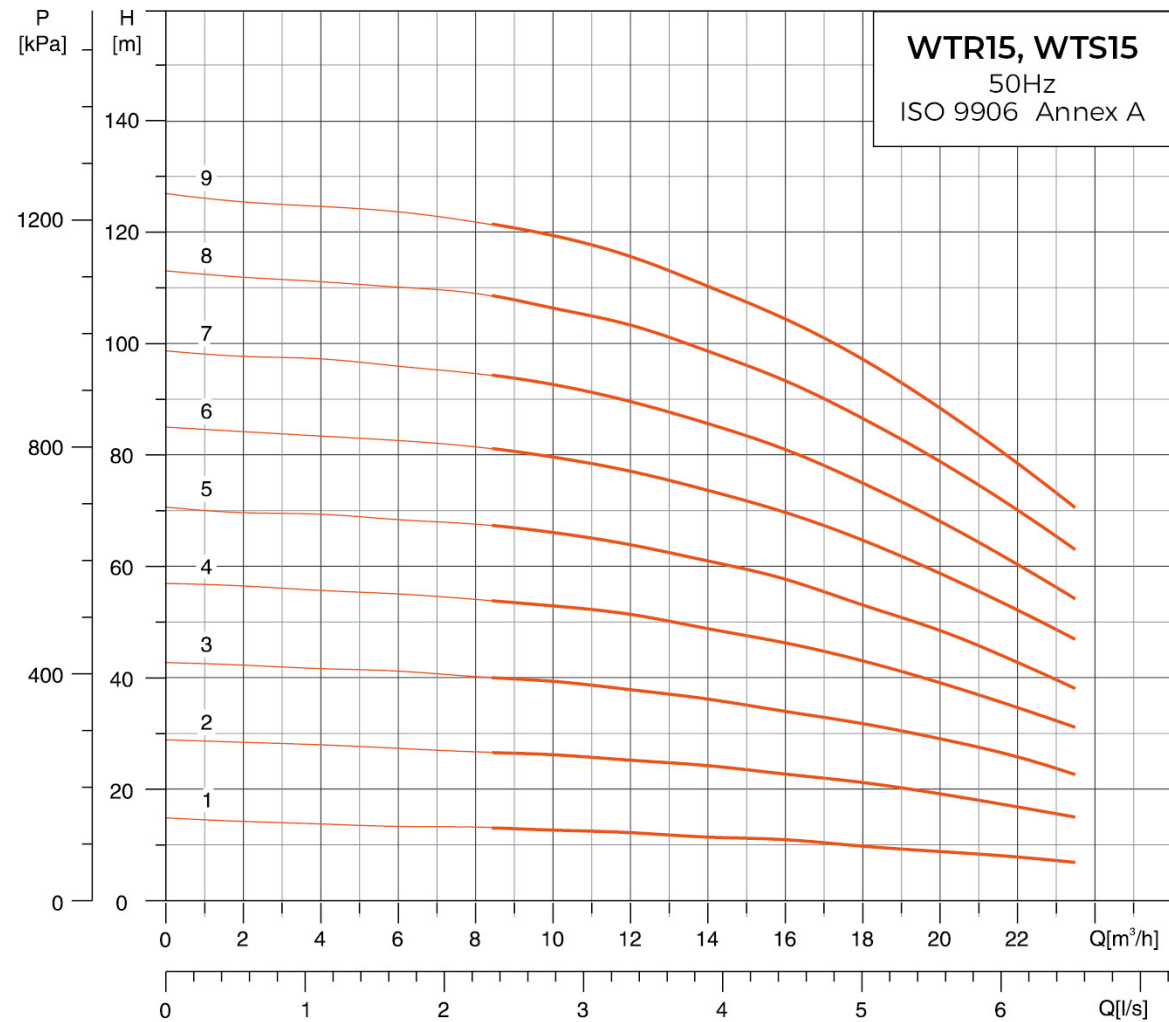


Table with 6 columns: Model, DIN Flange(WTR) B1, DIN Flange(WTR) B1+B2, DIN Flange(WTS) B1, DIN Flange(WTS) B1+B2, D1, D2. It lists dimensions for models WTR/S10-2 through WTR/S10-22.

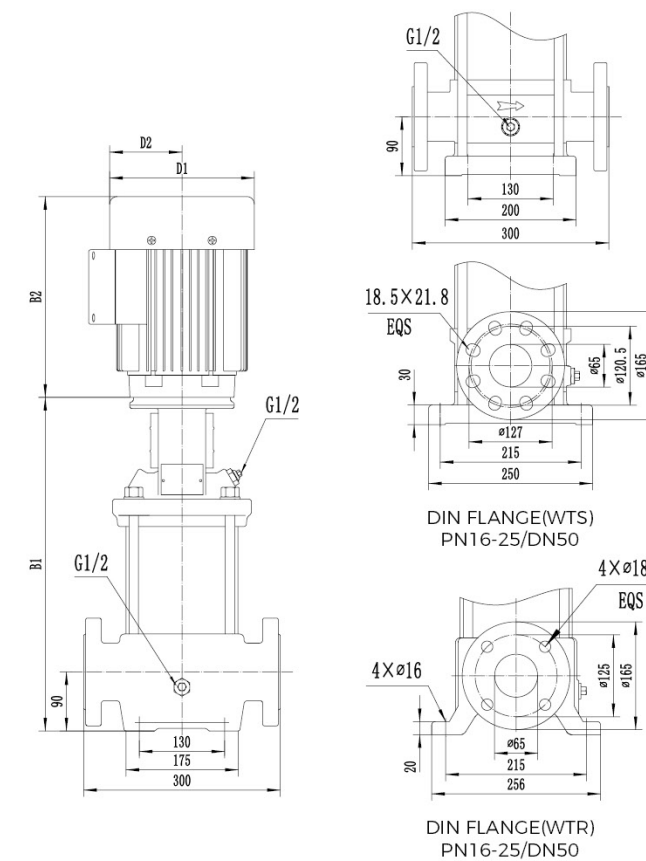
Technical Data

Table with 9 columns: Model, Power (kW), Q(m³/h), and H(m) for flow rates 5, 6, 8, 10, 12, and 13. It provides performance data for models WTR/S10-2 through WTR/S10-22.

Hydraulic Performance Curves



Dimension

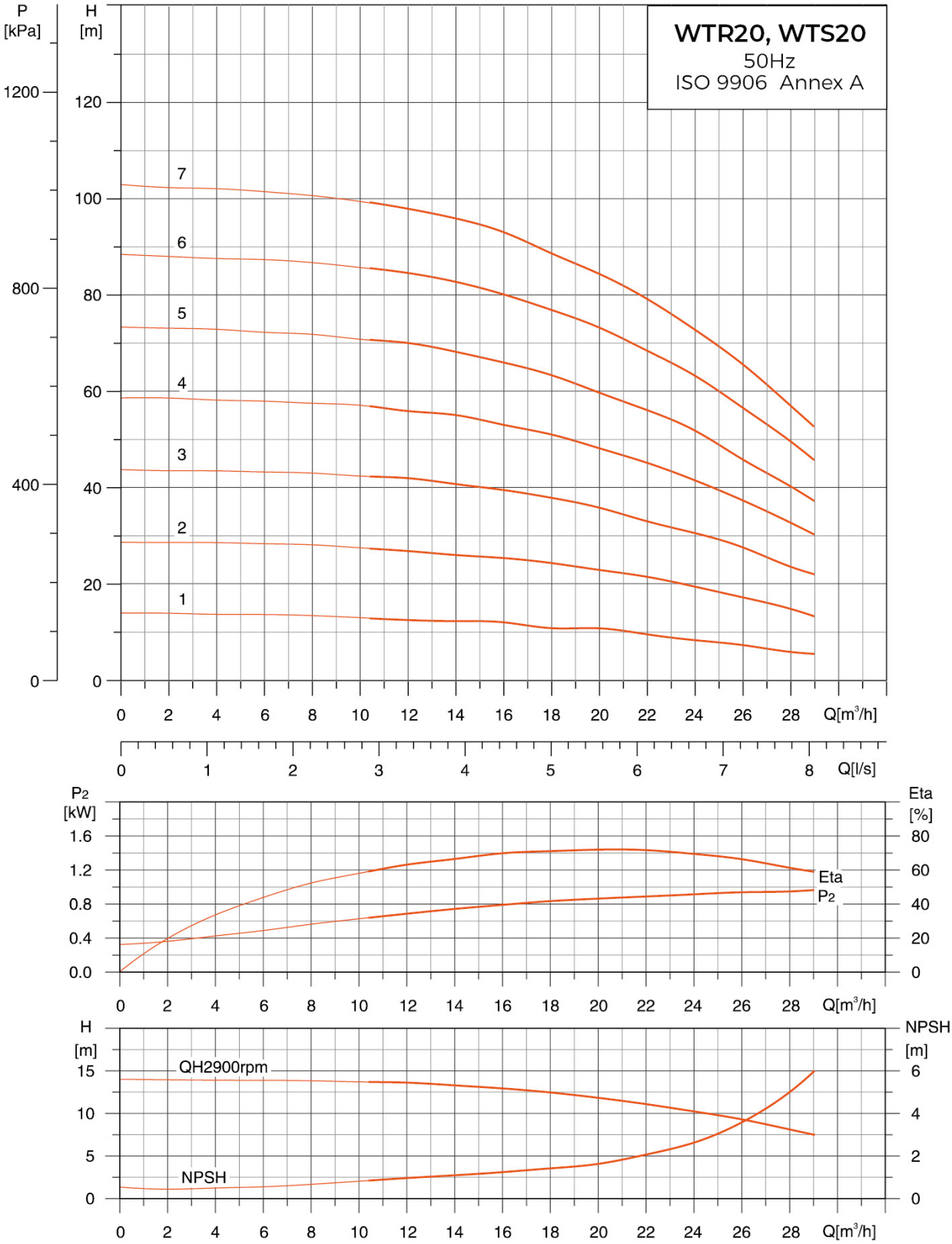


Model	DIN Flange(WTR)		DIN Flange(WTS)		D1	D2
	B1	B1+B2	B1	B1+B2		
WTR/S(m)15-1	354	611	352	609	164	119
WTR/S(m)15-2	415	672	413	670	164	119
WTR/S15-3	465	778	463	776	175	119
WTR/S15-4	510	828	508	826	194	128
WTR/S15-5	555	873	553	871	194	128
WTR/S15-6	632	1000	630	998	216	143
WTR/S15-7	677	1045	675	1043	216	143
WTR/S15-8	722	1118	720	1116	216	143
WTR/S15-9	767	1163	765	1161	216	143

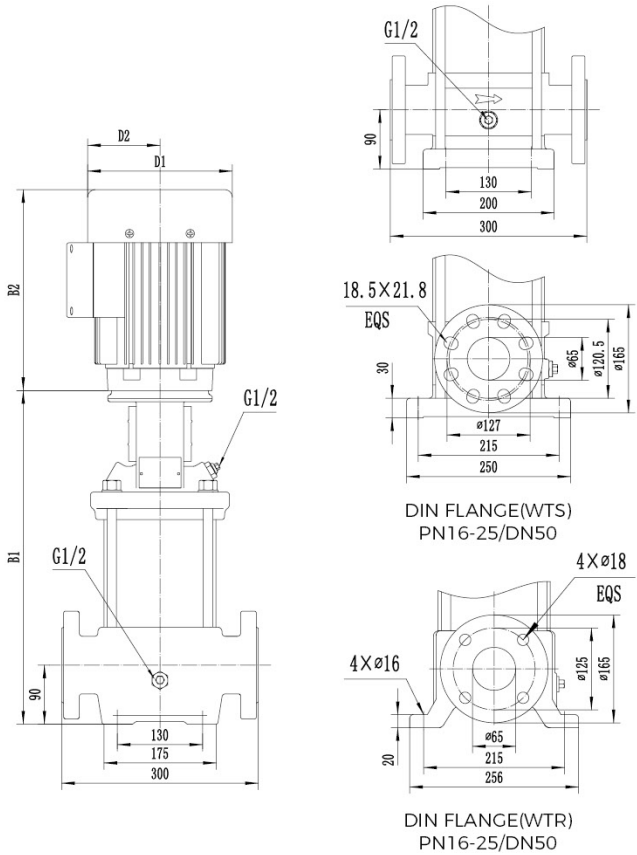
Technical Data

Model	Power (kW)	Q(m³/h)	8.5	12	15	18	21	23.5
WTR/S(m)15-1	1.1	H(m)	13	12	11	10	9	7
WTR/S(m)15-2	2.2		26	25	23	21	18	15
WTR/S15-3	3		40	38	35	32	28	22
WTR/S15-4	4		55	51	47	43	38	32
WTR/S15-5	4		68	64	58	53	48	38
WTR/S15-6	5.5		81	77	71	64	58	47
WTR/S15-7	5.5		95	89	83	75	65	52
WTR/S15-8	7.5		108	103	96	86	75	62
WTR/S15-9	7.5		121	115	108	97	84	70

Hydraulic Performance Curves



Dimension



Model	DIN Flange(WTR)		DIN Flange(WTS)		D1	D2
	B1	B1+B2	B1	B1+B2		
WTR/S(m)20-1	354	611	352	609	164	119
WTR/S(m)20-2	415	672	413	670	164	119
WTR/S20-3	465	783	463	781	194	128
WTR/S20-4	542	910	540	908	216	143
WTR/S20-5	587	955	585	953	216	143
WTR/S20-6	632	1028	630	1026	216	143
WTR/S20-7	677	1073	675	1071	216	143

Technical Data

Model	Power (kW)	Q(m³/h)	10.5	12	16	20	24	28	28.5
WTR/S(m)20-1	1.1	H(m)	13	13	12	10.5	9	6.5	6
WTR/S(m)20-2	2.2		28	27	25	22.5	19	15	13
WTR/S20-3	4		42	42	39	36	30	23	22
WTR/S20-4	5.5		58	56	53	48	41	32	30
WTR/S20-5	5.5		71	70	66	60	52	40	38
WTR/S20-6	7.5		86	84	80	72	62	49	45
WTR/S20-7	7.5		99	97	93	84	72	57	52



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

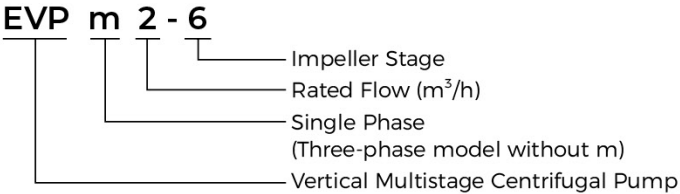
Features

- Economic vertical multistage pumps
- 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

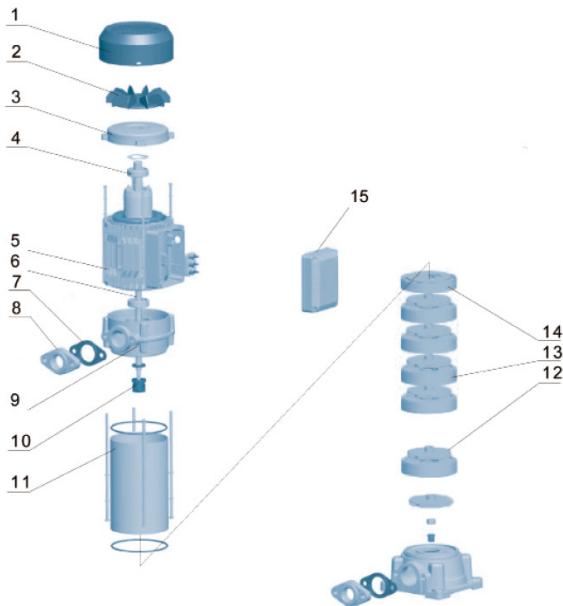
- Liquid temperature: +5°C ~ 75°C
- Max. ambient temperature: +40°C
- Max. operating pressure: 15 bar
- Altitude: up to 1000 m
- Standard voltage: Single-phase: 220~240V/50Hz
Three-phase: 380~415v/50Hz

Identification Codes

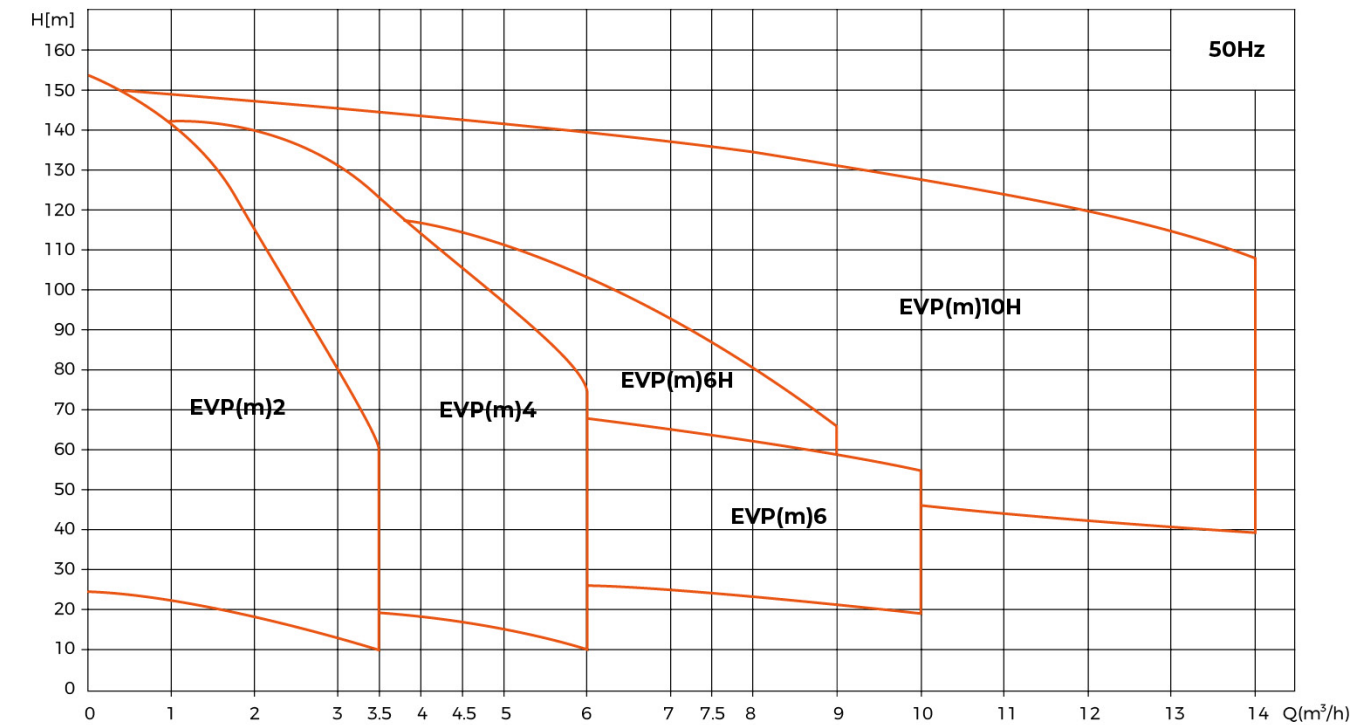


Materials Table

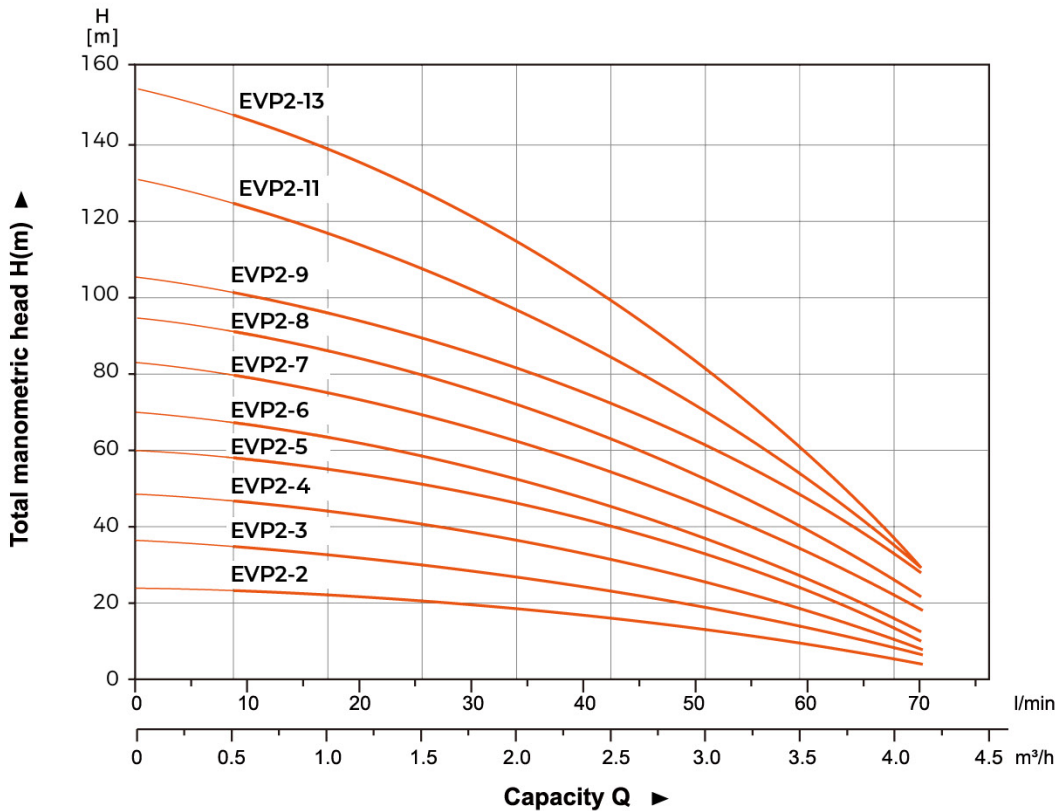
No.	Part	Material
1	Fan cover	08F
2	Fan	PP
3	Rear cover	Cast iron
4	Bearing	
5	Stator	
6	Rotor	
7	Gasket	Rubber
8	Flange	Cast iron
9	Motor bracket	Aluminum
10	Machanical seal	Ceramic/Carbon
11	Pump barrel	AISI 304
12	Impeller	Plastic
13	Diffuser	Plastic
14	Last stage diffuser	Plastic
15	Capacitor box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



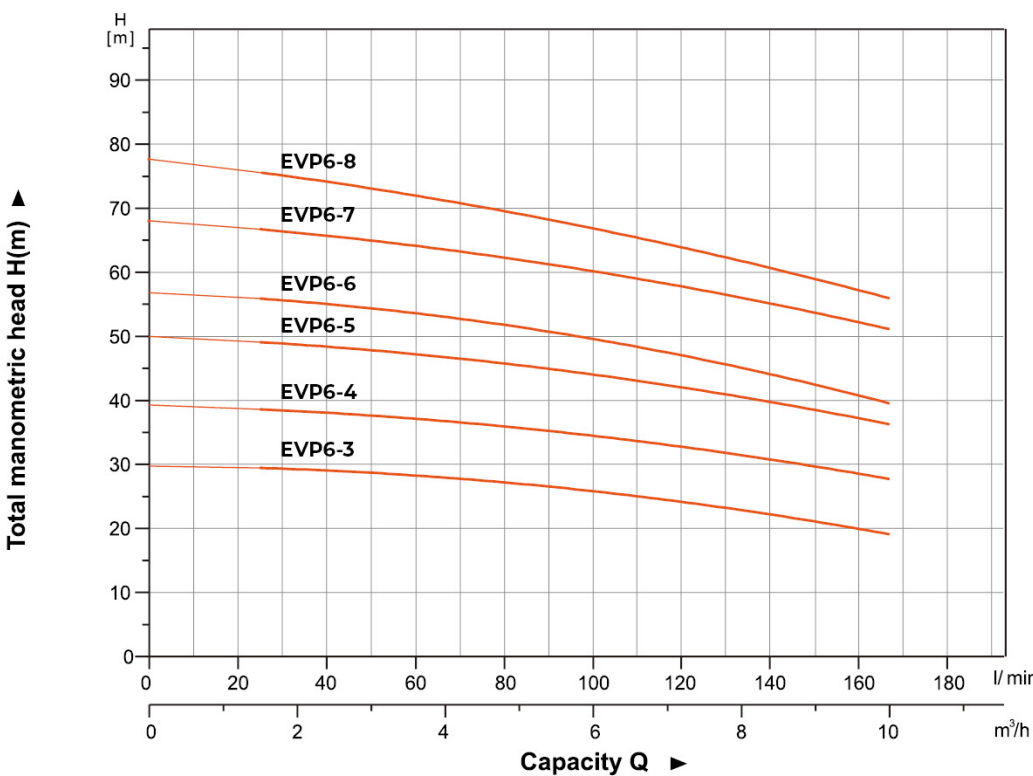
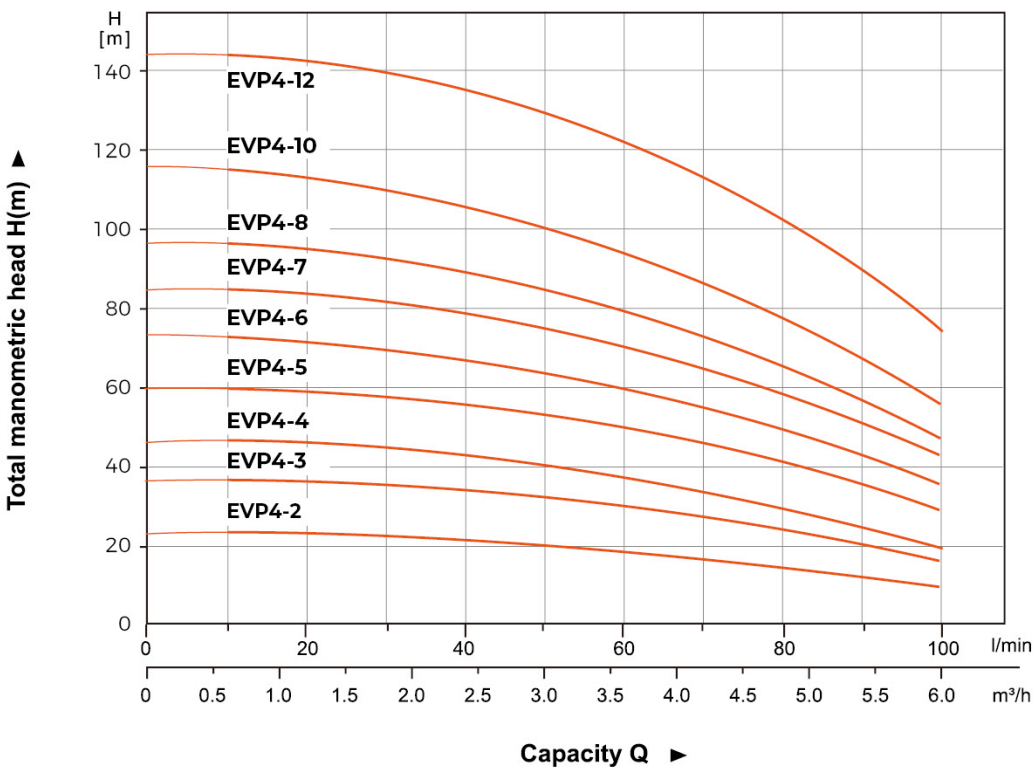
Scope of Performance



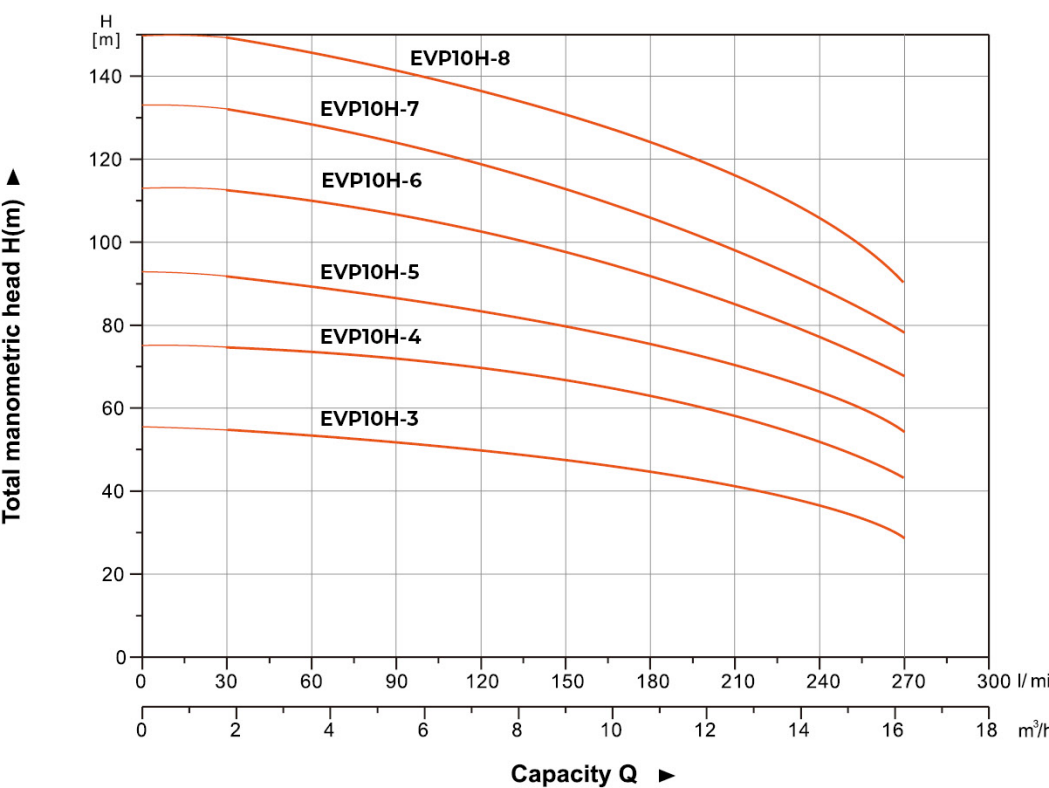
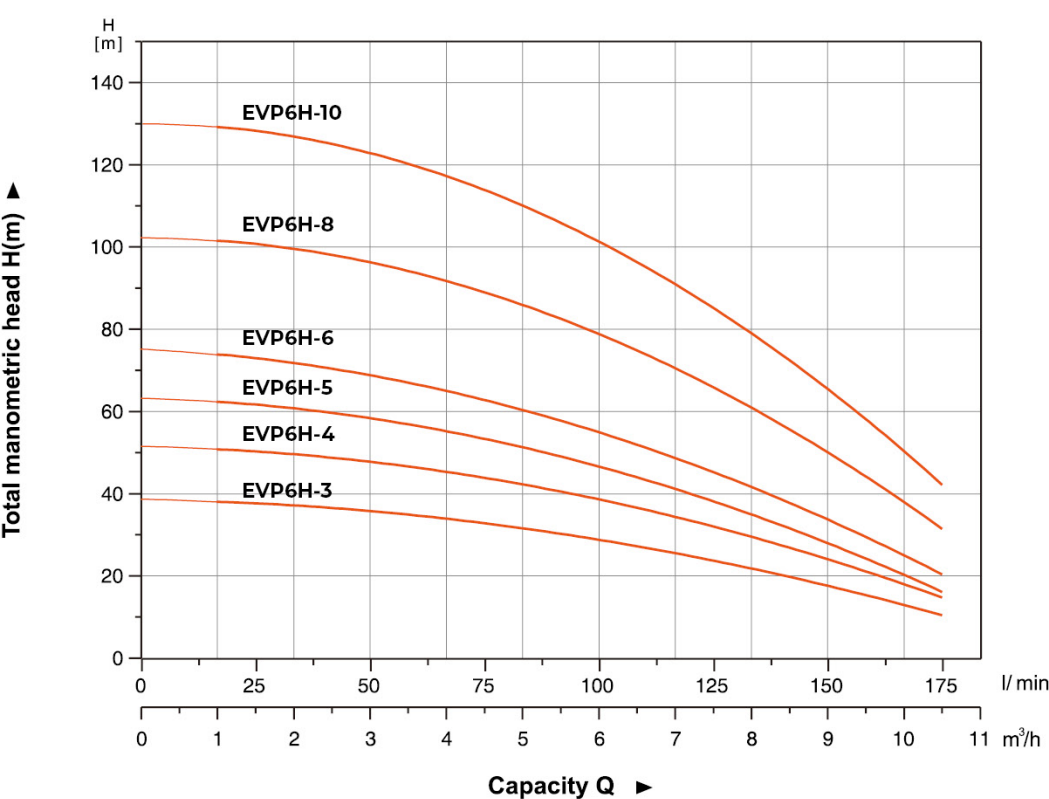
Hydraulic Performance Curves



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

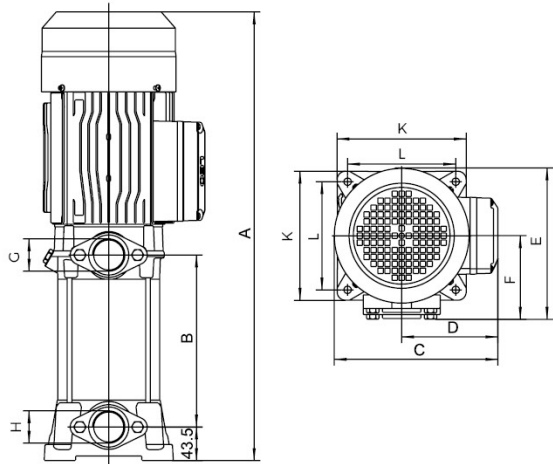
Model		Power(P2)		Q(m³/h)	0	1	2	3	4	5	6
Single-phase	Three-phase	kW	HP	Q(l/min)	0	16.7	33.3	50	66.7	83.3	100
EVPm4-2	EVP4-2	0.55	0.75	H (m)	24	23	22	21	18	15	10
EVPm4-3	EVP4-3	0.75	1.0		37	36	34	33	29	24	16
EVPm4-4	EVP4-4	1.0	1.5		47	46	45	41	36	28	20
EVPm4-5	EVP4-5	1.5	2.0		61	58	57	55	48	39	29
EVPm4-6	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

Model		Power(P2)		Q(m³/h)	0	1	2	3	4	5	6	7	8	9	10
Single-phase	Three-phase	kW	HP	Q(l/min)	0	16.7	33.3	50	66.7	83.3	100	116.7	133.3	150	166.7
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)	0	1	2	3	4.5	6	7.5	9	10.5
Single-phase	Three-phase	kW	HP	Q(l/min)	0	16.7	33.3	50	75	100	125	150	175
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	2.0		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	3.0		76	74	71	68	63	56	45	34	20
-	EVP6H-8	3.0	4.0		103	100	97	95	90	80	66	50	31
-	EVP6H-10	4.0	5.5		130	127	124	121	114	103	86	66	41

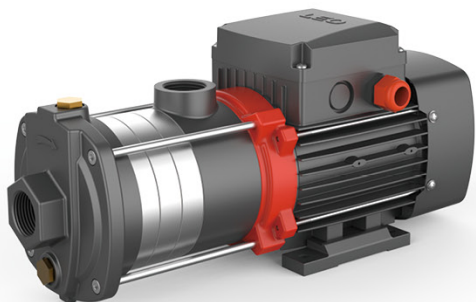
Model	Power(P2)		Q(m³/h)	0	2	4	6	8	10	12	14	16
	kW	HP	Q(l/min)	0	33	67	100	133	167	200	233	267
EVP10H-3	3.0	4.0	H (m)	56	55	54	52	49	46	42	39	29
EVP10H-4	4.0	5.5		75	74	72	70	67	64	60	53	43
EVP10H-5	5.5	7.5		93	91	87	84	81	77	72	64	55
EVP10H-6	5.5	7.5		113	110	107	104	100	96	87	78	68
EVP10H-7	7.5	10		132	128	124	120	116	112	103	93	80
EVP10H-8	7.5	10		150	147	143	139	134	127	120	108	92

Dimension

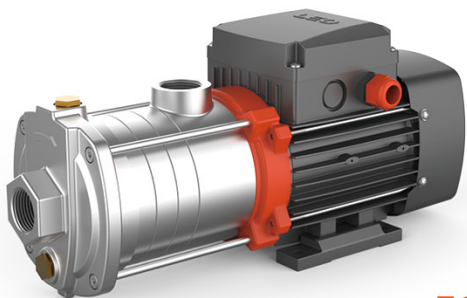


Model		A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	K (mm)	L (mm)
Single-phase	Three-phase										
EVPm2-2	EVP2-2	382	122	193	110	202	114.5	G1	G1	166	140.5
EVPm2-3	EVP2-3	406	146	193	110	202	114.5	G1	G1	166	140.5
EVPm2-4	EVP2-4	430	170	193	110	202	114.5	G1	G1	166	140.5
EVPm2-5	EVP2-5	454	194	193	110	202	114.5	G1	G1	166	140.5
EVPm2-6	EVP2-6	478	218	193	110	202	114.5	G1	G1	166	140.5
EVPm2-7	EVP2-7	545	248.5	210	125	202	114.5	G1	G1	166	140.5
EVPm2-8	EVP2-8	569	272.5	210	125	202	114.5	G1	G1	166	140.5
EVPm2-9	EVP2-9	593	296.5	210	125	202	114.5	G1	G1	166	140.5
EVPm2-11	EVP2-11	641	344.5	210	125	202	114.5	G1	G1	166	140.5
-	EVP2-13	689	392.5	210	125	202	114.5	G1	G1	166	140.5
EVPm4-2	EVP4-2	382	122	193	110	202	114.5	G1	G1	166	140.5
EVPm4-3	EVP4-3	406	146	193	110	202	114.5	G1	G1	166	140.5
EVPm4-4	EVP4-4	430	170	193	110	202	114.5	G1	G1	166	140.5
EVPm4-5	EVP4-5	497	200.5	210	125	202	114.5	G1	G1	166	140.5
EVPm4-6	EVP4-6	521	224.5	210	125	202	114.5	G1	G1	166	140.5
-	EVP4-7	545	248.5	210	125	202	114.5	G1	G1	166	140.5
-	EVP4-8	569	272.5	210	125	202	114.5	G1	G1	166	140.5
-	EVP4-10	617	320.5	210	125	202	114.5	G1	G1	166	140.5
-	EVP4-12	731	374	240	141	218	121.5	G1	G1	166	140.5
EVPm6-3	EVP6-3	487	190	210	125	198.5	110	G1¼	G1¼	166	140.5
EVPm6-4	EVP6-4	524	227	210	125	198.5	110	G1¼	G1¼	166	140.5
-	EVP6-5	561	264	210	125	198.5	110	G1¼	G1¼	166	140.5
-	EVP6-6	598	301	210	125	198.5	110	G1¼	G1¼	166	140.5
-	EVP6-7	685	338	221	134	198.5	110	G1¼	G1¼	166	140.5
-	EVP6-8	722	375	221	134	198.5	110	G1¼	G1¼	166	140.5
EVPm6H-3	EVP6H-3	457	158.5	210	125	202	114.5	G1¼	G1½	166	140.5
EVPm6H-4	EVP6H-4	483.5	185	210	125	202	114.5	G1¼	G1½	166	140.5
EVPm6H-4	EVP6H-5	510	211.5	210	125	202	114.5	G1¼	G1½	166	140.5
-	EVP6H-6	536.5	238	210	125	202	114.5	G1¼	G1½	166	140.5
-	EVP6H-8	655	297.5	210	141	218	121.5	G1¼	G1½	166	140.5
-	EVP6H-10	708	350.5	210	141	218	121.5	G1¼	G1½	166	140.5
-	EVP10H-3	554.5	187	2410	141	227.5	127.5	G1¼	G1½	192	164
-	EVP10H-4	577.5	220	240	141	227.5	127.5	G1¼	G1½	192	164
-	EVP10H-5	647	253	262	152	237.5	128.5	G1¼	G1½	192	164
-	EVP10H-6	680	286	262	152	237.5	128.5	G1¼	G1½	192	164
-	EVP10H-7	713	319	262	152	237.5	128.5	G1¼	G1½	192	164
-	EVP10H-8	746	352	262	152	237.5	128.5	G1¼	G1½	192	164

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

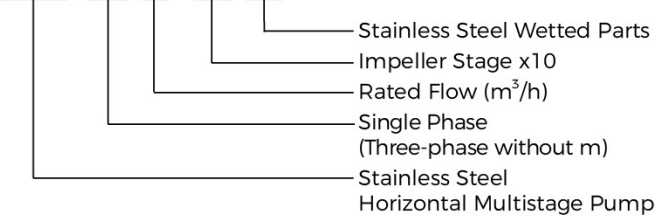
- AISI 304 shaft
- Max. liquid temperature: +85°C
- Altitude: up to 1000 m
- Max. suction: 8 m
- Max. inlet pressure: limited by max. operating pressure
- Max. operating pressure: 10 bar
- Liquid PH Value: 4-10

Motor

- IE2 motor (IE3 motor available on request)
- 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

ECH (m) 2 - 20 (S)



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

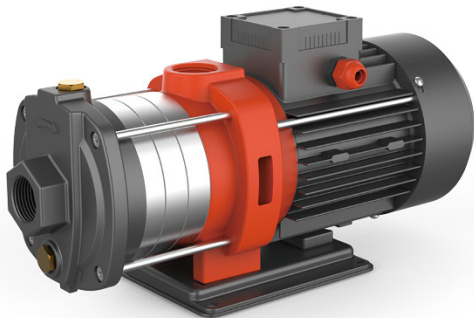
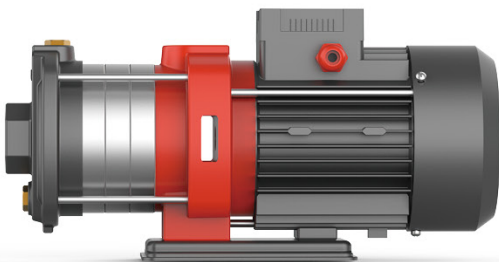
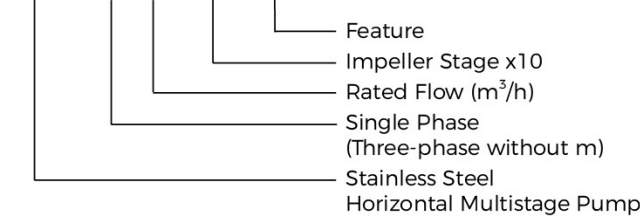
- AISI 304 shaft
- Max. liquid temperature: +60°C
- Altitude: up to 1000 m
- Max. suction: 8 m
- Max. inlet pressure: limited by max. operating pressure
- Max. operating pressure: 10 bar
- Liquid PH Value: 6.5 - 8.5

Motor

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

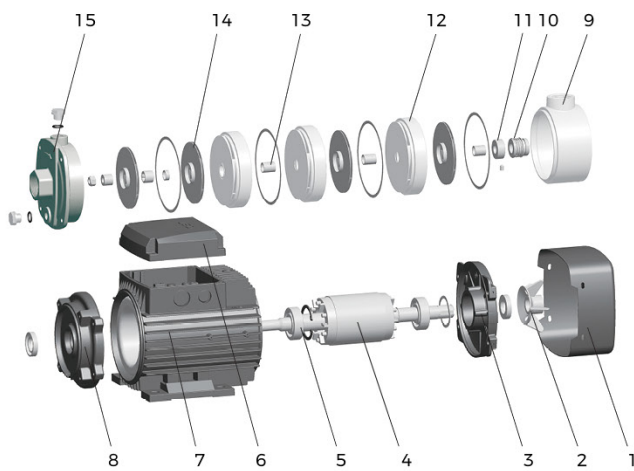
Identification Codes

ECH (m) 2 - 20 - F



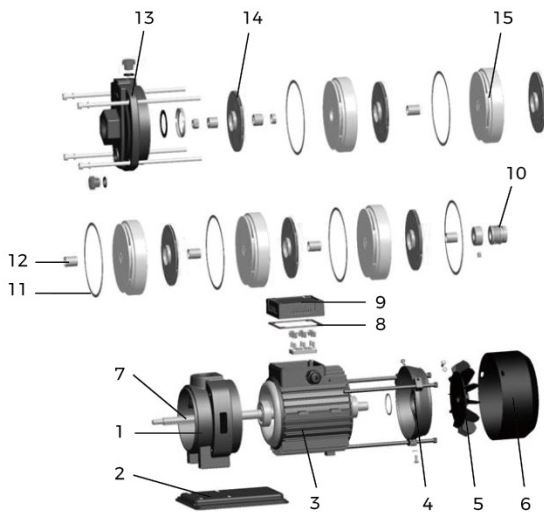
Materials Table

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	Sic/Carbon
11	Positioning sleeve	AISI 304
12	Diffuser	AISI 304
13	Sleeve	AISI 304
14	Impeller	AISI 304
15	Pump body	Cast iron/AISI 304

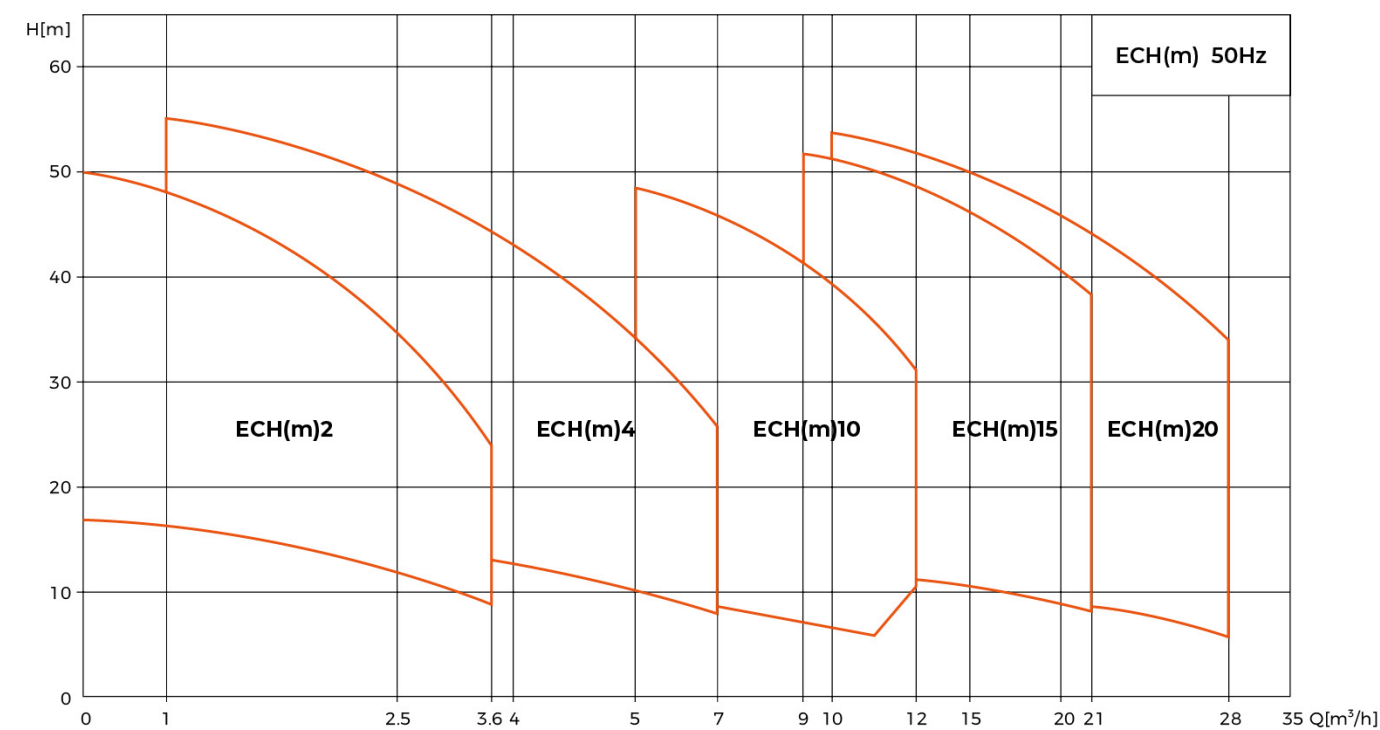


Materials Table

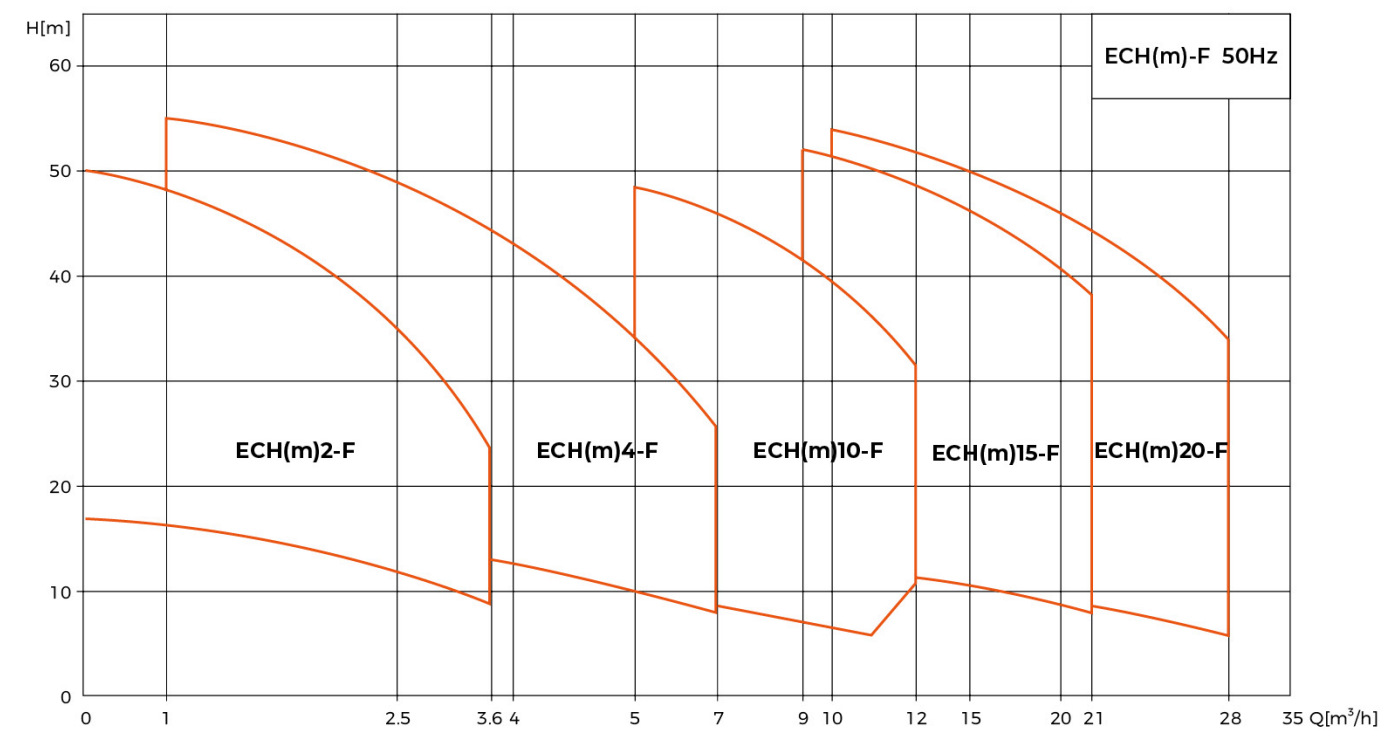
No.	Part	Material
1	Support	Cast iron
2	Base	Q235
3	Stator	ZL 102
4	Rear	ZL 102
5	Fan	PP-GF15
6	Fan cover	08F
7	Rotor	
8	O-ring	NBR
9	Terminal Box	PP-GF20
10	Mechanical seal	Sic/Carbon
11	O-ring	NBR
12	Sleeve	AISI 304
13	Pump body	HT200
14	Impeller	AISI 304
15	Diffuser	AISI 304



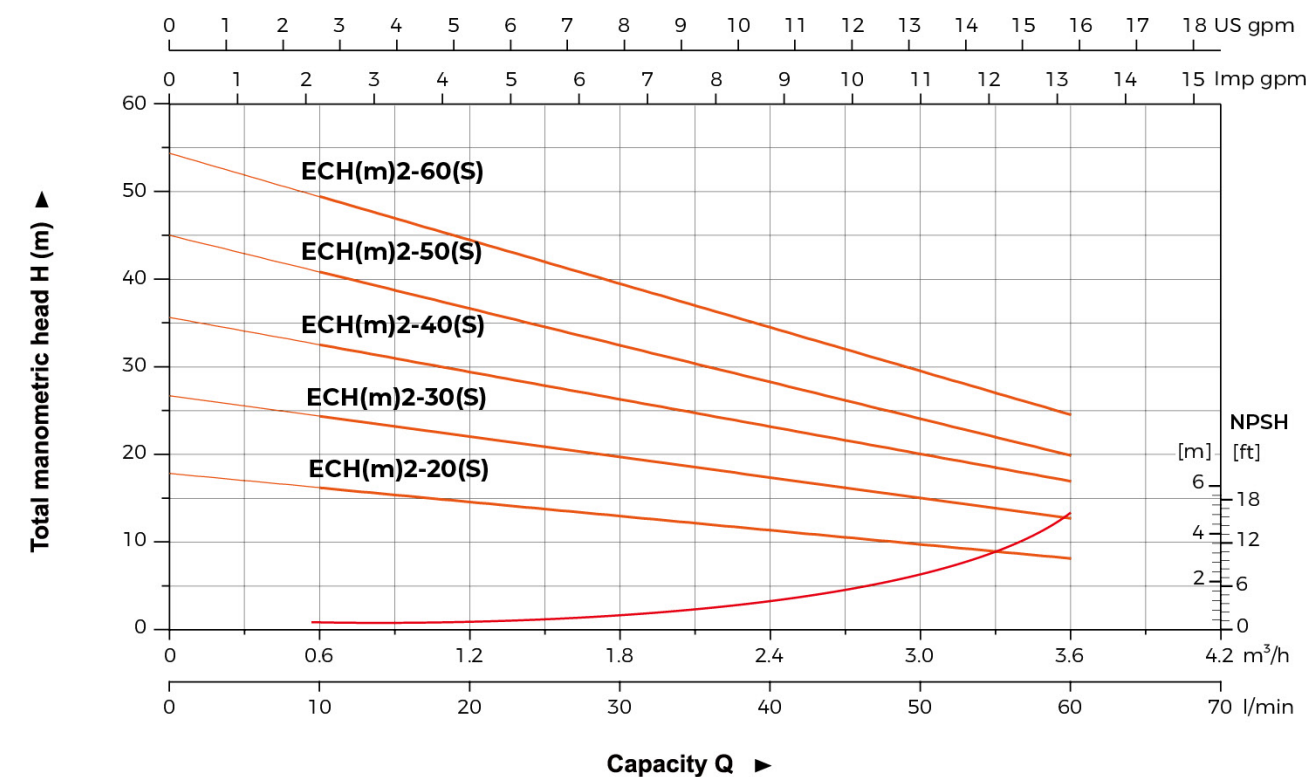
Scope of Performance - ECH



Scope of Performance - ECH-F



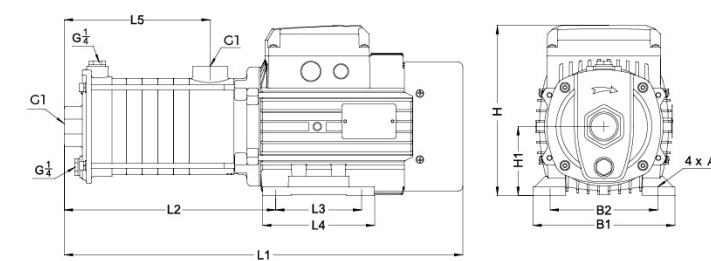
Hydraulic Performance Curves



Technical Data

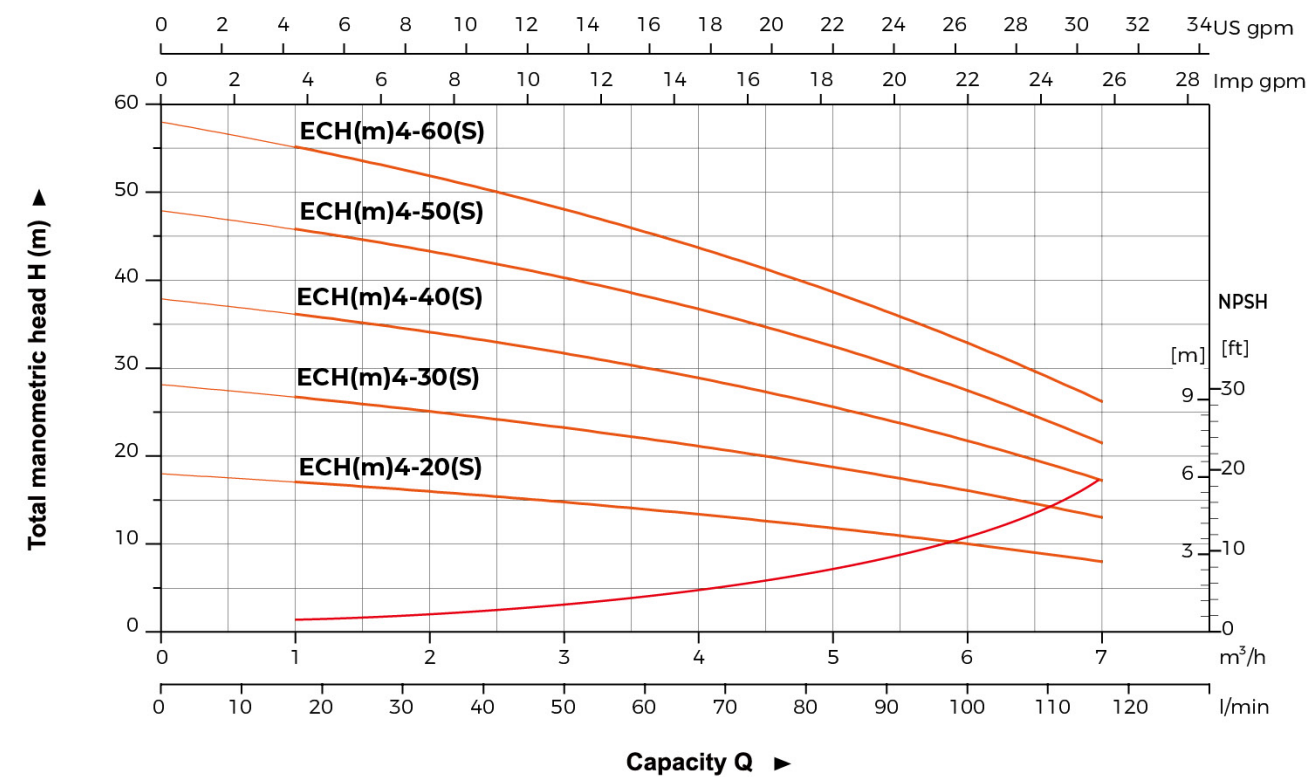
Model	Power		Q(m³/h) Q(l/min)	1.6	1.2	1.8	2.4	3.0	3.6
	kW	HP		10	20	30	40	50	60
ECH(m)2-20(S)	0.37	0.5	H (m)	16	15	13	12	10	8
ECH(m)2-30(S)	0.37	0.5		24	22	20	18	16	12
ECH(m)2-40(S)	0.55	0.75		33	30	26	24	21	16
ECH(m)2-50(S)	0.55	0.75		40	37	33	30	24	19
ECH(m)2-60(S)	0.75	1.0		50	45	40	36	30	23

Dimension



Model	L1	L2	L3	L4	L5	B1	B2	H	H1	A3	GW (Kgs)	L x W x H (mm)	Quantity (PCS/20'TEU)
ECH(m)2-20(S)	344.5	165.5	90	110	98.5	137	112	176.5	71	Φ7	11.5	420x215x243	1215
ECH(m)2-30(S)	362.5	183.5	90	110	116.5	137	112	176.5	71	Φ7	11.8	420x215x243	1215
ECH(m)2-40(S)	380.5	201.5	90	100	134.5	137	112	176.5	71	Φ7	13.2	420x215x243	1215
ECH(m)2-50(S)	399.5	220.5	90	110	153.5	137	112	176.5	71	Φ7	13.7	455x215x243	1170
ECH(m)2-60(S)	417.5	238.5	90	110	171.5	137	112	176.5	71	Φ7	14.6	455x215x243	1170

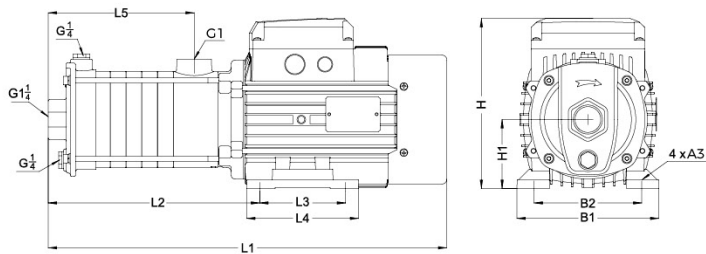
Hydraulic Performance Curves



Technical Data

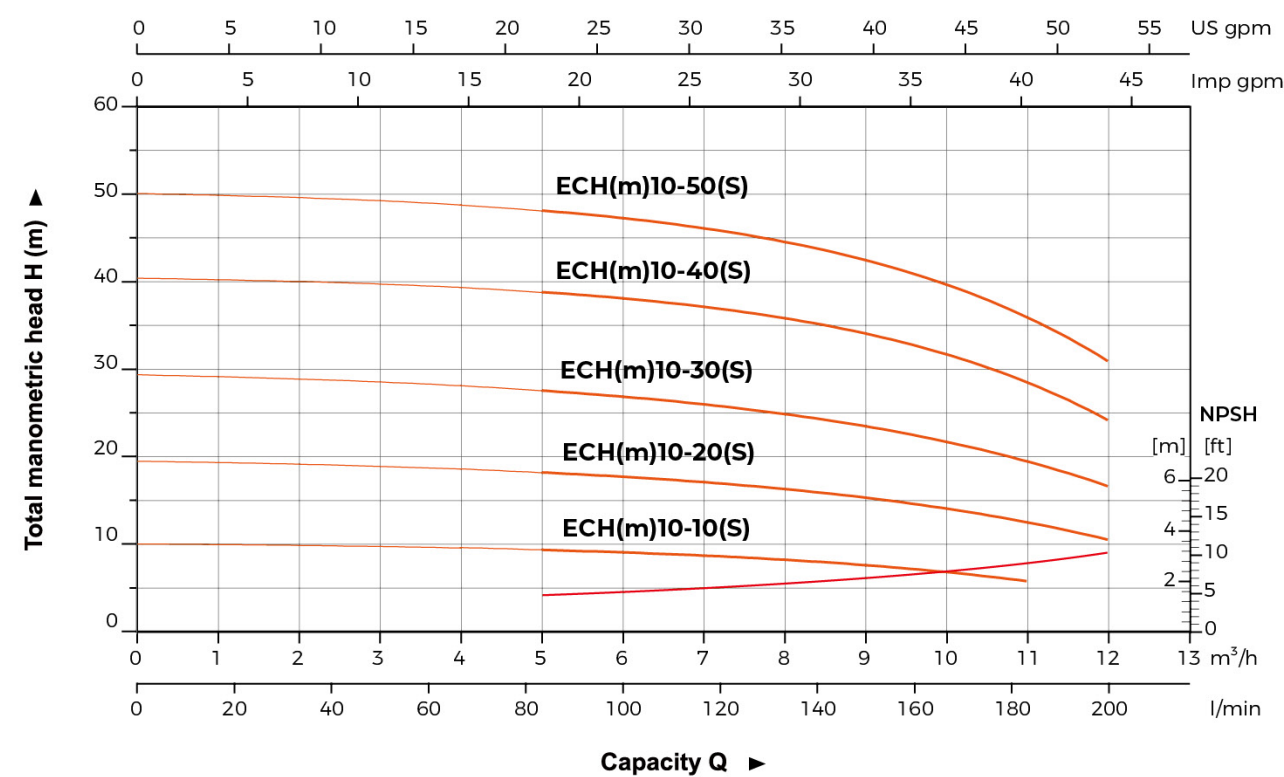
Model	Power		Q(m³/h) Q(l/min)	1	2	3	4	5	6	7
	kW	HP		17	33	50	67	83	100	117
ECH(m)4-20(S)	0.55	0.75	H (m)	17	16	15	13	12	10	8
ECH(m)4-30(S)	0.55	0.75		27	25	23	21	19	16	13
ECH(m)4-40(S)	0.75	1.0		36	34	32	28	26	22	17
ECH(m)4-50(S)	1.1	1.5		46	43	40	36	33	28	21
ECH(m)4-60(S)	1.1	1.5		55	52	48	43	39	33	26

Dimension



Model	L1	L2	L3	L4	L5	B1	B2	H	H1	A3	GW (Kgs)	L x W x H (mm)	Quantity (PCS/20'TEU)
ECH(m)4-20(S)	354	175.5	90	110	108.5	137	112	176.5	71	Φ7	13.1	420x215x243	1215
ECH(m)4-30(S)	381.5	203	90	110	136	137	112	176.5	71	Φ7	13.6	420x215x243	1215
ECH(m)4-40(S)	408.5	230	90	110	163	137	112	176.5	71	Φ7	14.7	455x215x243	1170
ECH(m)4-50(S)	484	266	100	130	190	165	125	204.5	80	Φ10	21.5	548x235x268	800
ECH(m)4-60(S)	511.5	293.5	100	130	217.5	165	125	204.5	80	Φ10	22	548x235x268	800

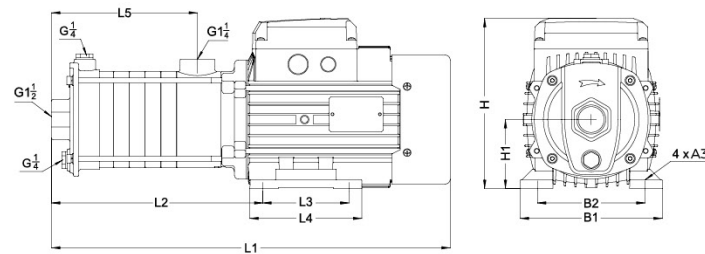
Hydraulic Performance Curves



Technical Data

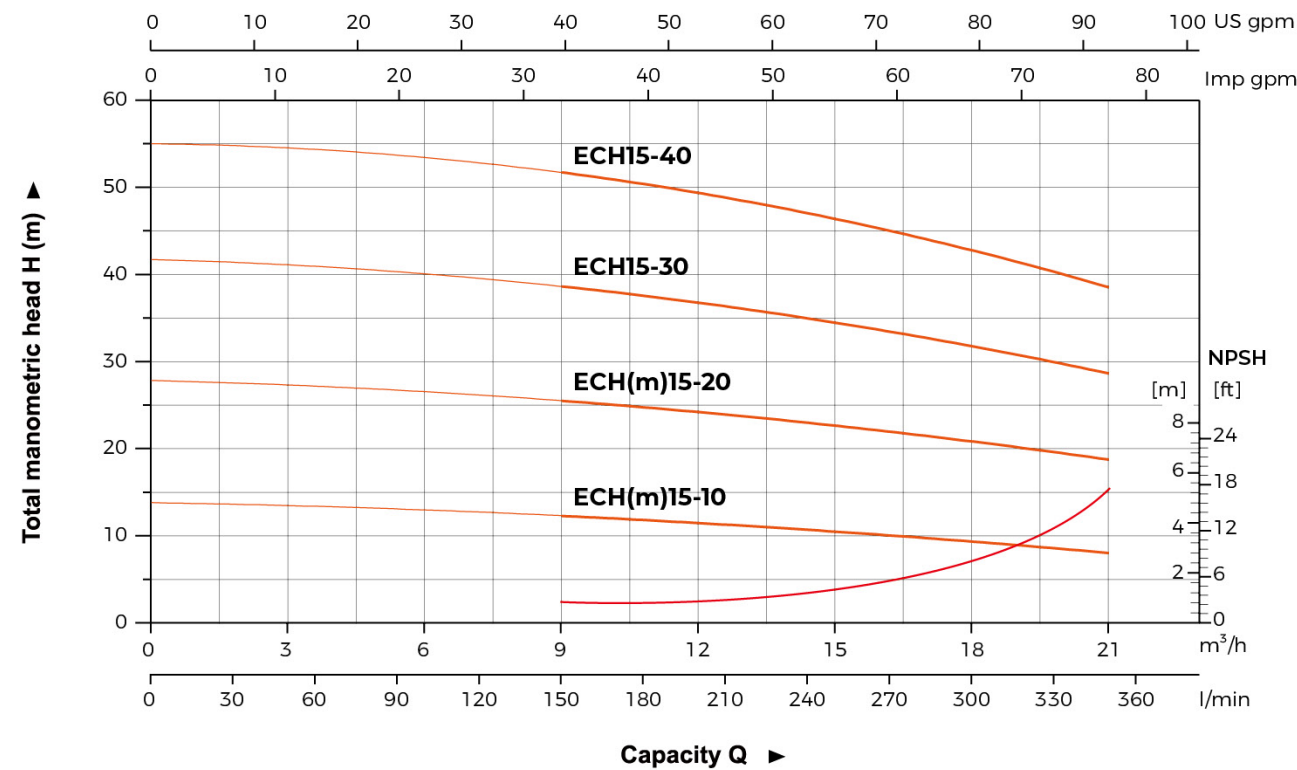
Model	Power		Q(m³/h) Q(l/min)	6	7	8	9	10	11	12
	kW	HP		100	117	133	150	167	183	200
ECH(m)10-10(S)	0.75	1.0	H (m)	9.1	8.7	8.2	7.7	6.8	5.8	-
ECH(m)10-20(S)	0.75	1.0		17.9	17.1	16.3	15.3	14	12.5	10.6
ECH(m)10-30(S)	1.1	1.5		27.1	26.3	24.9	23.4	21.4	19.3	16.9
ECH(m)10-40(S)	1.5	2.0		38.6	37.6	35.9	33.9	31.2	28.2	24.6
ECH(m)10-50(S)	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	A3	GW (Kgs)	L x W x H (mm)	Quantity (PCS/20'TEU)
ECH(m)10-10(S)	430	212	100	130	121	165	125	204.5	80	Φ10	20.7	503x235x268	856
ECH(m)10-20(S)	430	212	100	130	121	165	125	204.5	80	Φ10	20.8	503x235x268	856
ECH(m)10-30(S)	460.5	242.5	100	130	151.5	165	125	204.5	80	Φ10	21.9	503x235x268	856
ECH(m)10-40(S)	549.5	261.5	125	150	182	180	140	217.5	90	Φ10	28.2	618x245x283	653
ECH(m)10-50(S)	579.5	291.5	125	150	212	180	140	217.5	90	Φ10	30.6	618x245x283	653

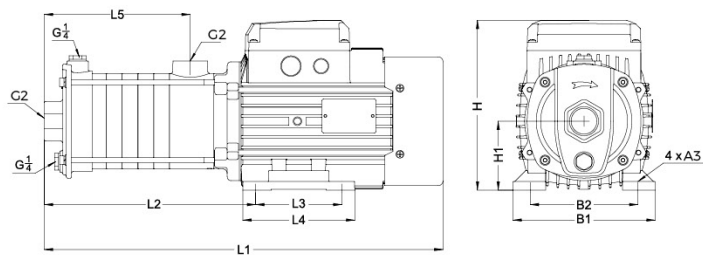
Hydraulic Performance Curves



Technical Data

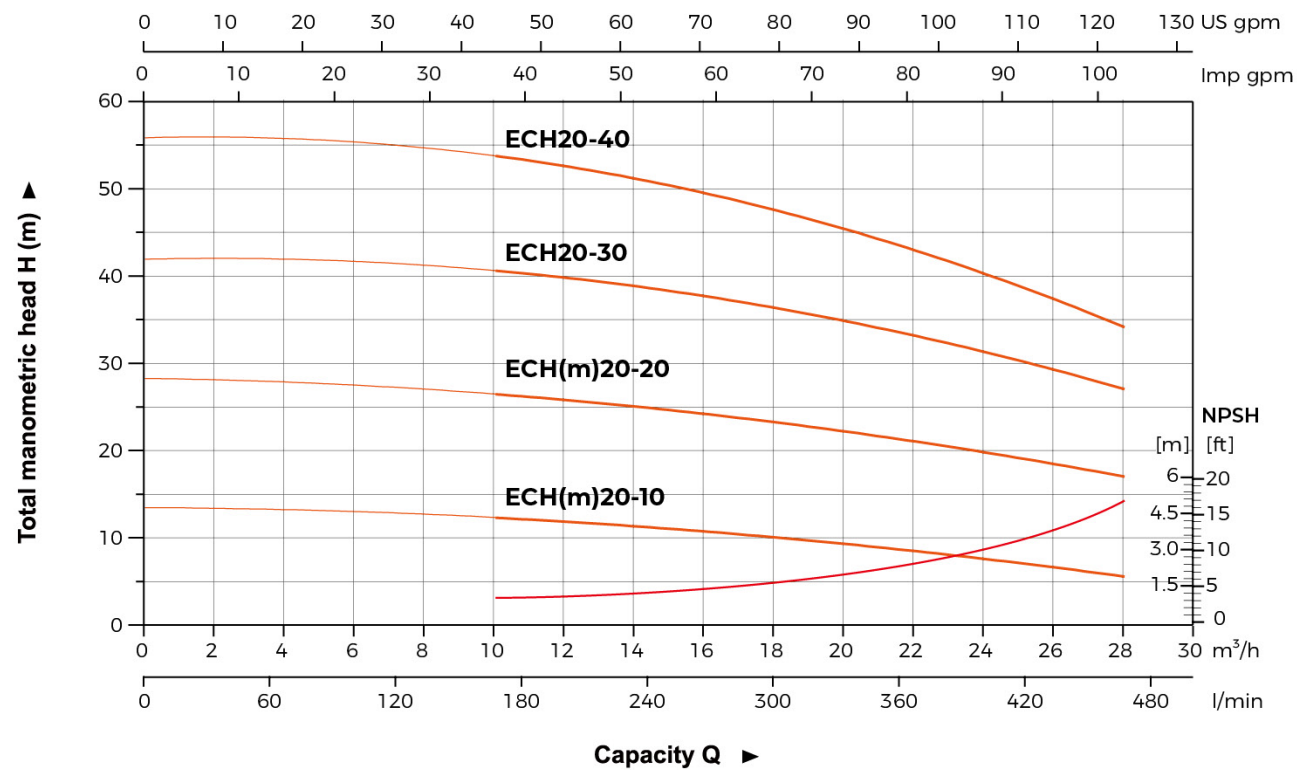
Model	Power		Q(m³/h) Q(l/min)	9	12	15	18	21
	kW	HP		150	200	250	300	350
ECH(m)15-10	1.1	1.5	H (m)	12.4	11.6	10.6	9.4	8.2
ECH(m)15-20	2.2	3.0		25.6	24.1	22.7	21.1	18.8
ECH15-30	3.0	4.0		38.7	36.9	34.9	31.9	28.5
ECH15-40	4.0	5.5		51.8	49.7	46.8	42.9	38.3

Dimension



Model	L1	L2	L3	L4	L5	B1	B2	H	H1	A3	GW (Kgs)	L x W x H (mm)	Quantity (PCS/20 TEU)
ECH(m)15-10	451	233.5	100	130	139.5	165	125	204.5	80	Φ10	22.7	503x235x268	856
ECH(m)15-20	510	222	125	150	139.5	180	140	217.5	90	Φ10	30.3	557x245x283	659
ECH15-30	560	272	125	150	189.5	180	140	217.5	90	Φ10	32.2	618x245x283	620
ECH15-40	616	336.5	140	180	230	205	160	224.5	100	Φ12	39.6	687x245x290	504

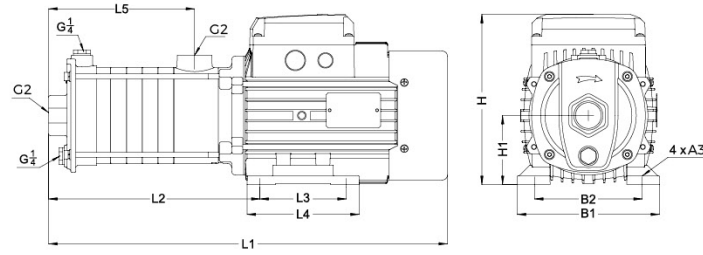
Hydraulic Performance Curves



Technical Data

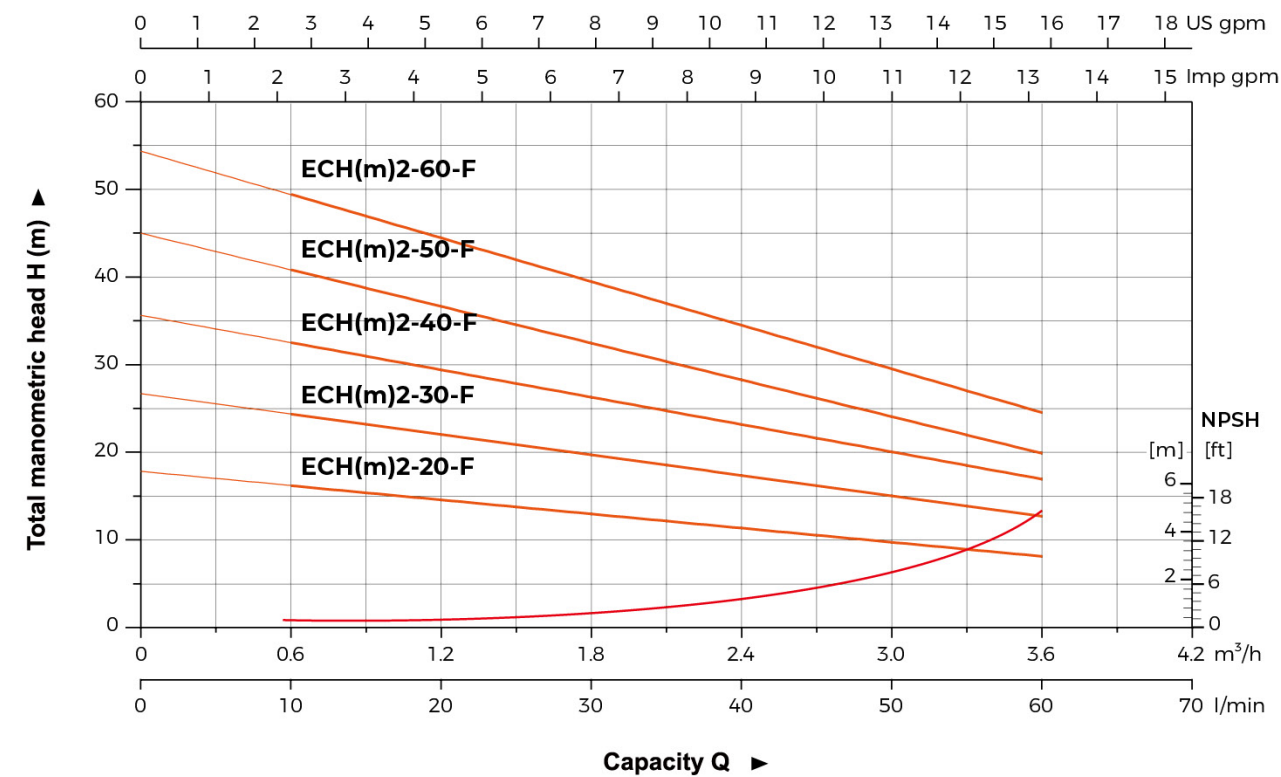
Model	Power		Q(m³/h) Q(l/min)	12	16	20	24	28
	kW	HP		200	267	333	400	467
ECH(m)20-10	1.1	1.5	H (m)	12.1	10.8	9.5	7.8	5.7
ECH(m)20-20	2.2	3.0		26.1	24.4	22.4	19.8	17.2
ECH20-30	4.0	5.5		39.9	38.0	35.5	31.4	26.9
ECH20-40	4.0	5.5		52.7	50.1	45.9	40.3	34.0

Dimension



Model	L1	L2	L3	L4	L5	B1	B2	H	H1	A3	GW (Kgs)	L x W x H (mm)	Quantity (PCS/20 TEU)
ECH(m)20-10	451	233.5	100	130	139.5	165	125	204.5	80	Φ10	22.7	503x235x268	856
ECH(m)20-20	510	222	125	150	139.5	180	140	217.5	90	Φ10	30.3	557x245x283	659
ECH20-30	570.5	291	140	180	184.5	205	160	224.5	100	Φ12	38.9	687x245x290	513
ECH20-40	616	336.5	140	180	230	205	160	224.5	100	Φ12	39.4	687x245x290	504

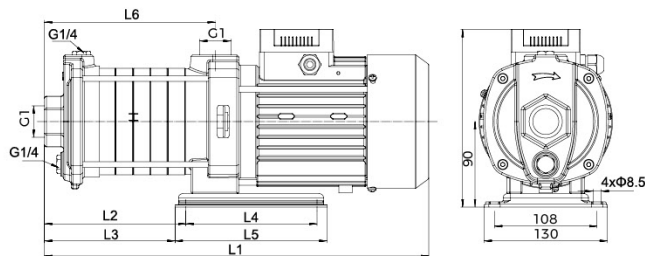
Hydraulic Performance Curves



Technical Data

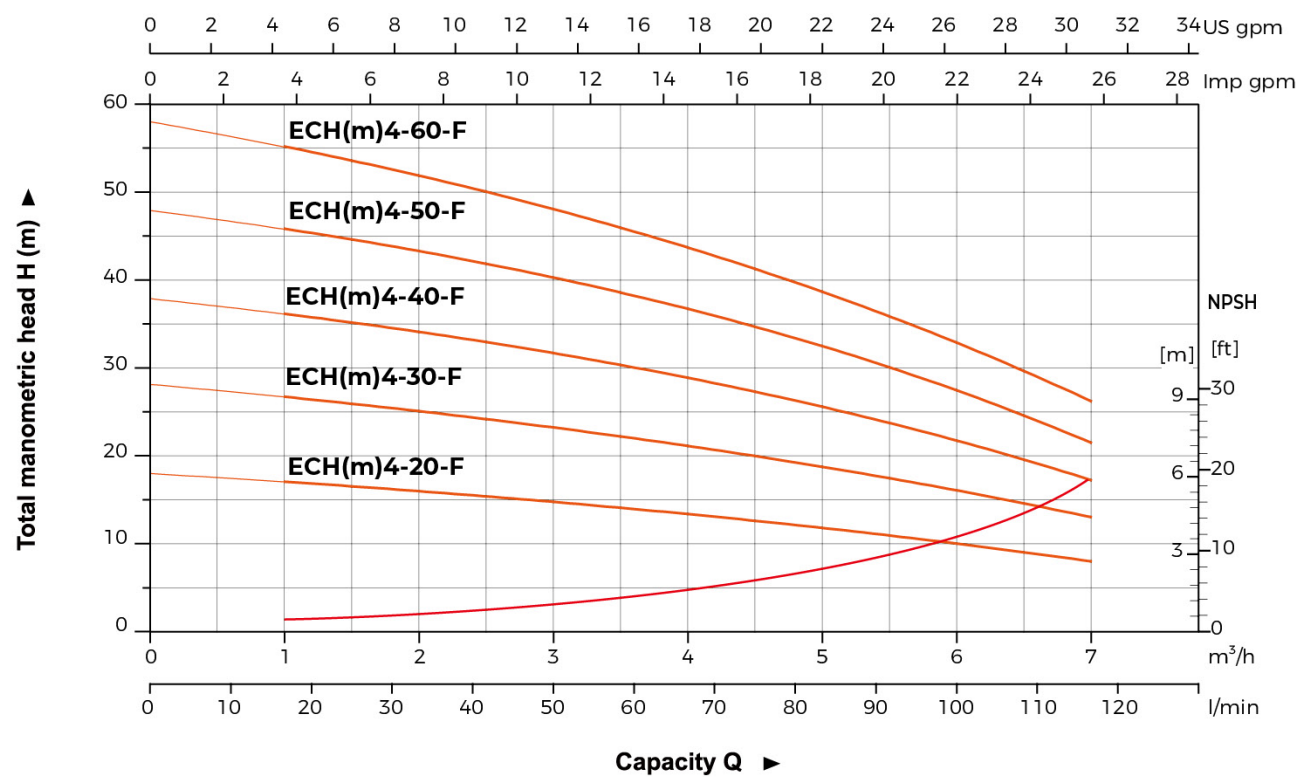
Model	Power		Q(m³/h) Q(l/min)	0	0.6	1.2	1.8	2.4	3.0	3.6
	kW	HP		0	10	20	30	40	50	60
ECH(m)2-20-F	0.37	0.5	H (m)	18	16	15	13	12	10	8
ECH(m)2-30-F	0.37	0.5		27	24	22	20	18	16	12
ECH(m)2-40-F	0.55	0.75		35	33	30	26	24	21	16
ECH(m)2-50-F	0.55	0.75		45	40	37	33	30	24	19
ECH(m)2-60-F	0.75	1.0		53	50	45	40	36	30	23

Dimension



Model	L1	L2	L3	L4	L5	L6	H		GW (Kgs)	L x W x H (mm)	Quantity (PCS/20 TEU)
							1~	3~			
ECH(m)2-20-F	333	75	64	138	160	103.5	197.5	187	12.3	400x205x240	1386
ECH(m)2-30-F	352	93.5	82.5	138	160	122	197.5	187	12.6	400x205x240	1260
ECH(m)2-40-F	370	112	101	138	160	140.5	197.5	187	13.3	400x205x240	1386
ECH(m)2-50-F	389	130.5	119.5	138	160	159	197.5	187	13.8	400x205x240	1260
ECH(m)2-60-F	407	149	138	138	160	177.5	197.5	187	14.7	400x205x240	1161

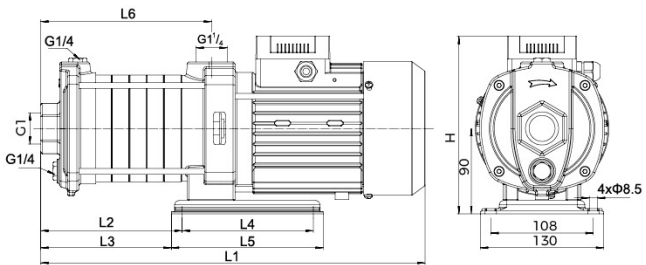
Hydraulic Performance Curves



Technical Data

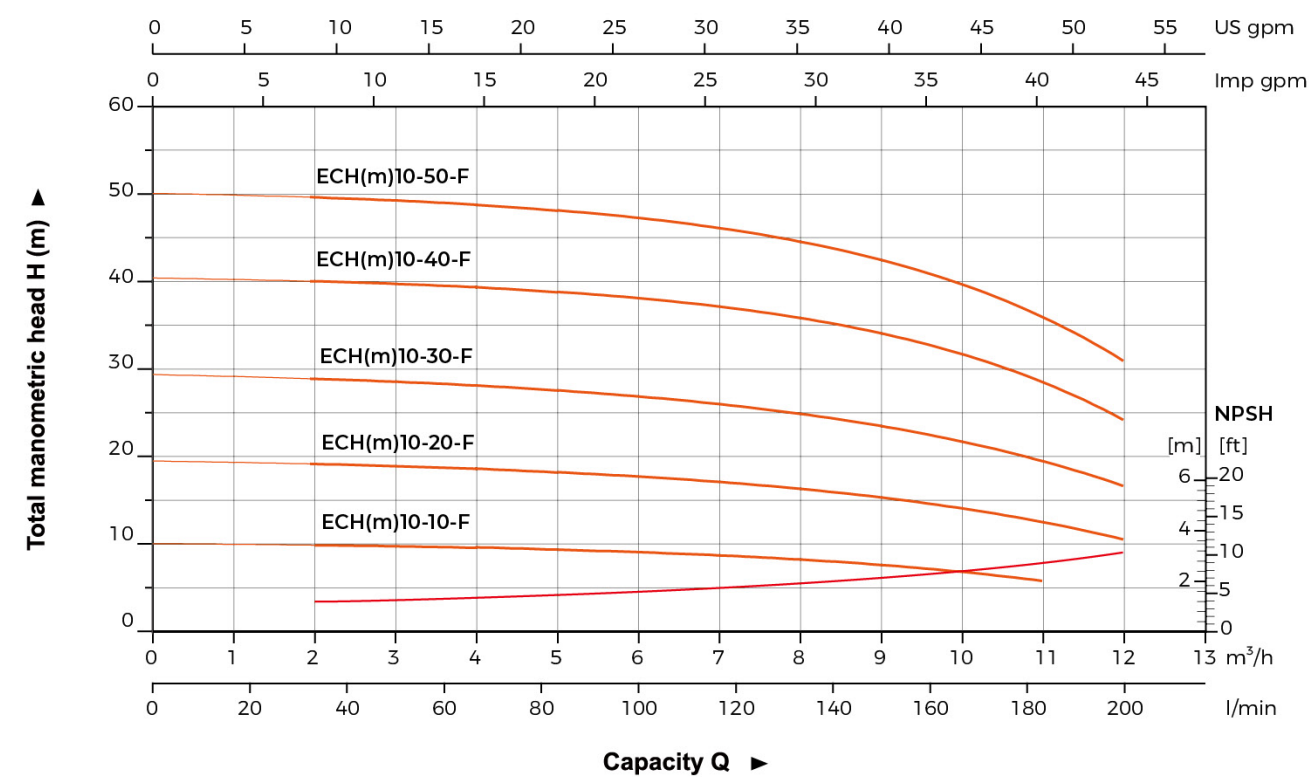
Model	Power		Q(m³/h) Q(l/min)	0	1	2	3	4	5	6	7
	kW	HP		0	17	33	50	67	83	100	117
ECH(m)4-20-F	0.55	0.75	H (m)	18	17	16	15	13	12	10	8
ECH(m)4-30-F	0.55	0.75		28	27	25	23	21	19	16	13
ECH(m)4-40-F	0.75	1.0		38	36	34	32	28	26	22	17
ECH(m)4-50-F	1.1	1.5		48	46	43	40	36	33	28	21
ECH(m)4-60-F	1.1	1.5		58	55	52	48	43	39	33	26

Dimension



Model	L1	L2	L3	L4	L5	L6	H		GW (Kgs)	L x W x H (mm)	Quantity (PCS/20 TEU)
							1~	3~			
ECH(m)4-20-F	342	85.5	74.5	138	160	114	197.5	187	12.8	400x205x240	1386
ECH(m)4-30-F	370	113	102	138	160	141.5	197.5	187	13	400x205x240	1386
ECH(m)4-40-F	398	140.5	129.5	138	160	169	197.5	187	14.9	455x205x240	1260
ECH(m)4-50-F	426	168	157	138	160	196.5	197.5	187	15.7	455x205x240	1260
ECH(m)4-60-F	453	195.5	184.5	138	160	224	197.5	187	15.9	485x205x240	1161

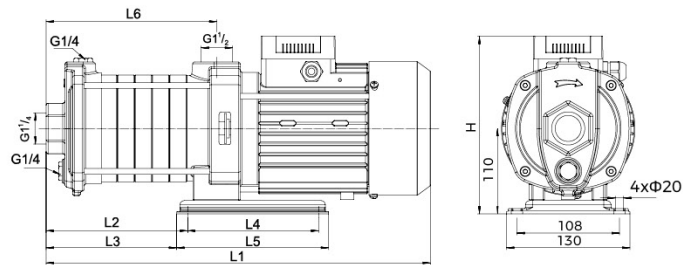
Hydraulic Performance Curves



Technical Data

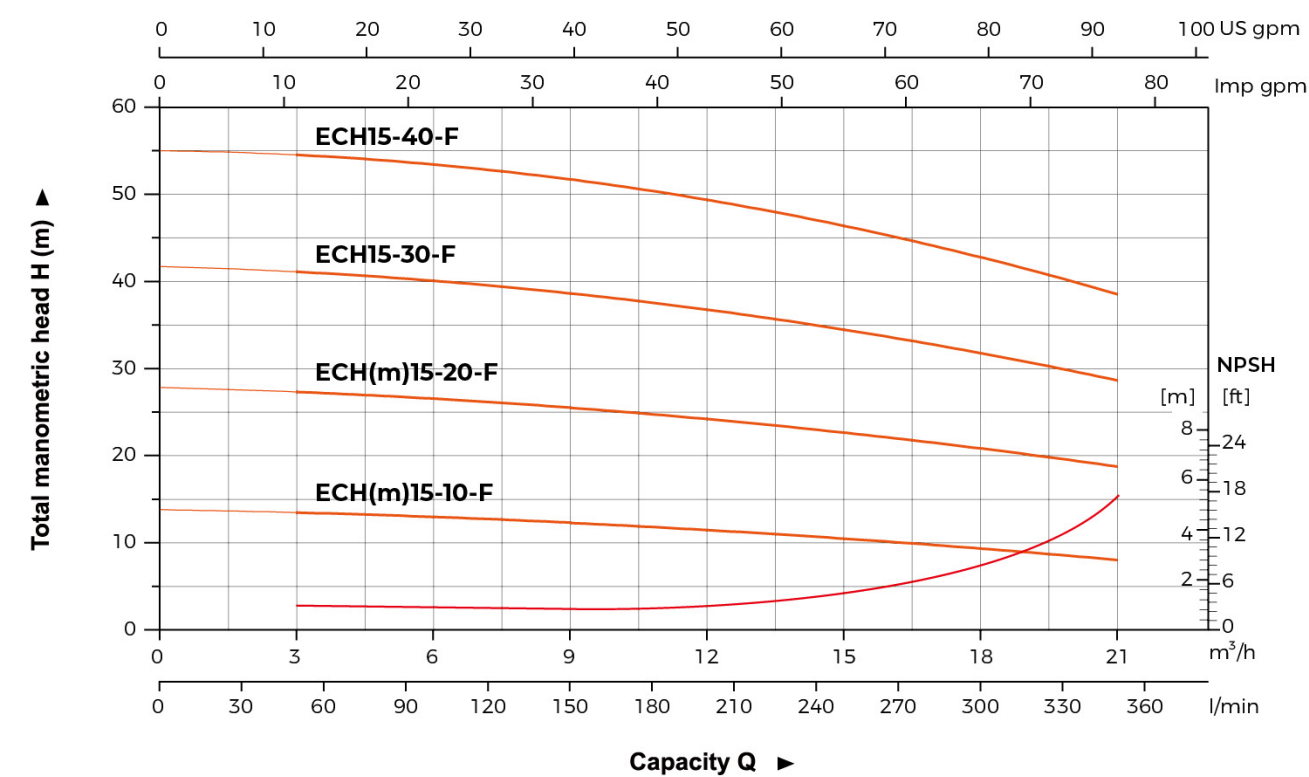
Model	Power		Q(m³/h)	Q(l/min)									
	kW	HP		0	2	4	6	7	8	9	10	11	12
ECH(m)10-10-F	0.75	1.0	H (m)	10.1	9.8	9.6	9.1	8.7	8.2	7.7	6.8	5.8	-
ECH(m)10-20-F	0.75	1.0		19.5	19	18.7	17.9	17.1	16.3	15.3	14	12.5	10.6
ECH(m)10-30-F	1.1	1.5		29.3	28.6	28.3	27.1	26.3	24.9	23.4	21.4	19.3	16.9
ECH(m)10-40-F	1.5	2.0		38.1	39.6	39.8	38.6	37.6	35.9	33.9	31.2	28.2	24.6
ECH(m)10-50-F	2.2	3.0		49.9	49.2	49.1	47.8	46.4	44.4	42.2	39.5	35.9	31.1

Dimension



Model	L1	L2	L3	L4	L5	L6	H		GW (Kgs)	L x W x H (mm)	Quantity (PCS/20°TEU)
							1~	3~			
ECH(m)10-10-F	398	122	111	138	170	120	232.5	226	21.5	435x275x310	896
ECH(m)10-20-F	398	122	111	138	170	120	232.5	226	21.9	435x275x310	896
ECH(m)10-30-F	428	152	141	138	170	150	232.5	226	24.3	465x275x310	756
ECH(m)10-40-F	530	194	183	138	170	187	236	230	26.1	575x275x310	686
ECH(m)10-50-F	560	224	213	138	170	217	242	230	30.4	605x275x310	637

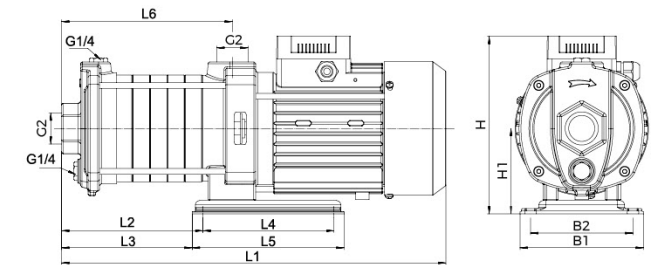
Hydraulic Performance Curves



Technical Data

Model	Power		Q(m³/h)	Q(l/min)							
	kW	HP		0	3	6	9	12	15	18	21
ECH(m)15-10-F	1.1	1.5	H (m)	13.9	13.5	13.1	12.4	11.6	10.6	9.4	8.2
ECH(m)15-20-F	2.2	3		27.8	27.5	26.7	25.6	24.1	22.7	21.1	18.8
ECH15-30-F	3.0	4		42.1	40.9	39.8	38.7	36.9	34.9	31.9	28.5
ECH15-40-F	4.0	5.0		55.5	54.3	52.8	51.8	49.7	46.8	42.9	38.3
ECH15-50-F	5.0	6.5		69.9	68.6	67.1	65.9	63.9	60.9	57.9	53.3

Dimension

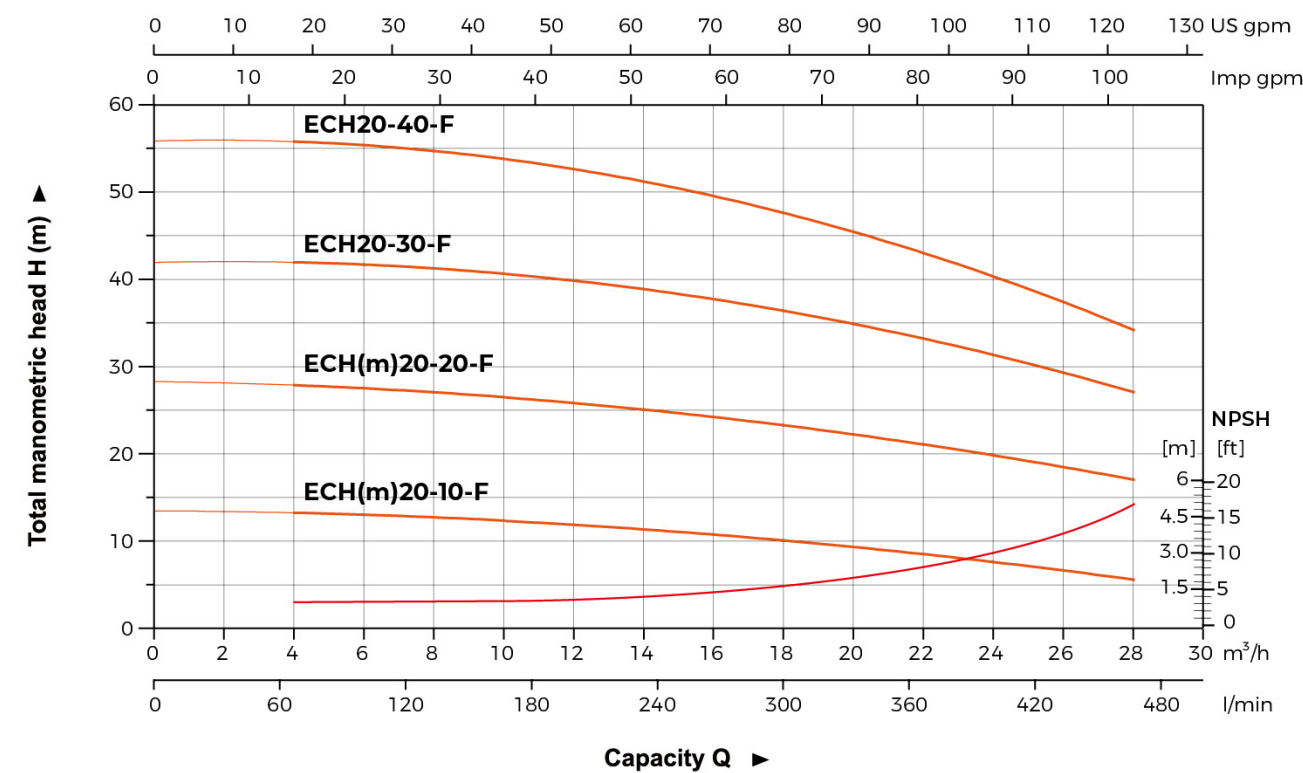


Model	L1	L2	L3	L4	L5	L6	B1	B2	H		H1	GW (Kgs)	L x W x H (mm)	Quantity (PCS/20°TEU)
									1~	3~				
ECH(m)15-10-F	419	142	131	138	170	142	130	108	232.5	226	110	23	465x275x310	756
ECH(m)15-20-F	485	149	138	138	170	142	130	108	242	230	110	29.2	530x275x310	696
ECH15-30-F	546	192	190	190	230	185	180	140	-	250	120	34.5	590x275x310	539
ECH15-40-F	591	237	217	190	230	230	180	140	-	250	120	46.5	635x275x310	430

ECH

Stainless Steel Horizontal
Multistage Pump

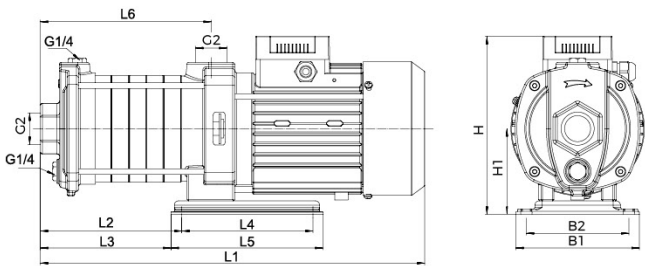
Hydraulic Performance Curves



Technical Data

Model	Power		Q(m³/h)	0	4	8	12	16	20	24	28
	kW	HP	Q(l/min)	0	67	133	200	267	333	400	467
ECH(m)20-10-F	1.1	1.5	H (m)	13.6	13.3	12.8	12.1	10.8	9.5	7.8	5.7
ECH(m)20-20-F	2.2	3		28.5	27.8	27.0	26.1	24.4	22.4	19.8	17.2
ECH20-30-F	4.0	5.0		42.5	41.6	40.9	39.9	38.0	35.5	31.4	26.9
ECH20-40-F	4.0	5.0		56.6	55.2	54.2	52.7	50.1	45.9	40.3	34.0

Dimension



Model	L1	L2	L3	L4	L5	L6	B1	B2	H		H1	GW (Kgs)	L x W x H (mm)	Quantity (PCS/20"TEU)
									1~	3~				
ECH(m)20-10-F	419	142	131	138	170	142	130	108	232.5	226	110	23	465x275x310	756
ECH(m)20-20-F	485	149	138	138	170	142	130	108	242	230	110	29.2	530x275x310	696
ECH20-30-F	546	192	190	190	230	185	180	140	-	250	120	37.3	590x275x310	536
ECH20-40-F	591	237	217	190	230	230	180	140	-	250	120	46.5	635x275x310	430

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

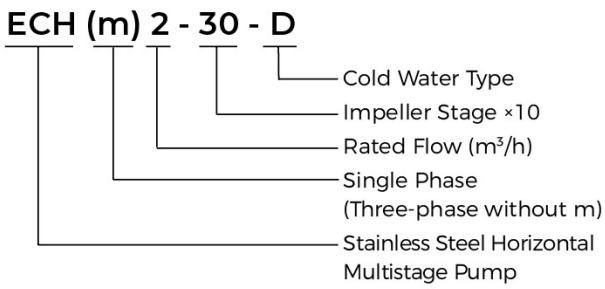
Pump

- AISI 304 shaft
- Max. liquid temperature: +60°C
- Altitude: up to 1000 m
- Max. suction: 8 m
- Max. inlet pressure: limited by max. operating pressure
- Max. operating pressure: 8 bar
- Liquid PH Value: 6.5 - 8.5

Motor

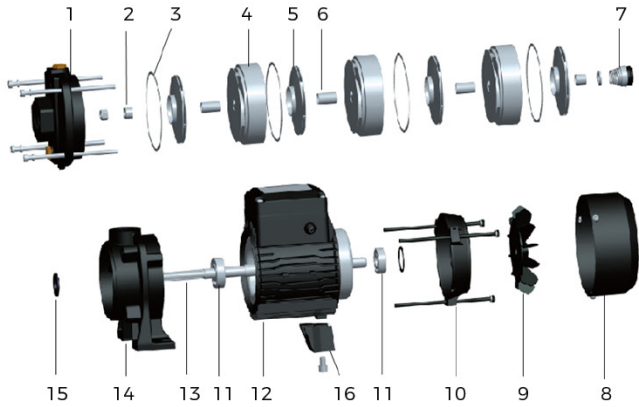
- Motor with copper winding
- Built-in thermal protector for single phase motor
- Insulation class: F
- Protection class: IPX4
- Max. ambient temperature: +40°C

Identification Codes

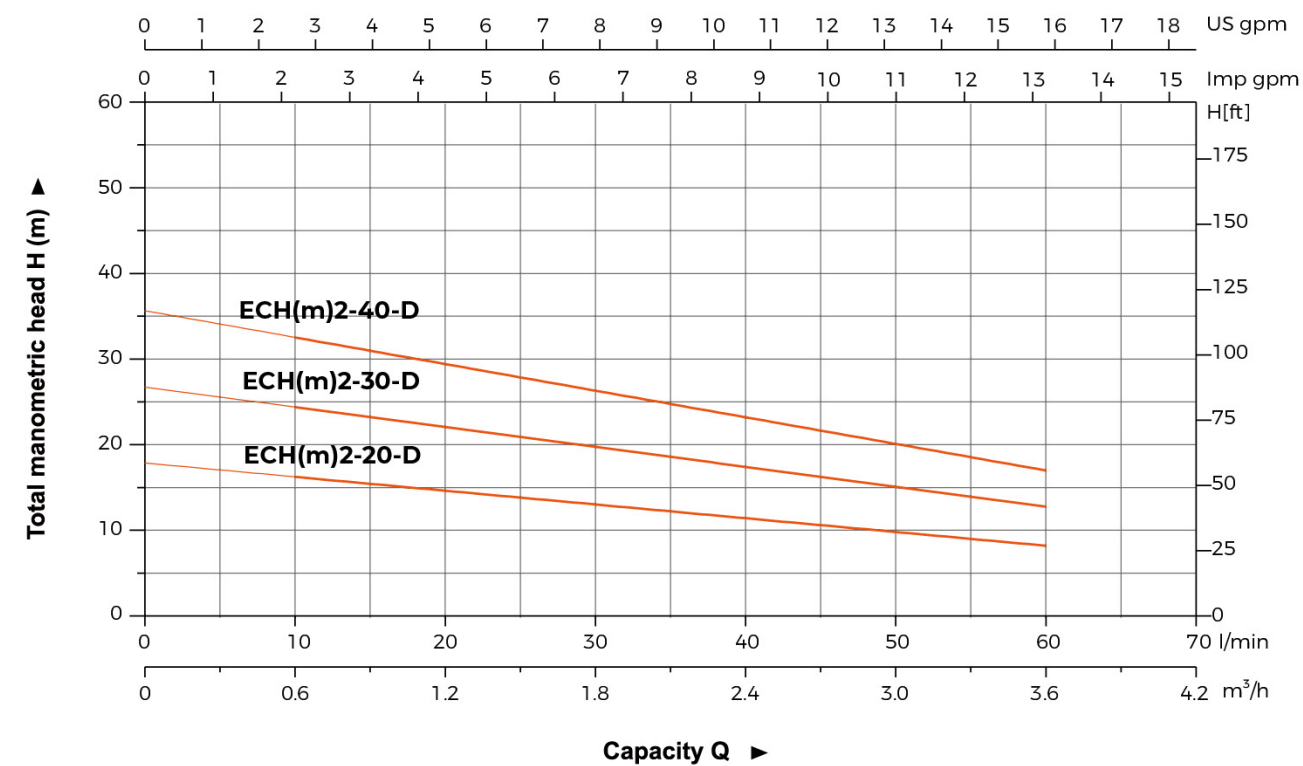


Materials Table

No.	Part	Material
1	Pump body	Cast iron
2	Shaft end sleeve	AISI304
3	Snap ring	PTFE
4	Diffuser	AISI304
5	Impeller	AISI304
6	Sleeve	AISI304
7	Mechanical seal	Sic/Carbon
8	Fan cover	08F
9	Fan	PP
10	Rear cover	ZL102
11	Bearing	
12	Stator	
13	Rotor	
14	Outlet body	Cast iron
15	Collar	PTFE
16	Support	PTFE



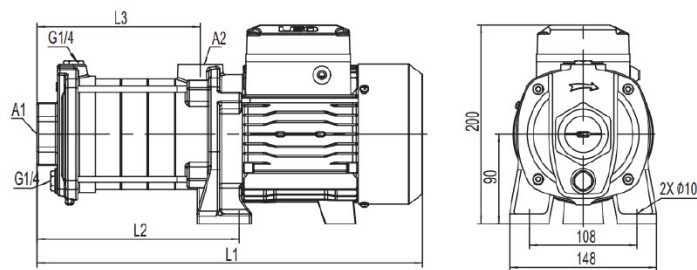
Hydraulic Performance Curves



Technical Data

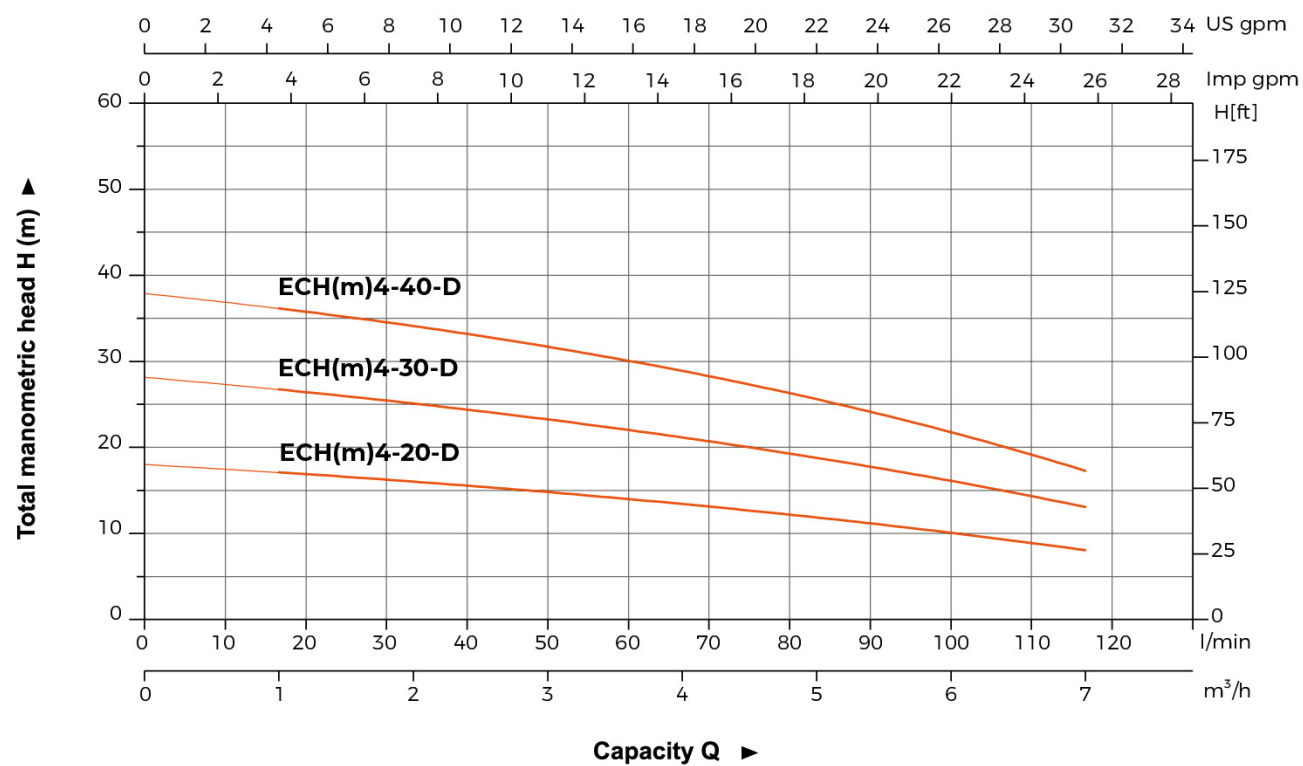
Model	Power		Q(m³/h)	0.6	1.2	1.8	2.4	3.0	3.6
	kW	HP	Q(l/min)	10	20	30	40	50	60
ECH(m)2-20-D	0.37	0.5	H (m)	16	15	13	12	10	8
ECH(m)2-30-D	0.37	0.5		24	22	20	18	16	12
ECH(m)2-40-D	0.55	0.75		33	30	26	24	21	16

Dimension



Model	L1	L2	L3	A1	A2	GW(Kgs)		L x W x H (mm)	Quantity (PCS/20'TEU)
						1~	3~		
ECH(m)2-20-D	324	140	101	G1	G1	10.3	10.7	375x185x237	1674
ECH(m)2-30-D	342	158	119	G1	G1	10.7	11	375x185x237	1674
ECH(m)2-40-D	360	176	137	G1	G1	12.4	12.6	420x185x237	1508

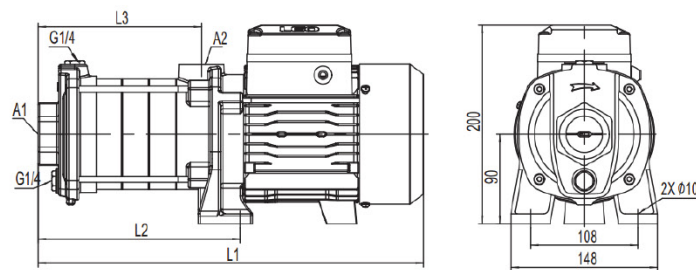
Hydraulic Performance Curves



Technical Data

Model	Power		Q(m³/h)	1	2	3	4	5	6	7
	kW	HP	Q(l/min)	17	33	50	67	83	100	117
ECH(m)4-20-D	0.55	0.75	H (m)	17	16	15	13	12	10	8
ECH(m)4-30-D	0.55	0.75		27	25	23	21	19	16	13
ECH(m)4-40-D	0.75	1.0		36	34	32	28	26	22	17

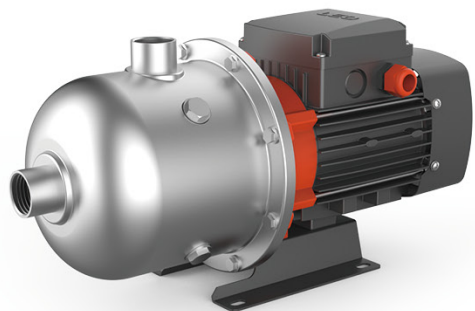
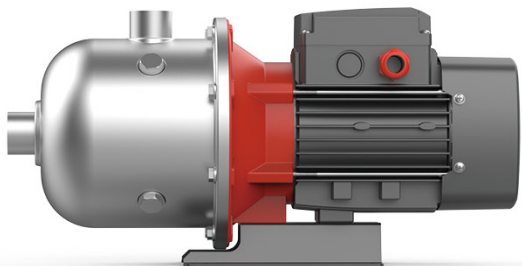
Dimension



Model	L1	L2	L3	A1	A2	GW(Kgs)		L x W x H (mm)	Quantity (PCS/20'TEU)
						1~	3~		
ECH(m)4-20-D	334	150	111	G1 1/4	G1	11.7	12	375x185x237	1583
ECH(m)4-30-D	361	177	138	G1 1/4	G1	12.4	12.6	420x185x237	1508
ECH(m)4-40-D	388	204	165	G1 1/4	G1	13.8	14	420x185x237	1357

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

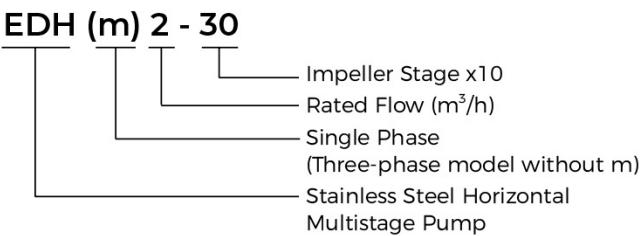
Pump

- 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
- Max. operating pressure: 10 bar
- Liquid PH Value: 4-10

Motor

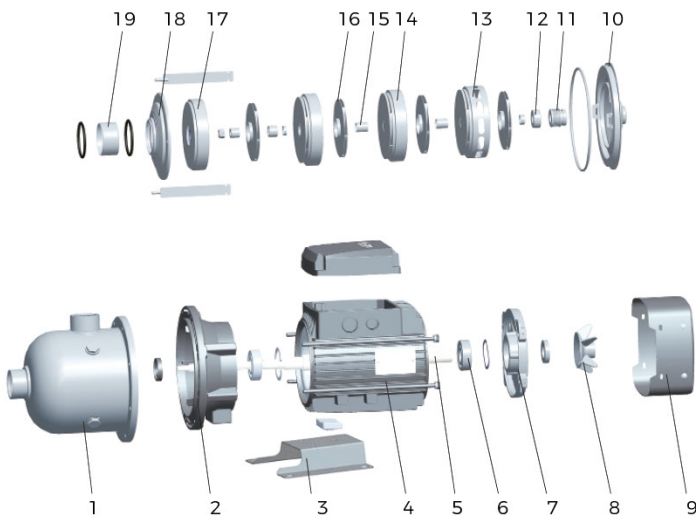
- IE2 motor (IE3 motor available on request)
- Motor with copper winding
- Built-in thermal protector for single phase motor
- Insulation class: F
- Protection class: IP55
- Max. ambient temperature: +40°C

Identification Codes



Materials Table

No.	Part	Material
1	Pump body	AISI 304
2	Support	ZL 102
3	Bottom plate	Q235
4	Stator	
5	Rotor	
6	Bearing	
7	Rear cover	ZL 102
8	Fan	PP
9	Fan cover	08F
10	Bracket cover	AISI 304
11	Mechanical seal	Sic/Carbon
12	Positioning sleeve	AISI 304
13	Diffuser 3	AISI 304
14	Diffuser 2	AISI 304
15	Sleeve	AISI 304
16	Impeller	AISI 304
17	Diffuser 1	AISI 304
18	Pressure plate	AISI 304
19	Spacer bush	AISI 304



Application

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

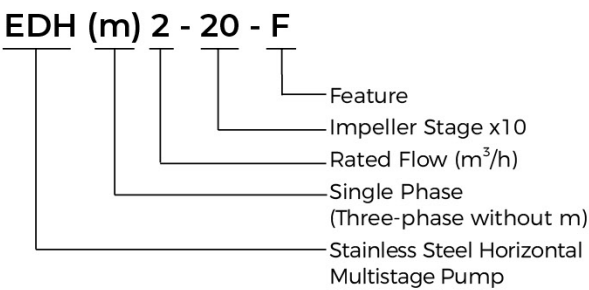
Pump

- AISI304 shaft
- Max. liquid temperature: +60°C
- Altitude: up to 1000 m
- Max. suction: 8 m
- Max. inlet pressure: limited by max. operating pressure
- Max. operating pressure: 10 bar
- Liquid PH value: 6.5 - 8.5

Motor

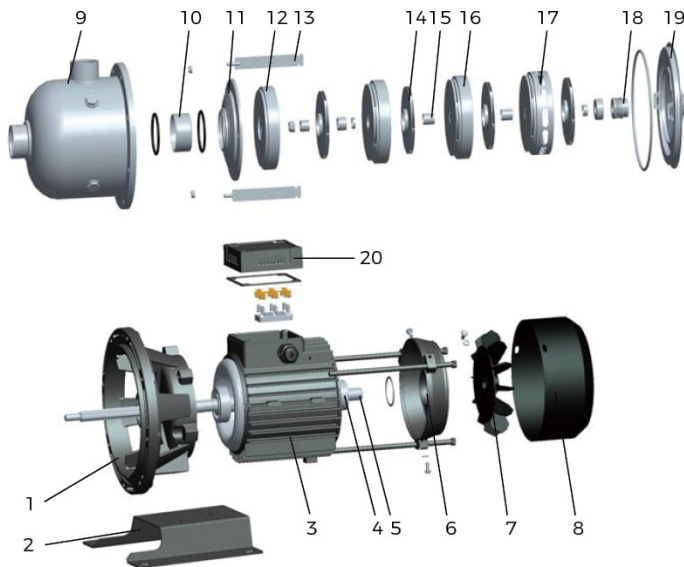
- Motor with copper winding
- Built-in thermal protector for single phase motor
- Insulation class: F
- Protection class: IPX4
- Max. ambient temperature: +40°C

Identification Codes

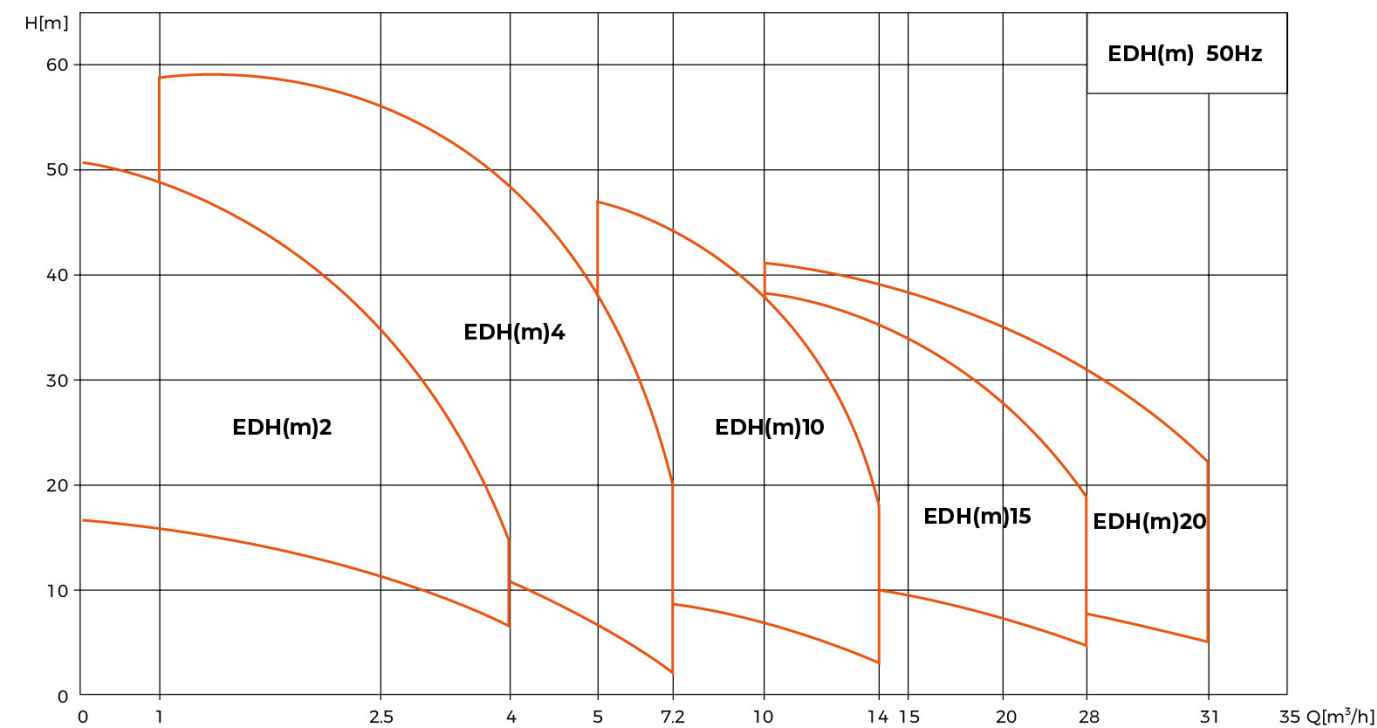


Materials Table

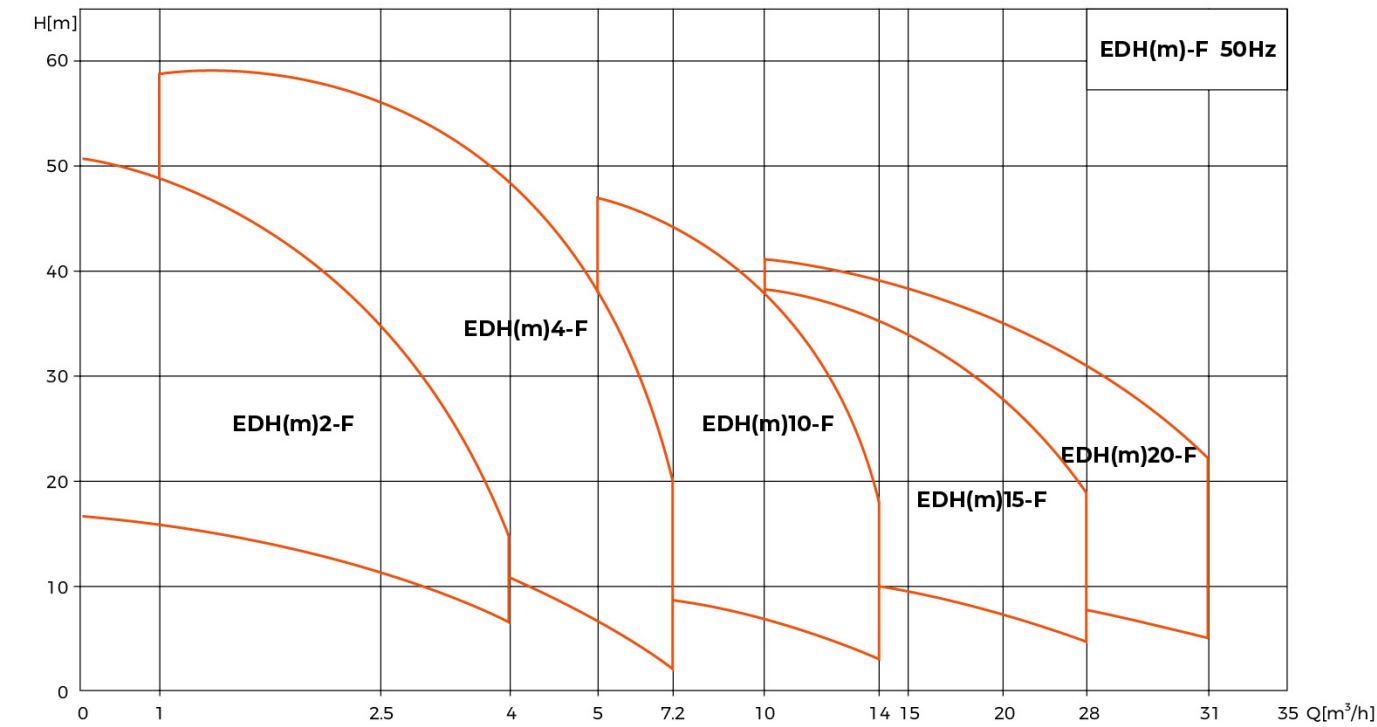
No.	Part	Material
1	Support	ZL 102
2	Base	Q235
3	Stator	
4	Bearing	
5	Rotor	
6	Rear	ZL 102
7	Fan	PP
8	Fan cover	08F
9	Pump body	AISI 304
10	Spacer bush	AISI 304
11	Pressure plate	AISI 304
12	Diffuser1	AISI 304
13	Tension plate	AISI 304
14	Impeller	AISI 304
15	Sleeve	AISI 304
16	Diffuser2	AISI 304
17	Diffuser3	AISI 304
18	Mechanical seal	Sic/Carbon
19	Bracket cover	AISI 304
20	Terminal cover	Plastic



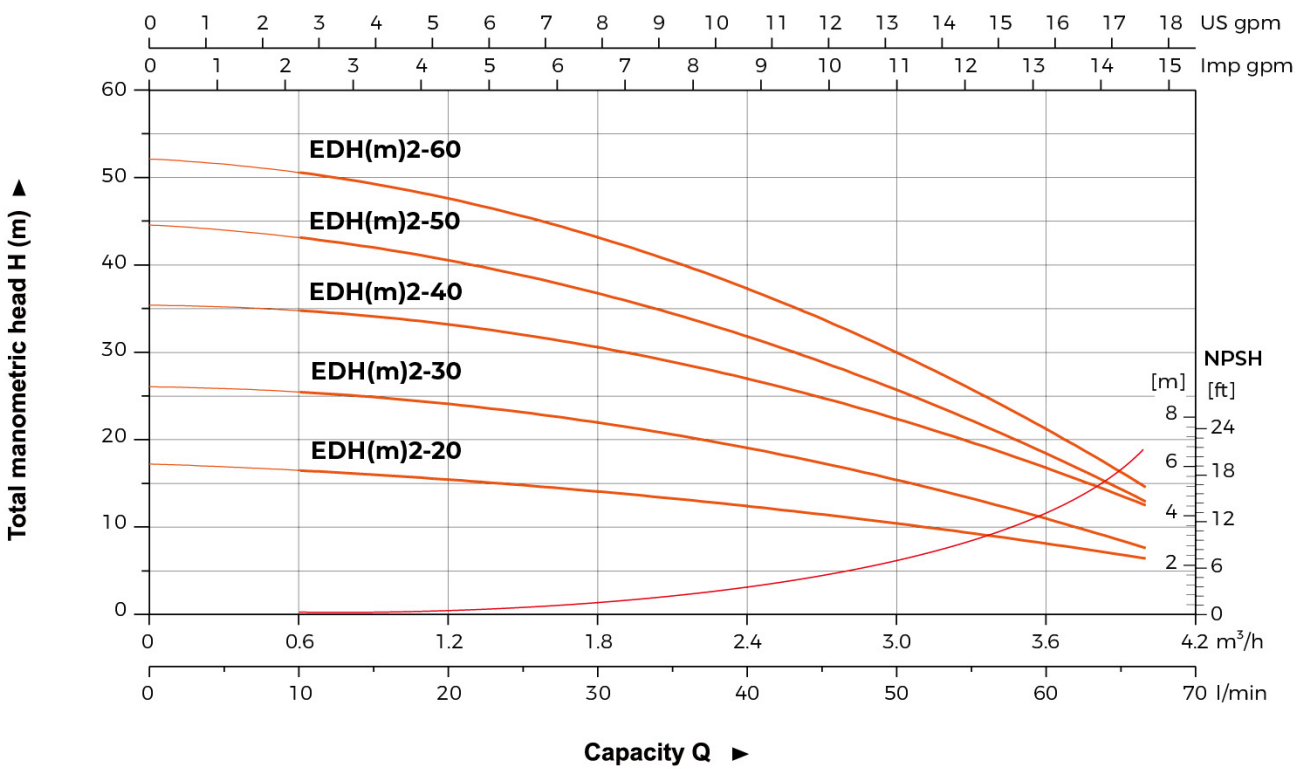
Scope of Performance - EDH



Scope of Performance - EDH-F



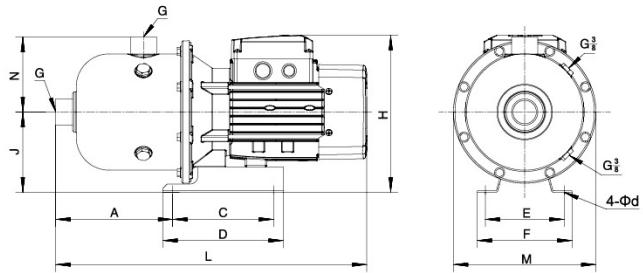
Hydraulic Performance Curves



Technical Data

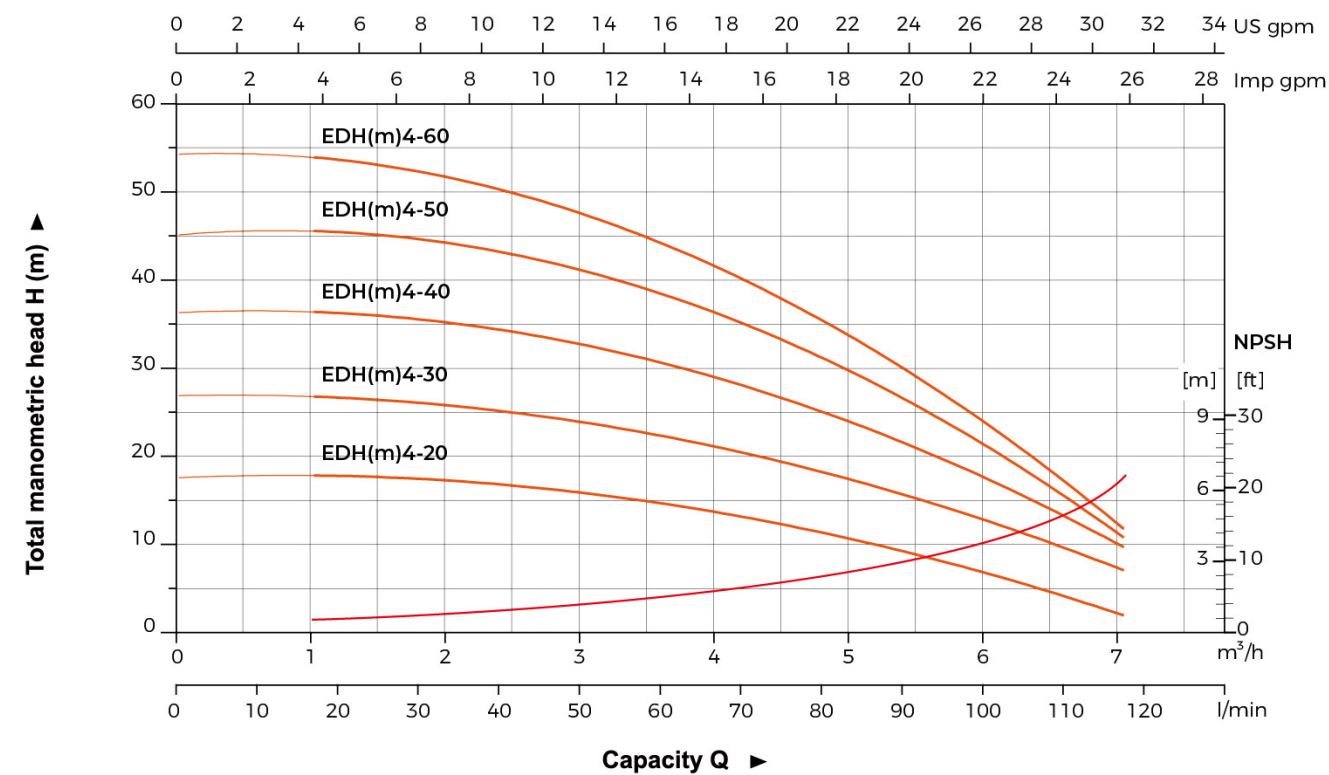
Model	Power		Q(m³/h) Q(l/min)	0.5	1	1.5	2	2.5	3	3.5	4
	kW	HP		8.3	16.7	25	33.3	41.7	50	58.3	66.7
EDH(m)2-20	0.37	0.5	H (m)	16.7	16.2	15	14	11	10.6	8.8	6.5
EDH(m)2-30	0.37	0.5		25.8	24.3	23.8	21.3	17	16.1	12.5	7.2
EDH(m)2-40	0.55	0.75		34.8	34.1	33.2	30.7	23	22.9	18.4	12.6
EDH(m)2-50	0.55	0.75		43.5	42.1	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	d	GW (Kgs)	L x W x H (mm)	Quantity (PCS/20 TEU)
EDH(m)2-20	427	160	138	165	108	130	G1	216	110	Φ195	103	9	10.7	465x225x270	1044
EDH(m)2-30	427	160	138	165	108	130	G1	216	110	Φ195	103	9	11.1	465x225x270	1044
EDH(m)2-40	427	160	138	165	108	130	G1	216	110	Φ195	103	9	12.4	465x225x270	1044
EDH(m)2-50	427	160	138	165	108	130	G1	216	110	Φ195	103	9	12.8	465x225x270	1044
EDH(m)2-60	427	160	138	165	108	130	G1	216	110	Φ195	103	9	13.8	465x225x270	1044

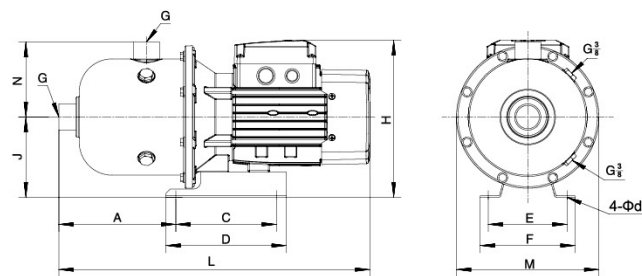
Hydraulic Performance Curves



Technical Data

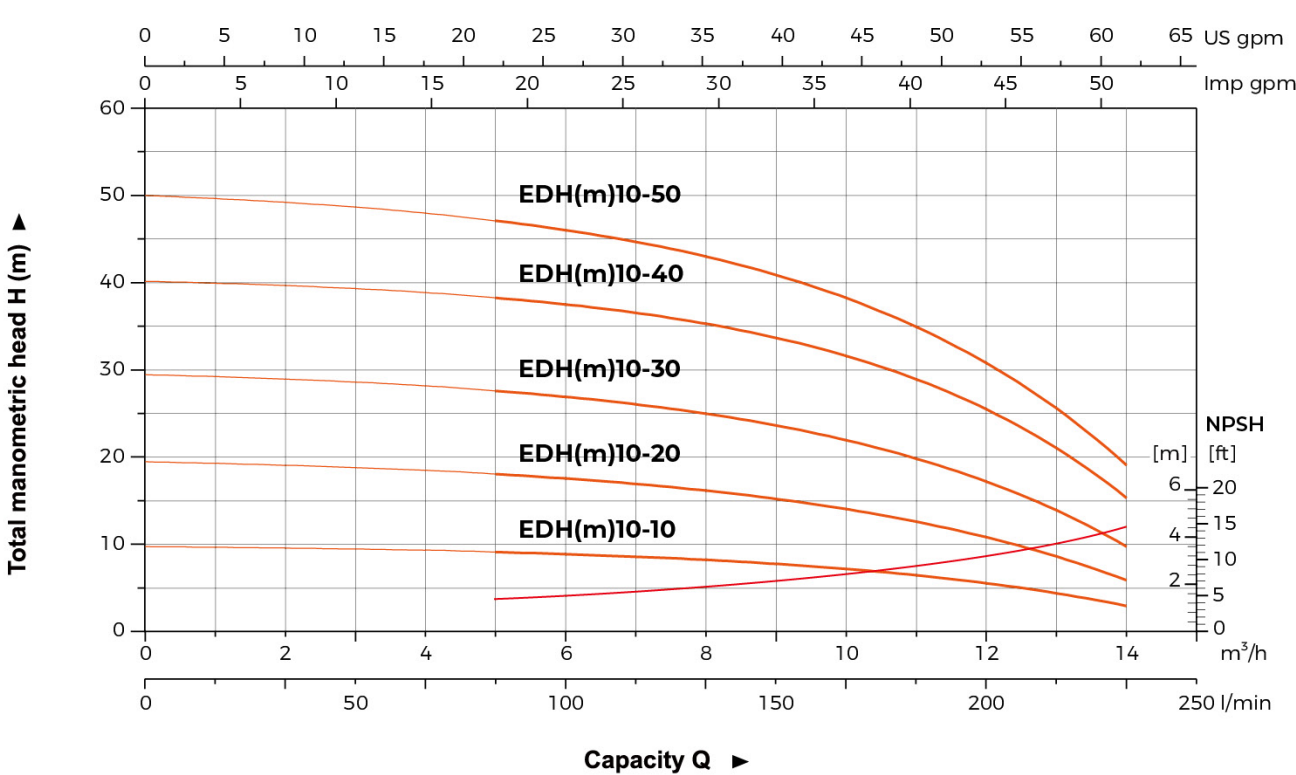
Model	Power		Q(m³/h) Q(l/min)	1	2	3	4	4.5	5	6	7
	kW	HP		17	33	50	67	75	83	100	117
EDH(m)4-20	0.55	0.75	H (m)	17.8	17.2	16.1	14.3	12	11.3	6.3	2.3
EDH(m)4-30	0.55	0.75		26.7	26.4	24.6	22.1	18	16.8	13.5	7.3
EDH(m)4-40	0.75	1.0		36.1	35.2	32.9	29.9	25	24.7	18.6	9.2
EDH(m)4-50	1.1	1.5		45.7	43.6	40.5	37	32	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	d	GW (Kgs)	L x W x H (mm)	Quantity (PCS/20 TEU)
EDH(m)4-20	427	160	138	165	108	130	G1 1/4	216	110	Φ195	103	9	11.5	465x225x270	1044
EDH(m)4-30	427	160	138	165	108	130	G1 1/4	216	110	Φ195	103	9	12.9	465x225x270	1044
EDH(m)4-40	427	160	138	165	108	130	G1 1/4	216	110	Φ195	103	9	13.8	465x225x270	1044
EDH(m)4-50	480	160	138	165	108	130	G1 1/4	245	120	Φ195	103	9	18.2	515x225x297	870
EDH(m)4-60	480	160	138	165	108	130	G1 1/4	245	120	Φ195	103	9	18.6	515x225x297	870

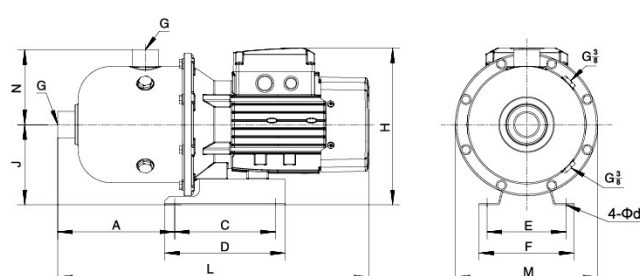
Hydraulic Performance Curves



Technical Data

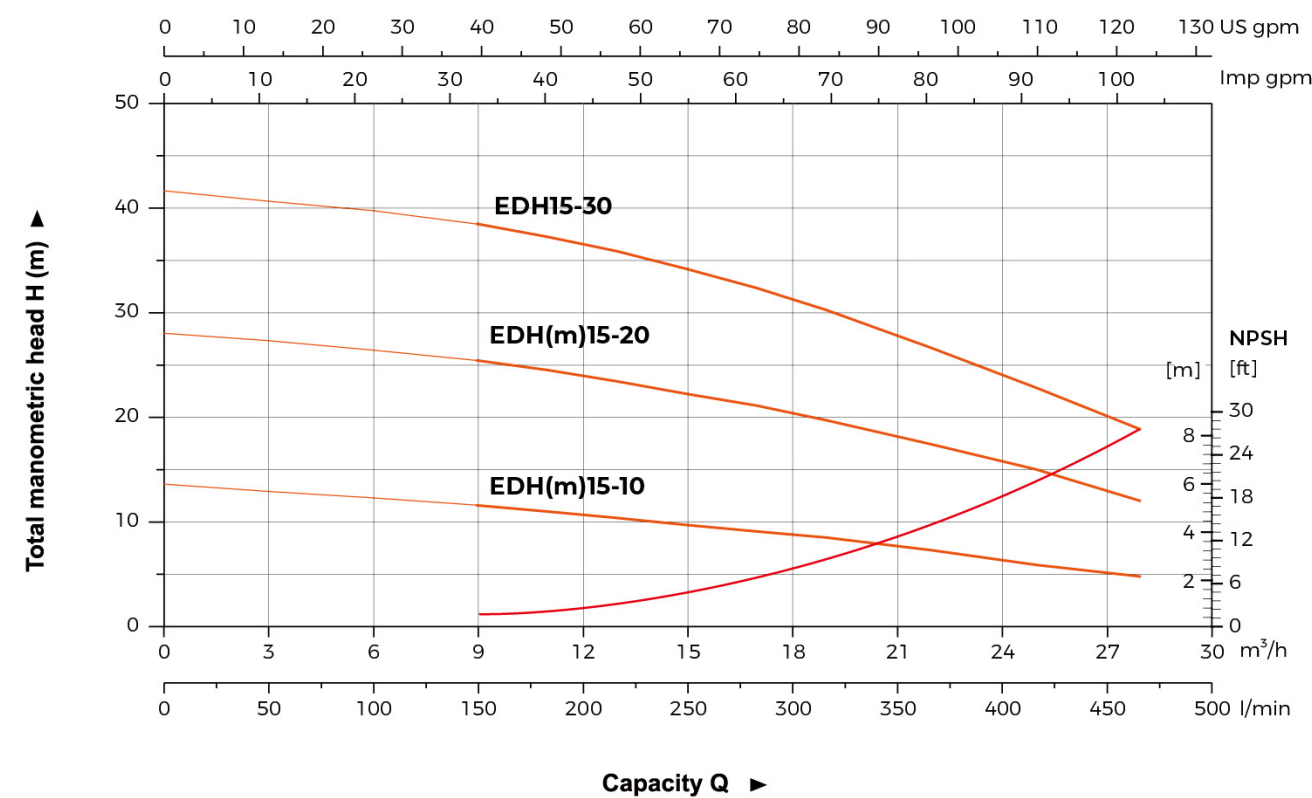
Model	Power		Q(m³/h) Q(l/min)	6	7	8	9	10	11	12	13	14
	kW	HP		100	117	133	150	167	183	200	217	233
EDH(m)10-10	0.75	1.0	H (m)	9.1	8.7	8.3	7.8	7.1	6.4	5.4	4.4	3.1
EDH(m)10-20	0.75	1.0		17.9	17.1	16.3	15.3	13.9	12.4	10.7	8.4	6.2
EDH(m)10-30	1.1	1.5		27.5	26.5	25.2	23.6	21.7	19.3	17	14	10
EDH(m)10-40	1.5	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	d	GW (Kgs)	L x W x H (mm)	Quantity (PCS/20 TEU)
EDH(m)10-10	568	277	138	165	108	130	G2	245	120	Φ233	140	9	21.5	610x265x317	540
EDH(m)10-20	568	277	138	165	108	130	G2	245	120	Φ233	140	9	22	610x265x317	540
EDH(m)10-30	568	277	138	165	108	130	G2	245	120	Φ233	140	9	23	610x265x317	540
EDH(m)10-40	626	285.5	138	165	108	130	G2	248	120	Φ233	140	9	29	660x265x317	480
EDH(m)10-50	626	285.5	138	165	108	130	G2	248	120	Φ233	140	9	30.7	660x265x317	480

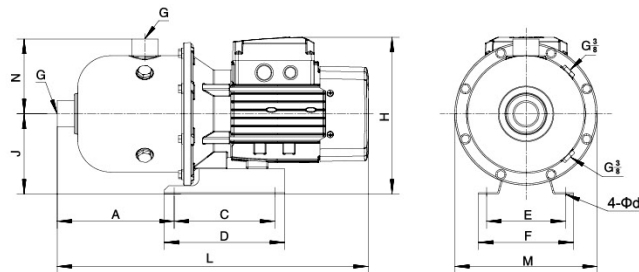
Hydraulic Performance Curves



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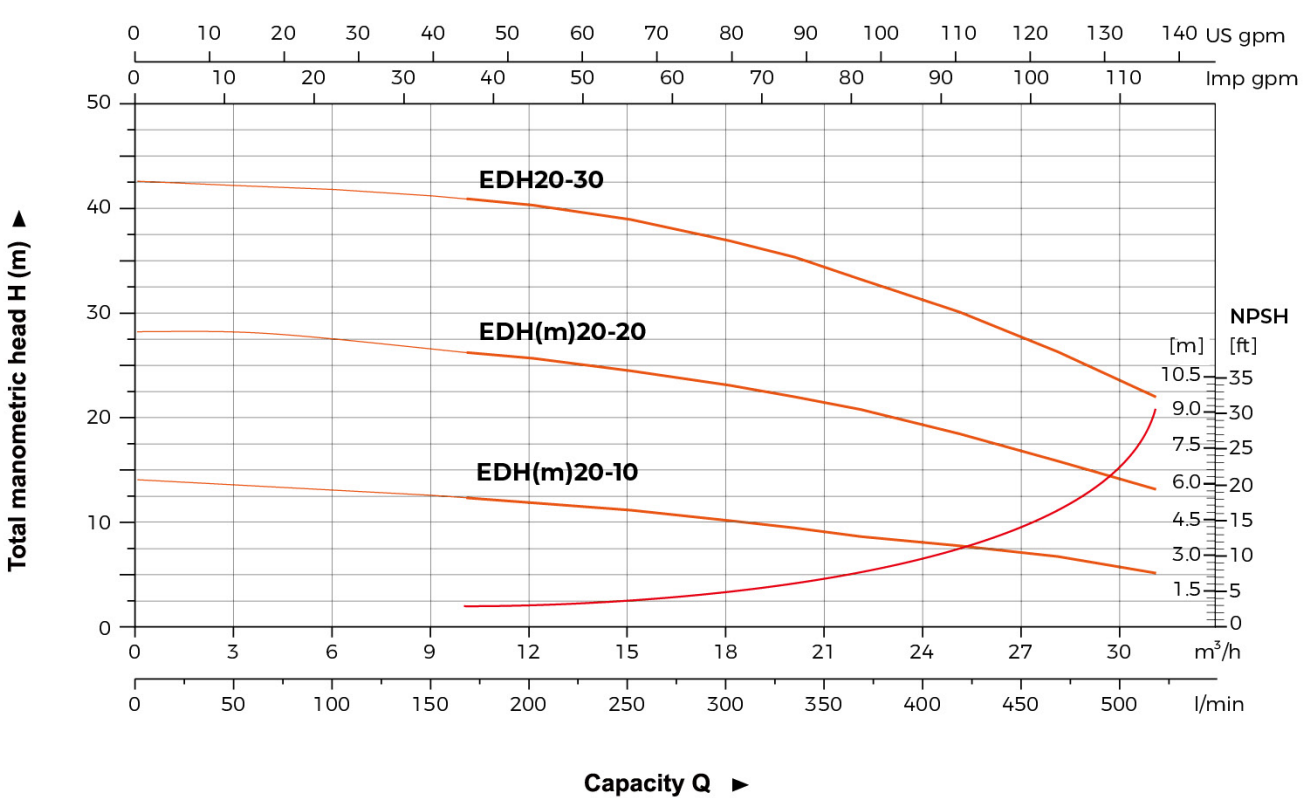
Model	Power		Q(m³/h) Q(l/min)	9	11	13	15	17	19	22	25	28
	kW	HP		150	183	217	250	283	317	367	417	467
EDH(m)15-10	1.1	1.5	H (m)	11.6	11	10.4	9.7	9.1	8.5	7.7	5.9	4.8
EDH(m)15-20	2.2	3.0		25.4	24.5	23.4	22.2	21.1	19.7	17.4	15	12
EDH15-30	3.0	4.0		38.4	37.2	35.8	34.1	32.3	30.2	26.6	22.8	18.8

Dimension



Model	L	A	C	D	E	F	G	H	J	M	N	d	GW (Kgs)	L x W x H (mm)	Quantity (PCS/20 TEU)
EDH(m)15-10	568	277	138	165	108	130	G2	245	120	Φ233	140	9	20.5	610x265x317	540
EDH(m)15-20	626	285.5	138	165	108	130	G2	248	120	Φ233	140	9	28.8	660x265x317	480
EDH15-30	626	285.5	138	165	108	130	G2	248	120	Φ233	140	9	33	660x265x317	480

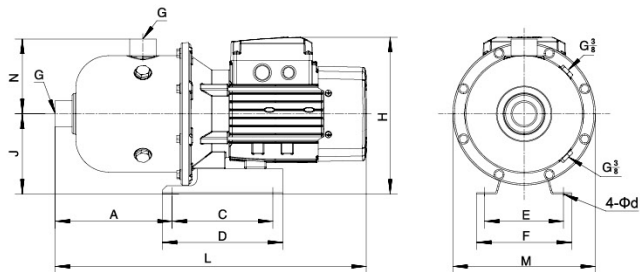
Hydraulic Performance Curves



Technical Data

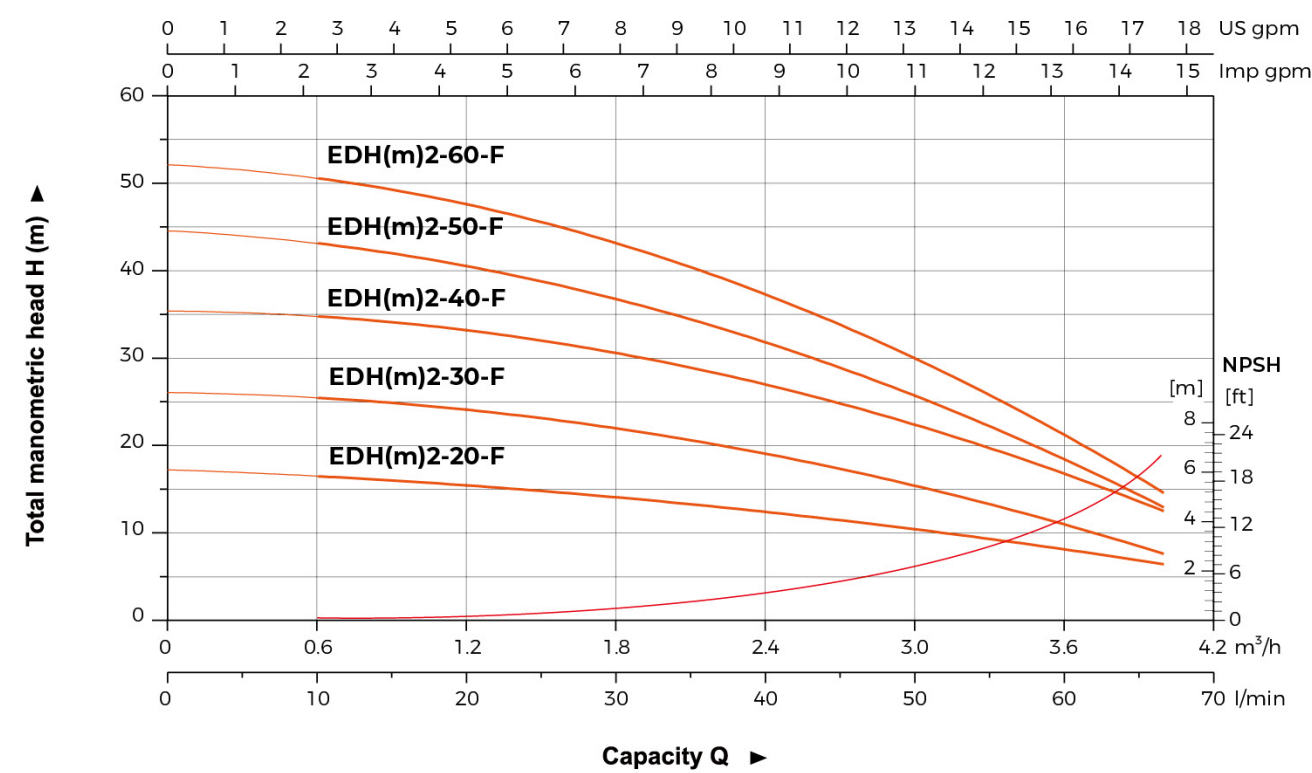
Model	Power		Q(m³/h) Q(l/min)	9	12	15	18	20	22	25	28	31
	kW	HP		150	200	250	300	333	367	417	467	517
EDH(m)20-10	1.1	1.5	H (m)	12.6	11.9	11.2	10.2	9.8	8.7	8	6.8	5.2
EDH(m)20-20	2.2	3.0		26.5	25.7	24.5	23.1	22	20.8	18.5	15.9	13.2
EDH20-30	4.0	5.5		41.2	40.3	38.9	36.9	35.3	33.2	30.1	26.3	22

Dimension



Model	L	A	C	D	E	F	G	H	J	M	N	d	GW (Kgs)	L x W x H (mm)	Quantity (PCS/20 TEU)
EDH(m)20-10	568	277	138	165	108	130	G2	245	120	Φ233	140	9	20.5	610x265x317	540
EDH(m)20-20	626	285.5	138	165	108	130	G2	248	120	Φ233	140	9	28.8	660x265x317	480
EDH20-30	642	283	140	175	190	230	G2	240	120	Φ233	140	12	37.5	675x265x317	480

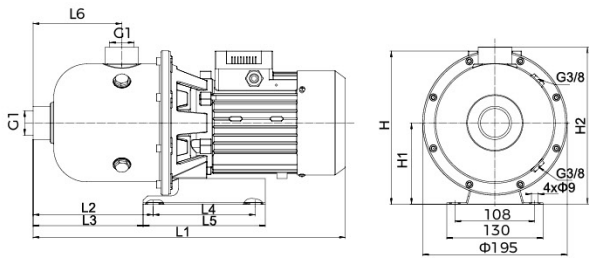
Hydraulic Performance Curves



Technical Data

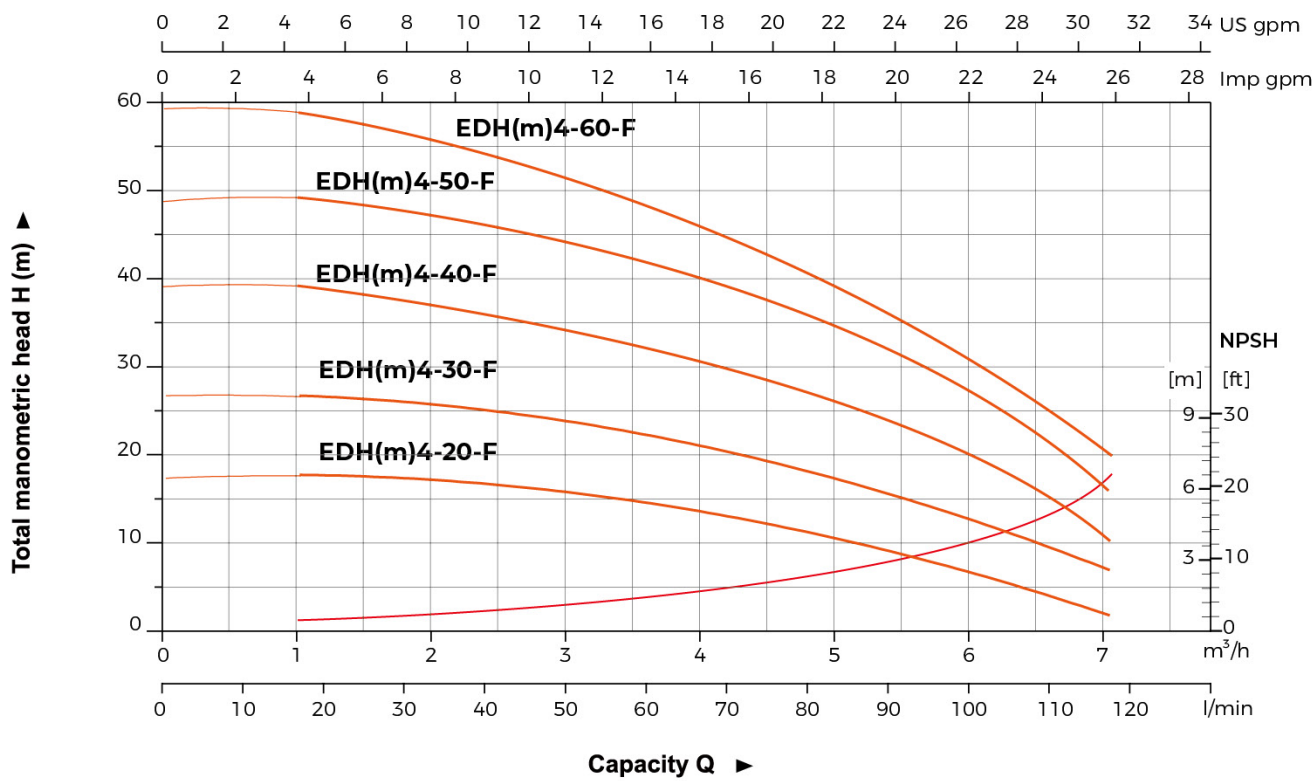
Model	Power		Q(m³/h) Q(l/min)	0.5	1	1.5	2	2.5	3	3.5	4
	kW	HP		8.3	16.7	25	33.3	41.7	50	58.3	66.7
EDH(m)2-20-F	0.37	0.5	H (m)	16.7	16.2	15	14	12	10.6	8.8	6.5
EDH(m)2-30-F	0.37	0.5		25.7	24.3	23.8	21.3	19	16.1	12.5	7.2
EDH(m)2-40-F	0.55	0.75		34.9	34.1	33.2	30.7	23	22.9	18.4	12.6
EDH(m)2-50-F	0.55	0.75		43.5	42.1	39.5	35.9	29	25.7	19.6	13.5
EDH(m)2-60-F	0.75	1.0		50.8	49.2	45.6	41.5	35	30.4	23.4	14.3

Dimension



Model	L1	L2	L3	L4	L5	L6	H		H1	H2	GW (Kgs)	L x W x H (mm)	Quantity (PCS/20 TEU)
							1~	3~					
EDH(m)2-20-F	426	162	148.5	138	165	120	197.5	187	110	213	10.7	460x225x275	1044
EDH(m)2-30-F	426	162	148.5	138	165	120	197.5	187	110	213	11.1	460x225x275	1044
EDH(m)2-40-F	426	162	148.5	138	165	120	197.5	187	110	213	12.4	460x225x275	1044
EDH(m)2-50-F	426	162	148.5	138	165	120	197.5	187	110	213	12.8	460x225x275	1044
EDH(m)2-60-F	426	162	148.5	138	165	120	197.5	187	110	213	13.8	460x225x275	1044

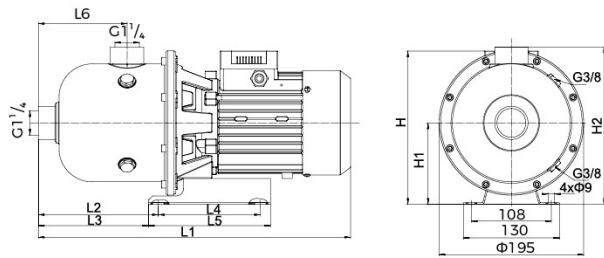
Hydraulic Performance Curves



Technical Data

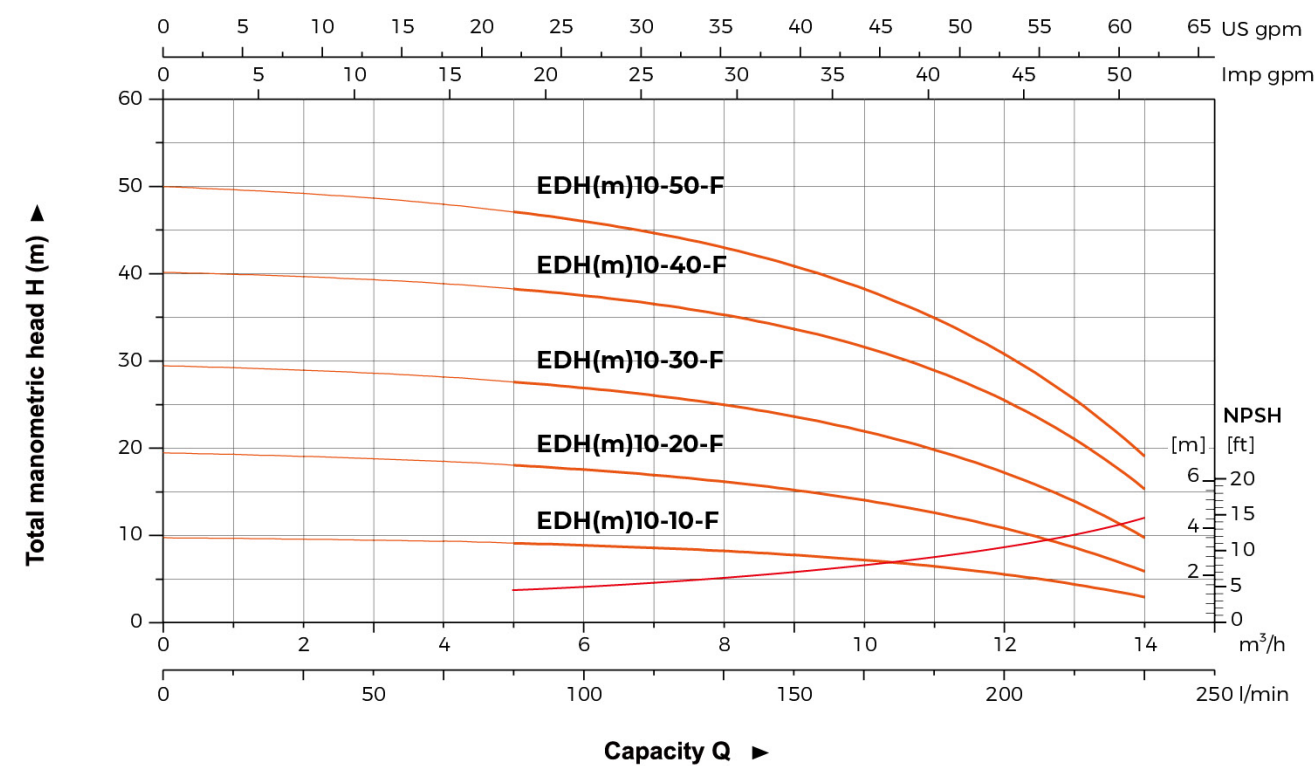
Model	Power		Q(m³/h) Q(l/min)	1	2	3	4	4.5	5	6	7
	kW	HP		17	33	50	67	75	83	100	117
EDH(m)4-20-F	0.55	0.75	H (m)	17.8	17.2	16.1	14.3	12	11.3	6.3	2.3
EDH(m)4-30-F	0.55	0.75		26.7	26.4	24.6	22.1	18	16.8	13.5	7.3
EDH(m)4-40-F	0.75	1.0		39	37	34	31.5	29	27	20	11
EDH(m)4-50-F	1.1	1.5		49	47	44	41	37	35	27	17
EDH(m)4-60-F	1.1	1.5		59	55	52	47	43	39	29	20

Dimension



Model	L	L2	L3	L4	L5	L6	H		H1	H2	GW (Kgs)	L x W x H (mm)	Quantity (PCS/20 TEU)
							1~	3~					
EDH(m)4-20-F	429	165	151.5	138	165	123	197.5	187	110	215.5	11.5	460x225x275	1044
EDH(m)4-30-F	429	165	151.5	138	165	123	197.5	187	110	215.5	12.9	460x225x275	1044
EDH(m)4-40-F	429	165	151.5	138	165	123	197.5	187	110	215.5	13.8	460x225x275	1044
EDH(m)4-50-F	429	165	151.5	138	165	123	197.5	187	110	215.5	18.2	460x225x275	1044
EDH(m)4-60-F	429	165	151.5	138	165	123	197.5	187	110	215.5	18.6	460x225x275	1044

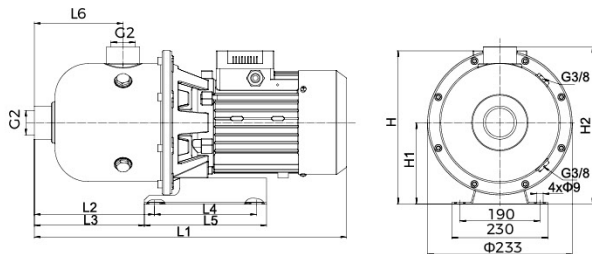
Hydraulic Performance Curves



Technical Data

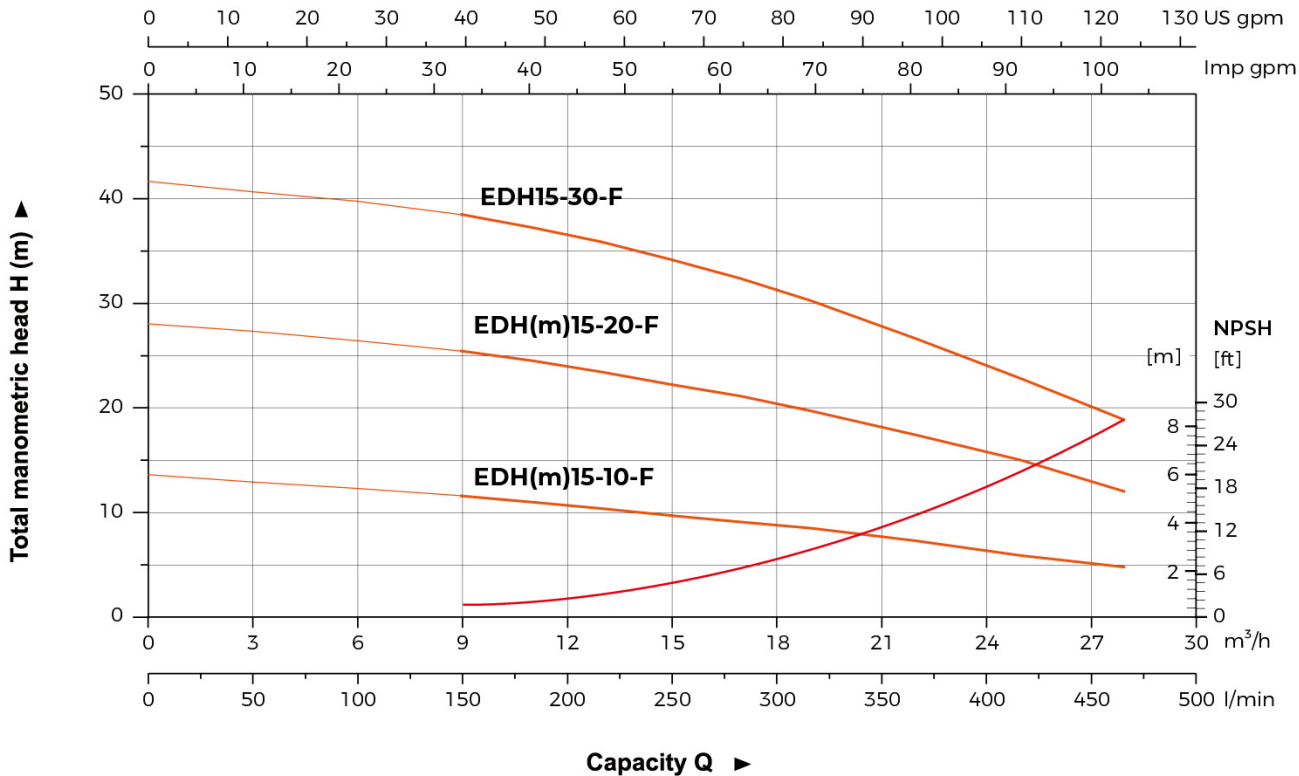
Model	Power		Q(m³/h) Q(l/min)	5	7	8	9	10	11	12	13	14
	kW	HP		83	117	133	150	167	183	200	217	233
EDH(m)10-10-F	0.75	1.0	H (m)	9.1	8.7	8.3	7.8	7	6.4	5.4	4.4	3.1
EDH(m)10-20-F	0.75	1.0		17.9	17.1	16.3	15.3	13.5	12.4	10.7	8.4	6.2
EDH(m)10-30-F	1.1	1.5		27.5	26.5	25.2	23.6	21.5	19.3	17	14	10
EDH(m)10-40-F	1.5	2.0		38.7	37.2	35.9	33.9	31.5	28.7	24.9	19.7	15.9
EDH(m)10-50-F	2.2	3.0		47.2	45.4	43.6	41	38	34.2	30	24.5	18

Dimension



Model	L1	L2	L3	L4	L5	L6	H		H1	H2	GW (Kgs)	L x W x H (mm)	Quantity (PCS/20 TEU)
							1~	3~					
EDH(m)10-10-F	557	288	273	140	170	188	232.5	226	120	260	21.5	610x265x317	540
EDH(m)10-20-F	557	288	273	140	170	188	232.5	226	120	260	22.0	610x265x317	540
EDH(m)10-30-F	557	288	273	140	170	188	232.5	226	120	260	23.0	610x265x317	540
EDH(m)10-40-F	600	288	273	140	170	188	236	230	120	260	29.0	660x265x317	480
EDH(m)10-50-F	600	288	273	140	170	188	242	230	120	260	30.7	660x265x317	480

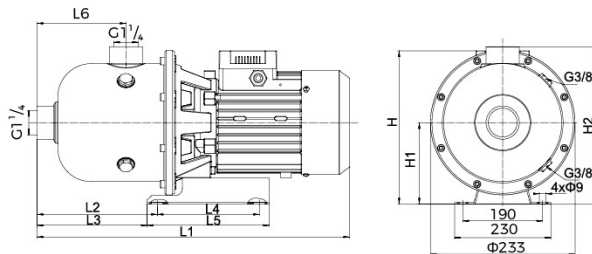
Hydraulic Performance Curves



Technical Data

Model	Power		Q(m³/h) Q(l/min)	9	11	13	15	17	19	22	25	28
	kW	HP		150	183	217	250	283	317	367	417	467
EDH(m)15-10-F	1.1	1.5	H (m)	11.6	11	10.4	9.5	9.1	8.5	7.7	5.9	4.8
EDH(m)15-20-F	2.2	3.0		25.4	24.5	23.4	22	21.1	19.7	17.4	15	12
EDH15-30-F	3.0	4.0		38.4	37.2	35.8	34	32.3	30.2	26.6	22.8	18.8
EDH15-30-F	3.0	4.0		38.4	37.2	35.8	34	32.3	30.2	26.6	22.8	18.8

Dimension

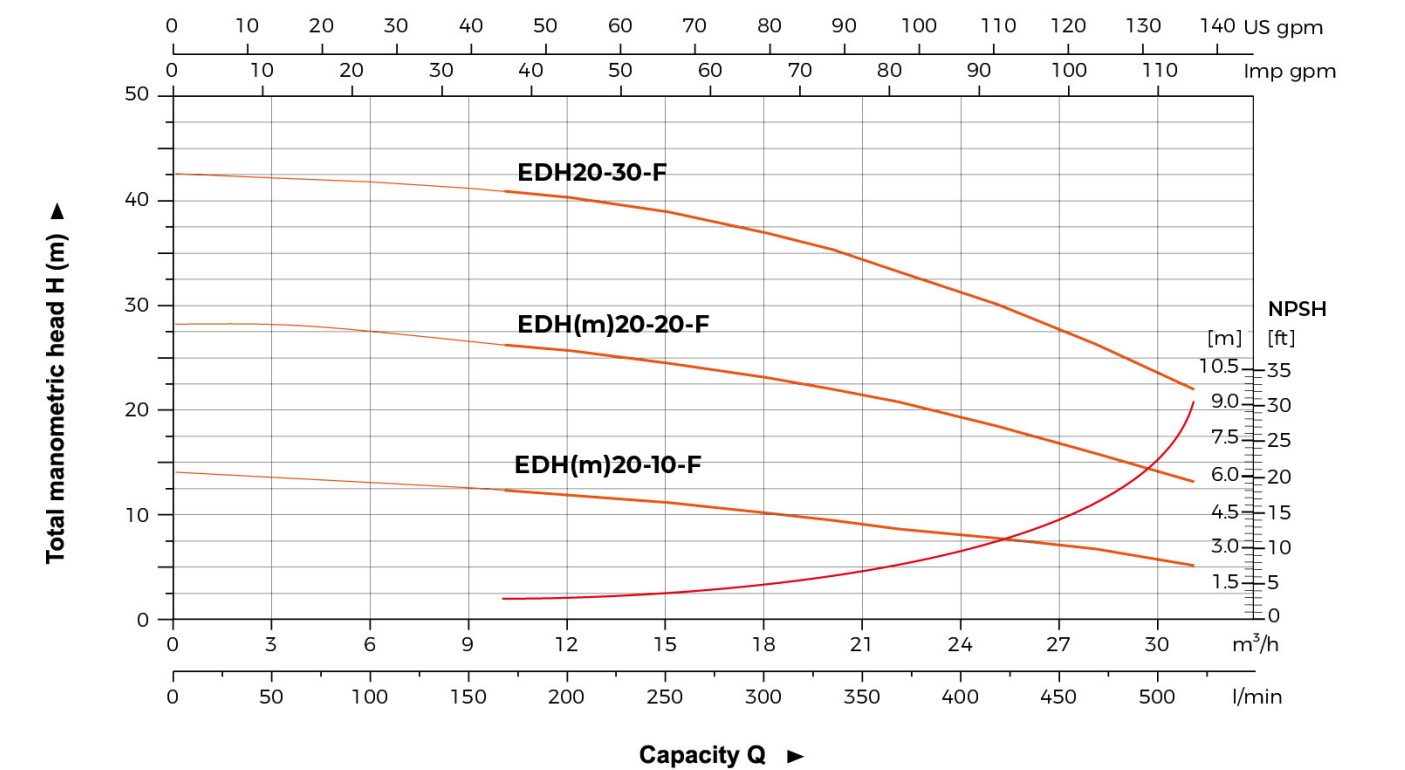


Model	L1	L2	L3	L4	L5	L6	H		H1	H2	GW (Kgs)	L x W x H (mm)	Quantity (PCS/20 TEU)
							1~	3~					
EDH(m)15-10-F	557	288	273	140	170	188	232.5	226	120	260	20.5	610x265x317	540
EDH(m)15-20-F	600	288	273	140	170	188	242	230	120	260	28.8	660x265x317	480
EDH15-30-F	620	288	273	140	170	188	250	250	120	260	33	660x265x317	480

EDH

Stainless Steel Horizontal
Multistage Pump

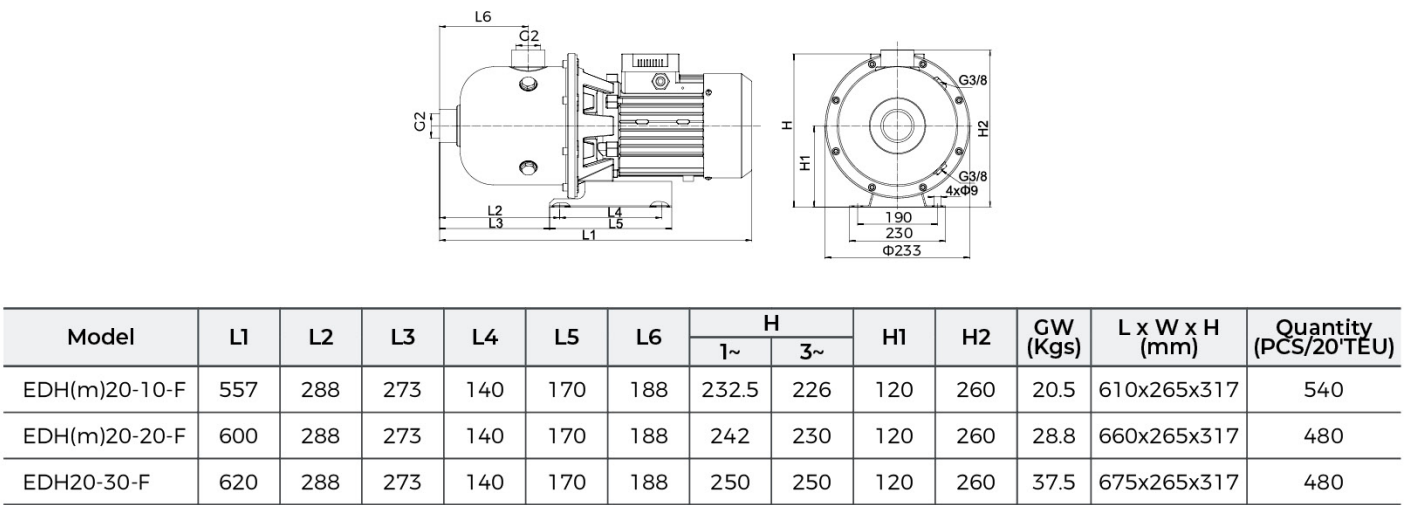
Hydraulic Performance Curves



Technical Data

Model	Power		Q(m³/h) Q(l/min)	9	12	15	18	20	22	25	28	31
	kW	HP		150	200	250	300	333	367	417	467	517
EDH(m)20-10-F	1.1	1.5	H (m)	12.4	11.9	11.2	10.2	9.5	8.7	8	6.8	5.2
EDH(m)20-20-F	2.2	3.0		26.5	25.7	24.5	23.1	22	20.8	18.5	15.9	13.2
EDH20-30-F	4.0	5.5		41.2	40.3	38.9	36.9	35	33.2	30.1	26.3	22

Dimension



EMH

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.

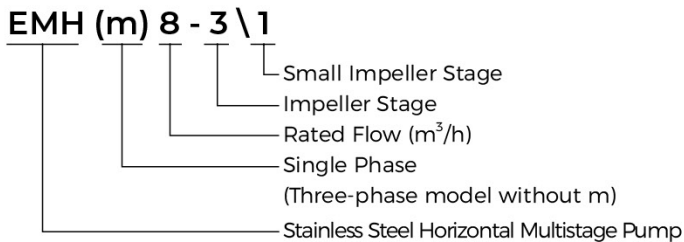
Pump

- AISI304 welding shaft
- Max. liquid temperature: +60°C
- Altitude: up to 1000 m
- Max. inlet pressure: limited by Max. operating pressure
- Max. operating pressure: 8 bar
- Liquid PH Value: 6.5 - 8.5

Motor

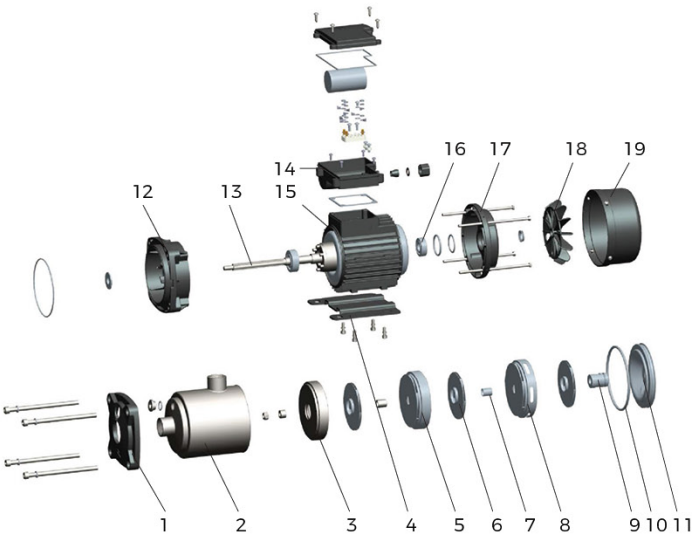
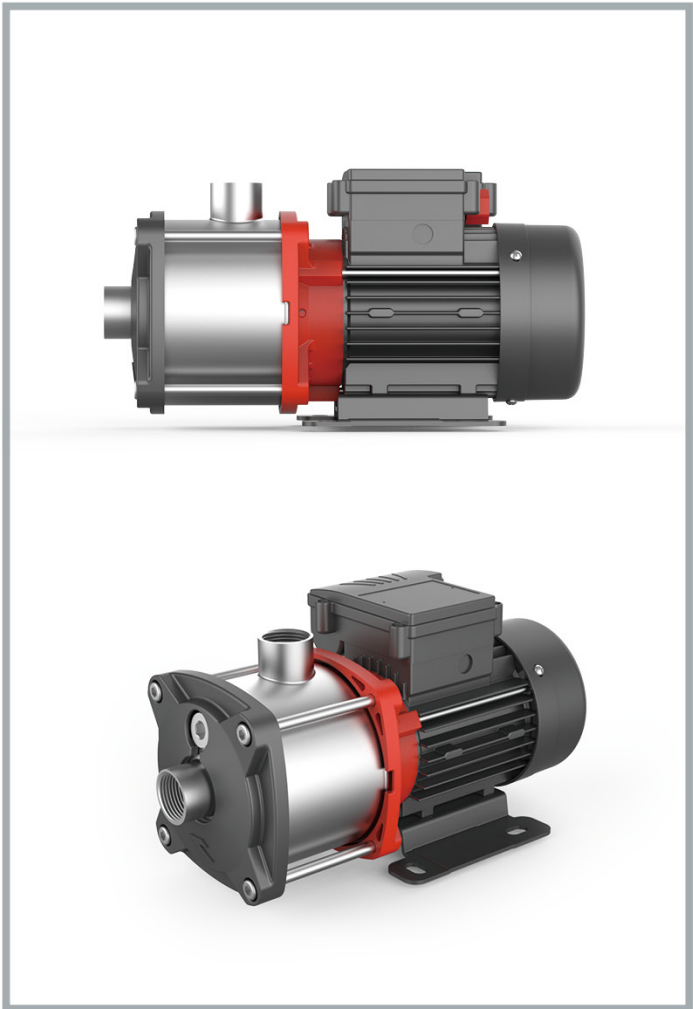
- Motor with copper winding
- Built-in thermal protector for single phase motor
- Insulation class: F
- Protection class: IP55
- Max. ambient temperature: +40°C

Identification Codes

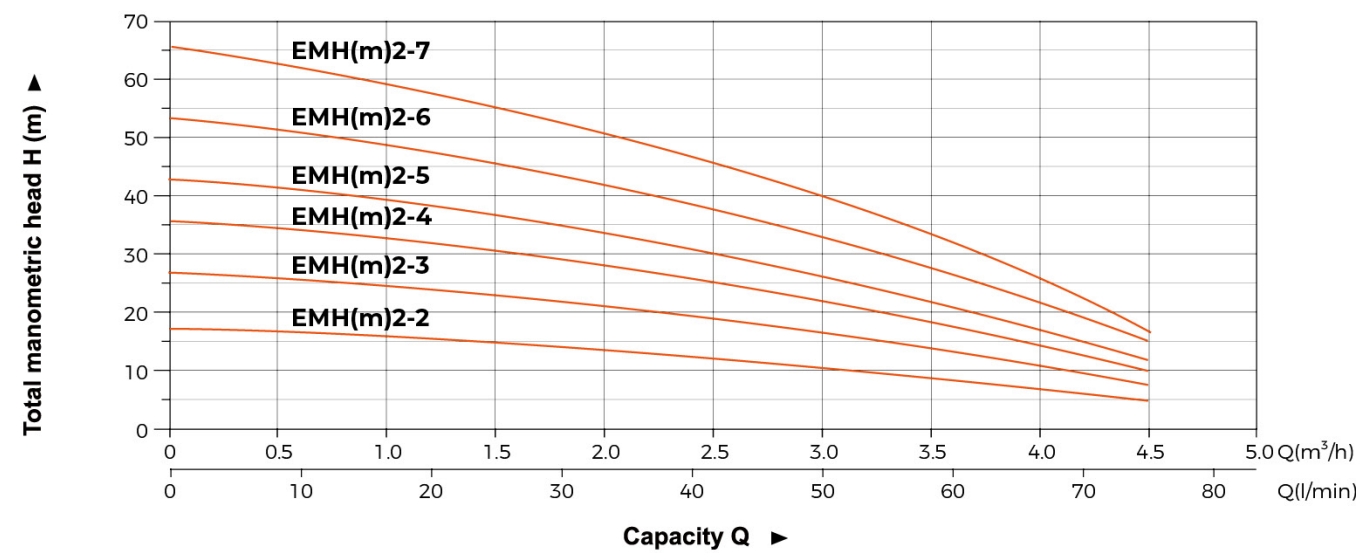


Materials Table

No.	Part	Material
1	Pump cover	ADC 12
2	Pump body	AISI 304
3	Diffuser 1	AISI 304
4	Base	Q235 Steel
5	Diffuser 2	AISI 304
6	Impeller	AISI 304
7	Sleeve	AISI 304
8	Diffuser 3	AISI 304
9	Mechanical seal	SIC/Carbon
10	O-Ring	NBR
11	Bracket cover	AISI 304
12	Bracket	ADC 12
13	Rotor	
14	Terminal Box	
15	Stator	
16	Bearing	
17	Rear cover	ADC 12
18	Fan	PP
19	Fan cover	PP



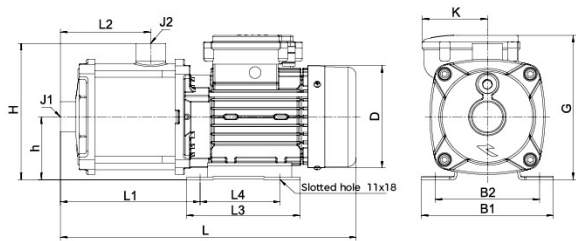
Hydraulic Performance Curves



Technical Data

Model	Power		Q(m³/h)	0	1	1.5	2	2.5	3	3.5	4	4.5
	kW	HP	Q(l/min)	0	16.7	25	33.3	41.7	50	58.3	66.7	75
EMH(m)2-2	0.25	0.33	H (m)	17	16	14.5	13.5	12	10.5	8.5	7	4.5
EMH(m)2-3	0.37	0.5		27	24.5	23	20.5	19	17	14	11	7
EMH(m)2-4	0.37	0.5		36	33	31	27.5	25.5	22.5	19	14.5	9.5
EMH(m)2-5	0.55	0.75		44	40	37	33.5	30.5	27	22.5	17	11
EMH(m)2-6	0.75	1.0		54	49.5	46	41.5	38.5	34	29	21.5	15
EMH(m)2-7	0.75	1.0		65.5	59.5	55.5	51	46	41	34	26	16.5

Dimension

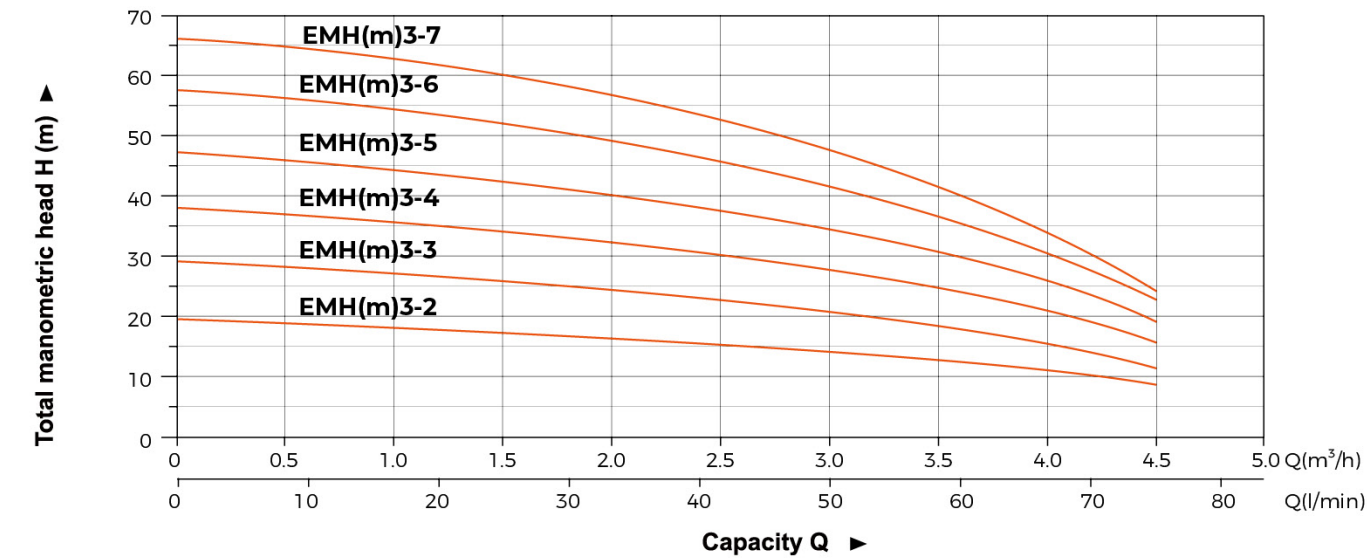


Model	L	L1	L2	L3	L4	H	h	B1	B2	D	G	K	J1/J2		
											3~/1~	3~/1~			
EMH(m)2-2	305	131	72	136	96	163	75	158	125	122	163/172.5	/89	G1/G1		
EMH(m)2-3															
EMH(m)2-4	323	149	90							146.5	172/182.5				
EMH(m)2-5	354	167	108												
EMH(m)2-6	382	185	126												
EMH(m)2-7	400	203	144												

Package Information

Model	GW(Kgs)		L x W x H (mm)	Quantity (PCS/20'TEU)
	3~	1~		
EMH(m)2-2	7.2	7.1	344x189x211	1638
EMH(m)2-3	7.6	8.3	344x189x211	1638
EMH(m)2-4	7.7	9.7	362x189x211	1530
EMH(m)2-5	8.8	10.3	392x189x211	1458
EMH(m)2-6	11.4	12.4	420x214x226	1064
EMH(m)2-7	11.6	12.8	438x214x226	928

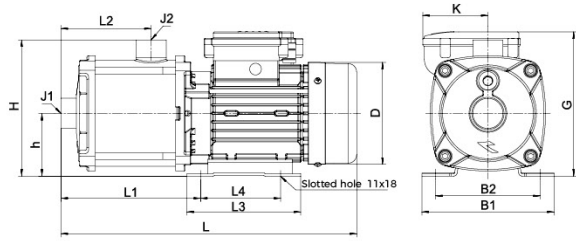
Hydraulic Performance Curves



Technical Data

Model	Power		Q(m³/h)	0	1	1.5	2	2.5	3	3.5	4	4.5
	kW	HP	Q(l/min)	0	16.7	25	33.3	41.7	50	58.3	66.7	75
EMH(m)3-2	0.25	0.33	H (m)	19.5	18	17.5	16.5	15	14.5	13	11	9
EMH(m)3-3	0.37	0.5		29	26	25.5	24.5	23	21	18	16	12
EMH(m)3-4	0.55	0.75		38	35.5	34	32	30.5	28	25	21	16
EMH(m)3-5	0.55	0.75		47.5	44.5	42.5	40	37.5	35	29	24	19
EMH(m)3-6	0.75	1.0		57.5	53.5	52	49	45	42	35	31	23
EMH(m)3-7	0.85	1.15		66	62	59	55.5	52	48.5	42	33	24

Dimension

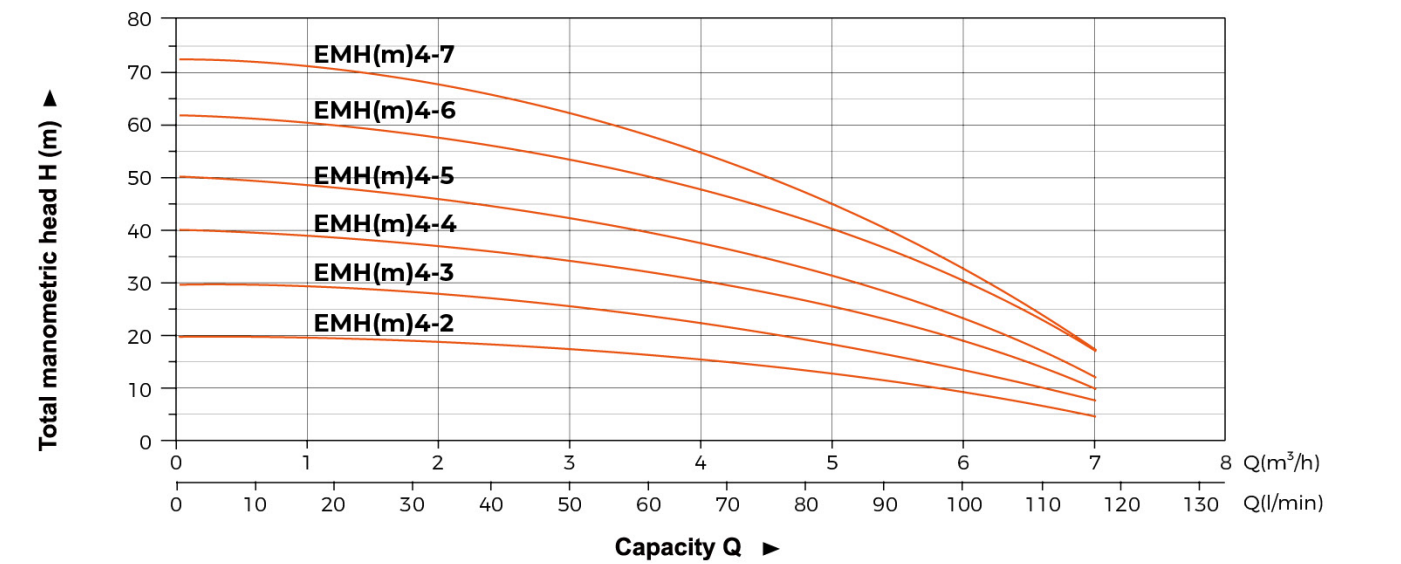


Model	L	L1	L2	L3	L4	H	h	B1	B2	D	G	K	J1/J2		
											3~/1~	3~/1~			
EMH(m)3-2	305	131	72	136	96	163	75	158	125	122	163/172.5	/89	G1/G1		
EMH(m)3-3															
EMH(m)3-4	336	149	90							146.5	172/182.5				
EMH(m)3-5	354	167	108												
EMH(m)3-6	382	185	126												
EMH(m)3-7	400	203	144												

Package Information

Model	GW(Kgs)		L x W x H (mm)	Quantity (PCS/20'TEU)
	3~	1~		
EMH(m)3-2	6.9	7.5	344x189x211	1638
EMH(m)3-3	7.9	7.9	344x189x211	1638
EMH(m)3-4	8.5	9.1	374x189x211	1485
EMH(m)3-5	9.3	10.4	392x189x211	1458
EMH(m)3-6	11.3	11.7	420x214x226	1064
EMH(m)3-7	11.6	12.8	438x214x226	928

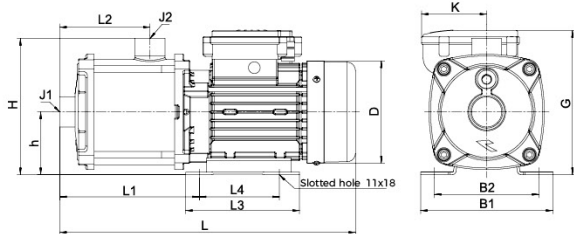
Hydraulic Performance Curves



Technical Data

Model	Power		Q(m³/h) Q(l/min)	0	1	2	3	4	4.5	5	6	7
	kW	HP		0	16.7	33.3	50	67	75	83	100	117
EMH(m)4-2	0.37	0.5	H (m)	20	19.5	18.5	17	15.5	14.5	13	9.5	5
EMH(m)4-3	0.55	0.75		30	29	27	25	22.5	21	18.5	13	10
EMH(m)4-4	0.75	1.0		40	38.5	36.5	34.5	30.5	29	26	19	10
EMH(m)4-5	0.75	1.0		50	47.5	45.5	42.5	37.5	35.5	32	23	12
EMH(m)4-6	1.1	1.5		61.5	59	56	53	47.5	45	41	30.5	17
EMH(m)4-7	1.3	1.75		72	68	64.5	60.5	55	50.5	45.5	32	17

Dimension

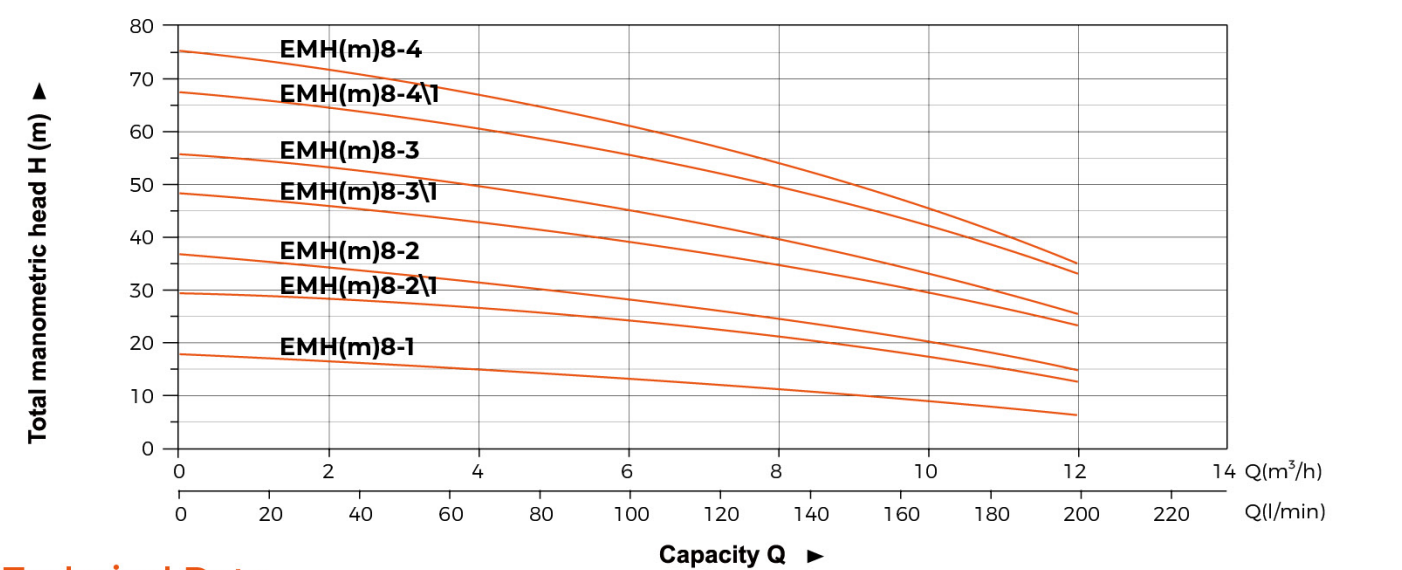


Model	L	L1	L2	L3	L4	H	h	B1	B2	D	G	K	J1/J2
											3~/1~	3~/1~	
EMH(m)4-2	308.5	134	75	136	96	163	75	158	125	122	163/172.5	/89	G1 ¹ / ₄ /G1
EMH(m)4-3	321									146.5			
EMH(m)4-4	349	152	93										
EMH(m)4-5	367	170	111										
EMH(m)4-6	411	188	129	155	125	178	90	178	140	167	203/212	/105.5	
EMH(m)4-7	429	206	147										

Package Information

Model	GW(Kgs)		L x W x H (mm)	Quantity (PCS/20'TEU)
	3~	1~		
EMH(m)4-2	7.5	8.0	344x189x211	1638
EMH(m)4-3	8.0	8.7	357x189x211	1530
EMH(m)4-4	9.9	11	384x214x226	1136
EMH(m)4-5	10.8	12.2	402x214x226	1104
EMH(m)4-6	13.1	16.5	446x244x251	864
EMH(m)4-7	13.4	16.8	464x244x251	840

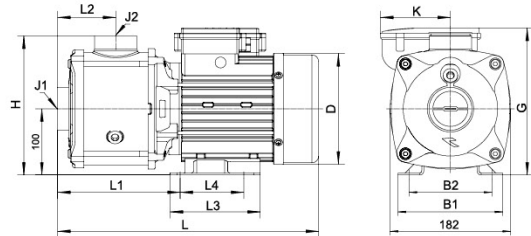
Hydraulic Performance Curves



Technical Data

Model	Power		Q(m³/h) Q(l/min)	0	2	4	5	6	7	8	9	10	12
	kW	HP		0	33.3	67	83	100	117	134	150	166	200
EMH(m)8-1	0.55	0.75	H (m)	18	16.5	15.5	15	13.5	13	11.5	10.5	9	6.5
EMH(m)8-2\1	1.0	1.36		29.5	27.5	26	25	24	23	21.5	19	18	13
EMH(m)8-2	1.0	1.36		37	34	31.5	30	28	26	24.5	22.5	20	15
EMH(m)8-3\1	1.5	2.0		48.5	45.5	44	42	40	38	35	33	30	23.5
EMH(m)8-3	1.85	2.5		56	53.5	50	47.5	45.5	42.5	40	37	33	25.5
EMH(m)8-4\1	2.2	3.0		67.5	63	60.5	58.5	55.5	53	49.5	46.5	42	33
EMH(m)8-4	2.2	3.0		75.5	71.5	68	64.5	62	58	54	50.5	46	35

Dimension



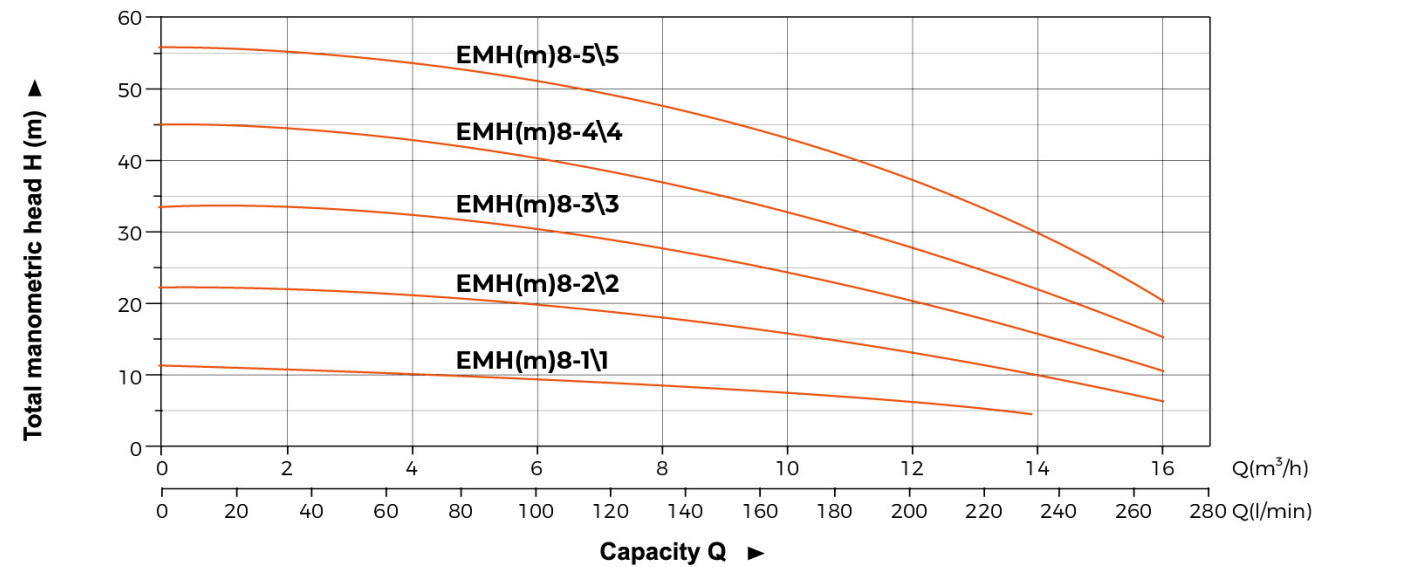
Inside "(l)" is the size of single-phase motor

Model	L	L1	L2	L3	L4	B1	B2	D	G	K	H	J1/J2
									3~/1~	3~/1~		
EMH(m)8-1	378	186	102.5	132	96	158	125	146.5	196/207.5	/89	210	G1 ¹ / ₂ /G1 ¹ / ₂
EMH(m)8-2\1												
EMH(m)8-2												
EMH(m)8-3\1	410	200	102.5	136	96	158	125	167	213/222	/105.5		
EMH(m)8-3	410(470)											
EMH(m)8-4\1	440(500)											
EMH(m)8-4												

Package Information

Model	GW(Kgs)		L x W x H(mm)		Quantity(PCS/20'TEU)	
	3~	1~	3~	1~	3~	1~
EMH(m)8-1	11.5	12.5	423x234x256		847	
EMH(m)8-2\1	13.0	14.5	423x234x256		847	
EMH(m)8-2	14.0	14.5	423x234x256		847	
EMH(m)8-3\1	16.5	19.0	455x244x266		742	
EMH(m)8-3	17.5	22.5	455x244x266	515x244x276	742	644
EMH(m)8-4\1	20.0	24.0	485x244x266	545x244x276	644	623
EMH(m)8-4	20.0	25.0	485x244x266	545x244x276	644	623

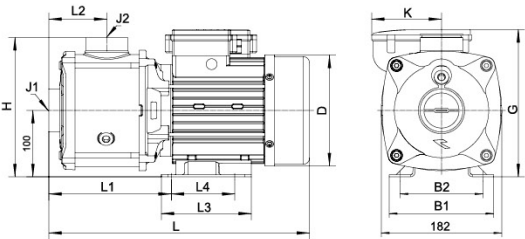
Hydraulic Performance Curves



Technical Data

Model	Power		Q(m³/h) Q(l/min)	0	2	4	6	8	10	12	14	16
	kW	HP		0	33.3	67	100	134	166	200	233	268
EMH(m)8-1\1	0.55	0.75	H (m)	11	10.5	10	9.5	8.5	7.5	6.5	4.5	-
EMH(m)8-2\2	0.75	1.0		22	21	20.5	19.5	18	16	13	9.5	6.5
EMH(m)8-3\3	1.3	1.75		33.5	33	32	30	28	25	20	15.5	11
EMH(m)8-4\4	1.5	2.0		45	43.5	42.5	40.5	37.5	33	27.5	22	15.5
EMH(m)8-5\5	2.2	3.0		56	55	53.5	52	48	42.5	37.5	29	20.5

Dimension



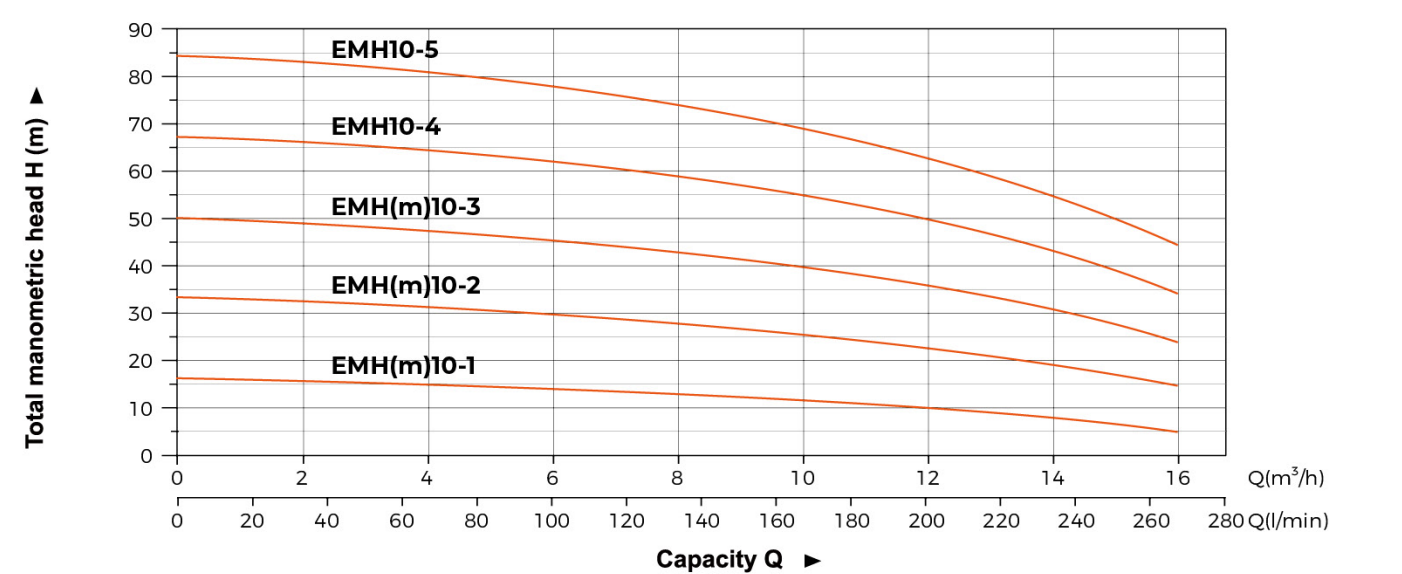
Inside "(l)" is the size of single-phase motor

Model	L	L1	L2	L3	L4	B1	B2	D	G	K	H	J1/J2
									3~/1~	3~/1~		
EMH(m)8-1\1	378	186	102.5	132	96	158	125	146.5	196/207.5	/89	210	G1 ¹ / ₂ /G1 ¹ / ₂
EMH(m)8-2\2												
EMH(m)8-3\3	410	200	102.5	136	96	158	125	167	213/222	/105.5		
EMH(m)8-4\4	440	230	132.5									
EMH(m)8-5\5	470(530)	260	162.5									

Package Information

Model	GW(Kgs)		L x W x H(mm)		Quantity(PCS/20'TEU)	
	3~	1~	3~	1~	3~	1~
EMH(m)8-1\1	10.5	11.5	423x234x256		847	
EMH(m)8-2\2	12.5	13.5	423x234x256		847	
EMH(m)8-3\3	14.5	18.0	455x244x266		742	
EMH(m)8-4\4	17.5	20.5	485x244x266		644	
EMH(m)8-5\5	20.5	24.5	515x244x266	575x244x276	644	588

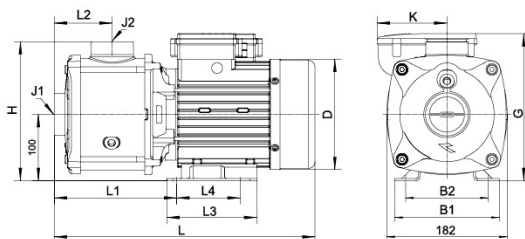
Hydraulic Performance Curves



Technical Data

Model	Power		Q(m³/h) Q(l/min)	0	2	4	6	8	10	12	14	16
	kW	HP		0	33.3	67	100	134	166	200	233	268
EMH(m)10-1	0.65	0.9	H (m)	16.5	16	15	14	12.5	11.5	10	8	5
EMH(m)10-2	1.3	1.75		33	32	30.5	29	27.5	25.5	22.5	19	14.5
EMH(m)10-3	2.2	3.0		50	48.5	47	45.5	43	39.5	36	30.5	24
EMH10-4	3.0	4.0		66.5	64.5	63.5	62	59	55	49.5	43	34
EMH10-5	3.5	4.7		84	82	80	78	74	69	63.5	55.5	44

Dimension

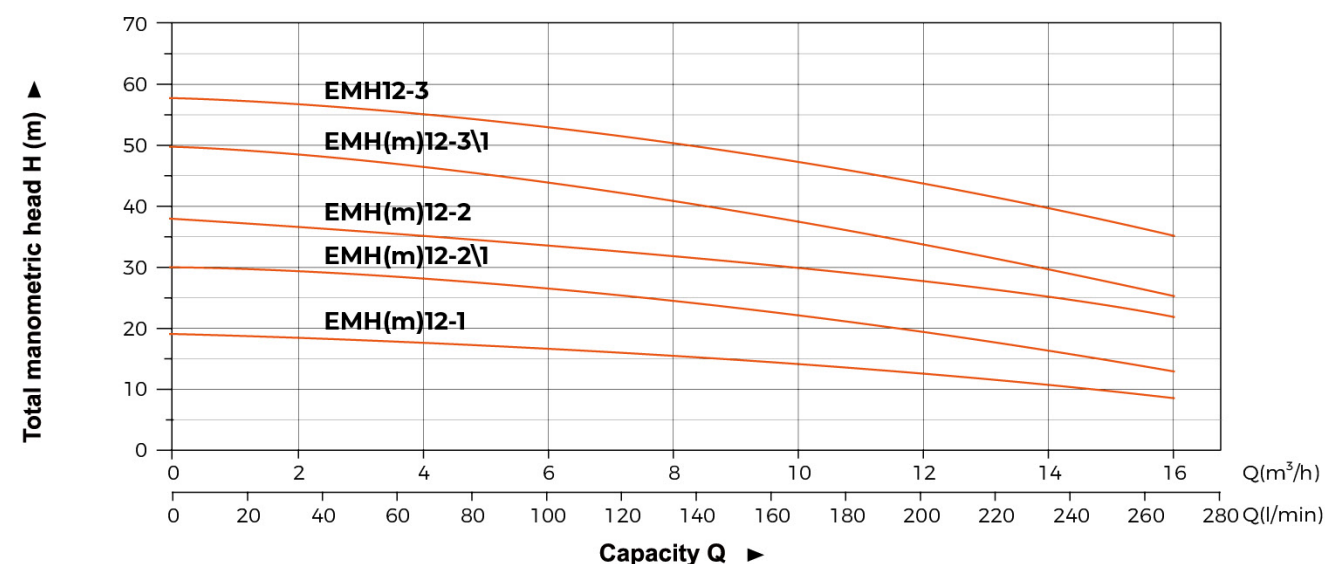


Model	L	L1	L2	L3	L4	B1	B2	D	G	K	H	J1/J2
									3~/1~	3~/1~		
EMH(m)10-1	378	186	102.5	132	96	158	125	146.5	196/207.5	/89	210	G1 ¹ / ₂ /G1 ¹ / ₂
EMH(m)10-2	410	200	102.5	136	96	158	125	167	213/222	/105.5		
EMH(m)10-3	470	200	102.5	170	140	200	160	175	222/237	/107		
EMH10-4	500	230	132.5						222/-	-		
EMH10-5	530	260	162.5									

Package Information

Model	GW(Kgs)		L x W x H (mm)	Quantity (PCS/20'TEU)
	3~	1~		
EMH(m)10-1	11.5	13.0	423x234x256	847
EMH(m)10-2	16.5	18.0	455x244x266	742
EMH(m)10-3	21.0	23.0	515x244x276	644
EMH10-4	24.0	-	545x244x276	623
EMH10-5	26.5	-	575x244x276	588

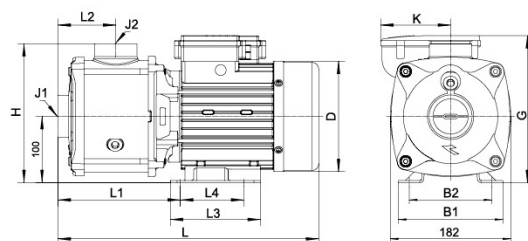
Hydraulic Performance Curves



Technical Data

Model	Power		Q(m³/h) Q(l/min)	0	2	4	6	8	10	12	14	16
	kW	HP		0	33.3	67	100	134	166	200	233	268
EMH(m)12-1	1.0	1.36	H (m)	19	18	17.5	16.5	15	14	12.5	10.5	8.5
EMH(m)12-2\1	1.3	1.75		30	29	28	27	25	22	19.5	16.5	13
EMH(m)12-2	1.85	2.5		38	36	35	34	32.5	30	27.5	25	22
EMH(m)12-3\1	2.2	3.0		50	48.5	46.5	44.5	42.5	38	33.5	30	25
EMH12-3	3.0	4.0		58	56	54	53.5	50.5	47	43.5	40	35

Dimension



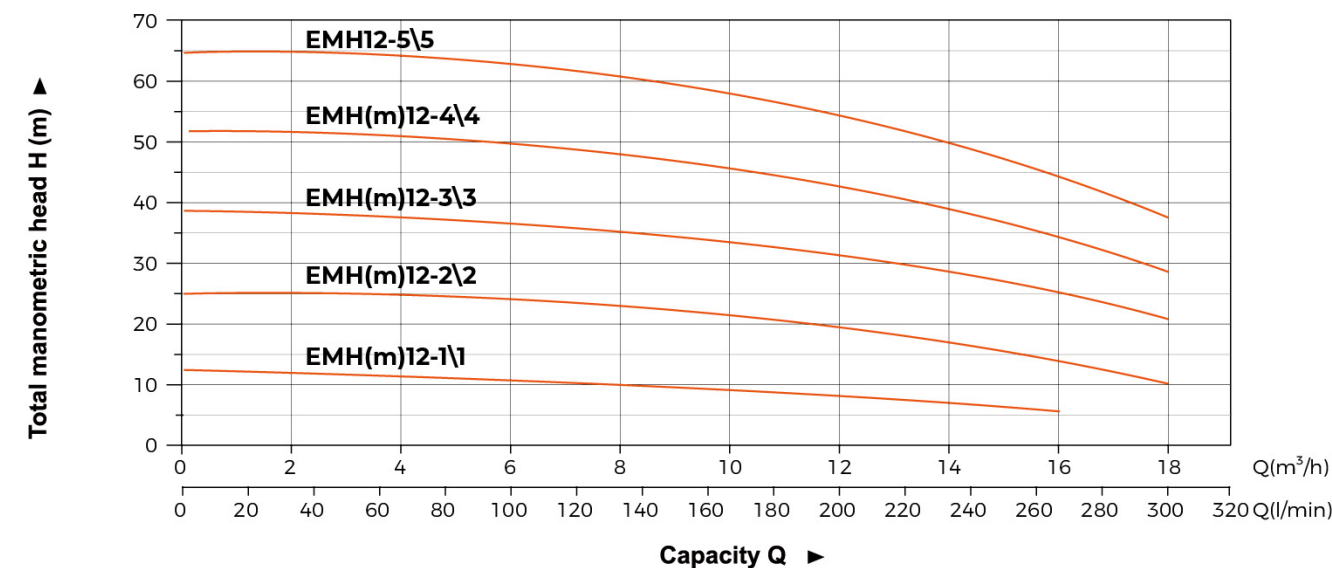
Inside "(l)" is the size of single-phase motor

Model	L	L1	L2	L3	L4	B1	B2	D	G	K	H	J1/J2
									3~/1~	3~/1~		
EMH(m)12-1	378	186	102.5	132	96	158	125	146.5	196/207.5	/89	210	G1 1/2/G1 1/2
EMH(m)12-2\1	410	200	102.5	136	96	158	125	167	213/222	/105.5		
EMH(m)12-2	410(470)	200	102.5	136(170)	96(140)	158(200)	125(160)	167(175)	213/237	/107		
EMH(m)12-3\1									213/237	/107		
EMH12-3	470	200	102.5	170	140	200	160	175	222/	-		

Package Information

Model	GW(Kgs)		L x W x H(mm)		Quantity(PCS/20'TEU)	
	3~	1~	3~	1~	3~	1~
EMH(m)12-1	12.5	14.0	423x234x256		847	
EMH(m)12-2\1	15.0	17.5	455x244x266		742	
EMH(m)12-2	17.5	22.0	455x244x266	515x244x276	742	644
EMH(m)12-3\1	18.5	23.0	455x244x266	515x244x276	742	644
EMH12-3	23.0	-	515x244x276	-	644	-

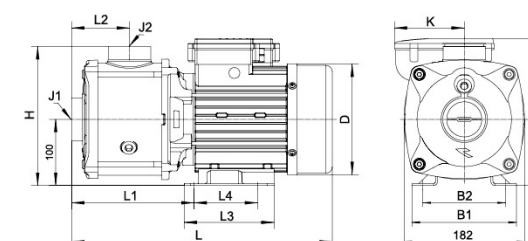
Hydraulic Performance Curves



Technical Data

Model	Power		Q(m³/h) Q(l/min)	0	2	4	6	8	10	12	14	16	18
	kW	HP		0	33.3	67	100	134	166	200	233	268	300
EMH(m)12-1\1	0.65	0.9	H (m)	12.5	12	11.5	11	10	9.5	8.5	7	5.5	-
EMH(m)12-2\2	1.3	1.75		25.5	25	24	23.5	22.5	21	19.5	16.5	13.5	10
EMH(m)12-3\3	1.85	2.5		38.5	37.5	37	36	35	32.5	31.5	28	24.5	20.5
EMH(m)12-4\4	2.2	3.0		51.5	50.5	49.5	48.5	47.5	45.5	42.5	38.5	33.5	28.5
EMH12-5\5	3.0	4.0		64.5	63	62.5	62	60.5	58	54	48.5	43	37

Dimension



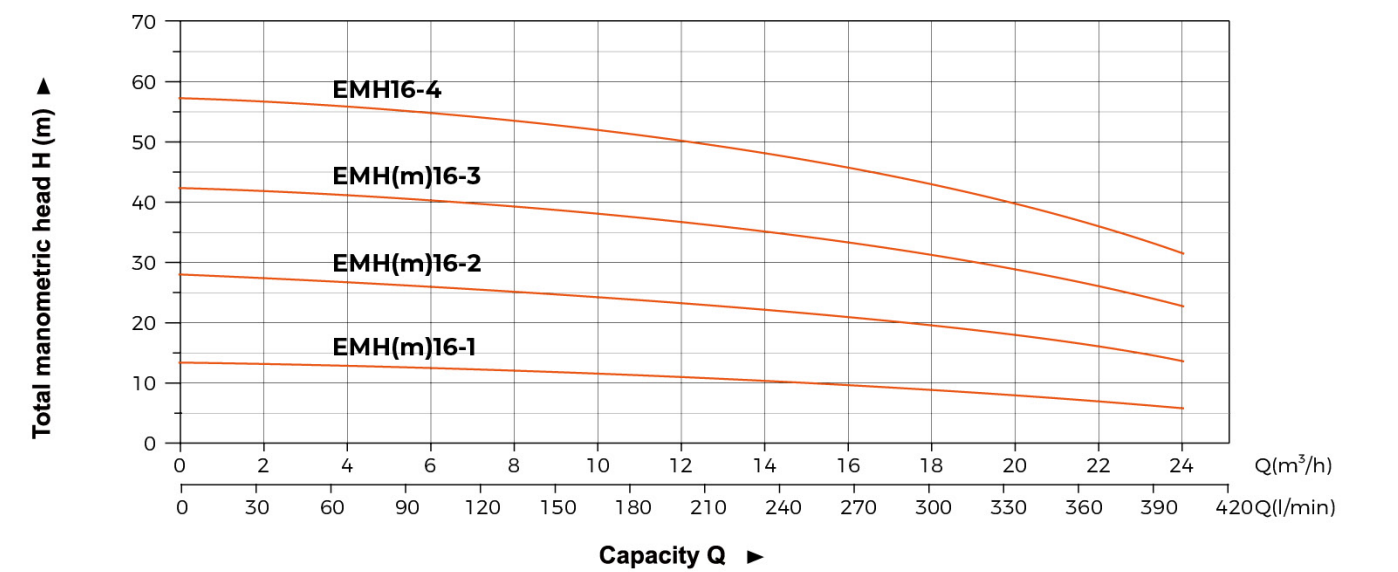
Inside "(l)" is the size of single-phase motor

Model	L	L1	L2	L3	L4	B1	B2	D	G	K	H	J1/J2
									3~/1~	3~/1~		
EMH(m)12-1\1	378	186	102.5	132	96	158	125	146.5	196/207.5	/89	210	G1 1/2/G1 1/2
EMH(m)12-2\2	410	200	102.5	136	96	158	125	167	213/222	/105.5		
EMH(m)12-3\3	410(470)	200	102.5	136(170)	96(140)	158(200)	125(160)	167(175)	213/237	/107		
EMH(m)12-4\4	440(500)	230	132.5						213/237	/107		
EMH12-5\5	530	260	162.5	170	140	200	160	175	222/	-		

Package Information

Model	GW(Kgs)		L x W x H(mm)		Quantity(PCS/20'TEU)	
	3~	1~	3~	1~	3~	1~
EMH(m)12-1\1	11.5	12.5	423x234x256		11.5	12.5
EMH(m)12-2\2	15.0	17.5	455x244x266		15.0	17.5
EMH(m)12-3\3	17.0	22.0	455x244x266	515x244x276	17.0	22.0
EMH(m)12-4\4	19.5	25.0	485x244x266	545x244x276	19.5	25.0
EMH12-5\5	25.5	-	575x244x276	-	25.5	-

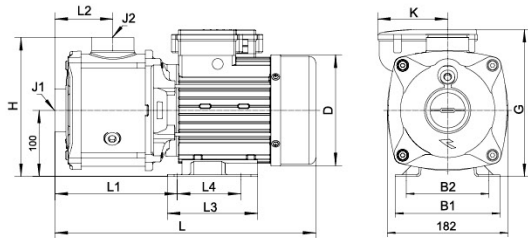
Hydraulic Performance Curves



Technical Data

Model	Power		Q(m³/h) Q(l/min)	0	4	8	12	14	16	18	20	22	24
	kW	HP		0	67	134	200	233	268	300	333	367	400
EMH(m)16-1	1.0	1.36	H (m)	13.5	12.5	12	11	10.5	9.5	8.5	8	7	6
EMH(m)16-2	1.6	2.15		28	26.5	25.5	23.5	22	21	20	18	16	14
EMH(m)16-3	2.6	3.5		42.5	40.5	39.5	37	35.5	33.5	31.5	28.5	26	23
EMH16-4	3.5	4.7		57.5	54.5	53.5	50.5	48.5	46	43.5	40	36	31.5

Dimension

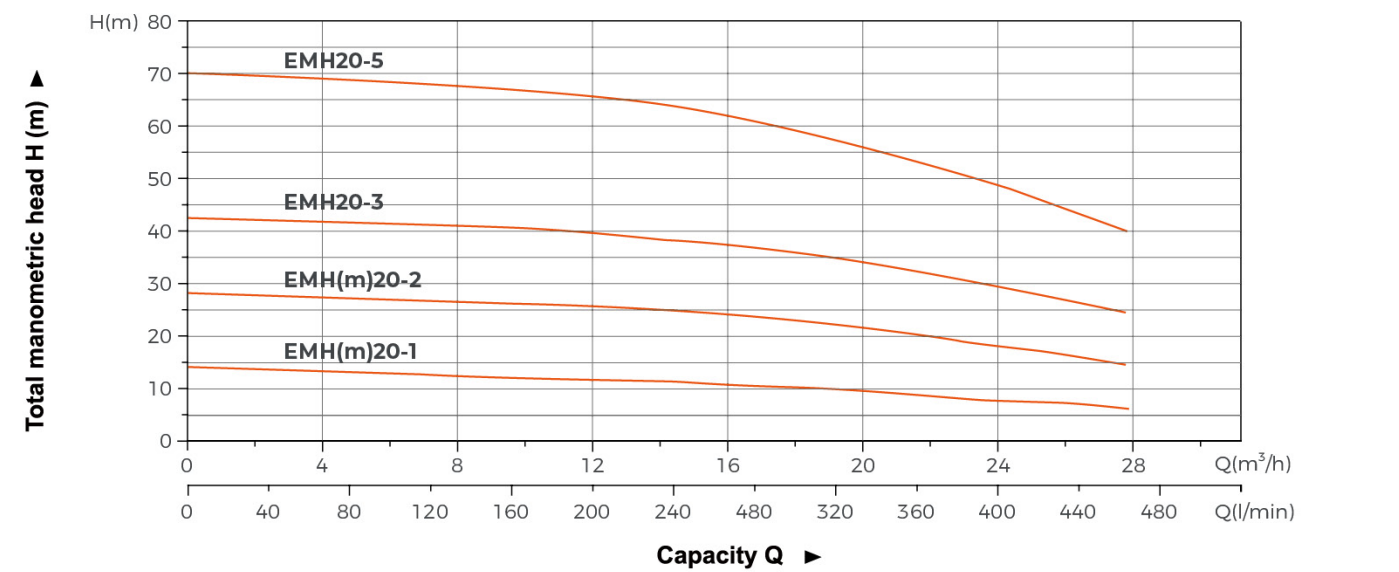


Model	L	L1	L2	L3	L4	B1	B2	D	G	K	H	J1/J2
									3~/1~	3~/1~		
EMH(m)16-1	363	171	87.5	132	96	158	125	146.5	196/207.5	/89	211	G2/G2
EMH(m)16-2	394	185	87.5	136	96	158	125	167	213/222	/105.5		
EMH(m)16-3	500	230	132.5	170	140	200	160	175	222/237	/107		
EMH16-4	545	275	177.5	170	140	200	160	175	222/	-		

Package Information

Model	GW(Kgs)		L x W x H (mm)	Quantity (PCS/20'TEU)
	3~	1~		
EMH(m)16-1	12.0	13.5	408x234x256	868
EMH(m)16-2	17.0	19.0	440x244x266	756
EMH(m)16-3	24.0	25.0	545x244x276	923
EMH16-4	27.0	-	590x244x276	553

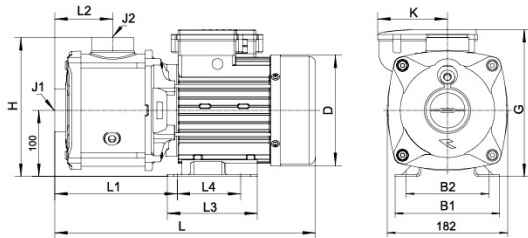
Hydraulic Performance Curves



Technical Data

Model	Power		Q(m³/h) Q(l/min)	0	5	10	14	16	18	20	22	24	26	28
	kW	HP		0	83	166	233	268	300	333	367	400	433	467
EMH(m)20-1	1.0	1.36	H (m)	14	13	12	11.5	10.5	10	9.5	8.5	7.5	7	6
EMH(m)20-2	2.2	3.0		28	27	26	25	24	23	21.55	20	18	16.5	14.5
EMH20-3	3.5	4.7		42.5	41.5	40.5	38.5	37.5	36	34	32	29.5	27	24.5
EMH20-5	5.5	7.5		70	68.5	66.5	63.5	62	59	55.5	52.5	46.5	44	36.5

Dimension



Inside "(l)" is the size of single-phase motor

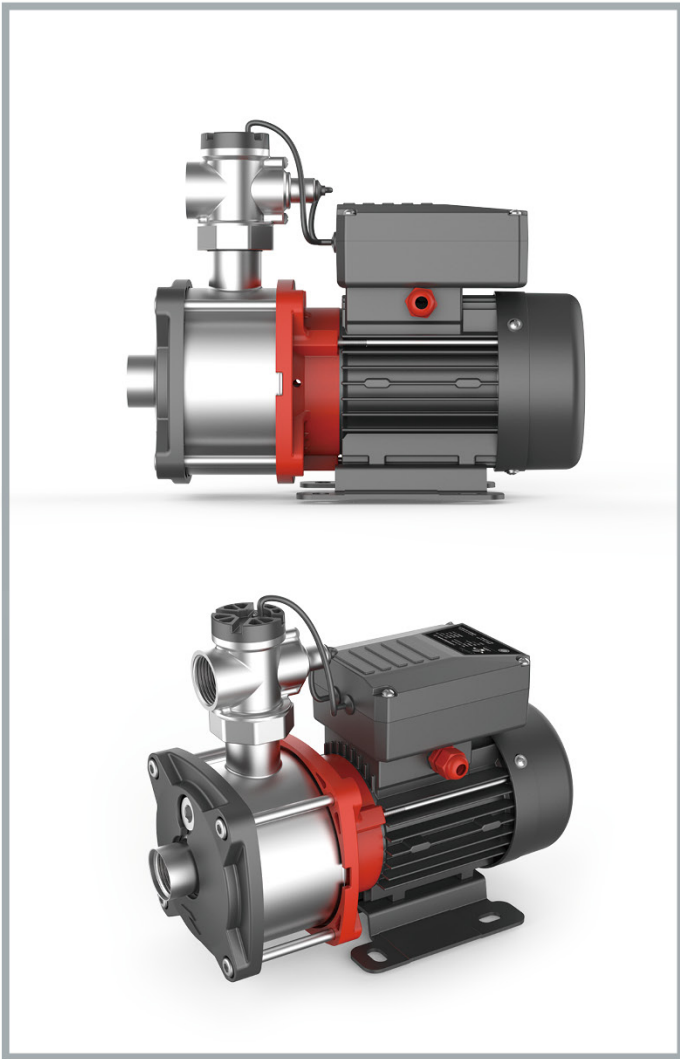
Model	L	L1	L2	L3	L4	B1	B2	D	G	K	H	J1/J2
									3~/1~	3~/1~		
EMH(m)20-1	363	171	87.5	132	96	158	125	146.5	196/207.5	/89	211	G2/G2
EMH(m)20-2	394(455)	185	87.5	136(170)	96(140)	158(200)	125(160)	167(175)	213/237	/107		
EMH20-3	500	230	132.5	170	140	200	160	175	222	-		
EMH20-5	679	351	222.5	180	140	230	190	211	255	-		

Package Information

Model	GW(Kgs)		L x W x H(mm)		Quantity(PCS/20'TEU)	
	3~	1~	3~	1~	3~	1~
EMH(m)20-1	12.5	13.5	408x234x256		868	
EMH(m)20-2	18.5	22.5	440x244x266	500x244x276	756	644
EMH20-3	25.5	-	545x244x276	-	623	-
EMH20-5	44.2	-	740x265x320	-	491	-

EMHm-SE

Stainless Steel Horizontal
Multistage Pump



Application

- EMHm-SE series is an intelligent stainless steel multistage centrifugal pump, controlled by a PCL microcomputer chip, mainly used for pressurization, household water supply, and automatic watering, with the feature of delay-start protection, automatic start and stop, and no water protection.
- Can be used to transfer clean water or other liquids similar to water in physical and chemical properties.

Pump

- When the density of the conveyed medium is greater than that of clean water, a high-power motor is required.
- Liquid temperature: 4°C ~ 60°C
- Max. Ambient temperature: +40°C
- Max. working pressure: 10 bar

Motor

- Motor with copper winding
- Protection class: IP55
- Insulation class: F
- Voltage: Single phase 180-220V/50Hz
- Built-in thermal protector for single phase motor

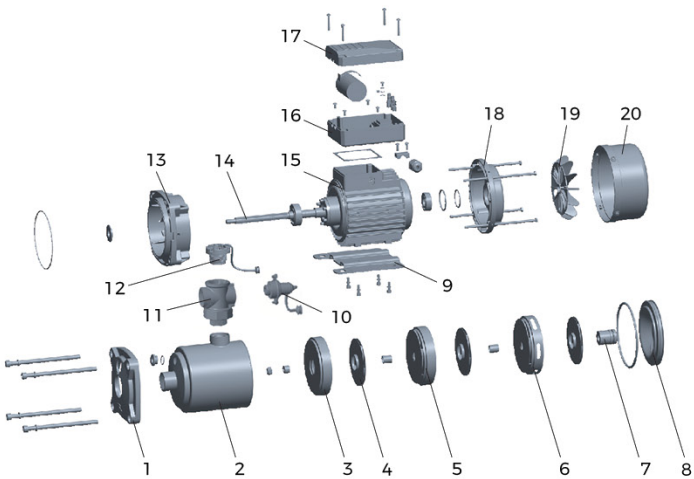
Identification Codes

EMH m 2 - 2 SE

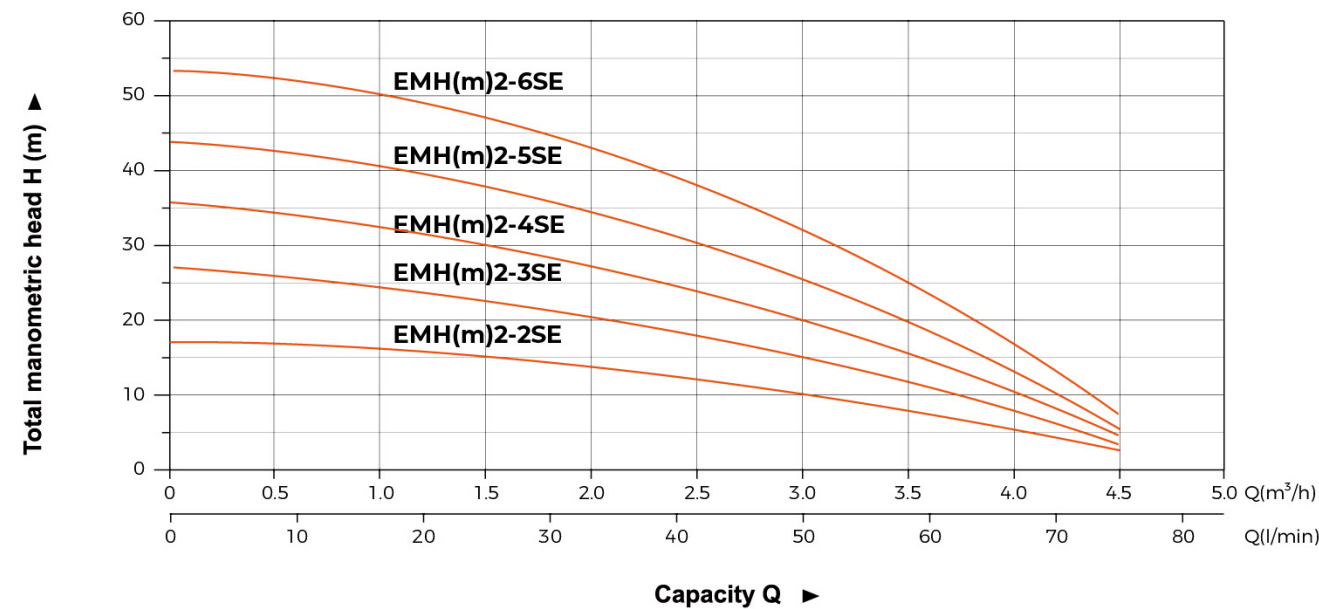
- Intelligent Type
- Impeller Stage
- Rated Flow (m³/h)
- Single Phase Motor
- Stainless Steel Horizontal Multistage Pump

Materials Table

No.	Part	Material
1	Pump cover	ZL102
2	Pump body	AISI 304
3	Diffuser 1	AISI 304
4	Impeller	AISI 304
5	Diffuser 2	AISI 304
6	Diffuser 3	AISI 304
7	Machinery Seal	
8	Bracket cover	AISI 304
9	Base	Q235
10	Pressure sensor	
11	Five-way	
12	Flow Sensor	
13	Bracket	ZL 102
14	Rotor	
15	Stator	
16	Terminal box	
17	Cover box	Plastic
18	Rear cover	ZL 102
19	Fan	Plastic
20	Fan cover	Plastic



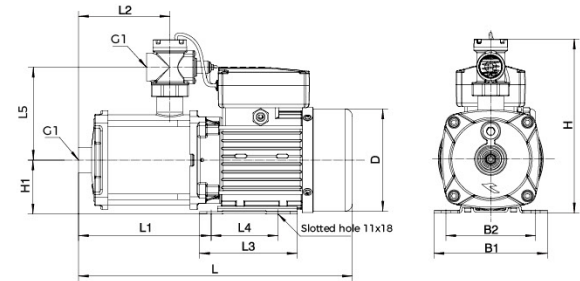
Hydraulic Performance Curves



Technical Data

Model	Power		Q(m³/h)	0	1	1.5	2	2.5	3	3.5	4	4.5
	kW	HP	Q(l/min)	0	16.7	25	33.3	41.7	50	58.3	66.7	75
EMHm2-2SE	0.25	0.33	H (m)	18.5	16.5	15.5	13.5	12.5	10.5	8	6	3
EMHm2-3SE	0.37	0.5		27	25	23	20.5	18	15.5	12	8	3.5
EMHm2-4SE	0.37	0.5		36	32.5	30	27.5	24	20	16	11	4
EMHm2-5SE	0.55	0.75		44	41	38	33.5	30	25.5	20.5	14	4.5
EMHm2-6SE	0.75	1.0		54	50	46.5	41.5	38	32	26.5	19	5

Dimension

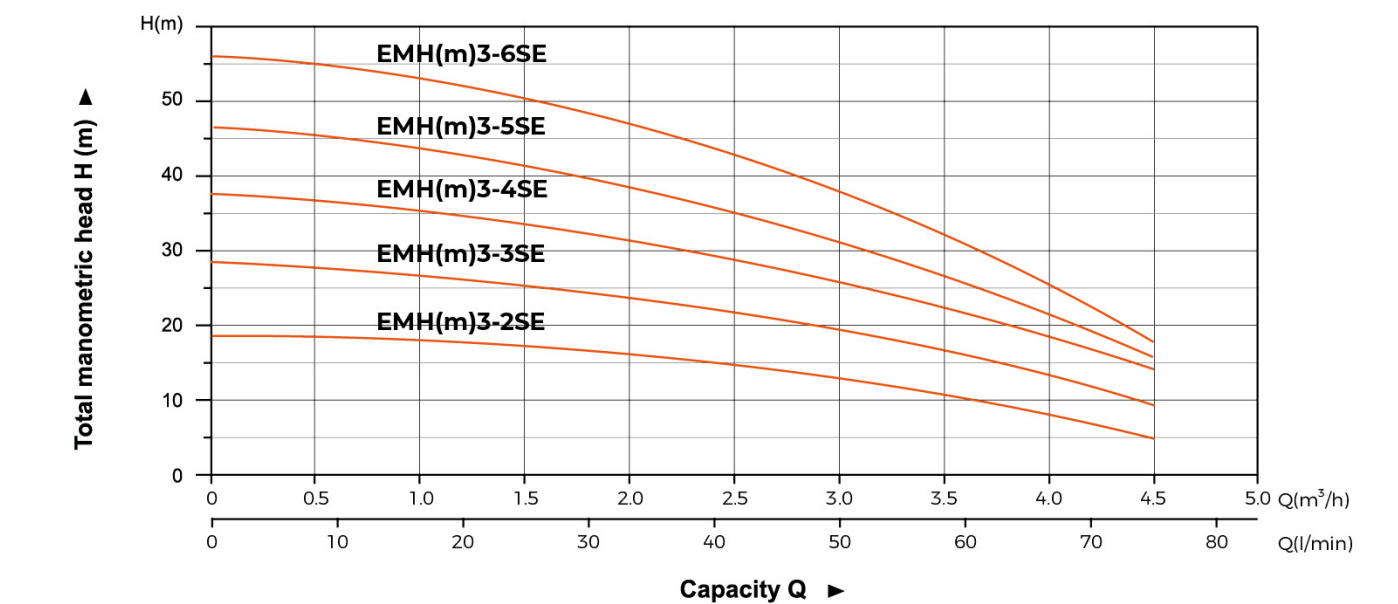


Model	L	L1	L2	L3	L4	L5	H1	B1	B2	D	H
EMHm2-2SE	305	131	72	136	96	129	75	158	125	122	242.5
EMHm2-3SE	305	131	72	136	96	129	75	158	125	122	242.5
EMHm2-4SE	323	149	90	136	96	129	75	158	125	122	242.5
EMHm2-5SE	354	167	108	136	96	129	75	158	125	122	242.5
EMHm2-6SE	382	185	126	136	96	129	75	158	125	146.5	242.5

Package Information

Model	GW (Kgs)	L (mm)	W (mm)	H (mm)
EMHm2-2SE	8.33	344	189	295
EMHm2-3SE	8.53	344	189	295
EMHm2-4SE	9.13	362	189	295
EMHm2-5SE	10.23	392	189	295
EMHm2-6SE	12.48	420	189	300

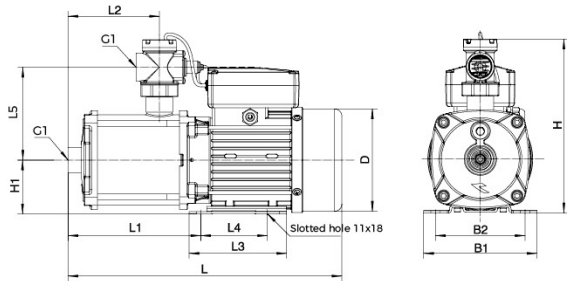
Hydraulic Performance Curves



Technical Data

Model	Power		Q(m³/h)	0	0.5	1	1.5	2	2.5	3	3.5	4	4.5
	kW	HP	Q(l/min)	0	8.4	16.7	25	33.3	41.7	50	58.5	67	75
EMHm3-2SE	0.25	0.33	H (m)	19.5	18.5	18	17	16	15	13	11	8.5	4
EMHm3-3SE	0.37	0.5		29	27.5	26.5	25	24	21.5	19	17	13	9
EMHm3-4SE	0.55	0.75		38	36.5	35	33.5	32	29	25.5	23	18	14.5
EMHm3-5SE	0.55	0.75		47.5	46	43	41	38	35.5	32	27.5	21	15
EMHm3-6SE	0.75	1.0		57.5	55.5	52	50	47	43.5	39	33.5	26	16.5

Dimension

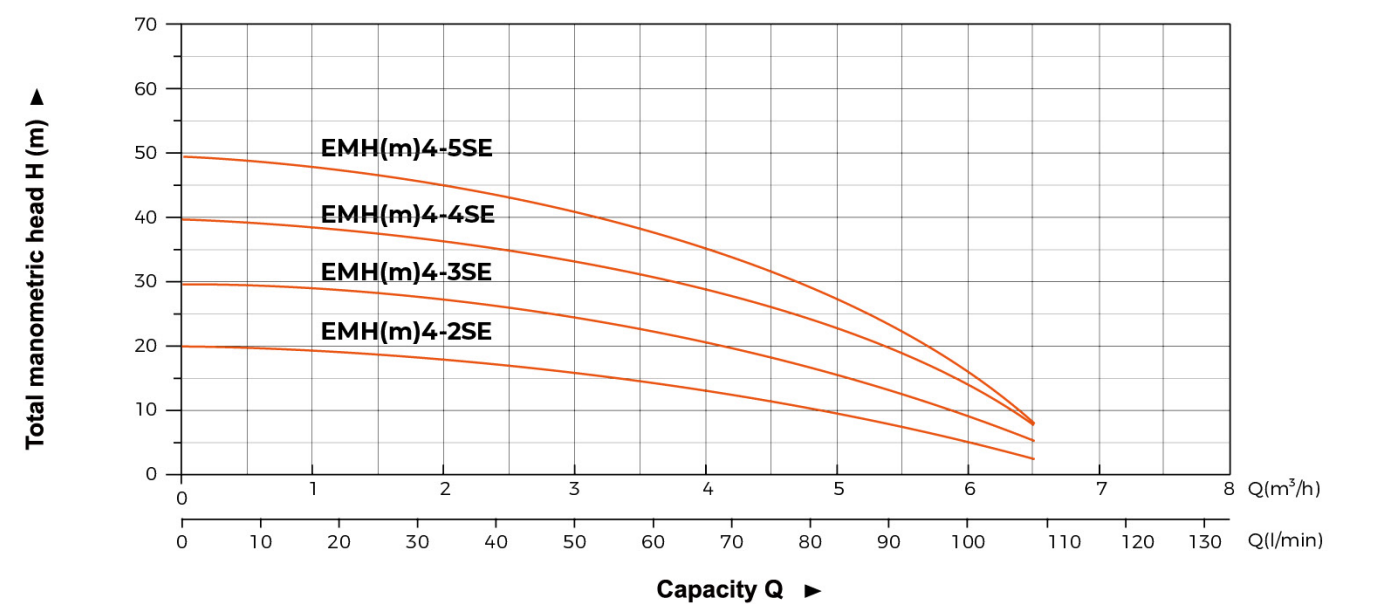


Model	L	L1	L2	L3	L4	L5	H1	B1	B2	D	H
EMHm3-2SE	305	131	72	136	96	129	75	158	125	122	242.5
EMHm3-3SE	305	131	72	136	96	129	75	158	125	122	242.5
EMHm3-4SE	336	149	90	136	96	129	75	158	125	122	242.5
EMHm3-5SE	354	167	108	136	96	129	75	158	125	122	242.5
EMHm3-6SE	382	185	126	136	96	129	75	158	125	146.5	242.5

Package Information

Model	GW (Kgs)	L (mm)	W (mm)	H (mm)
EMHm3-2SE	8.32	344	189	295
EMHm3-3SE	8.67	344	189	295
EMHm3-4SE	9.82	374	189	295
EMHm3-5SE	10.17	392	189	295
EMHm3-6SE	12.52	420	189	300

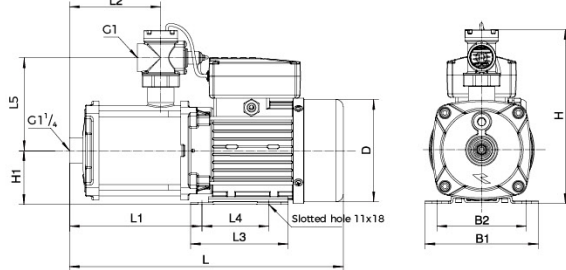
Hydraulic Performance Curves



Technical Data

Model	Power		Q(m³/h)	0	1	2	3	4	4.5	5	6	6.5
	kW	HP	Q(l/min)	0	16.7	33.3	50	67	75	83	100	108.5
EMHm4-2SE	0.37	0.5	H (m)	20	19	17.5	15.5	13	11	9	4	3
EMHm4-3SE	0.55	0.75		30	29	27	24	20	18.5	16	9	4
EMHm4-4SE	0.75	1.0		40	38.5	36	33	28	25.5	22.5	16	6
EMHm4-5SE	0.75	1.0		50	47.5	44.5	40.5	35	32	27	16.5	7

Dimension



Model	L	L1	L2	L3	L4	L5	H1	B1	B2	D	H
EMHm4-2SE	308.5	134	75	136	96	129	75	158	125	122	242.5
EMHm4-3SE	321	134	75	136	96	129	75	158	125	122	242.5
EMHm4-4SE	349	152	93	136	96	129	75	158	125	146.5	242.5
EMHm4-5SE	367	170	111	136	96	129	75	158	125	146.5	242.5

Package Information

Model	GW (Kgs)	L (mm)	W (mm)	H (mm)
EMHm4-2SE	8.72	344	189	295
EMHm4-3SE	9.47	357	189	295
EMHm4-4SE	11.77	384	189	300
EMHm4-5SE	13.67	402	189	300

ABK

Semi-open Impeller
Stainless Steel Centrifugal Pump



Application

- Can be used to transfer liquids with light corrosive, requirement for health and containing impurities,etc.
- Suitable for industrial & domestic sewage system, food & beverage processing,farming,pumping water from river and lake,etc.
- Can be used at full head without overloading motor.

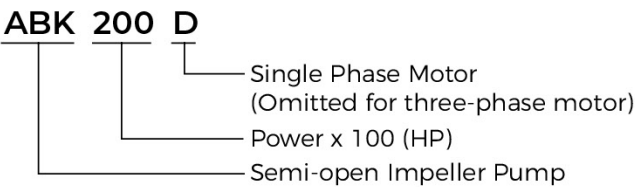
Pump

- AISI 304 pump body
- AISI 304 shaft
- Liquid temperature: -15°C ~ +80°C
- Liquid PH value: 5 - 9
- Max.solid diameter: 19 mm

Motor

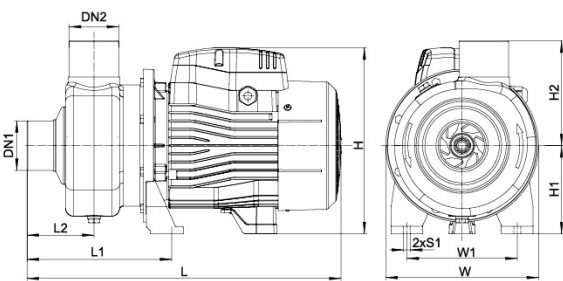
- Motor with copper winding
- Built-in thermal protector for single phase motor
- Insulation class: F
- Protection class: IPX4
- Max. temperature: +40°C

Identification Codes



Technical Data

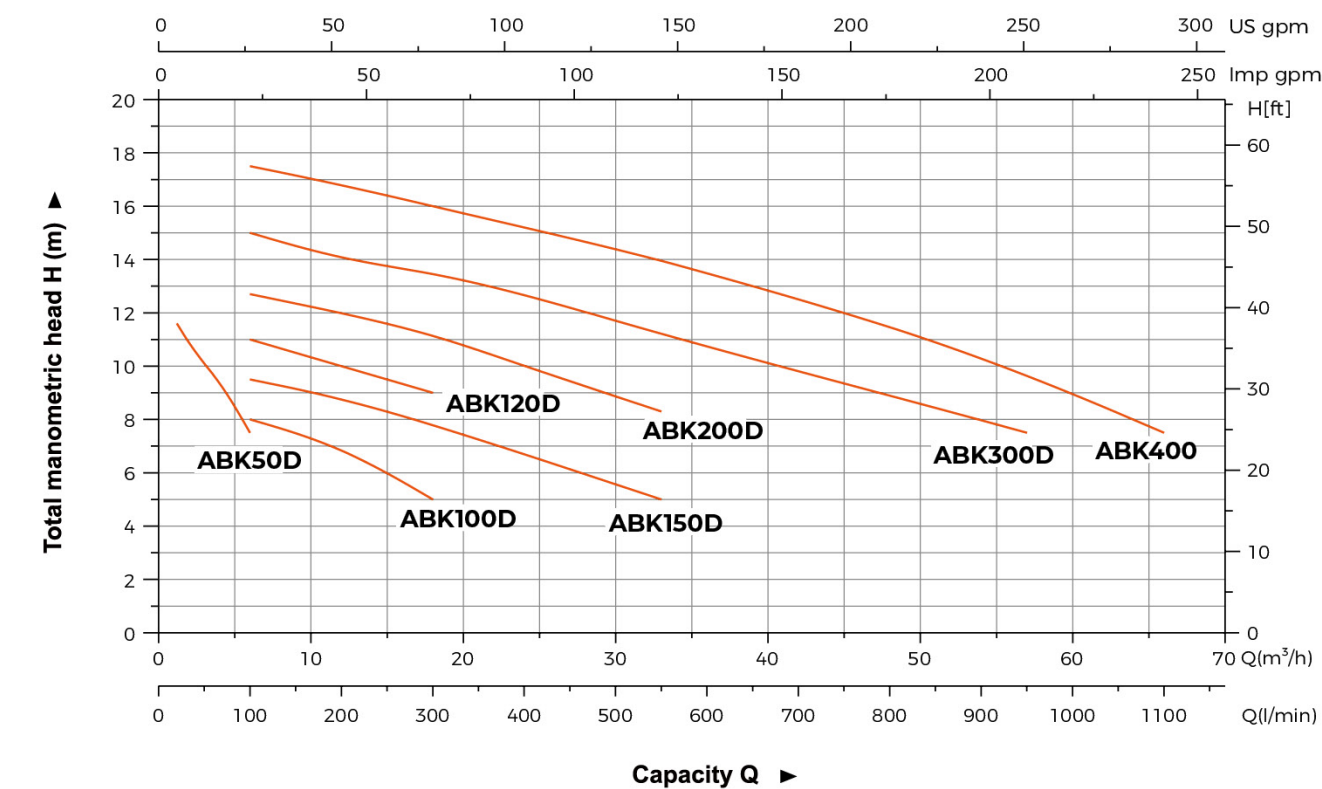
Model		Power		Q(m³/h)		1.2	2.4	3.6	4.8	6	12	18	24	33	42	48	57	66	Impeller passage (mm)
Single phase	Three phase	kW	HP	Q(l/min)		20	40	60	80	100	200	300	400	550	700	800	950	1100	
ABK50D	ABK50	0.37	0.5	H (m)		11.6	10.5	9.7	8.7	7.5	-	-	-	-	-	-	-	-	9
ABK100D	ABK100	0.75	1			-	-	-	-	8	7	5	-	-	-	-	-	-	12
ABK120D	ABK120	0.9	1.2			-	-	-	-	11	10	9	-	-	-	-	-	-	12
ABK150D	ABK150	1.1	1.5			-	-	-	-	9.5	8.8	7.8	6.7	5	-	-	-	-	12
ABK200D	ABK200	1.5	2			-	-	-	-	12.7	12	11.2	10	8.3	6.5	-	-	-	16
ABK300D	ABK300	2.2	3			-	-	-	-	15	14	13.5	12.7	11.2	9.8	8.9	7.5	-	16
-	ABK400	3	4			-	-	-	-	17.5	16.8	16	15.2	14	12.5	11.5	9.7	7.5	19



Dimension

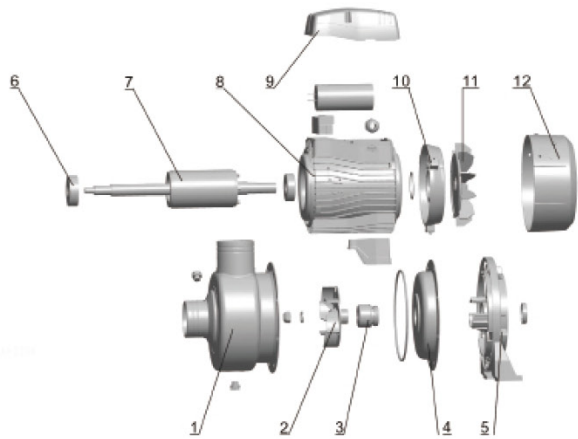
Model	Ports		L (mm)	L1 (mm)	L2 (mm)	H (mm)	H1 (mm)	H2 (mm)	W (mm)	W1 (mm)	S1 (mm)
	DN1	DN2									
ABK50(D)	1 1/4"	1"	280	123	50	180	90	106	170	105	9
ABK100(D)	1 1/2"	1 1/2"	332	160	76	212	100	118	170	120	9
ABK120(D)	1 1/2"	1 1/2"	332	160	76	212	100	118	170	120	9
ABK150(D)	2"	2"	400	184	85	235	112	133	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	Sic/Carbon
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

XZS
Stainless Steel Standard
Centrifugal Pump



Application

- Water supply: filtration and trasfer 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 santation, etc.

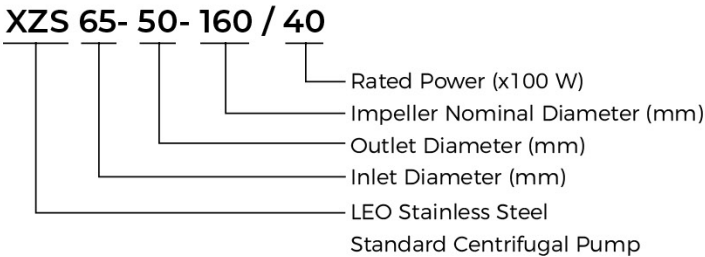
Operating Conditions

- 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. operating pressure: 10 bar
- Altitude: up to 1000 m
- Liquid PH valve: 3 - 9
- Max.ambient temperature: +40°C

Motor

- IE2 Motor (IE3 motor availableon request for power≥9.2kw)
- Totally enclosed & fan-cooled
- Protection class: IP55
- Insulation class: F

Identification Codes



Accessories on Request



AISI304 Threaded flange



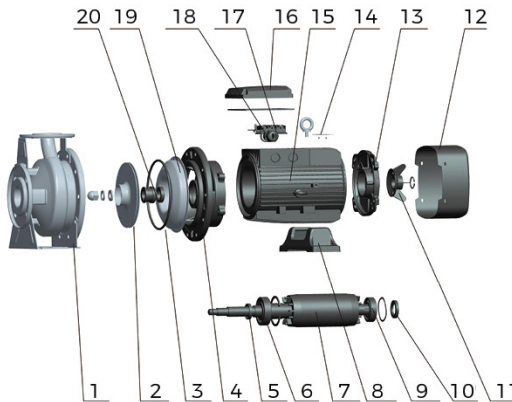
Flange gasket

Materials Table

1.1kW ~ 7.5kW

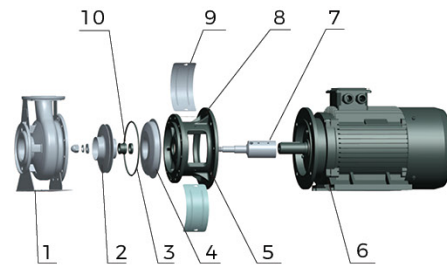
No.	Part	Material
1	Pump body	06Cr19Ni10
2	Impeller	06Cr19Ni10
3	O-ring	NBR
4	Support	HT200
5	Oil seal	
6	Bearing	
7	Rotor	
8	Stand	HT200
9	Bearing	
10	Oil seal	

No.	Part	Material
11	Fan	PP
12	Fan cover	PP-GF15
13	Rear cover	ZL102
14	Nameplate	06Cr19Ni10
15	Stator	
16	Terminal cover	ZL102
17	Terminal board	
18	Cable holder	
19	Support cover	06Cr19Ni10
20	Mechanical seal	



9.2kW ~ 22kW

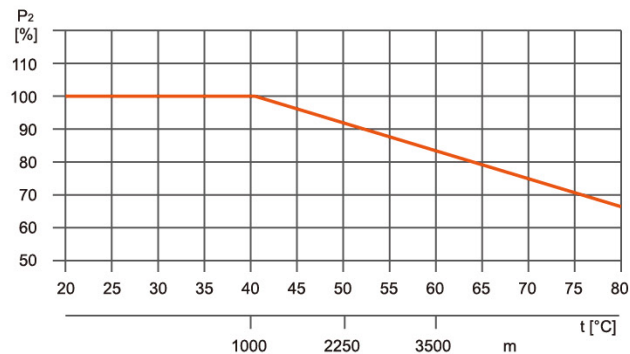
No.	Part	Material
1	Pump body	06Cr19Ni10
2	Impeller	06Cr19Ni10
3	O-ring	NBR
4	Support cover	06Cr19Ni10
5	Support	HT200
6	Motor	
7	Rotor	06Cr19Ni10/45
8	Nameplate	06Cr19Ni10
9	Guard plate	06Cr19Ni10
10	Mechanical seal	



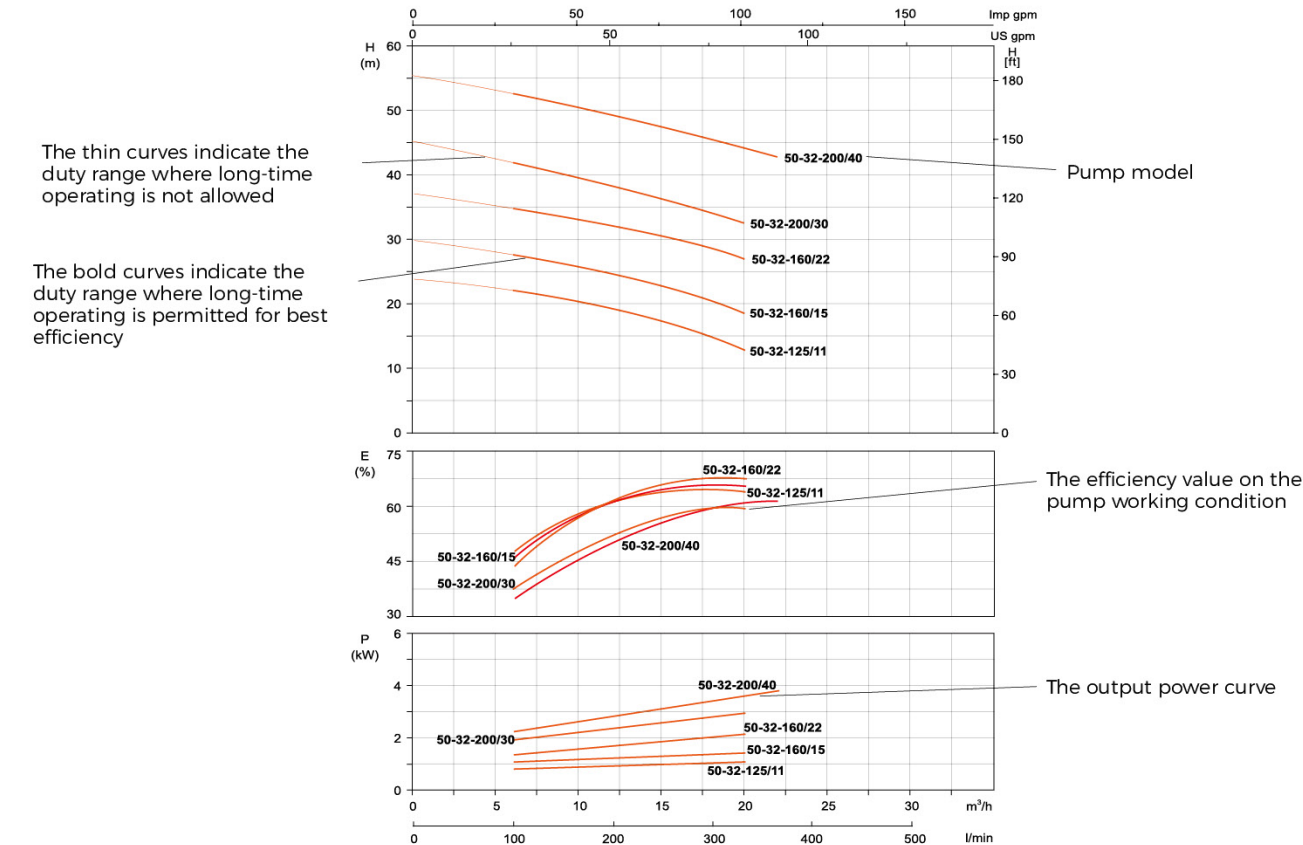
Ambient Temperature

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%.



How to Read the Curve Charts

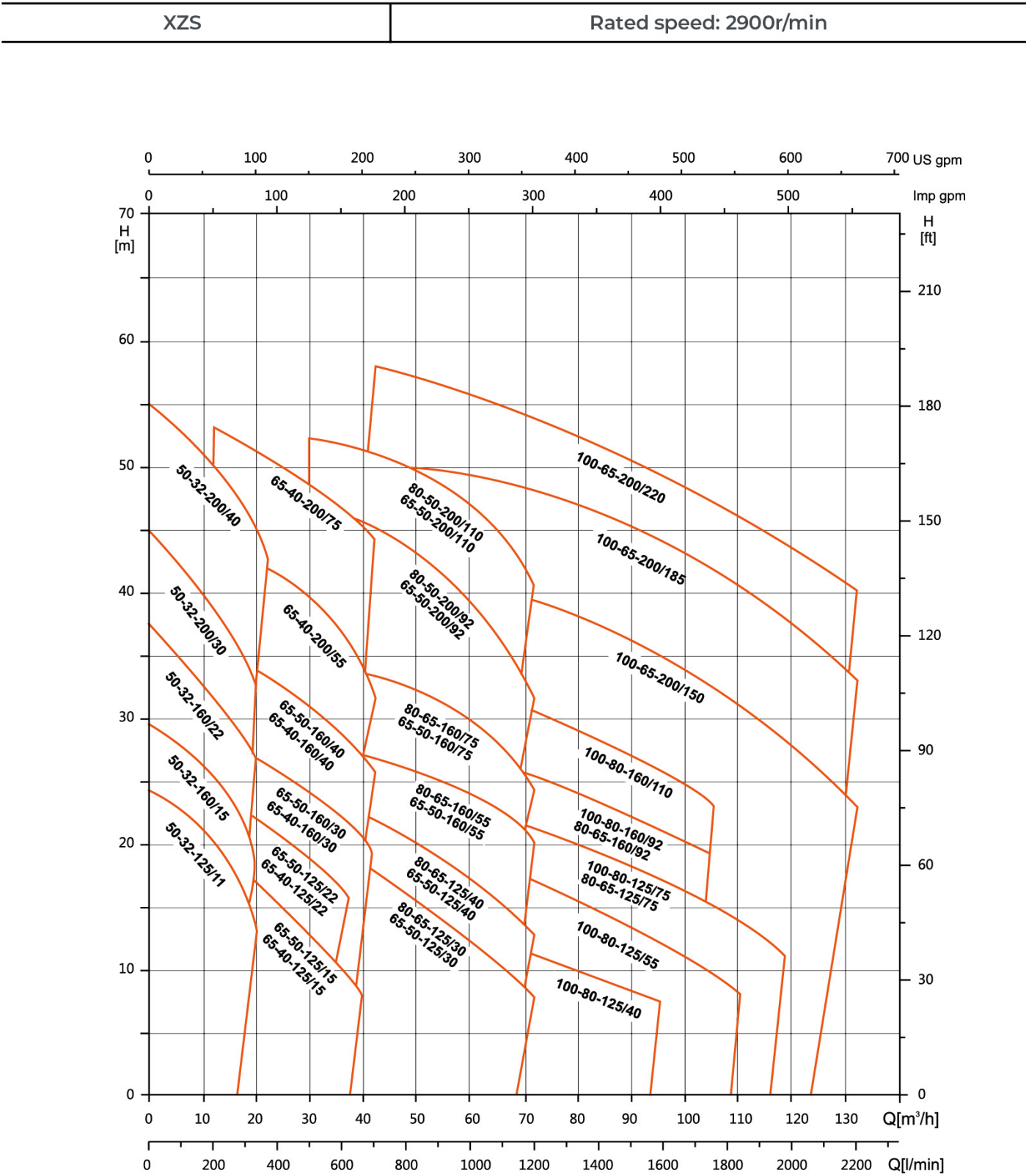


Technical Data

Model		Power		Q(m³/h)	0	6	9	12	18	20	22	24	27	30	36	42	48	60	72	90	108	114	120	126	132
GB5662 Standard	EN733 Standard	kW	HP	Q(l/min)	0	100	150	200	300	333	360	400	450	500	600	700	800	1000	1200	1500	1800	1900	2000	2100	2200
XZS50-32-125/11		1.1	1.5	H (m)	24	21.5	20.5	19.5	16	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
XZS50-32-160/15		1.5	2		29.5	27	26	25	21	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
XZS50-32-160/22		2.2	3		37	33.5	32.5	32	28.5	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
XZS50-32-200/30		3	4		45	41	40	38	34	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
XZS50-32-200/40		4	5.5		55	51	50	49	46	45	43	-	-	-	-	-	-	-	-	-	-	-	-	-	-
XZS65-50-125/15	XZS65-40-125/15	1.5	2		20	-	-	19	18	17	16.5	15	14	12.5	10	-	-	-	-	-	-	-	-	-	-
XZS65-50-125/22	XZS65-40-125/22	2.2	3		26	-	-	23.5	22.5	22	21.5	21	20.5	19.5	16.5	-	-	-	-	-	-	-	-	-	-
XZS65-50-160/30	XZS65-40-160/30	3	4		31	-	-	29	27.5	27	26.5	25.5	25	24	22	19	-	-	-	-	-	-	-	-	-
XZS65-50-160/40	XZS65-40-160/40	4	5.5		39	-	-	35.5	34.5	34	33.5	32.5	32	31	29	26	-	-	-	-	-	-	-	-	-
XZS65-40-200/55		5.5	7.5		47	-	-	43	42.5	42	41.5	41	40.5	39	37	33	-	-	-	-	-	-	-	-	-
XZS65-40-200/75		7.5	10		57	-	-	53	52.5	52	51	50	49	48	46.5	44.5	-	-	-	-	-	-	-	-	-
XZS80-65-125/30	XZS65-50-125/30	3	4		22.5	-	-	-	-	-	-	20	19.5	19	18.5	17.5	16	13	9	-	-	-	-	-	-
XZS80-65-125/40	XZS65-50-125/40	4	5.5		25.5	-	-	-	-	-	-	23	22.5	22	21.5	20.5	20	17	13.5	-	-	-	-	-	-
XZS80-65-160/55	XZS65-50-160/55	5.5	7.5		33	-	-	-	-	-	-	29.5	29	28.5	28	27	26	24	20	-	-	-	-	-	-
XZS80-65-160/75	XZS65-50-160/75	7.5	10		39	-	-	-	-	-	-	36	35	34.5	34	33.5	32.5	29	24	-	-	-	-	-	-
*XZS80-50-200/92	XZS65-50-200/92	11	15		53	-	-	-	-	-	-	-	-	48	47.5	46.5	44.5	39.5	34	-	-	-	-	-	-
*XZS80-50-200/110	XZS65-50-200/110	11	15		57.5	-	-	-	-	-	-	-	-	53	51	50.5	50	47	41	-	-	-	-	-	-
XZS100-80-125/40		4	5.5		20	-	-	-	-	-	-	-	-	-	17.5	16.5	15.5	14	12	7	-	-	-	-	-
XZS100-80-125/55		5.5	7.5		23	-	-	-	-	-	-	-	-	-	21.5	20.5	20	18	16	12	7.5	-	-	-	-
XZS100-80-125/75	XZS80-65-125/75	7.5	10		29	-	-	-	-	-	-	-	-	-	27.5	26.5	25.5	23.5	21.5	17.5	13	12	-	-	-
*XZS100-80-160/92	XZS80-65-160/92	11	15		33	-	-	-	-	-	-	-	-	-	-	31	30	28	26	23	-	-	-	-	-
*XZS100-80-160/110	XZS80-65-160/110	11	15		38.5	-	-	-	-	-	-	-	-	-	-	36	35	33	31	28	-	-	-	-	-
*XZS100-65-200/150		15	20		47	-	-	-	-	-	-	-	-	-	-	44	43	41	39	36	32	30	28	26	23
*XZS100-65-200/185		18.5	25		53	-	-	-	-	-	-	-	-	-	-	51	50	49	48	45	41	39	37	35	33
*XZS100-65-200/220		22	30		58	-	-	-	-	-	-	-	-	-	-	57	56	55	54	51	47	45.5	44	42	40

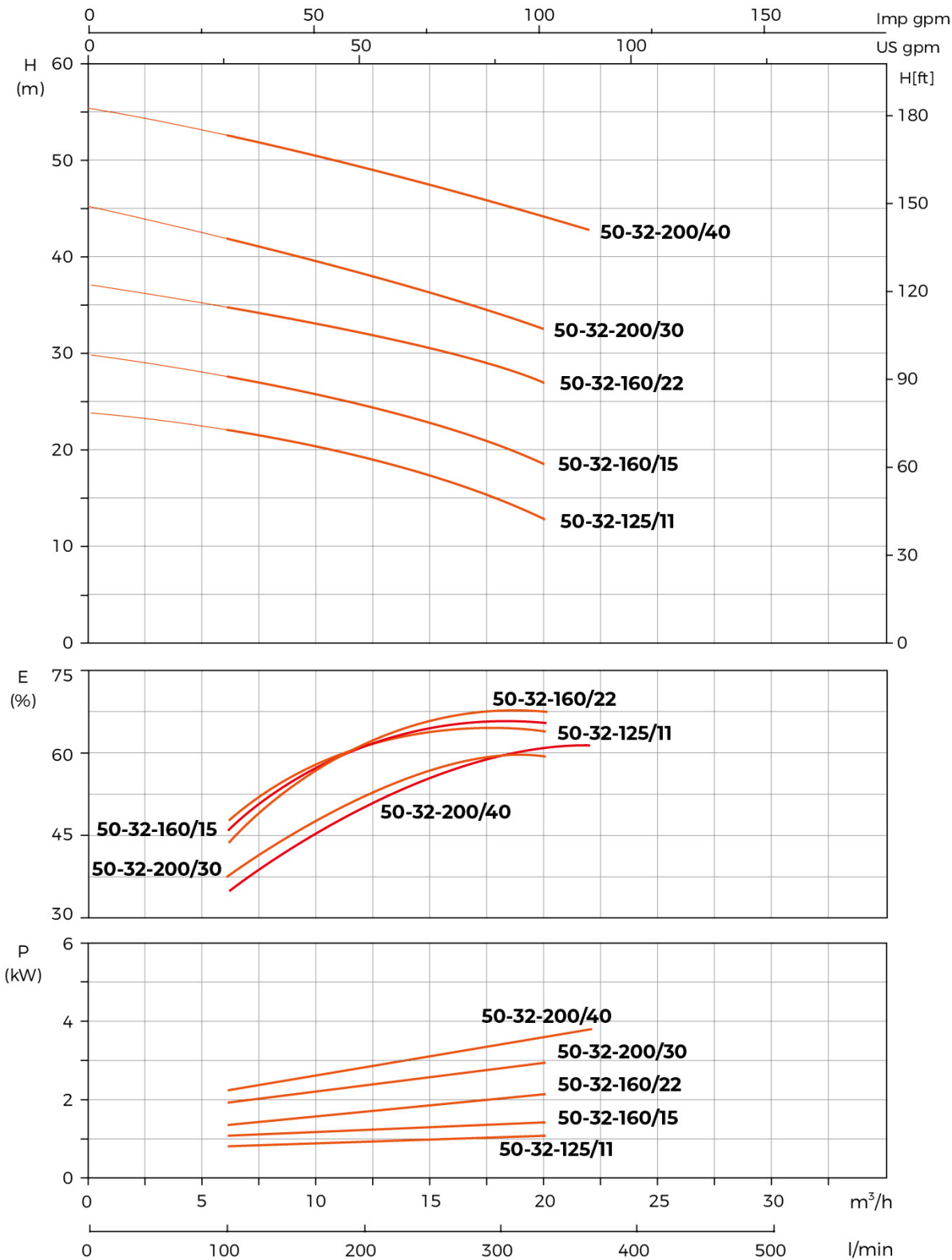
* =IE3 motor optional on request.

Characteristic Curves



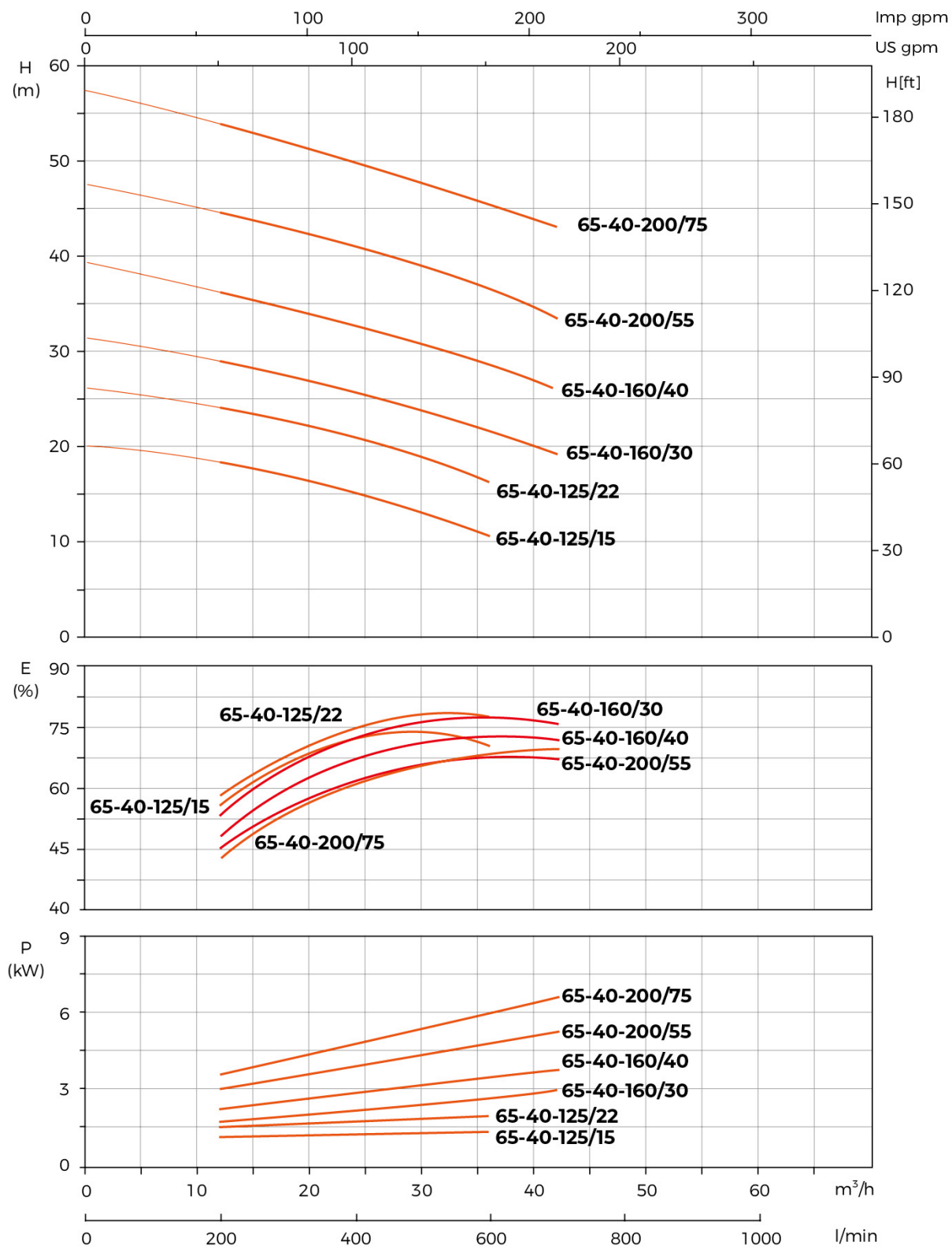
Hydraulic Performance Curves

XZS50-32	Rated speed: 2900r/min
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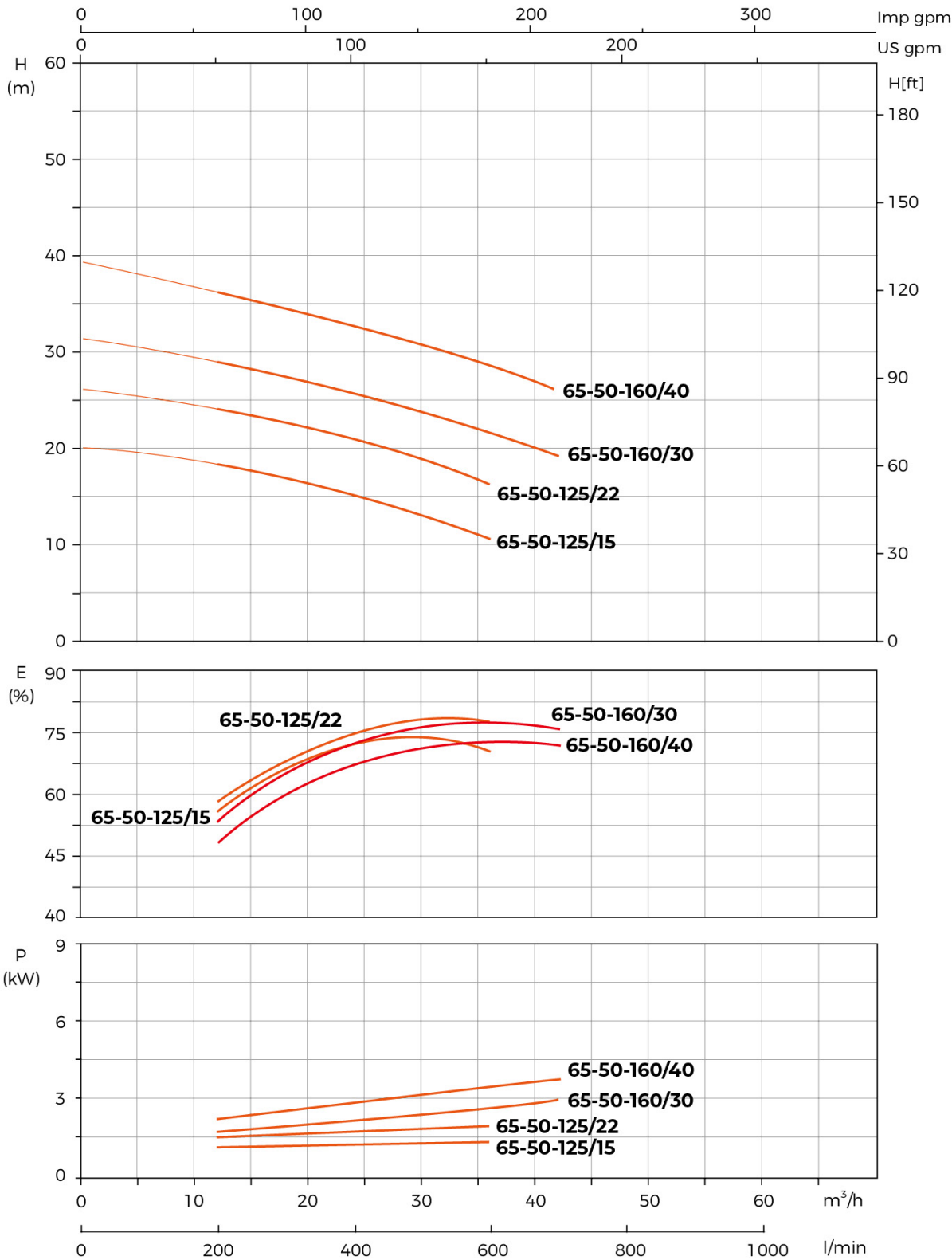
Hydraulic Performance Curves

XZS65-40	Rated speed: 2900r/min
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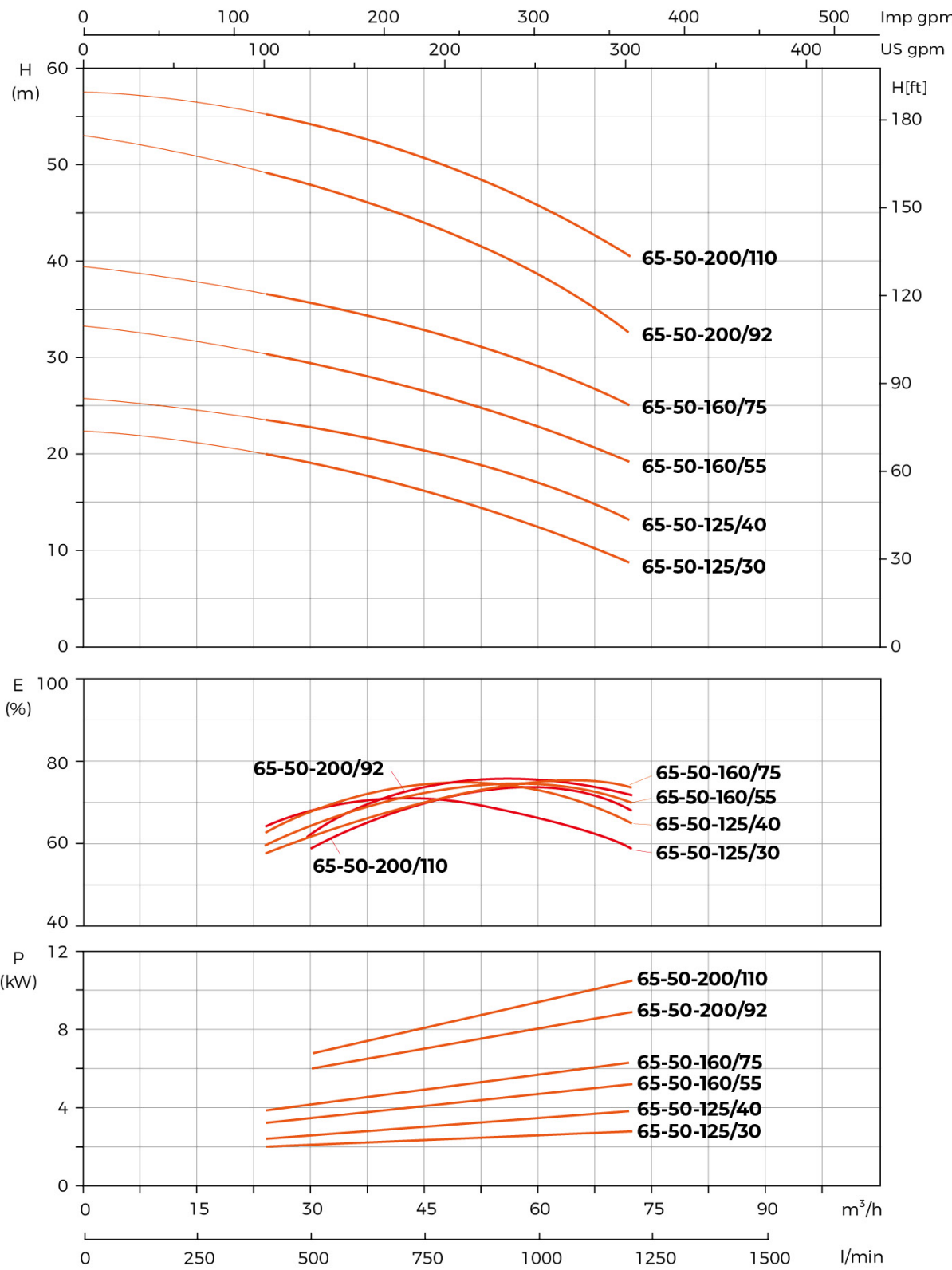
Hydraulic Performance Curves

XZS65-50	Rated speed: 2900r/min
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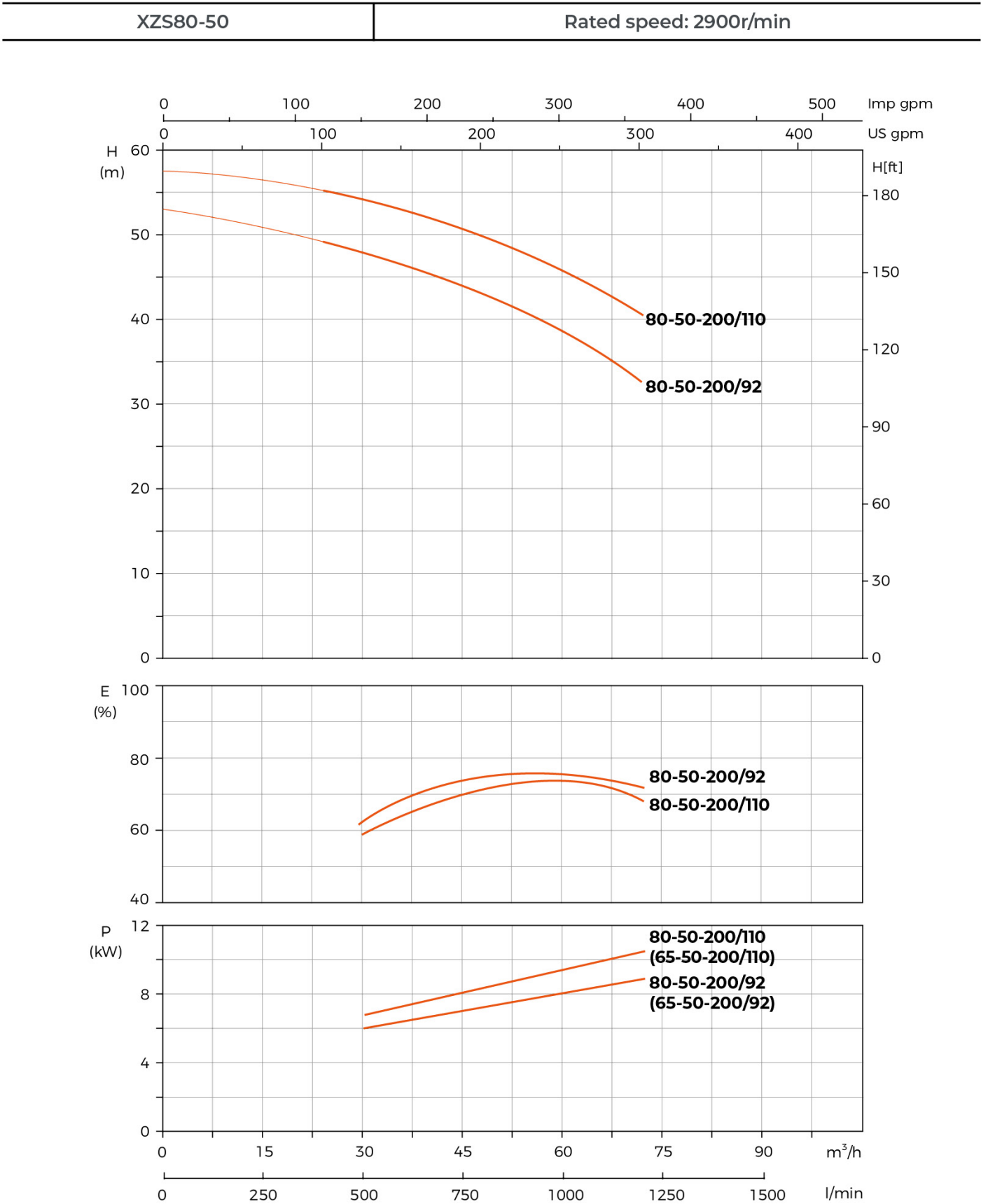


Hydraulic Performance Curves

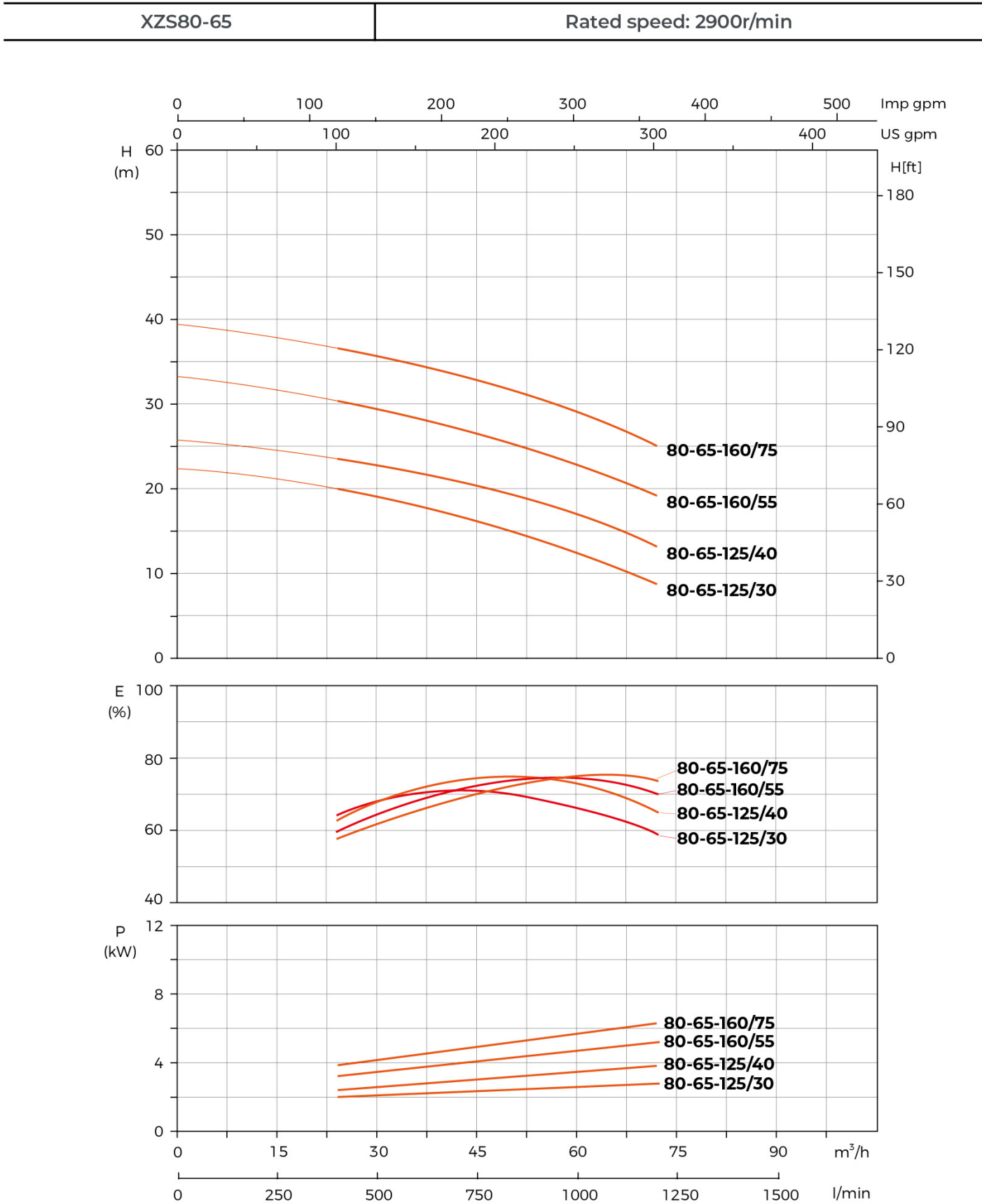
XZS65-50	Rated speed: 2900r/min
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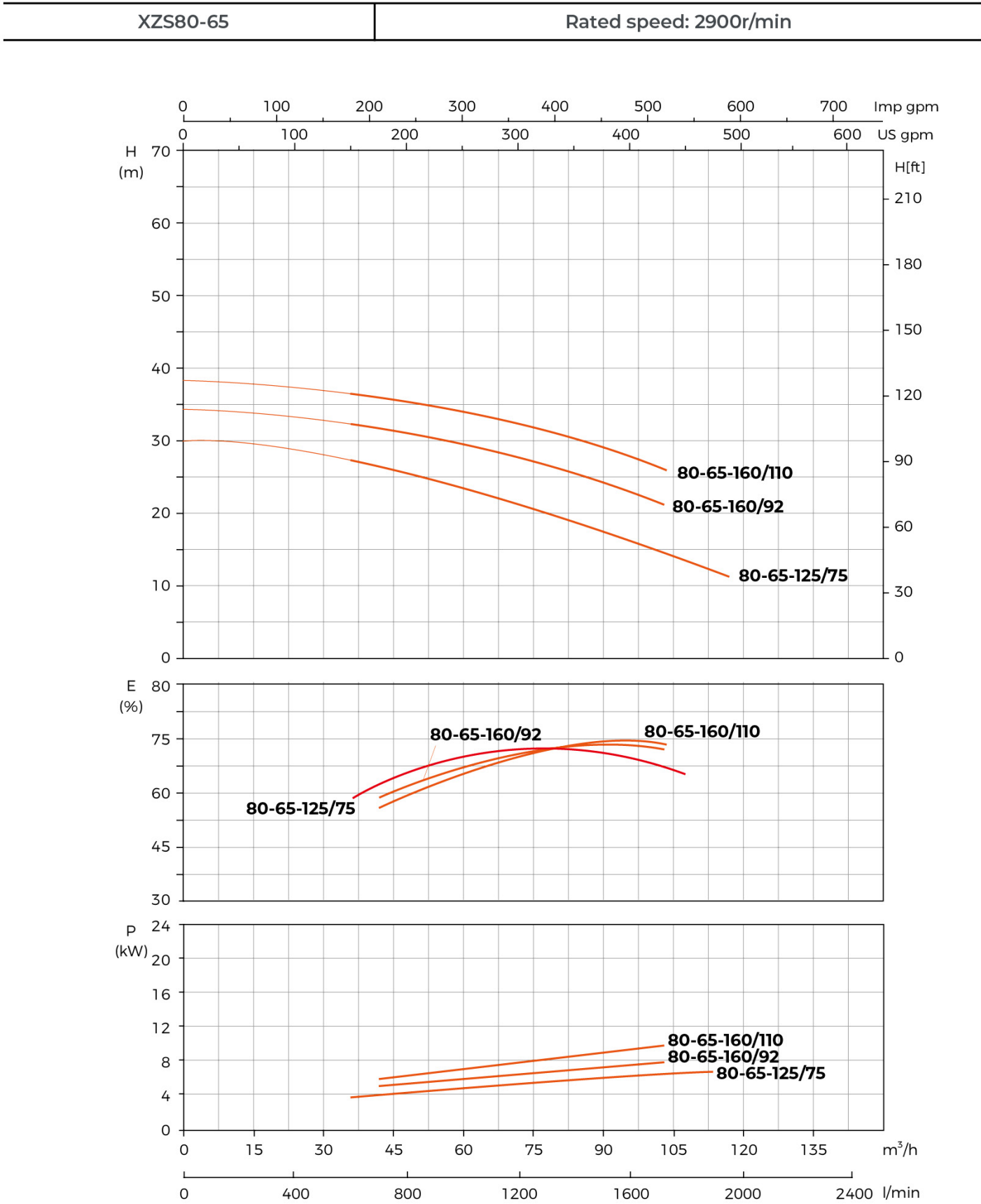
Hydraulic Performance Curves



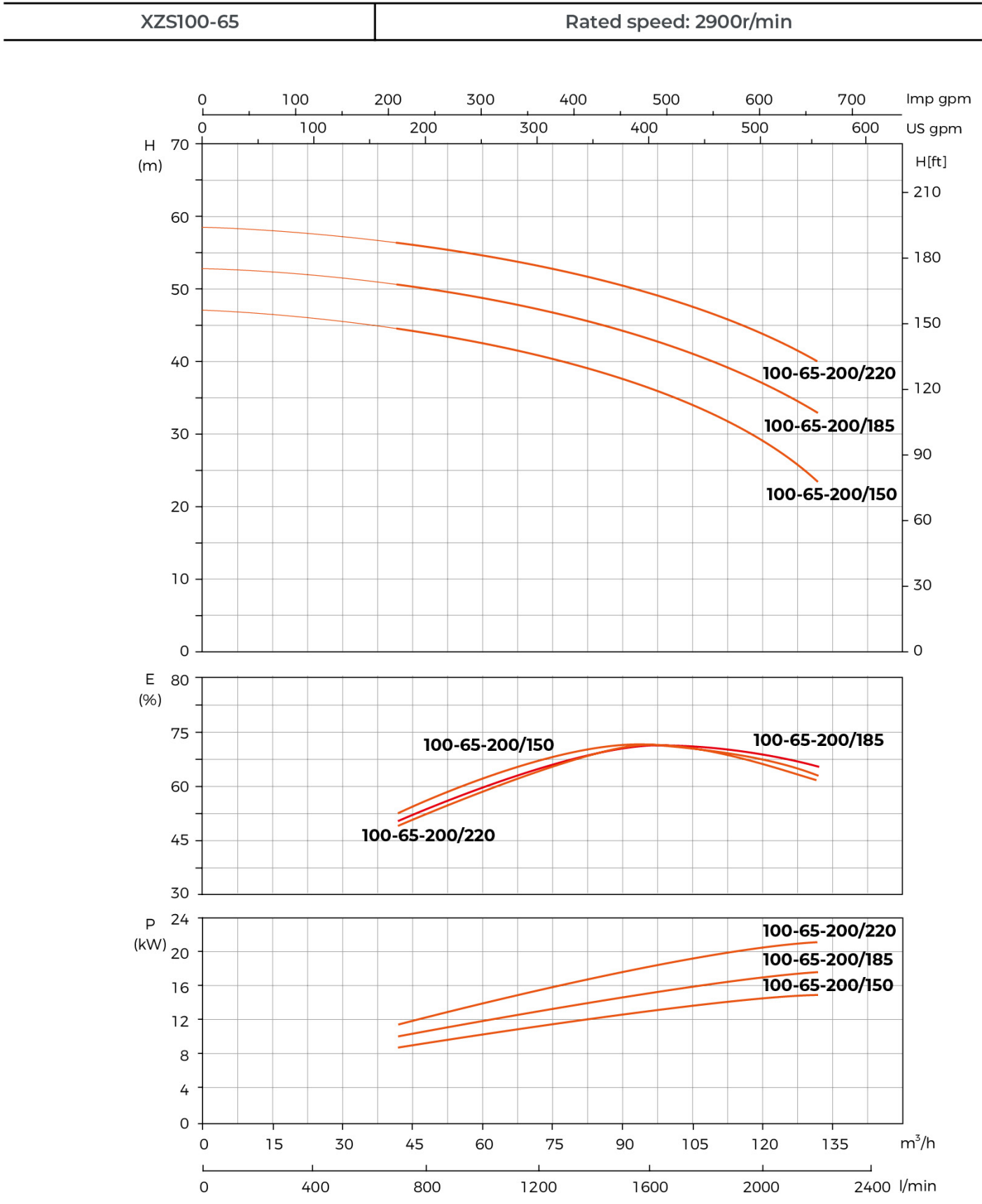
Hydraulic Performance Curves



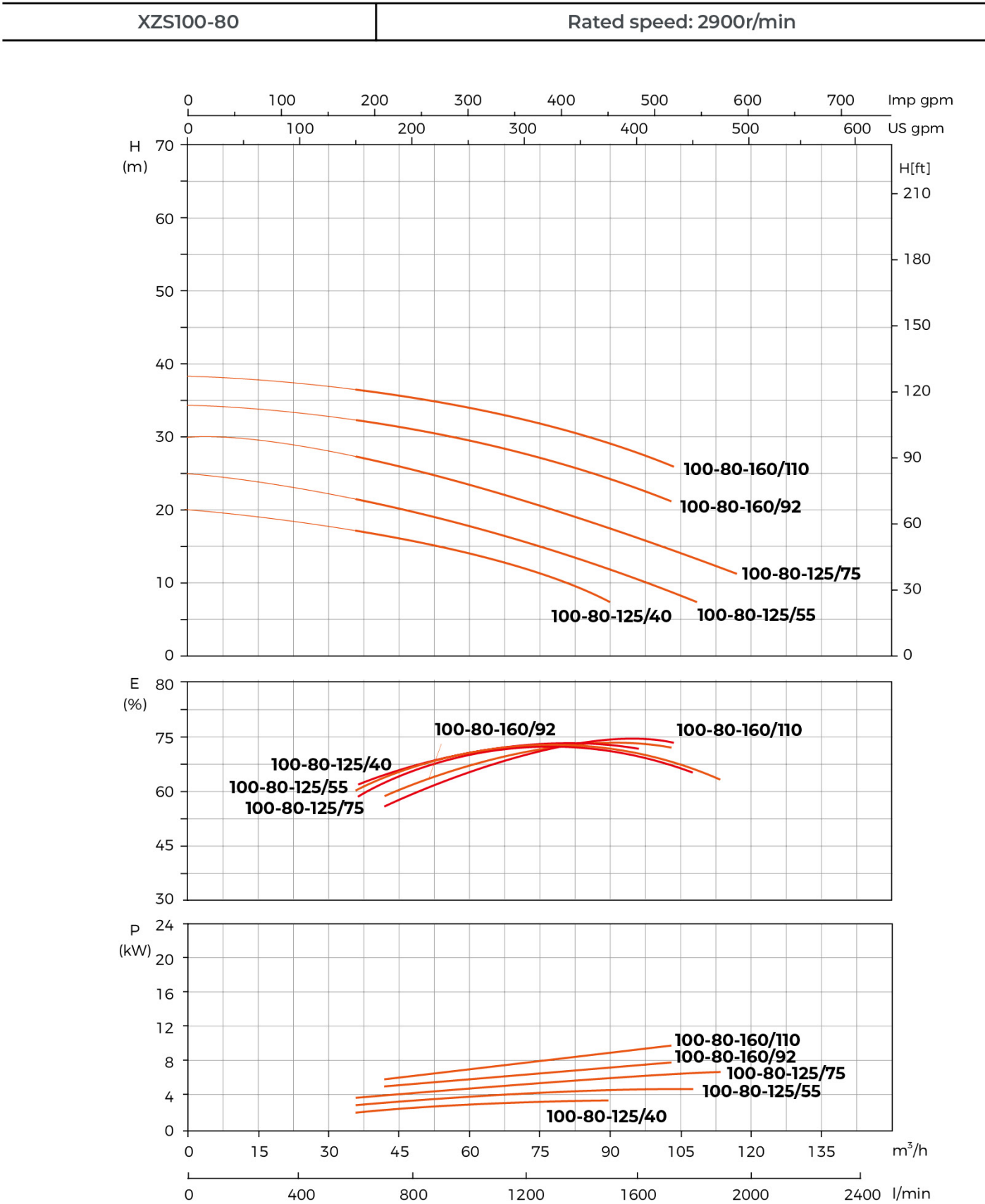
Hydraulic Performance Curves



Hydraulic Performance Curves

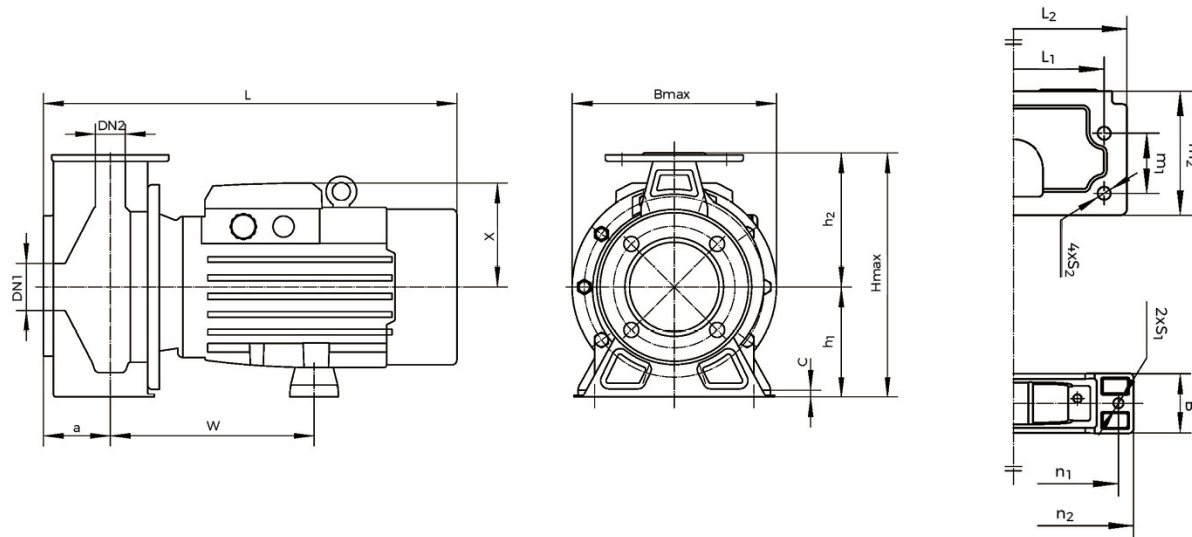


Hydraulic Performance Curves



Installation Sketch

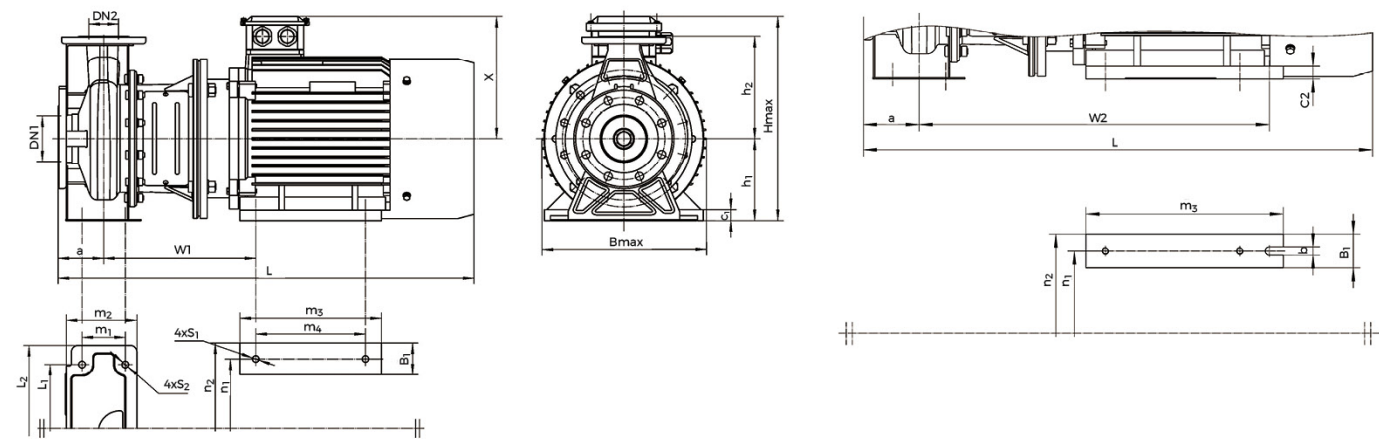
For model ≤ 7.5kW



Model	DN1	DN2	a	W	L	L1	L2	m1	m2	n1	n2	h1	h2	2-S1	4-S2	B	C	X	Bmax	Hmax
XZS50-32-125/11	50	32	80	205	475	140	190	70	122	205	240	112	140	2-Ø12	4-Ø15	65	12	127	240	250
XZS50-32-160/15	50	32	80	207	477	190	240	70	122	205	240	132	160	2-Ø12	4-Ø15	65	12	127	244	292
XZS50-32-160/22	50	32	80	207	477	190	240	70	122	205	240	132	160	2-Ø12	4-Ø15	65	12	127	244	292
XZS50-32-200/30	50	32	80	244	492	190	240	70	124	225	260	160	180	2-Ø12	4-Ø15	75	15	124	295	340
XZS50-32-200/40	50	32	80	244	492	190	240	70	124	225	260	160	180	2-Ø12	4-Ø15	75	15	124	295	340
XZS65-50-125/15	65	50	80	205	475	160	210	70	121	205	240	112	140	2-Ø12	4-Ø15	65	12	127	240	252
XZS65-50-125/22	65	50	80	205	475	160	210	70	121	205	240	112	140	2-Ø12	4-Ø15	65	12	127	240	252
XZS65-50-160/30	65	50	80	244	492	190	240	70	123	225	260	132	160	2-Ø12	4-Ø15	75	15	124	260	292
XZS65-50-160/40	65	50	80	244	492	190	240	70	123	225	260	132	160	2-Ø12	4-Ø15	75	15	124	260	292
XZS65-40-200/55	65	40	40	246	563	212	265	70	146	245	280	160	180	2-Ø12	4-Ø15	70	15	142	295	340
XZS65-40-200/75	65	40	40	246	563	212	265	70	146	245	280	160	180	2-Ø12	4-Ø15	70	15	142	295	340
XZS80-65-125/30	80	65	65	254	522	190	240	70	158	225	260	132	160	2-Ø12	4-Ø15	75	15	124	260	292
XZS80-65-125/40	80	65	65	254	522	190	240	70	158	225	260	132	160	2-Ø12	4-Ø15	75	15	124	260	292
XZS80-65-160/55	80	65	65	256	573	212	265	70	150	245	280	160	180	2-Ø12	4-Ø15	70	15	142	280	340
XZS80-65-160/75	80	65	65	256	573	212	265	70	150	245	280	160	180	2-Ø12	4-Ø15	70	15	142	280	340
XZS100-80-125/40	100	80	80	256	524	212	280	95	155	225	260	160	180	2-Ø12	4-Ø15	75	15	124	280	340
XZS100-80-125/55	100	80	80	258	575	212	280	95	155	245	280	160	180	2-Ø12	4-Ø15	70	15	142	280	340
XZS100-80-125/75	100	80	80	258	575	212	280	95	155	245	280	160	180	2-Ø12	4-Ø15	70	15	142	280	340
XZS65-40-125/15	65	40	80	205	475	160	210	70	121	205	240	112	140	2-Ø12	4-Ø15	65	12	127	240	252
XZS65-40-125/22	65	40	80	205	475	160	210	70	121	205	240	112	140	2-Ø12	4-Ø15	65	12	127	240	252
XZS65-40-160/30	65	40	80	244	492	190	240	70	123	225	260	132	160	2-Ø12	4-Ø15	75	15	124	260	292
XZS65-40-160/40	65	40	80	244	492	190	240	70	123	225	260	132	160	2-Ø12	4-Ø15	75	15	124	260	292
XZS65-50-125/30	65	50	100	254	522	190	240	70	158	225	260	132	160	2-Ø12	4-Ø15	75	15	124	260	292
XZS65-50-125/40	65	50	100	254	522	190	240	70	158	225	260	132	160	2-Ø12	4-Ø15	75	15	124	260	292
XZS65-50-160/55	65	50	100	256	573	212	265	70	150	245	280	160	180	2-Ø12	4-Ø15	70	15	142	280	340
XZS65-50-160/75	65	50	100	256	573	212	265	70	150	245	280	160	180	2-Ø12	4-Ø15	70	15	142	280	340
XZS80-65-125/75	80	65	100	258	575	212	280	95	155	245	280	160	180	2-Ø12	4-Ø15	70	15	142	280	340

Installation Sketch

For model ≥ 9.2kW



Model	DN1	DN2	a	W1	W2	L	L1	L2	m1	m2	m3	m4	n1	n2	h1	h2	4-S1	4-S2	B1	b	C1	C2	X	Bmax	Hmax
XZS80-50-200/92	80	50	100	314	-	816	212	265	70	146	210	260	254	320	160	200	4-Φ14.5	4-Φ14	65	-	20	-	260	350	420
XZS80-50-200/110	80	50	100	314	-	816	212	265	70	146	210	260	254	320	160	200	4-Φ14.5	4-Φ14	65	-	20	-	260	350	420
XZS100-80-160/92	100	80	100	321	-	823	212	280	95	155	260	210	254	320	160	200	4-Φ14.5	4-Φ14	65	-	20	-	260	350	420
XZS100-80-160/110	100	80	100	321	-	823	212	280	95	155	260	210	254	320	160	200	4-Φ14.5	4-Φ14	65	-	20	-	260	350	420
XZS100-65-200/150	100	65	100	-	581	823	250	320	95	155	310	-	254	314	180	225	-	4-Φ14	60	14.5	-	20	260	350	440
XZS100-65-200/185	100	65	100	-	625	868	250	320	95	155	354	-	254	314	180	225	-	4-Φ14	60	14.5	-	20	260	350	440
XZS100-65-200/220	100	65	100	334	-	913	250	320	95	155	311	241	279	355	180	225	4-Φ14.5	4-Φ14	70	-	22	-	280	355	460
XZS65-50-200/92	65	50	100	314	-	816	212	265	70	146	210	260	254	320	160	200	4-Φ14.5	4-Φ15	65	-	-	-	260	350	420
XZS65-50-200/110	65	50	100	314	-	816	212	265	70	146	210	260	254	320	160	200	4-Φ14.5	4-Φ15	65	-	-	-	260	350	420
XZS80-65-160/92	80	65	100	321	-	823	212	280	95	155	260	210	254	320	160	200	4-Φ14.5	4-Φ15	65	-	-	-	260	350	420
XZS80-65-160/110	80	65	100	321	-	823	212	280	95	155	260	210	254	320	160	200	4-Φ14.5	4-Φ15	65	-	-	-	260	350	420

Flange Dimensions

PN16 Flange						
DN	D	M	G	Holes		Max. Thickness
				N°	Φ	
Φ32	140	100	76	4	18	14
Φ40	150	110	84	4	18	14.5
Φ50	165	125	99	4	18	15
Φ65	185	145	118	4	18	16
Φ80	200	160	132	4	18	18

PN16 Flange						
DN	D	M	G	Holes		Max. Thickness
				N°	Φ	
Φ100	220	180	152	8	18	18

General

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

General

- 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.

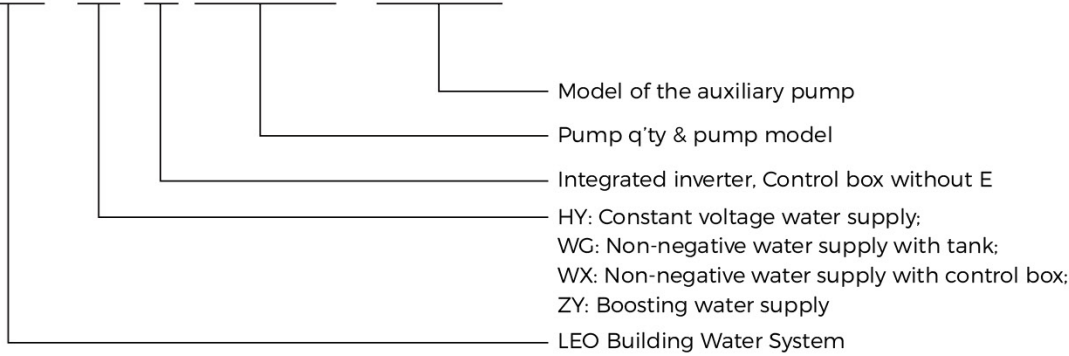
Product Composition

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

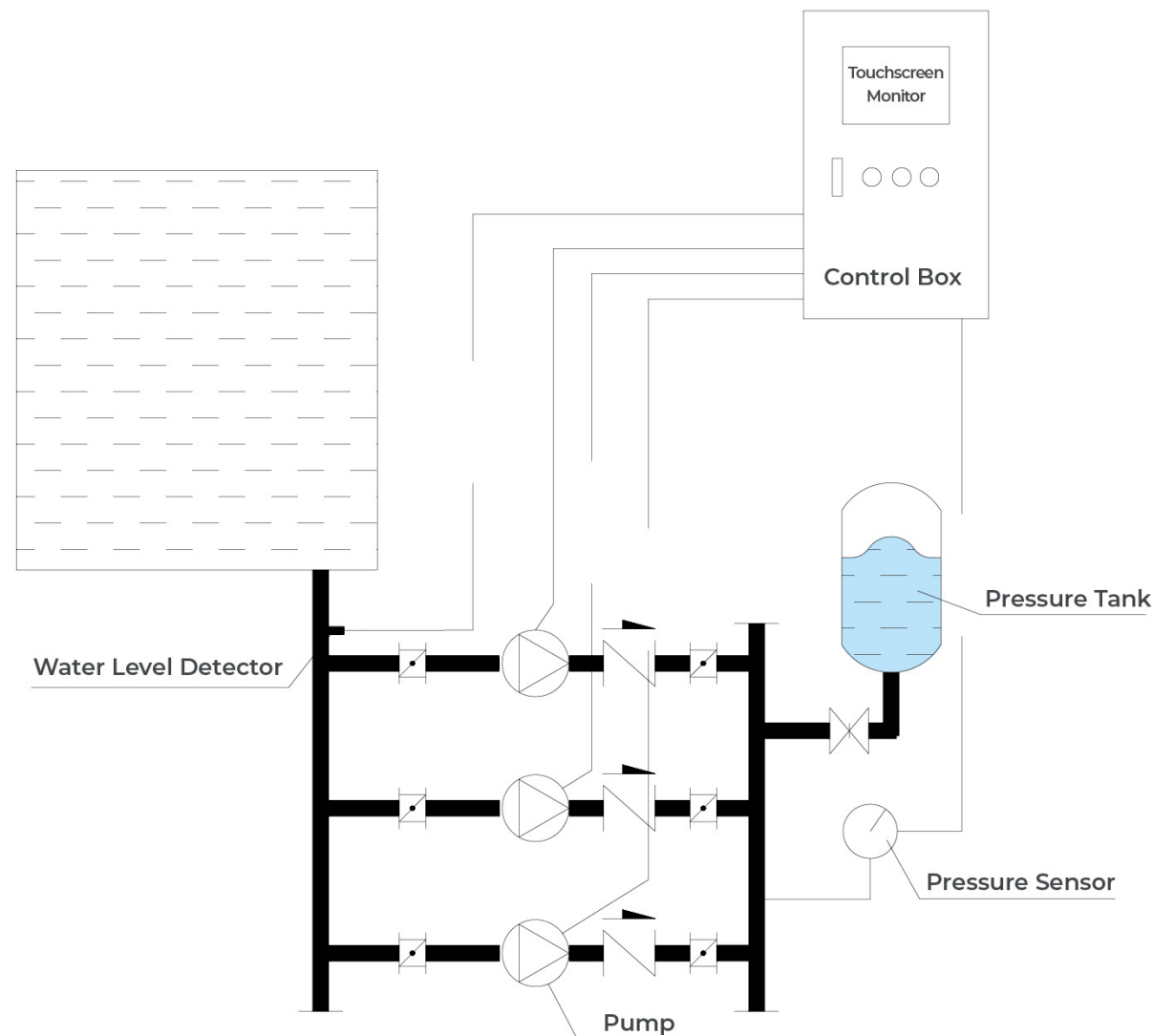


Identification Codes

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 operating, 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 operating 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 operating**
The pumps work by turns according to the present timing. The operating 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 operating 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 operating**
The device has two operating 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 operating, 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 operating 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 operating due to change of parameter values by users, the values can be reset to the factory default settings for safe operating.
- 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 operating.
- 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 operating 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.

PUMP RANGE

Peripheral Pump



Self-Priming Peripheral Pump



Jet Pump



Jet Pump for Deep Wells



Centrifugal Pump



Multistage Centrifugal Pump



Horizontal Multistage Centrifugal Pump



Permanent Magnet Intelligent Booster



Self-Priming Centrifugal Pump



Submersible Pump



Domestic Lifting Station



Pool Pump



Garden Jei Pump



Garden Pressure System



Fountain Pump



Garden Submersible Pump



Petrol Lawnmowers



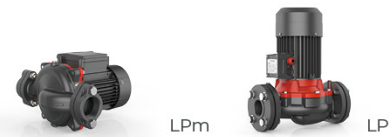
Wall-Mounted Gas Boiler Pump



Circulation Pump



Booster Pump



Stainless Steel Centrifugal Pump



Semi-open Impeller Stainless Steel Centrifugal Pump



Stainless Steel Horizontal Multistage Pump



Intelligent Pressure Booster System



Vertical Multistage Pump



Pressure Booster System



Stainless Steel Standard Centrifugal Pump



Standard Centrifugal Pump



End Suction Centrifugal Pump



Vertical In-line Pump



PUMP RANGE

Submersible Sewage Pump



Submersible Dewatering Pump



Submersible Slurry Pump



Gasoline/Diesel Water Pump



Generators



Submersible Borehole Pump

2", 2.5", 3", 4", 5", 6"



Solar Pumping System

