COMMERCIAL PUMPS

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AQUASTRONG®

Watering the Life

Commercial Pumps

CE ISO 9001

AQUASTRONG Co.,Ltd

About us

AQUASTRONG was established in 1990s as a global water pumps provider based in Italy, develops and sells pumps for house,garden, agriculture and commercial applications.

Nowadays **AQUASTRONG**'s strategy enables it to supply best price/performance ratio pumps with the process of controlling and monitoring quality starting from R&D, throughout manufacturing, marketing, sales, and after saler service.

As a trusted name that is highly appreciated by customers to serve their needs better than similar products available in the market, and is recognized for transparency in business relationship.

Our mission

To be recognized pump brand that offers clients a comprehensive ranges of high quality pumps of international standards and that suits the needs of customers in the world, and support these products with an after sale service according to our warranty policy.

Our values

The core values of **AQUASTRONG** stem from the cerdibility of its products and relations with its clients. This credibility is evident in the careful control of product's standard, reliability, warranty and development. It also embraces our commitment of transparency and honesty in dealing with all stakeholders.

CONTENTS

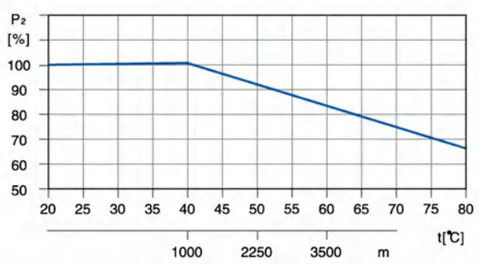
EVS

EVR

Ambient Temperature

Max. ambient temperature: + 40℃. Ambient temperature above 40℃ 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 P_2 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, P_2 will be decreased to 88%. When the ambient temperature is 70℃, P_2 will be decreased to 78%.

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℃~ +120℃
- Flow ranges: 0.7-240 m^3/h
- Liquid pH value: 4 - 10
- Max. ambient temperature: +40℃
- Max. operation pressure: 33 bar
- Altitude: up to 1000 m

Motor

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

Identification Codes

EVS 45 - 10 - 2 - B - K

- K: Pipeline Port Code (Omitted for DIN flange)
- B: AISI316 Stainless Steel Material (Omitted for AISI304)
- 2: Small Impeller Stages
- 10: Impeller Stages
- 45: Rated Flow (m^3/h)
- EVS: EVS,EVR Vertical Multistage Pump

EVS 200 - 3 -C - D

- D: Small impeller D
- C: Small impeller C
- 3: Impeller Stages
- 200: Rated Flow(m^3/h)
- EVS: EVS,EVR Vertical Multistage Pump

EVS: Stainless steel wetted parts
EVR: Cast iron base & pump cover

Identifications codes of flange structure
A: Oval flange: K: Clamp connector :
G: Threaded connector

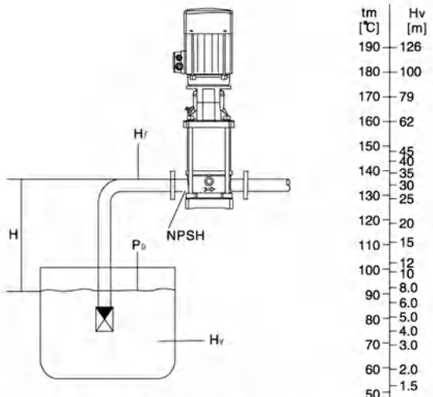
Minimum Inlet Pressure–Npsh

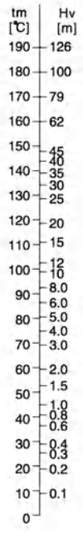
Calculation of the inlet pressure "H" is recommended in these situations:
The liquid temperature is high.
The flow is significantly higher than the rated flow.
Water is drawn from depths.
Water is drawn through long pipes.
Inlet conditions are poor.

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	= $P_b \times 10.2 - NPSH - H_f - H_v - H_s$
P_b	= Barometric pressure in bar. (Barometric pressure can be set to 1 bar). In closed systems, P_b indicates the system pressure in bar.
NPSH	= Net Positive Suction Head in meters head. (To be read from the NPSH curve at the highest flow the pump will be delivering.)
H_f	= Friction loss in suction pipe in meters head. (At the highest flow the pump will be delivering.)
H_v	= Vapor pressure in meters head. (To be read from the vapor pressure scale. "H_v" depends on the liquid temperature "tm")
H_s	= Safety margin=minimum 0.5 meters head.

If the "H" calculated is positive, the pump can operate at a suction lift of maximum "H" meters head.
If the "H" calculated is negative, an inlet pressure of minimum "H" meters head is required.





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

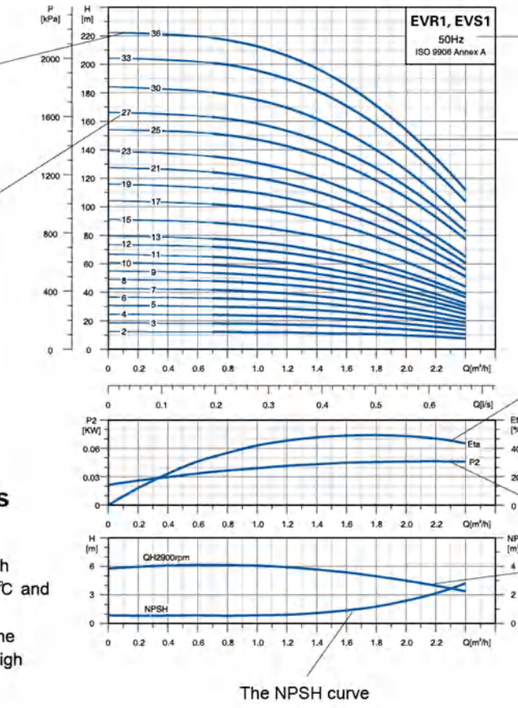
Maximum Inlet Pressure

The following table shows the maximum permissible inlet pressure. However, the current inlet pressure + the pressure against a closed valve must always be lower than the Max. permissible operating pressure.
If the maximum permissible operating pressure is exceeded, the bearing in the motor may be damaged and the life of the shaft seal reduced.

Model	Max. Inlet Pressure [bar]
EVR(S) 1–2 – 1–36	10
EVR(S) 2–2	6
EVR(S) 2–3 – 2–12	10
EVR(S) 2–13 – 2–26	15
EVR(S) 3–2 – 3–29	10
EVR(S) 3–31 – 3–36	15
EVR(S) 4–2	6
EVR(S) 4–3 – 4–11	10
EVR(S) 4–12 – 4–22	15
EVR(S) 5–2 – 5–16	10
EVR(S) 5–18 – 5–29	15
EVR(S) 10–1 – 10–6	8
EVR(S) 10–7 – 10–22	10
EVR(S) 15–1 – 15–3	8
EVR(S) 15–4 – 15–17	10
EVR(S) 20–1 – 20–3	8
EVR(S) 20–4 – 20–17	10
EVR(S) 32–1–1 – 32–4	4
EVR(S) 32–5–2 – 32–10	10
EVR(S) 32–11 – 32–14	15
EVR(S) 45–1–1 – 45–2	4
EVR(S) 45–3–2 – 45–5	10
EVR(S) 45–6–2 – 45–13–2	15
EVR(S) 64–1–1 – 64–2–2	4
EVR(S) 64–2–1 – 64–4–2	10
EVR(S) 64–4–1 – 64–8–1	15
EVR(S) 90–1–1 – 90–1	4
EVR(S) 90–2–2 – 90–3–2	10
EVR(S) 90–3 – 90–6	15
EVR(S) 120–1 – 120–2–1	10
EVR(S) 120–2 – 120–5–1	15
EVR(S) 120–5 – 120–7	20
EVR(S) 150–1–1 – 150–2–2	10
EVR(S) 150–2–1 – 150–4–1	15
EVR(S) 150–4 – 150–6	20
EVR(S) 200–1–D	10
EVR(S) 200–1–C – 200–2–2C	15
EVR(S) 200–2–C – 200–4	20

Model	EVR Max. Operation pressure [bar]		EVS Max. Operation pressure [bar]
	Oval Flange	DIN Flange	
EVR(S) 1	16	25	25
EVR(S) 2	16	25	25
EVR(S) 3	16	25	25
EVR(S) 4	16	25	25
EVR(S) 5	16	25	25
EVR(S) 10	25		25
EVR(S) 15	25		25
EVR(S) 20	25		25
EVR(S) 32–1–1 – 32–7	16		16
EVR(S) 32–8–2 – 32–14	30		30
EVR(S) 45–1–1 – 45–5	16		16
EVR(S) 45–6–2 – 45–11	30		30
EVR(S) 45–12–2 – 45–13–2	33		33
EVR(S) 64–1–1 – 64–5	16		16
EVR(S) 64–6–2 – 64–8–1	30		30
EVR(S) 90–1–1 – 90–4	16		16
EVR(S) 90–5–2 – 90–6	30		30
EVR(S) 120–1 – 120–7	20		20
EVR(S) 150–1–1 – 150–6	20		20
EVR(S) 200–1–D – 200–4	20		20

How to Read The Curve Charts



Pump type, frequency and ISO standard.

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

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

Number of Stages

The efficiency curve

The output power curves of single impeller

The Q-H curve of single impeller

The NPSH curve

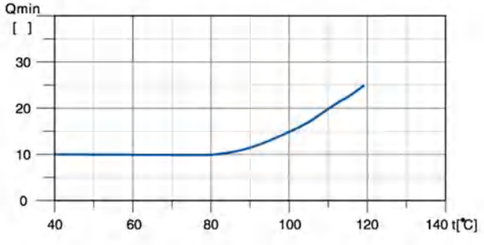
Guidelines to Performance Curves

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

Minimum Flow Rate

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

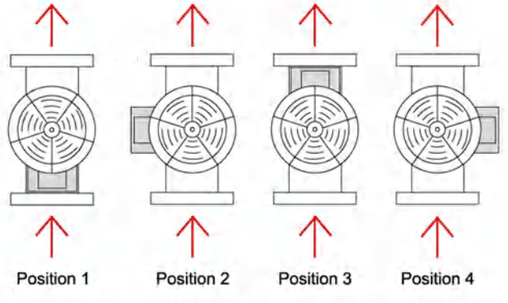
Air cooling apparatus



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

Terminal Box Positions

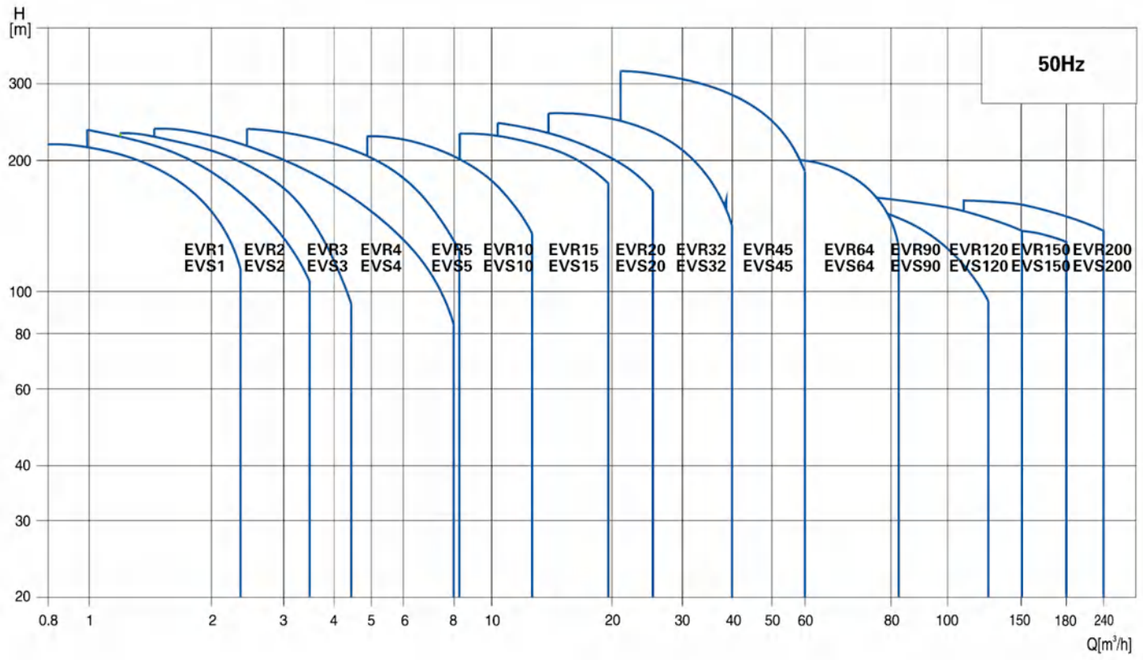
(Note: set to position 1 before delivery)



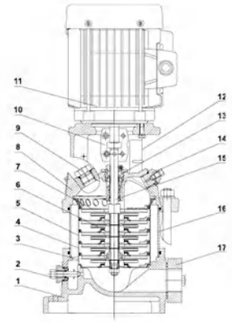
Product Range

MODEL / DESCRIPTION	EVR(S)1	EVR(S)2	EVR(S)3	EVR(S)4	EVR(S)5	EVR(S)10	EVR(S)15	EVR(S)20	EVR(S)32	EVR(S)45	EVR(S)64	EVR(S)90	EVR(S)120	EVR(S)150	EVR(S)200
Rated flow [m^3/h]	1	2	3	4	5	10	15	20	32	45	64	90	120	150	200
Flow range [m^3/h]	0.7–2.4	1.0–3.5	1.2–4.5	1.5–8	2.5–8.5	5–13	8–23	10.5–29	15–40	22–58	30–85	45–120	60–150	80–180	100–240
Max. pressure [bar]	22	23	24	21	24	22	23	25	28	33	22	20	16	16	16
Motor power [kW]	0.37–2.2	0.37–3	0.37–3	0.37–4	0.37–4	1.1–7.5	1.1–15	1.1–18.5	1.5–30	3–45	4–45	5.5–45	11–75	11–75	18.5–110
Temperature Range [℃]	–20℃~+120℃ (Note: Both the Max. permissible pressure and liquid temperature range refer to the pump capacity.)														
Max. pump efficiency [%]	45	46	55	59	60	65	70	72	78	79	80	81	74	73	79
Pipe connection-LVR															
Oval flange	G1	G1	G1	G1 1/4	G1 1/4	–	–	–	–	–	–	–	–	–	–
DIN flange	DN25	DN25	DN25	DN32	DN32	DN40	DN50	DN50	DN65	DN80	DN100	DN100	DN125	DN125	DN150
Pipe connection-LVS															
Oval flange	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
DIN flange	DN32	DN32	DN32	DN32	DN32	DN40	DN50	DN50	DN65	DN80	DN100	DN100	DN125	DN125	DN150
Clamp connector	ϕ42	ϕ42	ϕ42	ϕ42	ϕ42	–	–	–	–	–	–	–	–	–	–
Threaded connector	R_2 1¼	R_2 1¼	R_2 1¼	R_2 1¼	R_2 1¼	–	–	–	–	–	–	–	–	–	–

Scope of Performance–EVR, EVS

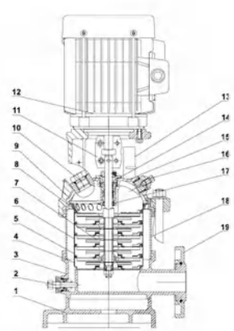


Cross Section



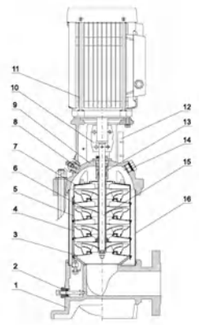
MODEL: EVR1 (2,3,4,5)

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



MODEL: EVS1 (2,3,4,5)

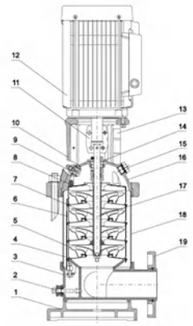
	Part	Material	Optional Material
1	Base plate	HT200	
2	Drainage plug assembly	AISI304	AISI316
3	Chasis	ZG304	ZG316
4	Primary diffuser	AISI304	AISI316
5	Diffuser with bearing	AISI304	AISI316
6	Medium diffuser	AISI304	AISI316
7	Impeller	AISI304	AISI316
8	Final volute	AISI304	AISI316
9	Motor base	HT200	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



MODEL: EVR10 (15,20)

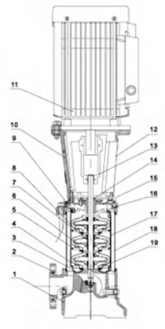
	Part	Material
1	Base	HT200
2	Drainage plug assembly	AISI304
3	Primary diffuser	AISI304
4	Diffuser with bearing	AISI304
5	Medium diffuser	AISI304
6	Impeller	AISI304
7	Final volute	AISI304
8	Filling plug	AISI304
9	Motor base	HT200
10	Coupling	Iron based powder metallurgy
11	Motor	
12	Guarding plate	AISI304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

Cross Section



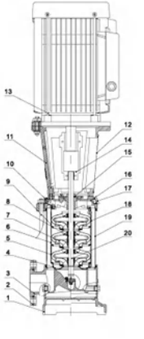
MODEL: EVS10 (15,20)

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



MODEL: EVR32 (45,64,90)

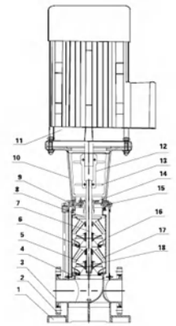
	Part	Material
1	Base plate	HT200
2	Flange	ZG35
3	Primary diffuser	AISI304
4	Medium diffuser	AISI304
5	Diffuser with bearing	AISI304
6	Impeller	AISI304
7	Shaft sleeve assembly	
8	Final diffuser	AISI304
9	Vent plug assembly	AISI304
10	Motor base	HT200
11	Motor	
12	Guarding plate	AISI304
13	Coupling	QT400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



MODEL: EVS32 (45,64,90)

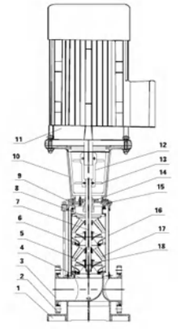
	Part	Material	Optional Material
1	Base plate	HT200	
2	Flange	ZG35	
3	Chasis	ZG304	ZG316
4	Primary diffuser	AISI304	AISI316
5	Medium diffuser	AISI304	AISI316
6	Diffuser with bearing	AISI304	AISI316
7	Impeller	AISI304	AISI316
8	Shaft sleeve assembly		
9	Final diffuser	AISI304	AISI316
10	Vent plug assembly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

Cross Section



MODEL: EVR120 (150,200)

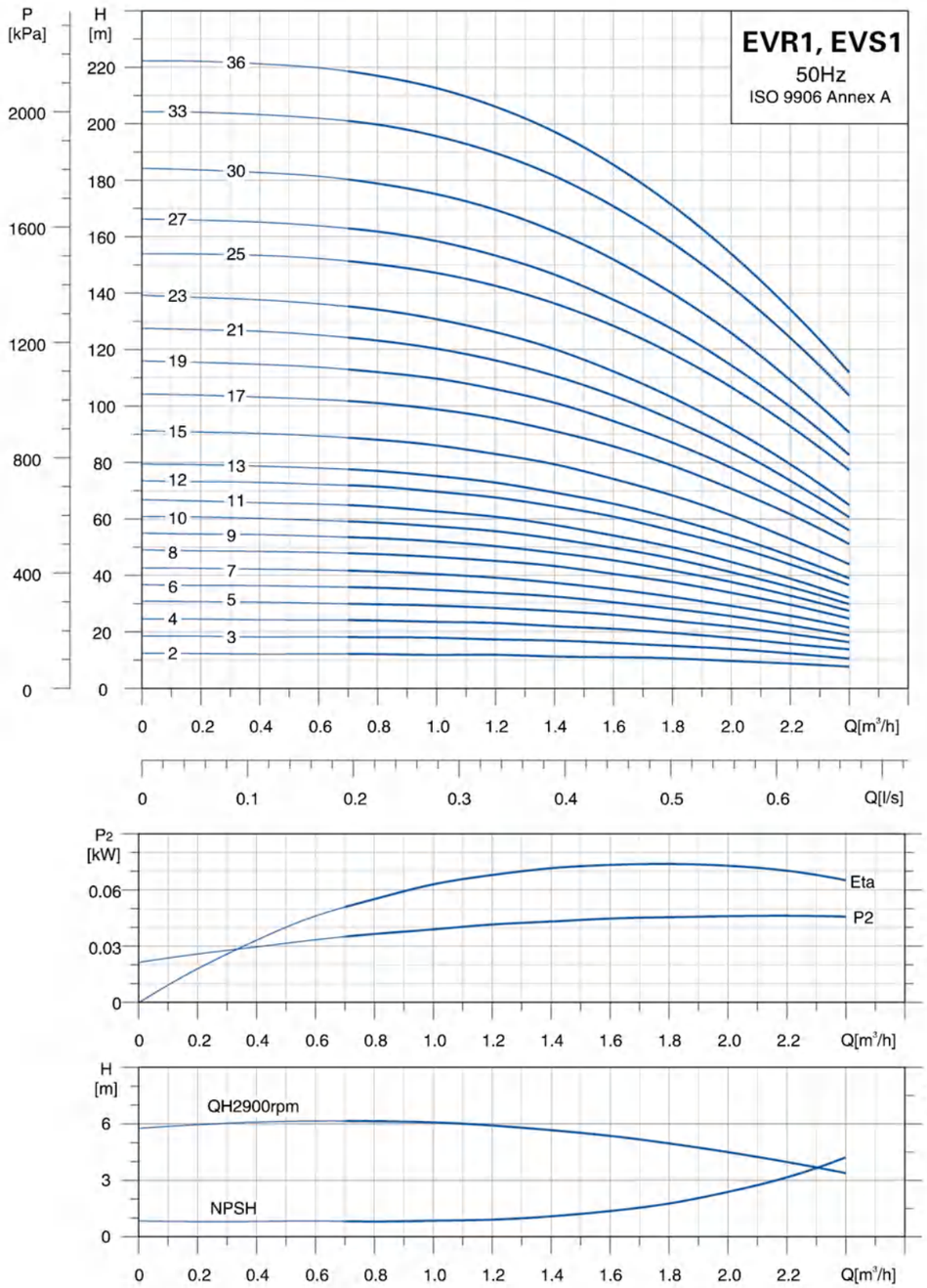
	Part	Material
1	Base plate	HT200
2	Flange	ZG35
3	Base	HT200
4	Primary diffuser	AISI304
5	Medium diffuser	AISI304
6	Diffuser with bearing	AISI304
7	Impeller	AISI304
8	Final diffuser	AISI304
9	Pump head	HT200
10	Motor base	HT200
11	Motor	
12	Coupling	QT400
13	Guarding plate	AISI304
14	Cartridge seal	
15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



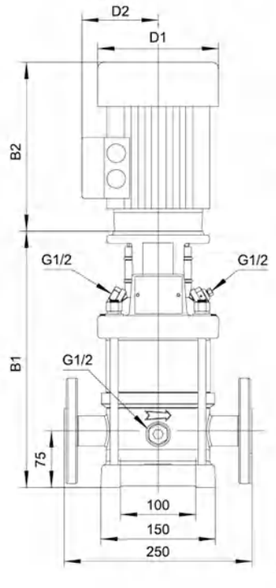
MODEL: EVS120 (150,200)

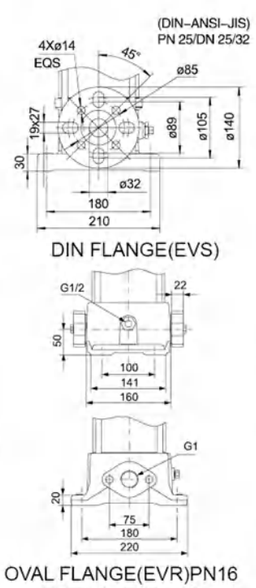
	Part	Material	Optional Material
1	Base plate	HT200	
2	Flange	ZG35	
3	Chasis	ZG304	ZG316
4	Primary diffuser	AISI304	AISI316
5	Medium diffuser	AISI304	AISI316
6	Diffuser with bearing	AISI304	AISI316
7	Impeller	AISI304	AISI316
8	Final diffuser	AISI304	AISI316
9	Pump head	ZG304	ZG316
10	Motor base	HT200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

Hydraulic Performance Curves



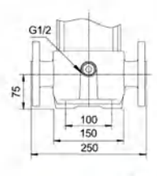
Dimension Drawing

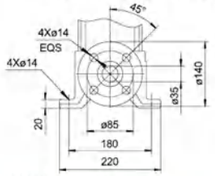


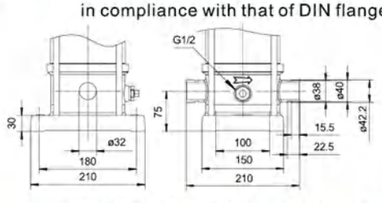


MODEL	OVAL FLANGE (EVR)		DIN FLANGE (EVR、EVS)		D1	D2	N.W. (kgs)
	B1	B1+B2	B1	B1+B2			
1–2	256	470	282	496	130	105	20.4
1–3	256	470	282	496	130	105	21.2
1–4	274	488	300	514	130	105	21.8
1–5	292	506	318	532	130	105	22.4
1–6	310	524	336	550	130	105	22.4
1–7	328	542	354	568	130	105	24.2
1–8	346	560	372	586	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	672	990	698	1016	163.6	127.4	41.5
1–27	708	1026	734	1052	163.6	127.4	43.6
1–30	762	1080	788	1106	163.6	127.4	43.9
1–33	816	1134	842	1160	163.6	127.4	46.9
1–36	870	1188	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.

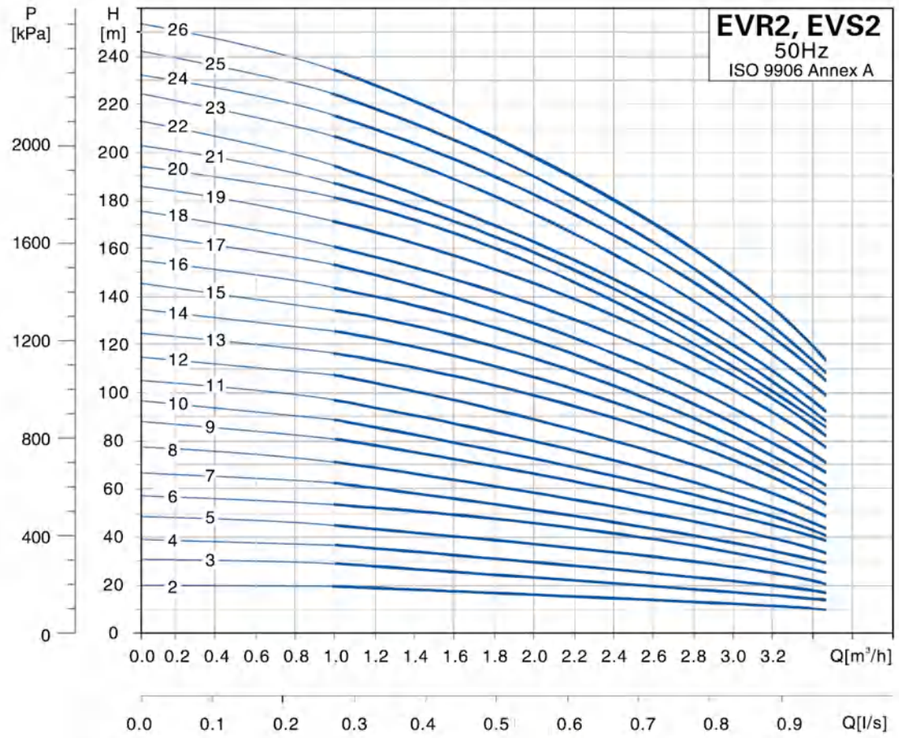


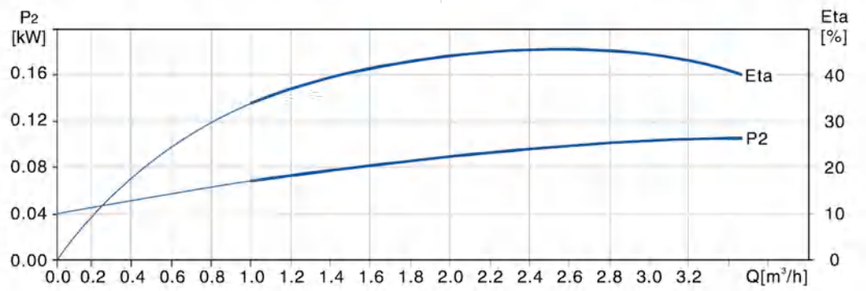


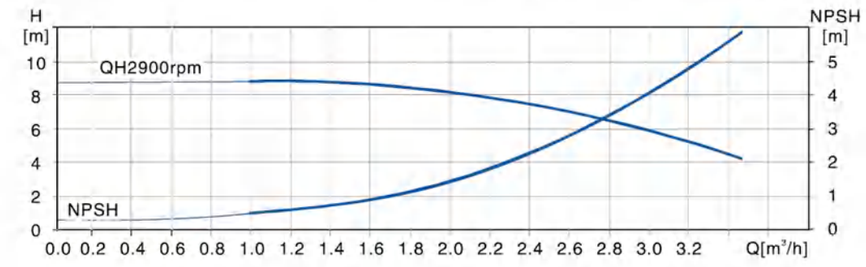


MODEL	POWER[kW]	Q[m³/h]	0.4	0.6	0.8	1.0	1.2	1.4	1.6	1.8	2.0
1–2	0.37	H(m)	12	12	12	12	12	11	11	10	10
1–3	0.37		18	18	18	18	17	17	16	15	14
1–4	0.37		24	24	24	24	22	22	21	19	18
1–5	0.37		30	30	30	29.5	28	27	26	24	22
1–6	0.37		36	36	35	35	34	32	30	28	25
1–7	0.37		42	42	41	40.5	39	37	35	32	30
1–8	0.55		48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

Hydraulic Performance Curves

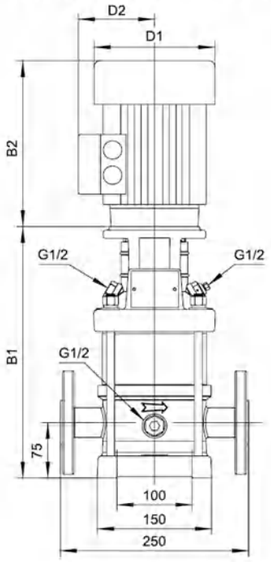


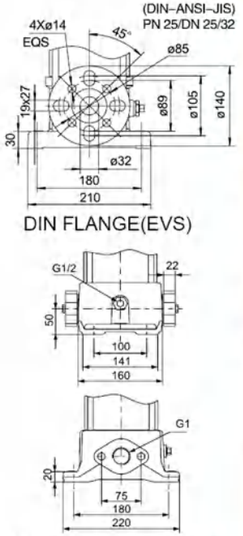




AQUASTRONG
Stainless Steel Vertical Multistage Pumps

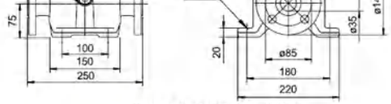
Dimension Drawing

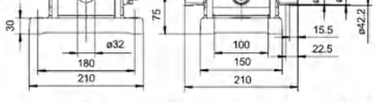


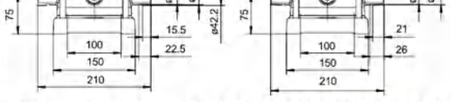


MODEL	OVAL FLANGE (EVR)		DIN FLANGE (EVR、EVS)		D1	D2	N.W. (kgs)
	B1	B1+B2	B1	B1+B2			
2–2	256	470	282	496	130	105	22.3
2–3	256	470	282	496	130	105	22.5
2–4	274	488	300	514	130	105	22.3
2–5	292	506	318	532	130	105	22.8
2–6	314	582	340	608	149.6	124.5	26.6
2–7	332	600	358	626	149.6	124.5	27.1
2–8	350	618	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	528	846	554	872	164	127	40.9
2–18	546	864	572	890	164	127	41
2–19	564	882	590	908	164	127	42.2
2–20	582	900	608	926	164	127	42.7
2–21	600	918	626	944	164	127	43.1
2–22	618	936	644	962	164	127	46.6
2–23	640	980	666	1006	185.5	120	50.4
2–24	658	998	684	1024	185.5	120	50.8
2–25	676	1016	702	1042	185.5	120	51.2
2–26	694	1034	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.

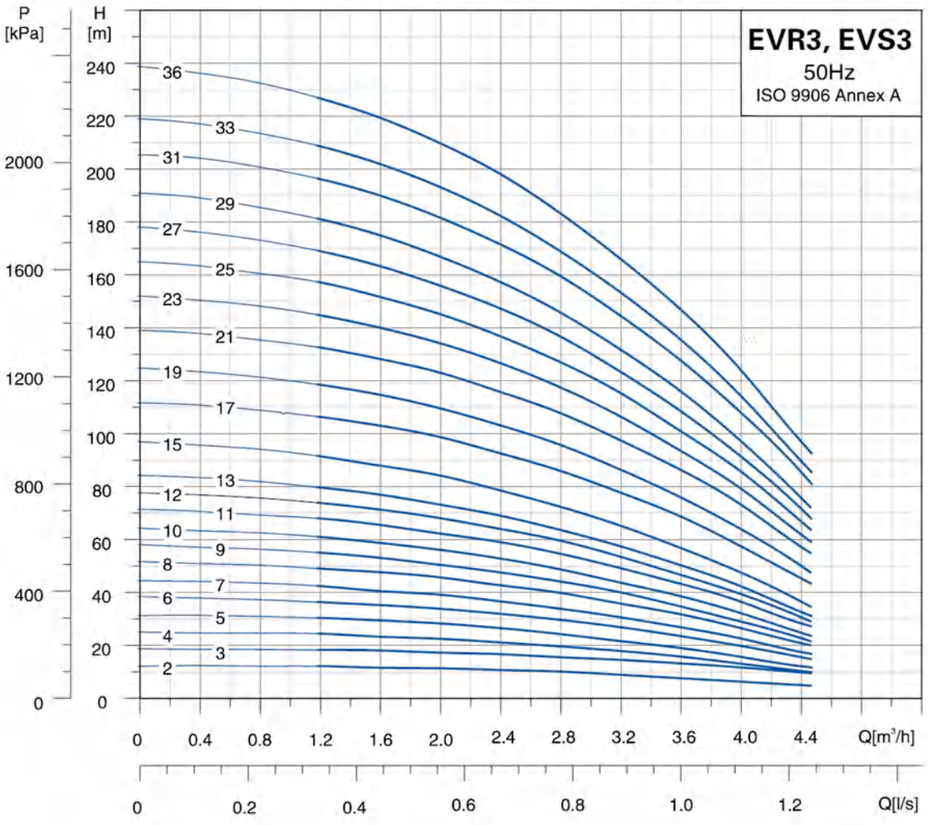


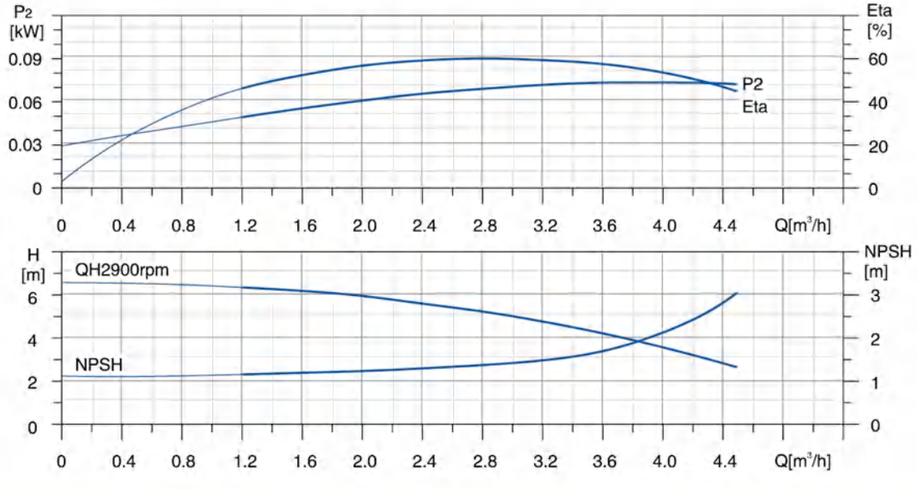




MODEL	POWER[kW]	Q[m³/h]	1.0	1.2	1.6	2.0	2.5	2.8	3.2	3.5
2–2	0.37		18	17	16	15.5	13.5	12	10	8
2–3	0.37		27	26	24	22.5	19.5	18	15	12
2–4	0.55		36	35	33	30.5	27	24	17	16
2–5	0.55		45	43	40	37	32.5	30	24	20
2–6	0.75		53	52	50	45.5	40	36	30	24
2–7	0.75		63	61	57	52	45.5	41	35	28
2–8	1.1		71	69	65	59	51	47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

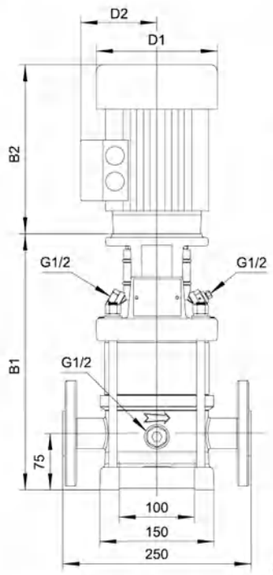
Hydraulic Performance Curves



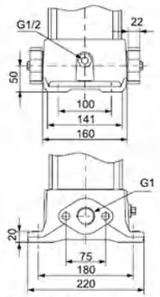


AQUASTRONG
Stainless Steel Vertical Multistage Pumps

Dimension Drawing



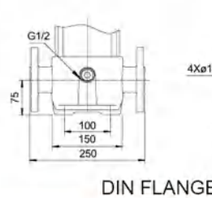
DIN FLANGE(EVS)

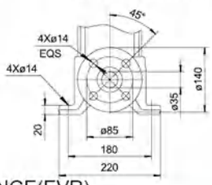


OVAL FLANGE(EVR)PN16
EVR3-2~EVR3-23

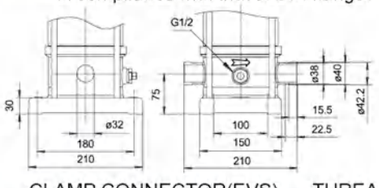
MODEL	OVAL FLANGE (EVR)		DIN FLANGE (EVR、EVS)		D1	D2	N.W. (kgs)
	B1	B1+B2	B1	B1+B2			
3–2	256	470	282	496	130	105	21
3–3	256	470	282	496	130	105	21.4
3–4	274	488	300	514	130	105	21.8
3–5	292	506	318	532	130	105	22.8
3–6	310	524	336	550	130	105	23.3
3–7	328	542	354	568	130	105	23.7
3–8	350	618	376	644	150	124	25.5
3–9	368	636	394	662	150	124	26.6
3–10	386	654	412	680	150	124	27.2
3–11	404	672	430	698	150	124	28.8
3–12	422	690	448	716	150	124	29.7
3–13	440	708	466	734	150	124	30.1
3–15	476	744	502	770	150	124	32.1
3–17	528	846	554	872	164	127	39.2
3–19	564	882	590	908	164	127	40.2
3–21	600	918	626	944	164	127	42.2
3–23	636	954	662	980	164	127	42.4
3–25	672	990	698	1016	164	127	44.4
3–27	708	1026	734	1052	164	127	44.5
3–29	744	1062	770	1088	164	127	45.3
3–31	784	1124	810	1150	186	120	52.3
3–33	820	1160	846	1186	186	120	53.1
3–36	874	1214	900	1240	186	120	54.7

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

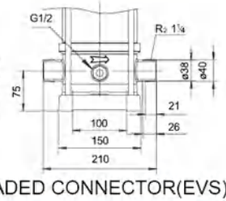




DIN FLANGE(EVR)



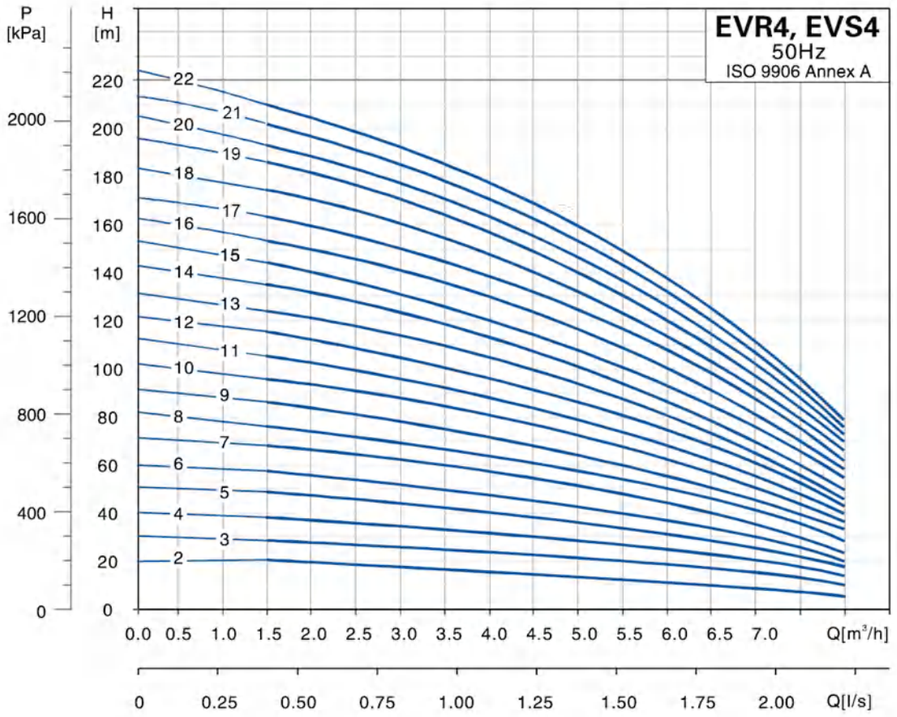
CLAMP CONNECTOR(EVS)

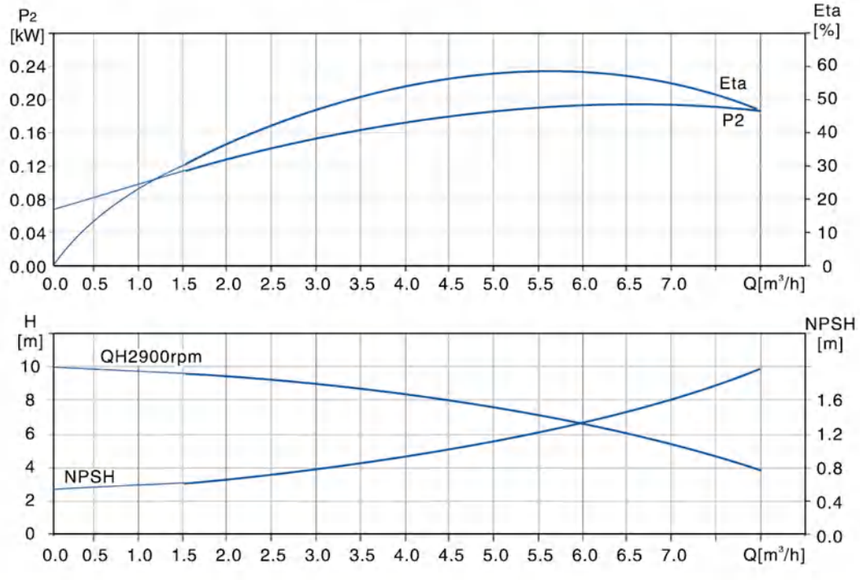


THREADED CONNECTOR(EVS)

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

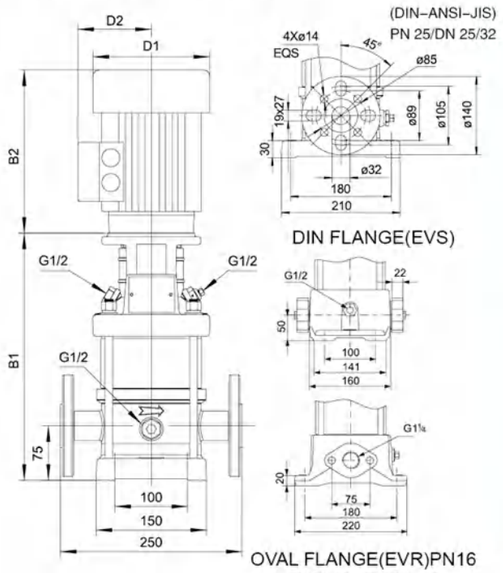
Hydraulic Performance Curves

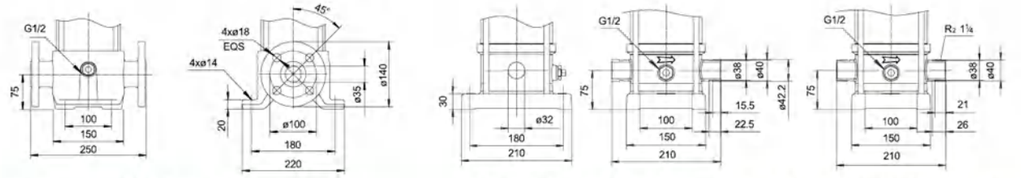




AQUASTRONG
Stainless Steel Vertical Multistage Pumps

Dimension Drawing



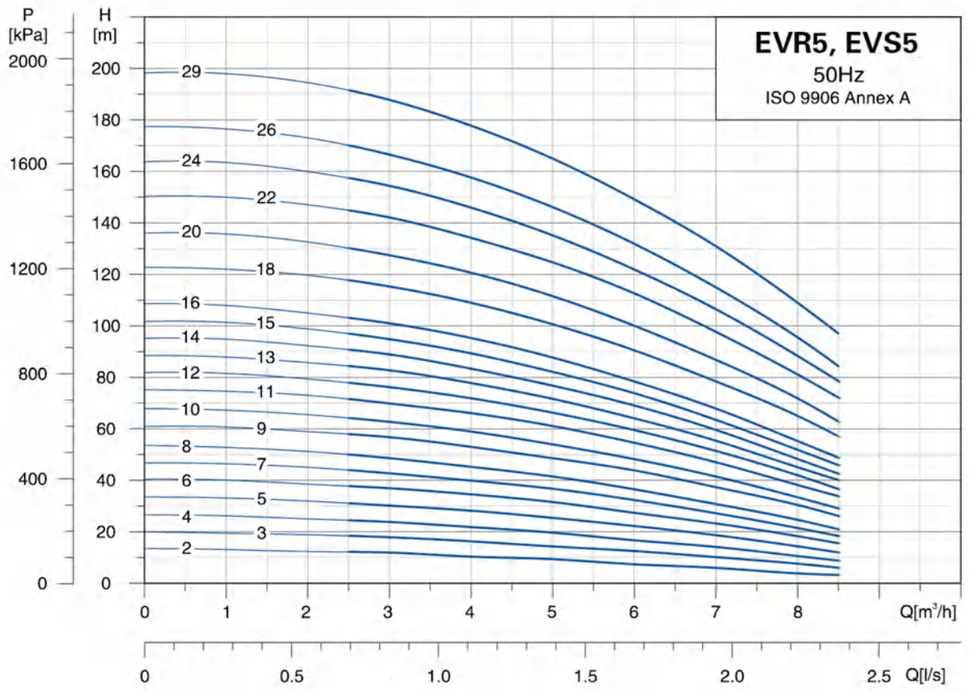


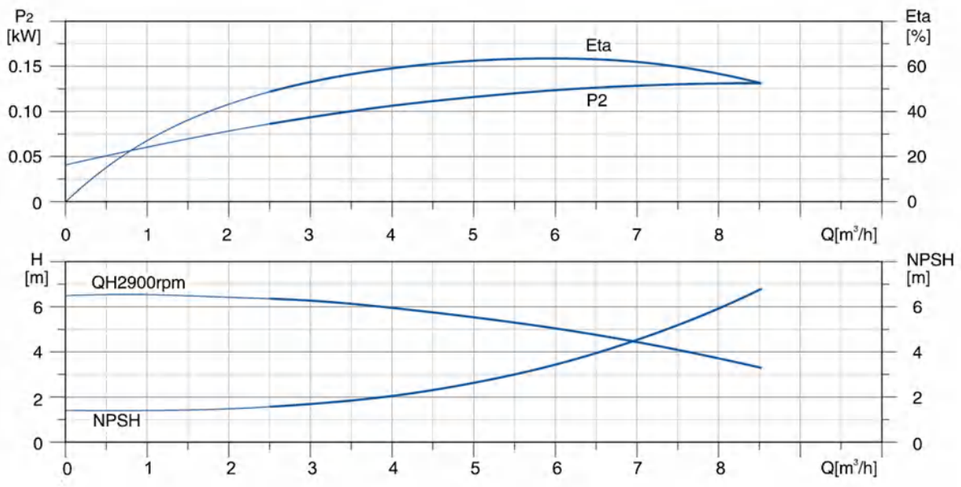
MODEL	OVAL FLANGE (EVR)		DIN FLANGE (EVR、EVS)		D1	D2	N.W. (kgs)
	B1	B1+B2	B1	B1+B2			
4–2	256	470	282	496	130	105	22.4
4–3	283	497	309	523	130	105	23
4–4	314	582	340	608	150	125	25.2
4–5	341	609	367	635	150	125	27.2
4–6	368	636	394	662	150	125	27.4
4–7	411	729	437	755	164	127	34.4
4–8	438	756	464	782	164	127	35.6
4–9	465	783	491	809	164	127	35.9
4–10	492	810	518	836	164	127	36.9
4–11	519	837	545	863	164	127	38.7
4–12	546	864	572	890	164	127	39.8
4–13	577	917	603	943	186	120	47.6
4–14	604	944	630	970	186	120	48.2
4–15	631	971	657	997	186	120	48.8
4–16	658	998	684	1024	186	120	47.3
4–17	685	1025	711	1051	186	120	50.9
4–18	712	1052	738	1078	186	120	53.1
4–19	739	1079	765	1105	186	120	53.4
4–20	766	1106	792	1132	186	120	53.6
4–21	793	1133	819	1159	186	120	53.9
4–22	820	1160	846	1186	186	120	54.2

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

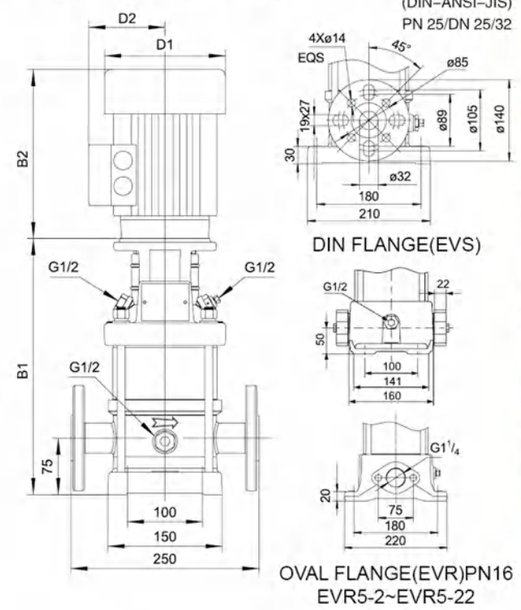
MODEL	POWER[kW]	Q[m³/h]	1.5	2.0	3.0	4.0	5.0	6.0	7.0	8.0
4–2	0.37		19	18	17	14.5	13	10.5	8	6
4–3	0.55		28	27	26	23.5	20	18	14	10
4–4	0.75		38	36	34	31.5	27	24.5	18	13
4–5	1.1		47	45	43	40.5	34	31.5	23	17
4–6	1.1		56	54	52	47.5	41	36	28	20
4–7	1.5		66	63	61	57	48	44.5	34	24
4–8	1.5		74	72	70	64	55	49.5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

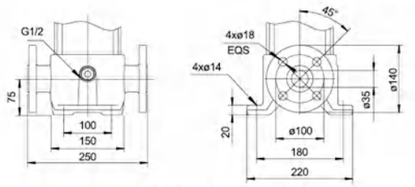
Hydraulic Performance Curves

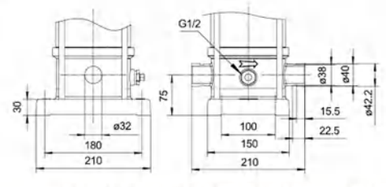




Dimension Drawing





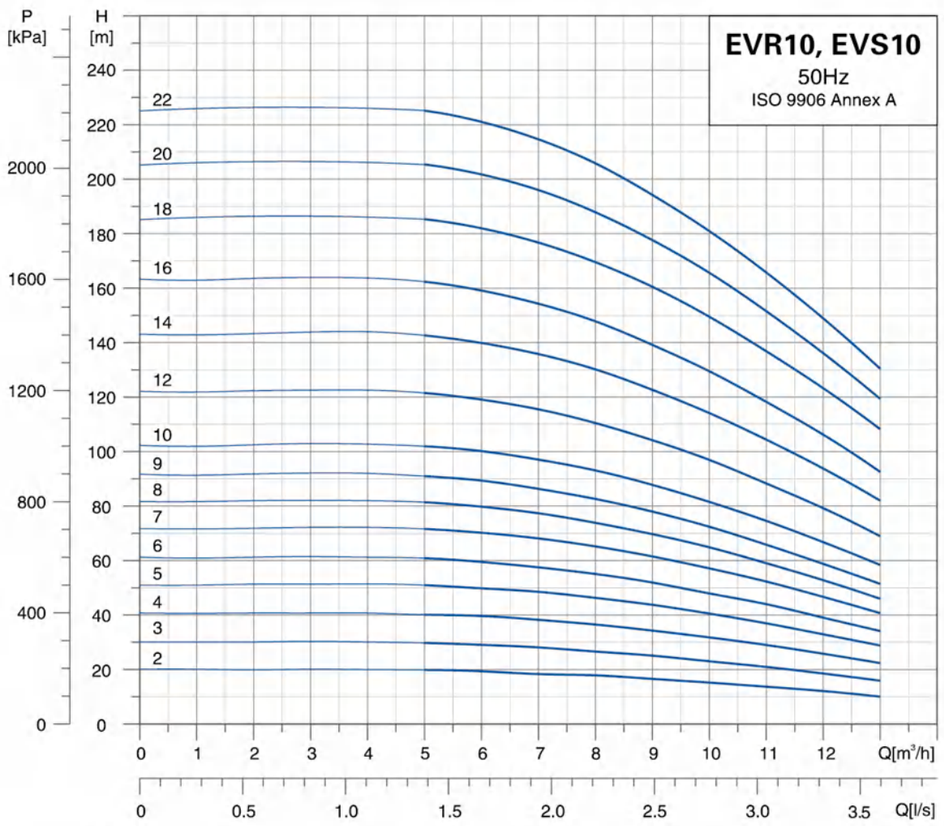


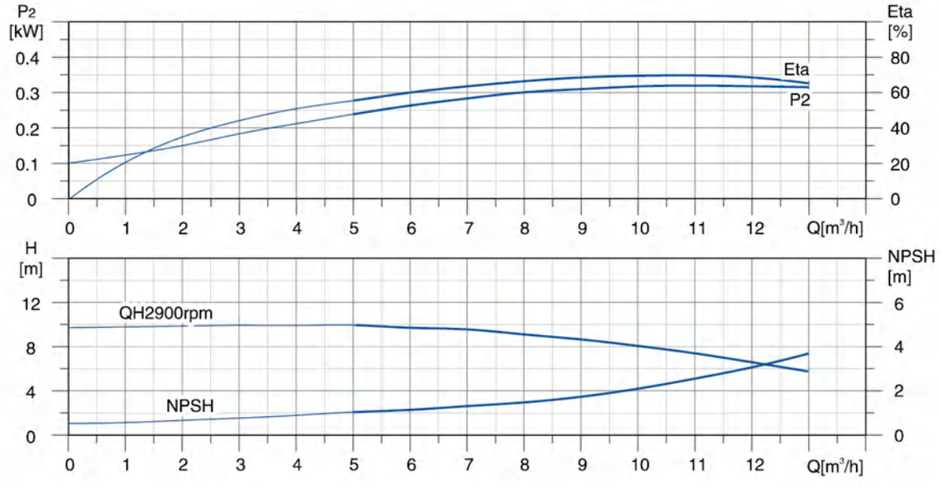
MODEL	OVAL FLANGE (EVR)		DIN FLANGE (EVR、EVS)		D1	D2	N.W. (kgs)
	B1	B1+B2	B1	B1+B2			
5–2	256	470	282	496	130	105	20.9
5–3	283	497	309	523	130	105	21.8
5–4	310	524	336	550	130	105	22.7
5–5	341	609	367	635	150	125	25.5
5–6	368	636	394	662	150	125	27.6
5–7	395	663	421	689	150	125	28.5
5–8	422	690	448	716	150	125	29.1
5–9	465	783	491	809	164	127	37.3
5–10	492	810	518	836	164	127	37.9
5–11	519	837	545	863	164	127	39.4
5–12	546	864	572	890	164	127	39.9
5–13	573	891	599	917	164	127	40.5
5–14	600	918	626	944	164	127	40.9
5–15	627	945	653	971	164	127	41.5
5–16	654	972	680	998	164	127	42.4
5–18	712	1052	738	1078	186	120	49.9
5–20	766	1106	792	1132	186	120	51.3
5–22	820	1160	846	1186	186	120	54.2
5–24	874	1214	900	1240	186	120	55.5
5–26	928	1268	954	1294	186	120	58.2
5–29	1009	1349	1035	1375	186	120	59.9

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

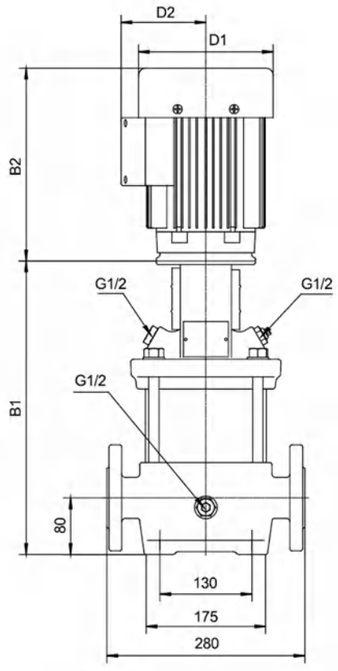
MODEL	POWER[kW]	Q[m³/h]	1.0	2.0	3.0	4.0	5.0	6.0	7.0
5–2	0.37		13	12	12	10	9	7	6
5–3	0.55		19	19	18	16	15	12	10
5–4	0.55		26	25	24	22	19	16	14
5–5	0.75		33	32	30	28	24	22	18
5–6	1.1		40	38	37	34	28	27	23
5–7	1.1		46	45	42	40	32	32	27
5–8	1.1		53	51	48	45	40	36	31
5–9	1.5		60	59	56	53	47	44	37
5–10	1.5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

Hydraulic Performance Curves

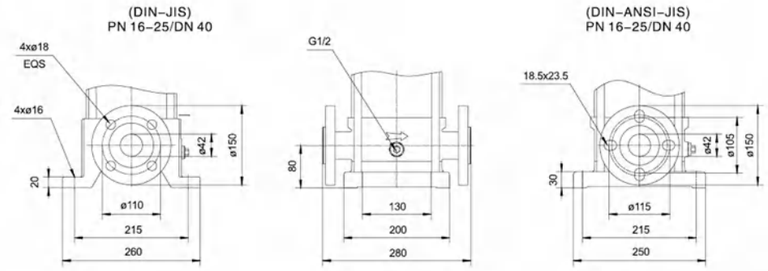




Dimension Drawing



EVR

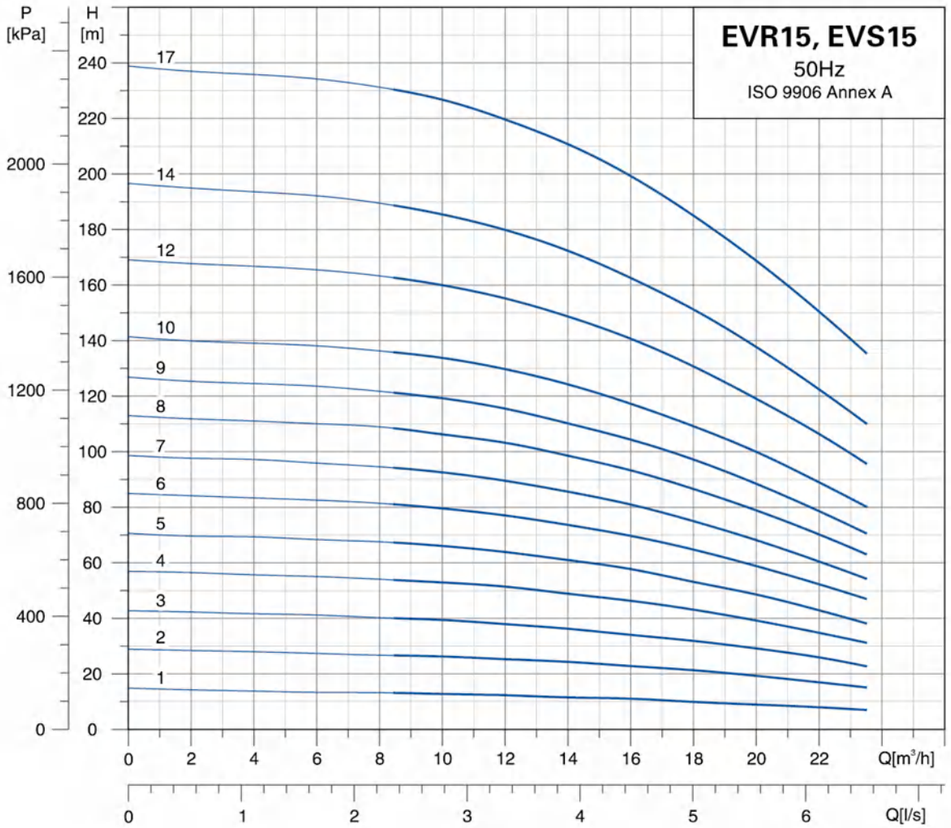


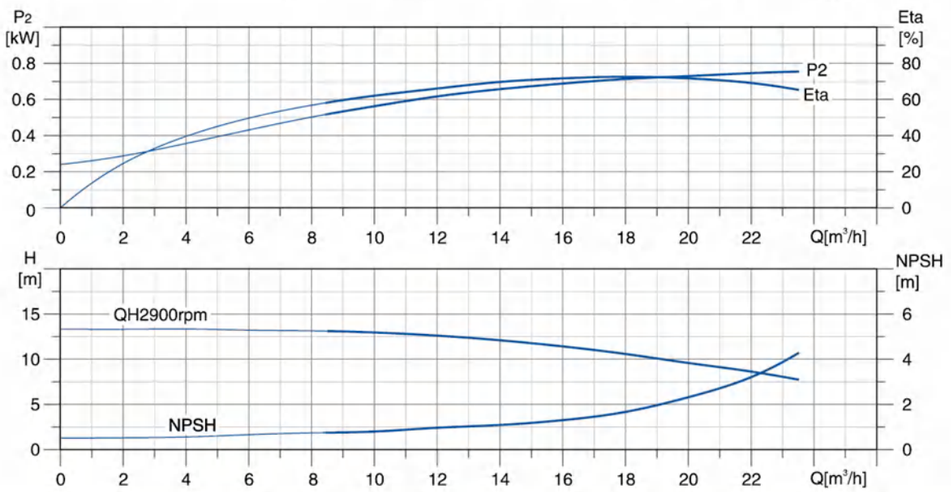
EVS

MODEL	DIN FLANGE (EVR)		DIN FLANGE (EVS)		D1	D2	N.W. (kgs)
	B1	B1+B2	B1	B1+B2			
10–2	351	619	353	621	150	125	40.6
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

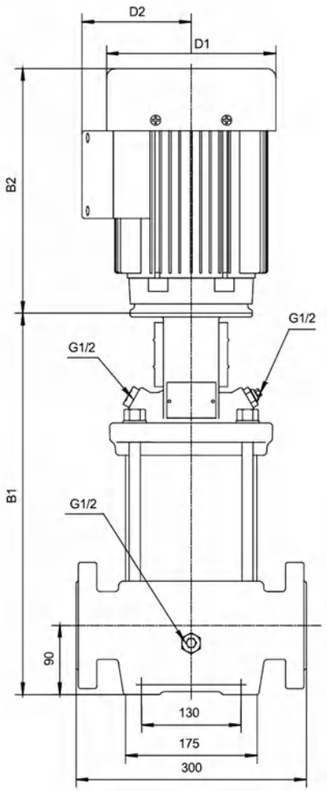
MODEL	POWER[kW]	Q[m³/h]	2	4	6	8	10	12
10–2	0.75	H(m)	20	20	19	18	15	12
10–3	1.1		30	30	29	26	23	18
10–4	1.5		40	40	40	36	32	26
10–5	2.2		51	51	50	46	40	33
10–6	2.2		61	61	59	55	48	39
10–7	3.0		72	72	70	65	56	46
10–8	3.0		82	82	80	74	64	53
10–9	3.0		92	92	89	82	70	59
10–10	4.0		102	102	100	93	80	66
10–12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

Hydraulic Performance Curves





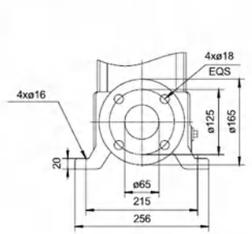
Dimension Drawing



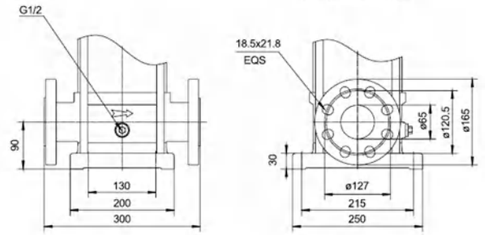
EVR

MODEL	DIN FLANGE (EVR)		DIN FLANGE (EVS)		D1	D2	N.W. (kgs)
	B1	B1+B2	B1	B1+B2			
15–1	354	622	352	620	150	125	44.9
15–2	415	733	413	731	164	127	52.5
15–3	465	805	463	803	186	120	60.9
15–4	510	850	508	848	186	120	64.1
15–5	555	895	553	893	186	120	65.2
15–6	632	1029	630	1027	210	142	75.1
15–7	677	1074	675	1072	210	142	76.1
15–8	722	1119	720	1117	210	142	83.6
15–9	767	1164	765	1162	210	142	83.8
15–10	889	1388	887	1386	254	175	133.2
15–12	979	1478	977	1476	254	175	134.7
15–14	1069	1568	1067	1566	254	175	137.2
15–17	1204	1703	1202	1701	254	175	155.9

PN 16–25/DN 50



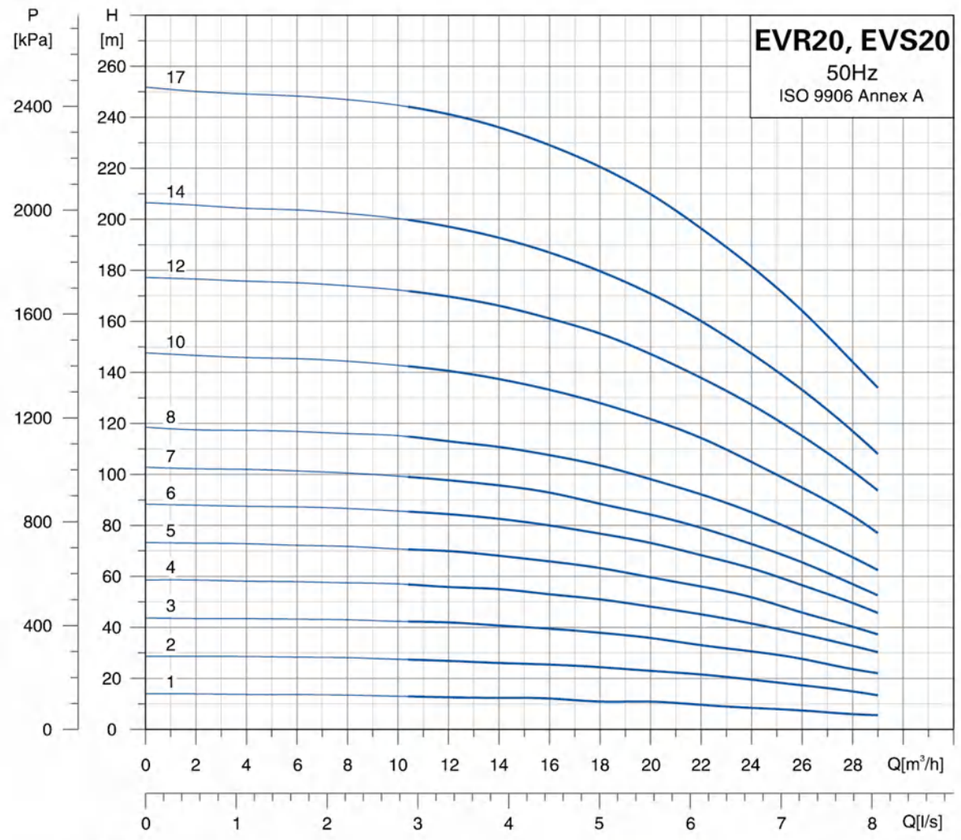
(DIN–ANSI–JIS)
PN 16–25/DN 50

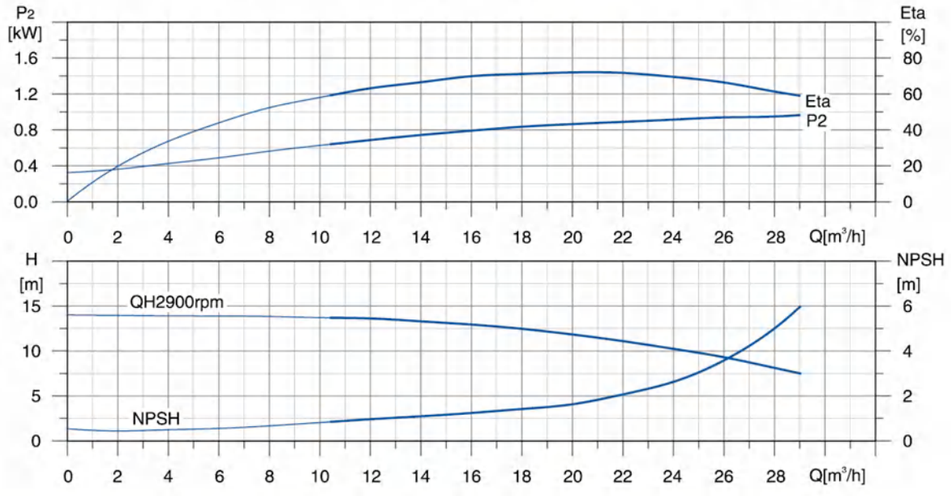


EVS

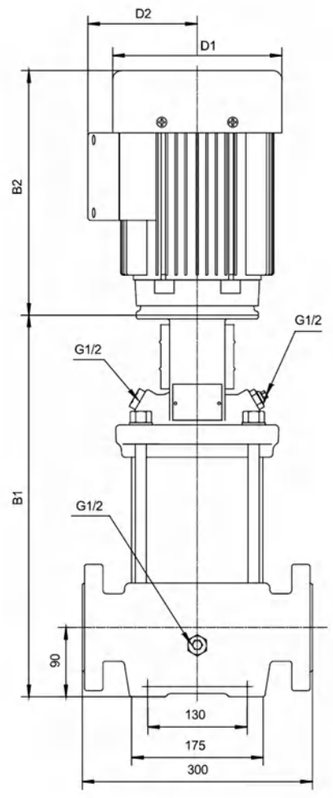
MODEL	POWER[kW]	Q[m³/h]	3	6	9	12	15	18	21
15–1	1.1	H(m)	15	13	13	12	11	10	9
15–2	2.2		28	27	26	25	23	21	18
15–3	3.0		42	41	40	38	35	32	28
15–4	4.0		58	55	55	51	47	43	38
15–5	4.0		70	68	66	64	58	53	48
15–6	5.5		83	82	80	77	71	64	58
15–7	5.5		98	96	94	89	83	75	65
15–8	7.5		112	110	108	103	96	86	75
15–9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

Hydraulic Performance Curves

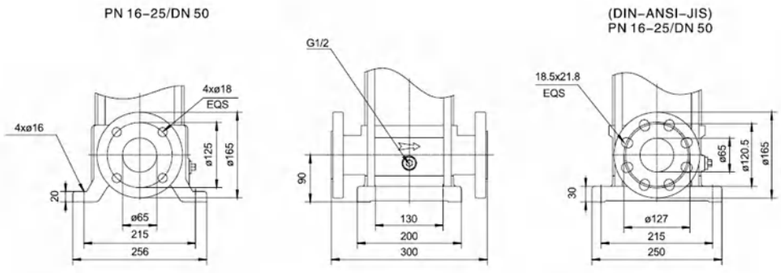




Dimension Drawing



EVR

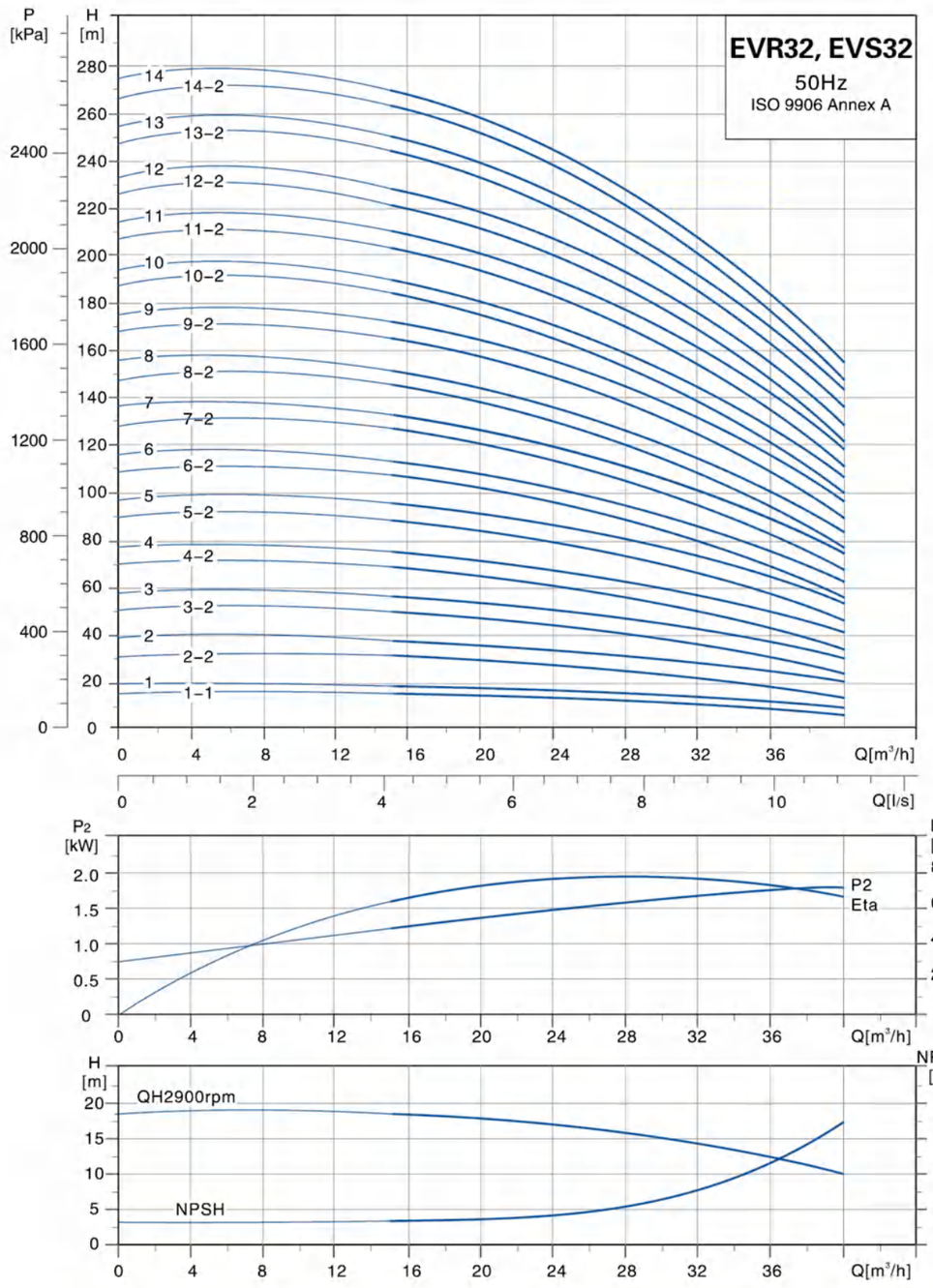


EVS

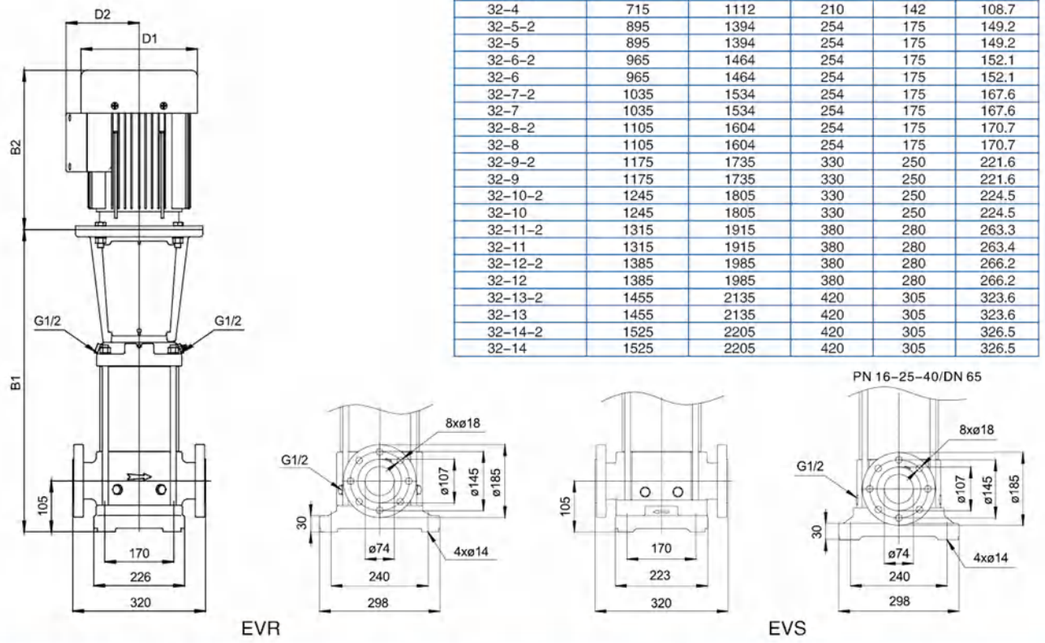
MODEL	DIN FLANGE (EVR)		DIN FLANGE (EVS)		D1	D2	N.W. (kgs)
	B1	B1+B2	B1	B1+B2			
20–1	354	622	352	620	150	125	44.9
20–2	415	733	413	731	164	127	52.4
20–3	465	805	463	803	186	120	59.3
20–4	542	939	540	937	210	142	71.3
20–5	587	984	585	982	210	142	73.9
20–6	632	1029	630	1027	210	142	81.3
20–7	677	1074	675	1072	210	142	82.1
20–8	799	1298	797	1296	254	175	125.2
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

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

Hydraulic Performance Curves



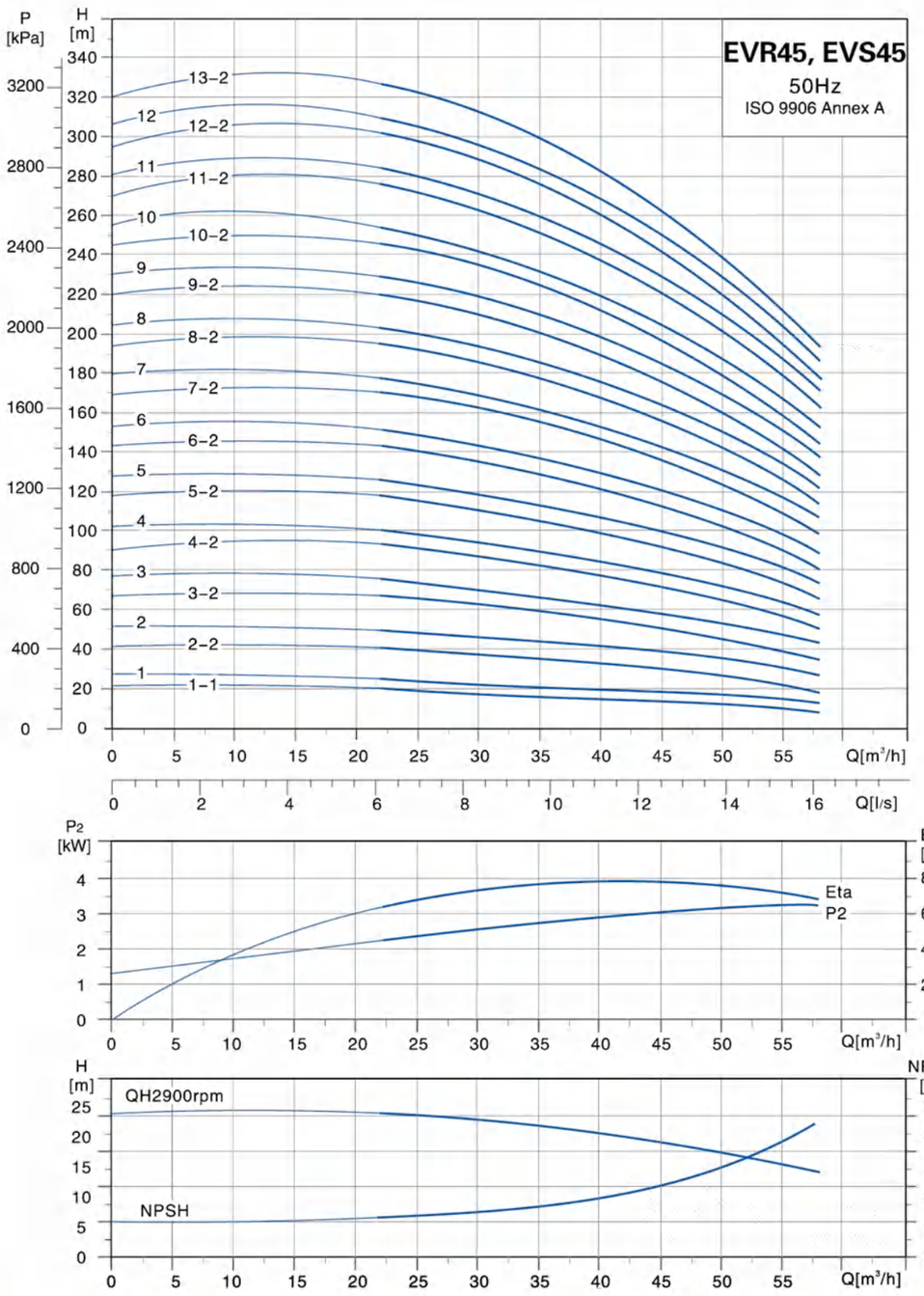
Dimension Drawing



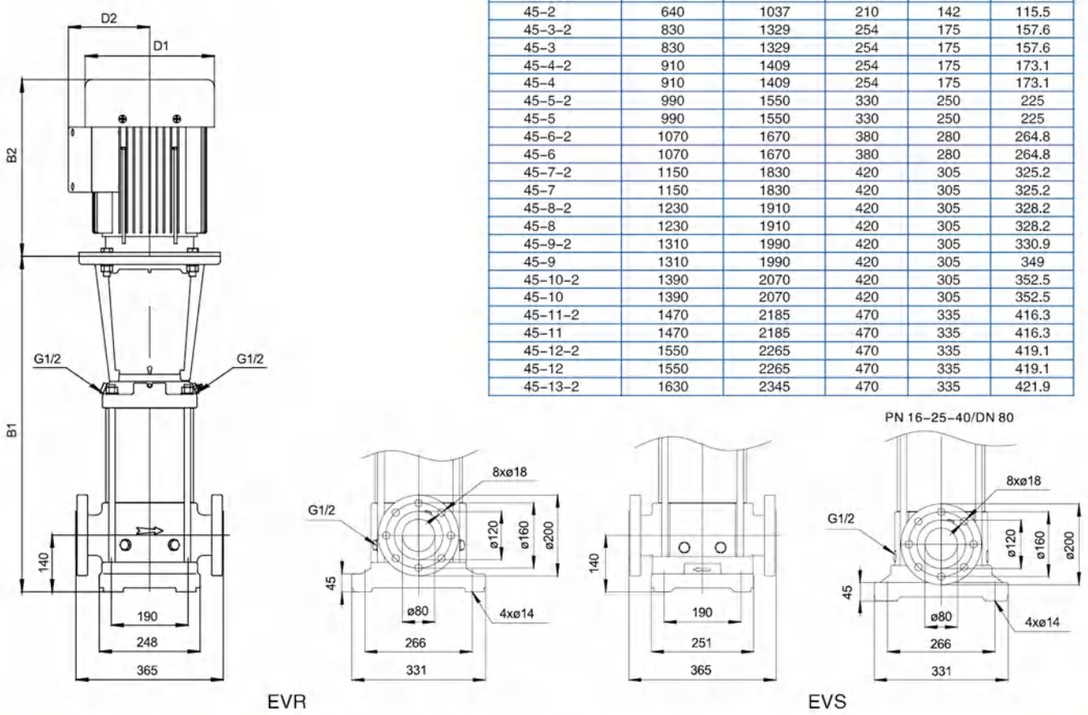
MODEL	DIN FLANGE(EVR、EVS)		D1	D2	N.W. (kgs)
	B1	B1+B2			
32-1-1	455	773	164	127	61.7
32-1	455	773	164	127	63.7
32-2-2	525	865	186	120	72.6
32-2	525	865	186	120	74.9
32-3-2	645	1042	210	142	100.9
32-3	645	1042	210	142	100.6
32-4-2	715	1112	210	142	108.7
32-4	715	1112	210	142	108.7
32-5-2	895	1394	254	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

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

Hydraulic Performance Curves



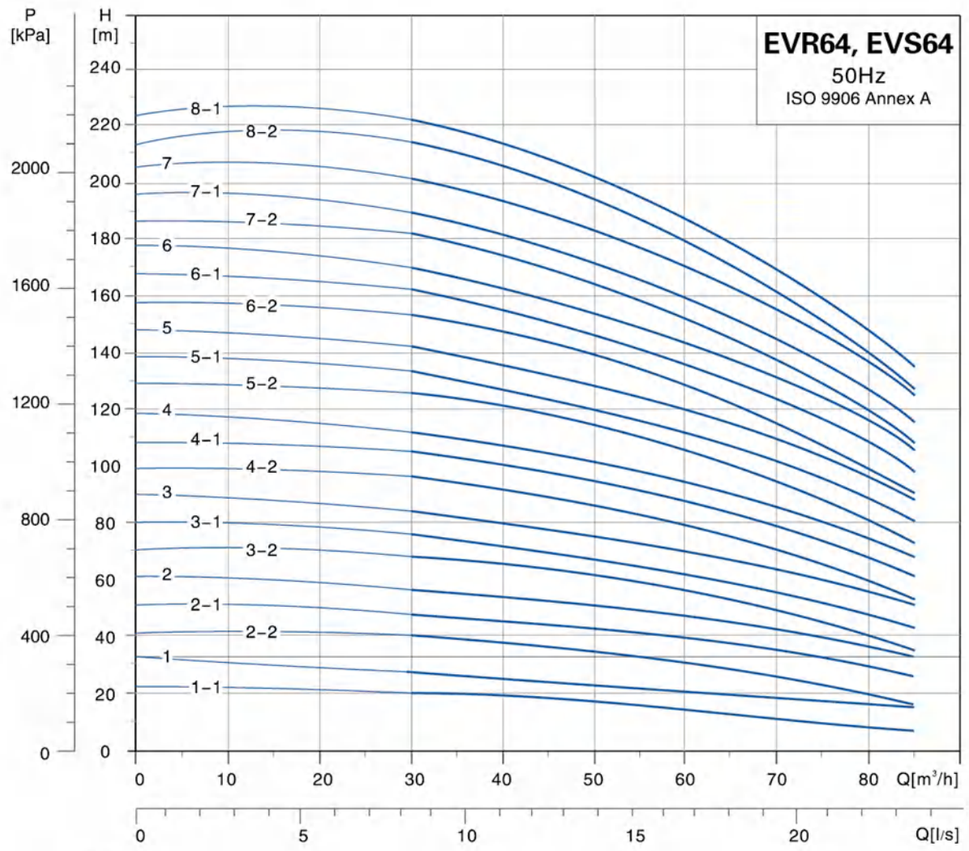
Dimension Drawing

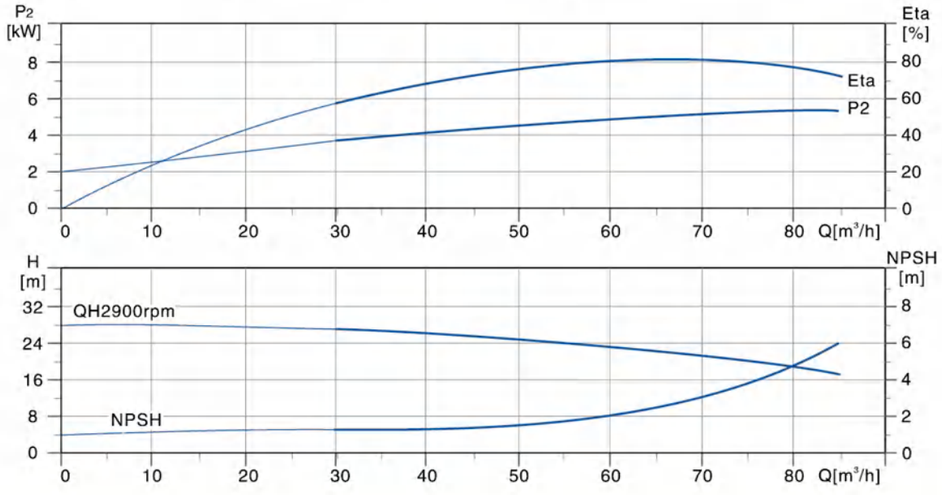


MODEL	DIN FLANGE(EVR、EVS)		D1	D2	N.W. (kgs)
	B1	B1+B2			
45-1-1	560	900	186	120	81
45-1	560	900	186	120	83.2
45-2-2	640	1037	210	142	111.3
45-2	640	1037	210	142	115.5
45-3-2	830	1329	254	175	157.6
45-3	830	1329	254	175	157.6
45-4-2	910	1409	254	175	173.1
45-4	910	1409	254	175	173.1
45-5-2	990	1550	330	250	225
45-5	990	1550	330	250	225
45-6-2	1070	1670	380	280	264.8
45-6	1070	1670	380	280	264.8
45-7-2	1150	1830	420	305	325.2
45-7	1150	1830	420	305	325.2
45-8-2	1230	1910	420	305	328.2
45-8	1230	1910	420	305	328.2
45-9-2	1310	1990	420	305	330.9
45-9	1310	1990	420	305	349
45-10-2	1390	2070	420	305	352.5
45-10	1390	2070	420	305	352.5
45-11-2	1470	2185	470	335	416.3
45-11	1470	2185	470	335	416.3
45-12-2	1550	2265	470	335	419.1
45-12	1550	2265	470	335	419.1
45-13-2	1630	2345	470	335	421.9

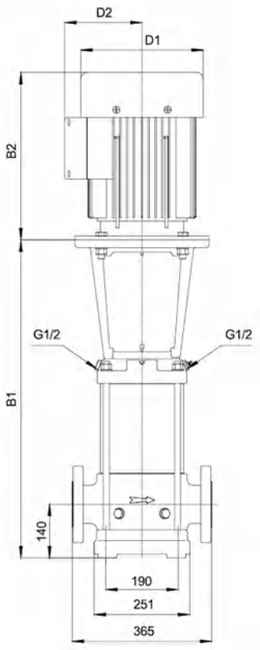
MODEL	POWER[kW]	Q[m³/h]	25	30	35	40	45	50	55
45-1-1	3	H(m)	20	19.5	18	17	15	12.5	10.5
45-1	4		24	23	22	20.5	19	17.5	15
45-2-2	5.5		41	39	37	34	30.5	26.5	22
45-2	7.5		48.5	46.5	44.5	42	39	35	31
45-3-2	11		66	64	61	56.5	52	46	40
45-3	11		73.5	71	68	64	59.5	54	47.5
45-4-2	15		91	88	84	78.5	72	64.5	56
45-4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

Hydraulic Performance Curves



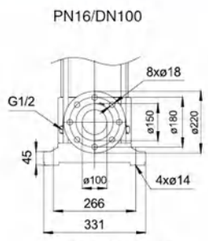


Dimension Drawing

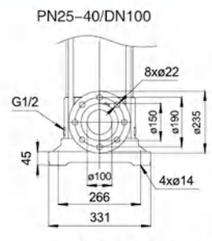


EVR

EVS



EVR(S)64-1-1~
EVR(S)64-5

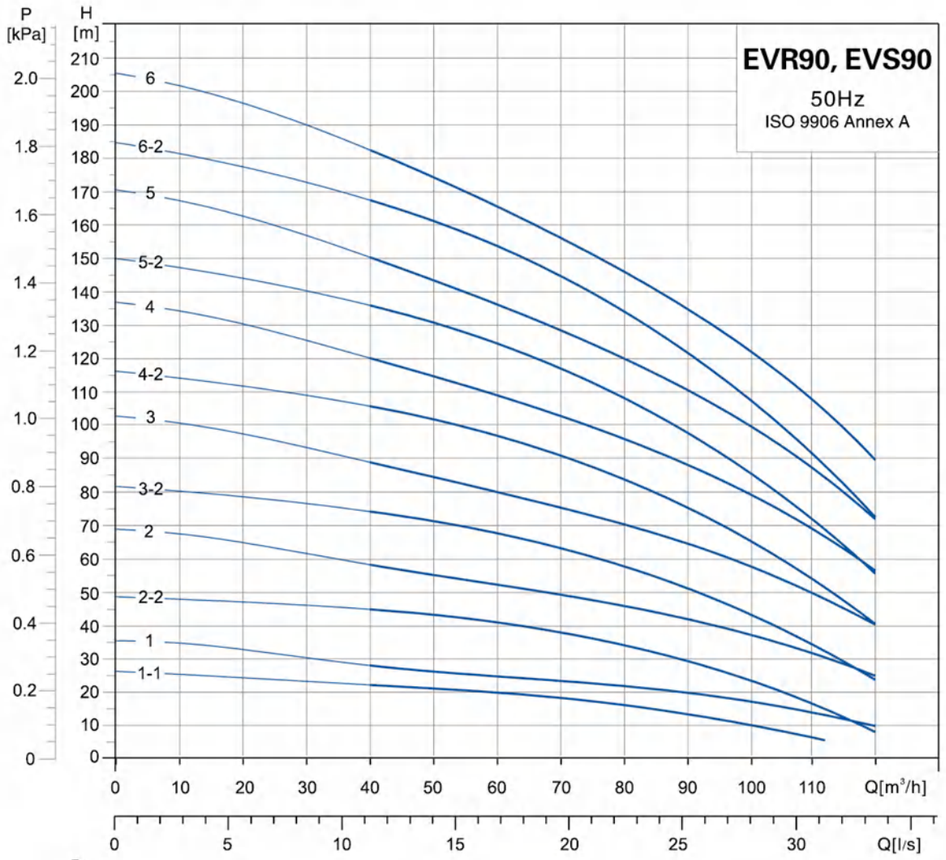


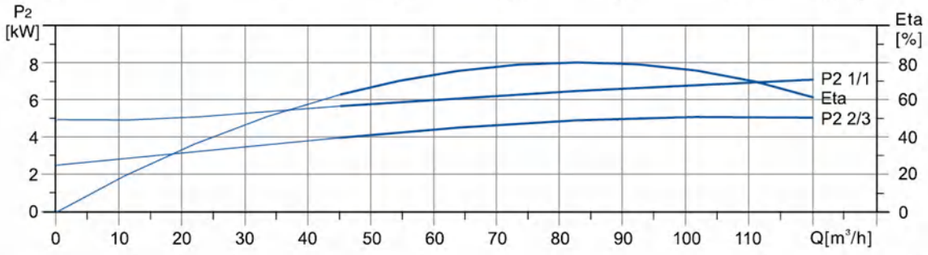
EVR(S)64-6-2~
EVR(S)64-8-1

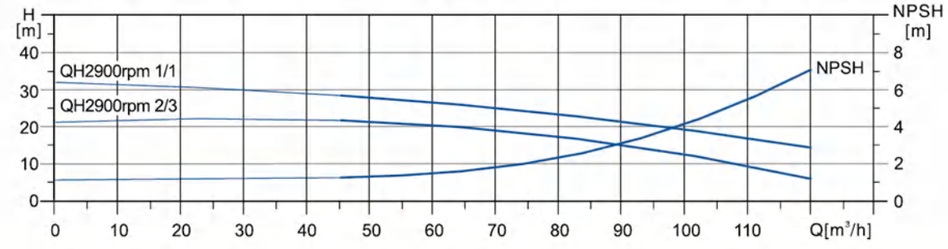
MODEL	DIN FLANGE(EVR、EVS)		D1	D2	N.W. (kgs)
	B1	B1+B2			
64-1-1	563	903	186	124	84.5
64-1	563	960	210	142	110.2
64-2-2	645	1042	210	142	117.4
64-2-1	755	1254	254	175	156
64-2	755	1254	254	175	156
64-3-2	838	1337	254	175	171.9
64-3-1	838	1337	254	175	171.9
64-3	838	1398	330	250	221
64-4-2	920	1480	330	250	223.9
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

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

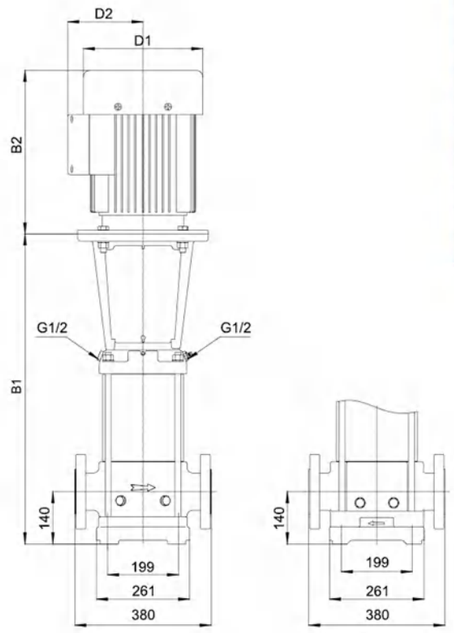
Hydraulic Performance Curves







Dimension Drawing

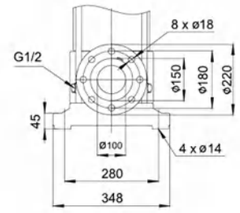


EVR

EVS

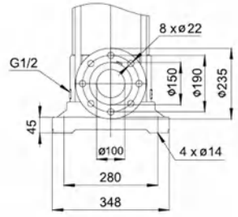
MODEL	DIN FLANGE(EVR、EVS)		D1	D2	N.W. (kgs)
	B1	B1+B2			
90–1–1	572.5	969.5	210	142	116
90–1	572.5	969.5	210	142	121.2
90–2–2	774.5	1273.5	254	175	162.2
90–2	774.5	1273.5	254	175	174.9
90–3–2	866.5	1426.5	330	250	228
90–3	866.5	1466.5	380	280	264
90–4–2	958.5	1638.5	420	305	326
90–4	958.5	1638.5	420	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

PN16/DN100



EVR(S)90–1–1~
EVR(S)90–5

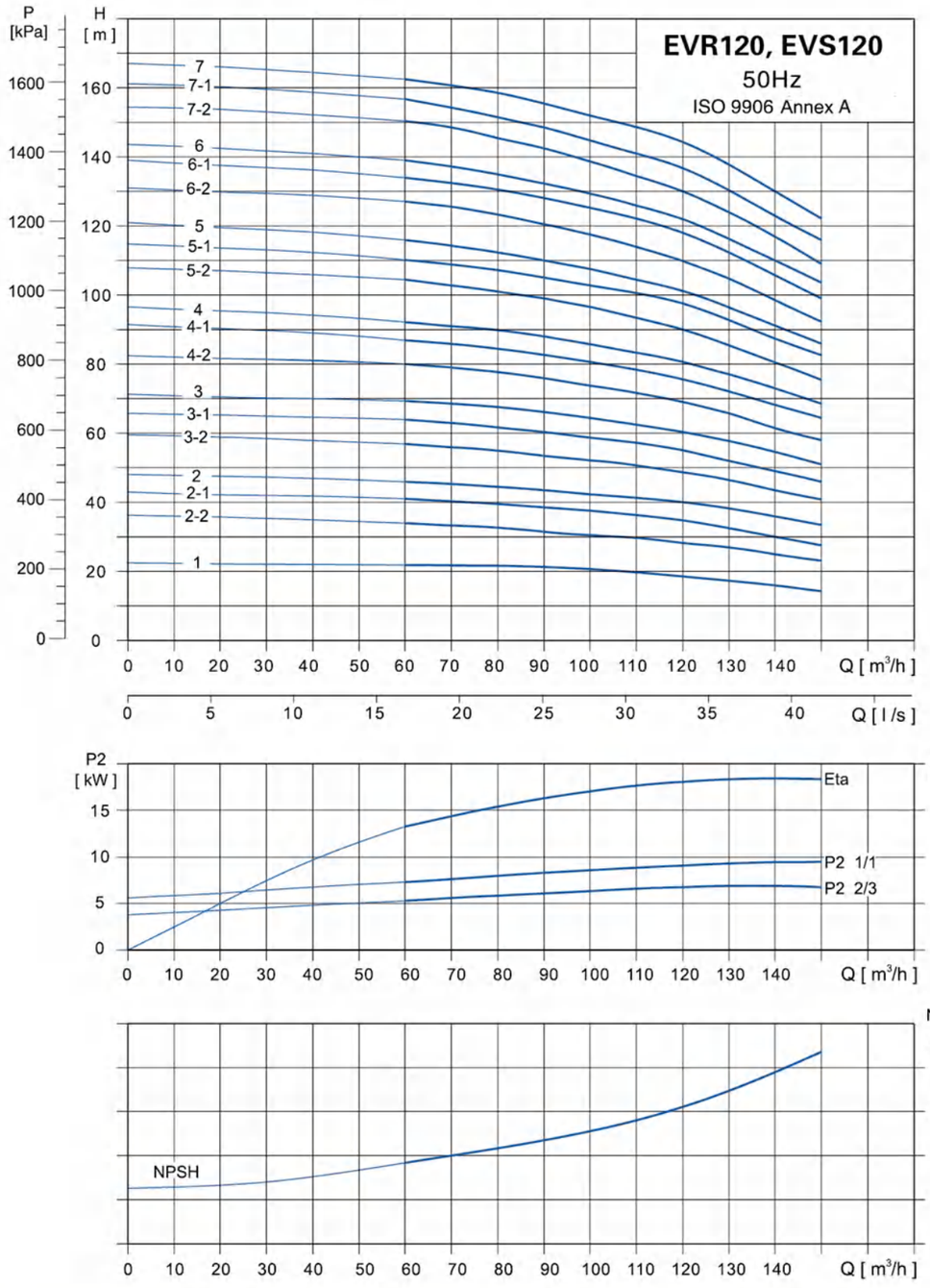
PN25–40/DN100



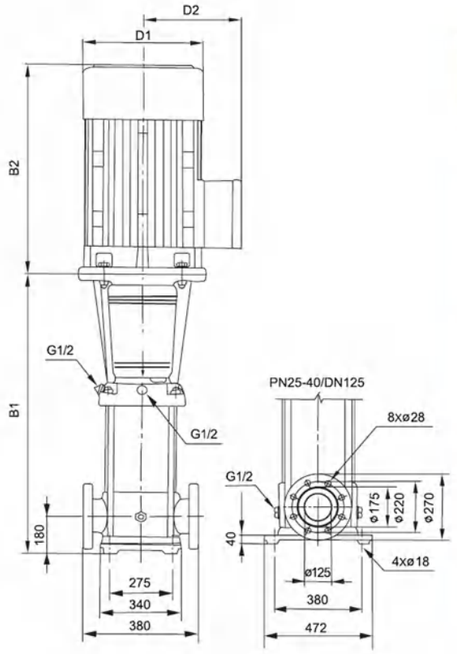
EVR(S)90–6–2~
EVR(S)90–6

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

Hydraulic Performance Curves



Dimension Drawing

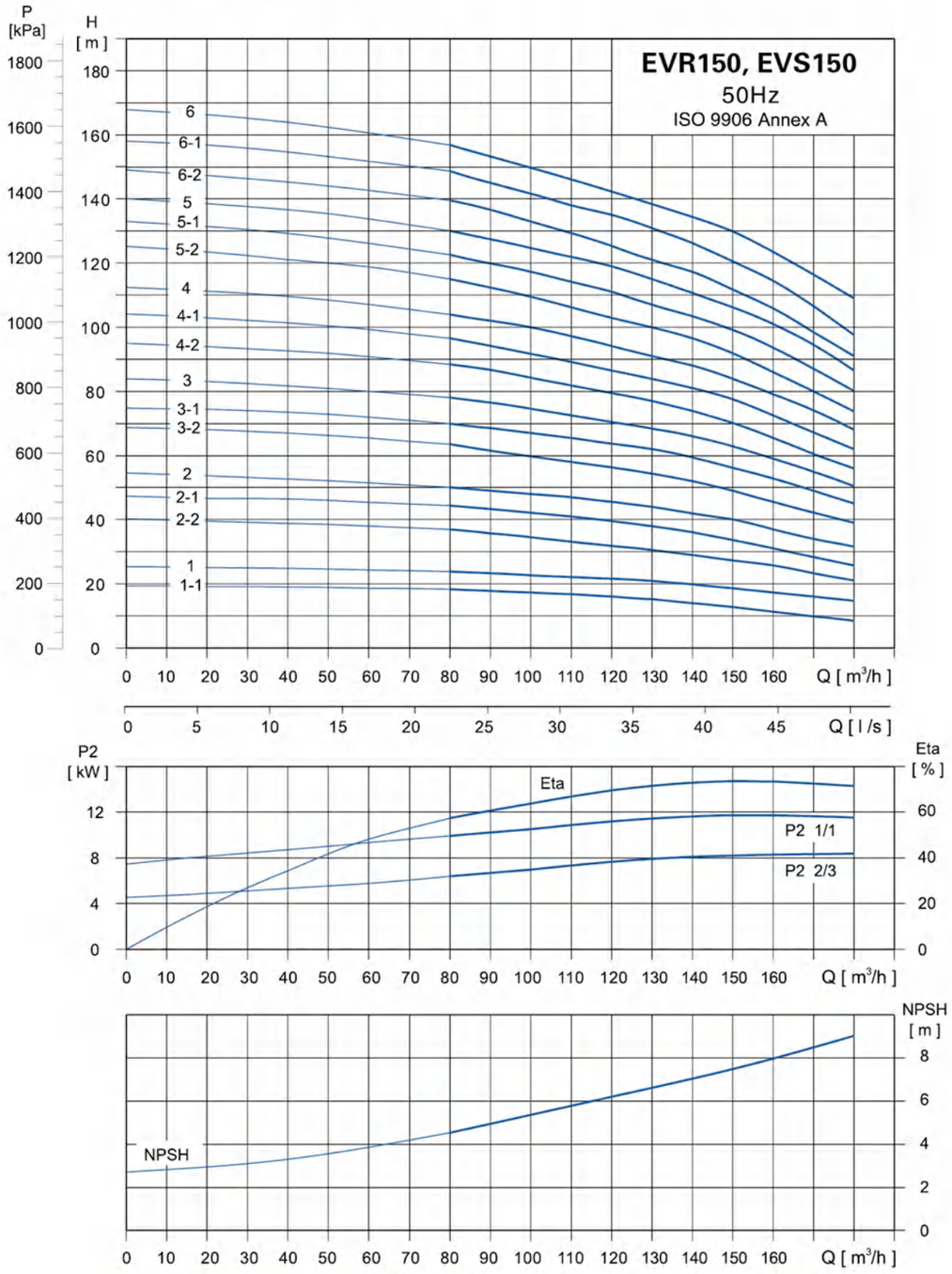


EVR(S)

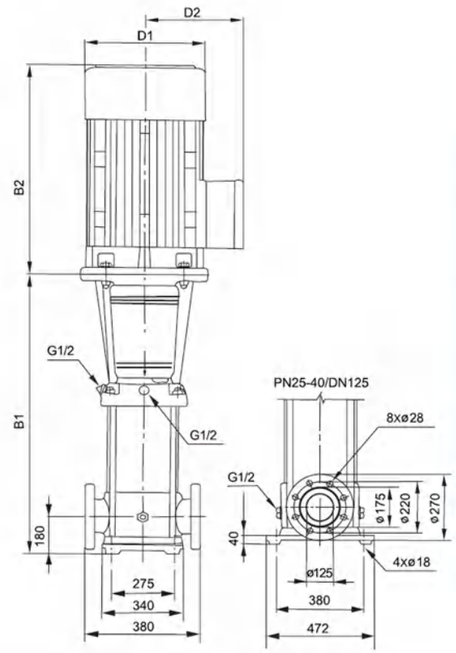
MODEL	DIN FLANGE(EVR、EVS)		D1	D2	N.W. (kgs)
	B1	B1+B2			
120–1	840	1339	254	175	186
120–2–2	1000	1499	254	175	210
120–2–1	1000	1560	330	250	250
120–2	1000	1600	380	280	285
120–3–2	1160	1840	420	305	326
120–3–1	1160	1840	420	305	360
120–3	1160	1840	420	305	360
120–4–2	1320	2000	420	305	400
120–4–1	1320	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

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

Hydraulic Performance Curves



Dimension Drawing

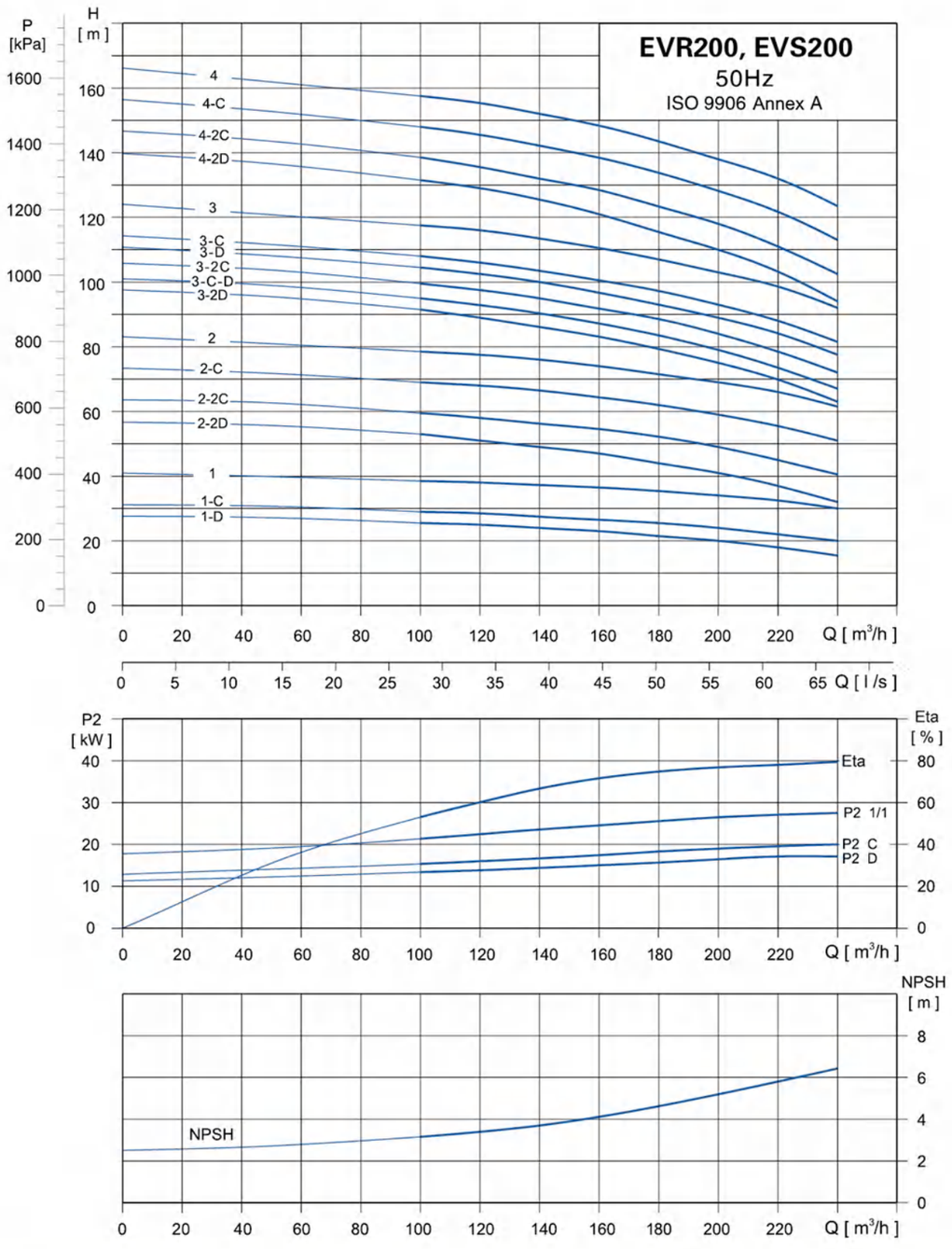


EVR(S)

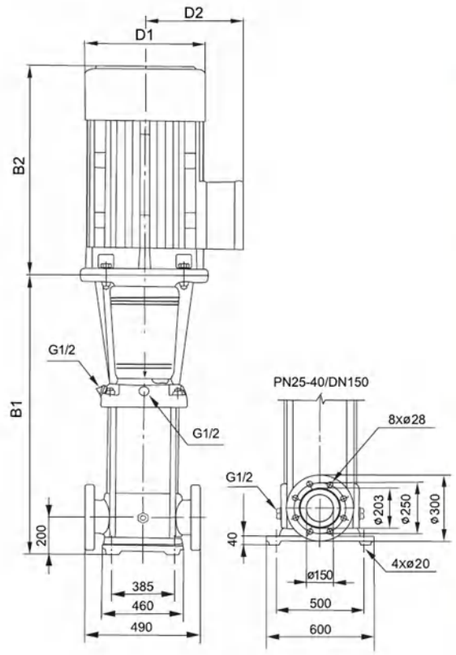
MODEL	DIN FLANGE(EVR、EVS)		D1	D2	N.W. (kgs)
	B1	B1+B2			
150–1–1	840	1339	254	175	186
150–1	840	1339	254	175	200
150–2–2	1000	1560	330	250	250
150–2–1	1000	1600	380	280	295
150–2	1000	1680	420	305	317
150–3–2	1160	1840	420	305	360
150–3–1	1160	1840	420	305	360
150–3	1160	1840	420	305	385
150–4–2	1320	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

MODEL	POWER[kW]	Q[m³/h]	80	90	100	110	120	130	140	150	160	170	180
150–1–1	11	H(m)	18.3	17.8	17.3	17	16	15	14	12.5	11	10	8.5
150–1	15		24	23	22.5	22	21.5	20.5	20	18.5	17	16	15
150–2–2	18.5		37	35.5	34	33	32	31	29	27.5	26	23	21
150–2–1	22		44.3	43	42	40	39	38.5	37.5	35	33	30	27
150–2	30		50	49	48	47	45.5	44	42	40	37	34	32
150–3–2	30		63.5	61	59	57.5	56	54.5	53	49	45.5	42	39
150–3–1	30		70	68	67	65	63	62	60	56	53	49	45
150–3	37		78	76.5	75	73	70.5	68	66	83	59	55	50.5
150–4–2	37		89	87	84	81.5	79	77	74.5	70.5	65.5	60	56
150–4–1	45		96.5	94	91.5	89	86.5	84	81.5	77	72.5	67	62
150–4	45		104	102	100	97	95	91	88	84	79.5	74	68
150–5–2	55		115.5	112	109	106	102.5	100	97	92	86	79	73.5
150–5–1	55		122.5	119.5	117	113.5	111.5	107.5	104.5	99	93.5	87	80
150–5	75		130	127.5	125	121	119	115	111.5	106.5	101	94.5	86.5
150–6–2	75		140	137	133	130	126	121	118	112	106	98	91
150–6–1	75		148.5	145	141.7	137.5	135	131	127	120.5	114.5	106.5	97.5
150–6	75		157	153	149	145	142	139.5	137	130	123.5	116	109

Hydraulic Performance Curves



Dimension Drawing



EVR(S)

MODEL	DIN FLANGE(EVR、EVS)		D1	D2	N.W. (kgs)
	B1	B1+B2			
200–1–D	907	1467	330	250	311
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

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

EVP

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℃ ~ 60℃
- Maximum ambient temperature: +40℃
- Maximum pressure: 15 bar
- Altitude: up to 1000 m

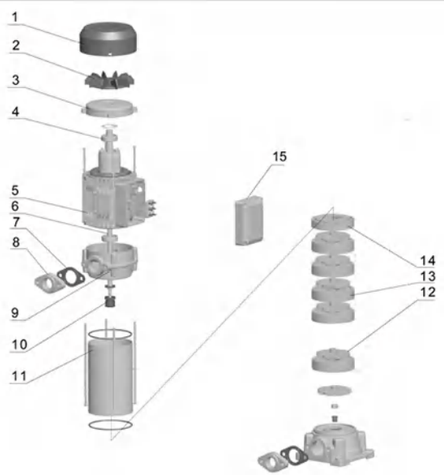
Identification Codes

EVP m 2 – 6

- Impeller Stage
- Rated Flow (m^3/h)
- Single Phase
  (Three-phase model without m)
- Vertical Multistage Centrifugal Pump

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

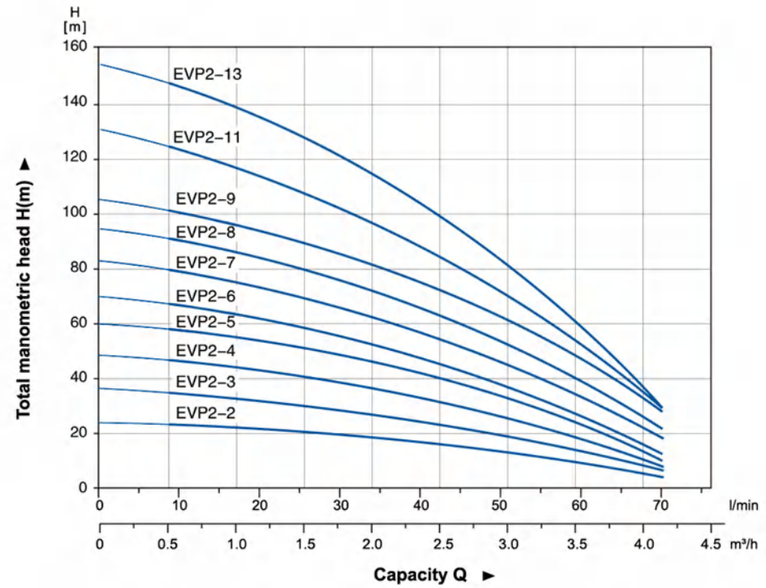


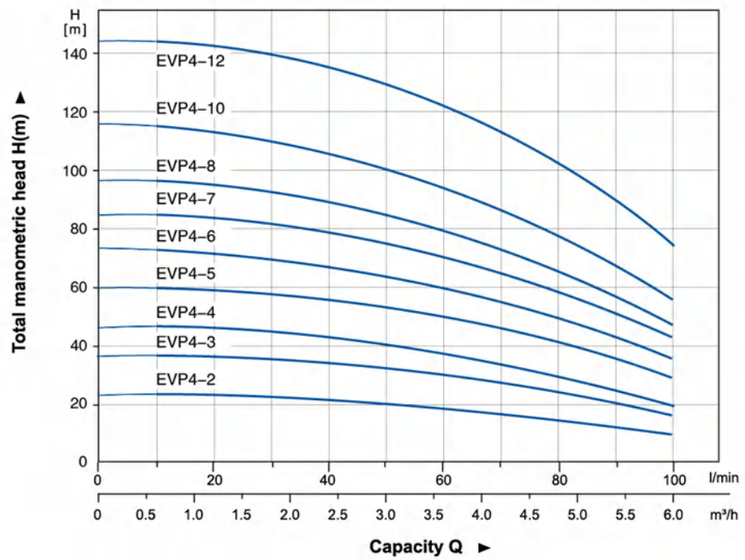
Model Selection Instructions

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

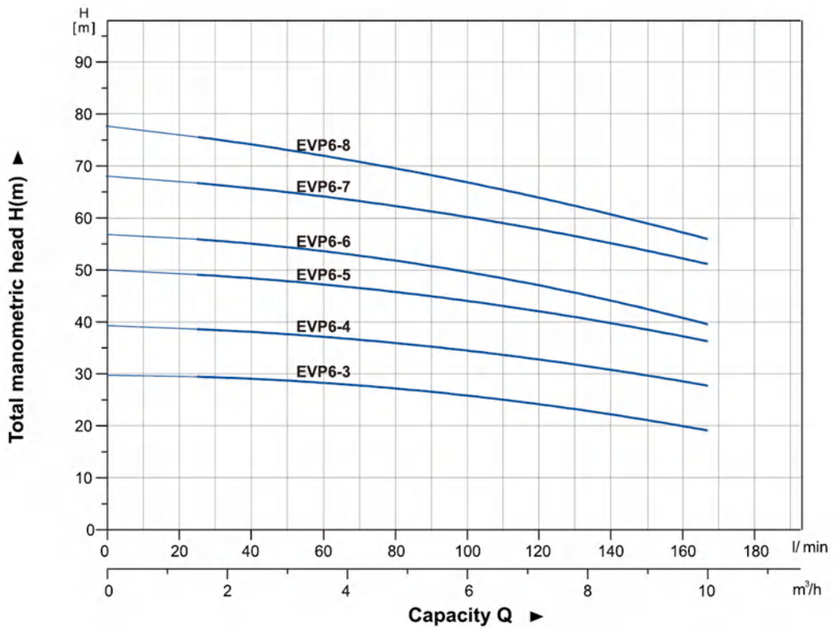
Please choose the pump with appropriate flow rate and head to meet your actual demand.

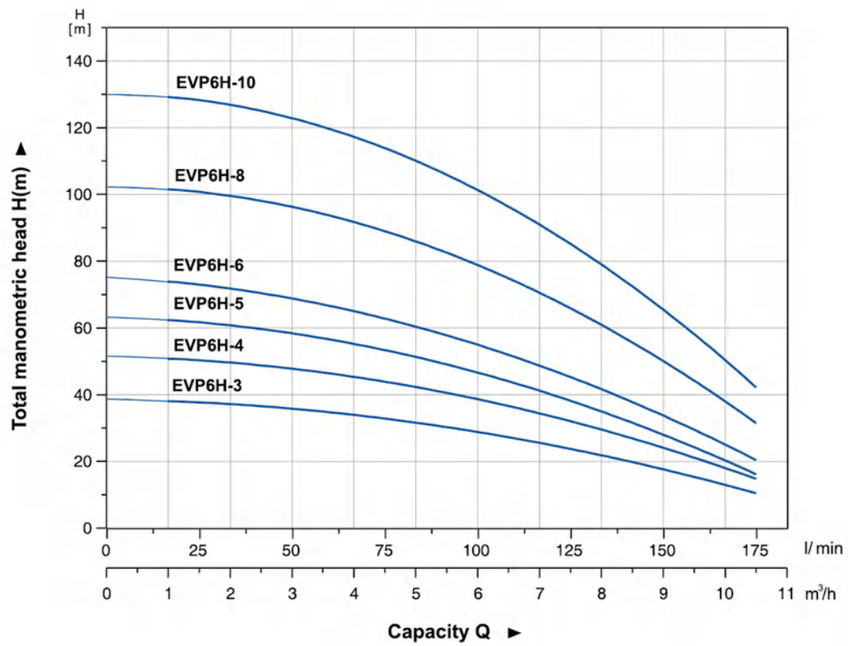
Hydraulic Performance Curves



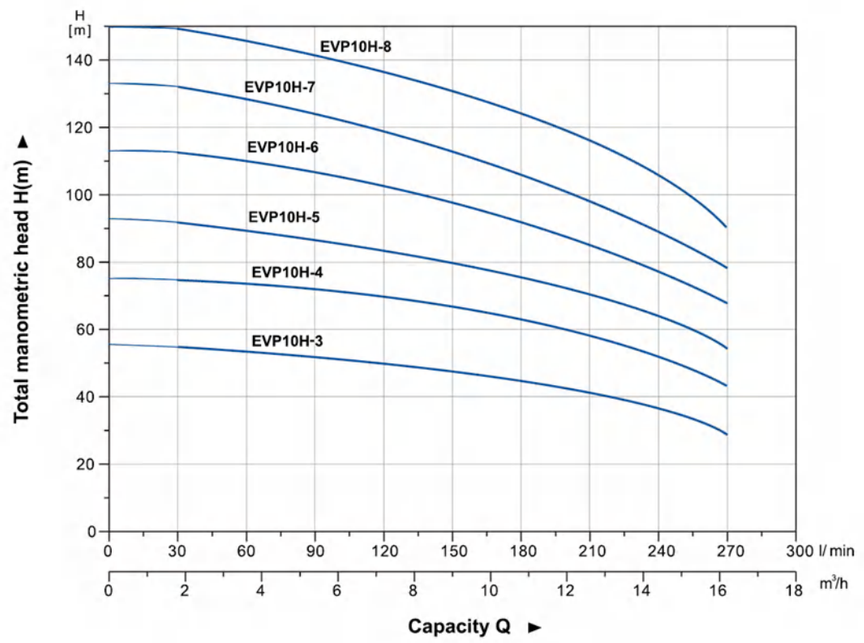


Hydraulic Performance Curves





Hydraulic Performance Curves



Technical Data

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

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

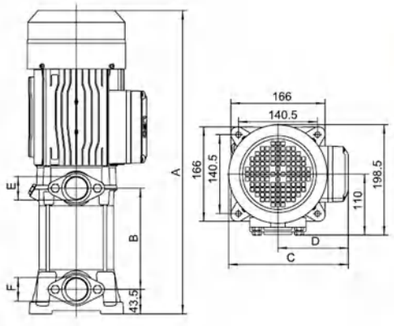
Technical Data

Model		Power (P2)		Q (m³/h)	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		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	H (m)	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

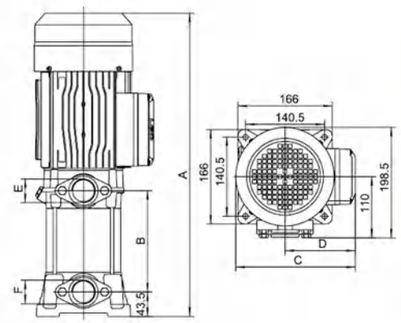
Model		Power (P2)		Q (m³/h)	0	1	2	3	4.5	6	7.5	9	10.5
Single-phase	Three-phase	kW	HP	Q (l/min)	0	16.7	33.3	50	75	100	125	150	175
EVPm6H-3	EVP6H-3	1.1	1.5		39	38	37	35	33	29	24	18	10
EVPm6H-4	EVP6H-4	1.5	2		52	51	49	47	44	39	32	25	14
EVPm6H-5	EVP6H-5	1.8	2.5	H (m)	64	62	60	58	54	47	38	28	16
—	EVP6H-6	2.2	3		76	74	71	68	63	56	45	34	20
—	EVP6H-8	3.0	4		103	100	97	95	90	80	66	50	31
—	EVP6H-10	4.0	5.5		130	127	124	121	114	103	86	66	41

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

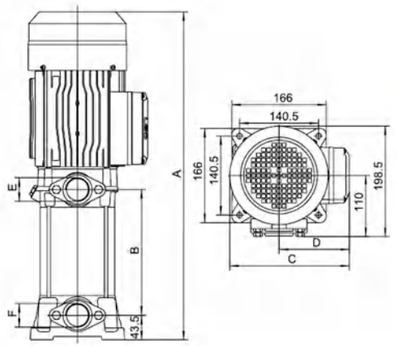
Dimension



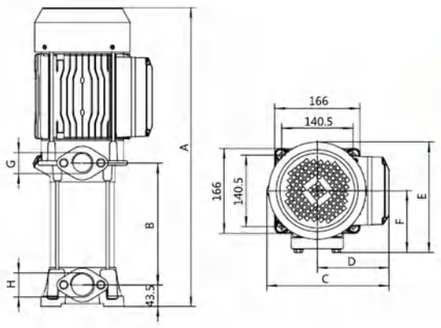
Model		Power (P2)	A	B	C	D	E	F	G	H
Single-phase	Three-phase	kW								
EVPm2-2	EVP2-2	0.37	382	122	193	110	202	114.5	G1	G1
EVPm2-3	EVP2-3	0.55	406	146	193	110	202	114.5	G1	G1
EVPm2-4	EVP2-4	0.75	430	170	193	110	202	114.5	G1	G1
EVPm2-5	EVP2-5	1.0	454	194	193	110	202	114.5	G1	G1
EVPm2-6	EVP2-6	1.0	478	218	193	110	202	114.5	G1	G1
EVPm2-7	EVP2-7	1.1	545	248.5	210	125	202	114.5	G1	G1
EVPm2-8	EVP2-8	1.5	569	272.5	210	125	202	114.5	G1	G1
EVPm2-9	EVP2-9	1.5	593	296.5	210	125	202	114.5	G1	G1
EVPm2-11	EVP2-11	1.8	641	344.5	210	125	202	114.5	G1	G1
–	EVP2-13	2.2	689	392.5	210	125	202	114.5	G1	G1



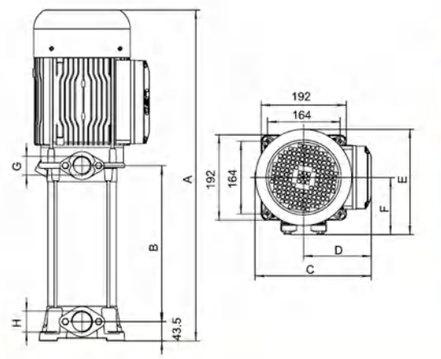
Model		Power (P2)	A	B	C	D	E	F	G	H
Single-phase	Three-phase	kW								
EVPm4-2	EVP4-2	0.55	382	122	193	110	202	114.5	G1	G1
EVPm4-3	EVP4-3	0.75	406	146	193	110	202	114.5	G1	G1
EVPm4-4	EVP4-4	1.0	430	170	193	110	202	114.5	G1	G1
EVPm4-5	EVP4-5	1.5	497	200.5	210	125	202	114.5	G1	G1
EVPm4-6	EVP4-6	1.5	521	224.5	210	125	202	114.5	G1	G1
–	EVP4-7	2.2	545	248.5	210	125	202	114.5	G1	G1
–	EVP4-8	2.2	569	272.5	210	125	202	114.5	G1	G1
–	EVP4-10	2.2	617	320.5	210	125	202	114.5	G1	G1
–	EVP4-12	3.0	731	374	240	141	218	121.5	G1	G1



Model		Power (P2)	A	B	C	D	E	F
Single-phase	Three-phase	kW						
EVPm6-3	EVP6-3	1.1	487	190	210	125	G1¼	G1¼
EVPm6-4	EVP6-4	1.5	524	227	210	125	G1¼	G1¼
—	EVP6-5	2.2	561	264	210	125	G1¼	G1¼
—	EVP6-6	2.2	598	301	210	125	G1¼	G1¼
—	EVP6-7	3.0	685	338	221	134	G1¼	G1¼
—	EVP6-8	3.0	722	375	221	134	G1¼	G1¼

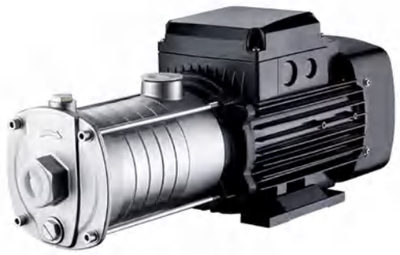


Model		Power (P2)	A	B	C	D	E	F	G	H
Single-phase	Three-phase	kW								
EVPm6H-3	EVP6H-3	1.1	457	158.5	210	125	202	114.5	G1¼	G1½
EVPm6H-4	EVP6H-4	1.5	483.5	185	210	125	202	114.5	G1¼	G1½
EVPm6H-5	EVP6H-5	1.8	510	211.5	210	125	202	114.5	G1¼	G1½
—	EVP6H-6	2.2	536.5	238	210	125	202	114.5	G1¼	G1½
—	EVP6H-8	3.0	655	297.5	240	141	218	121.5	G1¼	G1½
—	EVP6H-10	4.0	708	350.5	240	141	218	121.5	G1¼	G1½



Model	Power (P2)	A	B	C	D	E	F	G	H
Three-phase	kW								
EVP10H-3	3.0	554.5	187	240	141	227.5	127.5	G1¼	G1½
EVP10H-4	4.0	577.5	220	240	141	227.5	127.5	G1¼	G1½
EVP10H-5	5.5	647	253	262	152	237.5	128.5	G1¼	G1½
EVP10H-6	5.5	680	286	262	152	237.5	128.5	G1¼	G1½
EVP10H-7	7.5	713	319	262	152	237.5	128.5	G1¼	G1½
EVP10H-8	7.5	746	352	262	152	237.5	128.5	G1¼	G1½

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℃
- Altitude: up to 1000 m
- Max. suction: 8 m
- Max. inlet pressure: limited by max. operating pressure
- Max.operation 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℃

Identification Codes

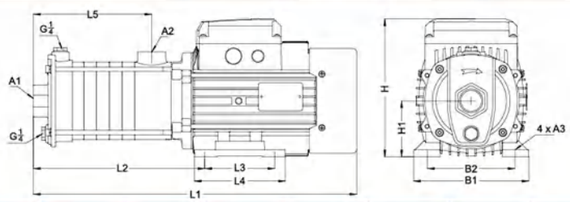
ECH (m) 2- 30 (S)

- (S) — Stainless Steel Wetted Parts
- 30 — Impeller Stage x10
- 2 — Rated Flow (m^3/h)
- (m) — Single Phase (Three-phase without m)
- ECH — Stainless Steel Horizontal Multistage Pump

Technical Data

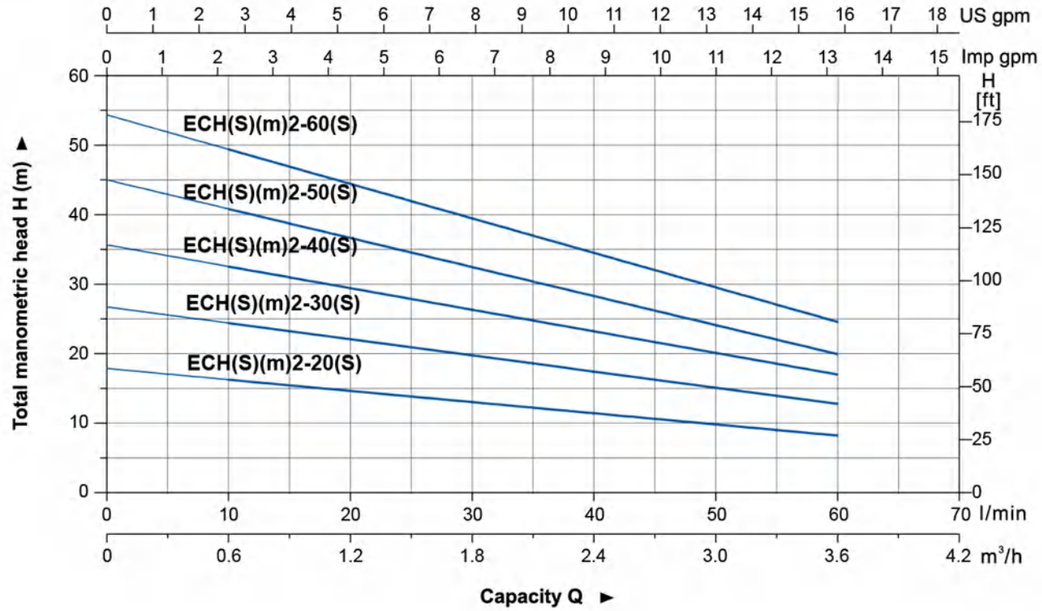
Model	Power		Q (m^3/h)	0.6	1.2	1.8	2.4	3.0	3.6
	kW	HP	Q (l/min)	10	20	30	40	50	60
ECH(S)(m)2-20(S)	0.37	0.5	H (m)	16	15	13	12	10	8
ECH(S)(m)2-30(S)	0.37	0.5		24	22	20	18	16	12
ECH(S)(m)2-40(S)	0.55	0.75		33	30	26	24	21	16
ECH(S)(m)2-50(S)	0.55	0.75		40	37	33	30	24	19
ECH(S)(m)2-60(S)	0.75	1.0		50	45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

Dimension



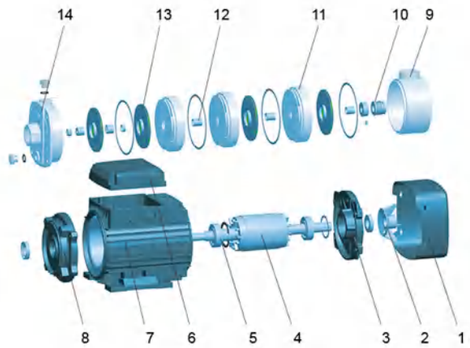
Model	L1	L2	L3	L4	L5	B1	B2	H	H1	A1	A2	A3
ECH(S)(m)2-20(S)	344.5	165.5	90	110	98.5	137	109	176.5	71	G1	G1	Φ7
ECH(S)(m)2-30(S)	362.5	183.5	90	110	116.5	137	109	176.5	71	G1	G1	Φ7
ECH(S)(m)2-40(S)	380.5	201.5	90	100	134.5	137	109	176.5	71	G1	G1	Φ7
ECH(S)(m)2-50(S)	399.5	220.5	90	110	153.5	137	109	176.5	71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

Hydraulic Performance Curves



Materials Table

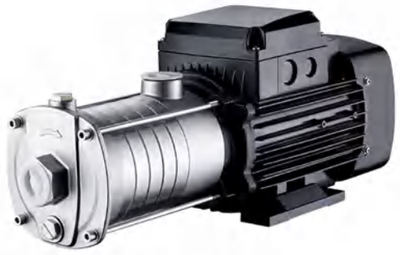
No.	Part	Material
1	Fan cover	08F
2	Fan	PP
3	Rear cover	ZL 102
4	Rotor	
5	Bearing	
6	Terminal box	ZL 102
7	Stator	
8	Front cover	Cast iron
9	Outlet body	Cast iron/AISI 304
10	Mechanical seal	Carbon/Ceramic
11	Diffuser	AISI 304
12	Sleeve	AISI 304
13	Impeller	AISI 304
14	Pump body	Cast iron/AISI 304



Package Information

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

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℃
- Altitude: up to 1000 m
- Max. suction: 8 m
- Max. inlet pressure: limited by max. operating pressure
- Max.operation 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℃

Identification Codes

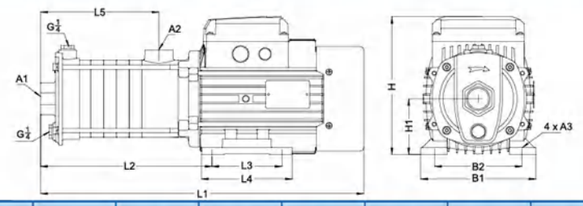
ECH (m) 4- 30 (S)

- (S) — Stainless Steel Wetted Parts
- 30 — Impeller Stage x10
- 4 — Rated Flow (m^3/h)
- (m) — Single Phase (Three-phase without m)
- ECH — Stainless Steel Horizontal Multistage Pump

Technical Data

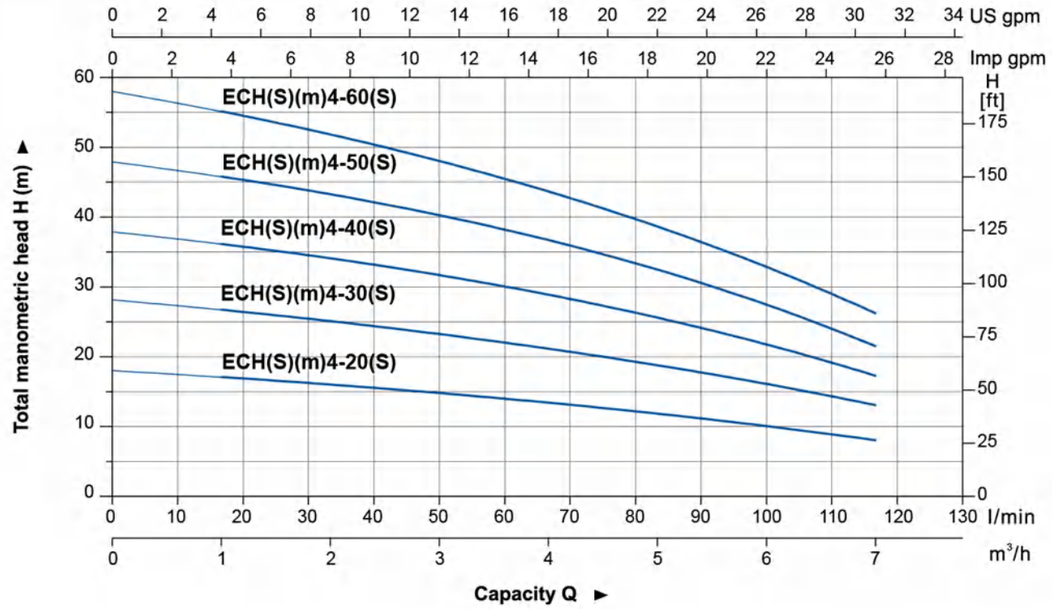
Model	Power		Q (m^3/h)	1	2	3	4	5	6	7
	kW	HP	Q (l/min)	17	33	50	67	83	100	117
ECH(S)(m)4-20(S)	0.55	0.75	H (m)	17	16	15	13	12	10	8
ECH(S)(m)4-30(S)	0.55	0.75		27	25	23	21	19	16	13
ECH(S)(m)4-40(S)	0.75	1.0		36	34	32	28	26	22	17
ECH(S)(m)4-50(S)	1.1	1.5		46	43	40	36	33	28	21
ECH(S)(m)4-60(S)	1.1	1.5		55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

Dimension



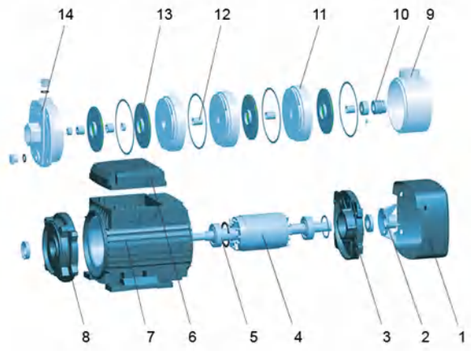
Model	L1	L2	L3	L4	L5	B1	B2	H	H1	A1	A2	A3
ECH(S)(m)4-20(S)	354	175.5	90	110	108.5	137	109	176.5	71	G1 1/4	G1	Φ7
ECH(S)(m)4-30(S)	381.5	203	90	110	136	137	109	176.5	71	G1 1/4	G1	Φ7
ECH(S)(m)4-40(S)	408.5	230	90	110	163	137	109	176.5	71	G1 1/4	G1	Φ7
ECH(S)(m)4-50(S)	484	266	100	130	190	165	125	204.5	80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

Hydraulic Performance Curves



Materials Table

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



Package Information

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

ECH

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℃
- Altitude: up to 1000 m
- Max. suction: 8 m
- Max. inlet pressure: limited by max. operating pressure
- Max.operation 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℃

Identification Codes

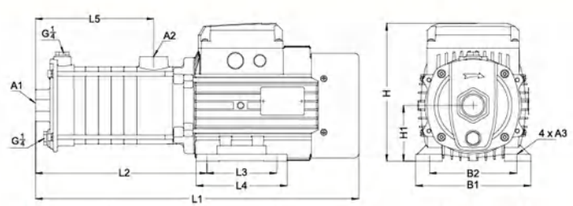
ECH (m) 10 - 30

- 30 — Impeller Stage x10
- 10 — Rated Flow (m^3/h)
- (m) — Single Phase (Three-phase without m)
- ECH — Stainless Steel Horizontal Multistage Pump

Technical Data

Model	Power		Q (m^3/h)	6	7	8	9	10	11	12
	kW	HP	Q (l/min)	100	117	133	150	167	183	200
ECH(m)10-10	0.75	1.0	H (m)	9.1	8.7	8.2	7.7	6.8	5.8	–
ECH(m)10-20				17.9	17.1	16.3	15.3	14.0	12.5	10.6
ECH(m)10-30	1.1	1.5		27.1	26.3	24.9	23.4	21.4	19.3	16.9
ECH(m)10-40	1.5	2.0		38.6	37.6	35.9	33.9	31.2	28.2	24.6
ECH(m)10-50	2.2	3.0		47.8	46.4	44.4	42.2	39.5	35.9	31.1

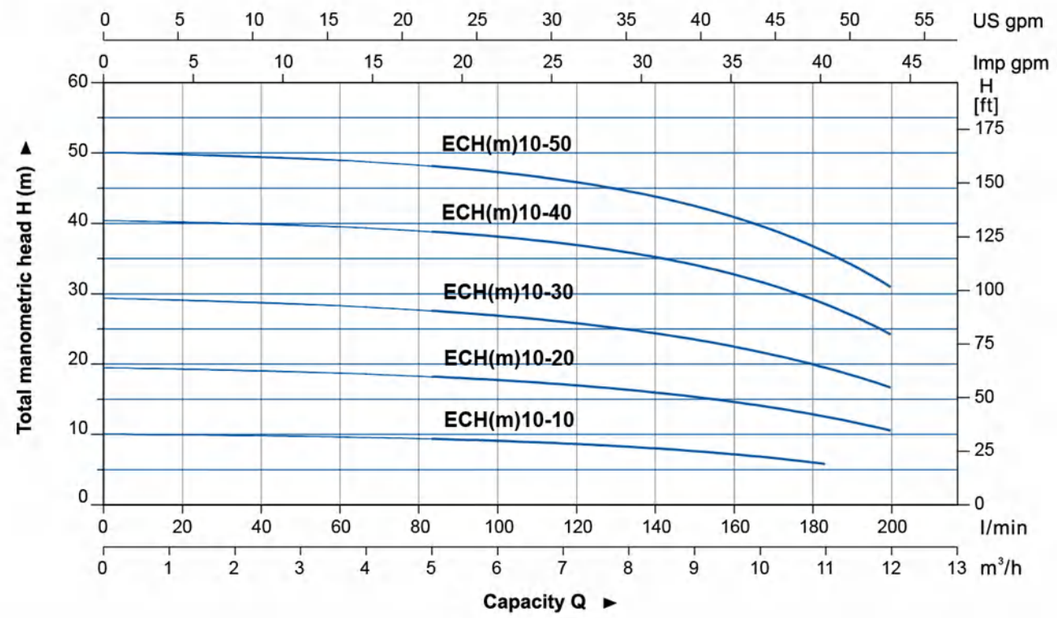
Dimension



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

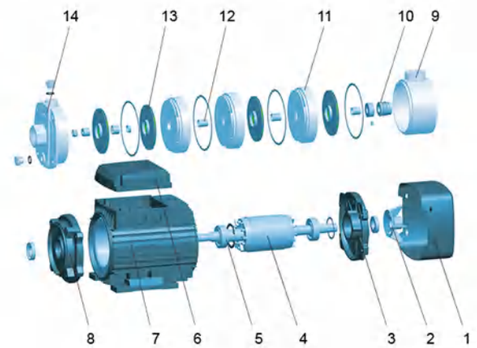
AQUASTRONG
Stainless Steel Horizontal Multistage Pumps

Hydraulic Performance Curves



Materials Table

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



Package Information

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

ECH

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℃
- Altitude: up to 1000 m
- Max. suction: 8 m
- Max. inlet pressure: limited by max. operating pressure
- Max.operation 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℃

Identification Codes

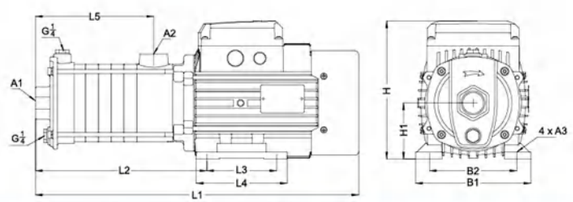
ECH (m) 15 - 20

- Impeller Stage x10
- Rated Flow (m^3/h)
- Single Phase (Three-phase without m)
- Stainless Steel Horizontal Multistage Pump

Technical Data

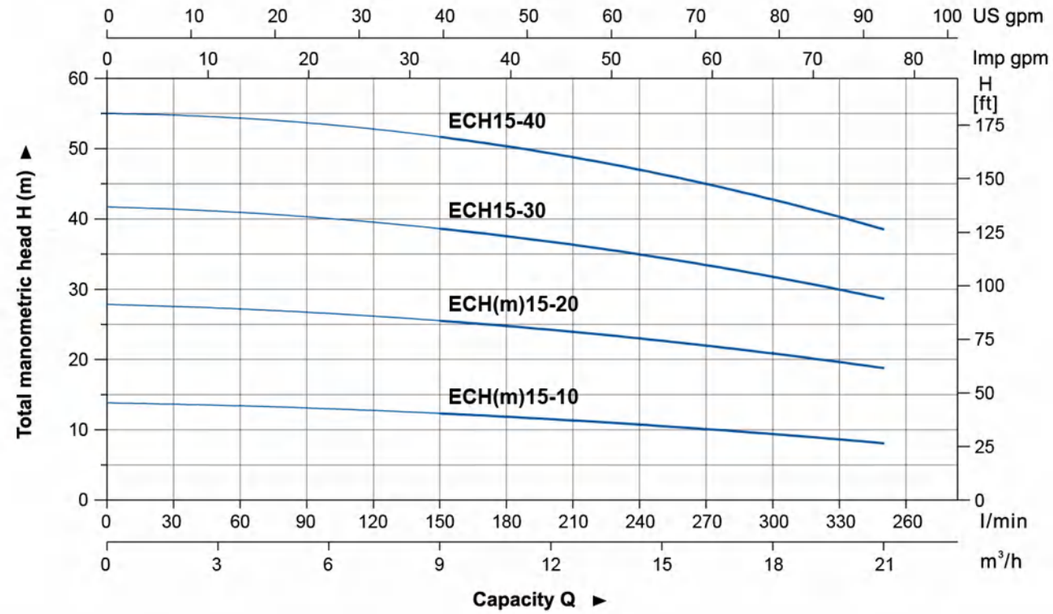
Model	Power		Q (m^3/h)	9	12	15	18	21
	kW	HP	Q (l/min)	150	200	250	300	350
ECH(m)15-10	1.1	1.5	H (m)	12.4	11.6	10.6	9.4	8.2
ECH(m)15-20	2.2	3		25.6	24.1	22.7	21.1	18.8
ECH15-30	3.0	4		38.7	36.9	34.9	31.9	28.5
ECH15-40	4.0	5.5		51.8	49.7	46.8	42.9	38.3

Dimension



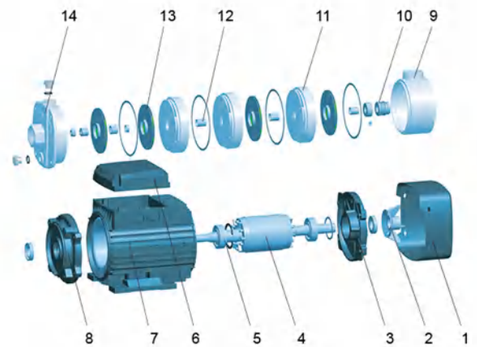
Model	L1	L2	L3	L4	L5	B1	B2	H	H1	A1	A2	A3
ECH(m)15-10	451	233.5	100	130	139.5	165	125	204.5	80	G2	G2	Φ10
ECH(m)15-20	510	222	125	150	139.5	180	140	217.5	90	G2	G2	Φ10
ECH15-30	560	272	125	150	189.5	180	140	247.5	90	G2	G2	Φ10
ECH15-40	616	336.5	140	180	230	205	160	224.5	100	G2	G2	Φ12

Hydraulic Performance Curves



Materials Table

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



Package Information

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

ECH

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℃
- Altitude: up to 1000 m
- Max. suction: 8 m
- Max. inlet pressure: limited by max. operating pressure
- Max.operation 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℃

Identification Codes

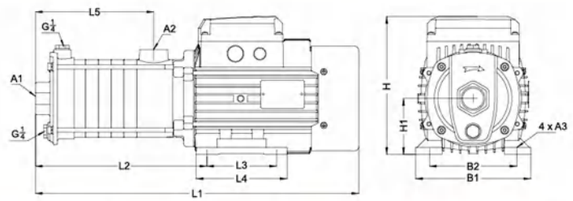
ECH (m) 20 - 20

- Impeller Stage x10
- Rated Flow (m^3/h)
- Single Phase (Three-phase without m)
- Stainless Steel Horizontal Multistage Pump

Technical Data

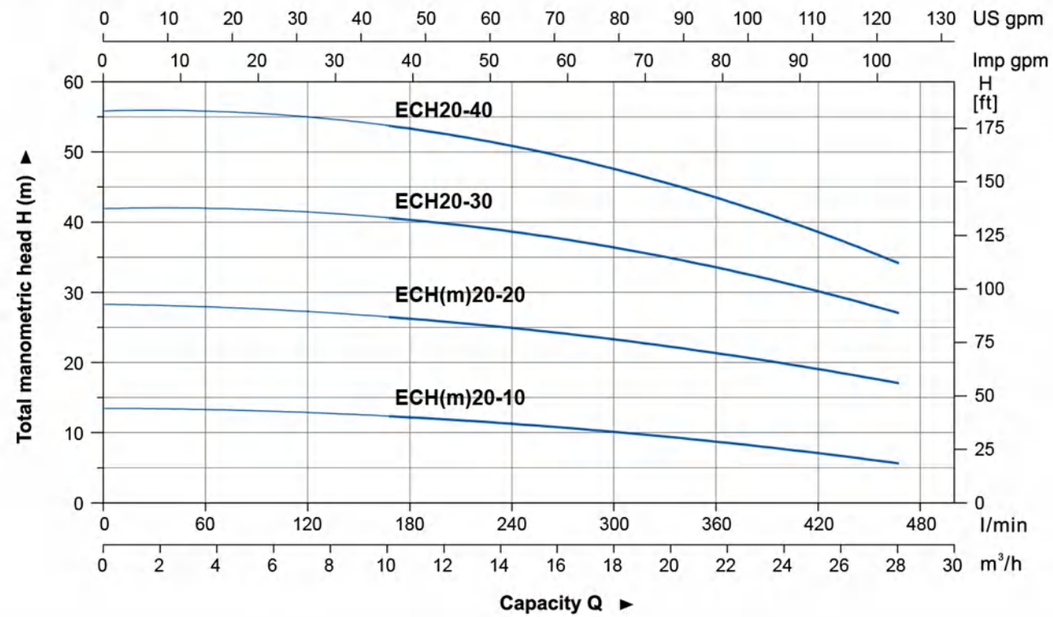
Model	Power		Q (m^3/h)	12	16	20	24	28
	kW	HP	Q (l/min)	200	267	333	400	467
ECH(m)20-10	1.1	1.5	H (m)	12.1	10.8	9.5	7.8	5.7
ECH(m)20-20	2.2	3		26.1	24.4	22.4	19.8	17.2
ECH20-30	4.0	5.5		39.9	38.0	35.5	31.4	26.9
ECH20-40				52.7	50.1	45.9	40.3	34.0

Dimension



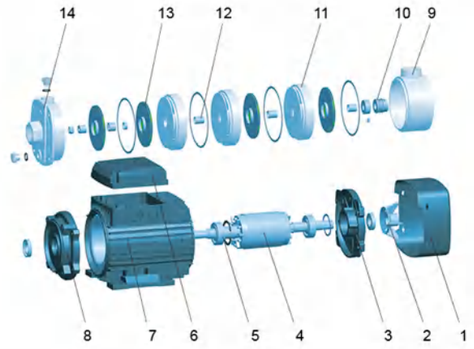
Model	L1	L2	L3	L4	L5	B1	B2	H	H1	A1	A2	A3
ECH(m)20-10	451	233.5	100	130	139.5	165	125	204.5	80	G2	G2	Φ10
ECH(m)20-20	510	222	125	150	139.5	180	140	217.5	90	G2	G2	Φ10
ECH20-30	570.5	291	140	180	184.5	205	160	224.5	100	G2	G2	Φ12
ECH20-40	616	336.5	140	180	230	205	160	224.5	100	G2	G2	Φ12

Hydraulic Performance Curves



Materials Table

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



Package Information

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

ECH

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 system, etc.

Pump

- AISI 304 shaft
- Max. liquid temperature: +40℃
- Altitude: up to 1000 m
- Max. suction: 8 m
- Max. inlet pressure: limited by max. operating pressure
- Max.operation pressure: 8 bar
- Liquid PH value: 6.5 - 8.5

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℃

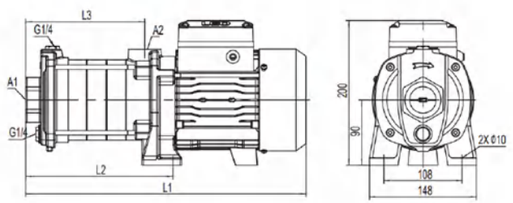
Identification Codes

ECH (m) 2 - 30 - D

- D — Cold Water Type
- 30 — Impeller Stage ×10
- 2 — Rated Flow (m³/h)
- (m) — Single Phase(Three-phase without m)
- ECH — Stainless Steel Horizontal Multistage Pump

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

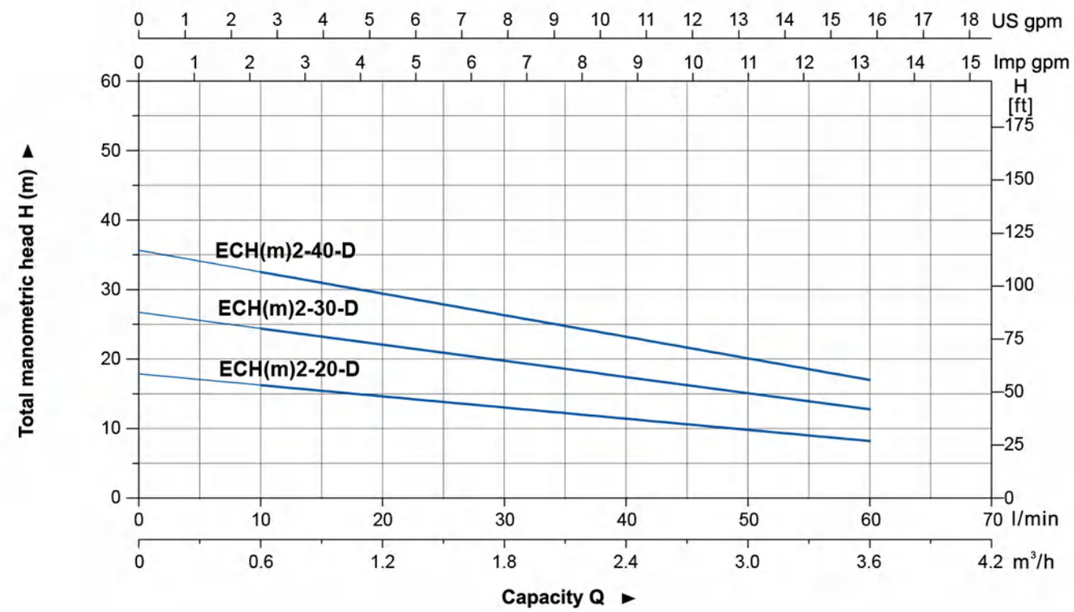


Dimension

Model	L1	L2	L3	A1	A2
ECH(m)2-20-D	324	140	101	G1	G1
ECH(m)2-30-D	342	158	119	G1	G1
ECH(m)2-40-D	360	176	137	G1	G1

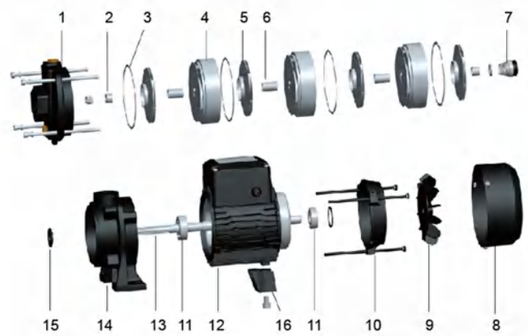
AQUASTRONG
Stainless Steel Horizontal Multistage Pumps

Hydraulic Performance Curves



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



Package Information

Model	NW (kg)		GW (kg)		L (mm)	W (mm)	H (mm)	Quantity (PCS/20'TEU)
	Three phase	Single phase	Three phase	Single phase				
ECH(m)2-20-D	9.6	10	10.3	10.7	375	185	237	1674
ECH(m)2-30-D	10	10.3	10.7	11	375	185	237	1674
ECH(m)2-40-D	11.6	11.8	12.4	12.6	420	185	237	1508

ECH

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 system, etc.

Pump

- AISI 304 shaft
- Max. liquid temperature: +40℃
- Altitude: up to 1000 m
- Max. suction: 8 m
- Max. inlet pressure: limited by max. operating pressure
- Max.operation pressure: 8 bar
- Liquid PH value: 6.5 - 8.5

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℃

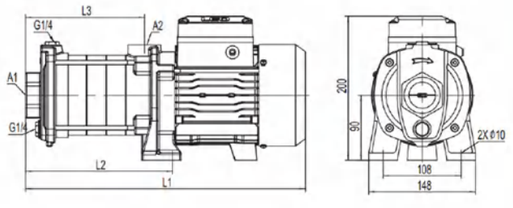
Identification Codes

ECH (m) 4-30 - D

- D — Cold Water Type
- 30 — Impeller Stage ×10
- 4 — Rated Flow (m^3/h)
- (m) — Single Phase(Three-phase without m)
- ECH — Stainless Steel Horizontal Multistage Pump

Technical Data

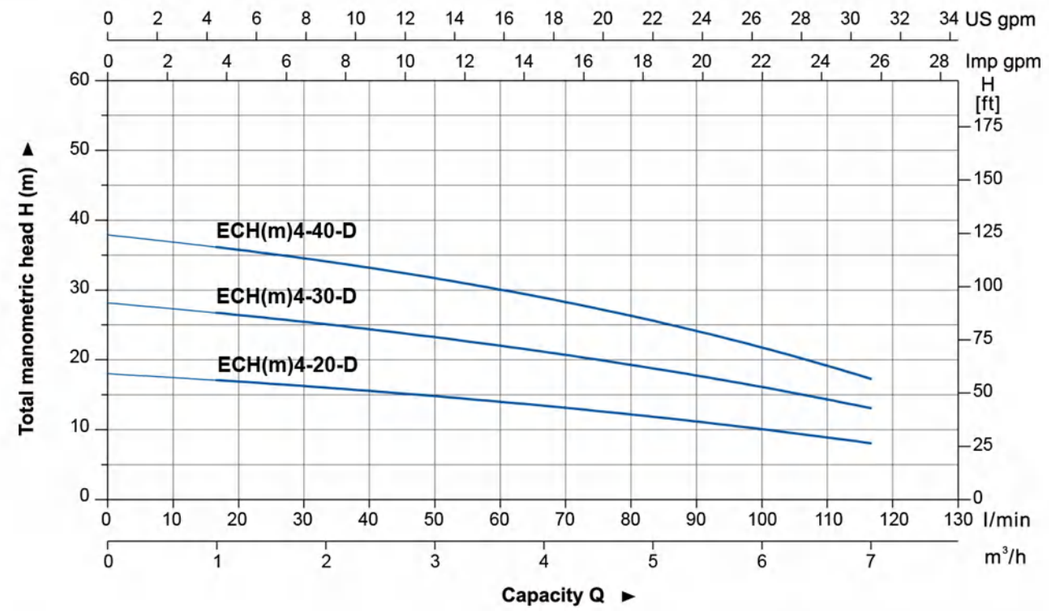
Model	Power		Q (m^3/h)	1	2	3	4	5	6	7
	kW	HP	Q (l/min)	17	33	50	67	83	100	117
ECH(m)4-20-D	0.55	0.75	H (m)	17	16	15	13	12	10	8
ECH(m)4-30-D	0.55	0.75		27	25	23	21	19	16	13
ECH(m)4-40-D	0.75	1.0		36	34	32	28	26	22	17



Dimension

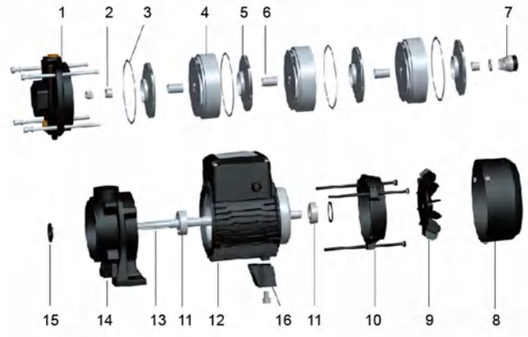
Model	L1	L2	L3	A1	A2
ECH(m)4-20-D	334	150	111	$G1\frac{1}{4}$	G1
ECH(m)4-30-D	361	177	138	$G1\frac{1}{4}$	G1
ECH(m)4-40-D	388	204	165	$G1\frac{1}{4}$	G1

Hydraulic Performance Curves



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



Package Information

Model	NW (kg)		GW (kg)		L (mm)	W (mm)	H (mm)	Quantity (PCS/20'TEU)
	Three phase	Single phase	Three phase	Single phase				
ECH(m)4-20-D	11	11.3	11.7	12	375	185	237	1583
ECH(m)4-30-D	11.6	11.8	12.4	12.6	420	185	237	1508
ECH(m)4-40-D	12.8	13	13.8	14	420	185	237	1357

EDH

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 shaft
- Max liquid temperature: +85℃
- Altitude: up to 1000 m
- Max. suction: 8 m
- Max. inlet pressure: limited by max. operating pressure
- Max operation 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℃

Identification Codes

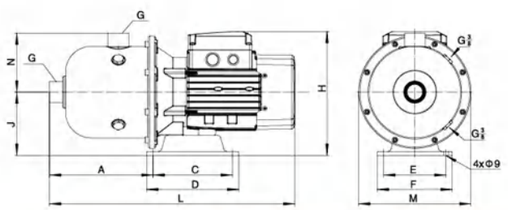
EDH(m) 2-30

- Impeller Stage x 10
- Rated Flow (m^3/h)
- Single phase (Three-phase model without m)
- Stainless Steel Horizontal Multistage Pump

Technical Data

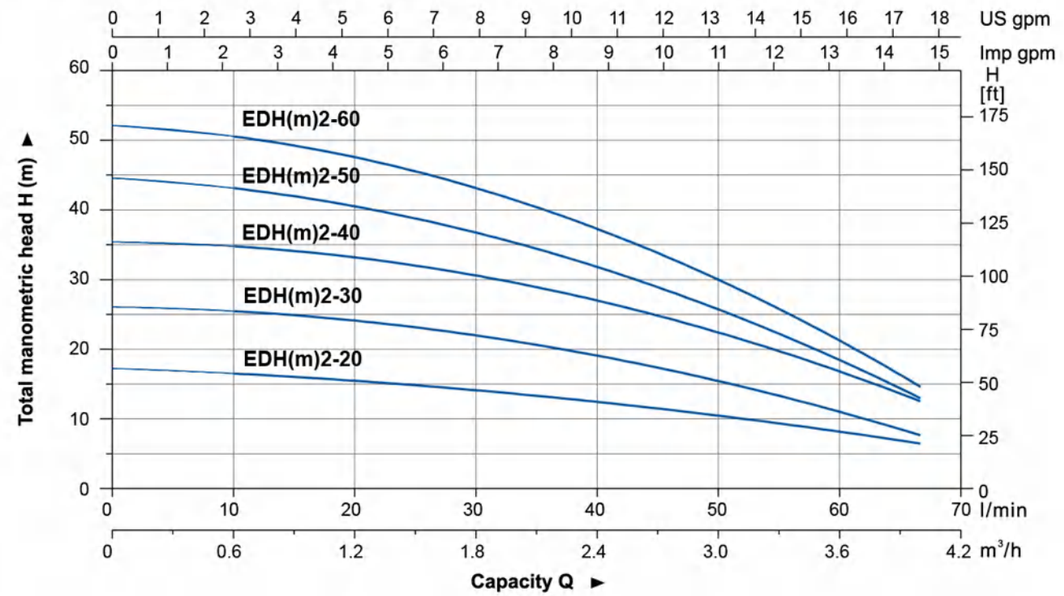
Model	Power (P2)		Q (m^3/h)	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0
	kW	HP	Q (l/min)	8.3	16.7	25	33.3	41.7	50	58.3	66.7
EDH(m)2-20	0.37	0.5	H (m)	16.7	16.2	15	14	11	10.6	8.8	6.5
EDH(m)2-30	0.37	0.5		25.8	24.3	23.8	21.3	17	16.1	12.5	7.2
EDH(m)2-40	0.55	0.75		34.8	34.1	33.2	30.7	23	22.9	18.4	12.6
EDH(m)2-50	0.55	0.75		43.5	42.1	39.5	35.9	29	25.7	19.6	13.5
EDH(m)2-60	0.75	1.0		50.8	49.2	45.6	41.5	35	30.4	23.4	14.3

Dimension



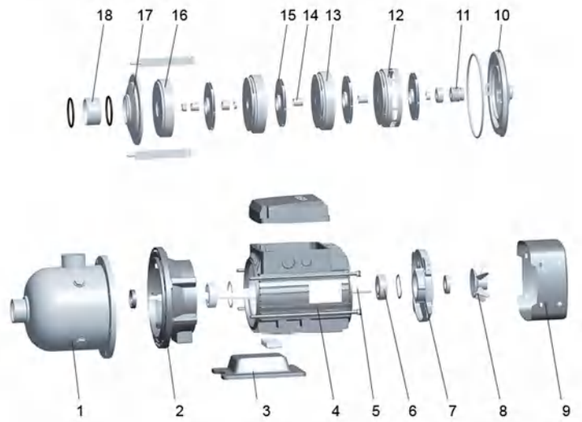
Model	L	A	C	D	E	F	G	H	J	M	N
EDH(m)2-20	427	180	138	160	108	130	G1	216	110	Φ195	103
EDH(m)2-30	427	180	138	160	108	130	G1	216	110	Φ195	103
EDH(m)2-40	427	180	138	160	108	130	G1	216	110	Φ195	103
EDH(m)2-50	427	180	138	160	108	130	G1	216	110	Φ195	103
EDH(m)2-60	427	180	138	160	108	130	G1	216	110	Φ195	103

Hydraulic Performance Curves



Materials Table

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



Package Information

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

EDH

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 shaft
- Max liquid temperature: +85℃
- Altitude: up to 1000 m
- Max. suction: 8 m
- Max. inlet pressure: limited by max. operating pressure
- Max operation 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℃

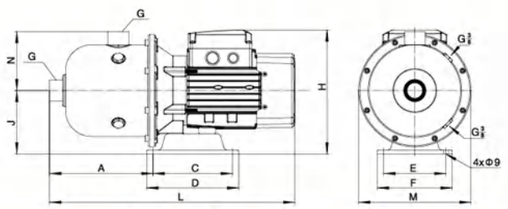
Identification Codes

EDH(m) 4-30
- Impeller Stage x 10
- Rated Flow (m^3/h)
- Single phase (Three-phase model without m)
- Stainless Steel Horizontal Multistage Pump

Technical Data

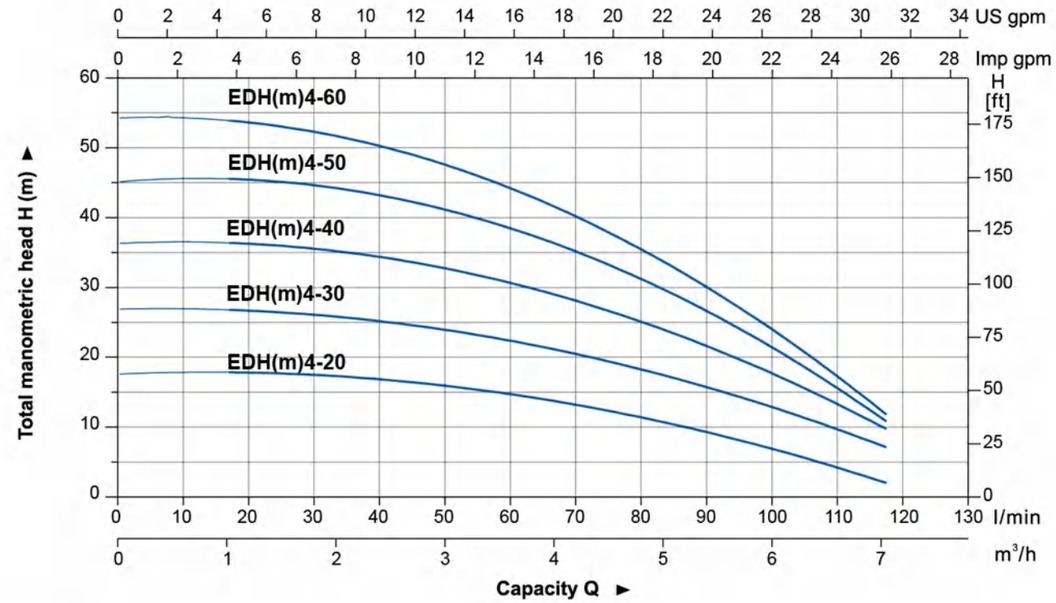
Model	Power (P2)		Q (m^3/h)	1.0	2.0	3.0	4.0	4.5	5.0	6.0	7.0
	kW	HP	Q (l/min)	17	33	50	67	75	83	100	117
EDH(m)4-20	0.55	0.75	H (m)	17.8	17.2	16.1	14.3	12	11.3	6.3	2.3
EDH(m)4-30	0.55	0.75		26.7	26.4	24.6	22.1	18	16.8	13.5	7.3
EDH(m)4-40	0.7	1.0		36.1	35.2	32.9	29.9	25	24.7	18.6	9.2
EDH(m)4-50	1.1	1.5		45.7	43.6	40.5	37	32	31.8	21.8	10
EDH(m)4-60	1.1	1.5		53.6	52	47	42.5	37	35	23	12

Dimension



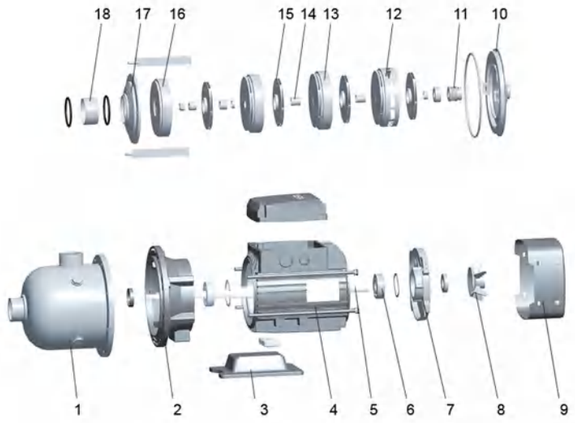
Model	L	A	C	D	E	F	G	H	J	M	N
EDH(m)4-20	427	180	138	160	108	130	G1¼	216	110	Φ195	103
EDH(m)4-30	427	180	138	160	108	130	G1¼	216	110	Φ195	103
EDH(m)4-40	427	180	138	160	108	130	G1¼	216	110	Φ195	103
EDH(m)4-50	480	180	138	160	108	130	G1¼	245	120	Φ195	103
EDH(m)4-60	480	180	138	160	108	130	G1¼	245	120	Φ195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

Hydraulic Performance Curves



Materials Table

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



Package Information

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

EDH

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 shaft
- Max liquid temperature: +85℃
- Altitude: up to 1000 m
- Max. suction: 8 m
- Max. inlet pressure: limited by max. operating pressure
- Max operation 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℃

Identification Codes

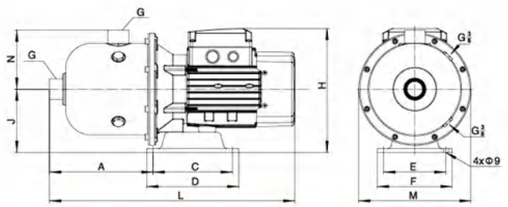
EDH(m)10-30

- EDH — Stainless Steel Horizontal Multistage Pump
- (m) — Single phase (Three-phase model without m)
- 10 — Rated Flow (m^3/h)
- 30 — Impeller Stage x 10

Technical Data

Model	Power		Q (m^3/h)	6	7	8	9	10	11	12	13	14
	kW	HP	Q (l/min)	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				17.9	17.1	16.3	15.3	13.9	12.4	10.7	8.4	6.2
EDH(m)10-30	1.1	1.5		27.5	26.5	25.2	23.6	21.7	19.3	17	14	10
EDH(m)10-40	1.5	2.0		38.7	37.2	35.9	33.9	31.6	28.7	24.9	19.7	15.9
EDH(m)10-50	2.2	3.0		47.2	45.4	43.6	41	38.2	34.2	30	24.5	18

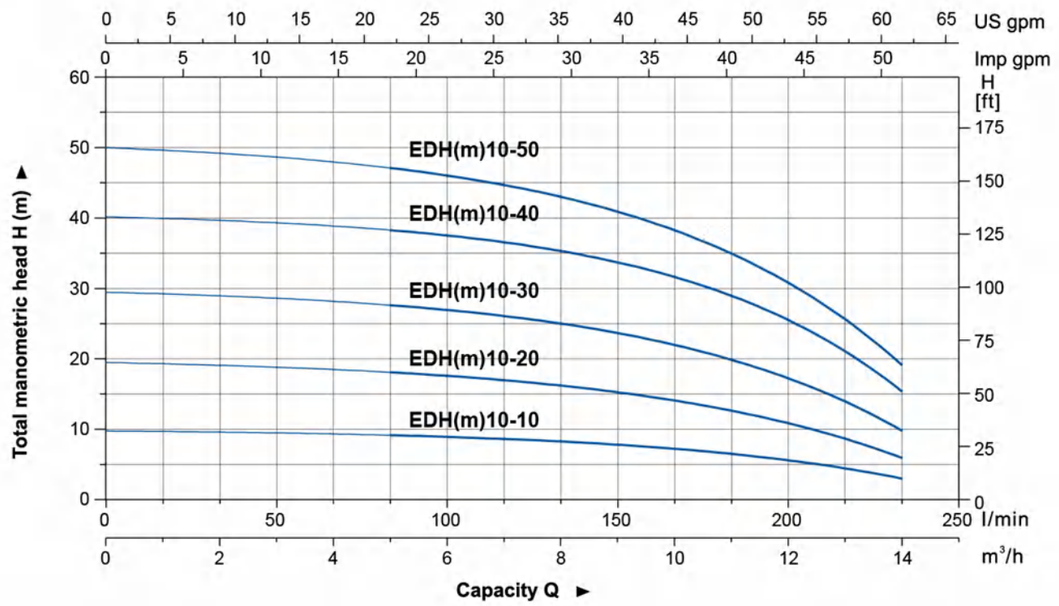
Dimension



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

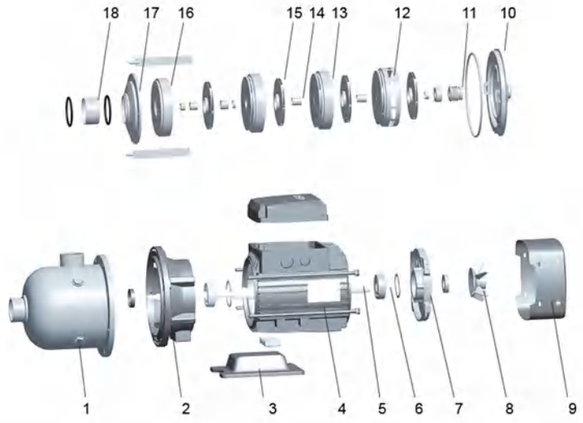
AQUASTRONG
Stainless Steel Horizontal Multistage Pumps

Hydraulic Performance Curves



Materials Table

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



Package Information

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

EDH

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 shaft
- Max liquid temperature: +85℃
- Altitude: up to 1000 m
- Max. suction: 8 m
- Max. inlet pressure: limited by max. operating pressure
- Max operation 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℃

Identification Codes

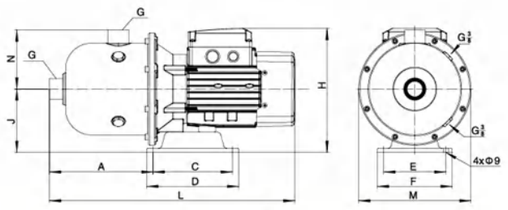
EDH(m) 15 - 20

- Impeller Stage x 10
- Rated Flow (m^3/h)
- Single phase (Three-phase model without m)
- Stainless Steel Horizontal Multistage Pump

Technical Data

Model	Power		Q (m^3/h)	9	11	13	15	17	19	22	25	28
	kW	HP	Q (l/min)	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

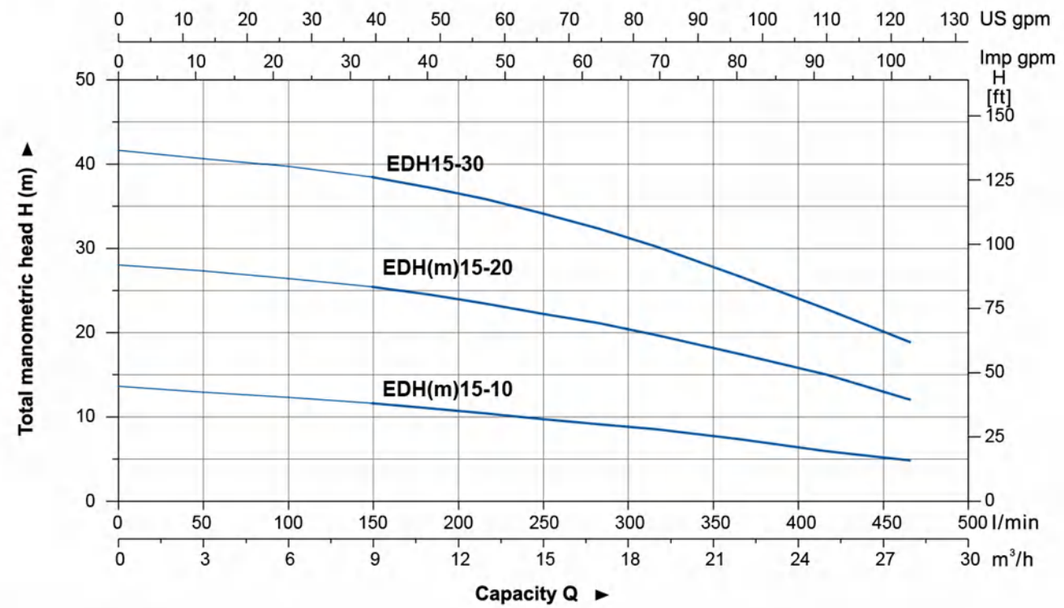
Dimension



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

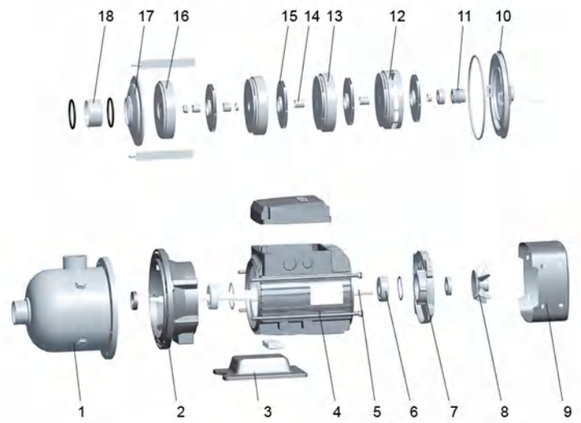
AQUASTRONG
Stainless Steel Horizontal Multistage Pumps

Hydraulic Performance Curves



Materials Table

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



Package Information

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

EDH

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 shaft
- Max liquid temperature: +85℃
- Altitude: up to 1000 m
- Max. suction: 8 m
- Max. inlet pressure: limited by max. operating pressure
- Max operation pressure: 10 bar
- Liquid PH value: 4- 10

Motor

- IE2 Motor (IE3 motor available on request, EDH20-30 not included)
- Motor with copper winding
- Built-in thermal protector for single phase motor
- Insulation class: F
- Protection class: IP55
- Max.ambient temperature: +40℃

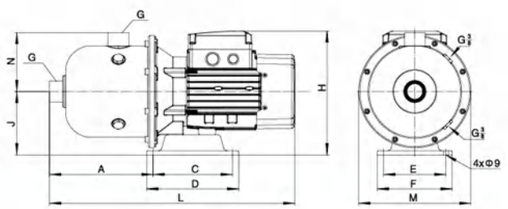
Identification Codes

EDH(m)20-20
- 20 — Impeller Stage x 10
- 20 — Rated Flow (m^3/h)
- (m) — Single phase (Three-phase model without m)
- EDH — Stainless Steel Horizontal Multistage Pump

Technical Data

Model	Power		Q (m^3/h)	9	12	15	18	20	22	25	28	31
	kW	HP	Q (l/min)	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

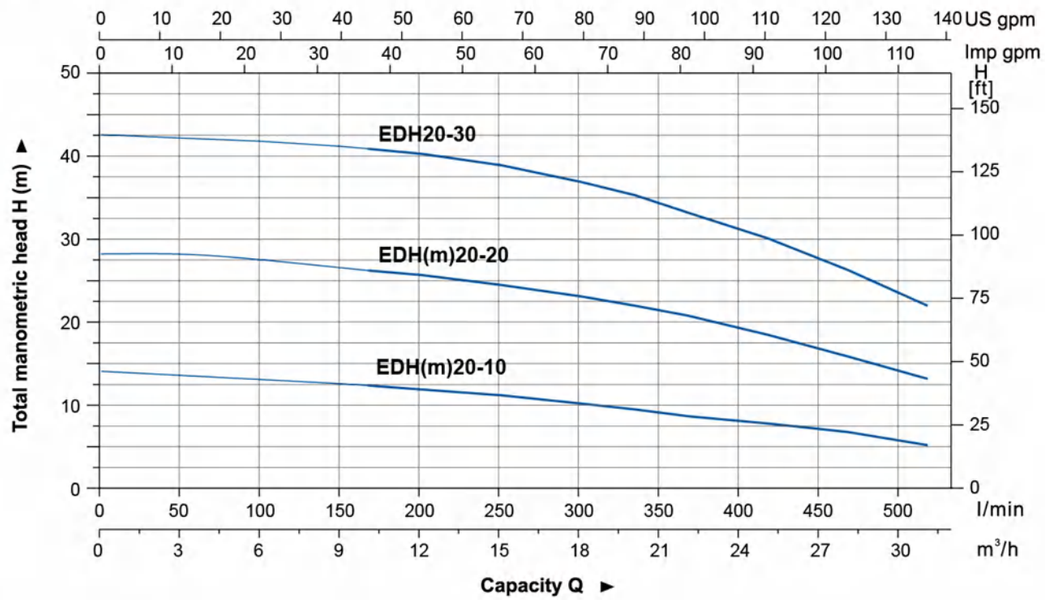
Dimension



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

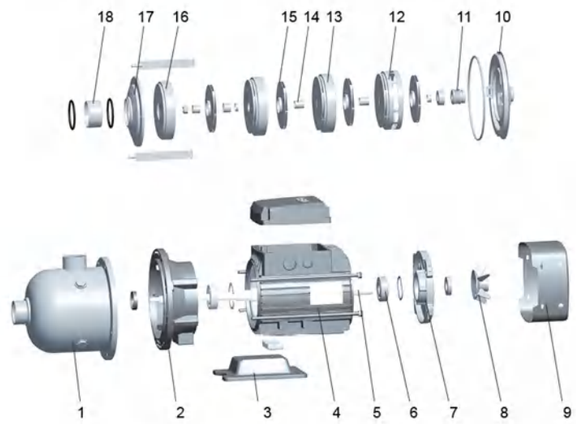
AQUASTRONG
Stainless Steel Horizontal Multistage Pumps

Hydraulic Performance Curves



Materials Table

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



Package Information

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

0.75kw~7.5kw

9.2kw~55kw

EST

Application

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

Operating conditions

- Delivery: up to 220 m^3/h
- Head: up to 95 m
- Liquid temperature:
- Standard: -10℃ to 85℃
- Maximum operating pressure: 12 bar (PN12)
- Anti–clockwise rotation when facing pump's suction port
- Impeller: AISI304/HT200
- Mechanical seal in compliance with DIN 24960
- Lubricated by internal recirculating pumped liquid
- Counter flange available on request

Motor

- Closed construction, external ventilation
- Insulation class: F
- Protection class: IP54
- Performance in compliance with CEI 2-3 (IEC 34.1)
- Max.ambient temperature: +40℃
- Overload protection
- For model that ≥9.2kw: Equiped with IE2 motor, IE3 motor available on request.
  For model that ≤7.5kw, the following 4 models can equiped with IE3 motor.
  (XST40-160/30、XST40-160/40、XST50-160/55、XST50-160/75)

Construction features

- Single–impeller centrifugal pump featuring axial intake and radial discharge
- Inlet and outlet DN in compliance with EN 733 (ex DIN 24255) and UNI 7467
- Flanges in compliance with UNI 2236 and DIN 2532
  Rear entry (impeller, control valve and motor can be extracted without disconnecting the pump body from the pipes)

Identification Codes

EST m 32 – 125 K / 11

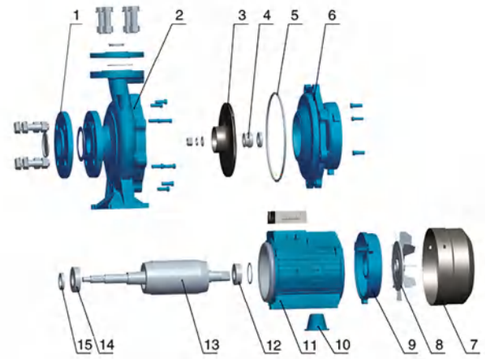
- 11 — Rated Power (1/10 kW)
- K — Extented Model
- 125 — Impeller Nominal Diameter (mm)
- 32 — Outlet Diameter (mm)
- m — Single Phase (m is omitted for three-phase)
- EST — Standard Centrifugal Pump

AQUASTRONG
Standard Centrifugal Pumps

Materials Table

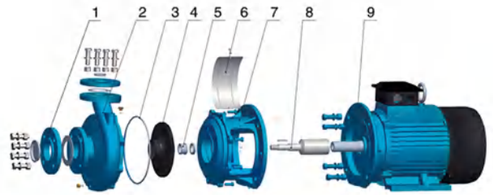
0.75kw~7.5kw

No.	Part	Material
1	Flange	HT200
2	Pump body	HT200
3	Impeller	HT200 / AISI304
4	Mechanical seal	Carbon/Silicon carbide
5	O-ring	NBR
6	Pump support	HT200
7	Fan cover	08F
8	Fan	PP
9	Rear cover	ZL102
10	Support	HT200
11	Stator	
12	Bearing	
13	Rotor	
14	Bearing	
15	Oil seal	



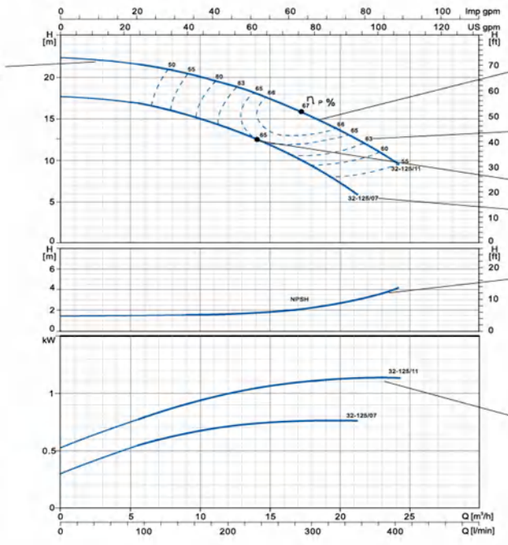
9.2kw~55kw

No.	Part	Material
1	Flange	HT200
2	Pump body	HT200
3	O-ring	NBR
4	Impeller	HT200 / AISI304
5	Mechanical seal	Carbon/Silicon carbide
6	Guarding plate	06Cr19Ni10
7	Pump support	HT200
8	Pump shaft	45/06Cr19Ni10
9	Motor	



How to Read The Curve Charts

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



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

The efficiency value on the pump working condition

The pump working condition

Pump model

The NPSH curve

The output power curve

Guidelines to Performance Curves

Tolerances to ISO 9906, Annex A.
Measurements have been made with airless water at a temperature of 20℃ and kinematic viscosity of 1 mm^2/s.
To avoid overheating of the motor,the pump should not be use against a high head for a long time.

Technical Data

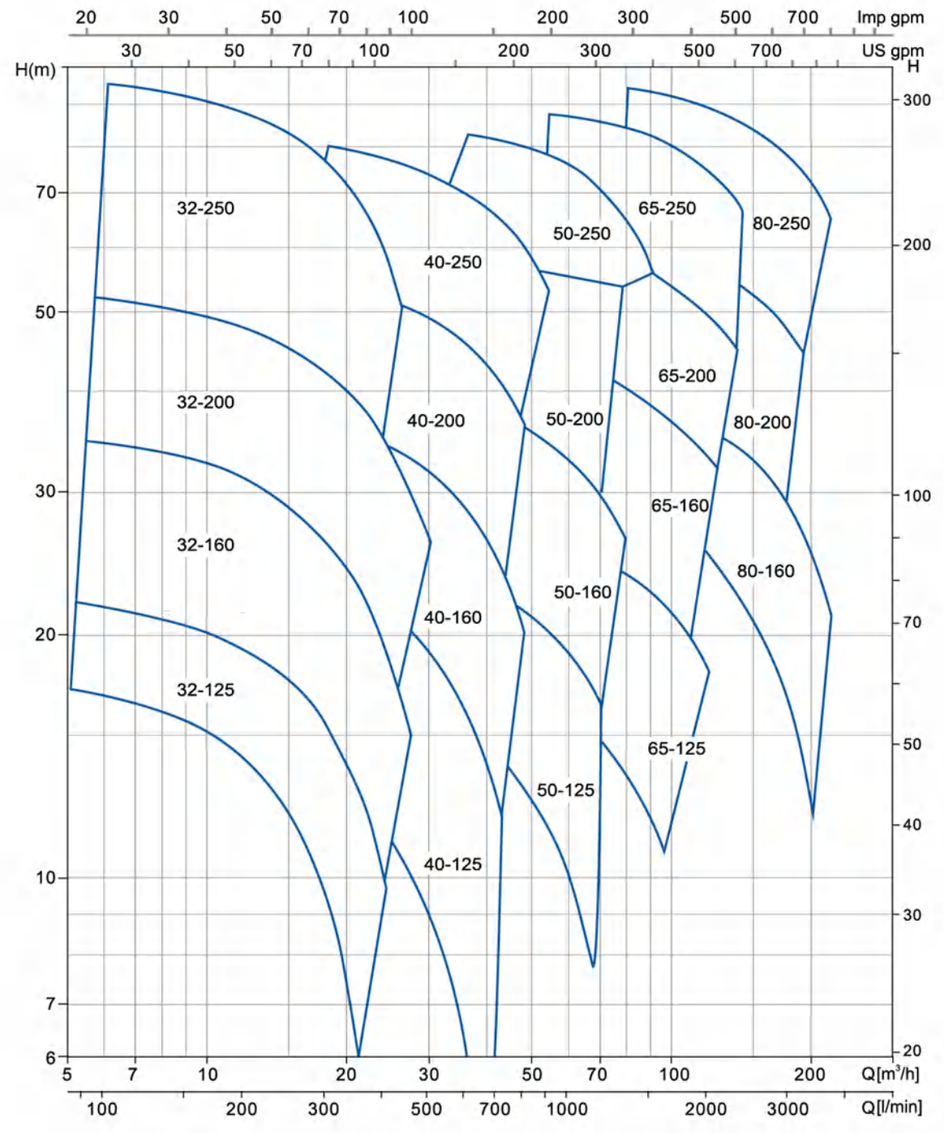
PUMP TYPE	POWER		l/min	Q=DELIVERY																		
	kW	HP	m³/h	0	6	9	15	18	24	27	36	42	48	54	72	84	90	108	120	138	180	210
32-125/7*△	0.75	1		17.5	16.7	15	12	9														
32-125/11*△	1.1	1.5		22	21	20.2	17	15	9													
32-160/15*△	1.5	2		24	23.7	22.5	19.5	16.2														
32-160/22*△	2.2	3		31	29.6	29	25.5	22.5	15													
32-160/30*△	3	4		34.5	33.5	33	29	26.5	20	16.5												
32-200/30*	3	4		43.2	42	40.5	35.2	32.2	24.6	19.8												
32-200/40*	4	5.5		52	50.5	50	45	41.9	35	30.3												
32-250/55**	5.5	7.5		79	74.7	71.8	63	56	37.5													
32-250/75**	7.5	10		95	92	89	82	75	57.8													
40-125/11△	1.1	1.5		14.7				13	11.5	10.1												
40-125/15△	1.5	2		18.1				17	15	13.9												
40-125/22△	2.2	3		24.5				23.2	21.5	20.2	16	12										
40-160/30	3	4		31.8				29	27.5	26.3	21.5	17.5										
40-160/40	4	5.5		38				36	34	33	28.5	25	20.1									
40-200/55*	5.5	7.5		44				42	40	38	32	27										
40-200/75*	7.5	10		55				52	49	48	42	37	32									
40-250/92*	9.2	12.5		64				59	56.5	55	49.5	45	39.8									
40-250/110*	11	15		72				67.5	65	63.5	57.5	52.2	47									
40-250/150*	15	20		82				79	77.3	76.5	71	66	60.5									
50-125/22△	2.2	3		17							15.4	14	12.8	11.5								
50-125/30	3	4		20							18.8	18	17	15.6								
50-125/40	4	5.5		24							23.1	22.6	21.5	20.3	15.8							
50-160/55	5.5	7.5		32							30.6	30	28	26.6	20.5							
50-160/75	7.5	10		40							38	37	36	34.4	29							
50-200/92*	9.2	12.5	H (m)	50.5							46.8	45	43	40.9	32.5							
50-200/110*	11	15		57.5							53.5	52	50	47.5	40							
50-250/150*	15	20		68.5							64	63	61.5	59	50	41						
50-250/185*	18.5	25		77							73.2	72	70	68	60.5	51.5						
50-250/220*	22	30		86.3							83	81.5	80	78	70	61						
65-125/40	4	5.5		19									17.3	16.8	14.5	13	11.8					
65-125/55	5.5	7.5		23									21.3	20.9	19	17.5	16.7	13.7				
65-125/75	7.5	10		27									26	25.6	24.5	23	22.5	20	18			
65-160/92	9.2	12.5		33										31.5	30	28	27.1	24	21.5			
65-160/110	11	15		36										34.5	33	31.5	30.8	28	25.5			
65-160/150	15	20		42										41	40	38.5	37.8	35	33			
65-200/150	15	20		45.5										46	43.5	41	39.2	33				
65-200/185	18.5	25		53										53.5	51.2	48.3	47	41.5				
65-200/220	22	30		59										59.5	57.2	54	53	47	43.5			
65-200K/185	18.5	25		41.2											42	41.2	40.6	38.2	36.5	34		
65-200K/220	22	30		48												48	47.5	46	44	41		
65-200K/300	30	40		59.5												59	58.5	58	56.2	54		
65-250/220	22	30		62										61.5	58.2	56.5	54	49	45			
65-250/300	30	40		76										75	73	70	69	64	61	54		
65-250/370	37	50		90										88	86	84	82	78	74	68		
80-160/110	11	15		27													27.3	26	24.5	22.5	16	
80-160/150	15	20		32.8													32.5	31.3	30.2	28	22.1	16.7
80-160/185	18.5	25		39													38	36.8	35.7	33.8	28.8	23.5
80-200/220	22	30		48													47.5	46	43.5	41	32.5	
80-200/300	30	40		60													59.5	58	57	54.5	47	
80-250/370	37	50		71.5													70.5	67.5	65.5	61.5	49.5	38
80-250/450	45	60		82													80.5	78.5	76.5	72	62	51
80-250/550	55	75		95													93.5	91.2	89.8	86.8	77.6	68.3

* =AISI304 impeller ** =Double AISI304 impeller
Models marked with " △ " have both single phase and three phase type, other models only have three phase type

AQUASTRONG
Standard Centrifugal Pumps

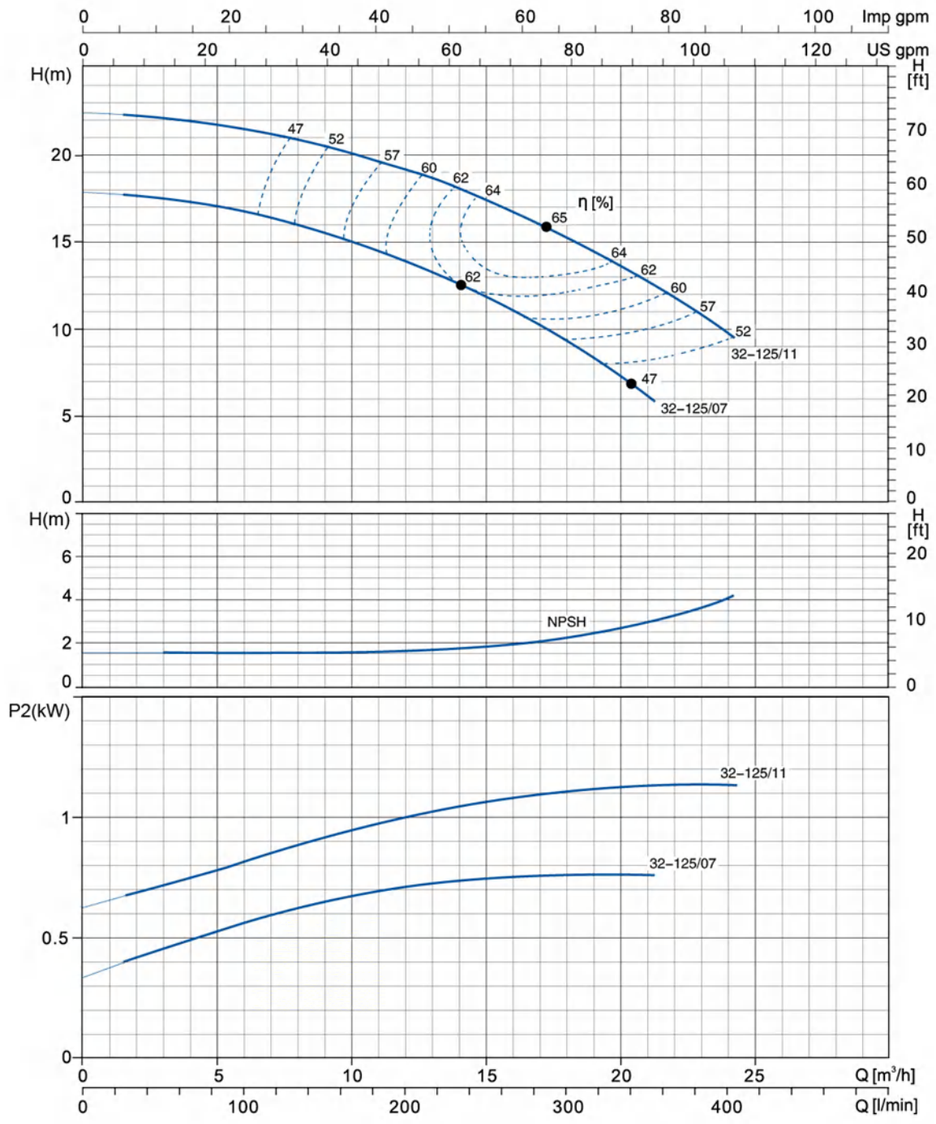
Characteristic Curves

EST	~2900 rpm	ISO 9906 Annex A



Hydraulic Performance Curves

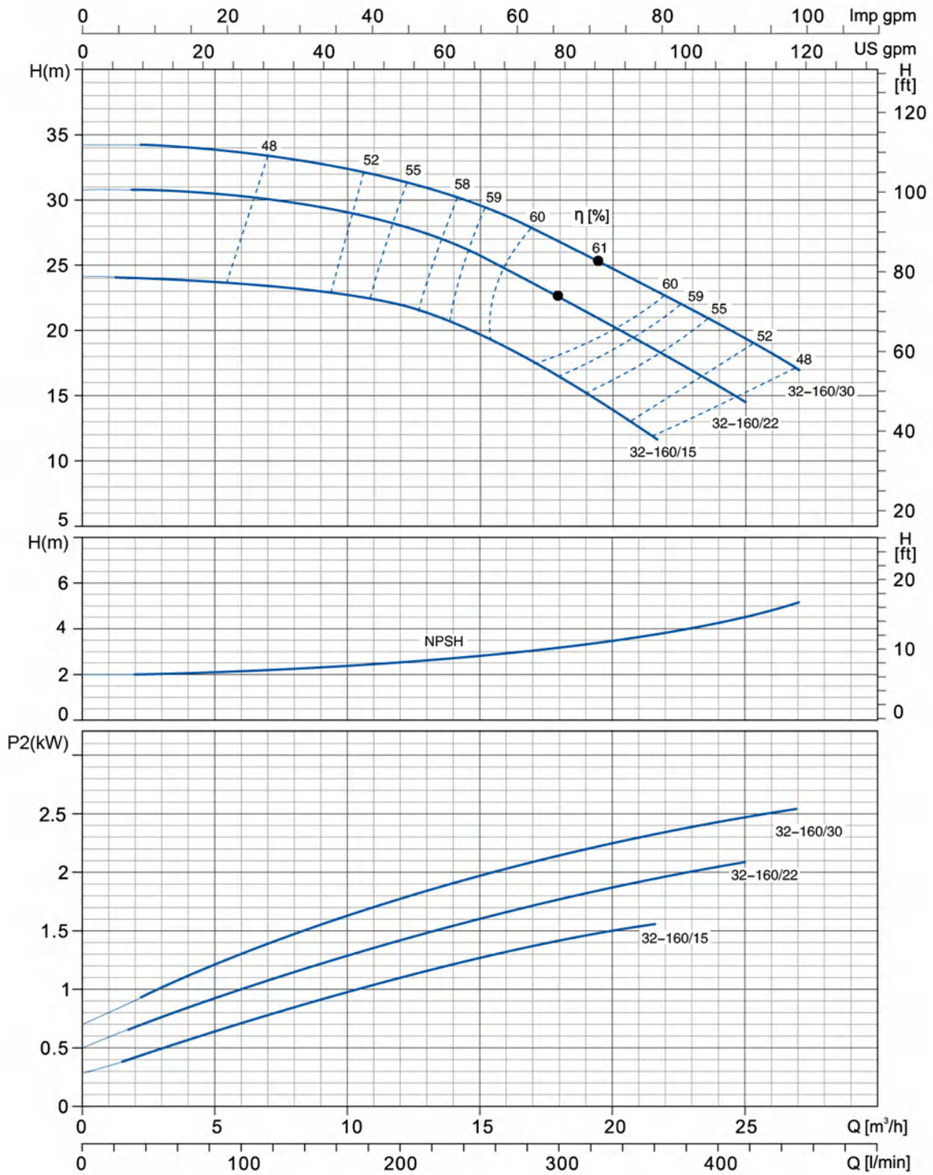
EST 32-125	~2900 rpm	ISO 9906 Annex A



AQUASTRONG
Standard Centrifugal Pumps

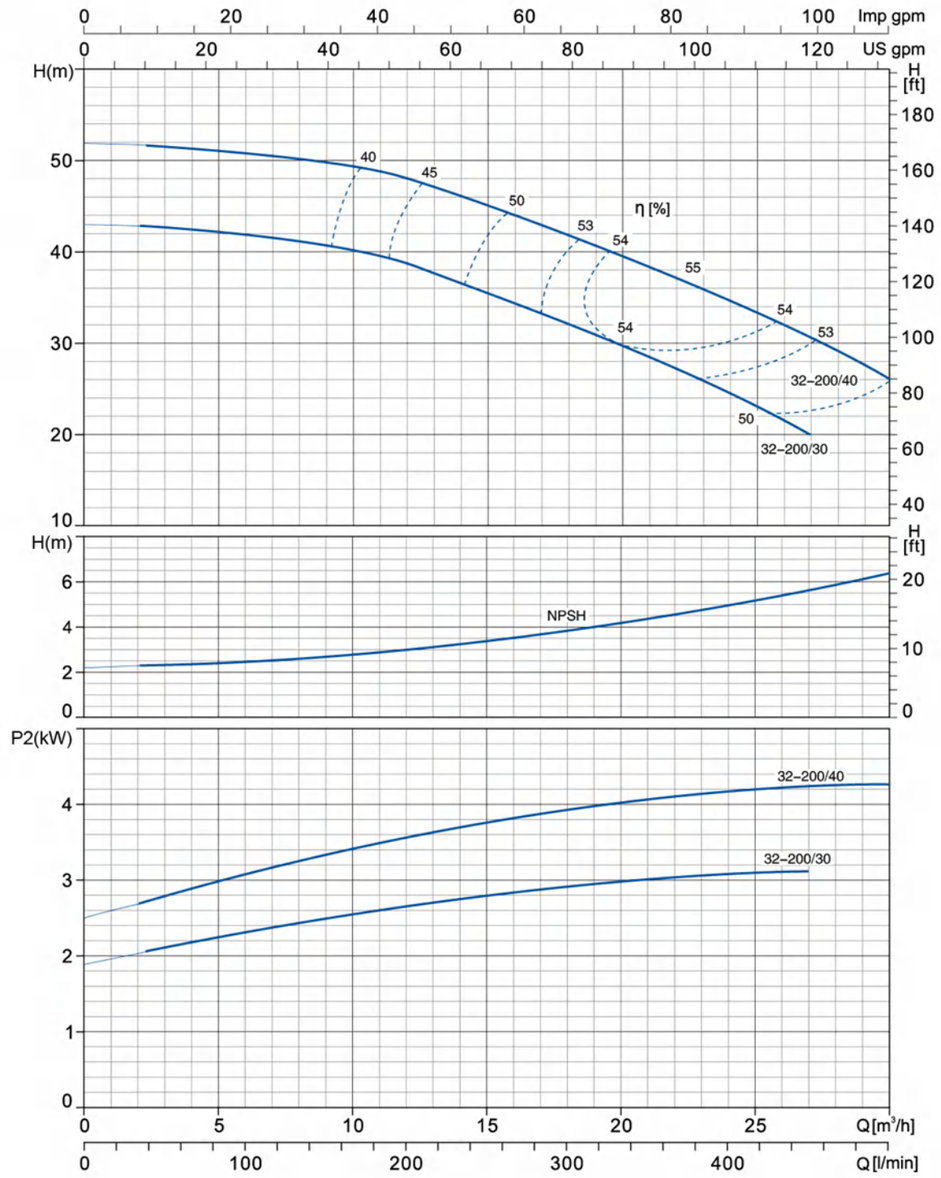
Hydraulic Performance Curves

EST 32-160	~2900 rpm	ISO 9906 Annex A



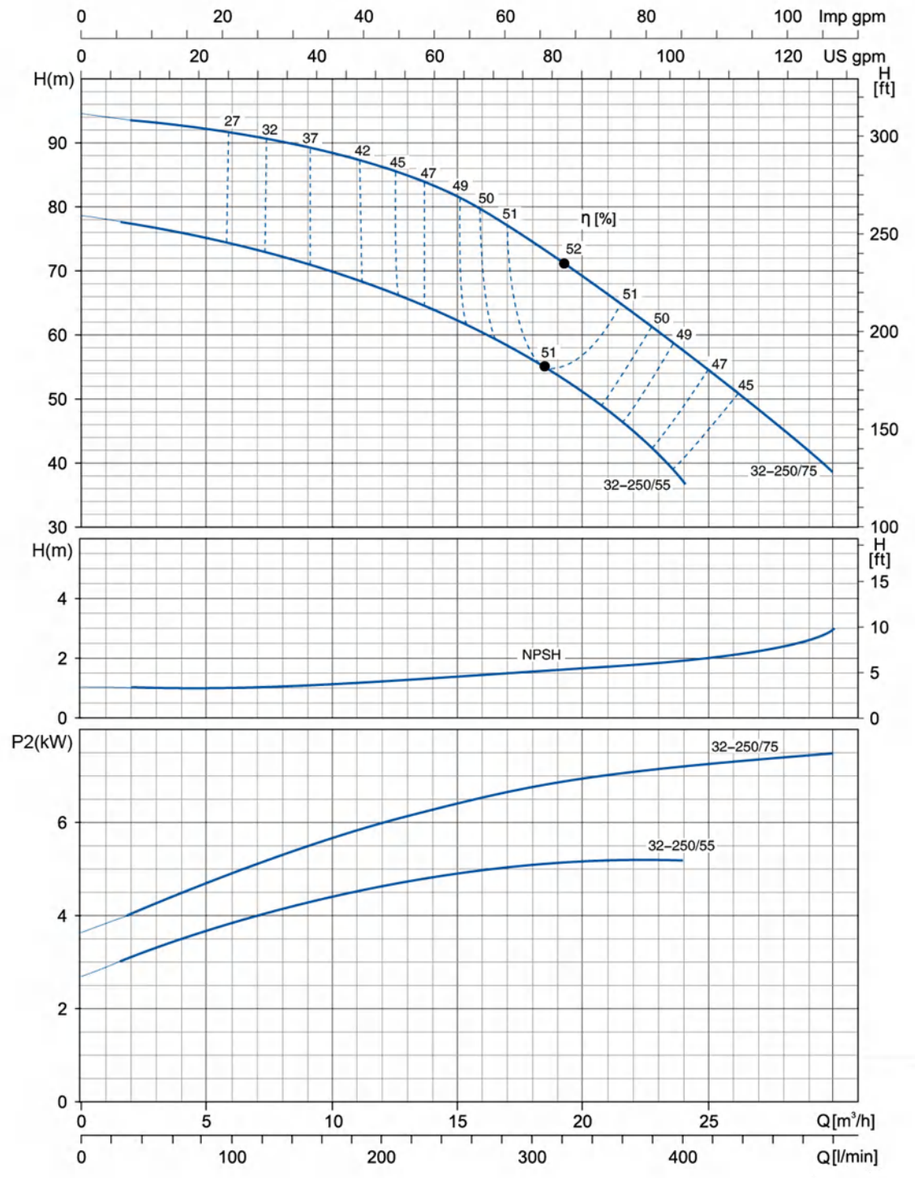
Hydraulic Performance Curves

EST 32-200	~2900 rpm	ISO 9906 Annex A



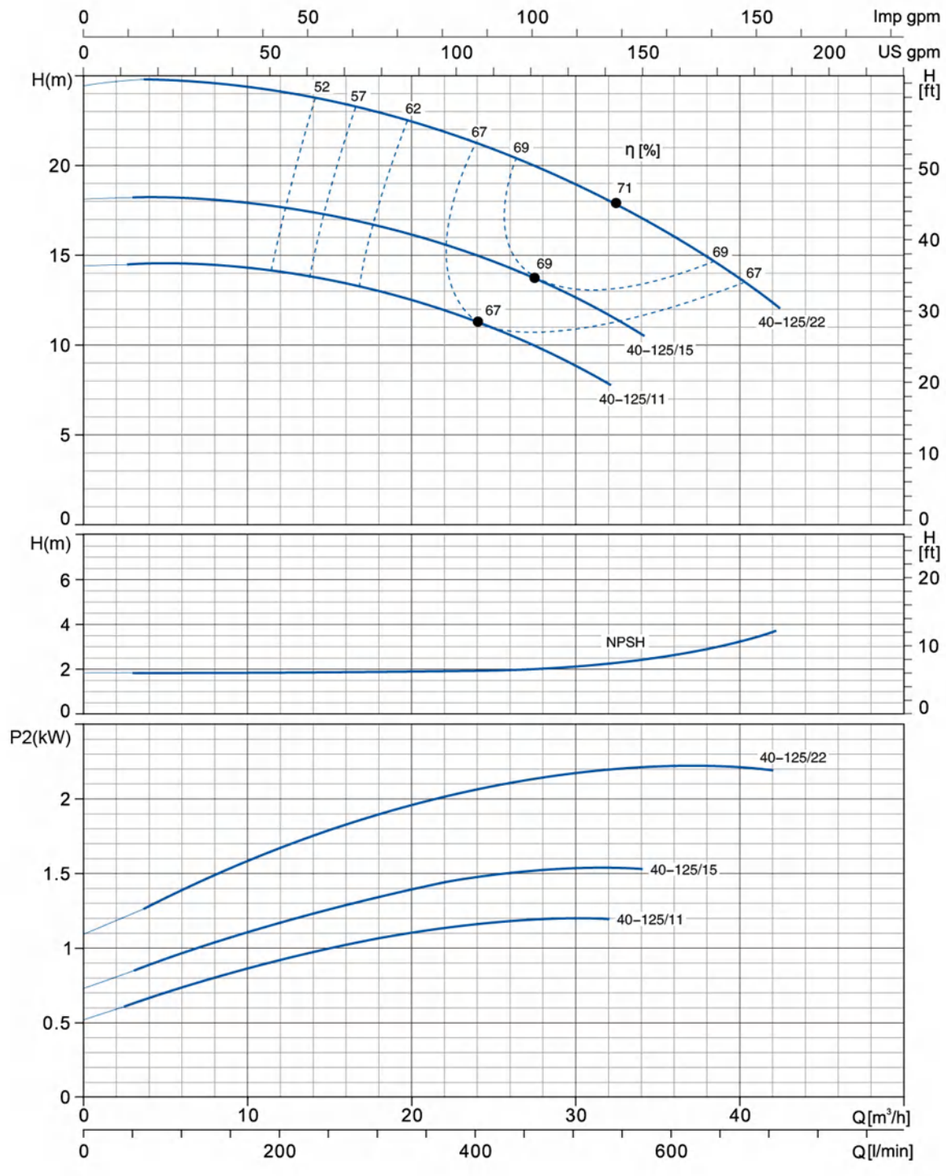
Hydraulic Performance Curves

EST 32-250	~2900 rpm	ISO 9906 Annex A



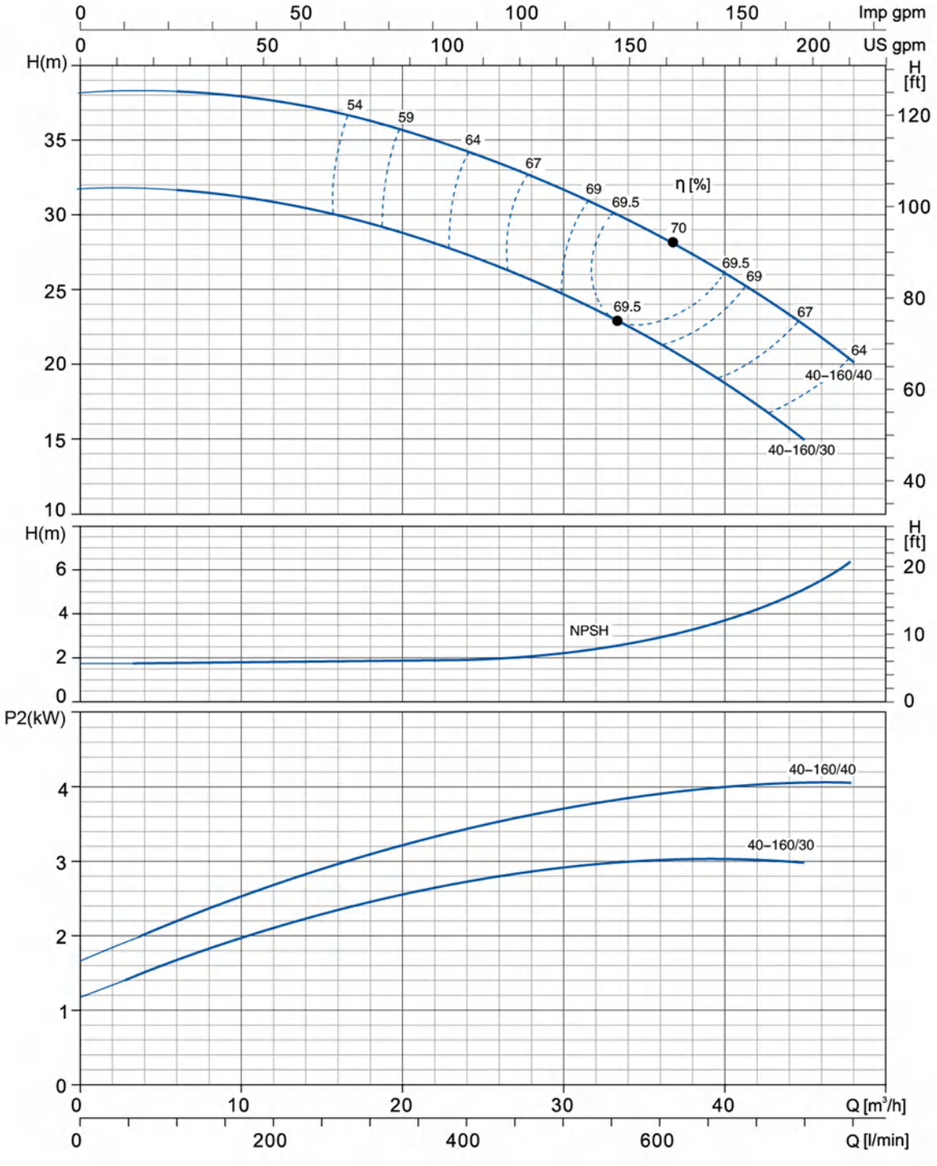
Hydraulic Performance Curves

EST 40-125	~2900 rpm	ISO 9906 Annex A



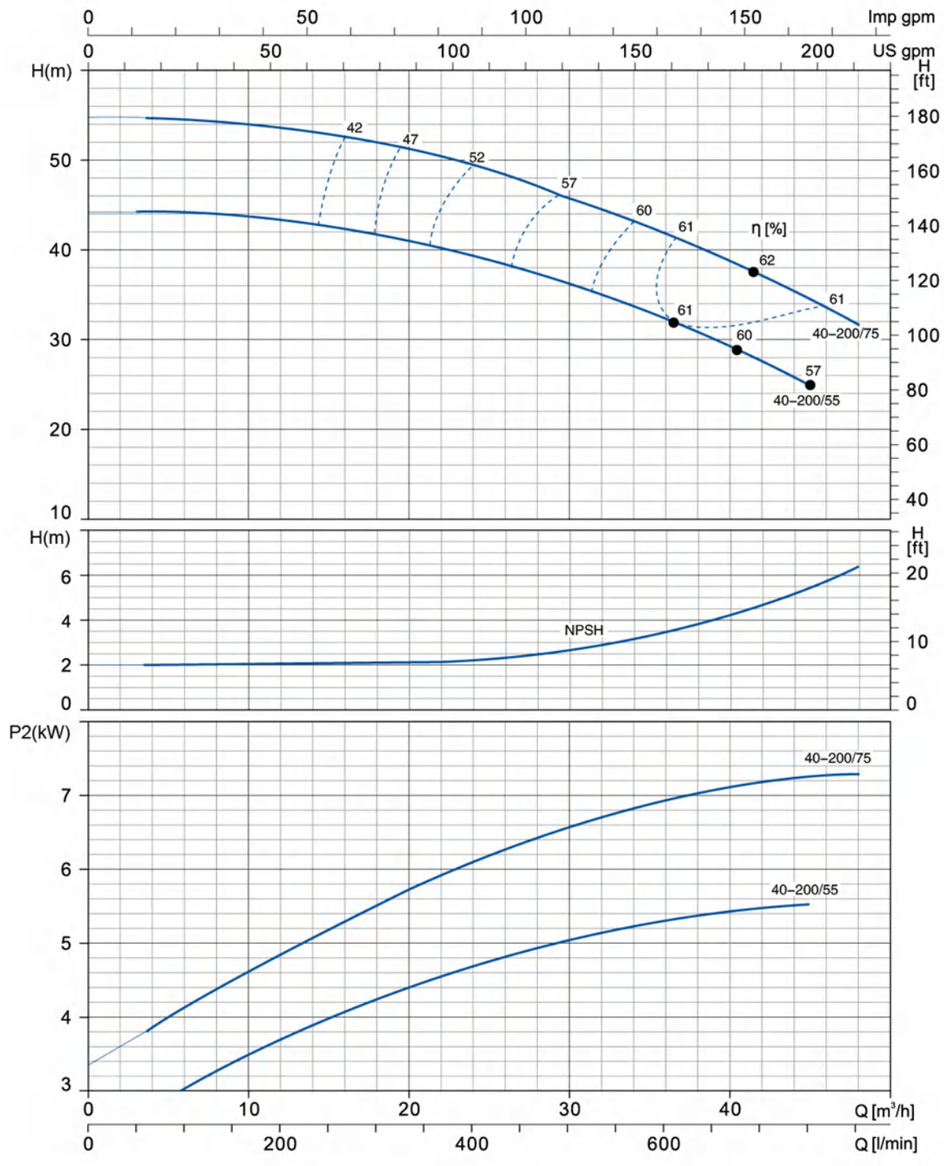
Hydraulic Performance Curves

EST 40-160	~2900 rpm	ISO 9906 Annex A



Hydraulic Performance Curves

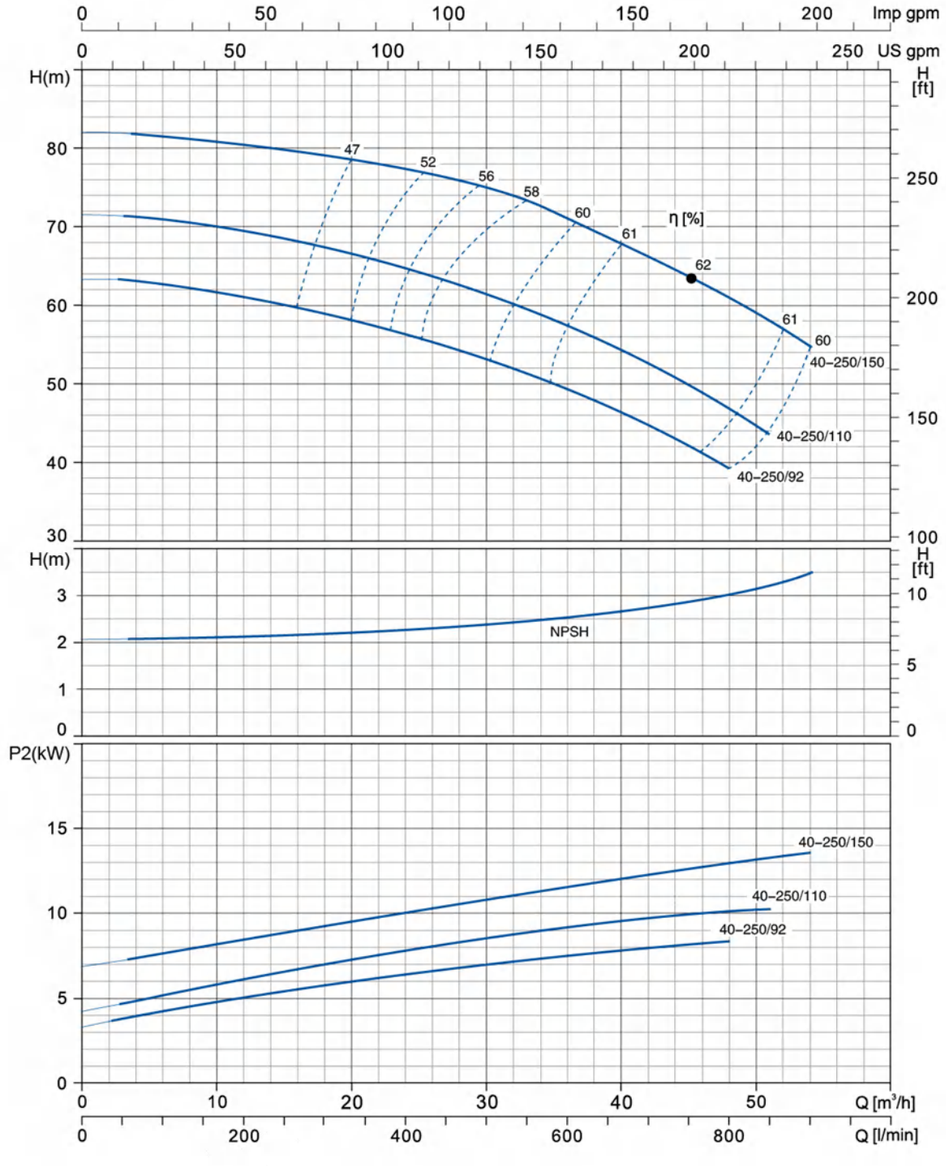
EST 40-200	~2900 rpm	ISO 9906 Annex A



AQUASTRONG
Standard Centrifugal Pumps

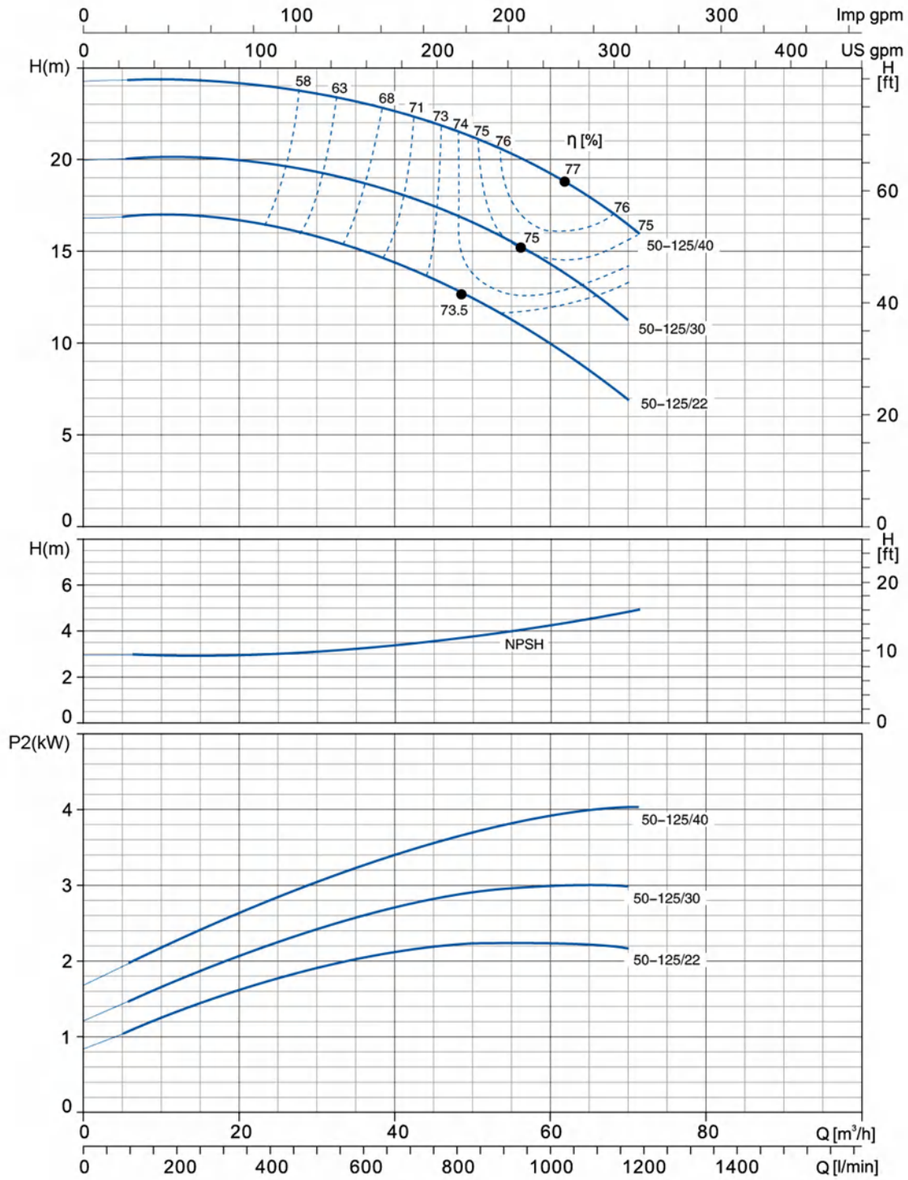
Hydraulic Performance Curves

EST 40-250	~2900 rpm	ISO 9906 Annex A



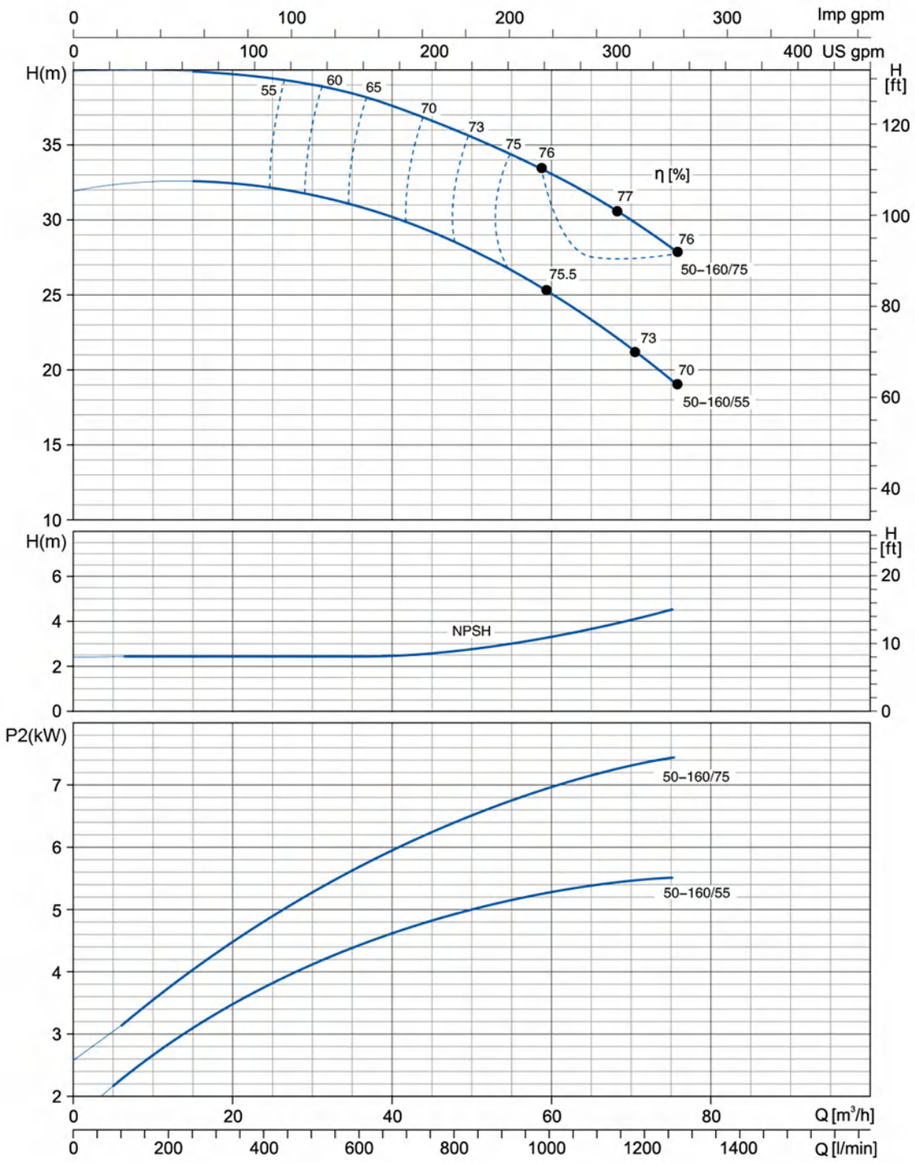
Hydraulic Performance Curves

EST 50-125	~2900 rpm	ISO 9906 Annex A



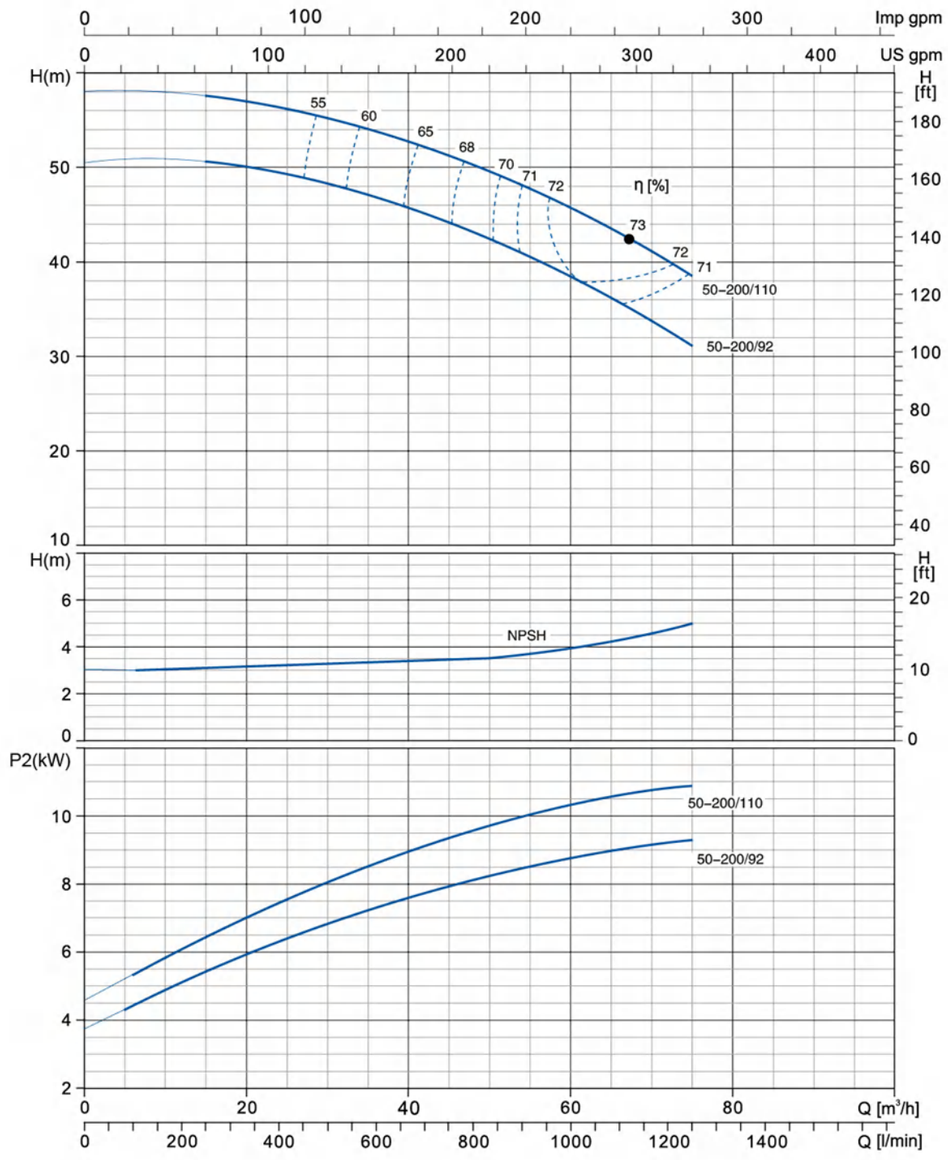
Hydraulic Performance Curves

EST 50-160	~2900 rpm	ISO 9906 Annex A



Hydraulic Performance Curves

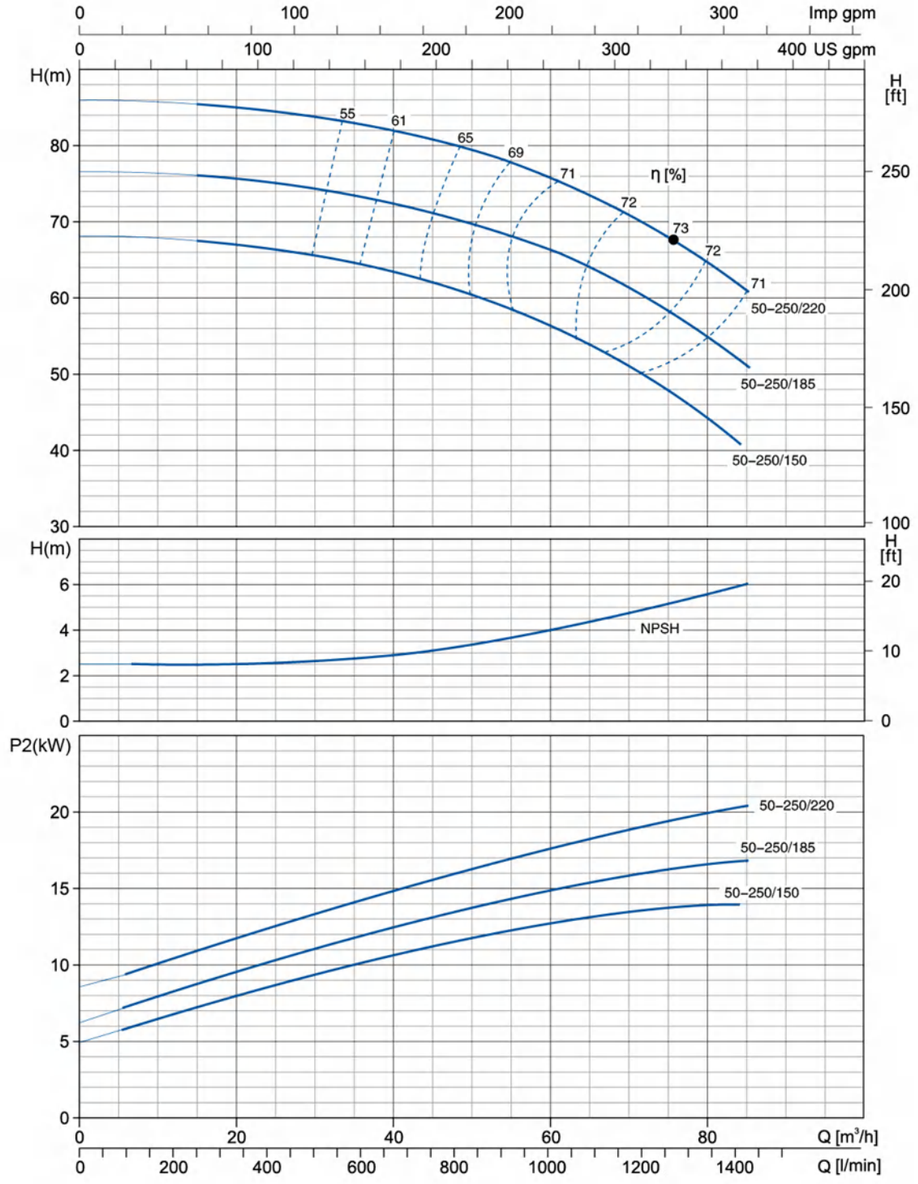
EST 50-200	~2900 rpm	ISO 9906 Annex A



AQUASTRONG
Standard Centrifugal Pumps

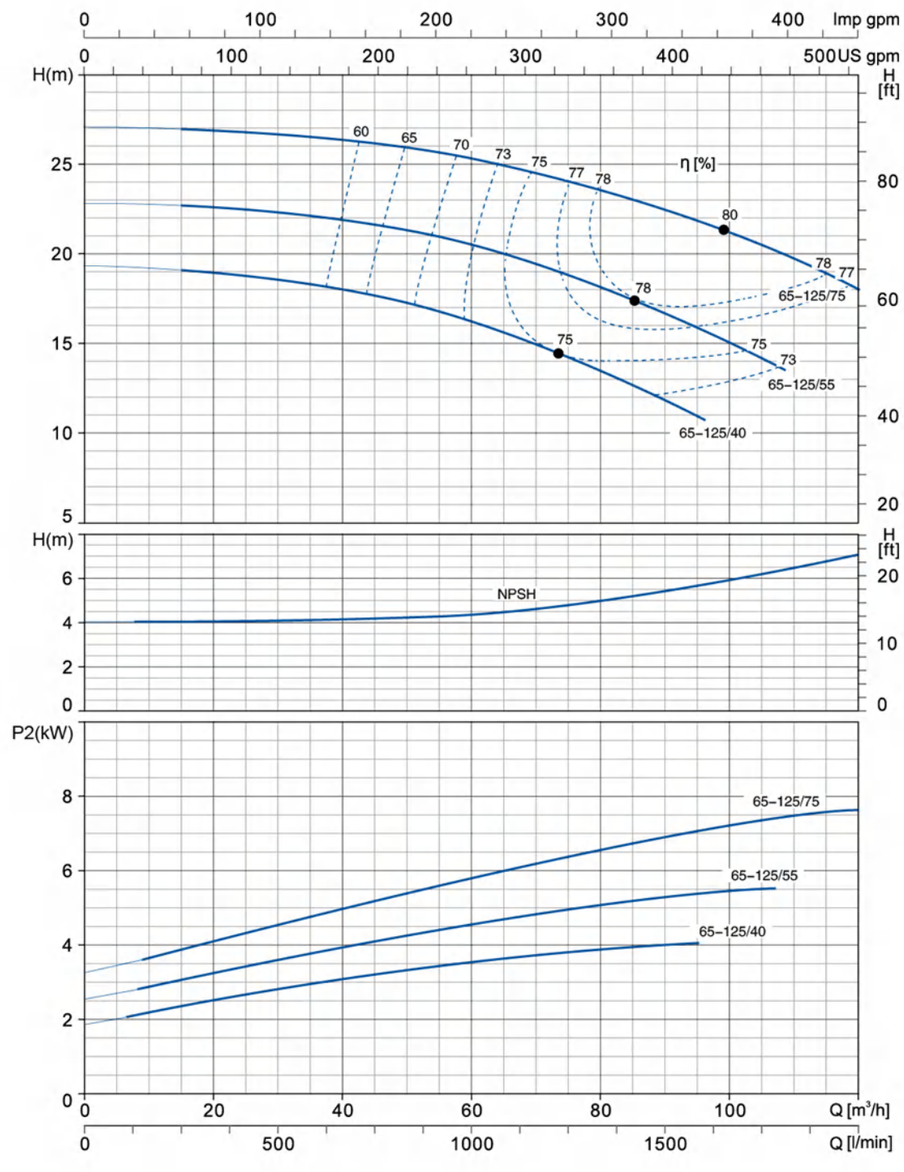
Hydraulic Performance Curves

EST 50-250	~2900 rpm	ISO 9906 Annex A



Hydraulic Performance Curves

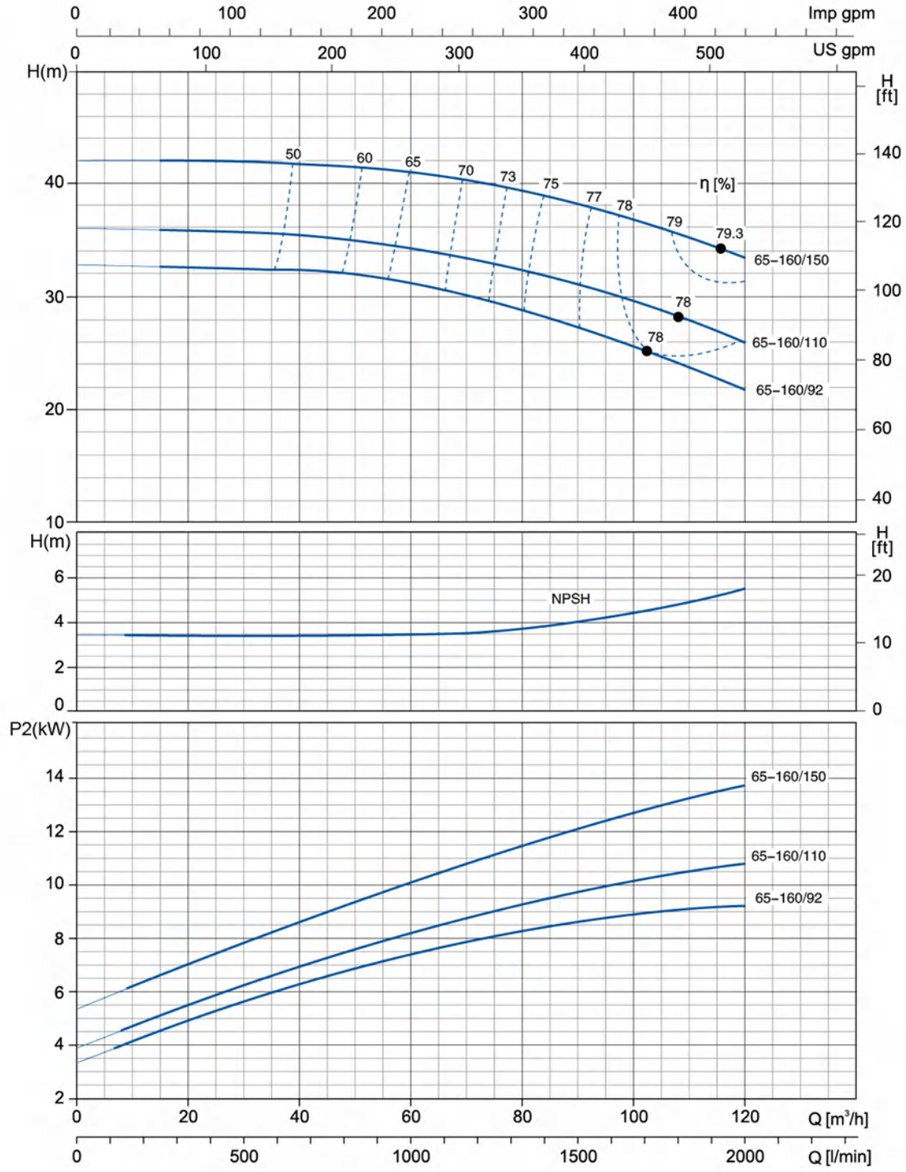
EST 65-125	~2900 rpm	ISO 9906 Annex A



AQUASTRONG
Standard Centrifugal Pumps

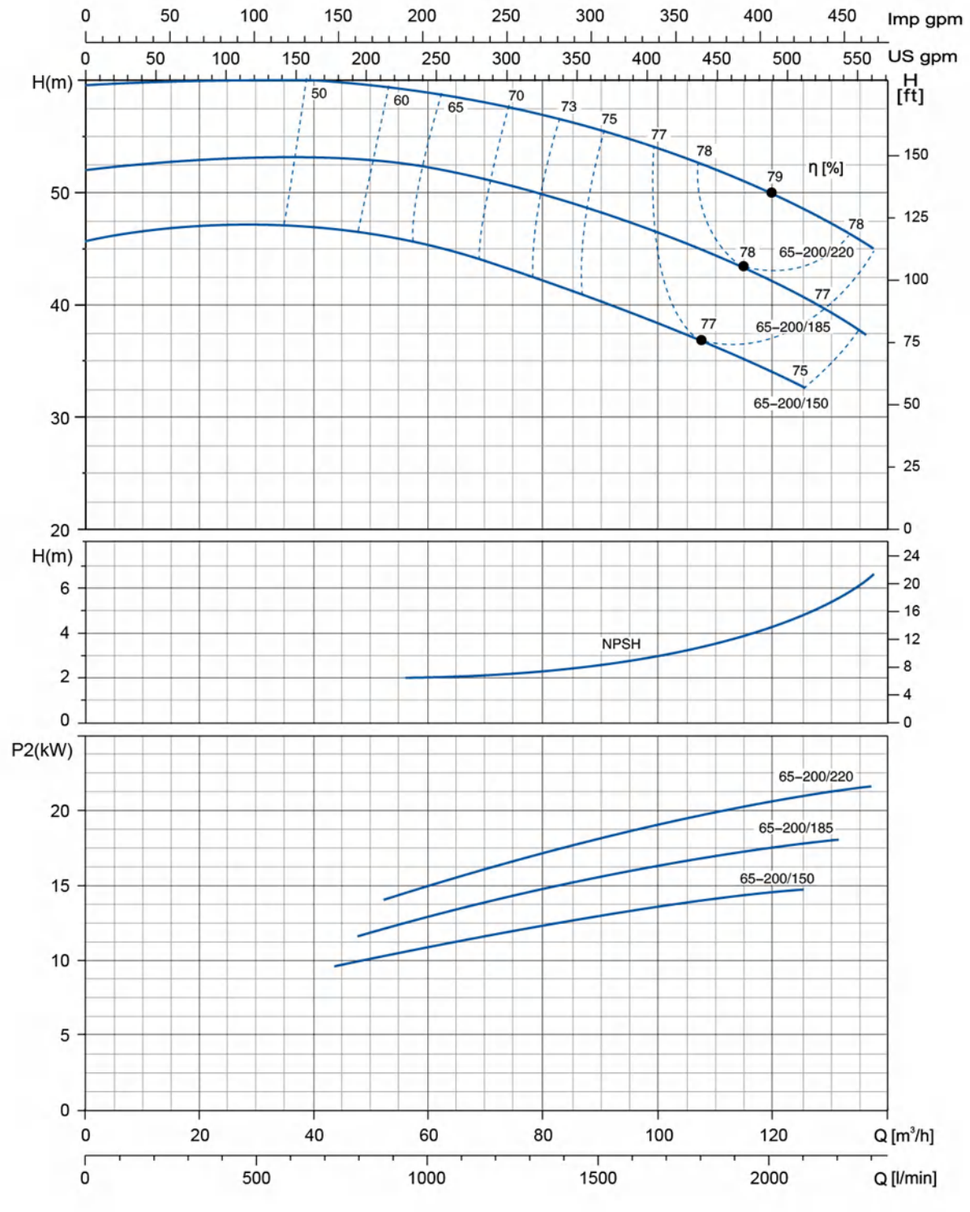
Hydraulic Performance Curves

EST 65-160	~2900 rpm	ISO 9906 Annex A



Hydraulic Performance Curves

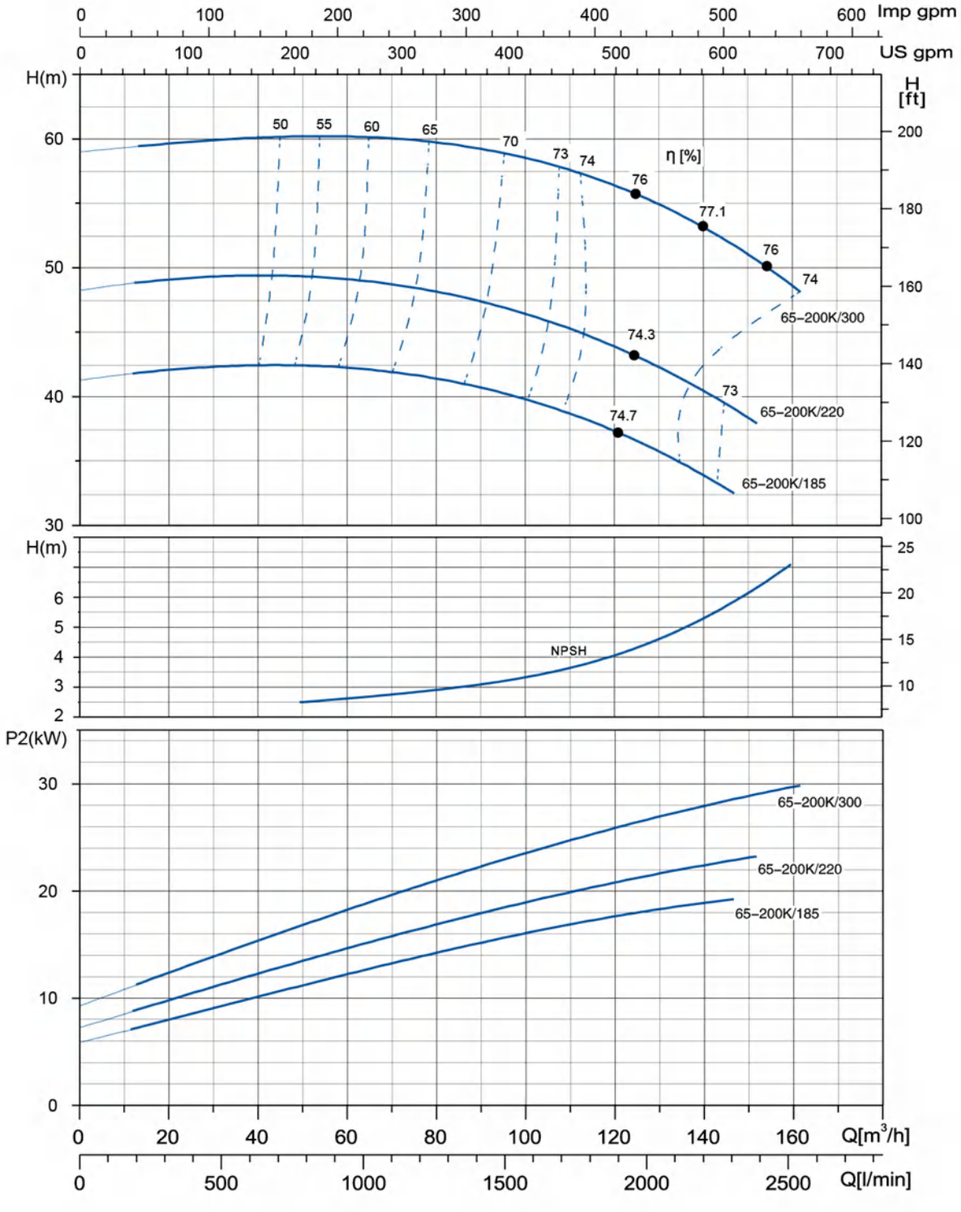
EST 65-200	~2900 rpm	ISO 9906 Annex A



AQUASTRONG
Standard Centrifugal Pumps

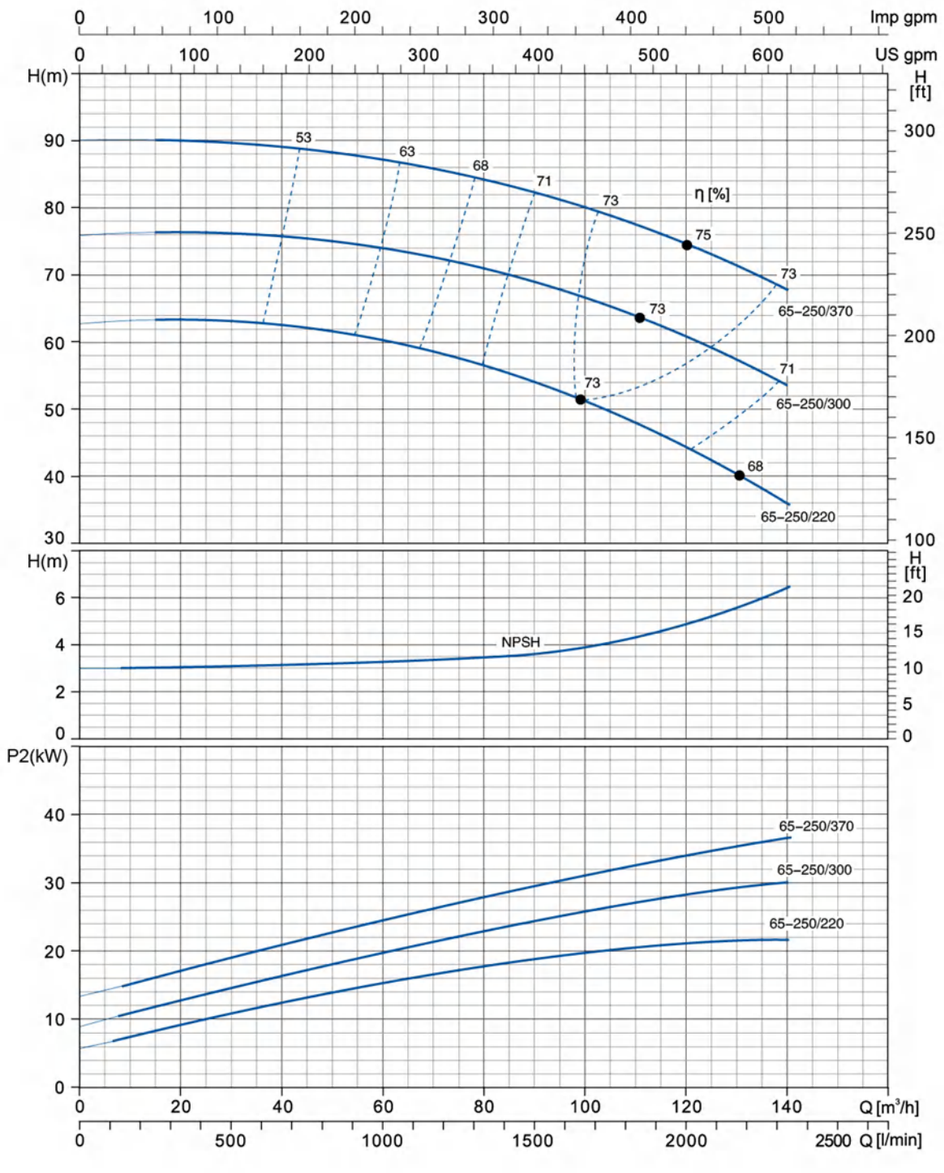
Hydraulic Performance Curves

EST 65-200K	~2900 rpm	ISO 9906 Annex A



Hydraulic Performance Curves

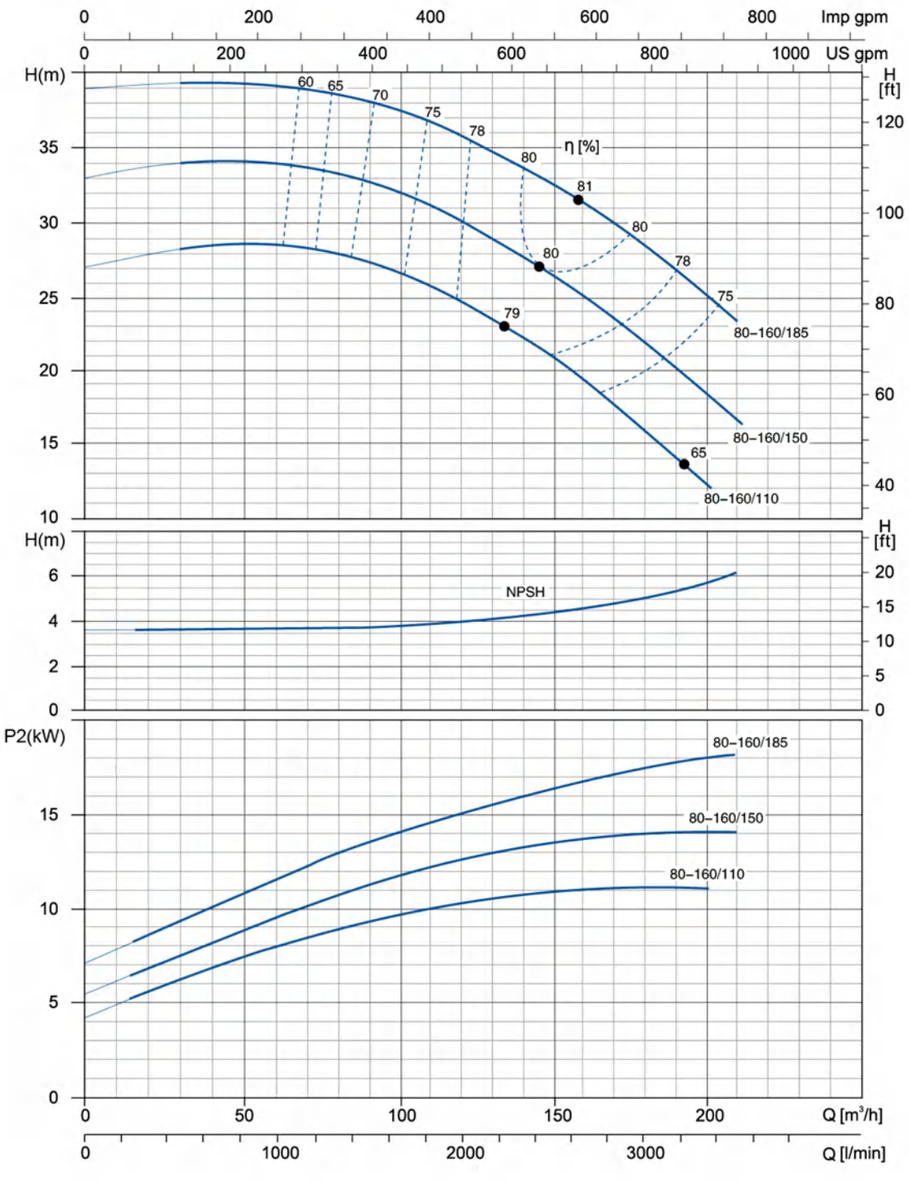
EST 65-250	~2900 rpm	ISO 9906 Annex A



AQUASTRONG
Standard Centrifugal Pumps

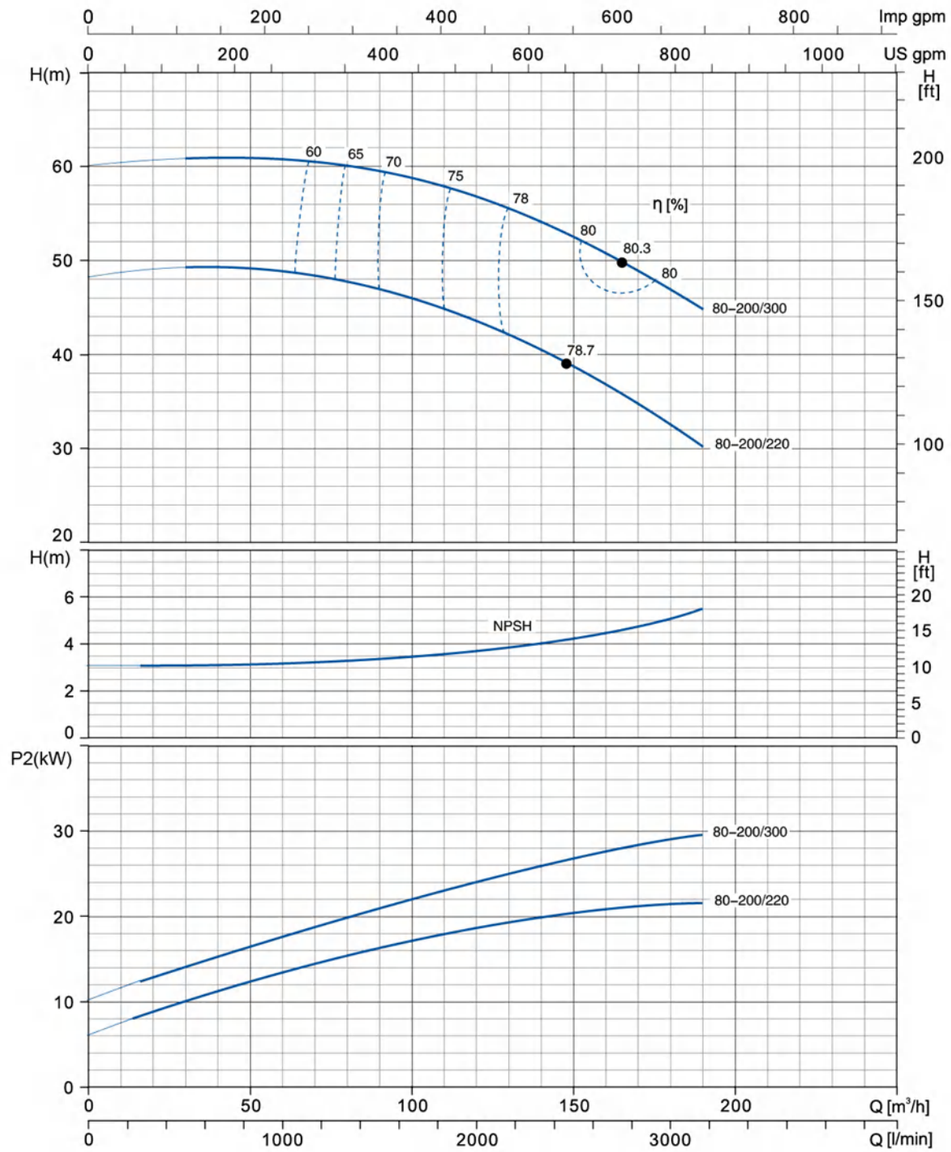
Hydraulic Performance Curves

EST 80-160	~2900 rpm	ISO 9906 Annex A



Hydraulic Performance Curves

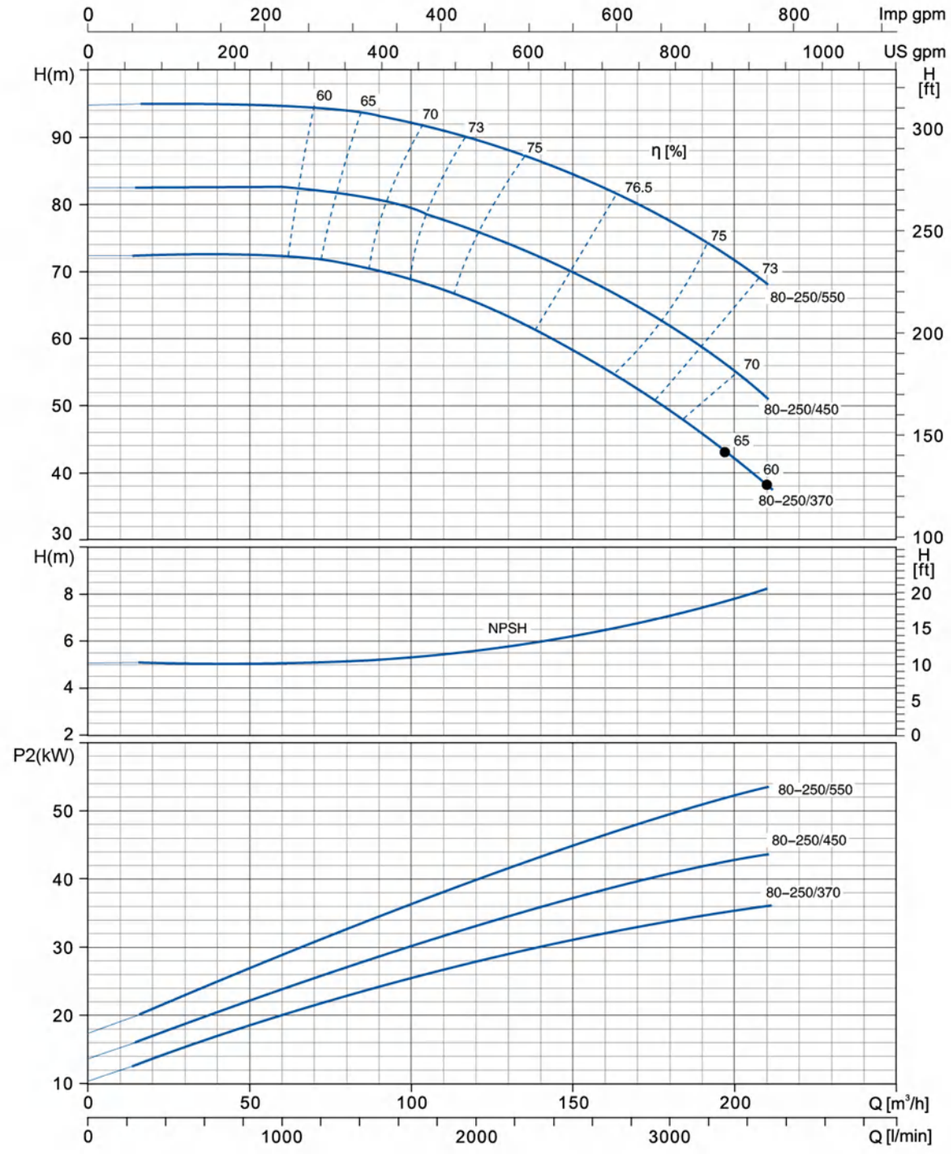
EST 80-200	~2900 rpm	ISO 9906 Annex A



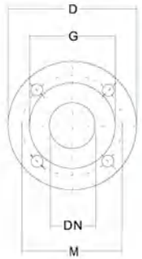
AQUASTRONG
Standard Centrifugal Pumps

Hydraulic Performance Curves

EST 80-250	~2900 rpm	ISO 9906 Annex A

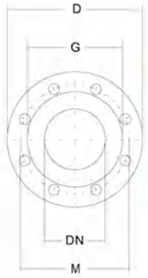


Flange Dimensions



PN16 FLANGES

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

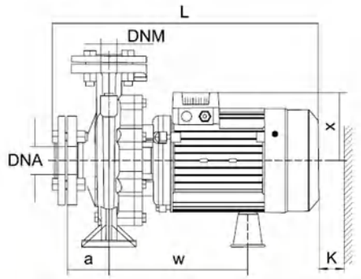


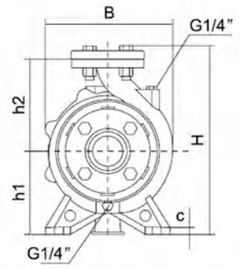
PN16 FLANGES

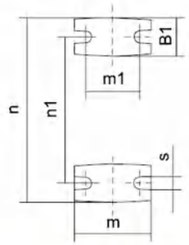
DN	D	M	G	HOLES		MAX. THICKNESS
				N°	∅	
80	200	160	138	8	18	22
100	220	180	158	8	18	22

Installation Sketch

up to 7.5 kW included



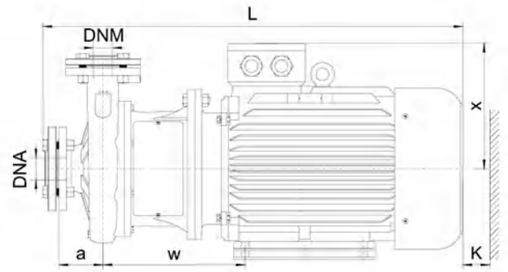


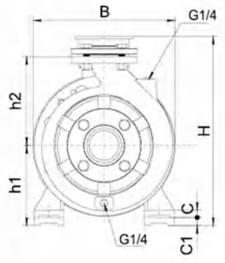


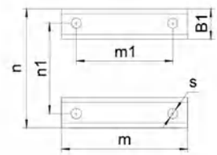
MODEL	DNM	DNA	a	w	x	h2	B1	c	h1	m	m1	n	n1	s	B	H	L	K
32-125/7	32	50	80	223	113	140	48	12	112	100	70	190	140	15	192	281	427	85
32-125/11																		
32-160/15				231	123	160	50	16	132			240	190	14	240	321	430	95
32-160/22					141													
32-160/30				266													496	
32-200/30				258	127	180	48	12	160						248	369	490	
32-200/40																		
32-250/55			155	264	180	198	60	15	160			272	212	15	308	386	610	60
32-250/75																	640	
40-125/11	40	65	80	255	127	140	45	12	112			210	160		218	282	489	95
40-125/15																		
40-125/22																		
40-160/30				238		168	48		132			240	190		249	330	494	105
40-160/40																		
40-200/55			100	259	180	180	50		160			264	212		275	370	553	
40-200/75																	583	
50-125/22	50			262	127	160			132			240	190		243	322	518	110
50-125/30																		
50-125/40																		
50-160/55					180	180	52		160			264	212		272	370	556	
50-160/75																	586	
65-125/40	65	80		265			68	14		125	95	280	212		283	372	564	
65-125/55																		
65-125/75																	594	

Installation Sketch

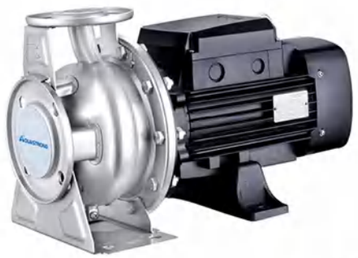
From 7.5 kW







MODEL	DNM	DNA	a	w	x	h2	B1	C	C1	h1	m	m1	n	n1	s	B	H	L	K
40-250/92	40	65	100	310	260	225	65	20	20	180	260	210	320	254	14.5	350	440	845	110
40-250/110																			
40-250/150																			
50-200/92	50	65	100	310	260	200	65	20	-	160	260	210	320	254		350	420	845	120
50-200/110																			
50-250/150						225			20	180							440		110
50-250/185											304	254						895	
50-250/220				323	275		70	25	-		311	241	355	279			455	925	
65-160/92	65	80	100	310	260	200	65	20	-	160	260	210	320	254	14.5	350	420	845	125
65-160/110																			
65-160/150																			
65-200/150						225			20	180							440	895	
65-200/185											304	254							
65-200/220				323	275		70	22	-		311	241	355	279		355	455	925	
65-200K/185				337	260		65	20	20		304	254	320	254			440	920	
65-200K/220				350	275			22			311	241	355	279			455	950	
65-200K/300				362	305			25			369	305	395	318	18.5		505	1020	
65-250/220				353	275	250	70	22			311	241	355	279	14.5		455	956	
65-250/300				365	305			25		200	369	305	395	318	18.5	400	505	1026	
65-250/370																			
80-160/110	80	100	125	315	260	225	65	20	-	160	260	210	320	254	14.5	350	420	870	130
80-160/150																			
80-160/185											304							926	
80-200/220				352	275	250	70	22		180	311	241	355	279		355	461	978	
80-200/300				365	305			25		200	369	305	395	318	18.5	400	505	1050	
80-250/370																	508		
80-250/450				381	330	280	75	28		225	404	311	435	356	18.5	450	555	1098	120
80-250/550				433	365		80	30	30	280	450	349	490	406	24	550	646	1192	



1.1kw~7.5kw

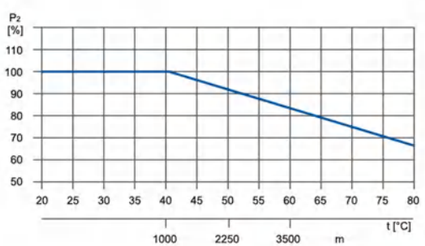
9.2kw~22kw

ESST

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%.



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℃ - +80℃
- Flow range: 0.7 - 132 m^3/h
- Head range: 9 - 58 m
- Ambient temperature range: -15℃ - + 40℃
- Max. operation: 10 bar
- Altitude: up to 1000 m
- Liquid PH valve: 3 - 9
- Max.ambient temperature: +40℃

Motor

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

Identification Codes

ESST 65– 50– 160/40

- Rated Power (x100 W)
- Impeller Nominal Diameter (mm)
- Outlet Diameter (mm)
- Inlet Diameter (mm)
- Stainless Steel Standard Centrifugal Pump

Accessories on Request

AISI304 Threaded flange

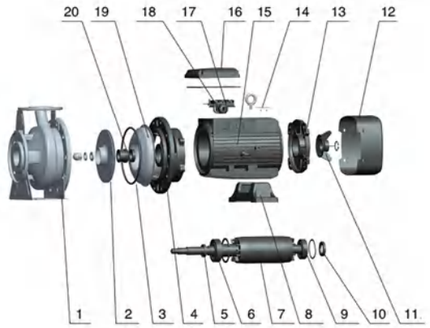
Flange gasket

Materials Table

1.1kw~7.5kw

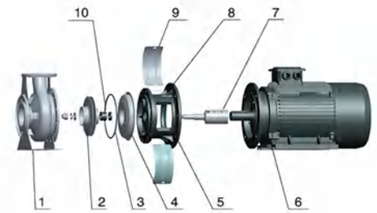
No.	Part	Material
1	Pump body	06Cr19Ni10
2	Impeller	06Cr19Ni10
3	O-ring	NBR
4	Support	HT200
5	Oil seal	
6	Bearing	
7	Rotor	
8	Stand	HT200
9	Bearing	
10	Oil seal	

No.	Part	Material
11	Fan	PP
12	Fan cover	08F
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

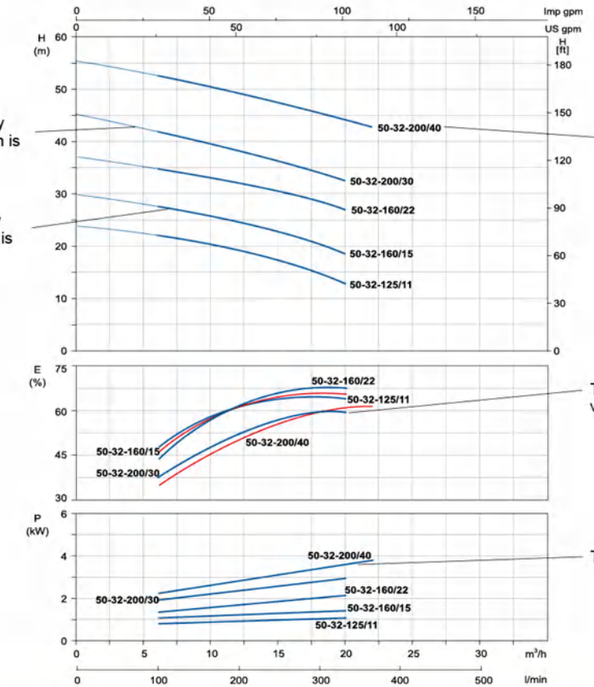
No.	Part	Material
1	Pump body	06Cr19Ni10
2	Impeller	06Cr19Ni10
3	O-ring	NBR
4	Support cover	06Cr19Ni10
5	Support	HT200
6	Motor	
7	Rotor	06Cr19Ni10/45
8	Nameplate	06Cr19Ni10
9	Guard plate	06Cr19Ni10
10	Mechanical seal	



How to Read The Curve Charts

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

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



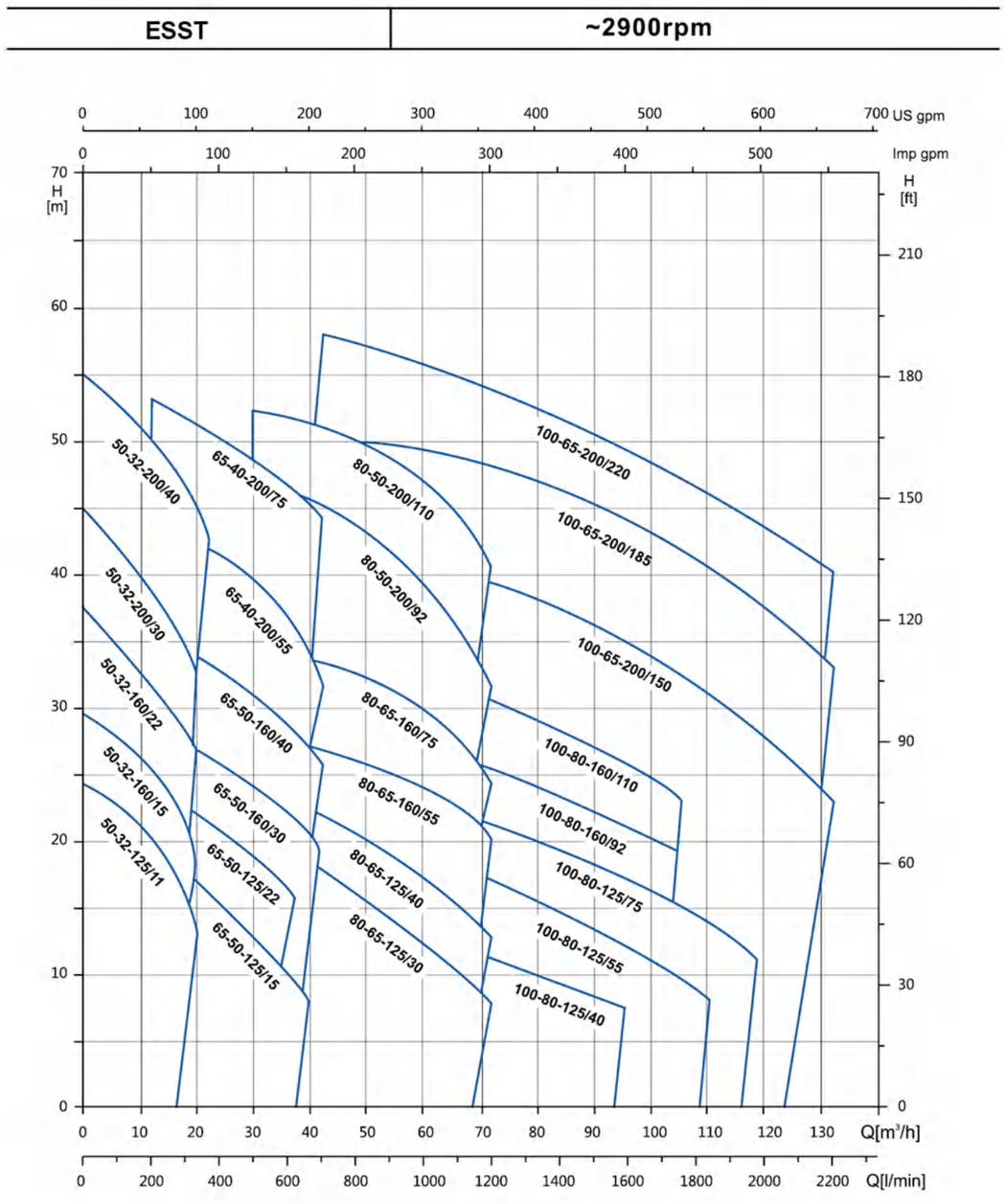
Technical Data

MODEL	Power		Q (m³/h)	Q=DELIVERY																				
	kW	HP	Q (l/min)	0	6	9	12	18	20	22	24	27	30	36	42	48	60	72	90	108	114	120	126	132
				0	100	150	200	300	333	360	400	450	500	600	700	800	1000	1200	1500	1800	1900	2000	2100	2200
ESST50-32-125/11	1.1	1.5		24.0	21.5	20.5	19.5	16.0	13.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ESST50-32-160/15	1.5	2		29.5	27.0	26.0	25.0	21.0	18.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ESST50-32-160/22	2.2	3		37.0	33.5	32.5	32.0	28.5	27.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ESST50-32-200/30	3	4		45.0	41.0	40.0	38.0	34.0	32.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ESST50-32-200/40	4	5.5		55.0	51.0	50.0	49.0	46.0	45.0	43.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ESST65-50-125/15	1.5	2		20.0	-	-	19.0	18.0	17.0	16.5	15.0	14.0	12.5	10.0	-	-	-	-	-	-	-	-	-	-
ESST65-50-125/22	2.2	3		26.0	-	-	23.5	22.5	22.0	21.5	21	20.5	19.5	16.5	-	-	-	-	-	-	-	-	-	-
ESST65-50-160/30	3	4		31.0	-	-	29.0	27.5	27.0	26.5	25.5	25.0	24.0	22.0	19.0	-	-	-	-	-	-	-	-	-
ESST65-50-160/40	4	5.5		39.0	-	-	35.5	34.5	34.0	33.5	32.5	32.0	31.0	29.0	26.0	-	-	-	-	-	-	-	-	-
ESST65-40-200/55	5.5	7.5		47.0	-	-	43.0	42.5	42.0	41.5	41.0	40.5	39.0	37.0	33.0	-	-	-	-	-	-	-	-	-
ESST65-40-200/75	7.5	10		57.0	-	-	53.0	52.5	52.0	51.0	50.0	49.0	48.0	46.5	44.5	-	-	-	-	-	-	-	-	-
ESST80-65-125/30	3	4		22.5	-	-	-	-	-	-	20.0	19.5	19.0	18.5	17.5	16.0	13.0	9.0	-	-	-	-	-	-
ESST80-65-125/40	4	5.5	H (m)	25.5	-	-	-	-	-	-	23.0	22.5	22.0	21.5	20.5	20.0	17.0	13.5	-	-	-	-	-	-
ESST80-65-160/55	5.5	7.5		33.0	-	-	-	-	-	-	29.5	29.0	28.5	28.0	27.0	26.0	24.0	20.0	-	-	-	-	-	-
ESST80-65-160/75	7.5	10		39.0	-	-	-	-	-	-	36.0	35.0	34.5	34.0	33.5	32.5	29.0	24.0	-	-	-	-	-	-
* ESST80-50-200/92	9.2	12.5		53.0	-	-	-	-	-	-	-	-	48.0	47.5	46.5	44.5	39.5	34.0	-	-	-	-	-	-
* ESST80-50-200/110	11	15		57.5	-	-	-	-	-	-	-	-	53.0	51.0	50.5	50.0	47.0	41.0	-	-	-	-	-	-
ESST100-80-125/40	4	5.5		20.0	-	-	-	-	-	-	-	-	-	17.5	16.5	15.5	14.0	12.0	7.0	-	-	-	-	-
ESST100-80-125/55	5.5	7.5		23.0	-	-	-	-	-	-	-	-	-	21.5	20.5	20.0	18.0	16.0	12.0	7.5	-	-	-	-
ESST100-80-125/75	7.5	10		29.0	-	-	-	-	-	-	-	-	-	27.5	26,5	25.5	23.5	21.5	17.5	13.0	12.0	-	-	-
* ESST100-80-160/92	9.2	12.5		33.0	-	-	-	-	-	-	-	-	-	-	31.0	30.0	28.0	26.0	23.0	-	-	-	-	-
* ESST100-80-160/110	11	15		38.5	-	-	-	-	-	-	-	-	-	-	36.0	35.0	33.0	31.0	28.0	-	-	-	-	-
* ESST100-65-200/150	15	20		47.0	-	-	-	-	-	-	-	-	-	-	44.0	43.0	41.0	39.0	36.0	32.0	30.0	28.0	26.0	23.0
* ESST100-65-200/185	18.5	25		53.0	-	-	-	-	-	-	-	-	-	-	51.0	50.0	49.0	48.0	45.0	41.0	39.0	37.0	35.0	33.0
* ESST100-65-200/220	22	30		58.0	-	-	-	-	-	-	-	-	-	-	57.0	56.0	55.0	54.0	51.0	47.0	45.5	44.0	42.0	40.0

* =IE3 motor optional on request.

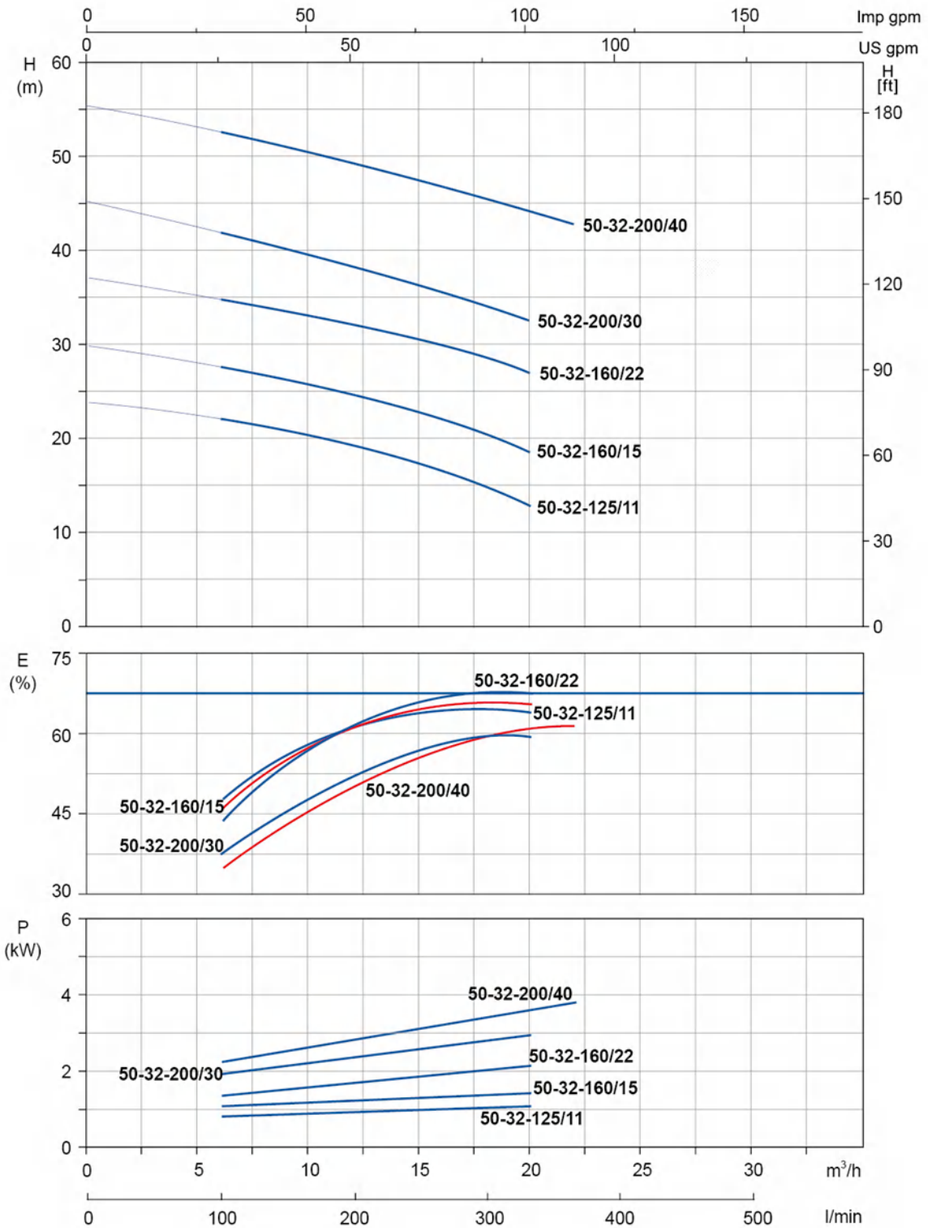
AQUASTRONG
Stainless Steel Standard Centrifugal Pumps

Characteristic Curves



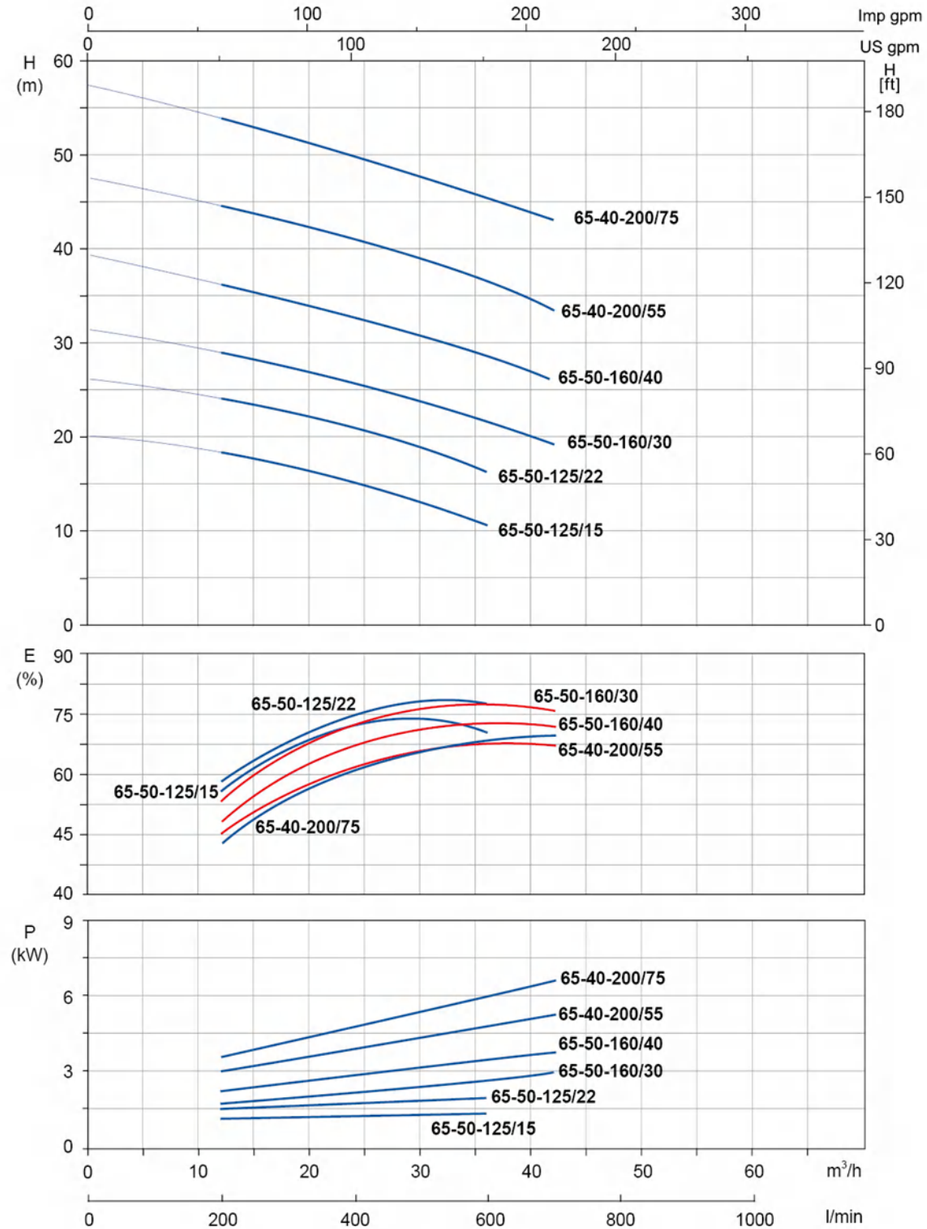
Hydraulic Performance Curves

ESST50-32	~2900rpm



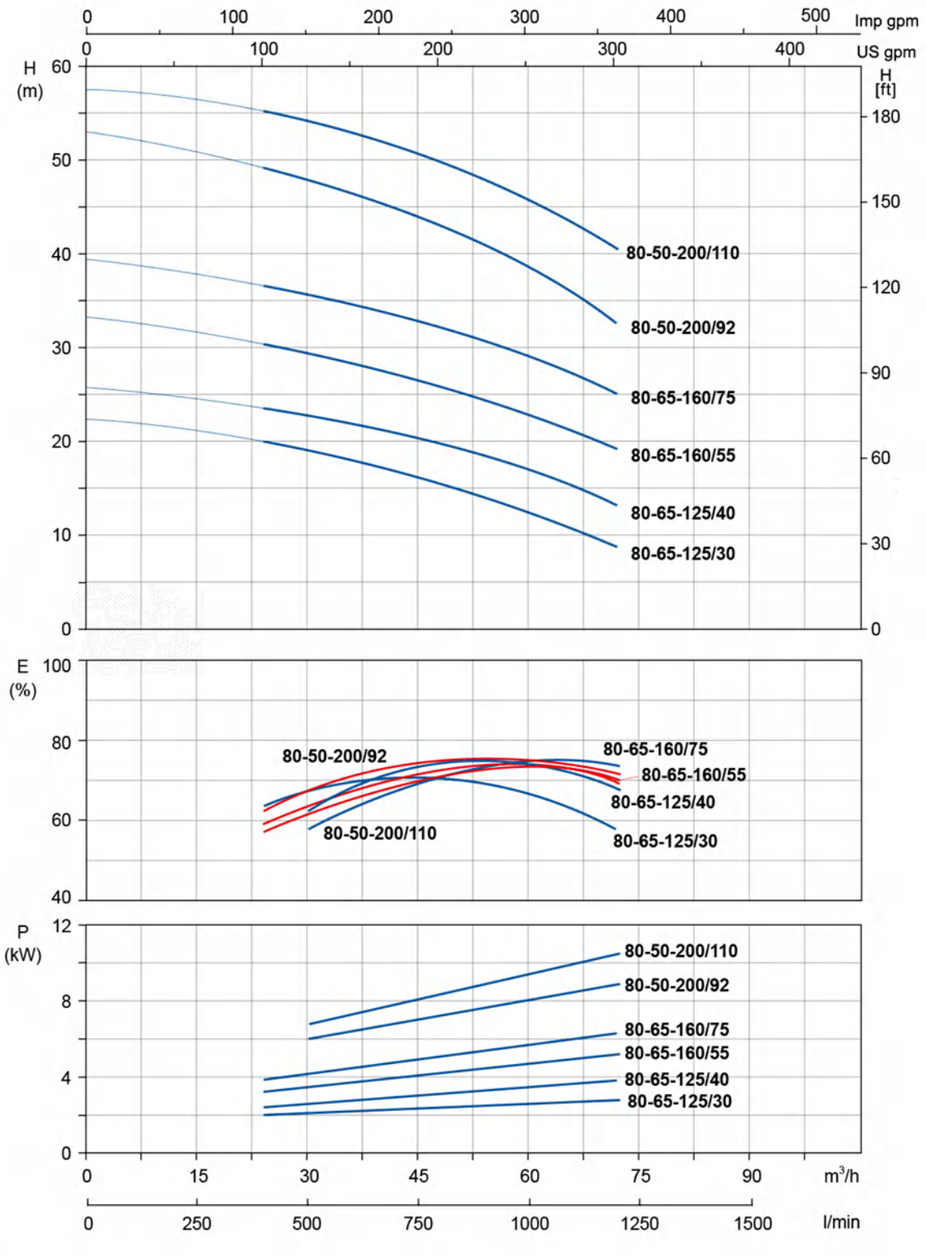
Hydraulic Performance Curves

ESST65-40/50	~2900rpm



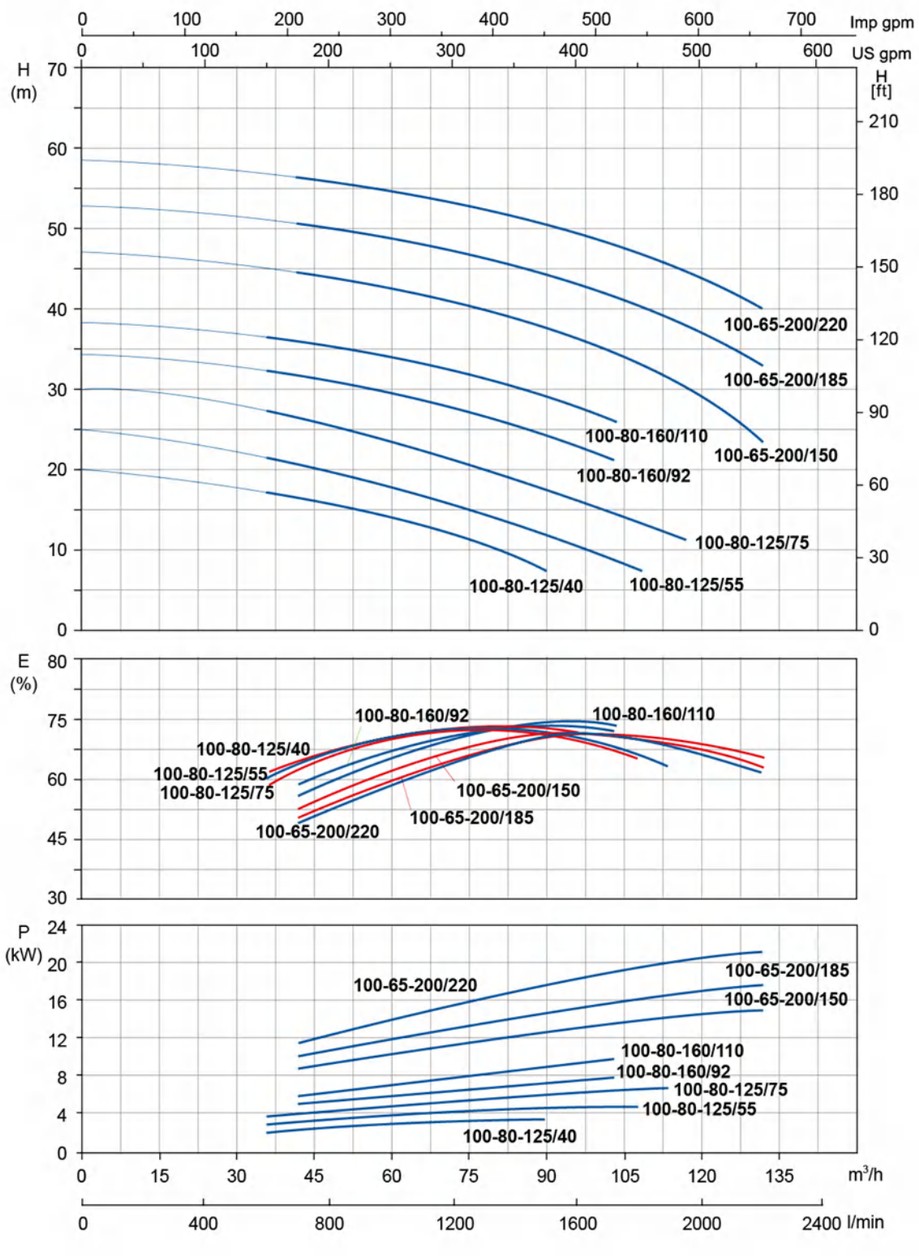
Hydraulic Performance Curves

ESST80-50/65	~2900rpm



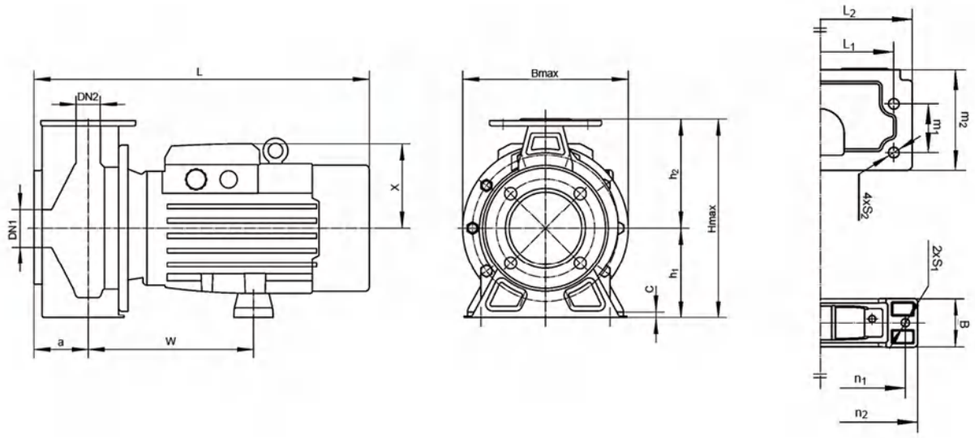
Hydraulic Performance Curves

ESST100-65/80	~2900rpm



Installation Sketch

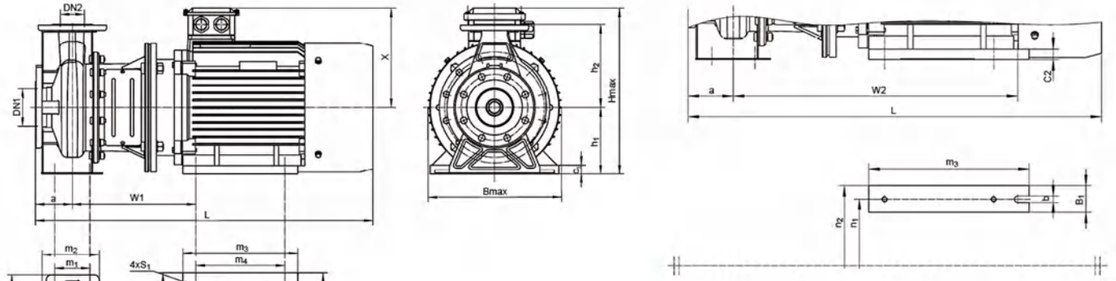
Up to 7.5 kW included



Model	DN1	DN2	a	w	L1	L2	m1	m2	n1	n2	h1	h2	2-S1	4-S2	B	C	X	Bmax	Hmax	L
ESST50-32-125/11	50	32	80	205	140	190	70	122	205	240	112	140	2-Ø12	4-Ø15	65	12	127	240	250	475
ESST50-32-160/15				207	190	240					132	160						244	292	477
ESST50-32-160/22																				
ESST50-32-200/30				244				124	225	260	160	180			75	15	124	295	340	492
ESST50-32-200/40																				
ESST65-50-125/15	65	50		205	160	210		121	205	240	112	140			65	12	127	240	252	475
ESST65-50-125/22																				
ESST65-50-160/30				244	190	240		123	225	260	132	160			75	15	124	260	292	492
ESST65-50-160/40																				
ESST65-40-200/55		40		246	212	265		146	245	280	160	180			70		142	295	340	563
ESST65-40-200/75																				
ESST80-65-125/30	80	65	100	254	190	240		158	225	260	132	160			75		124	260	292	522
ESST80-65-125/40																				
ESST80-65-160/55				256	212	265		150	245	280	160	180			70		142	280	340	573
ESST80-65-160/75																				
ESST100-80-125/40	100	80				280	95	155	225	260					75		124			524
ESST100-80-125/55				258					245	280					70		142			575
ESST100-80-125/75																				

Installation Sketch

From 7.5 kW

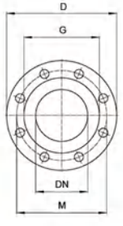


Model	DN1	DN2	a	w1	w2	L1	L2	m1	m2	m3	m4	n1	n2	h1	h2	4-S1	4-S2	B1	b	c1	c2	X	Bmax	Hmax	L
ESST80-50-200/92	80	50	100	314	-	212	265	70	146	210	260	254	320	160	200	4-Φ14.5	4-Φ14	65	-	20	-	260	350	420	816
ESST80-50-200/110																									
ESST100-80-160/92	100	80		321			280	95	155	260	210														823
ESST100-80-160/110																									
ESST100-65-200/150		65		-	581	250	320			310	-		314	180	225	-		60	14.5	-	20			440	
ESST100-65-200/185					625					354															868
ESST100-65-200/220				334	-					311	241	279	355			4-Φ14.5		70	-	22	-	280	355	460	913

Flange Dimensions

PN16 FLANGES

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



PN16 FLANGES

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

EISO

Application

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

Pump

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

Motor

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

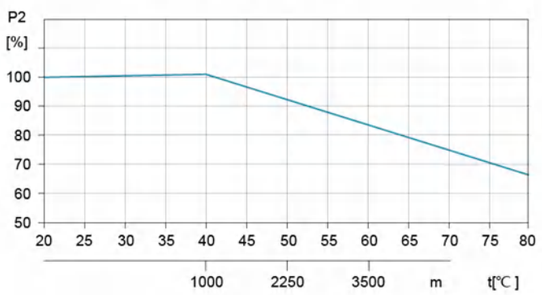
Flange

- EN 1092 and DIN 2576 standard

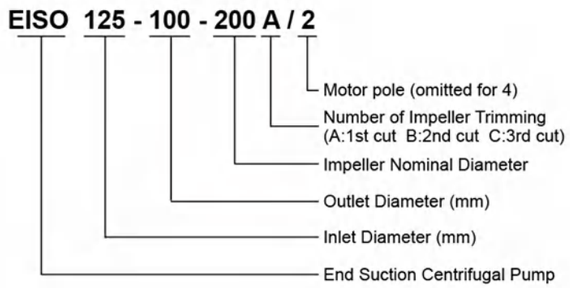
Ambient Temperature

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%.

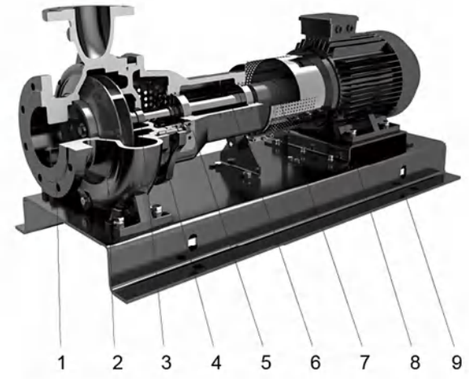


Identification Codes

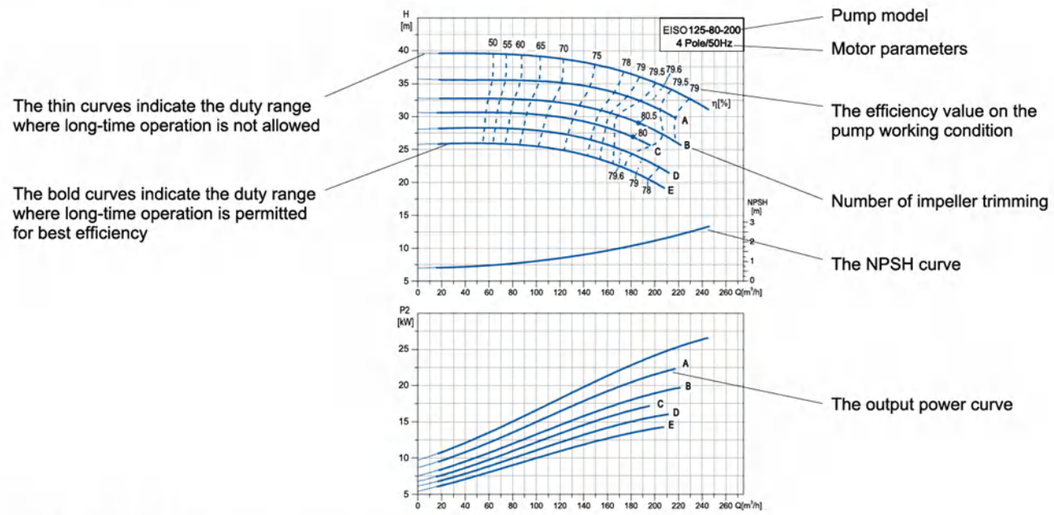


Materials Table

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



How to Read The Curve Charts



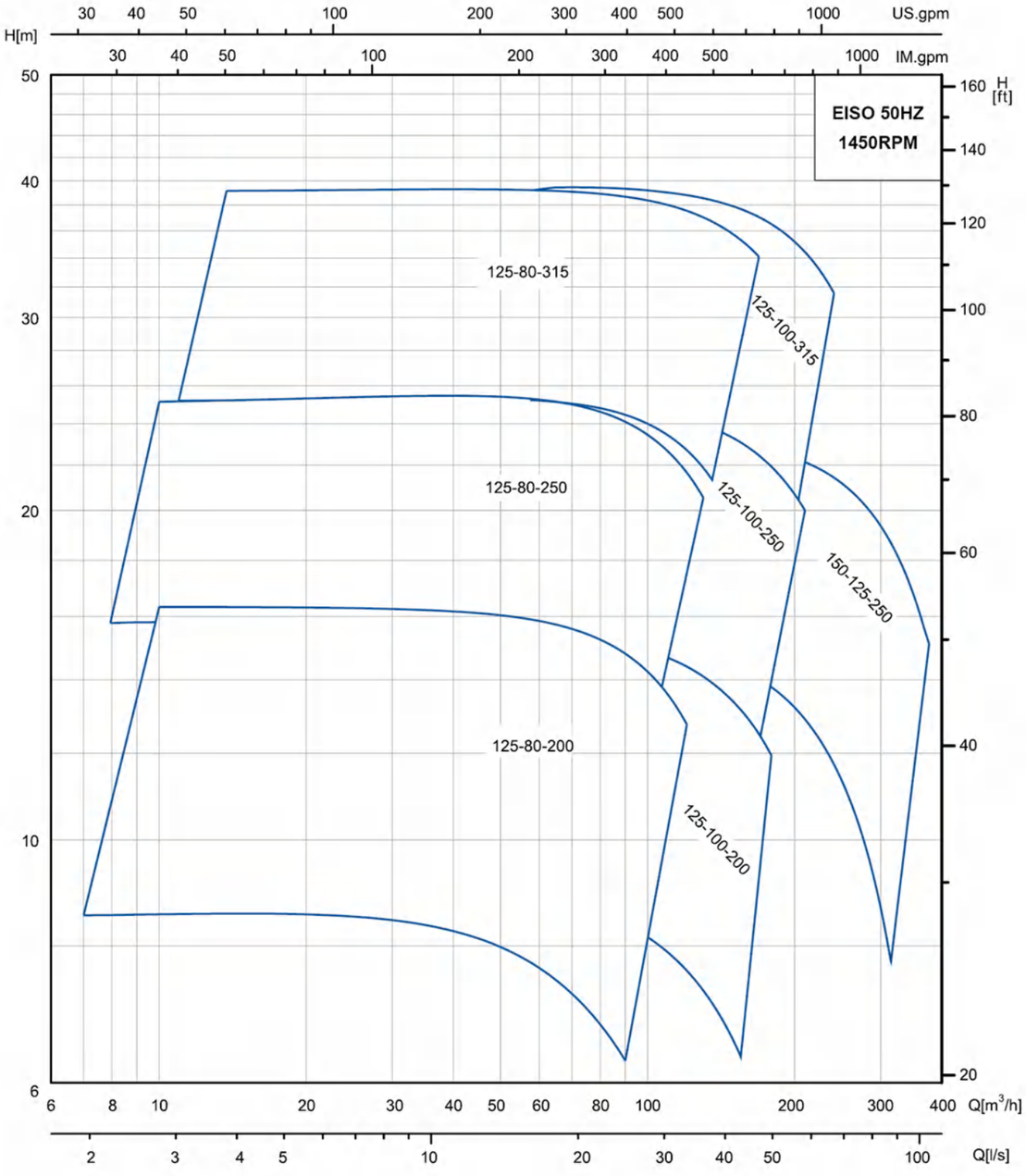
Guidelines to Performance Curves

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

Model	Power (kW)	Rated Flow (m^3/h)	Rated Head (m)	Max. Flow (m^3/h)	Min. Flow (m^3/h)	NPSH (m)
EISO125-80-200	5.5	100	14.5	120	70	2
EISO125-80-200A	5.5	95	13	123.5	66.5	2
EISO125-80-200B	4	90	11.5	108	63	2
EISO125-80-200C	4	85	10.5	110.5	59.5	2
EISO125-80-200D	3	82	9.5	98.5	57.4	2
EISO125-80-200E	2.2	70	7.5	91	49	2
EISO125-100-200	7.5	150	13.5	180	105	2.8
EISO125-100-200A	7.5	145	12	188.5	101.5	2.3
EISO125-100-200B	5.5	140	10.5	168	98	2.3
EISO125-100-200C	5.5	135	9.5	175.5	94.5	2.3
EISO125-100-200D	4	130	7	156	91	2.3
EISO125-80-250	11	100	22.5	130	70	2
EISO125-80-250A	11	96	20.5	125	67.2	2
EISO125-80-250B	7.5	90	18	117	63	2
EISO125-80-250C	7.5	85	16	110.5	59.5	2
EISO125-80-250D	5.5	82	15	98.5	57.4	2
EISO125-80-250E	5.5	78	14	101.5	54.6	2
EISO125-100-250	15	160	21	208	112	2
EISO125-100-250A	15	154	19	200	107.8	2
EISO125-100-250B	11	146	17.5	190	102.2	2
EISO125-100-250C	11	140	16	182	98	2
EISO125-100-250D	11	135	14.5	175.5	94.5	2
EISO125-100-250E	7.5	130	13	156	91	2
EISO125-100-250F	7.5	128	12	166.5	89.6	2
EISO150-125-250	22	290	19	377	203	3.5
EISO150-125-250A	18.5	280	17	336	196	3.5
EISO150-125-250B	18.5	270	15.5	351	189	3.5
EISO150-125-250C	15	256	14	333	179.2	3.5
EISO150-125-250D	15	250	12.5	325	175	3.5
EISO150-125-250E	11	242	11	315	169.4	3.5
EISO125-80-315	22	130	36	169	91	2
EISO125-80-315A	18.5	125	32	162.5	87.5	2
EISO125-80-315B	15	122	29	146.5	85.4	2
EISO125-80-315C	15	116	26.5	151	81.2	2
EISO125-80-315D	15	112	24	145.5	78.4	2
EISO125-80-315E	11	106	22	138	74.2	2
EISO125-100-315	30	185	35	240.5	129.5	2.2
EISO125-100-315A	22	178	30.5	213.5	124.6	2.2
EISO125-100-315B	22	172	28	223.5	120.4	2.2
EISO125-100-315C	18.5	166	28	199	116.2	2.2
EISO125-100-315D	18.5	162	24	210.5	113.4	2.2
EISO125-100-315E	15	158	22	205.5	110.6	2.2

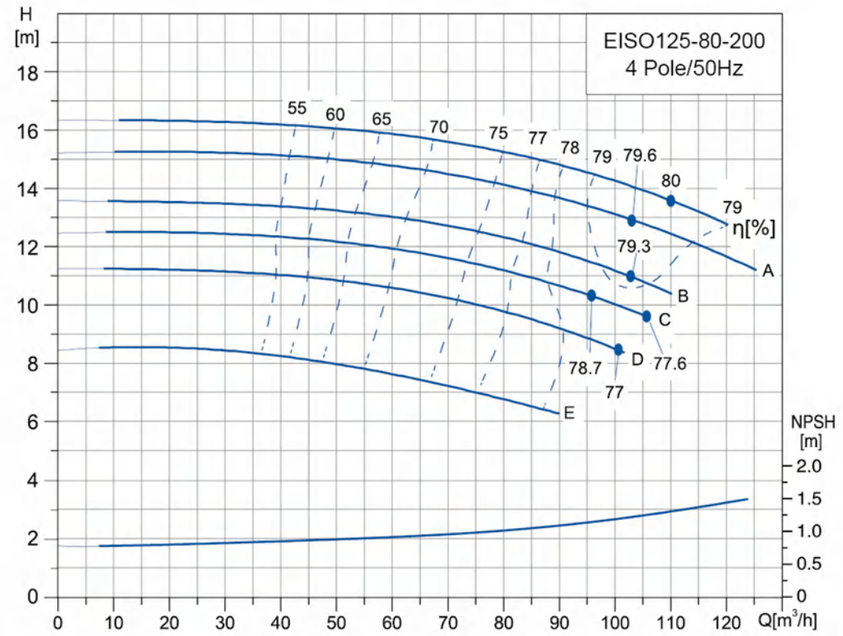
AQUASTRONG
End Suction Centrifugal Pumps

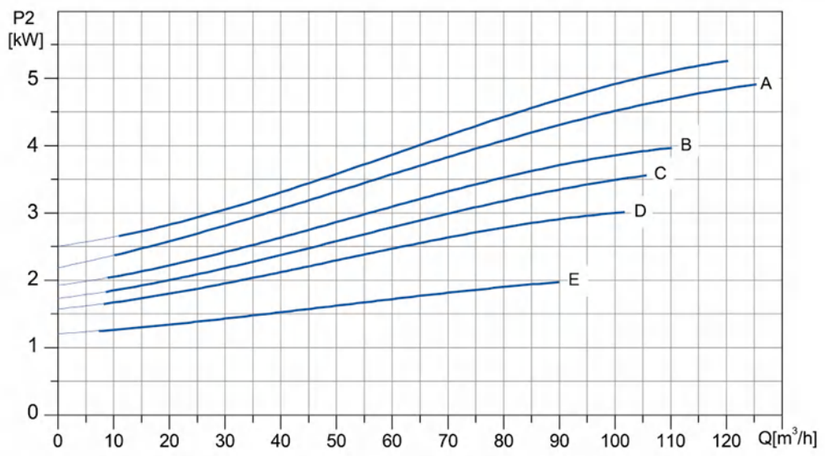
Hydraulic Performance Curves



Hydraulic Performance Curves

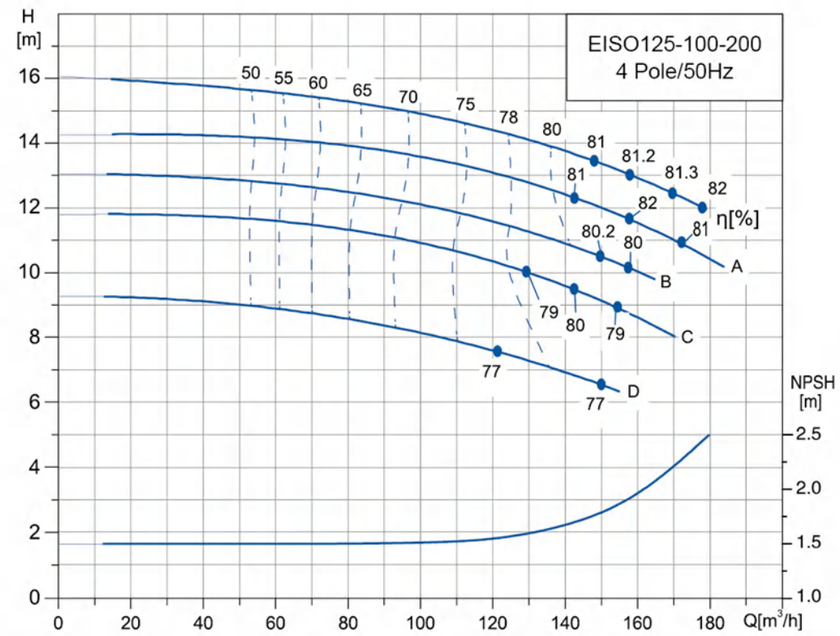
EISO125-80-200	1450r/min

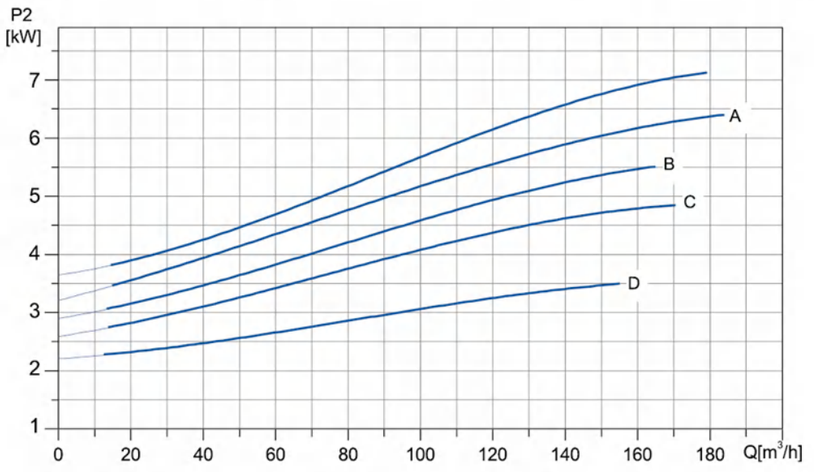




Hydraulic Performance Curves

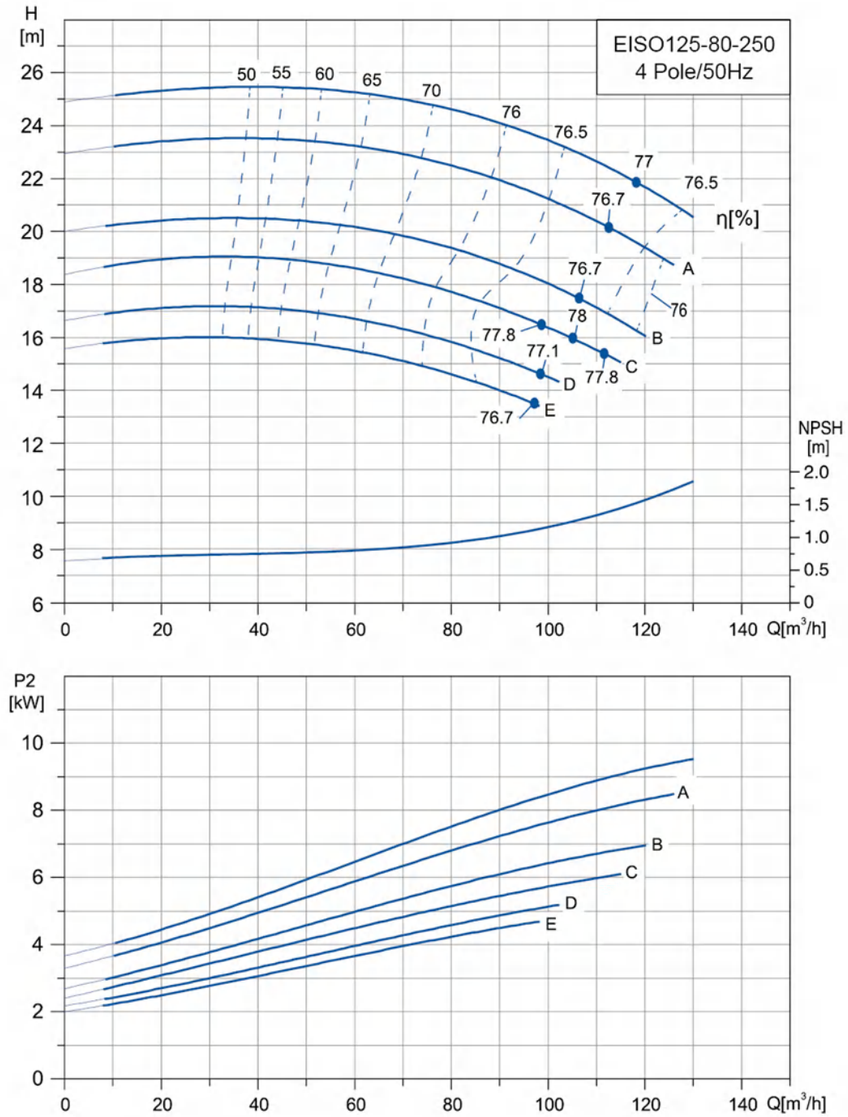
EISO125-100-200	1450r/min





Hydraulic Performance Curves

EISO125-80-250	1450r/min



Hydraulic Performance Curves

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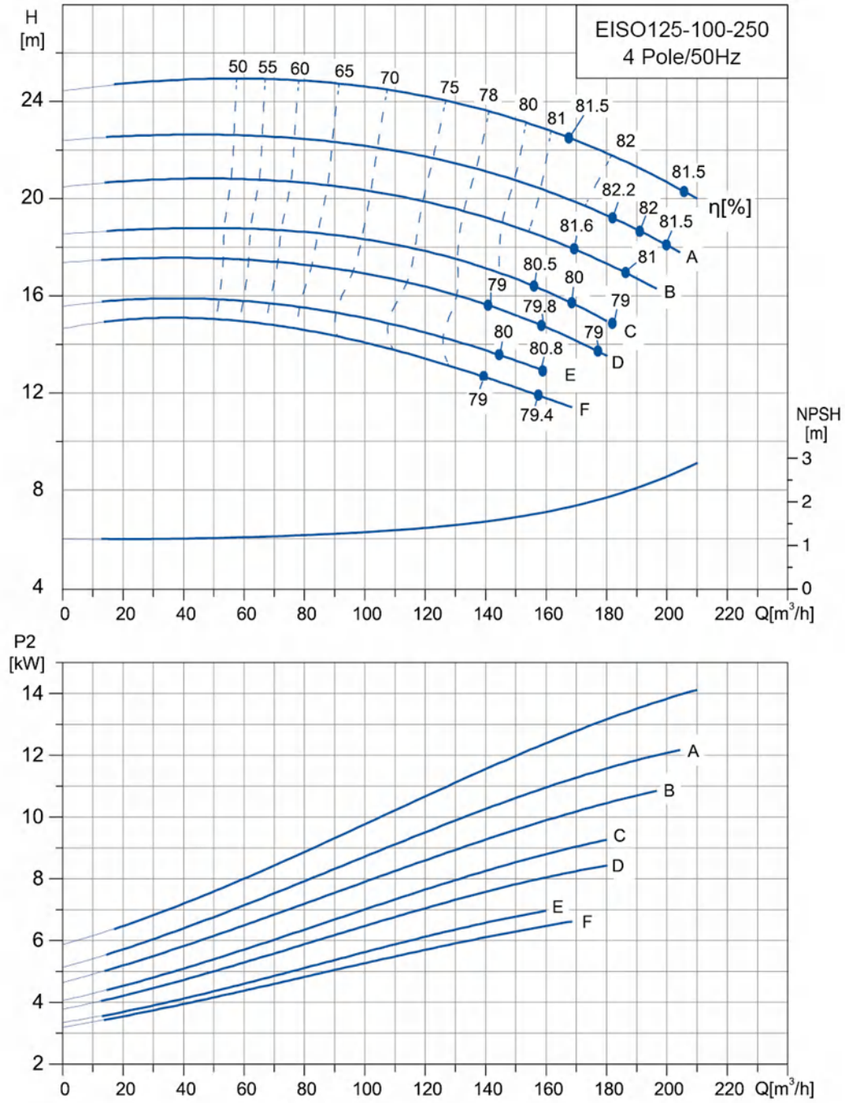

Hydraulic Performance Curves

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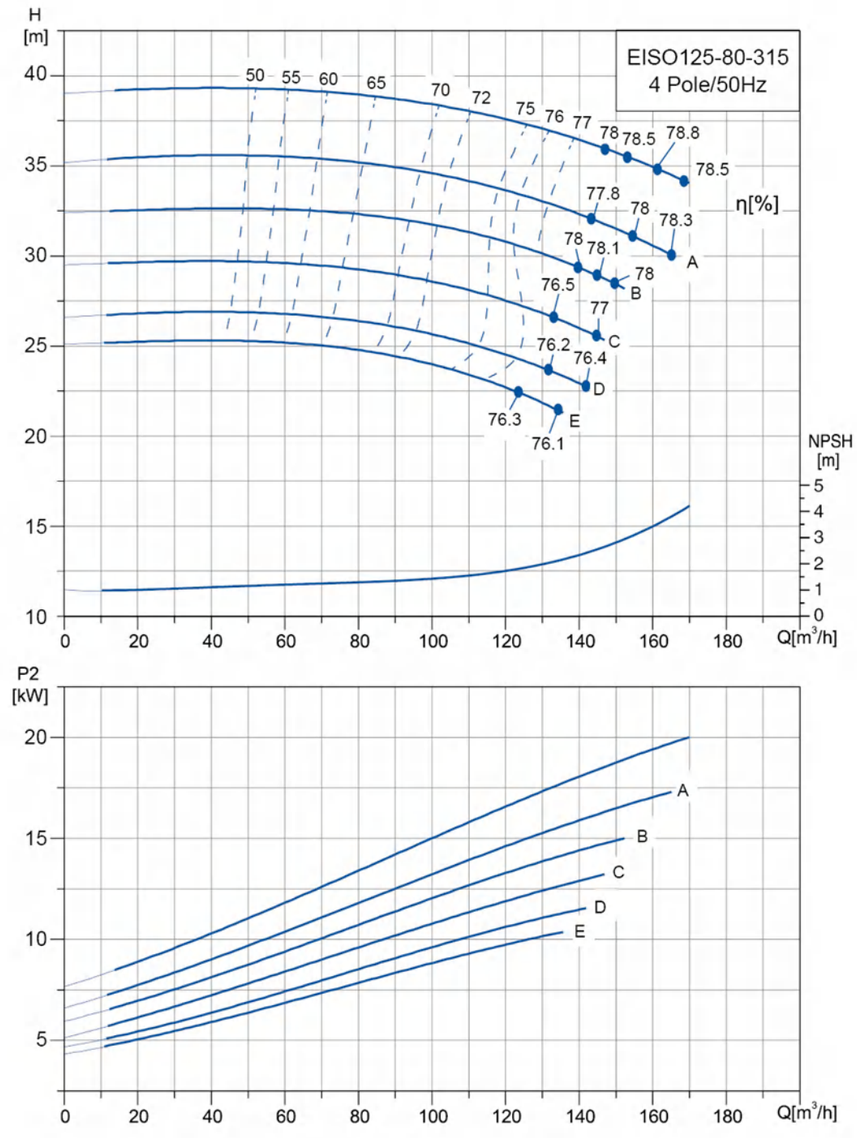
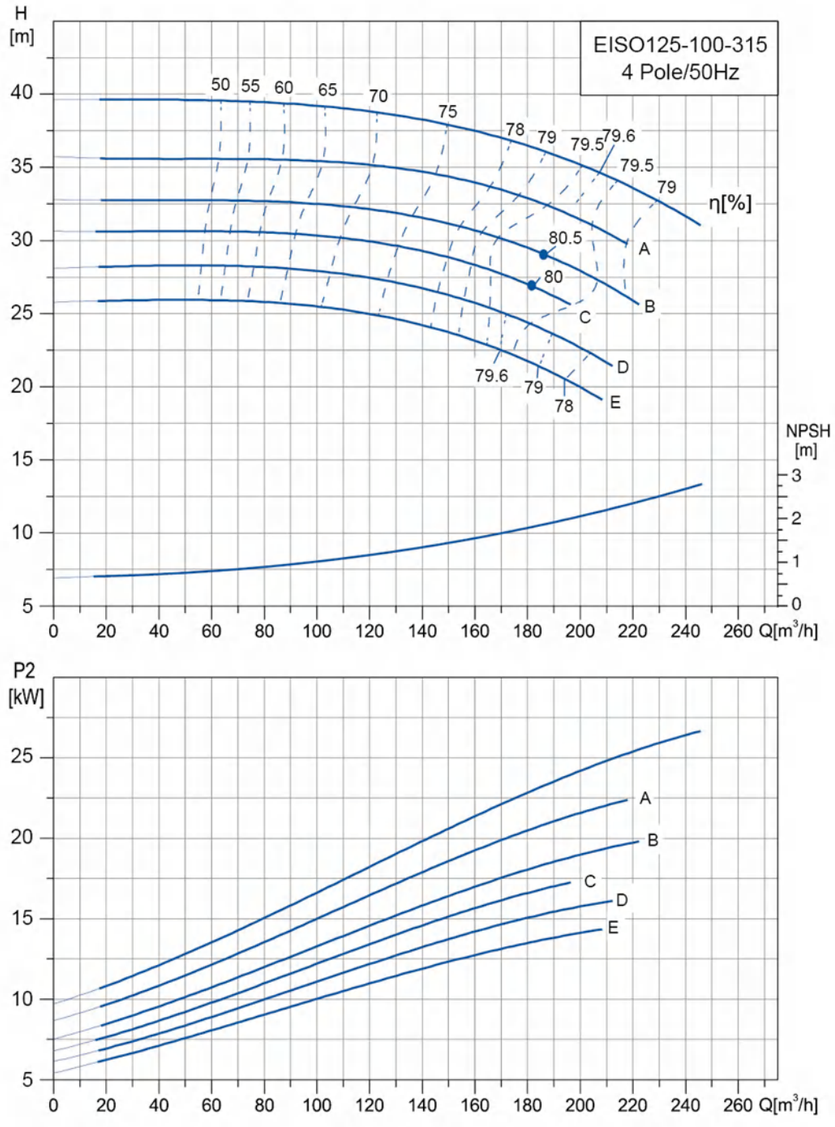


AQUASTRONG
End Suction Centrifugal Pumps

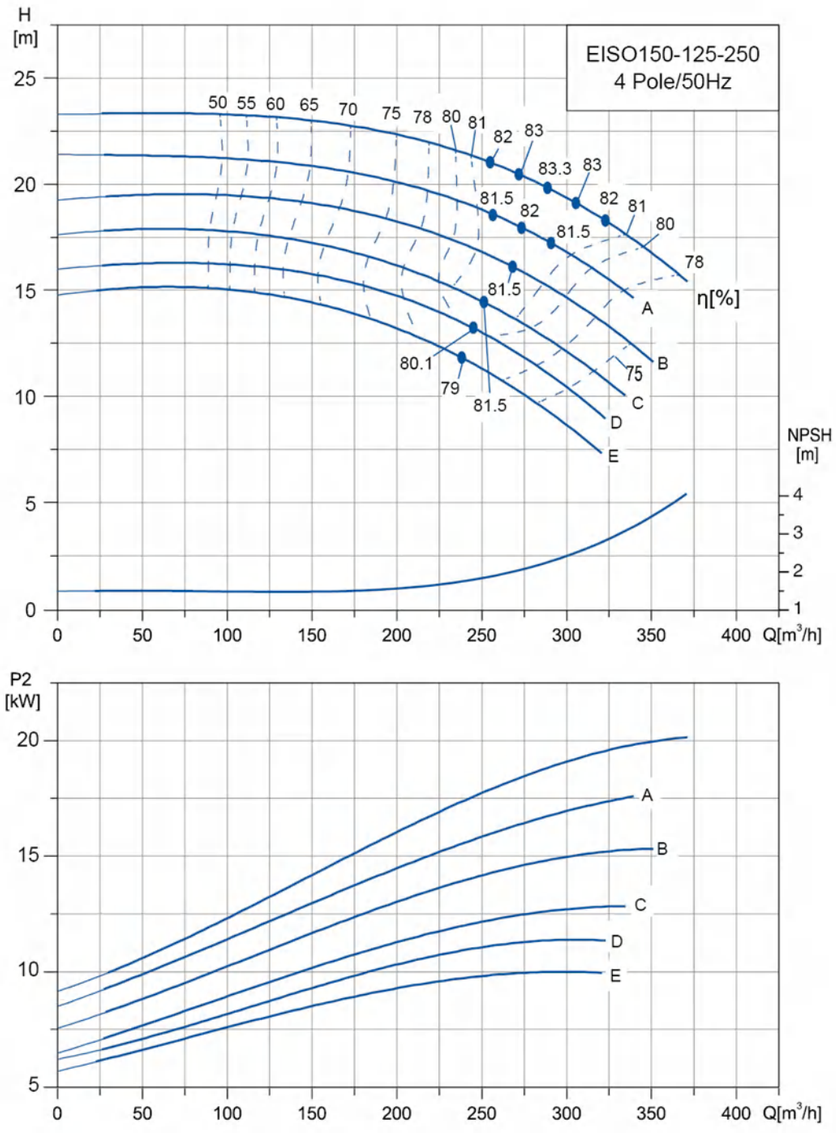
Hydraulic Performance Curves

EISO125-100-315	1450r/min

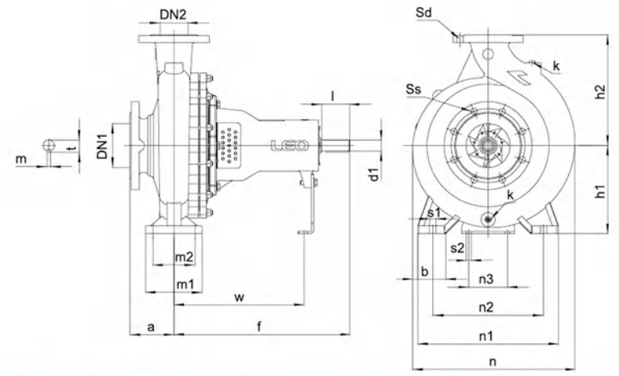


Hydraulic Performance Curves

EISO150-125-250	1450r/min



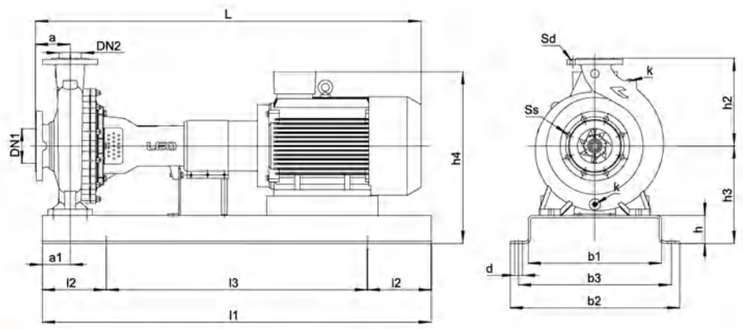
Pump Size



Model	DN1	DN2	a	f	h1	h2	b	m1	m2	n	n1	n2	n3	w	s1	s2	d1	l	m	t	Sd	Ss	k
EISO125-80-200																							
EISO125-80-200A																							
EISO125-80-200B					180	250	65	125	95	368	345	280			14								
EISO125-80-200C																							
EISO125-80-200D																							
EISO125-80-200E																							
EISO125-80-250																							
EISO125-80-250A																							
EISO125-80-250B					225	280				408													
EISO125-80-250C																							
EISO125-80-250D																							
EISO125-80-250E																							
EISO125-80-315											400	315											
EISO125-80-315A																							
EISO125-80-315B																							
EISO125-80-315C																							
EISO125-80-315D																							
EISO125-80-315E																							
EISO125-100-200																							
EISO125-100-200A																							
EISO125-100-200B																							
EISO125-100-200C																							
EISO125-100-200D																							
EISO125-100-250																							
EISO125-100-250A																							
EISO125-100-250B																							
EISO125-100-250C																							
EISO125-100-250D																							
EISO125-100-250E																							
EISO125-100-250F																							
EISO125-100-315																							
EISO125-100-315A																							
EISO125-100-315B																							
EISO125-100-315C																							
EISO125-100-315D																							
EISO125-100-315E																							
EISO150-125-250																							
EISO150-125-250A																							
EISO150-125-250B																							
EISO150-125-250C																							
EISO150-125-250D																							
EISO150-125-250E																							

Model	DN1	DN2	a	f	h1	h2	b	m1	m2	n	n1	n2	n3	w	s1	s2	d1	l	m	t	Sd	Ss	k
EISO125-80-200	125	80	125	500	180	250	65	125	95	368	345	280	110	370	14	19	Φ32	80	10	35	8-Φ18	8-Φ18	NPT 3/8
EISO125-80-200A																							
EISO125-80-200B																							
EISO125-80-200C																							
EISO125-80-200D																							
EISO125-80-200E																							
EISO125-80-250																							
EISO125-80-250A																							
EISO125-80-250B																							
EISO125-80-250C																							
EISO125-80-250D																							
EISO125-80-250E																							
EISO125-80-315																							
EISO125-80-315A																							
EISO125-80-315B																							
EISO125-80-315C																							
EISO125-80-315D																							
EISO125-80-315E																							
EISO125-100-200																							
EISO125-100-200A																							
EISO125-100-200B																							
EISO125-100-200C																							
EISO125-100-200D																							
EISO125-100-250																							
EISO125-100-250A																							
EISO125-100-250B																							
EISO125-100-250C																							
EISO125-100-250D																							
EISO125-100-250E																							
EISO125-100-250F																							
EISO125-100-315																							
EISO125-100-315A																							
EISO125-100-315B																							
EISO125-100-315C																							
EISO125-100-315D																							
EISO125-100-315E																							
EISO150-125-250	150	125																					
EISO150-125-250A																							
EISO150-125-250B																							
EISO150-125-250C																							
EISO150-125-250D																							
EISO150-125-250E																							

Dimension



Model	DN1	a	a1	h4	L	l1	l2	l3	DN2	Ss	Sd	h2	h3	h	d	b1	b3	b2	k
EISO125-80-200				493	1123														
EISO125-80-200A																			
EISO125-80-200B				468	1117	1120	190	740				250	280			380	440	490	
EISO125-80-200C																			
EISO125-80-200D				446	1082														
EISO125-80-200E															4-Φ24				
EISO125-80-250				585	1276														
EISO125-80-250A																			
EISO125-80-250B				538	1163	1250	205	840	80			280	325			430	490	540	
EISO125-80-250C																			
EISO125-80-250D					1123														
EISO125-80-250E		125																	
EISO125-80-315				630	1407														
EISO125-80-315A					1372														
EISO125-80-315B				610	1321	1400	230	940				315	350		4-Φ28	480	550	610	
EISO125-80-315C																			
EISO125-80-315D																			
EISO125-80-315E					1276	1250	205	840								430	490	540	
EISO125-100-200	125			513	1163														
EISO125-100-200A																			
EISO125-100-200B					1123	1120	190	740					300		4-Φ24	380	440	490	
EISO125-100-200C			100											100					
EISO125-100-200D				488	1117														
EISO125-100-250				585	1336	1400	230	940				280			4-Φ28	480	550	610	
EISO125-100-250A																			
EISO125-100-250B					1291								325						
EISO125-100-250C						1250	205	840	100						4-Φ24	430	490	540	
EISO125-100-250D																			
EISO125-100-250E				538	1178														
EISO125-100-250F																			
EISO125-100-315				655	1453														
EISO125-100-315A																			
EISO125-100-315B		140		630	1422														
EISO125-100-315C																			
EISO125-100-315D					1387							315							
EISO125-100-315E				610	1336	1400	230	940											
EISO150-125-250					1422								350		4-Φ28	480	550	610	
EISO150-125-250A				630															
EISO150-125-250B	150				1387				125	8-Φ22		355							
EISO150-125-250C																			
EISO150-125-250D				610	1336														
EISO150-125-250E					1291	1250	205	840							4-Φ24	430	490	540	

8-Φ18 | 8-Φ18 | NPT 3/8


Flange Elbow


Hose Coupling


Float Switch

11- 45kW(4P)

0.75-1.5kW(2P) 2.2-5.5kW(2P) 7.5kW(2P) 5.5-7.5kW(4P)

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

Application

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

Pump

- Max. immersion depth: 10m (0.75-5.5kw-2P), 20m (7.5kw-2P/5.5-45kw-4P)
- Cable length: 8 m
- Max. liquid temperature: up to +40℃
- Liquid PH value: 6 - 10
- Max.liquid density: $1.3x10^3$ kg/m^3
- Allowed by the particle diameter: 20 - 80 mm
- Float switch: single phase

Motor

- Copper winding
- Insulation class: B (0.75-5.5kw-2P), F (7.5kw-2P/5.5-45kw-4P)
- Protection class: IP68
- Motor protection: built in (0.75-7.5kw-2P, 5.5-7.5kw-4P)

Identification Codes

65 WQ D 15-10-1.1(F)

- Automatic Operation With Float Switch(Power≤1.5kw)
- Rated Power (kW)
- Rated Head (m)
- Rated Flow (m^3/h)
- Single Phase (Three phase without D)
- Submersible Sewage Pump
- Outlet Diameter (mm)

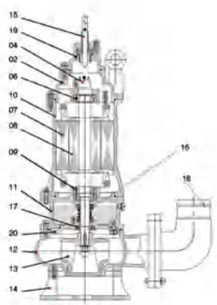
Technical Data

Model	Voltage	Speed	Max flow	Max head	Motor Power		Outlet	Guide Rial Fitting	Impeller passage	N.W	G.W	Packing dimension
	V	r.p.m	m^3/h	m	kW	HP	in		mm	kg	kg	mm
50WQ10-10-0.75	380	2850	26	12	0.75	1	2	50-50	25	18.5	20	490x255x240
50WQD10-10-0.75(F)	220	2850	26	12	0.75	1	2	50-50	25	19.5	21	490x255x240
50WQ8-16-1.1	380	2850	29	18	1.1	1.5	2	50-50	20	24	25.5	490x255x240
50WQD8-16-1.1(F)	220	2850	29	18	1.1	1.5	2	50-50	20	25.5	27	490x255x240
65WQ15-10-1.1	380	2850	33	15	1.1	1.5	2	50-50	25	23	24.5	490x255x240
65WQD15-10-1.1(F)	220	2850	33	15	1.1	1.5	2	50-50	25	23.5	25	490x255x240
50WQ8-20-1.5	380	2850	25	22	1.5	2	2	50-50	20	25	25	520x260x240
50WQD8-20-1.5(F)	220	2850	25	22	1.5	2	2	50-50	20	26	28	520x260x240
65WQ15-15-1.5	380	2850	37	20	1.5	2	2	50-50	25	26.5	28	510x255x240
65WQD15-15-1.5(F)	380	2850	37	20	1.5	2	2	50-50	25	26.5	28	510x255x240
50WQ15-20-2.2	380	2850	40	22	2.2	3	2	50-50	25	44	48	690x260x315
65WQ25-17-2.2	380	2850	42	22	2.2	3	2 1/2	65-65	25	42	46	690x260x315
80WQ40-9-2.2	380	2850	64	16	2.2	3	3	80-80	30	46	51.5	710x260x315
50WQ15-26-3	380	2850	46	28	3	4	2	50-50	25	49	54	710x260x315
65WQ25-22-3	380	2850	52	26	3	4	2 1/2	65-65	30	52	57	710x260x315
80WQ40-13-3	380	2850	75	20	3	4	3	80-80	30	54	60	750x240x325
100WQ60-9-3	380	2850	92	19	3	4	4	100-100	30	57	63	750x240x325
65WQ25-28-4	380	2850	58	33	4	5.5	2 1/2	65-65	25	61	69	780x260x325
80WQ40-18-4	380	2850	81	24	4	5.5	3	80-80	30	64	71.2	800x260x325
100WQ60-13-4	380	2850	93	24	4	5.5	4	100-100	30	65	73	800x260x325
50WQ15-40-5.5	380	2850	52	42	5.5	7.5	2	50-50	25	73	81	790x290x355
80WQ30-30-5.5	380	2850	47	36	5.5	7.5	3	80-80	30	73	83	800x290x335
100WQ65-15-5.5	380	2850	110	25	5.5	7.5	4	100-100	30	79	89	810x300x375
50WQ20-45-7.5	380	2850	37	52	7.5	10	2	50-50	25	114	127.5	934x364x435

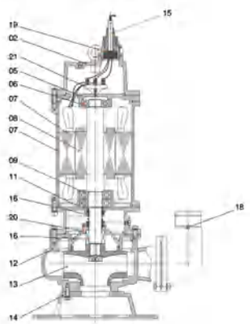
Model	Voltage	Speed	Max flow	Max head	Motor Power		Outlet	Guide Rial Fitting	Impeller passage	N.W	G.W	Packing dimension
	V	r.p.m	m^3/h	m	kW	HP	in		mm	kg	kg	mm
80WQ30-33-7.5	380	2850	80	40	7.5	10	3	80-80	30	112	126	934x364x435
100WQ65-22-7.5	380	2850	110	34	7.5	10	4	100-100	35	115	129.5	964x364x435
150WQ100-10-7.5	380	2850	160	20	7.5	10	6	150-150	35	115	130	1014x384x455
100WQ65-15-5.5(4P)	380	1450	150	19	5.5	7.5	4	100-100	55	142	158	905x415x555
150WQ110-10-5.5(4P)	380	1450	200	26	5.5	7.5	6	150-150	55	151	167.5	935x445x585
100WQ100-15-7.5(4P)	380	1450	170	24	7.5	10	4	100-100	55	158	175	955x415x555
150WQ150-10-7.5(4P)	380	1450	240	16	7.5	10	6	150-150	75	169	186	985x445x858
200WQ250-6-7.5(4P)	380	1450	400	12	7.5	10	8	200-200	55	200	218	730x490x1115
100WQ100-22-11(4P)	380	1450	190	31	11	15	4	100-100	50	253	271	700x470x1100
150WQ150-15-11(4P)	380	1450	260	24	11	15	6	150-150	50	256	274	700x470x1130
200WQ300-9-11(4P)	380	1450	450	17	11	15	8	200-200	65	280	298	700x500x1170
100WQ100-27-15(4P)	380	1450	210	35	15	20	4	100-100	50	275	293	700x470x1150
150WQ150-20-15(4P)	380	1450	290	29	15	20	6	150-150	50	277	295	700x470x1170
200WQ300-12-15(4P)	380	1450	490	21	15	20	8	200-200	65	302	320	700x500x1220
100WQ100-31-18.5(4P)	380	1450	200	38	18.5	25	4	100-100	50	326	344.5	700x480x1240
150WQ150-24-18.5(4P)	380	1450	300	32	18.5	25	6	150-150	50	327	346	700x480x1240
200WQ300-15-18.5(4P)	380	1450	530	25	18.5	25	8	200-200	65	354	373	720x510x1280
100WQ100-36-22(4P)	380	1450	220	44	22	30	4	100-100	50	346	366.5	700x480x1240
150WQ150-28-22(4P)	380	1450	330	39	22	30	6	150-150	50	347	367	700x480x1240
200WQ300-18-22(4P)	380	1450	550	27	22	30	8	200-200	65	374	395	720x510x1280
250WQ500-11-22(4P)	380	1450	800	22	22	30	10	250-250	70	390	411	720x600x1350
150WQ150-34-30(4P)	380	1450	310	45	30	40	6	150-150	55	497	519	780x600x1430
200WQ300-21-30(4P)	380	1450	570	33	30	40	8	200-200	80	519	541	820x620x1470
250WQ500-14-30(4P)	380	1450	860	27	30	40	10	250-250	85	512	535	780x650x1490
300WQ800-8-30(4P)	380	1450	1040	22	30	40	12	300-300	90	557	581	860x720x1540
150WQ150-40-37(4P)	380	1450	330	50	37	50	6	150-150	55	557	579	780x600x1480
200WQ300-25-37(4P)	380	1450	620	39	37	50	8	200-200	80	576	598	820x620x1520
250WQ500-18-37(4P)	380	1450	930	30	37	50	10	250-250	85	570	593	780x650x1540
300WQ800-11-37(4P)	380	1450	1060	25	37	50	12	300-300	90	614	638	860x720x1590
200WQ300-30-45(4P)	380	1450	660	43	45	60	8	200-200	80	612	634	820x620x1520
250WQ500-21-45(4P)	380	1450	950	34	45	60	10	250-250	85	606	629	780x650x1540
300WQ800-14-45(4P)	380	1450	1080	28	45	60	12	300-300	90	650	674	860x720x1590

Materials Table

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



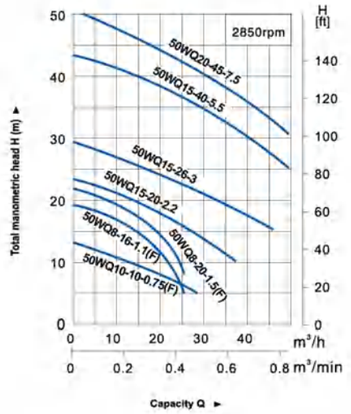
WQ(D) 0.75 - 7.5 kW

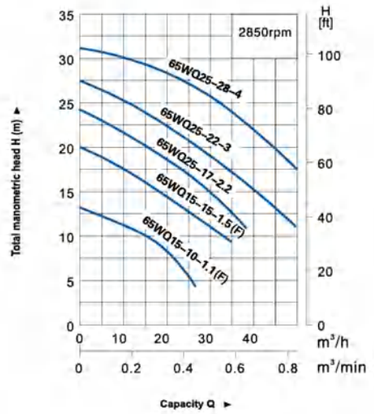


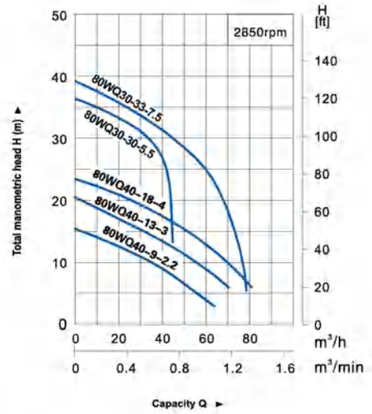
WQ 11 - 45 kW

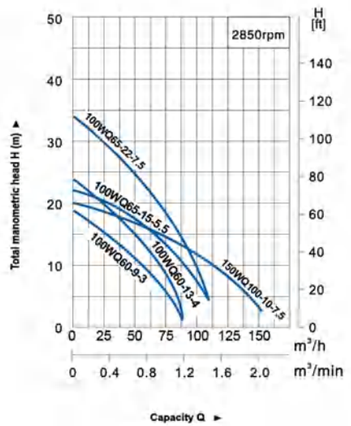
AQUASTRONG
Submersible Sewage Pumps

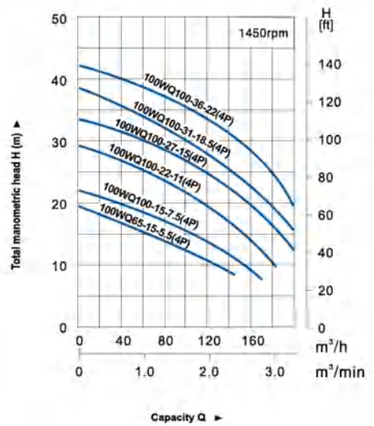
Hydraulic Performance Curves

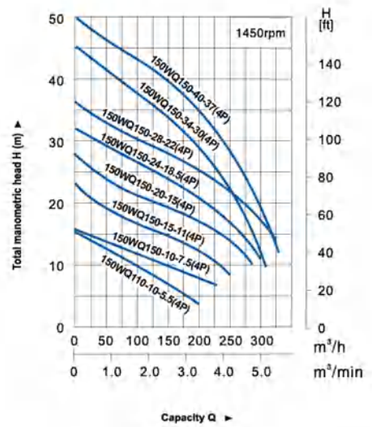


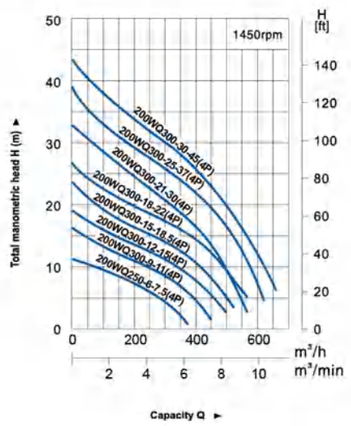


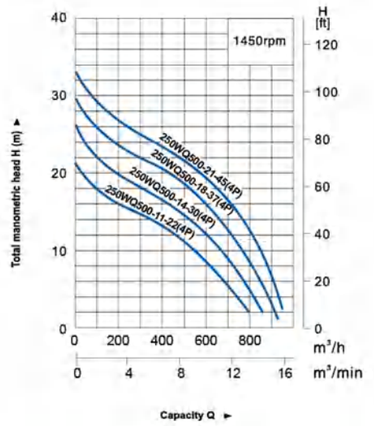


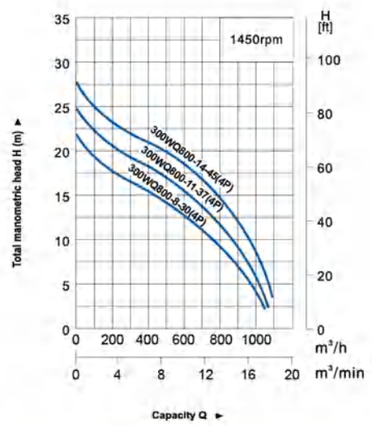




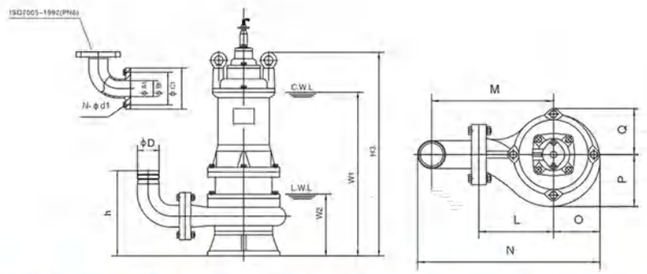






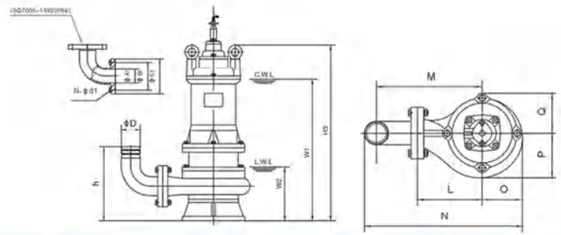


Dimension

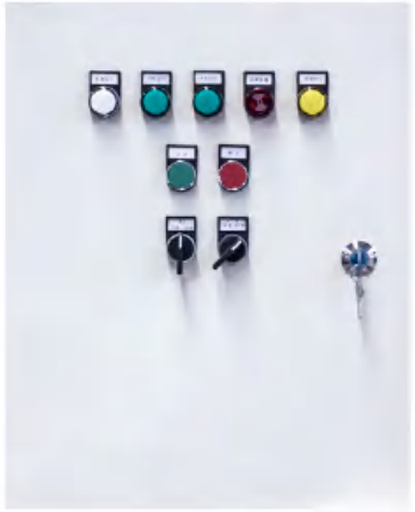


Model	ΦD	ΦA1	ΦB1	ΦC1	n-Φd1	h	W1	W2	H3	N	O	P	Q	L	M
50WQ10-10-0.75	50	50	110	140	4-Φ14	200	300	120	445	332	90	96	85	128	192
50WQD10-10-0.75(F)	50	50	110	140	4-Φ14	200	315	120	445	332	90	96	85	128	192
50WQ8-16-1.1	50	50	110	140	4-Φ14	195	325	120	460	347	90	96	85	128	192
50WQD8-16-1.1(F)	50	50	110	140	4-Φ14	195	325	120	460	347	90	96	85	128	192
65WQ15-10-1.1	65	50	110	140	4-Φ14	195	345	120	460	347	90	96	85	128	192
65WQD15-10-1.1(F)	65	50	110	140	4-Φ14	195	345	120	460	347	90	96	85	128	192
50WQ8-20-1.5	50	50	110	140	4-Φ14	202	370	165	480	340	90	105	82	145	210
50WQD8-20-1.5(F)	50	50	110	140	4-Φ14	202	390	165	500	340	90	105	82	145	210
65WQ15-15-1.5	65	50	110	140	4-Φ14	195	345	120	480	347	90	96	85	128	192
65WQD15-15-1.5(F)	65	50	110	140	4-Φ14	195	345	120	480	347	90	96	85	128	192
50WQ15-20-2.2	50	50	110	140	4-Φ14	210	410	145	575	357	107	113	100	164	228
65WQ25-17-2.2	65	65	130	160	4-Φ14	225	410	145	575	383	107	113	100	164	234
80WQ40-9-2.2	80	65	150	190	4-Φ14	255	415	150	580	392	105	111	93	160	250
50WQ15-26-3	50	50	110	140	4-Φ14	210	425	145	610	357	107	113	100	164	228
65WQ25-22-3	65	65	130	160	4-Φ14	225	425	145	610	383	107	113	100	164	234
80WQ40-13-3	80	80	150	190	4-Φ18	270	450	170	630	387	107	115	100	153	243
100WQ60-9-3	100	80	170	210	4-Φ18	295	450	170	630	410	107	115	100	153	253
65WQ25-28-4	65	65	130	160	4-Φ14	240	455	160	650	406	111	116	106	179	249
80WQ40-18-4	80	80	150	190	4-Φ18	280	480	185	675	407	105	110	100	165	255
100WQ60-13-4	100	80	170	210	4-Φ18	305	480	185	675	430	105	110	100	165	265
50WQ15-40-5.5	50	50	110	140	4-Φ14	235	475	160	675	386	125	130	112	175	239
80WQ30-30-5.5	80	80	150	190	4-Φ18	275	495	175	690	427	115	120	110	175	265
100WQ65-15-5.5	100	100	170	210	4-Φ18	285	505	190	705	462	131	140	115	181	281
50WQ20-45-7.5	50	50	110	140	4-Φ12	265	540	210	4760	449	140	146	134	200	264
80WQ30-33-7.5	80	80	150	190	4-Φ18	305	540	210	760	490	140	146	134	200	290
100WQ65-22-7.5	100	100	170	210	4-Φ18	345	560	230	780	513	145	154	135	200	300
150WQ100-10-7.5	150	150	225	265	8-Φ18	405	575	245	795	598	145	160	135	210	360

Dimension



Model	ΦD	ΦA1	ΦB1	ΦC1	n-Φd1	h	W1	W2	H3	N	O	P	Q	L	M
100WQ65-15-5.5(4P)	100	100	170	210	4-Φ18	360	585	255	805	620	190	202	177	280	380
150WQ110-10-5.5(4P)	150	150	225	265	8-Φ18	430	615	285	835	725	200	215	185	300	450
100WQ100-15-7.5(4P)	100	100	170	210	4-Φ18	360	630	255	850	620	190	202	177	280	380
150WQ150-10-7.5(4P)	150	150	225	265	8-Φ18	430	660	285	880	725	200	215	185	300	450
200WQ250-6-7.5(4P)	200	200	295	340	8-Φ22	540	695	320	915	880	230	256	192	350	550
100WQ100-22-11(4P)	100	100	170	210	4-Φ18	355	650	255	910	671	206	217	193	310	410
150WQ150-15-11(4P)	150	150	225	265	8-Φ18	440	680	285	940	756	208	225	188	320	470
200WQ300-9-11(4P)	200	200	295	340	8-Φ22	545	720	325	980	866	226	253	191	340	540
100WQ100-27-15(4P)	100	100	170	210	4-Φ18	355	695	255	955	671	206	217	193	310	410
150WQ150-20-15(4P)	150	150	225	265	8-Φ18	440	725	285	985	756	208	225	188	320	470
200WQ300-12-15(4P)	200	200	295	340	8-Φ22	545	765	325	1025	866	226	253	191	340	540
100WQ100-31-18.5(4P)	100	100	170	210	4-Φ18	355	715	185	1010	693	218	227	206	325	425
150WQ150-24-18.5(4P)	150	150	225	265	8-Φ18	415	740	290	1035	781	221	235	206	335	485
200WQ300-15-18.5(4P)	200	200	295	340	8-Φ22	545	785	330	1080	883	233	260	203	350	550
100WQ100-36-22(4P)	100	100	170	210	4-Φ18	355	735	265	1030	693	218	227	206	325	425
150WQ150-28-22(4P)	150	150	225	265	8-Φ18	415	760	290	1055	781	221	235	206	335	485
200WQ300-18-22(4P)	200	200	295	340	8-Φ22	545	805	330	1100	883	233	260	203	350	550
250WQ500-11-22(4P)	250	250	350	395	12-Φ22	635	860	400	1160	1150	280	313	270	400	673
150WQ150-34-30(4P)	150	150	240	285	8-Φ22	475	855	340	1200	997	272	283	270	380	582
200WQ300-21-30(4P)	200	200	295	340	8-Φ22	580	895	380	1240	1078	286	308	270	390	622
250WQ500-14-30(4P)	250	250	350	395	12-Φ22	-	920	400	1265	1181	300	332	270	410	683
300WQ800-8-30(4P)	300	300	400	445	12-Φ22	-	970	450	1315	1365	340	386	290	480	803
150WQ150-40-37(4P)	150	150	240	285	8-Φ22	463	850	340	1255	997	272	283	270	380	582
200WQ300-25-37(4P)	200	200	295	340	8-Φ22	593	890	380	1295	1078	286	308	270	390	622
250WQ500-18-37(4P)	250	250	350	395	12-Φ22	665	910	400	1315	1181	300	332	270	410	683
300WQ800-11-37(4P)	300	300	400	445	12-Φ22	750	860	450	1365	1365	340	386	290	480	803
200WQ300-30-45(4P)	200	200	295	340	8-Φ22	560	930	380	1295	1078	286	308	270	390	622
250WQ500-21-45(4P)	250	250	350	395	12-Φ22	665	950	400	1315	1181	300	332	270	410	683
300WQ800-14-45(4P)	300	300	400	445	12-Φ22	750	1000	450	1365	1365	340	386	290	480	803



Control Box

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

Features

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

Operating Conditions

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

Instructions

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

Identification Codes

D – 2 – 1.5 – Z

- Z — Starting Method (Omitted for Direct Start)
- 1.5 — Power for Single Pump
- 2 — Pump Quantity
- D — Control Box

	Q	Z	R
Starting Method	Direct on Line	Autotransformer Starter	Soft Starter

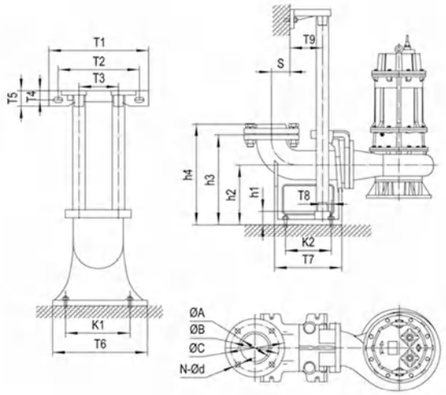
Controlled Quantity	1	2	3
Control Mode	For One Pump	For Three Pumps	For Four Pumps

Guide Rail System

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

Includes

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



Model	ΦA	ΦB	ΦC	N-Φd	T1	T2	T3	T4	T5	T6	T7	T8	T9	K1	K2	S	h1	h2	h3	h4	Ⅰ	Ⅱ	Ⅲ
50-50(PN6)	Φ50/G2"	110	140	4-Φ14	265	215	105	25	42	200	215	15	67	165	135	63	25	160	250	280	1"/Φ33.3x3.5	4-M16x120	2-M12x40
65-65(PN6)	Φ65/G2$^1/_2$"	130	160	4-Φ14	280	230	125	30	50	230	235	20	70	190	155	90	25	165	265	295	1"/Φ33.3x3.5	4-M16x120	2-M12x40
80-80(PN6)	Φ80/G3"	150	190	4-Φ18	315	265	145	27	50	255	225	30	78	215	155	77	25	190	305	335	$1^1/_2$"/Φ48.3x3.5	4-M16x120	2-M12x40
100-100(PN6)	Φ100/G4"	170	210	4-Φ18	365	305	170	32	55	295	260	35	95	265	175	100	25	230	350	380	$1^1/_2$"/Φ48.3x3.5	4-M18x150	2-M12x50
150-150(PN6)	Φ150	225	265	8-Φ18	400	260	280	24	48	400	410	75	95	280	300	200	390	300	480	-	$1^1/_2$"/Φ48.3x3.5	4-M20x150	2-M14x50
150-150(PN10)	Φ150	240	280	8-Φ22	400	260	280	24	48	400	410	75	95	280	300	200	390	300	480	-	$1^1/_2$"/Φ48.3x3.5	4-M20x150	2-M14x50
200-200(PN10)	Φ200	295	340	8-Φ22	400	260	280	24	48	400	445	100	95	300	355	230	440	325	555	-	$1^1/_2$"/Φ48.3x3.5	4-M20x150	2-M14x50
250-250(PN10)	Φ250	350	395	12-Φ22	400	260	280	24	48	460	555	110	95	360	430	295	460	315	630	-	$1^1/_2$"/Φ48.3x3.5	4-M22x150	2-M14x50
300-300(PN10)	Φ300	400	445	12-Φ22	520	340	375	32	65	550	600	140	110	414	460	280	480	415	730	-	2"/Φ60.3x3.5	4-M24x200	2-M14x50

• Ⅰ = Dimensions of tube for guide rod.
Ⅱ = Quantity and specification of foundation bolt.
Ⅲ = Quantity and specification of upper guide rod bolt

1.5~2.2kw

3.7KW

5.5KW

Application

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

Pump

- Max. liquid temperature: +40℃
- Flow: up to 156 m^3/h
- Head: up to 57 m
- Power: 1.5 kW (2 HP) to 15kW (20 HP)
- Max. Immersion depth: 25 m
- Optional cable length

Motor

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

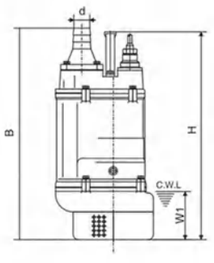
Identification Codes

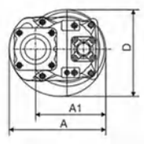
KBZ 2 1.5

- 1.5 — Power (kW)
- 2 — Outlet Diameter (")
- KBZ — Submersible Dewatering Pump

Technical Data

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

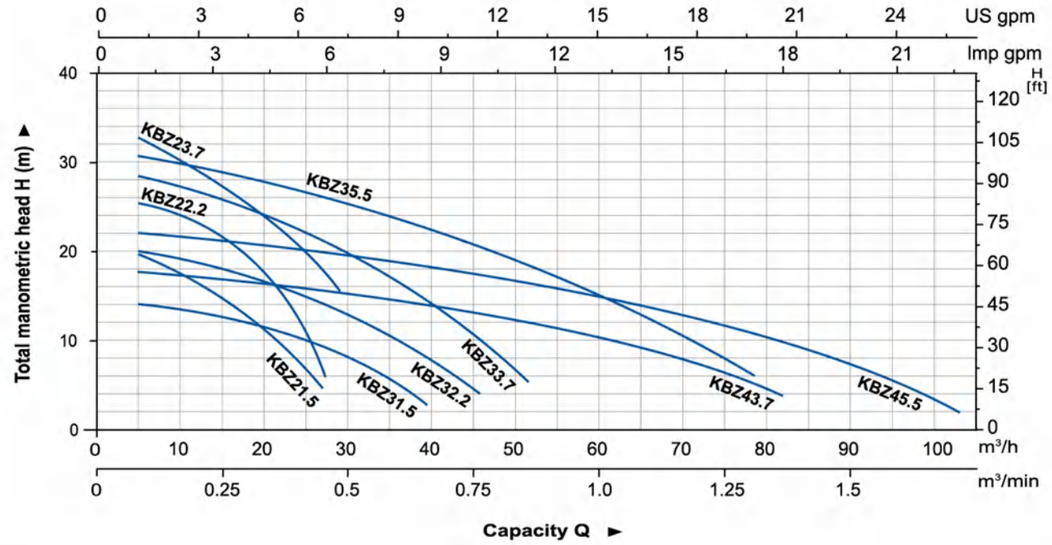




Dimension

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

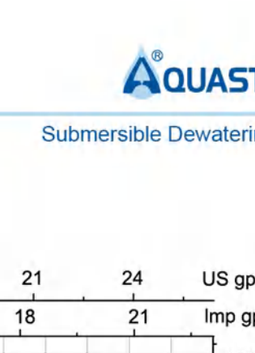
Hydraulic Performance Curves



Materials Table

No.	Part	Material
1	Hose coupling	Cast iron
2	Thermal protector	
3	Upper cover	Cast iron
4	Motor cover	Cast iron
5	Oil seal	
6	Mechanical seal	Lower:Sic-Sic Upper:Carbon-Sic(≤2.2kW) Lower: Sic-Sic Upper:Sic-Sic(≥3.7kW)
7	Strainer	Steel
8	Handle	Steel

No.	Part	Material
9	Cable	
10	Bearing	
11	Rotor	
12	Stator	
13	Bearing	
14	Impeller	High chrome alloy
15	Pump body	Cast iron
16	Inlet plate	Ductile iron



Package Information

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

Application

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

Pump

- Max. liquid temperature: +40℃
- Flow: up 156 60 m³/h
- Head: up to 57 m
- Power: 1.5 kW (2 HP) to 15kW (20 HP)
- Max. Immersion depth: 25 m
- Optional cable length

Motor

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

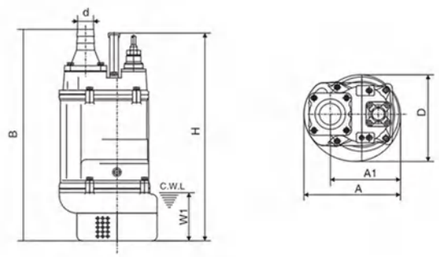
Identification Codes

KBZ 4 7.5

- Power (kW)
- Outlet Diameter (")
- Submersible Dewatering Pump

Technical Data

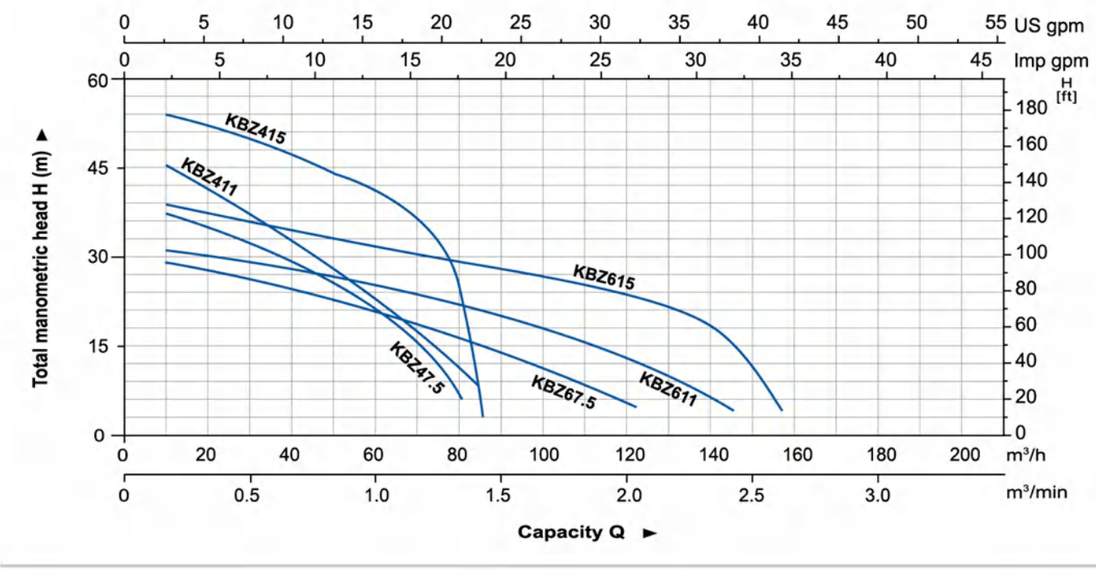
Model	Outlet	Power		Max head	Max flow		Impeller passage
	mm	kW	HP	m	m³/h	m³/min	mm
KBZ47.5	100	7.5	10	40	84	1.4	11.5
KBZ411	100	11	15	48.5	86.4	1.44	11.5
KBZ415	100	15	20	56	86.4	1.44	11.5
KBZ67.5	150	7.5	10	31	124.8	2.08	19.5
KBZ611	150	11	15	32	147	2.45	19.5
KBZ615	150	15	20	40	156	2.6	19.5



Dimension

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

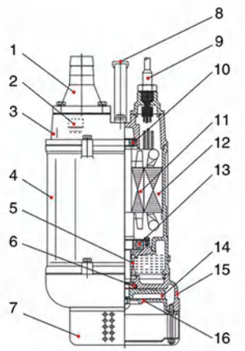
Hydraulic Performance Curves



Materials Table

No.	Part	Material
1	Hose coupling	Cast iron
2	Thermal protector	
3	Upper cover	Cast iron
4	Motor cover	Cast iron
5	Oil seal	
6	Mechanical seal	Lower:Sic-Sic Upper:Carbon-Sic(≤2.2kW) Lower: Sic-Sic Upper:Sic-Sic(≥3.7kW)
7	Strainer	Steel
8	Handle	Steel

No.	Part	Material
9	Cable	
10	Bearing	
11	Rotor	
12	Stator	
13	Bearing	
14	Impeller	High chrome alloy
15	Pump body	Cast iron
16	Inlet plate	Ductile iron



Package Information

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

Application

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

Pump

- Max. liquid temperature: +40℃
- Flow: up to 60 m^3/h
- Head: up to 57 m
- Power: 1.5 kW (2 HP) to 15 kW (20 HP)
- Max. Immersion depth: 25 m
- Optional cable length

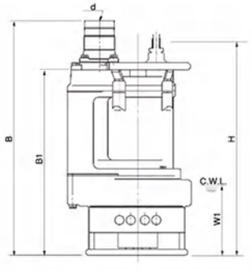
Motor

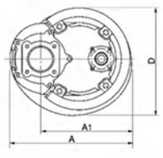
- Copper winding
- Insulation class: B
- Protection class: IP68

Identification Codes

Technical Data

Model	Outlet	Power		Max head	Max flow		Impeller passage
	mm	kW	HP	m	m^3/h	m^3/min	mm
80KBS44	80	4	5.5	14.8	99	1.65	30
100KBS46	100	6	8	16.9	150	2.50	30
150KBS49	150	9	12	21.5	168	2.80	30

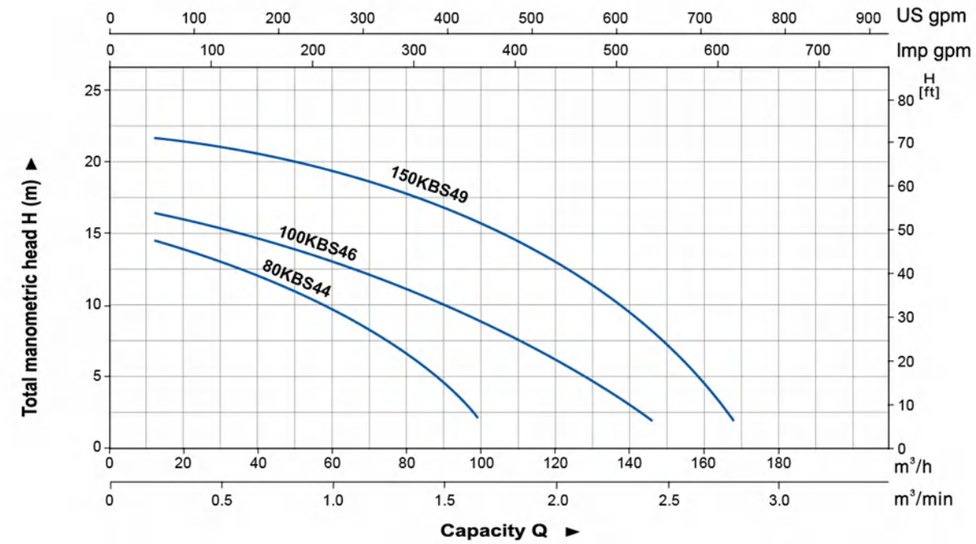




Dimension

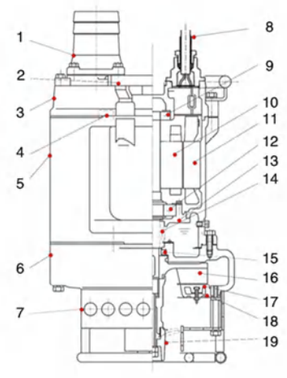
Model	d	A	A1	B	B1	D	H	W1
80KBS44	80	350	260	816	666	326	730	250
100KBS46	100	415	305	844	688	373	730	250
150KBS49	150	434	324	889	709	407	776	250

Hydraulic Performance Curves



Materials Table

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



Package Information

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

MEMO