IMPPUMPS®
Intelligent Motor Pumps
www.imp-pumps.com

MULTISTAGE PUMPS TECHNICAL DATA

NMT NEW MOTOR TECHNOLOGY

ErP Ready NewMotorTechnolgy

Investing in your future
Operation Part Financed By The European Union
European Regional Development Fund

INDEX

GENERAL INFORMATION

ALL PRODUCTS AND COMPONENTS ARE MANUFACTURED FROM ENVIRONMENTALLY FRIENDLY MATERIALS.

UPON DISPOSAL INTERNAL ENVIRONMENTAL REGULATION MUST BE CONSIDERED.

FURTHER INFORMATION ON ALL PUMPING PROGRAMS WITH TECHNICAL DATA ARE AVAILABLE ON

WWW.IMP-PUMPS.COM

GENERAL SALES CONDITIONS AND TERMS OF PAYMENT – DEPENDING ON THE AGREEMENT WITH THE FIRM IMP PUMPS.

IMAGES IN CATALOGUE ARE FOR ILLUSTRATIVE PURPOSES ONLY.

TECHNICAL ADJUSTMENTS AND REVISIONS ARE NOT PERMITTED!

IMPPUMPS®
Intelligent Motor Pumps

ABOUT US

IMP PUMPS is Slovenian manufacturer of pumps and pumping systems located in Komenda in Slovenia. Company designs, develops, manufactures, distributes and maintains pumps and pumping systems. With products and services of its own and from strategic partners, company is positioned as provider of integrated solutions. With specialized skills company resolves the problems relating to the transportation of liquid media. This ensures the comfort of home environment and optimal working conditions in the industry.

IMP PUMPS increased turnover in 2014 for 23%. More than 95 % of production is sold in over 60 countries around the world. Company is innovator in the field of electro commutated submersible motors and has the quality certificate ISO 9001:2008.

History

IMP PUMPS was founded in 1947 and has existed as part of the IMP until the late 1980s. Company successfully survived the change of the economic system and the turbulent nineties and stood on its own feet. Company was privatized in 1997 and 1999. In the year 2000, the company was restructured and renamed in IMP PUMPS d.o.o.. Slovenia's entry into the EU was another initiative for IMP PUMPS intensive development of the sales network in the changing European market, either directly or through its business partners.
At the same time investments in development, marketing, information technology, and philosophy of e-commerce were made.

Present

IMP PUMPS is present with its products and services in many world markets (Eastern and Western Europe, North America, Asia, North Africa and Australia). IMP PUMPS is also a member of EUROPUMP the European Association of Pump Manufacturers. In pump design, high priority is given to the improvement of the energy efficiency of pumps. Excellent results have been reached by the new NMT pump series, using permanent magnets technology for very high efficiency rates.
IMP PUMPS is one of the few European manufacturers, which over the years developed and launched a new generation of pumps with electronically controlled wet running motors. This is one of the main reasons that the company IMP PUMPS is ranked among Europe's technological elite.

Reference: http://imp-pumps.com/en/reference/

Future

IMP PUMPS Company employees are aware they have become part of global development and the importance of the environment in which they live. Our products are energy efficient and environmentally friendly. We are constantly developing new and more cost effective pumps replacing the old types and investing in the development of intelligent pumps with an emphasis on digitization and communication. The company plans to further expand its sales on foreign markets and enhance its position among the four largest manufacturer of circulator pumps in Europe.
In the spirit of its motto "The honest product for the honest price", IMP PUMPS intends to maintain the excellent quality of its products at the favorable prices for the customer, along with the application of the latest technologies and prompt service.

IMPPUMPS®
Intelligent Motor Pumps

Vertical Multi-Stage Centrifugal Pumps

CATALOGUE FOR 50Hz

IMPPUMPS®
Intelligent Motor Pumps

High-efficiency standard motor, Japan NSK bearings and cold-rolled 50ww800 silicon steel sheet made the pump high efficiency, low noise and maintenance-free. Totally enclosed shaft seal, IP55 protection grade, F class insulation grade, the special "double-lock" drive end bearing made the pump withstand higher inlet pressure.

Balanced & container-type shaft seal with all the parts assembled together, no axial rotating to prevent the shaft and rubber parts from wearing, with the characteristics of rapid changing, easy installation and safe operation.Dynamic sealing is made of cemented carbide materials and the static sealing is fluorine rubber material which make the mechanical seal to be high temperature resistance, long service life, easy changing and other significant characteristics.

Being produced by the most advanced international laser welding technology,, no eliminate welding, ensure the high intensity and efficiency. The processing technology: precision casting, CNC lathe, CNC machining center, the modern advanced technology such as the laser welding technique and processing equipment.

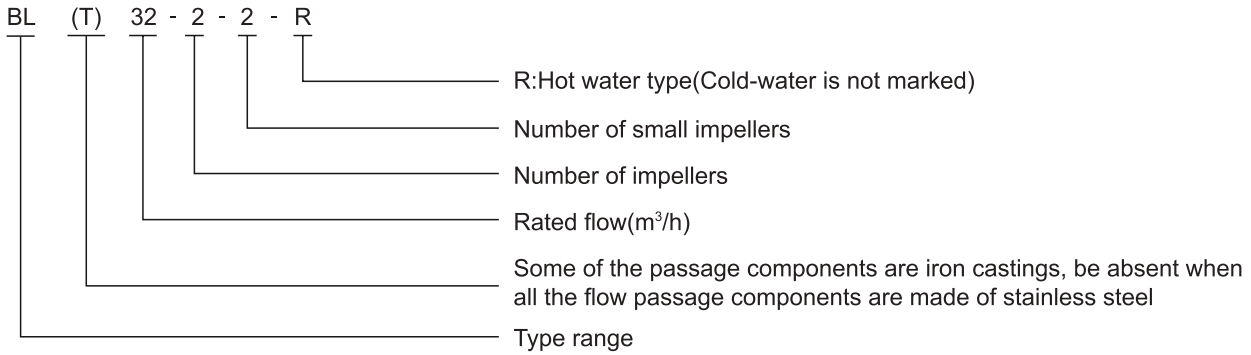
The built-in floating sealing ring of the pump cavity body could minimize the internal leakage produced by the differential pressure and prevent the energy consumption when liquid leaking back to the pump cavity body.

The pump core parts are designed to be multilevel interlocking, fastening nut locked, component system interlock assembly industry, to minimize the gap between the impeller per level, improve the efficiency of the impeller water conservancy, and ensure the stability, reliablity and efficiency of the pump core components.

Cold extrusion spline shaft with good surface quality, high machining accuracy, at the same time improve the comprehensive mechanical properties of the shaft and the reliability of the pump

IMPPUMPS®
Intelligent Motor Pumps

Model Instruction



Overview Of The Product

BL(T) series stainless steel multi-stage centrifugal pump (afterwards called pump) boasts characters of high efficiency, low noise, steady operation, etc. The pump set adopts the non-self-priming vertical multi-stage structure, which makes a compact whole,its installation easy, its operation and maintenance convenient.

Application Limits

- Medium temperature: normal type: 0℃ ~68℃ hot water type:0℃ ~120℃ ,
- Ambient temperature:+40℃ ,
- Max ambient pressure:1.0MPa,
- Advisable to use motor of higher power in case that the density or viscosity of medium is above that of water.
- pH: 5 to 8

Applications Fields

Water supply	BL	BLT
Filtration and transfer at waterworks	●	●
Distribution from waterworks	●	●
Pressureboosting in mains	●	●
Pressure boosting in high-rise buildins,hotels,etc.	●	●
Pressure boosting for industrial water supply	●	●
Industry		
Pressure boosting		
Process water systems	●	●
Washing and cleaning systems	●	●
Vehicle washing tunnels	●	●
Fire fighting systems	●	●
Liquid transfer		
Cooling and air-conditioning systems(refrigerants)	●	●
Boiler feed and condensate systems	●	●
Machine tools(cooling lubricants)	●	●
Aquafarming	●	●
Transfer		
Oil and alcohol	●	●
Glycol and coolants	●	●

IMPPUMPS®
Intelligent Motor Pumps

Water treatment		
Ultra-filtration systems	●	○
Reverse osmosis systems	●	○
Softening, ionising, demineralizing systems	●	○
Distillation sys tems	●	○
Separators	●	○
Swimming baths	●	●
Irrigation		
Field irrigation(flooding)	●	●
Sprinkler irrigation	●	●
Drip-feed irrigation	●	●

Certificate

CE

Electric Motor

- Full-enclosed and ventilating two-pole standard motor
- Protection class: IP55
- Insulation class: F
- Standard voltage Single phase 220V-50Hz Three phase:380/400V-50Hz

Standard motor efficiency: 11kW to 45kW:IE3,other:IE2, Specific efficiency value for below table

Energy Efficiency Standard (IEC60034)

Power(kW)	Efficiency(2P, IE2)	Efficiency(2P,IE3)
0.75	77.4	80.7
1.1	79.6	82.7
1.5	81.3	84.2
2.2	83.2	85.9
3	84.6	87.1
4	85.8	88.1
5.5	87	89.2
7.5	88.1	90.1
11	89.4	91.2
15	90.3	91.9
18.5	90.9	92.4
22	91.3	92.7
30	92	93.3
37	92.5	93.7
45	92.9	94

IMPPUMPS®
Intelligent Motor Pumps

Calculation Of minimum Inlet Pressure

If the pressure in pump is lower than the vapour pressure of medium, cavitation will occur, which will affect the performance of pump. To avoid the cavitation and ensure the pump inlet has a minimum pressure, maximum suction head should be calculated as following:

$$H=P_b x10.2-NPSH-H_f-h_v-H_s$$

Pb: Atmospheric pressure, bar (In close pipeline system, it can be considered as the system pressure);
NPSH: Net positive suction head, m (Value at maximum flow of Q-NPSH curve);
H_f: Suction pipe line loss (Value at maximum flow of corresponding pipeline);
H_v: Medium vapour pressure, m (Medium vapour pressure at corresponding temperature, the default medium is water, as shown in figure4 on the right);
H_s: Safety margin, m, general value is 0.5.
Calculation result: if H is positive, the pump is installed in suction way, otherwise, it is installed in downdraft way.

Note: It is not necessary to do above calculation under general conditions. Only when we use pump in the following situations do we need to calculate the H:

1. Medium temperature is high;
2. The velocity of flow is larger than rated value;
3. Suction head is big or inlet pipeline is long;
4. System pressure is small;
5. Inlet condition is bad.

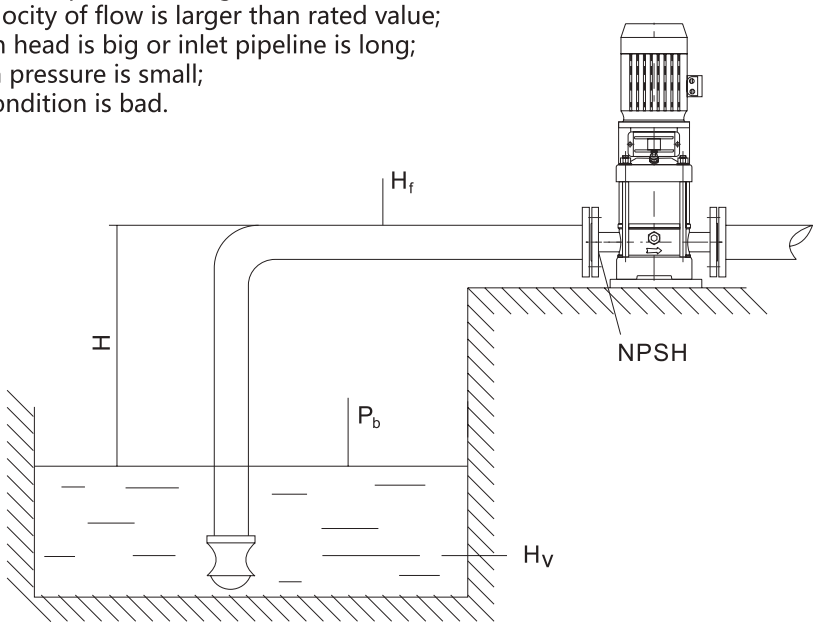


Fig. 1

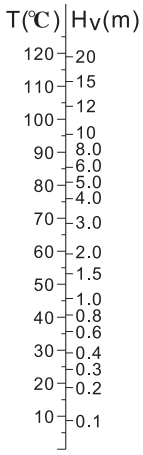


Fig. 2

Selection Of Pumps

Selection of pumps should be based on:

1. Duty point of the pump.
2. Dimensional data such as pressure loss as aresult of height differences,friction loss in the pipework,
3. Pump efficiency etc.
4. Pump materials
5. Pump connections
6. Commonly used mechanical seal configuration tables

IMPPUMPS®
Intelligent Motor Pumps

1. Duty point of the pump:

From a duty point it is possible to select a pump on the basis of the curve charts shown in "performance curves/technical" data.

2. Dimensional data:

When sizing a pump the following must be taken into accounting:

- •Required flow and pressure at the draw-off point.
- •Pressure loss as a result of height differences.
- •Friction loss in the pipework(Hf) (Refer to Fig.1) It may.
- •Best efficiency at the estimated duty point.
- •NPSH value.
- •For calculation of the NPSH value, see corresponding curves chart.

3. Pump efficiency:

Before determining the best efficiency point, the operation pattern of the pump needs to be identified. If the pump expected to operate as the same duty point, then select a BL pump which is operating at a duty point corresponding with the best efficiency of the pump.

As the pump is sized on the basis of the highest possible flow, it is important always to have the duty point to the right on the efficiency curve(eta) in order to keep efficiency high when the flow drops.

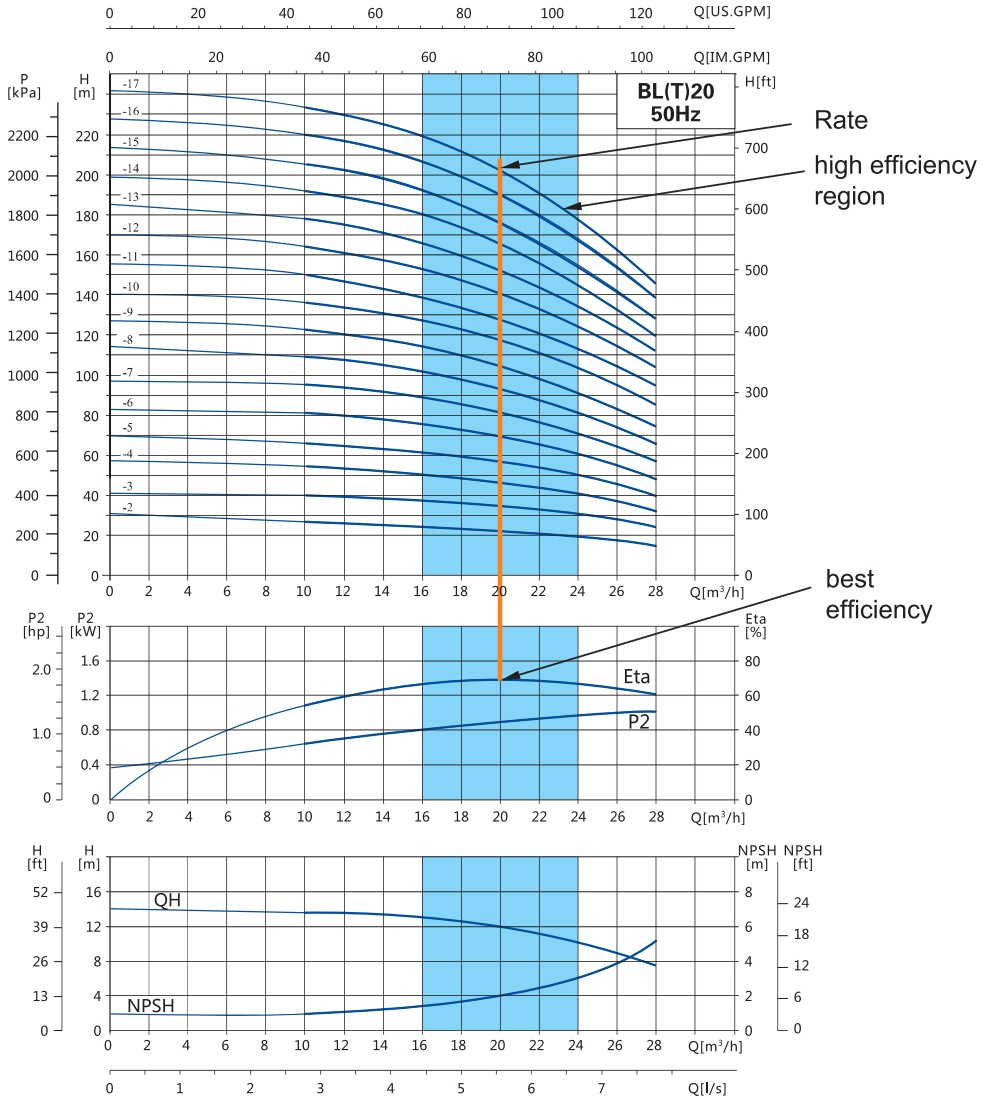


Fig. 3

4. Pump material:

The material variant should be selected based of the liquid to be pump.
BL wetted parts are made of AISI304
BLT pump body is made of cast-iron and .
Wetted parts are made of AISI304.

5. Pump connections

Selection of pump connection depend on the rated pressure and pipe work. the pump offer a wide range of ftexible connection such as:

- •Pipe thread
- •Oval flange
- •DIN flange
- •Other connections on reguest

6. Commonly used mechanical seal configuration tables

Configuration	Configuration illustrate	Application Field	Configuration case
EUBV	Container-type E,hard alloy moving ring U,Static ring leaching resin graphite B, fluorine rubber V	1. Working condition regular under cold water 0 ℃ to 68 ℃ , no particles, oil. 2. Working condition regular under hot water 68 ℃ to 90 ℃ , no particles,with oil.	Normal
EQQE	Container type E, moving ring and static ring silicon carbide Q , epdm E	Working condition:hot water 90 ℃ to 120 ℃ , containing a small amount of particles, no oil.	Normal
EQQV	Container type E,moving ring and static ring silicon carbide Q, fluorine rubber V	1. PH = 5-7 acidic medium. 2. PH = 7-9, alkaline medium. 3. Working conditions: hot water 68 ℃ to 90 ℃ , containing a small amount of particles, oil. 4. With oil.	Customer-made
EUUE	Container type E, moving ring and statil ring U, hard alloy U, epdm E	1. Under ice water 0℃ . 2. A crystallization of alkaline medium. 3. Containing a large number of granular media. 4. More than 2 MPa pressure condition. 5. No oil.	Customer-made

Maximum Work Pressure

Model	Curve No.
BL(T)2,4	2
BL(T)8,12,16,20	3
BL(T)32-2-2~BL(T)32-7	1
BL(T)32-8-2~BL(T)32-12	4
BL(T)32-13~BL(T)32-15-2	5
BL(T)45-2-2~BL(T)45-6	1
BL(T)45-7-2~BL(T)45-9	4
BL(T)45-10-2~BL(T)45-13-2	5
BL(T)64-2-2~BL(T)64-5-2	1
BL(T)64-5-1~BL(T)64-8	4
BL(T)90-2-2~BL(T)90-4-2	1
BL(T)90-4~BL(T)90-6	4

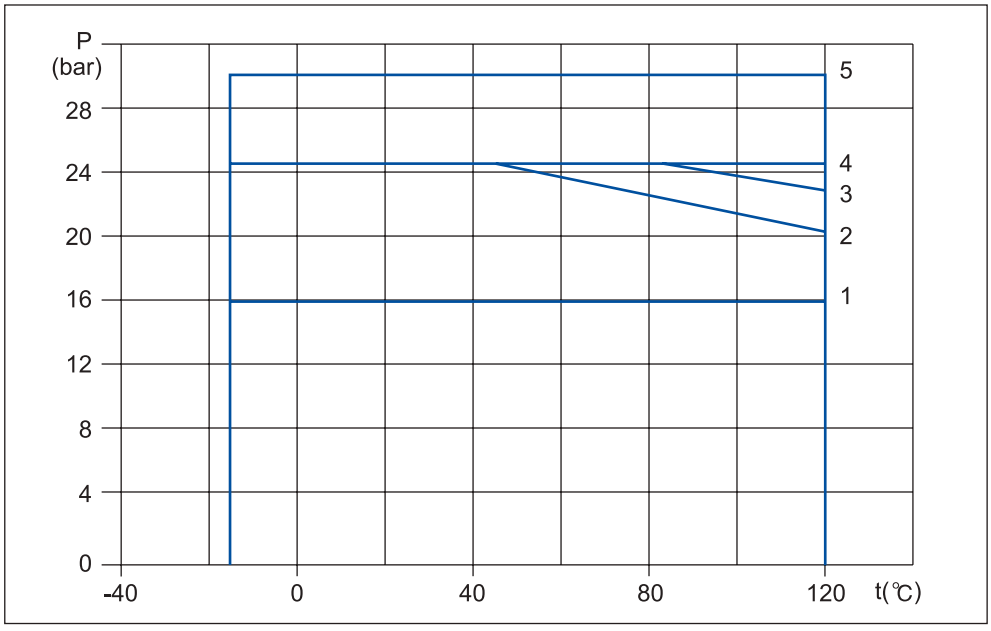
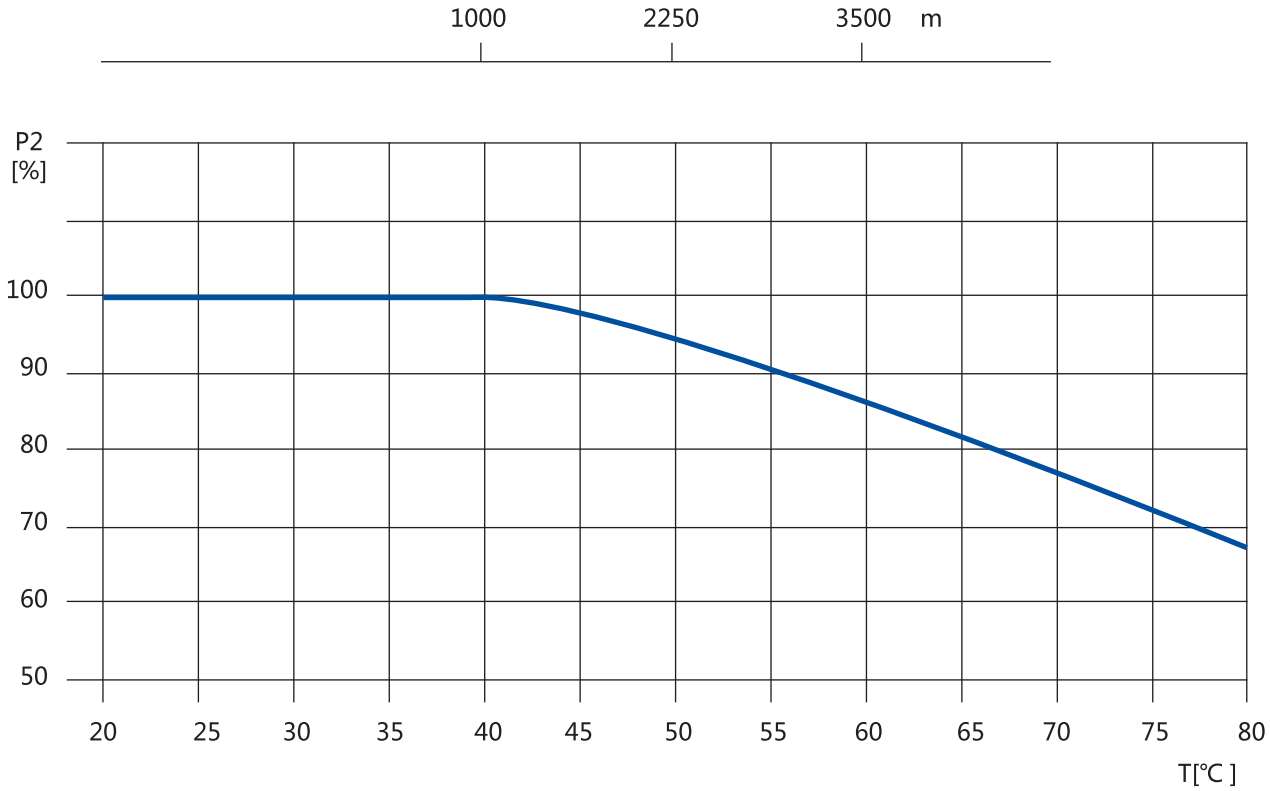


Fig. 4

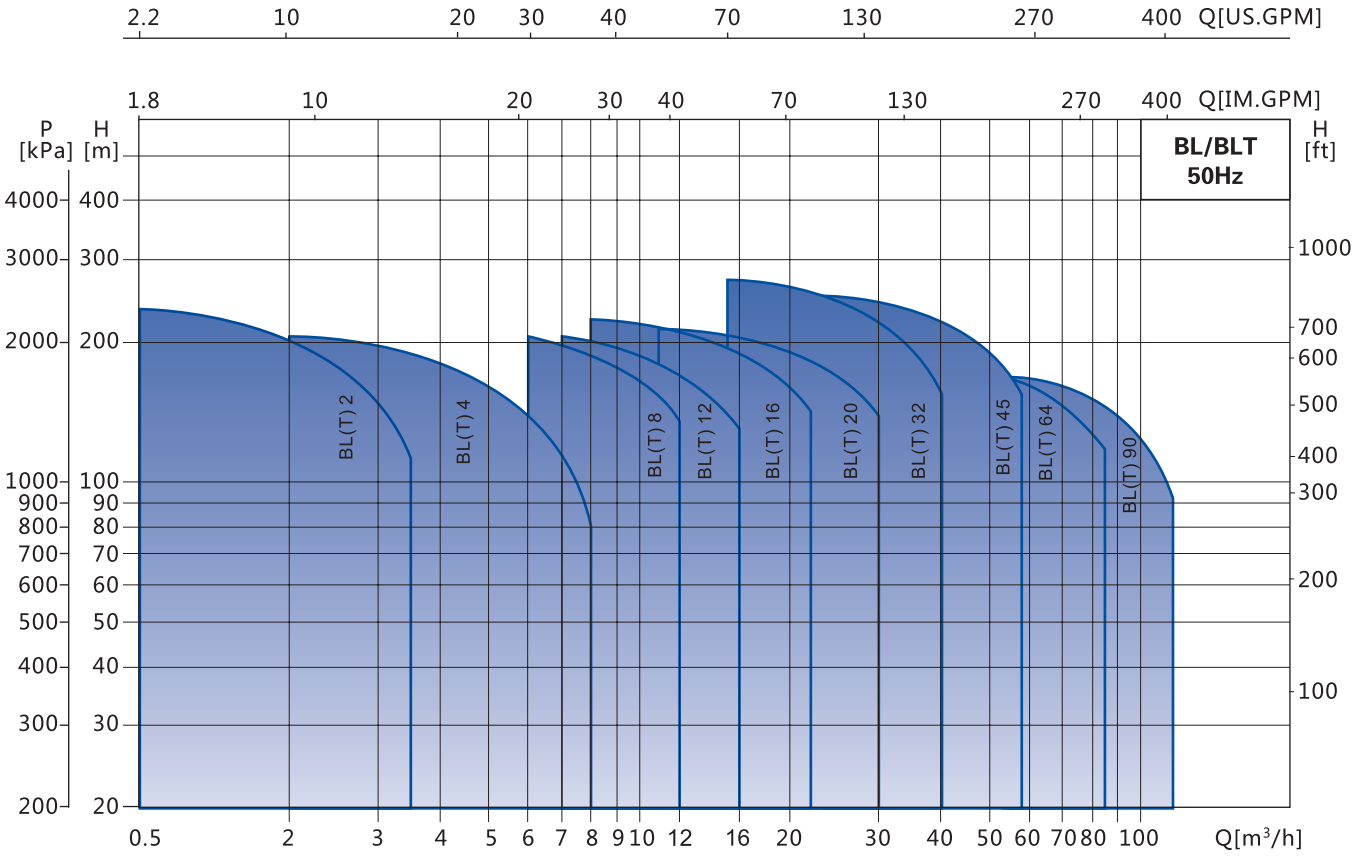
The limits of pressure and temperature are shown in the following fig.4,the pressure and temperature must be in the shown in the fig. 4.

Maximum Ambient Temperature

When the pump is operating in the place where ambient temperature is higher than 40℃ or altitude is higher than 1000m,the output power of motor P2 will decrease because of poor cooling caused by low air density.Therefore, in that case,the pump should be equipped with high-power motor.



Performance Range

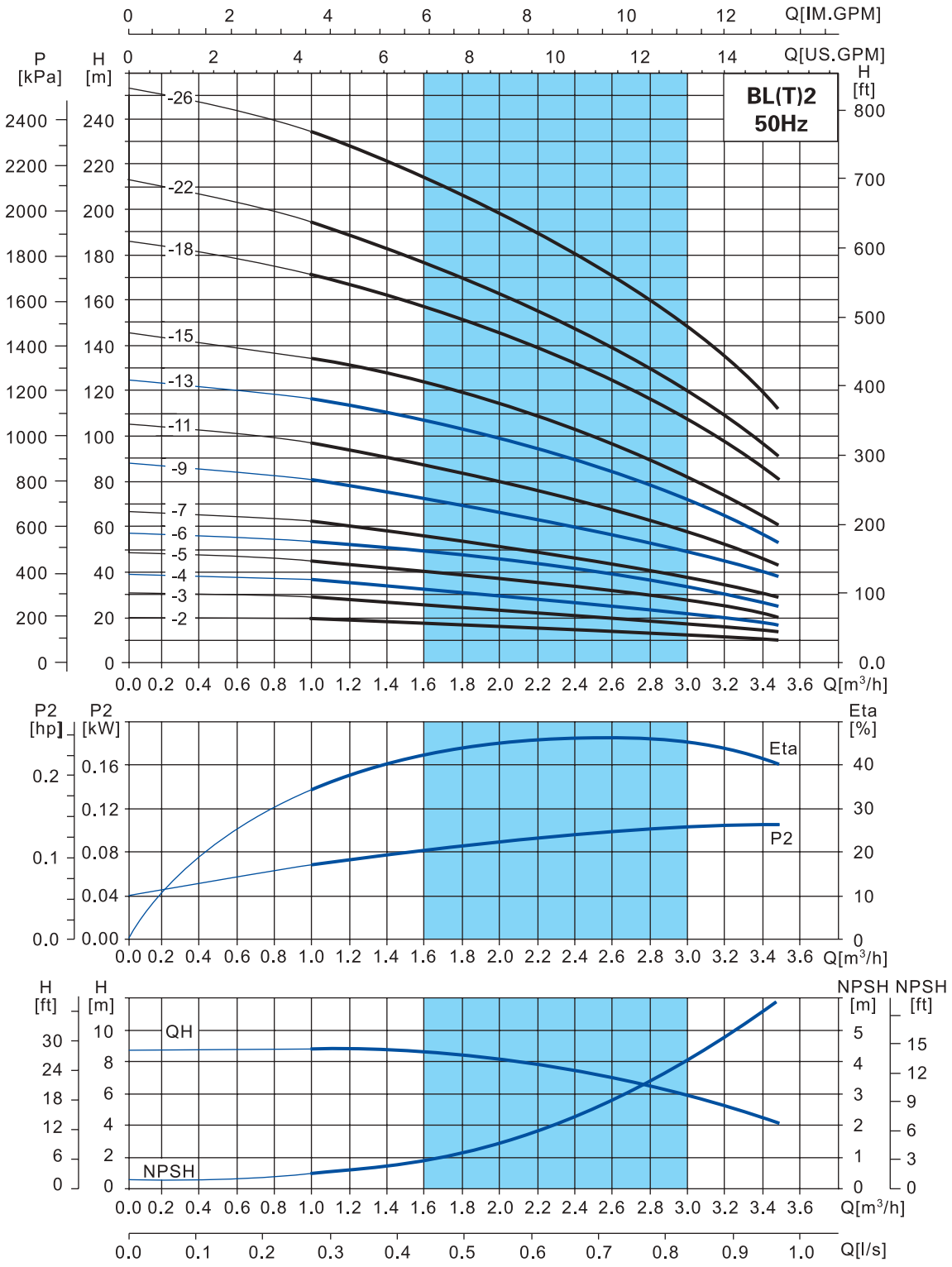


Product Range

Model	BL(T)2	BL(T)4	BL(T)8	BL(T)12	BL(T)16	BL(T)20	BL(T)32	BL(T)45	BL(T)64	BL(T)90
Rated Flow (m^3/h)	2	4	8	12	16	20	32	45	64	90
Flow Range (m^3/h)	1~3.5	1.5~7	5~12	7~16	8~22	10~28	16~40	25~55	30~80	50~110
Max.Pressure (bar)	23	21	21	22	23	23	28	30	23	17
Motor Power (kW)	0.37~3	0.37~4	0.75~7.5	1.5~11	2.2~15	2.2~18.5	3~30	5.5~45	7.5~45	11~45
Max.Efficiency (%)	46	57	62	63	66	69	73	75	76	77
DIN Flange	DN25	DN32	DN40	DN50	DN50	DN50	DN65	DN80	DN100	DN100
Pipe Thread	$R_2 1^1/_4$	$R_2 1^1/_4$	$R_c 2$	$R_c 2$	$R_c 2$	$R_c 2$				

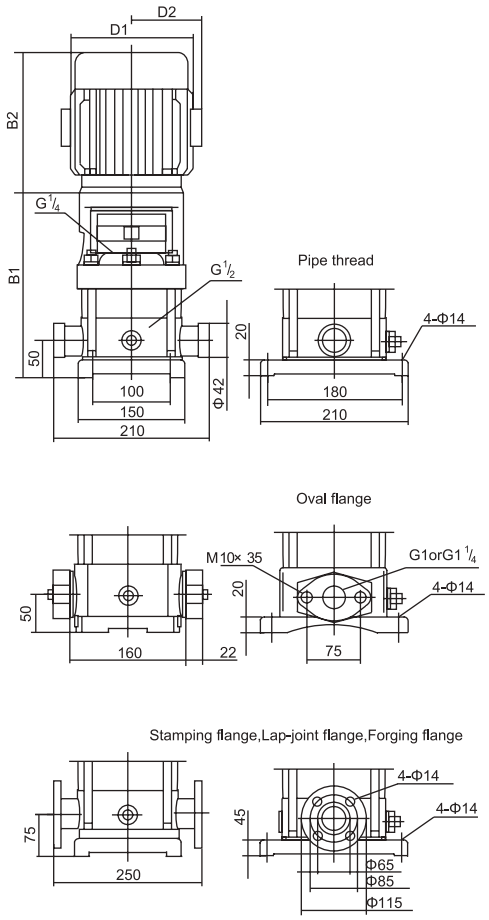
IMPPUMPS®
Intelligent Motor Pumps

Performance Curve - BL(T)2



Performance Table

Model	Power		Q (m^3/h)	1	1.2	1.6	2	2.4	2.8	3.2	3.5
	kW	HP									
BL(T)2-2	0.37	0.55	H (m)	18	17	16	15	13	12	10	8
BL(T)2-3	0.37	0.55		27	26	24	22	20	18	15	12
BL(T)2-4	0.55	0.75		36	35	33	30	26	24	20	16
BL(T)2-5	0.55	0.75		45	43	40	37	33	30	24	20
BL(T)2-6	0.75	1		53	52	50	45	40	36	30	24
BL(T)2-7	0.75	1		63	61	57	52	47	41	35	28
BL(T)2-9	1.1	1.5		80	78	73	67	61	54	45	37
BL(T)2-11	1.1	1.5		98	95	89	82	73	64	54	44
BL(T)2-13	1.5	2		116	114	106	98	89	78	65	52
BL(T)2-15	1.5	2		134	130	123	112	100	90	73	60
BL(T)2-18	2.2	3		161	157	148	136	121	108	91	76
BL(T)2-22	2.2	3		197	192	180	165	148	130	110	90
BL(T)2-26	3	4		232	228	214	198	179	158	130	110

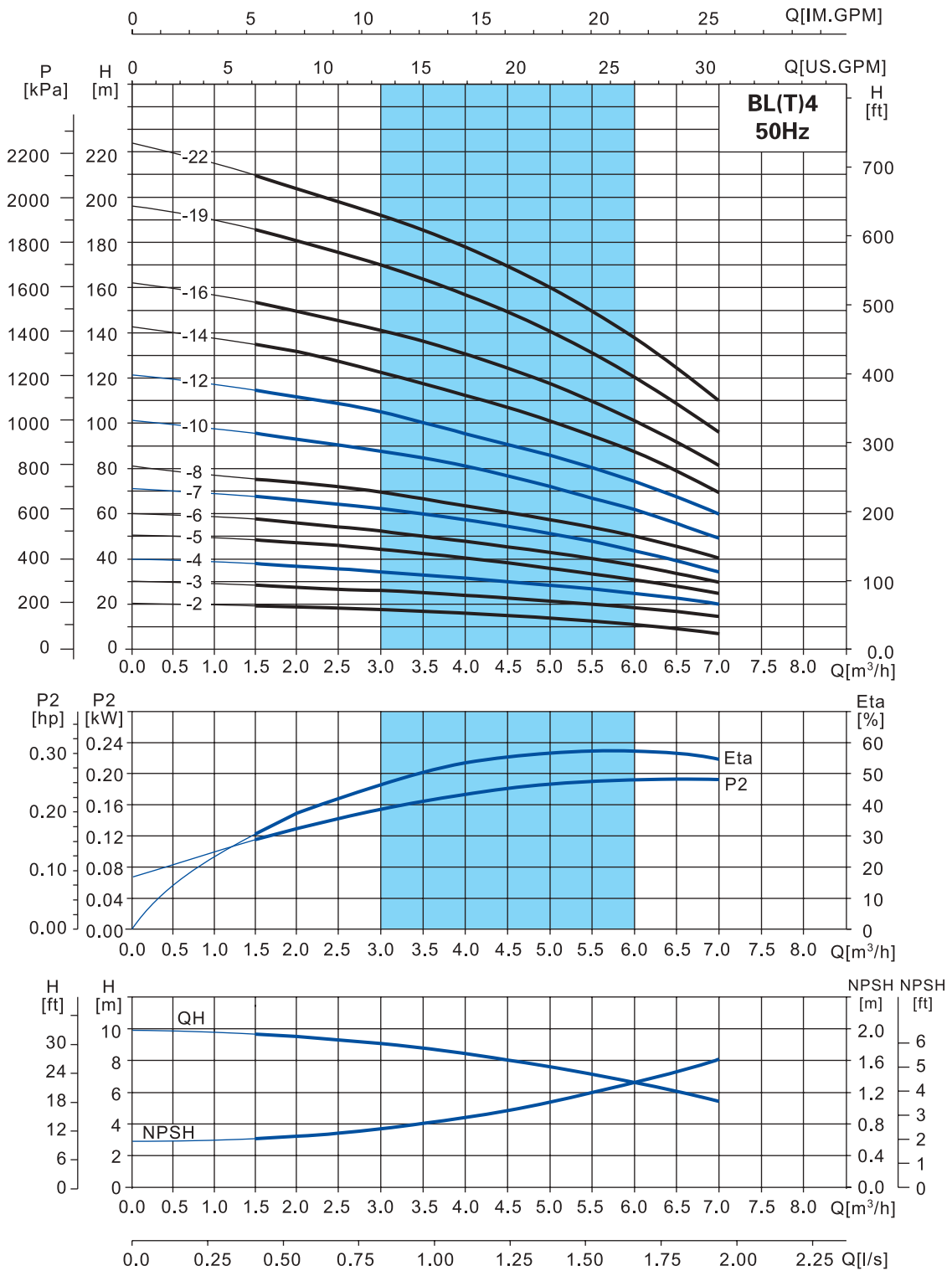


Dimensions & Weight

Model	Dim.(mm)					N.W.(kg)
	B1	B2	B1+B2	D1	D2	
BL(T)2-2	278	220	498	135	86	22/26
BL(T)2-3	278	220	498	135	86	22/26
BL(T)2-4	296	220	516	135	86	24/28
BL(T)2-5	314	220	534	135	86	24/28
BL(T)2-6	340	255	595	148	96	28/32
BL(T)2-7	358	255	613	148	96	28/32
BL(T)2-9	394	255	649	148	96	31/35
BL(T)2-11	430	255	685	148	96	32/36
BL(T)2-13	479	300	779	166	115	35/40
BL(T)2-15	515	300	815	166	115	36/40
BL(T)2-18	569	300	869	166	115	40/45
BL(T)2-22	641	300	941	166	115	42/46
BL(T)2-26	722	325	1047	191	128	50/55

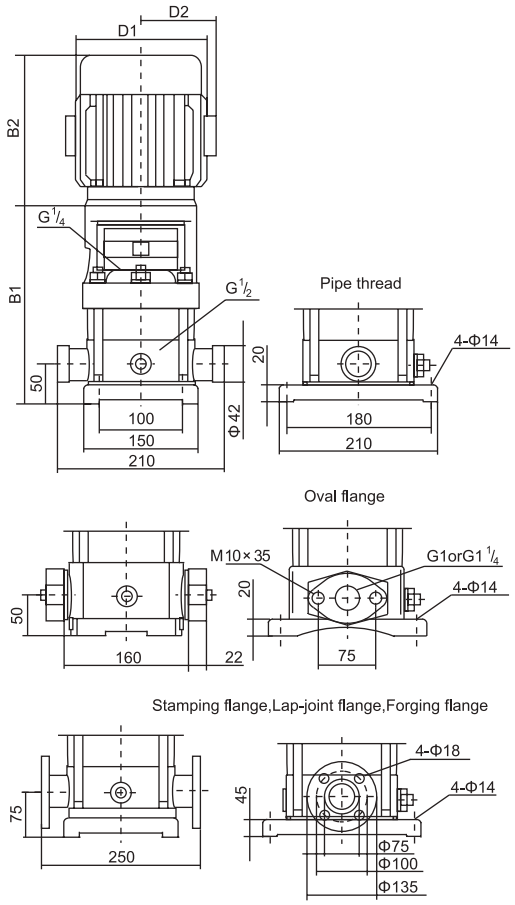
IMPPUMPS®
Intelligent Motor Pumps

Performance Curve - BL(T)4



Performance Table

Model	Power		Q (m^3/h)	1.5	2	3	4	5	6	7
	kW	HP								
BL(T)4-2	0.37	0.5	H (m)	19	18	17	15	13	10	8
BL(T)4-3	0.55	0.75		28	27	26	24	20	18	13
BL(T)4-4	0.75	1		38	36	34	32	27	24	19
BL(T)4-5	1.1	1.5		47	45	43	40	34	31	23
BL(T)4-6	1.1	1.5		56	54	52	48	41	37	28
BL(T)4-7	1.5	2		66	63	61	56	48	43	33
BL(T)4-8	1.5	2		74	72	70	64	55	50	38
BL(T)4-10	2.2	3		96	90	87	81	71	62	48
BL(T)4-12	2.2	3		114	108	104	95	85	75	58
BL(T)4-14	3	4		136	126	122	112	101	89	68
BL(T)4-16	3	4		152	144	140	129	115	101	78
BL(T)4-19	4	5.5		183	171	168	153	137	122	93
BL(T)4-22	4	5.5		211	200	192	178	160	138	108

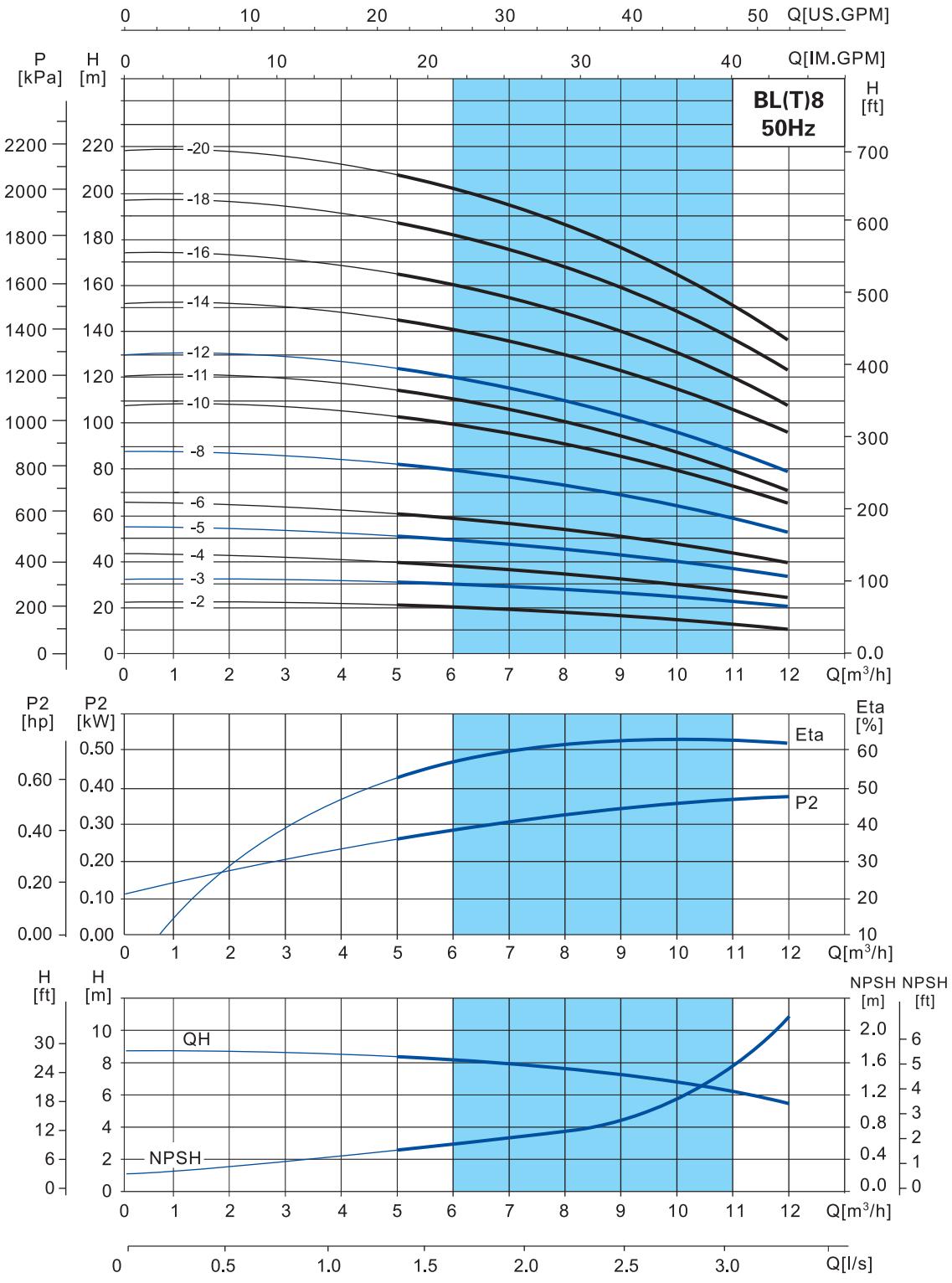


Dimensions & Weight

Model	Dim.(mm)					N.W.(kg)
	B1	B2	B1+B2	D1	D2	
BL(T)4-2	278	220	498	135	86	22/28
BL(T)4-3	305	220	525	135	86	25/30
BL(T)4-4	340	255	595	148	96	28/33
BL(T)4-5	367	255	622	148	96	30/35
BL(T)4-6	394	255	649	148	96	31/36
BL(T)4-7	434	300	734	166	115	34/40
BL(T)4-8	461	300	761	166	115	35/40
BL(T)4-10	515	300	815	166	115	39/44
BL(T)4-12	569	300	869	166	115	40/46
BL(T)4-14	632	325	957	191	140	48/53
BL(T)4-16	686	325	1011	191	140	49/54
BL(T)4-19	767	355	1122	212	163	58/63
BL(T)4-22	848	355	1203	212	163	60/65

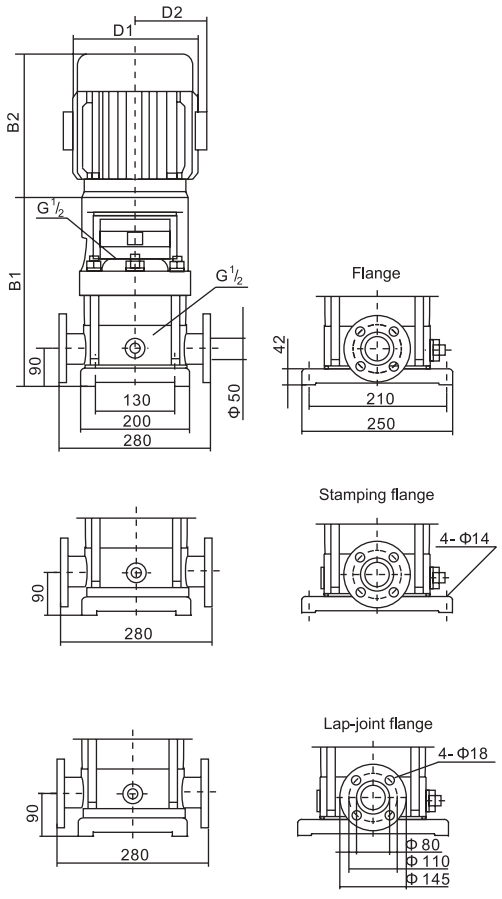
IMPPUMPS®
Intelligent Motor Pumps

Performance Curve - BL(T)8



Performance Table

Model	Power		Q (m^3/h)	5	6	7	8	9	10	11	12
	kW	HP									
BL(T)8-2	0.75	1	H (m)	20	19.5	19	18	17	16	14	13
BL(T)8-3	1.1	1.5		30	29.5	28.5	27	25	24	21	19
BL(T)8-4	1.5	2		41	39.5	38	36	34	32	28	26
BL(T)8-5	2.2	3		52	50	48	45	42	40	36	32
BL(T)8-6	2.2	3		62	60	57	54	51	48	43	39
BL(T)8-8	3	4		83	80	77	73	69	65	58	52
BL(T)8-10	4	5.5		104	100	97	92	87	81	73	65
BL(T)8-11	4	5.5		114	110	106	101	95	86	80	72
BL(T)8-12	5.5	7.5		124	120	116	111	104	92	87	78
BL(T)8-14	5.5	7.5		145	141	136	130	122	113	102	92
BL(T)8-16	5.5	7.5		166	161	156	148	139	130	118	106
BL(T)8-18	7.5	10		187	182	175	167	157	146	134	120
BL(T)8-20	7.5	10		208	202	195	186	175	163	150	135

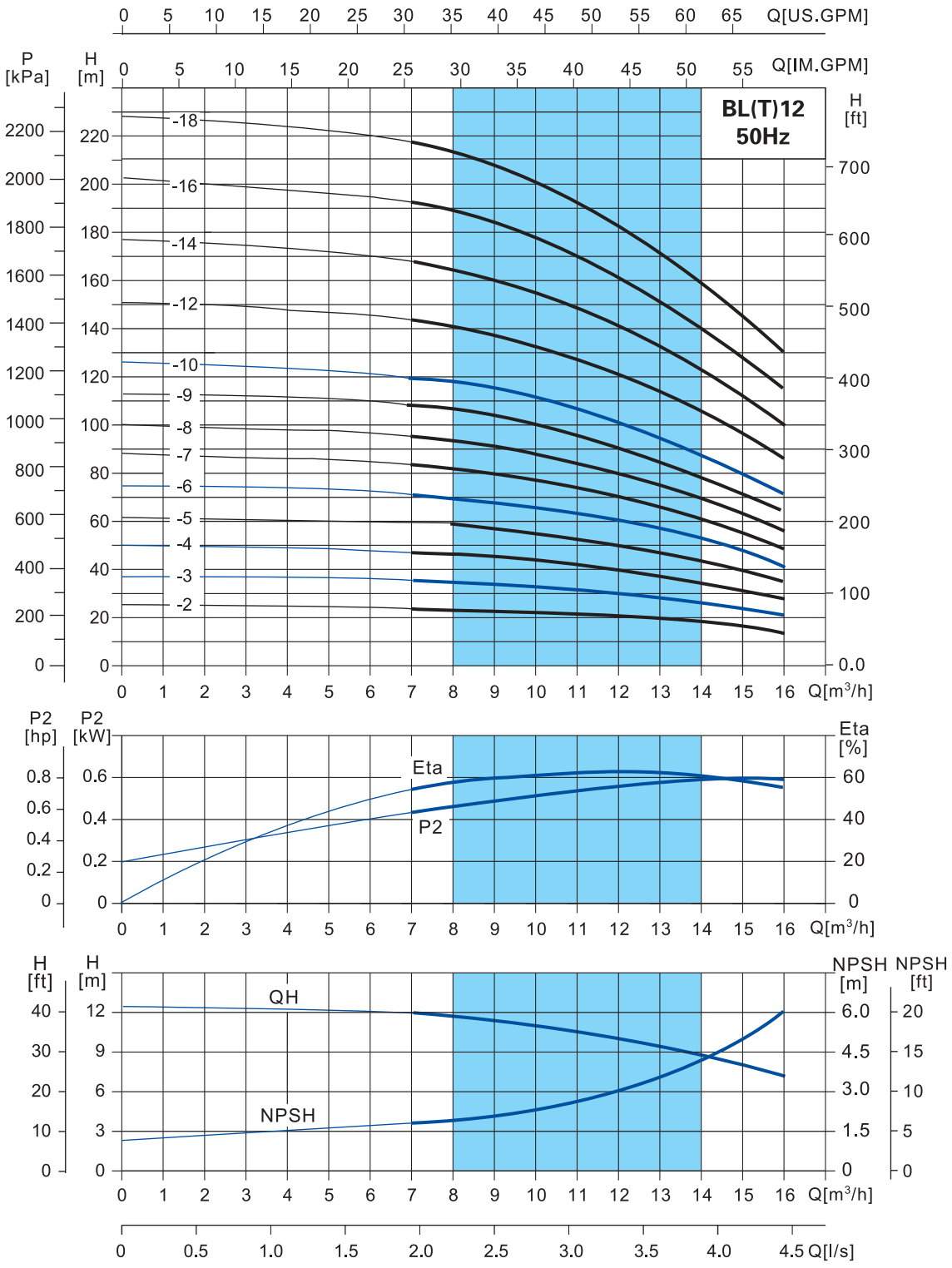


Dimensions & Weight

Model	Dim.(mm)					N.W.(kg)
	B1	B2	B1+B2	D1	D2	
BL(T)8-2	375	247	622	155	124	36/43
BL(T)8-3	405	247	652	155	124	38/45
BL(T)8-4	440	260	700	175	137	42/49
BL(T)8-5	470	285	755	175	137	46/53
BL(T)8-6	500	285	785	175	137	47/54
BL(T)8-8	570	232	893	195	151	55/63
BL(T)8-10	630	341	971	219	169	65/72
BL(T)8-11	660	341	1001	219	169	66/73
BL(T)8-12	715	395	1110	258	188	84/92
BL(T)8-14	774	395	1169	258	188	86/94
BL(T)8-16	834	395	1229	258	188	89/96
BL(T)8-18	894	395	1289	258	188	95/102
BL(T)8-20	954	395	1349	258	188	97/104

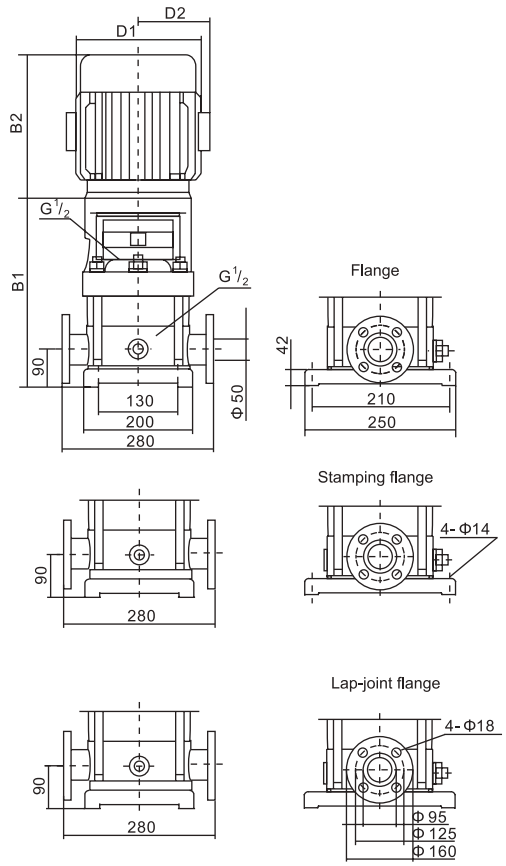
IMPPUMPS®
Intelligent Motor Pumps

Performance Curve - BL(T)12



Performance Table

Model	Power		Q (m^3/h)	7	8	10	12	14	15	16
	kW	HP								
BL(T)12-2	1.5	2	H (m)	23.5	23	22	20	17	15	14
BL(T)12-3	2.2	3		35.5	35	33	30	26	23	21
BL(T)12-4	3	4		47	46	44	40	34	31	28
BL(T)12-5	3	4		59.5	58	55	50	43	39	35
BL(T)12-6	4	5.5		71.5	70	66	60	52	47	42
BL(T)12-7	5.5	7.5		83.5	82	77	70	61	55	49
BL(T)12-8	5.5	7.5		95.5	94	88	80	70	63	56
BL(T)12-9	5.5	7.5		108	106	100	91	79	71	64
BL(T)12-10	7.5	10		120	118	111	101	88	80	72
BL(T)12-12	7.5	10		143.5	141	133	121	106	96	86
BL(T)12-14	11	15		168	165	155	141	124	112	100
BL(T)12-16	11	15		192.5	189	178	162	142	128	115
BL(T)12-18	11	15		217	213	202	183	160	145	130

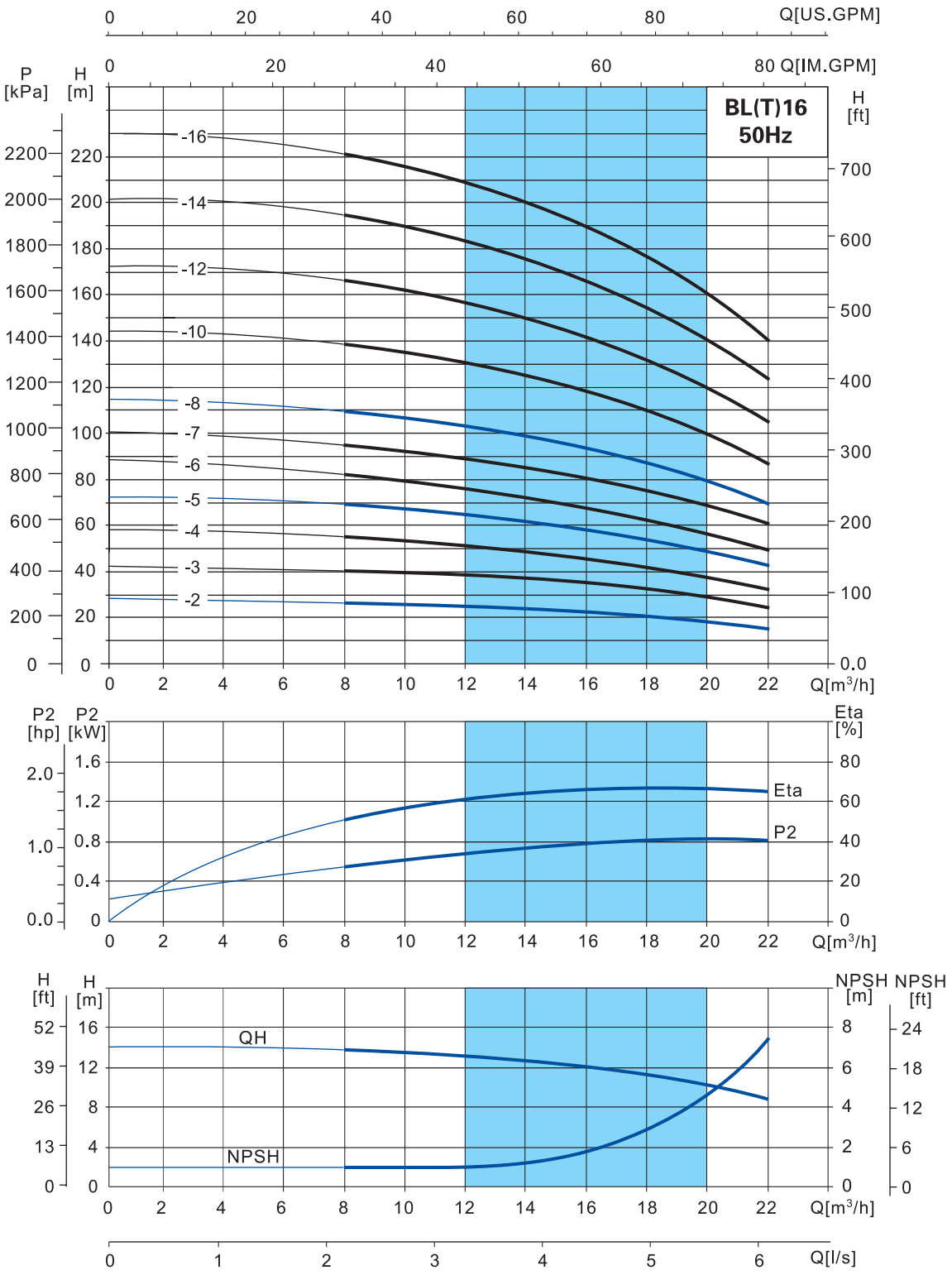


Dimensions & Weight

Model	Dim.(mm)					N.W.(kg)
	B1	B2	B1+B2	D1	D2	
BL(T)12-2	383	300	683	166	115	42/49
BL(T)12-3	415	300	715	166	115	45/52
BL(T)12-4	456	325	781	191	128	50/58
BL(T)12-5	488	325	813	191	128	51/59
BL(T)12-6	519	355	874	212	140	57/64
BL(T)12-7	575	395	970	258	163	75/83
BL(T)12-8	606	395	1001	258	163	76/85
BL(T)12-9	638	395	1033	258	163	78/86
BL(T)12-10	669	395	1064	258	163	83/91
BL(T)12-12	733	395	1128	258	163	86/93
BL(T)12-14	825	498	1323	315	251	165/173
BL(T)12-16	888	498	1386	315	251	168/176
BL(T)12-18	951	498	1449	315	251	170/178

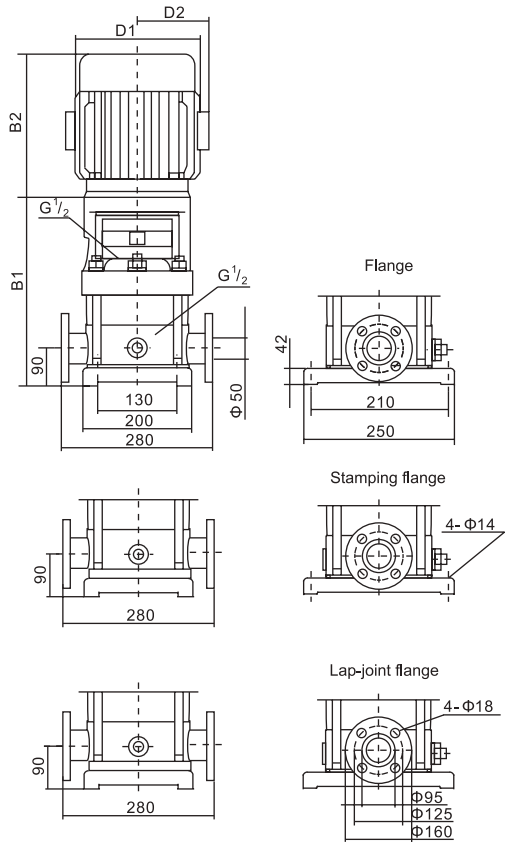
IMPPUMPS®
Intelligent Motor Pumps

Performance Curve - BL(T)16



Performance Table

Model	Power		Q (m^3/h)	8	10	12	14	16	18	20	22
	kW	HP									
BL(T)16-2	2.2	3	H (m)	27	26	25	24	22	21	19	16
BL(T)16-3	3	4		41	40	38	37	34	32	29	25
BL(T)16-4	4	5.5		54	53	52	49	46	43	38	34
BL(T)16-5	5.5	7.5		68	67	65	62	58	54	48	43
BL(T)16-6	5.5	7.5		82	80	78	74	70	64	58	52
BL(T)16-7	7.5	10		96	95	91	87	82	76	68	61
BL(T)16-8	7.5	10		110	108	104	99	94	86	77	70
BL(T)16-10	11	15		138	136	131	125	118	109	97	87
BL(T)16-12	11	15		166	162	157	150	141	130	116	105
BL(T)16-14	15	20		194	190	184	175	166	152	136	122
BL(T)16-16	15	20		222	217	210	200	189	174	156	140

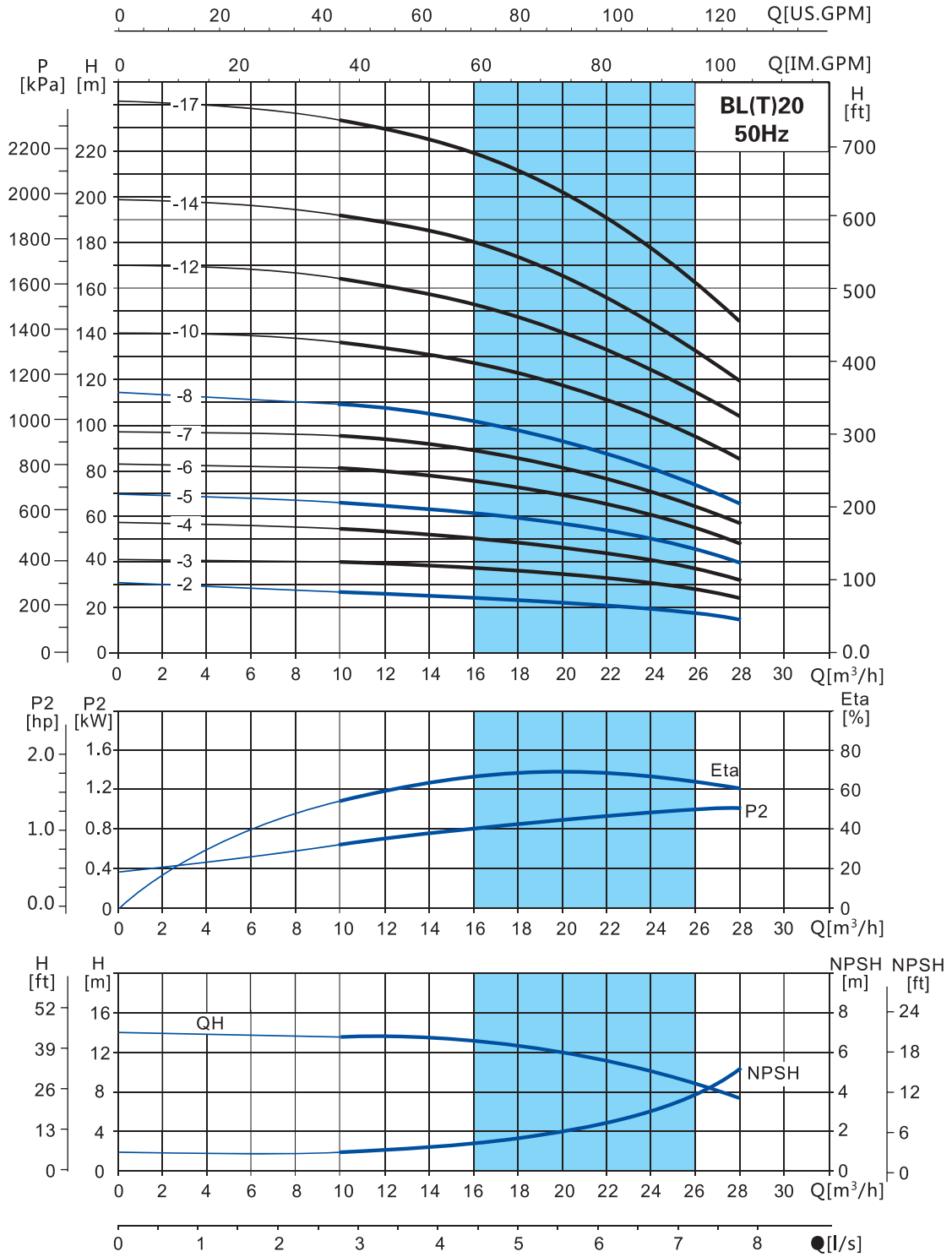


Dimensions & Weight

Model	Dim.(mm)					N.W.(kg)
	B1	B2	B1+B2	D1	D2	
BL(T)16-2	410	300	710	166	115	45/53
BL(T)16-3	465	325	790	191	128	52/60
BL(T)16-4	510	355	865	212	140	61/69
BL(T)16-5	581	395	976	258	163	79/88
BL(T)16-6	626	395	1021	258	163	81/90
BL(T)16-7	671	395	1066	258	163	84/95
BL(T)16-8	716	395	1111	258	163	86/97
BL(T)16-10	837	498	1335	315	251	164/173
BL(T)16-12	927	498	1425	315	251	167/176
BL(T)16-14	1017	498	1515	315	251	181/189
BL(T)16-16	1107	498	1605	315	251	184/192

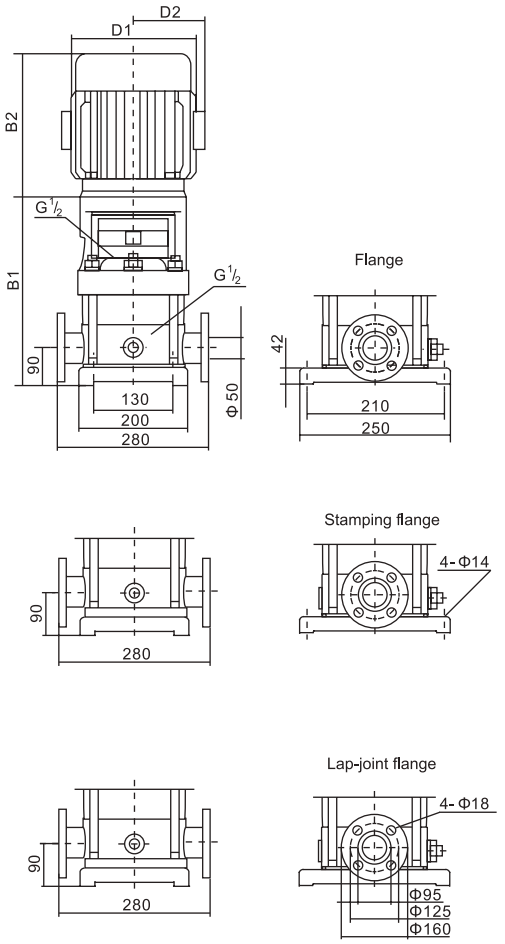
IMPPUMPS®
Intelligent Motor Pumps

Performance Curve - BL(T)20



Performance Table

Model	Power		Q (m^3/h)	14	16	18	20	22	24	26	28
	kW	HP									
BL(T)20-2	2.2	3	H (m)	26	25	24	23	22	20	18	15
BL(T)20-3	4	5.5		39	38	37	35	33	30	27	24
BL(T)20-4	5.5	7.5		52	51	49	47	44	41	37	33
BL(T)20-5	5.5	10		64	62	60	58	55	50	45	40
BL(T)20-6	7.5	10		77	75	73	70	66	61	55	49
BL(T)20-7	7.5	7.5		91	89	86	82	77	71	65	58
BL(T)20-8	11	25		105	102	99	94	89	82	75	67
BL(T)20-10	11	20		131	128	124	118	111	103	95	85
BL(T)20-12	15	20		158	154	149	142	133	124	114	102
BL(T)20-14	15	15		185	180	174	166	156	145	133	119
BL(T)20-17	18.5	15		225	219	212	202	190	177	162	145

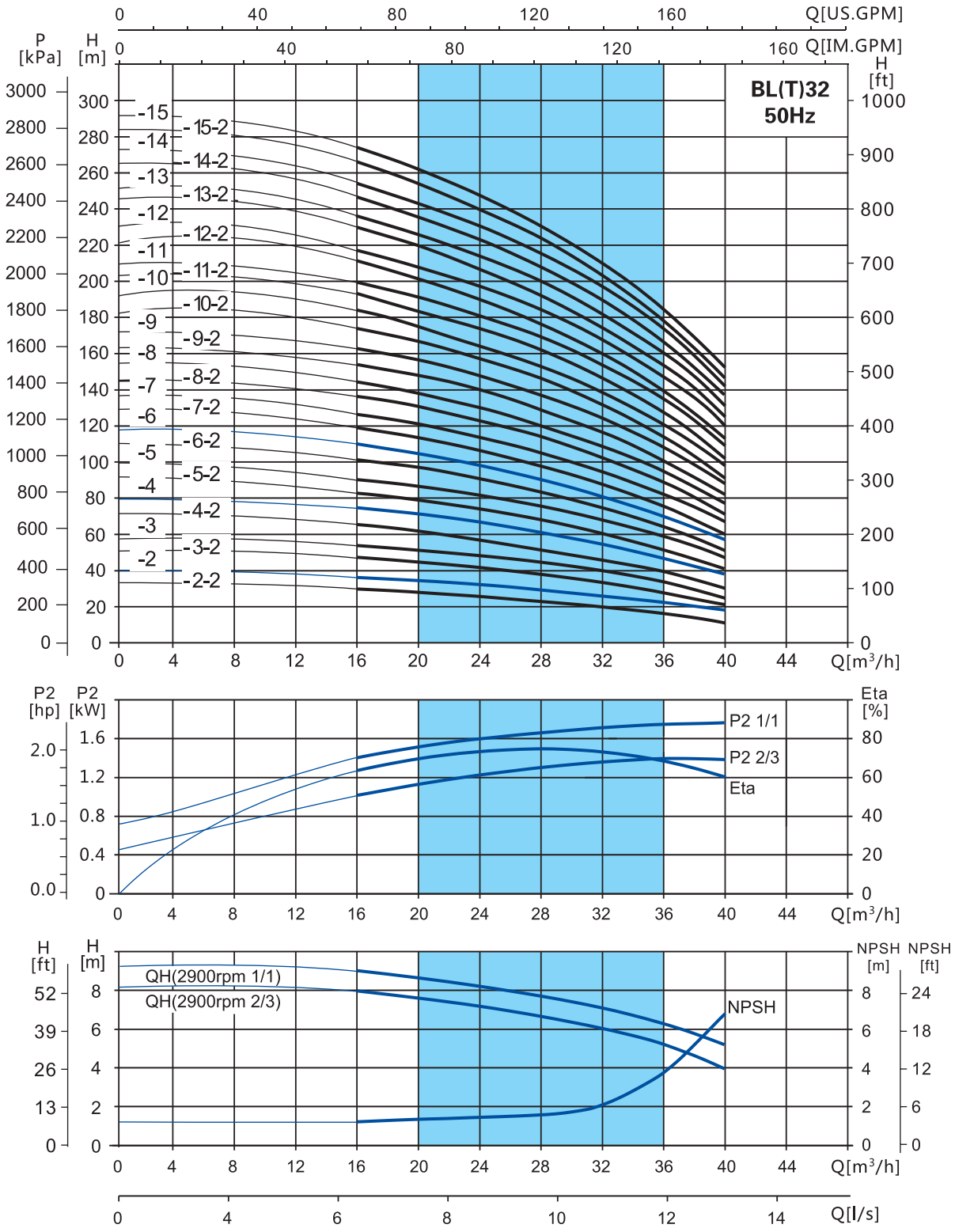


Dimensions & Weight

Model	Dim.(mm)					N.W.(kg)
	B1	B2	B1+B2	D1	D2	
BL(T)20-2	410	300	710	166	115	46/53
BL(T)20-3	465	355	800	212	140	61/68
BL(T)20-4	536	395	931	258	163	79/87
BL(T)20-5	581	395	976	258	163	81/88
BL(T)20-6	626	395	1021	258	163	84/94
BL(T)20-7	671	395	1066	258	163	86/95
BL(T)20-8	747	498	1245	315	251	162/170
BL(T)20-10	837	498	1335	315	251	165/173
BL(T)20-12	927	498	1425	315	251	180/186
BL(T)20-14	1017	498	1515	315	251	183/189
BL(T)20-17	1152	542	1694	315	251	203/211

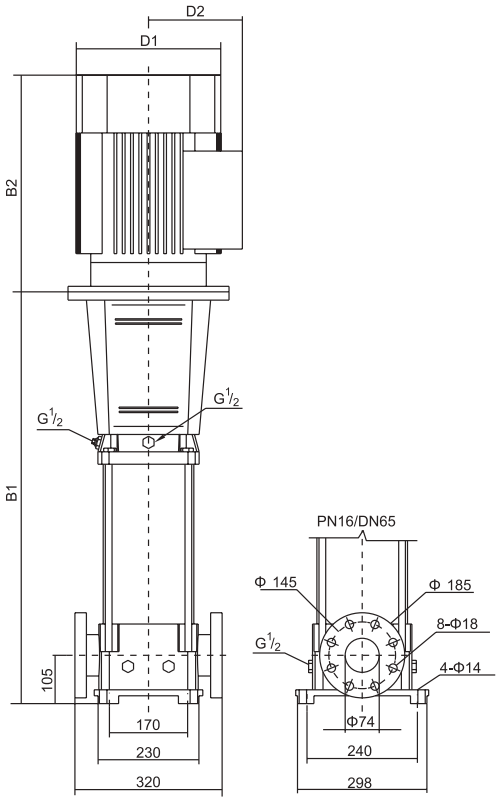
IMPPUMPS®
Intelligent Motor Pumps

Performance Curve - BL(T)32



Performance Table

Model	Power		Q (m^3/h)	16	20	24	28	32	36	40
	kW	HP								
BL(T)32-2-2	3	4		29	28	26	23	20	16	11
BL(T)32-2	4	5.5		36	34	32	29	27	23	18
BL(T)32-3-2	5.5	7.5		47	44	41	38	33	28	21
BL(T)32-3	5.5	7.5		54	51	48	44	40	35	27
BL(T)32-4-2	7.5	10		65	62	58	53	46	40	30
BL(T)32-4	7.5	10		72	69	65	59	53	47	37
BL(T)32-5-2	11	15		83	79	74	68	60	52	41
BL(T)32-5	11	15		90	86	81	74	67	59	47
BL(T)32-6-2	11	15		101	97	90	83	74	65	51
BL(T)32-6	11	15		108	104	97	90	81	72	57
BL(T)32-7-2	15	20		119	114	107	98	88	78	60
BL(T)32-7	15	20		126	121	113	105	95	85	67
BL(T)32-8-2	15	20	H (m)	136	131	123	114	102	90	71
BL(T)32-8	15	20		144	138	130	120	109	97	77
BL(T)32-9-2	18.5	25		154	148	140	129	117	102	82
BL(T)32-9	18.5	25		162	156	147	136	124	109	88
BL(T)32-10-2	18.5	25		175	166	157	146	131	115	91
BL(T)32-10	18.5	25		182	173	164	152	138	122	98
BL(T)32-11-2	22	30		193	184	173	164	146	128	102
BL(T)32-11	22	30		200	191	180	168	153	135	109
BL(T)32-12-2	22	30		211	201	189	178	160	140	113
BL(T)32-12	22	30		218	208	196	184	167	147	120
BL(T)32-13-2	30	40		230	218	206	193	174	153	124
BL(T)32-13	30	40		237	225	213	200	181	160	131
BL(T)32-14-2	30	40		247	235	222	210	189	165	135
BL(T)32-14	30	40		255	242	229	216	196	172	142
BL(T)32-15-2	30	40		266	253	239	224	203	178	145
BL(T)32-15	30	40		274	260	246	231	210	185	152



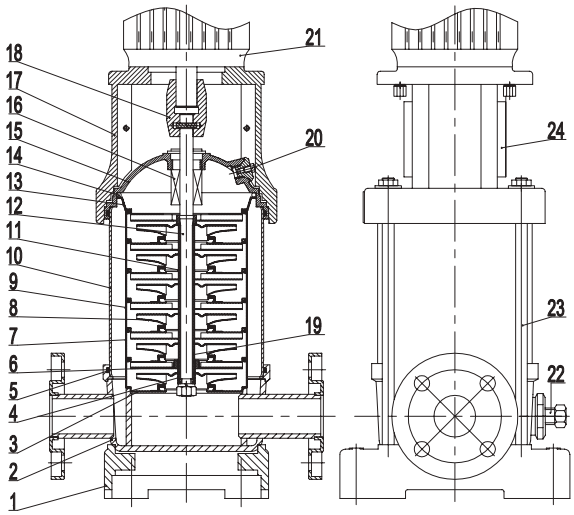
Dimensions & Weight

Model	Dim.(mm)					N.W.(kg)
	B1	B2	B1+B2	D1	D2	
BL(T)32-2-2	634	325	959	191	140	74/78
BL(T)32-2	634	355	989	212	163	81/85
BL(T)32-3-2	724	395	1119	258	163	100/104
BL(T)32-3	724	395	1119	258	163	100/104
BL(T)32-4-2	794	395	1189	258	163	106/110
BL(T)32-4	794	395	1189	258	163	106/110
BL(T)32-5-2	894	498	1392	315	251	185/189
BL(T)32-5	894	498	1392	315	251	185/189
BL(T)32-6-2	964	498	1462	315	251	189/193
BL(T)32-6	964	498	1462	315	251	189/193
BL(T)32-7-2	1034	498	1532	315	251	203/207
BL(T)32-7	1034	498	1532	315	251	203/207
BL(T)32-8-2	1104	498	1602	315	251	207/211
BL(T)32-8	1104	498	1602	315	251	207/211
BL(T)32-9-2	1174	542	1716	315	251	228/232
BL(T)32-9	1174	542	1716	315	251	228/232
BL(T)32-10-2	1244	542	1786	315	251	232/236
BL(T)32-10	1244	542	1786	315	251	232/236
BL(T)32-11-2	1314	578	1892	355	267	278/282
BL(T)32-11	1314	578	1892	355	267	278/282
BL(T)32-12-2	1384	578	1962	355	267	281/286
BL(T)32-12	1384	578	1962	355	267	281/286
BL(T)32-13-2	1454	669	2123	397	299	361/365
BL(T)32-13	1454	669	2123	397	299	361/365
BL(T)32-14-2	1524	669	2193	397	299	364/369
BL(T)32-14	1524	669	2193	397	299	364/369
BL(T)32-15-2	1594	669	2263	397	299	368/373
BL(T)32-15	1594	669	2263	397	299	368/373

IMPPUMPS®
Intelligent Motor Pumps

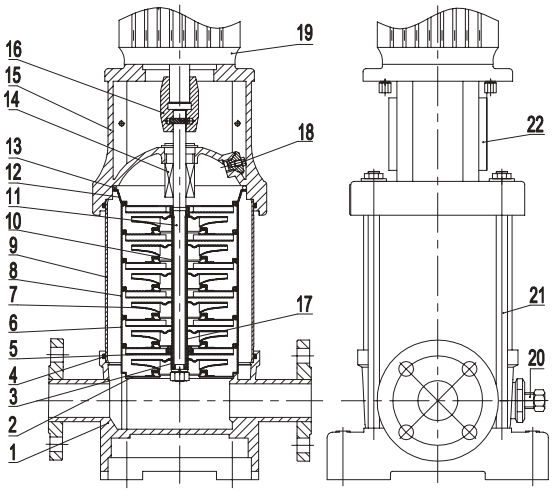
Components & Materials

BL2 BL4



No.	Component	Material	AISI/ASTM
1	Base Plate	HT200	ASTM35B
2	Pump Base	SUS304	AISI304
3	Inlet Fluid Director	SUS304	AISI304
4	Lining	SUS304	AISI304
5	O-ring	FPM	
6	Bearing	YG 8	
7	Fluid Director With Bearings	SUS304	AISI304
8	Impeller	SUS304	AISI304
9	Fluid Director	SUS304	AISI304
10	Outer Cylinder	SUS304	AISI304
11	Long Round Sleeve	SUS304	AISI304
12	Pump Shaft	SUS304	AISI304
13	Outlet Fluid Director	SUS304	AISI304
14	Wave Spring	SUS304	AISI304
15	Ball-Shaped Lining	SUS304	AISI304
16	Mechanical Seal	YG6、FPM	
17	Motor Base	HT200	ASTM35B
18	Coupling	F0212J	
19	Short Round Sleeve	SUS304	AISI304
20	Air Valve	SUS304	AISI304
21	Motor	Standard Motor	
22	Adjustable Bolt	SUS304	AISI304
23	Pull-rod	Steel 45#	
24	Prection Blade	SUS304	AISI304

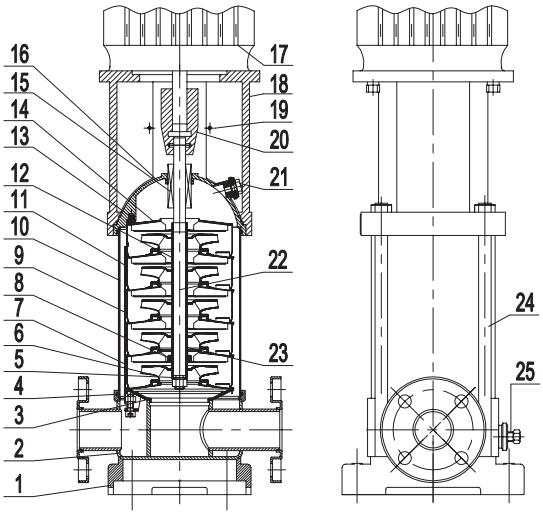
BLT2 BLT4



No.	Component	Material	AISI/ASTM
1	Pump Base	HT200	ASTM35B
2	Inlet Fluid Director	SUS304	AISI304
3	Lining	SUS304	AISI304
4	O-ring	FPM	
5	Bearing	YG8	
6	Fluid Director With Bearings	SUS304	AISI304
7	Impeller	SUS304	AISI304
8	Fluid Director	SUS304	AISI304
9	Outer Cylinder	SUS304	AISI304
10	Long Round Sleeve	SUS304	AISI304
11	Pump Shaft	SUS304	AISI304
12	Outlet Fluid Director	SUS304	AISI304
13	Wave Spring	SUS304	AISI304
14	Mechanical Seal	YG6、FPM	
15	Motor Base	HT200	ASTM35B
16	Coupling	F0212J	
17	Short Round Sleeve	SUS304	AISI304
18	Air Valve	SUS304	AISI304
19	Motor	Standard Motor	
20	Adjustable Bolt	SUS304	AISI304
21	Pull-rod	Steel 45#	
22	Prection Blade	SUS304	AISI304

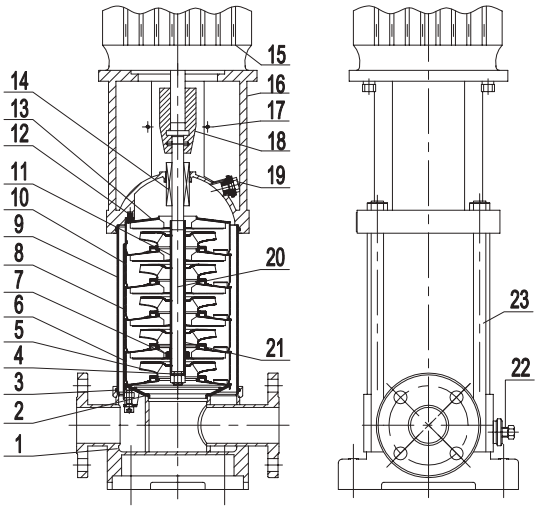
IMPPUMPS®
Intelligent Motor Pumps

BL8 BL12 BL16 BL20



No.	Component	Material	AISI/ASTM
1	Base Plate	HT200	ASTM35B
2	Pump Base	SUS304	AISI304
3	Inlet Fluid Director	SUS304	AISI304
4	O-ring	FPM	
5	Lining	SUS304	AISI304
6	Impeller	SUS304	
7	Fluid Director With Bearings	SUS304	AISI304
8	Bearing	YG8	
9	Fluid Director	SUS304	AISI304
10	Outer Cylinder	SUS304	AISI304
11	Pull-rod	SUS304	AISI304
12	Long Round Sleeve	SUS304	AISI304
13	Compress Nail	FPM	
14	Outlet Fluid Director	SUS304	AISI304
15	Mechanical Seal	YG6、FPM	
16	Ball-shaped Lining	SUS304	AISI304
17	Motor	Standard Motor	
18	Motor Base	HT200	ASTM35B
19	Prection Blade	SUS304	AISI304
20	Coupling	QT 500	AISI304
21	Air Valve	SUS304	AISI304
22	Pump Shaft	SUS304	AISI304
23	Short Round Sleeve	SUS304	AISI304
24	Pull-rod	Steel 45#	
25	Adjustable Bolt	SUS304	AISI304

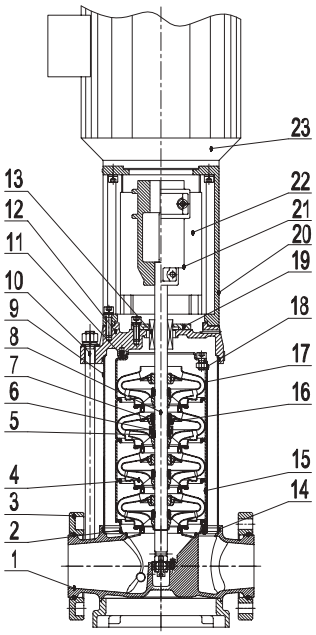
BLT8 BLT12 BLT16 BLT20



No.	Component	Material	AISI/ASTM
1	Pump Base	HT200	ASTM35B
2	Inlet Fluid Director	SUS304	AISI304
3	O-ring	FPM	
4	Lining	SUS304	AISI304
5	Impeller	SUS304	AISI304
6	Fluid Director With Bearings	SUS304	AISI304
7	Bearing	YG8	
8	Fluid Director	SUS304	AISI304
9	Outer Cylinder	SUS304	AISI304
10	Pull-rod	SUS304	AISI304
11	Long Round Sleeve	SUS304	AISI304
12	Compress Nail	FPM	
13	Outlet Fluid Director	SUS304	AISI304
14	Mechanical Seal	YG6、FPM	
15	Motor	Standard Motor	
16	Motor Base	HT200	ASTM35B
17	Prection Blade	SUS304	AISI304
18	Coupling	QT 500	
19	Air Valve	SUS304	AISI304
20	Pump Shaft	SUS304	AISI304
21	Short Round Sleeve	SUS304	AISI304
22	Adjustable Bolt	SUS304	AISI304
23	Pull-rod	Steel 45#	

IMPPUMPS®
Intelligent Motor Pumps

BL(T)32-90



No.	Component	Material	AISI/ASTM
1	Pump Base	SUS304/HT250	SUS304/ASTM40B
2	Inlet Fluid Director	SUS304	AISI304
3	Movable Flange	SUS304	AISI304
4	Impeller	SUS304	AISI304
5	Rip Cone Sleeve	SUS304	AISI304
6	Nur Of Rip Cone Sleeve	SUS304	AISI304
7	Impeller/Bearing	YG8、SUS304	
8	Pump Shaft	SUS304	AISI304
9	Outer Cylinder	SUS304	AISI304
10	Pull-rod	Steel 45#	
11	Compress Nail	FPM	
12	Pump Head	SUS304/HT250	SUS304/ASTM40B
13	Mechanical Seal	YG6、FPM	
14	O-ring	FPM	
15	Fluid Director	SUS304	AISI304
16	Fluid Director With Bearings	SUS304	AISI304
17	Outlet Fluid Director	SUS304	AISI304
18	Draw Plate	SUS304	AISI304
19	Mechanical Seal Gland	SUS304	AISI304
20	Motor Base	HT250	ASTM40B
21	Coupling	QT500	
22	Prection Blade	SUS304	AISI304
23	Motor	Standard Motor	Standard Motor

IMPPUMPS®
Intelligent Motor Pumps

Horizontal Multi-Stage Centrifugal Pumps

CATALOGUE FOR 50Hz

BW

BWJ

BWJT

IMPPUMPS®
Intelligent Motor Pumps

Model Instruction

BW J (T) 8 - 3 R

- R — Hot water type (Cold-water is not maked)
- 3 — Pump stage
- 8 — Rated flow (m^3/h)
- (T) — "T"for the overflowing components are cast iron; No"T"for stainless steel
- J — "J"for sectional type; No "J"for cylinder type
- BW — BW Light-type stainless steel horizontal multistage centrifugal pump

Overview Of The Product

BW, BWJ(T) stainless steel horizontal multistage centrifugal pumps are non-self priming pumps absorbing the advanced technology from home and abroad. They are classified into two kinds: cylinder type and sectional type. They adopt horizontal motor and alloy mechanical seal, which makes the replacement more convenient. The overflowing part of the pump is made of stainless steel 304, applicable for light-corrosion medium. Relying on the high efficiency, energy saving performance, reliable quality, wide usable range, our products receive the great popularity after being launched.

Application Limits

- Temperature range of medium: Normal type 0 ~ +68℃ , hot water type 0 ~ +120℃
- Maximum ambient temperature: +40 ℃
- Maximum working pressure: 10 bar
- When the density or viscosity of the transmission medium exceeds that of water, it is necessary to select a drving motor of high-power.
- pH: 6.5 to 8.5

Applications Fields

- Air conditioner system
- Aquaculture
- Cooling System
- Industrial cleansing
- Environmental application
- Water processing(Water purification)
- Fertilization/measuring system
- Other special applications

Certificate

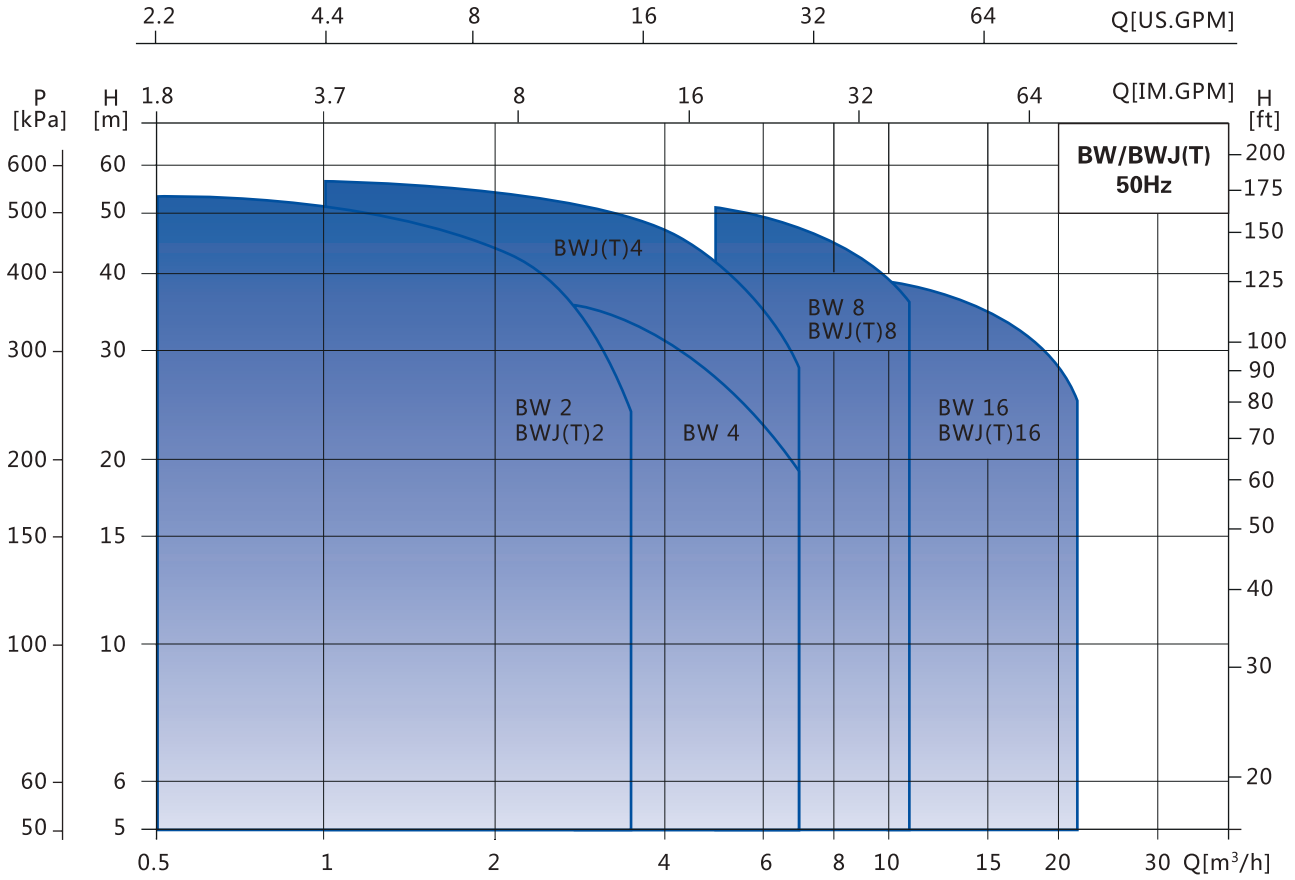
CE

Optional Available On Request

- Full-enclosed and ventilating two-pole standard motor
- Protection class: IP55
- Insulation class: F
- Standard voltage (50Hz): Single phase 220V
  Three phase:380V or 220V

IMPPUMPS®
Intelligent Motor Pumps

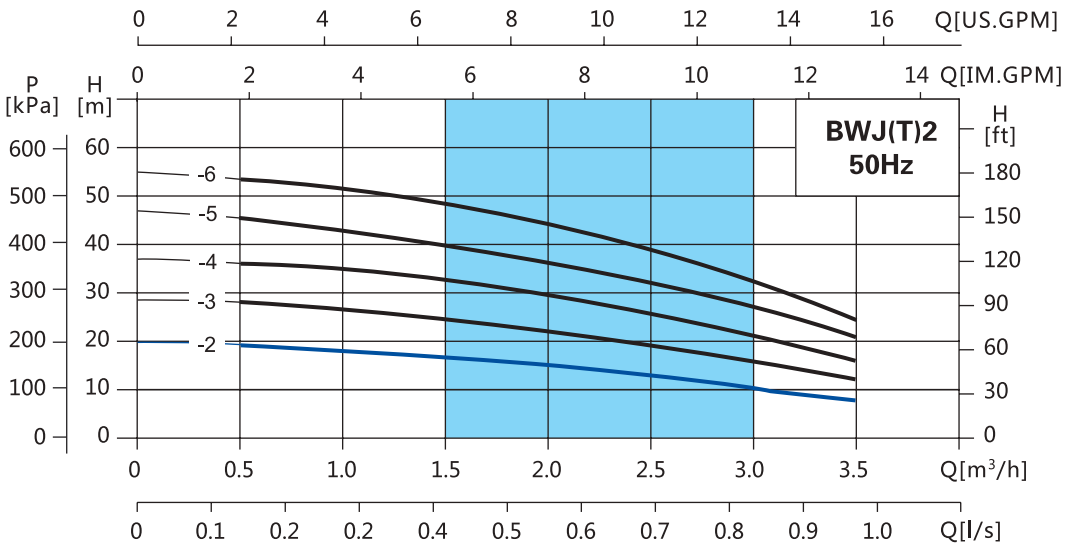
Performance Curve

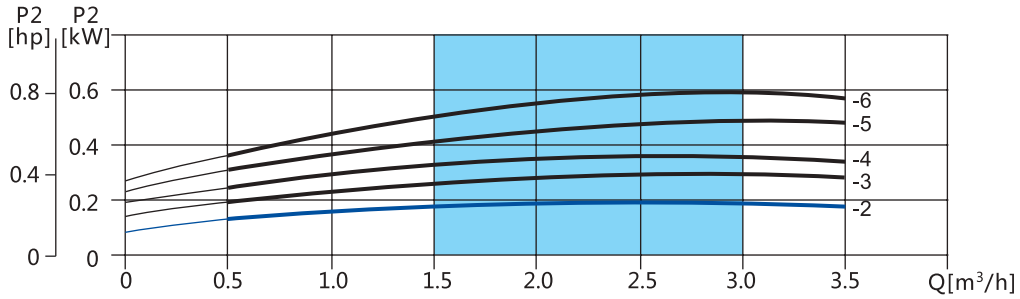


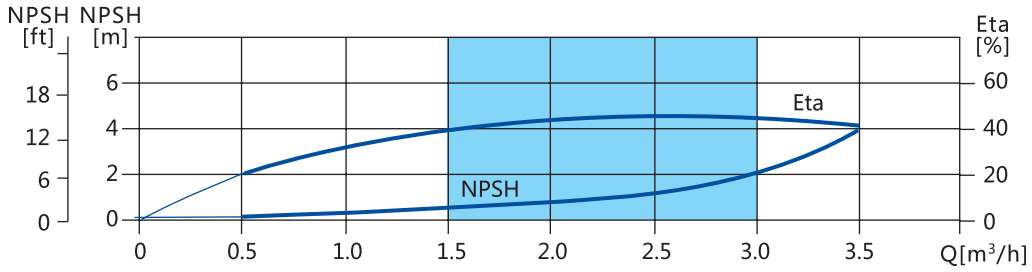
Model	BW2/BWJ(T)2	BW4/BWJ(T)4	BW8	BW16	BWJ(T)8	BWJ(T)16
Rated Flow(m^3/h)	2	4	8	16	8	16
Flow Range(m^3/h)	1~3.5	1.5~7	5~12	8~22	5~12	8~22
Max.Pressure(bar)	5.5	4	5	4	5	4
Motor Power(kW)	0.37~0.75	0.55~1.1	0.75~2.2	2.2~3	0.75~2.2	2.2~3
Max.Efficiency(%)	45	59	64	70	64	70
Inlet	G1	G1 $^1/_4$	G2	G2	G1 $^1/_2$	G1 $^1/_2$
Outlet	G1	G1	G2	G2	G1 $^1/_4$	G1 $^1/_4$

IMPPUMPS®
Intelligent Motor Pumps

Performance Details-BWJ(T)2



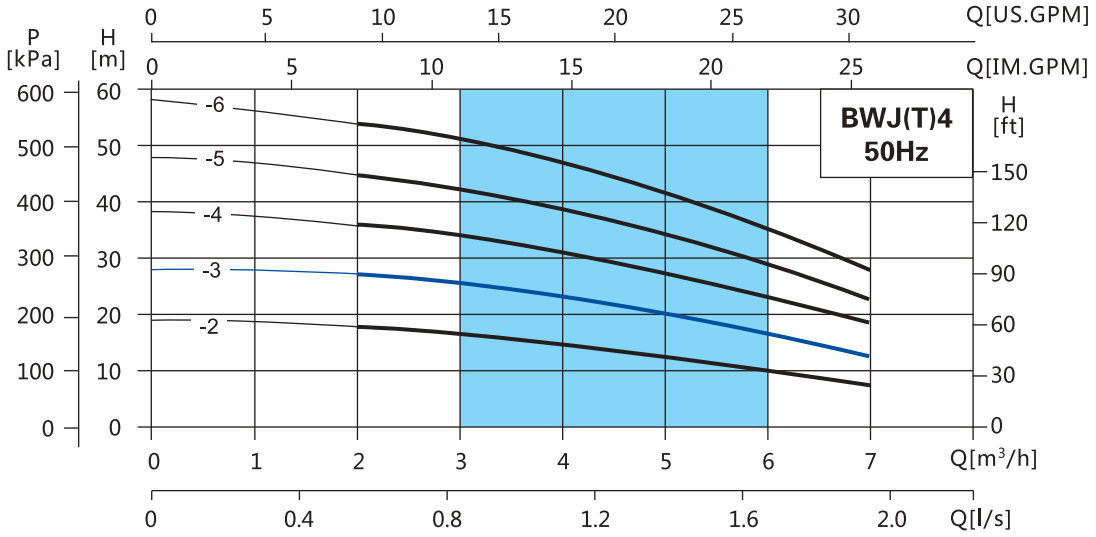


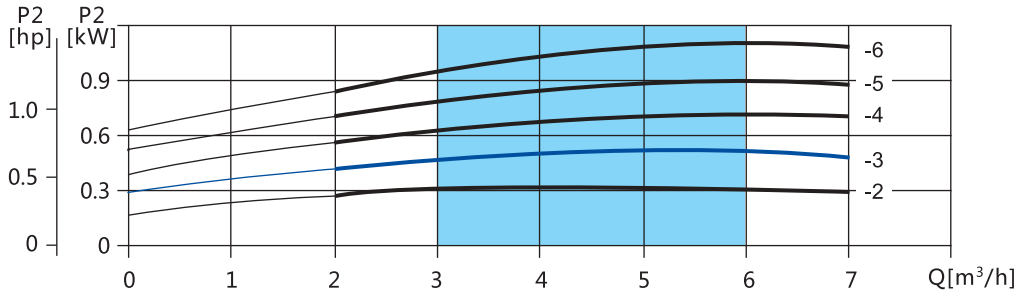


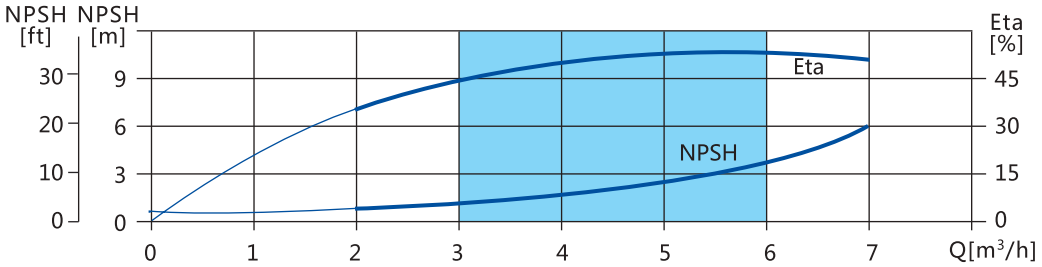
Model	Power		Q(m³/h)	0.5	1.0	1.5	2.0	2.5	3.0	3.5
	kW	HP								
BWJ(T)2-2	0.37	0.5	H (m)	19	18	16.5	15	13	10	7.5
BWJ(T)2-3	0.55	0.75		28	26.5	24.5	22	19	15.5	12
BWJ(T)2-4	0.55	0.75		36	34.5	33	29	25	20.5	16
BWJ(T)2-5	0.55	0.75		45.5	43	40	36	31.5	26.5	20.5
BWJ(T)2-6	0.75	1		53.5	51	48	44	39	32	24

IMPPUMPS®
Intelligent Motor Pumps

Performance Details-BWJ(T)4



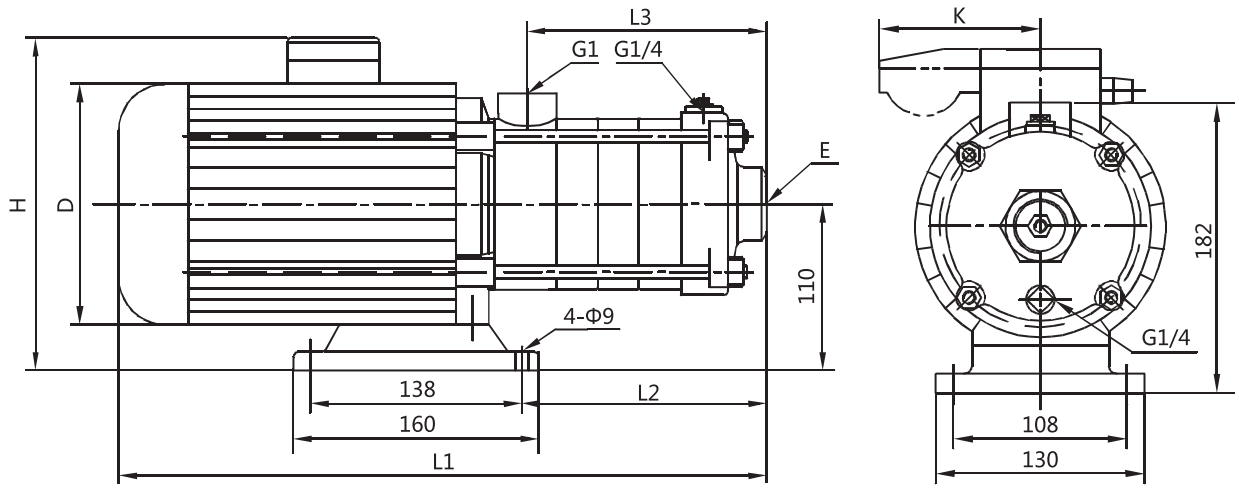




Model	Power		Q(m³/h)	1	2	3	4	5	6	7
	kW	HP								
BWJ(T)4-2	0.55	0.75	H (m)	19	18	17	15	11.5	10	8
BWJ(T)4-3	0.55	0.75		28	27	26	23.5	20.5	18	13
BWJ(T)4-4	0.75	1		37.5	36	34	31	27	25	19
BWJ(T)4-5	1.1	1.5		47	45	42.5	39	34	29	23
BWJ(T)4-6	1.1	1.5		56	54	51	47	41.5	35.5	28

IMPPUMPS®
Intelligent Motor Pumps

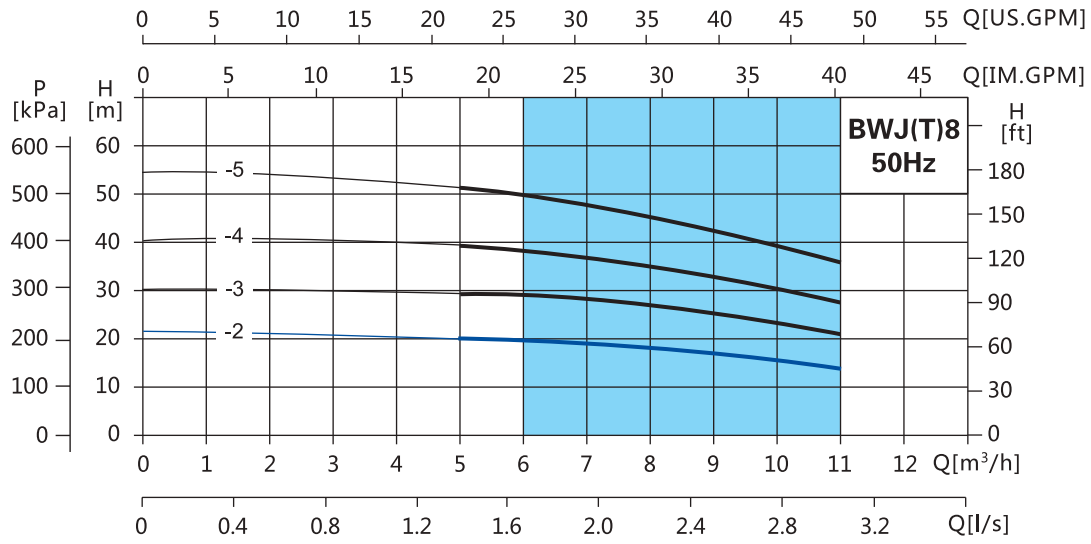
Dimensions & Weight

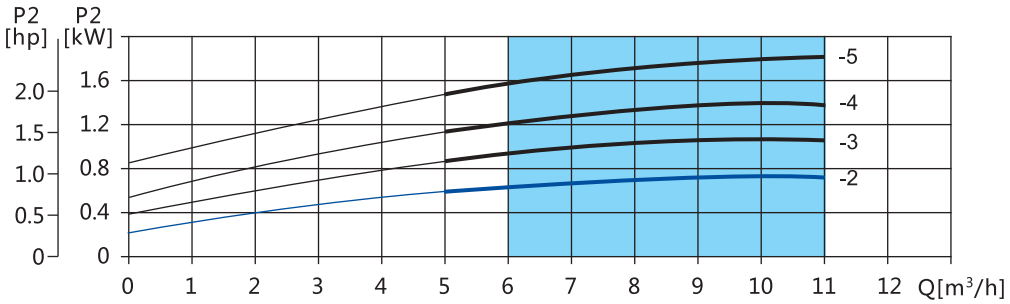


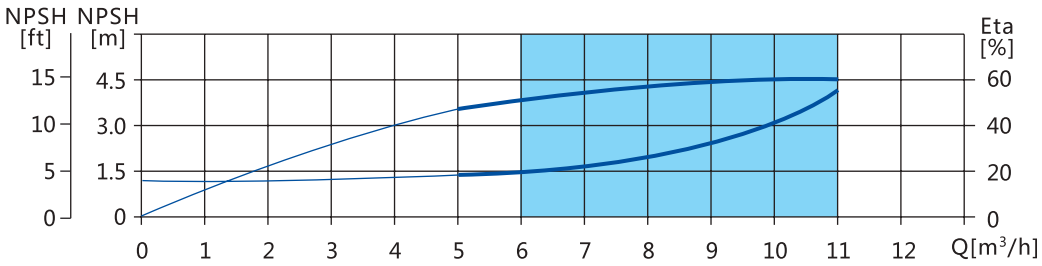
Model	Dim.(mm)							N.W.(kg)
	L1	L2	L3	D	E	H	K	
BWJ(T)2-2	317	77	88	137	G1	215/230		9.3
BWJ(T)2-3	335	95	105	137	G1	215/230		9.8
BWJ(T)2-4	353	113	124	137	G1	215/230		10.6
BWJ(T)2-5	371	131	142	137	G1	215/230		11
BWJ(T)2-6	445	151	160	156	G1	225/245	/100	15.6
BWJ(T)4-2	335	95	105	137	G1 1/4	215/230		9.8
BWJ(T)4-3	362	122	133	137	G1 1/4	215/230		10.8
BWJ(T)4-4	445	151	160	156	G1 1/4	225/245	/100	14.3
BWJ(T)4-5	472	178	187	156	G1 1/4	225/245	/100	17.6
BWJ(T)4-6	499	232	214	156	G1 1/4	225/245	/100	18.3

IMPPUMPS®
Intelligent Motor Pumps

Performance Details-BWJ(T)8



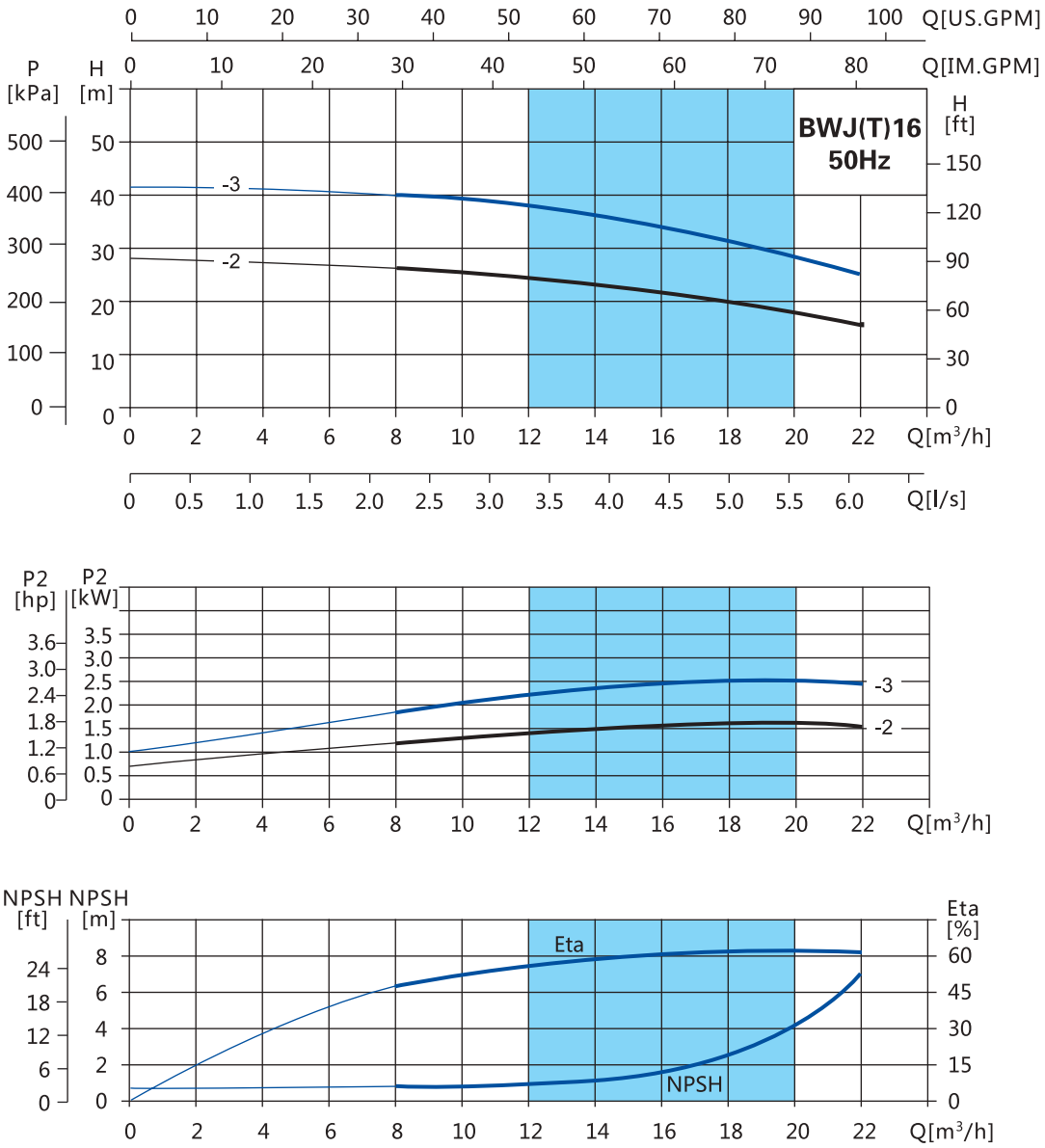




Model	Power		Q(m³/h)	5	6	7	8	9	10	11
	kW	HP								
BWJ(T)8-2	0.75	1	H (m)	20	19.5	19	18	17	15.5	14
BWJ(T)8-3	1.1	1.5		29.5	29	28	27	25	23	21
BWJ(T)8-4	1.5	2		39	38	37	35	33	30.5	27.5
BWJ(T)8-5	2.2	3		51	49.5	47.5	45	42.5	39.5	36

IMPPUMPS®
Intelligent Motor Pumps

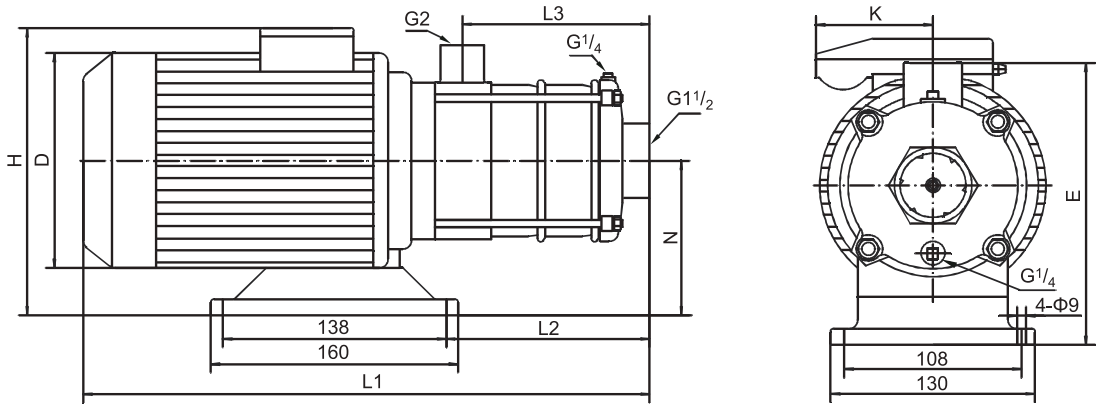
Performance Details-BWJ(T)16



Model	Power		Q(m³/h)	8	10	12	14	16	18	20	22
	kW	HP									
BWJ(T)16-2	2.2	3	H (m)	26	25	24	23	21.7	20	18	15.5
BWJ(T)16-3	3	4		40	39	38	36	34	31.5	29	25

IMPPUMPS®
Intelligent Motor Pumps

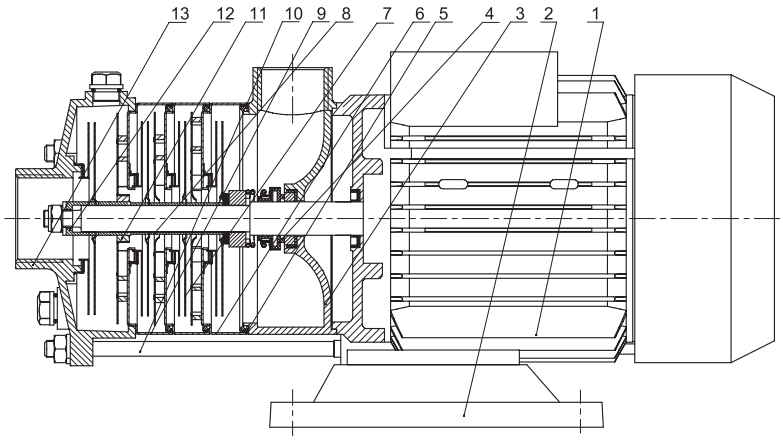
Dimensions & Weight



Model	Dim.(mm)								N.W.(kg)
	L1	L2	L3	H	D	E	N	K	
BWJ(T)8-2	376	111	107	230/265	156	219	114	/100	17.9
BWJ(T)8-3	406	141	137	230/265	156	219	114	/100	20
BWJ(T)8-4	503	171	167	240/270	169	223	118	/100	24.5
BWJ(T)8-5	533	201	197	240/270	169	223	118	/100	27.1
BWJ(T)16-2	467	125	122	240/270	169	223	118	/100	25.4
BWJ(T)16-3	524	171	167	270	194	235	130		29.1

IMPPUMPS®
Intelligent Motor Pumps

Components & Materials



BWJ(T)

No.	Component	Material	AISI/ASTM
1	Motor	Horizontal Motor(Lengthening Shaft)	
2	Base	HT200	ASTM35B
3	Water Outlet Shell	SUS304/HT200	AISI304/ASTM35B
4	Mechanical Seal	SIC FPM	
5	Sealing Gasket	NBR	
6	Fluid Director	SUS304	AISI304
7	Impeller	SUS304	AISI304
8	Long Casing Bush	SUS304	AISI304
9	Fluid Director With Bearings	SUS304	AISI304
10	Pull-rod	Steel 45#	
11	Bearing	YG 8	
12	Lining	SUS304	AISI304
13	Water Inlet Shell	SUS304/HT200	AISI304/ASTM35B

IMPPUMPS®
Intelligent Motor Pumps

IMPPUMPS®
Intelligent Motor Pumps

THE HONEST PRODUCT FOR THE HONEST PRICE

IMP PUMPS d.o.o.
Pod hrasti 28
1218 Komenda
SLOVENIJA

E: info@imp-pumps.com
T: +386 1 28 06 400
F: +386 1 28 06 460
www.imp-pumps.com

Contact:

9/2015