



IMPPUMPS®

Intelligent Motor Pumps

www.imp-pumps.com



MULTISTAGE PUMPS

TECHNICAL DATA



Investing in your future

OPERATION PART FINANCED BY THE EUROPEAN UNION
European Regional Development Fund



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 has increased its profit in the last three years by 60%. More than 96 % 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.

Product overview

The basic production program of IMP PUMPS are circulating pumps for HVAC application. Pumps are flanged or threaded and single or double design with a bronze or cast iron hydraulic casing. All cast iron hydraulics are covered with cataphoresis.

Wet running circulating pumps



NMT (electronic savings, ECM, SAN circulation for sanitary water)



SAN - for sanitary water



GHN (3-speed pumps)

Dry running circulating pump



CL, CV, PV, NR
(in-line, bloc,
with frequency converter)

Vertical Multi-Stage Centrifugal Pumps

CATALOGUE FOR 50Hz



BL

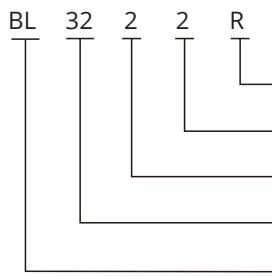


BL



BL

Model Instruction



- R:Hot water type (Cold-water is not marked)
- Number of small impellers
- Number of impellers
- Rated flow(m³/h)
- Type range

Overview Of The Product

BL 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°C ~ 68°C hot water type:0°C ~ 120°C
- Ambient temperature:+40°C,
- 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

	BL
Water supply	
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	●

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

Certificate



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

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(H_f) (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(η) in order to keep efficiency high when the flow drops.

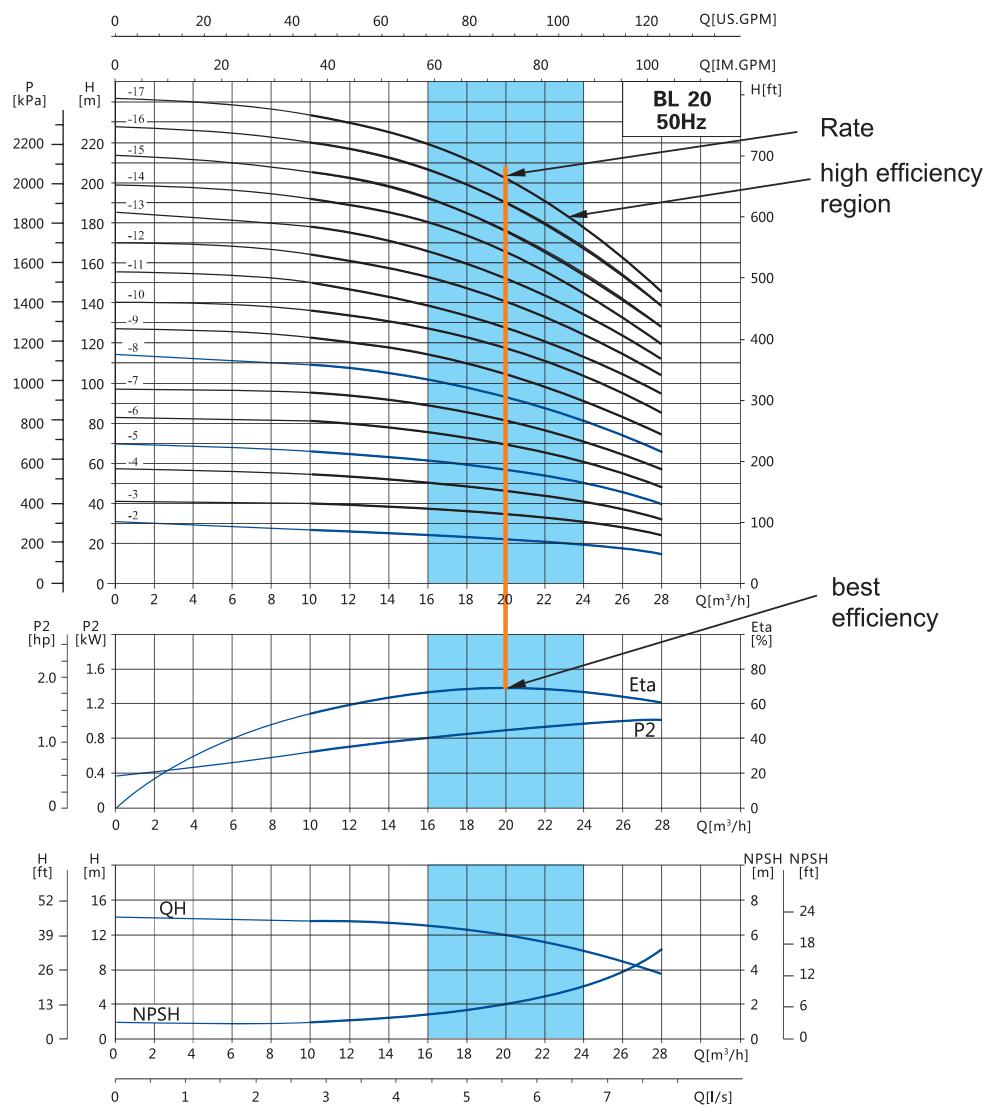


Fig. 3

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 flexible connection such as:

- Pipe thread
- Oval flange
- DIN flange
- Other connections on request

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°C to 68°C, no particles, oil. 2. Working condition regular under hot water 68°C to 90°C, no particles, with oil.	Normal
EQQE	Container type E, moving ring and static ring silicon carbide Q , epdm E	Working condition:hot water 90°C to 120°C, 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°C to 90°C, 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°C. 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 2,4	2
BL 8,12,16,20	3
BL 32-2-2~BL 32-7	1
BL 32-8-2~BL 32-12	4
BL 32-13~BL 32-15-2	5
BL 45-2-2~BL 45-6	1
BL 45-7-2~BL 45-9	4
BL 45-10-2~BL 45-13-2	5
BL 64-2-2~BL 64-5-2	1
BL 64-5-1~BL 64-8	4
BL 90-2-2~BL 90-4-2	1
BL 90-4~BL 90-6	4

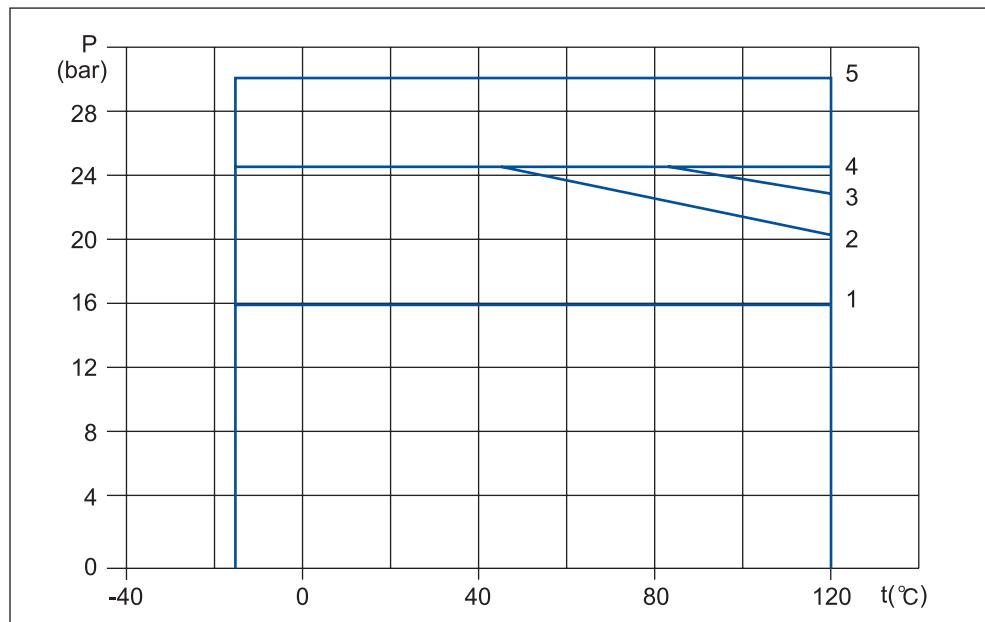
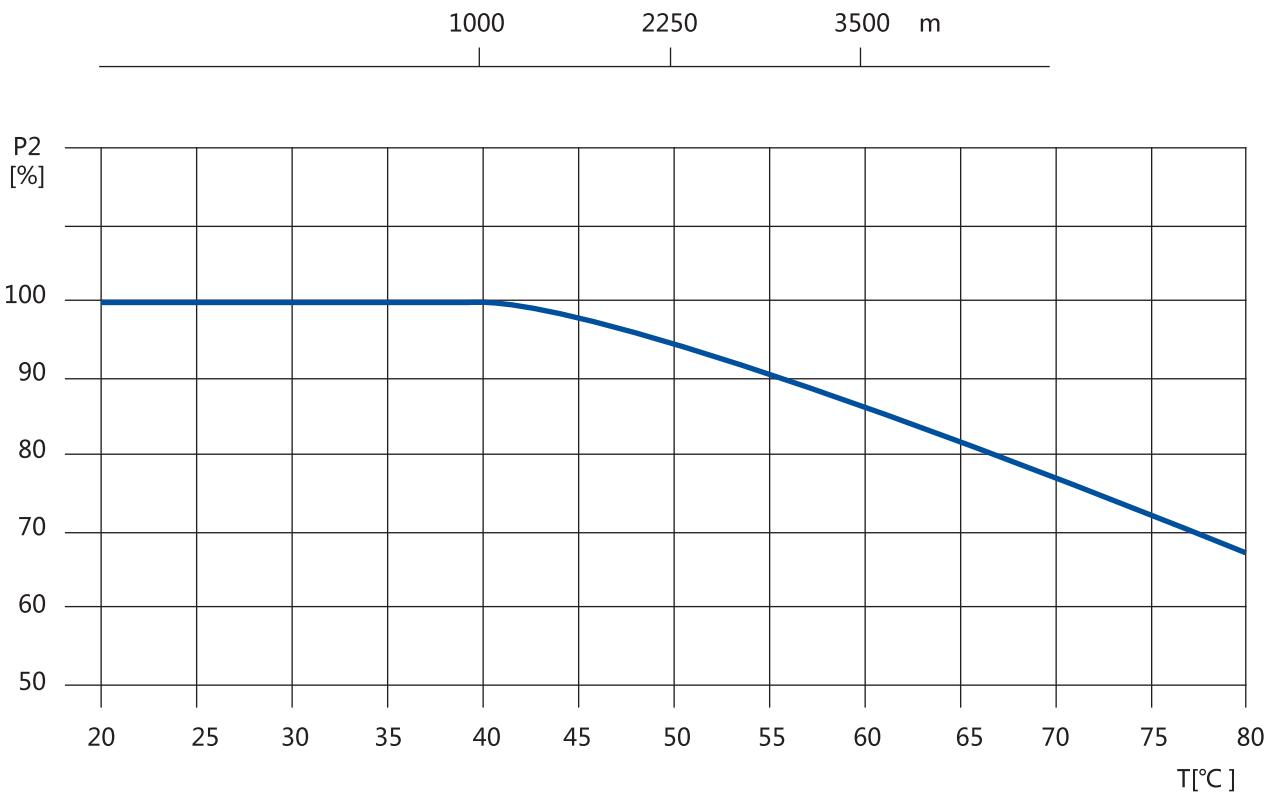


Fig. 4

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.

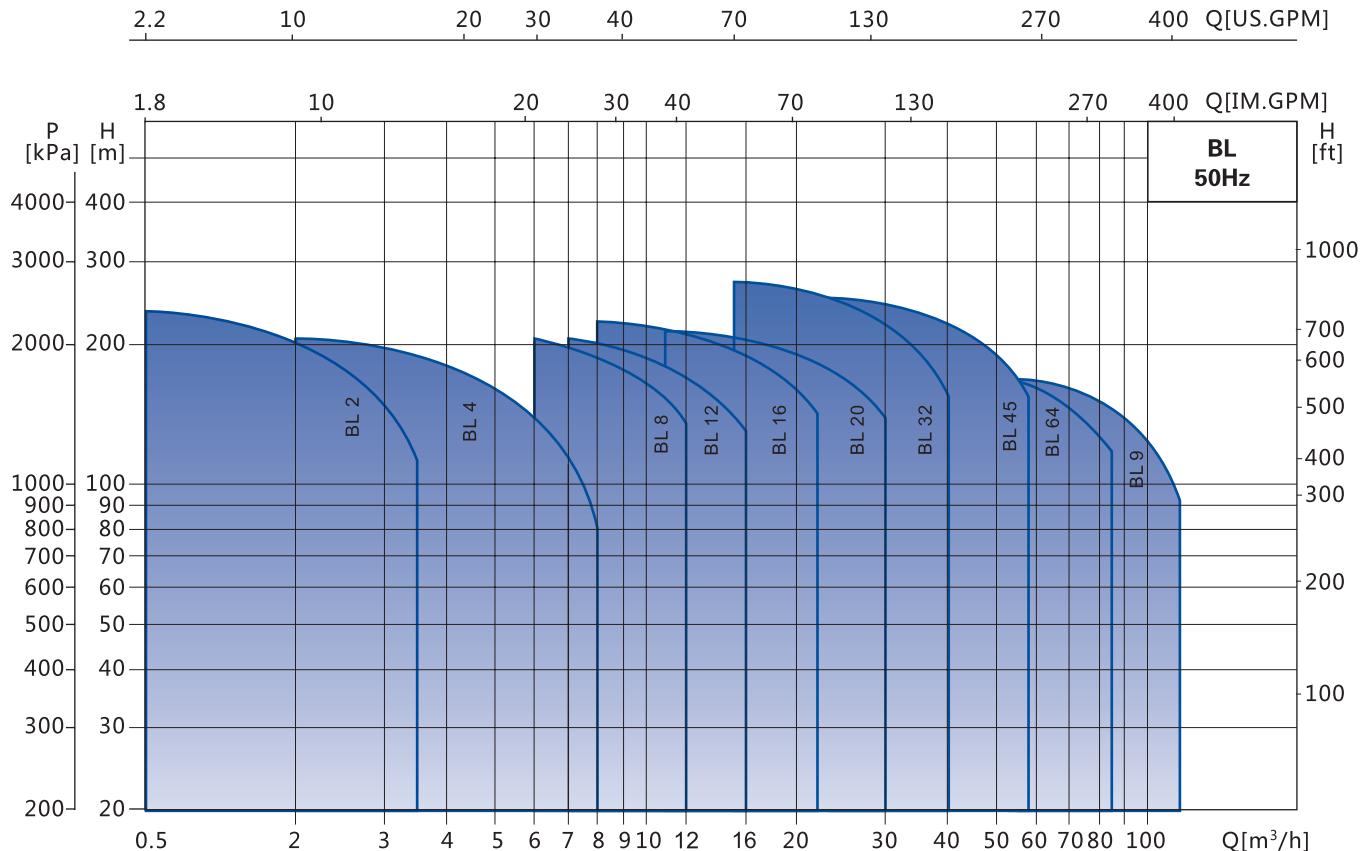
Maximum Ambient Temperature

When the pump is operating in the place where ambient temperature is higher than 40°C 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.





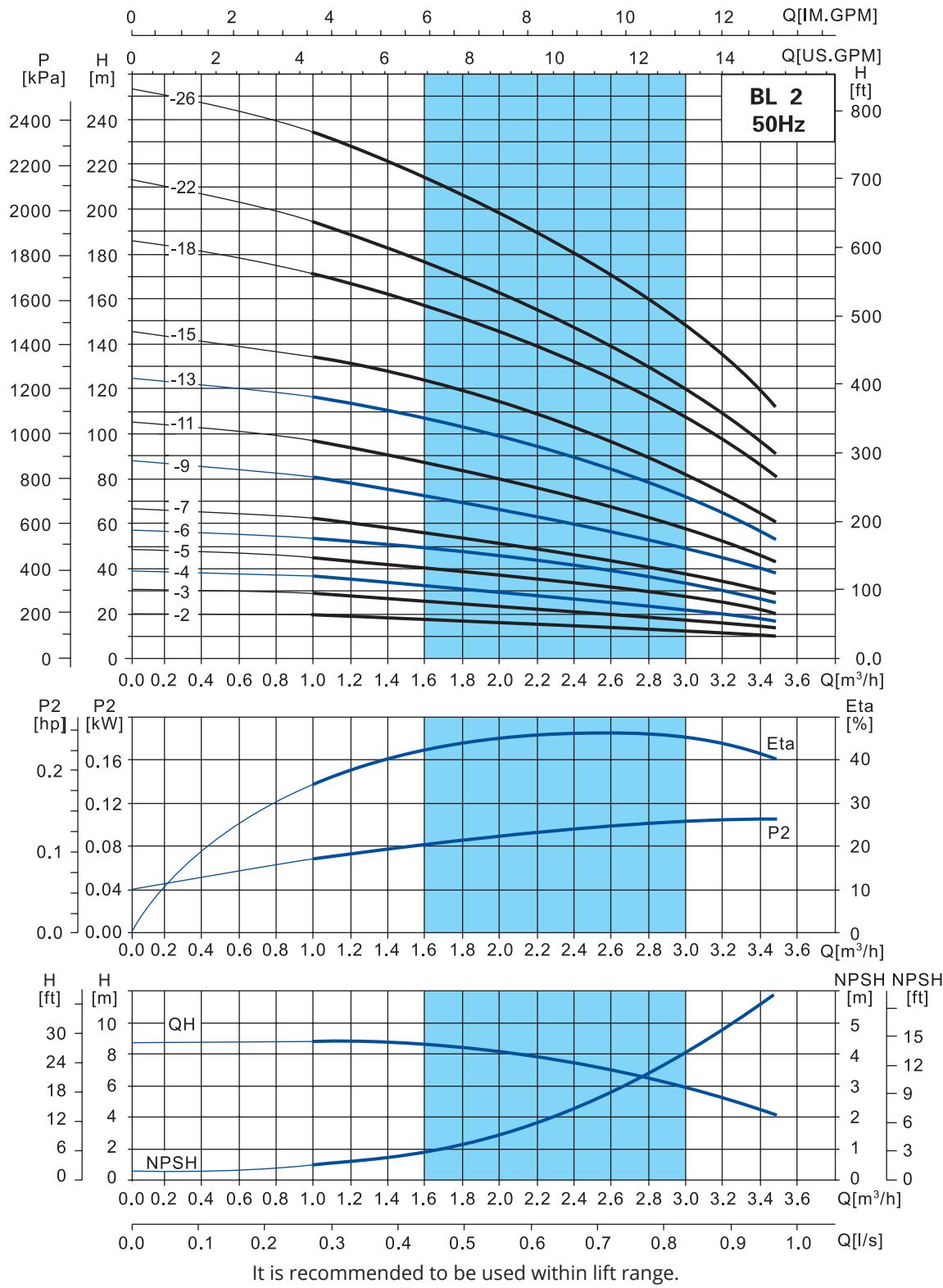
Performance Range



Product Range

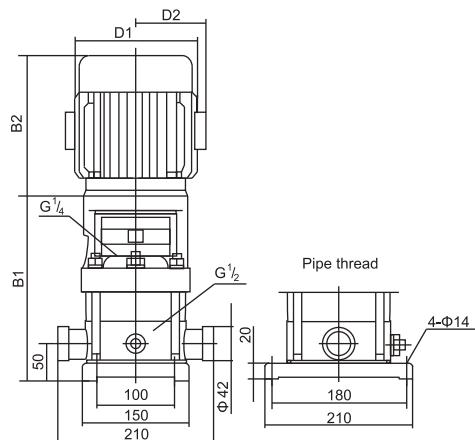
Model	BL 2	BL 4	BL 8	BL 12	BL 16	BL 20	BL 32	BL 45	BL 64	BL 90
Rated Flow (m³/h)	2	4	8	12	16	20	32	45	64	90
Flow Range (m³/h)	1~3.2	1.5~6	5~11	7~14	8~20	10~26	16~36	25~50	30~70	50~100
Max. Pressure (bar)	23	21	21	22	23	23	28	30	23	17
Motor Power (kW)	0.37~3	0.37~4	0.75~7.5	1.5~11	2.2~15	2.2~18.5	3~30	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				

Performance Curve - BL 2



Performance Table

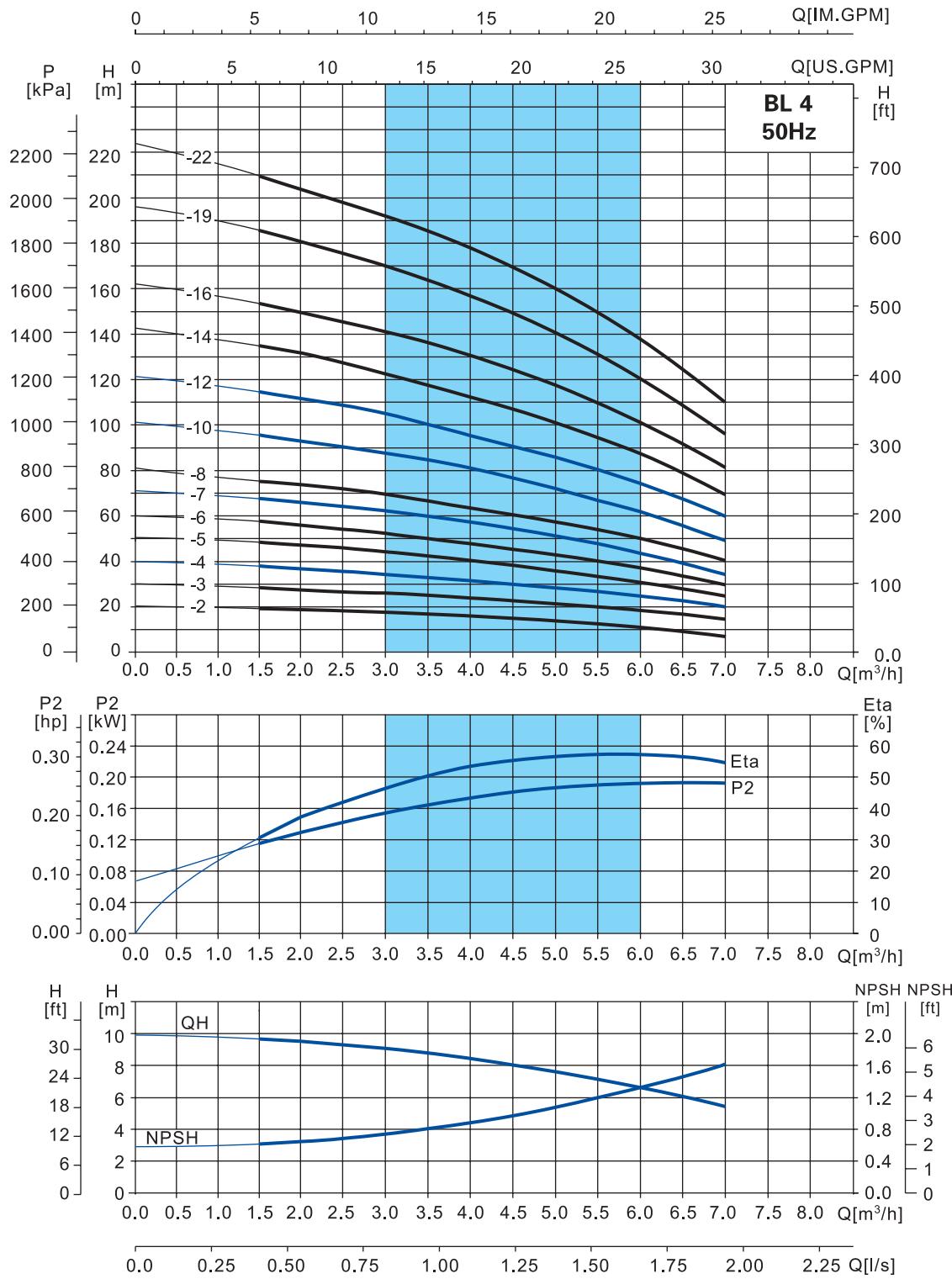
Model	Power		Q (m³/h)	H (m)	1	1.2	1.6	2	2.4	2.8	3.2	Head Range (m)
	kW	HP			18	17	16	15	13	12	10	10~18
BL 2-2	0.37	0.5			27	26	24	22	20	18	15	15~27
BL 2-3	0.37	0.5			36	35	33	30	26	24	20	20~36
BL 2-4	0.55	0.75			45	43	40	37	33	30	24	24~45
BL 2-5	0.55	0.75			53	52	50	45	40	36	30	30~53
BL 2-6	0.75	1			63	61	57	52	47	41	35	35~63
BL 2-7	0.75	1			80	78	73	67	61	54	45	45~80
BL 2-9	1.1	1.5			98	95	89	82	73	64	54	54~98
BL 2-11	1.1	1.5			116	114	106	98	89	78	65	65~116
BL 2-13	1.5	2			134	130	123	112	100	90	73	73~134
BL 2-15	1.5	2			161	157	148	136	121	108	91	91~161
BL 2-18	2.2	3			197	192	180	165	148	130	110	110~197
BL 2-22	2.2	3			232	228	214	198	179	158	130	130~232
BL 2-26	3	4										



Dimensions & Weight

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

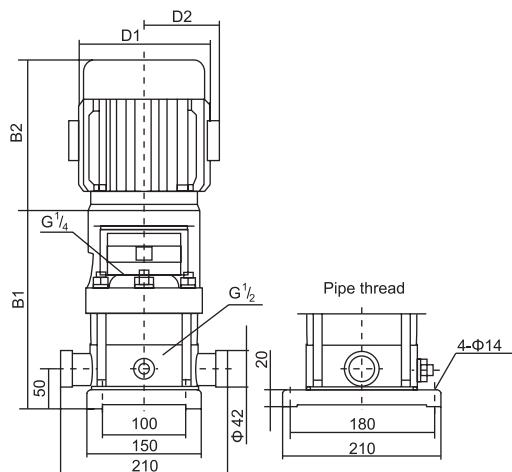
Performance Curve - BL 4



It is recommended to be used within lift range.

Performance Table

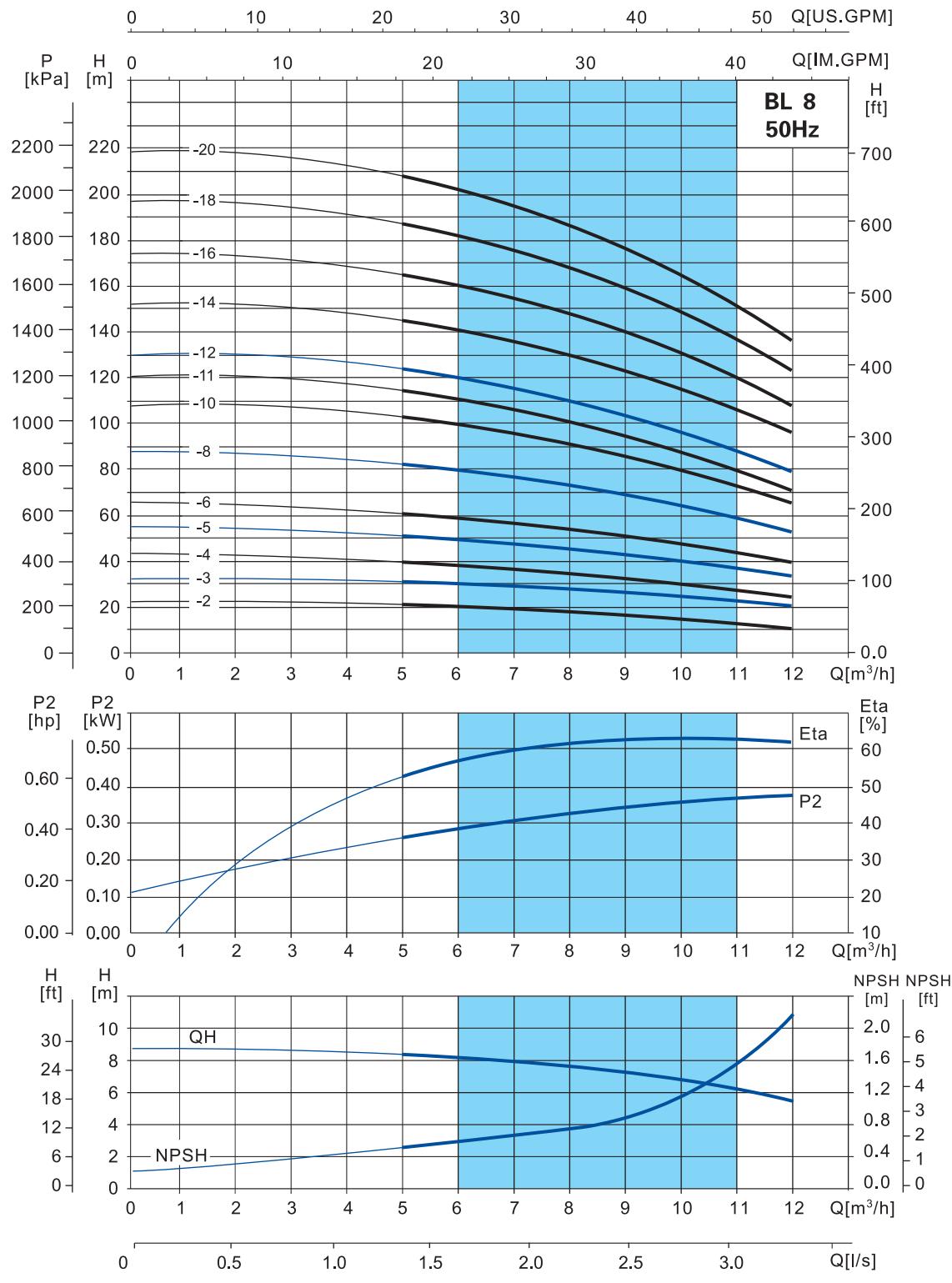
Model	Power		Q (m³/h)	1.5	2	3	4	5	6	Head Range (m)
	kW	HP								
BL 4-2	0.37	0.5	H (m)	19	18	17	15	13	10	10~19
BL 4-3	0.55	0.75		28	27	26	24	20	18	18~28
BL 4-4	0.75	1		38	36	34	32	27	24	24~38
BL 4-5	1.1	1.5		47	45	43	40	34	31	31~47
BL 4-6	1.1	1.5		56	54	52	48	41	37	37~56
BL 4-7	1.5	2		66	63	61	56	48	43	43~66
BL 4-8	1.5	2		74	72	70	64	55	50	50~74
BL 4-10	2.2	3		96	90	87	81	71	62	62~96
BL 4-12	2.2	3		114	108	104	95	85	75	75~114
BL 4-14	3	4		136	126	122	112	101	89	89~136
BL 4-16	3	4		152	144	140	129	115	101	101~152
BL 4-19	4	5.5		183	171	168	153	137	122	122~183
BL 4-22	4	5.5		211	200	192	178	160	138	138~211



Dimensions & Weight

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

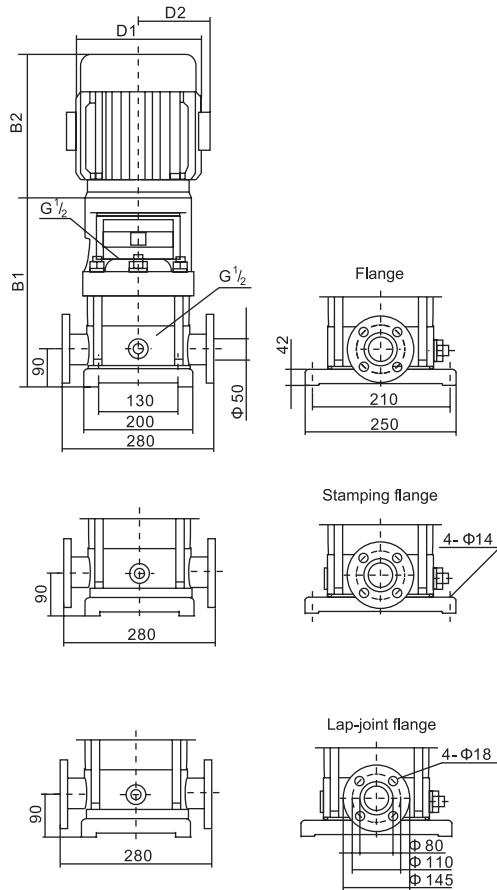
Performance Curve - BL 8



It is recommended to be used within lift range.

Performance Table

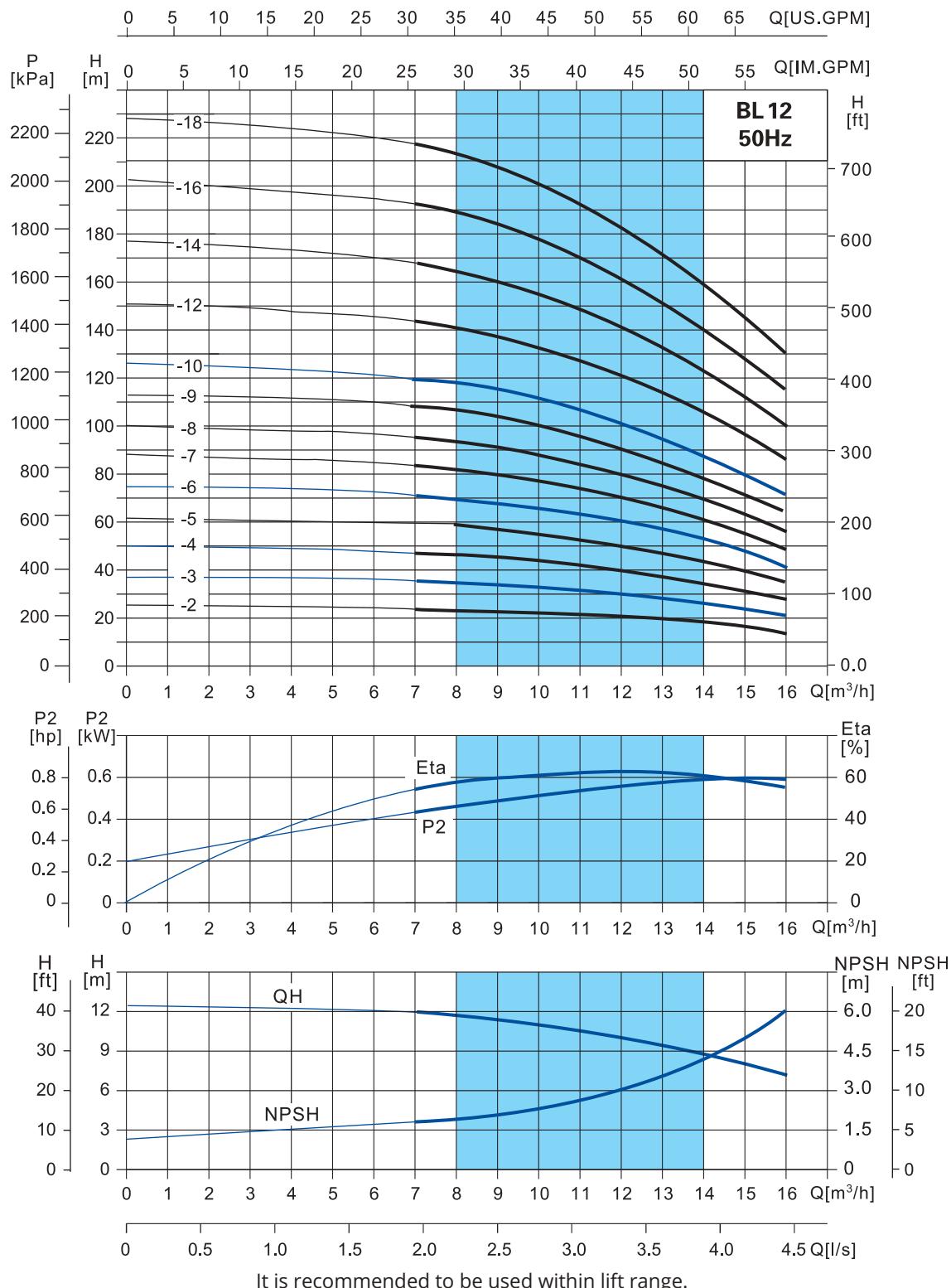
Model	Power		Q (m³/h)	H (m)	5	6	7	8	9	10	11	Head Range (m)
	kW	HP			20	19.5	19	18	17	16	14	14~20
BL 8-2	0.75	1			30	29.5	28.5	27	25	24	21	21~30
BL 8-3	1.1	1.5			41	39.5	38	36	34	32	28	28~41
BL 8-4	1.5	2			52	50	48	45	42	40	36	36~52
BL 8-5	2.2	3			62	60	57	54	51	48	43	43~62
BL 8-6	2.2	3			83	80	77	73	69	65	58	58~83
BL 8-8	3	4			104	100	97	92	87	81	73	73~104
BL 8-10	4	5.5			114	110	106	101	95	86	80	80~114
BL 8-11	4	5.5			124	120	116	111	104	92	87	87~124
BL 8-12	5.5	7.5			145	141	136	130	122	113	102	102~145
BL 8-14	5.5	7.5			166	161	156	148	139	130	118	118~166
BL 8-16	5.5	7.5			187	182	175	167	157	146	134	134~187
BL 8-18	7.5	10			208	202	195	186	175	163	150	150~208
BL 8-20	7.5	10										



Dimensions & Weight

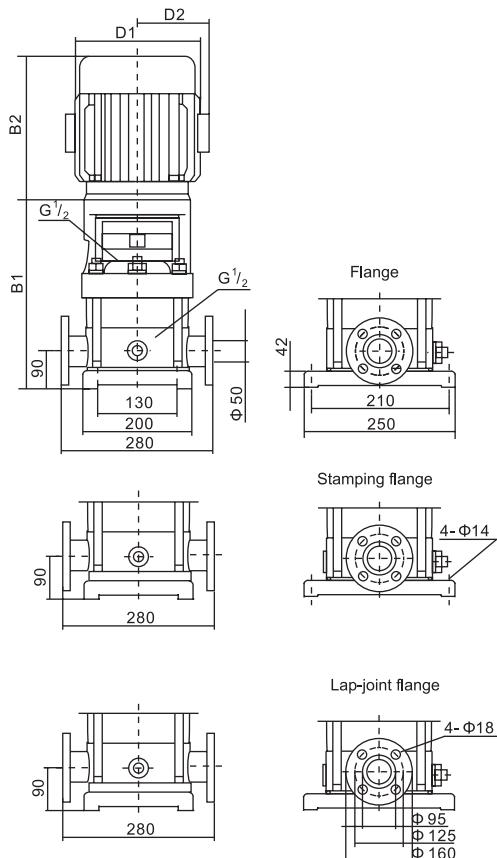
Model	Dim.(mm)					N.W.(kg)
	B1	B2	B1+B2	D1	D2	
BL 8-2	375	247	622	155	124	36/43
BL 8-3	405	247	652	155	124	38/45
BL 8-4	440	260	700	175	137	42/49
BL 8-5	470	285	755	175	137	46/53
BL 8-6	500	285	785	175	137	47/54
BL 8-8	570	232	893	195	151	55/63
BL 8-10	630	341	971	219	169	65/72
BL 8-11	660	341	1001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

Performance Curve - BL 12



Performance Table

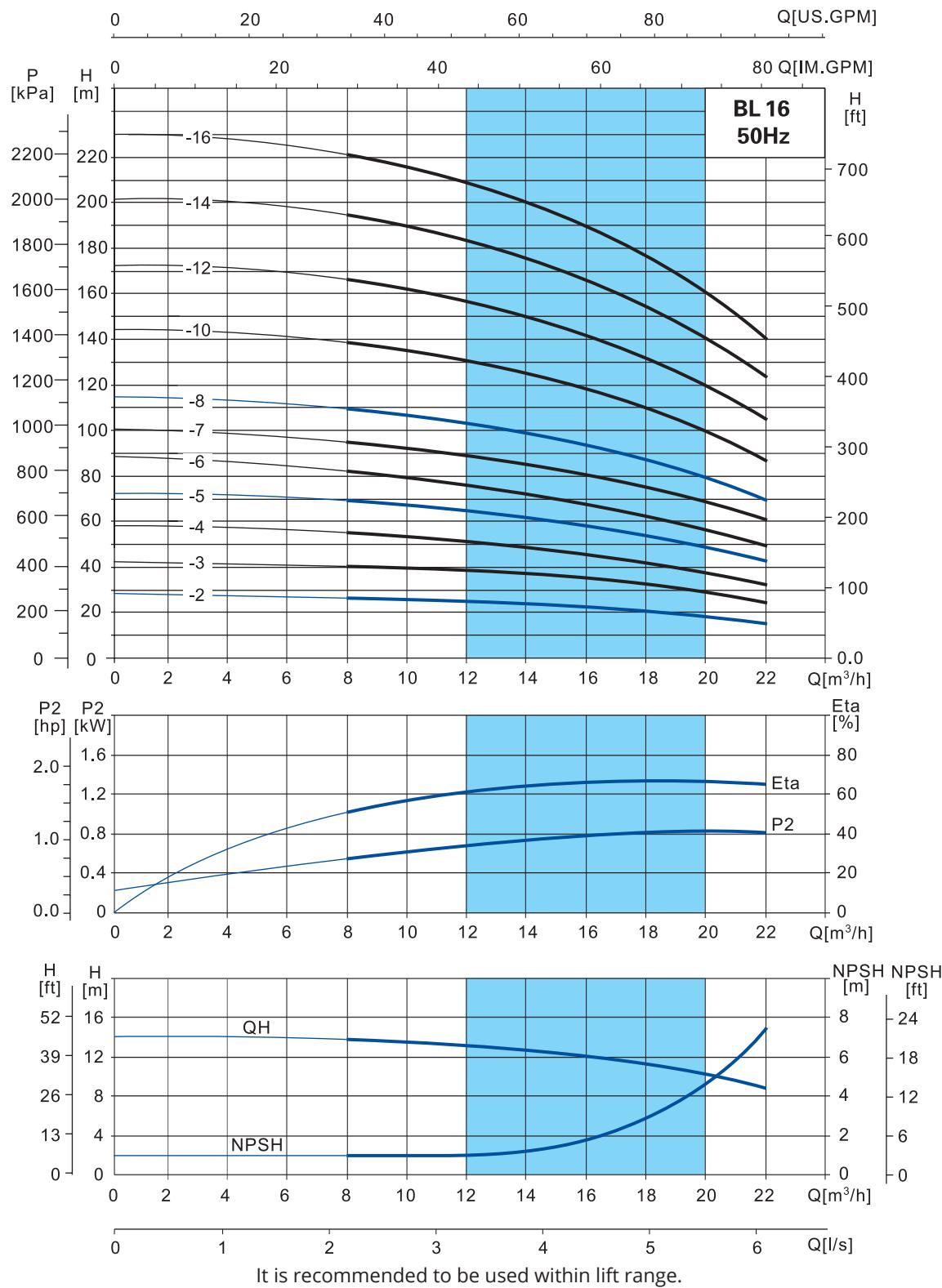
Model	Power		Q (m³/h)	H (m)	7	8	10	12	14	15	Head Range (m)
	kW	HP			23.5	23	22	20	17	15	15.5~23.5
BL 12-2	1.5	2			35.5	35	33	30	26	23	23.5~35.5
BL 12-3	2.2	3			47	46	44	40	34	31	31~47
BL 12-4	3	4			59.5	58	55	50	43	39	39~59.5
BL 12-5	3	4			71.5	70	66	60	52	47	47~71.5
BL 12-6	4	5.5			83.5	82	77	70	61	55	55~83.5
BL 12-7	5.5	7.5			95.5	94	88	80	70	63	63~95.5
BL 12-8	5.5	7.5			108	106	100	91	79	71	71.5~108
BL 12-9	5.5	7.5			120	118	111	101	88	80	80~120
BL 12-10	7.5	10			143.5	141	133	121	106	96	96~143.5
BL 12-12	7.5	10			168	165	155	141	124	112	112~168
BL 12-14	11	15			192.5	189	178	162	142	128	128.5~192.5
BL 12-16	11	15			217	213	202	183	160	145	145~217
BL 12-18	11	15									



Dimensions & Weight

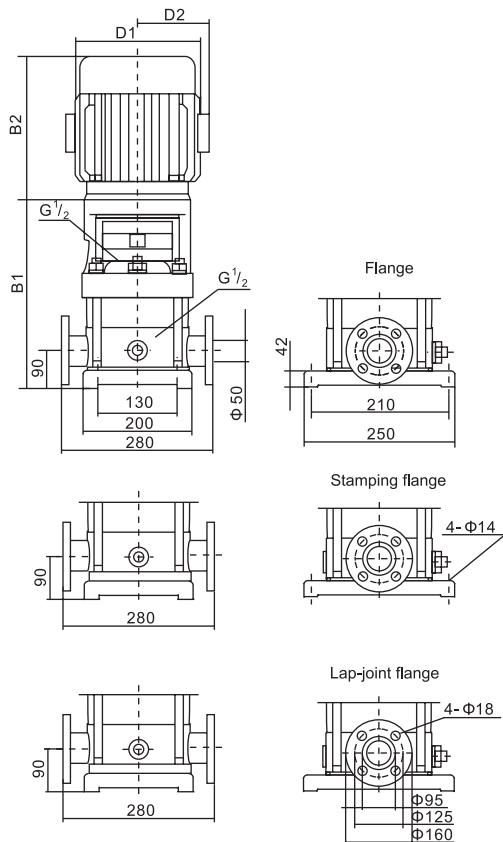
Model	Dim.(mm)					N.W.(kg)
	B1	B2	B1+B2	D1	D2	
BL 12-2	383	300	683	166	115	42/49
BL 12-3	415	300	715	166	115	45/52
BL 12-4	456	325	781	191	128	50/58
BL 12-5	488	325	813	191	128	51/59
BL 12-6	519	355	874	212	140	57/64
BL 12-7	575	395	970	258	163	75/83
BL 12-8	606	395	1001	258	163	76/85
BL 12-9	638	395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

Performance Curve - BL 16



Performance Table

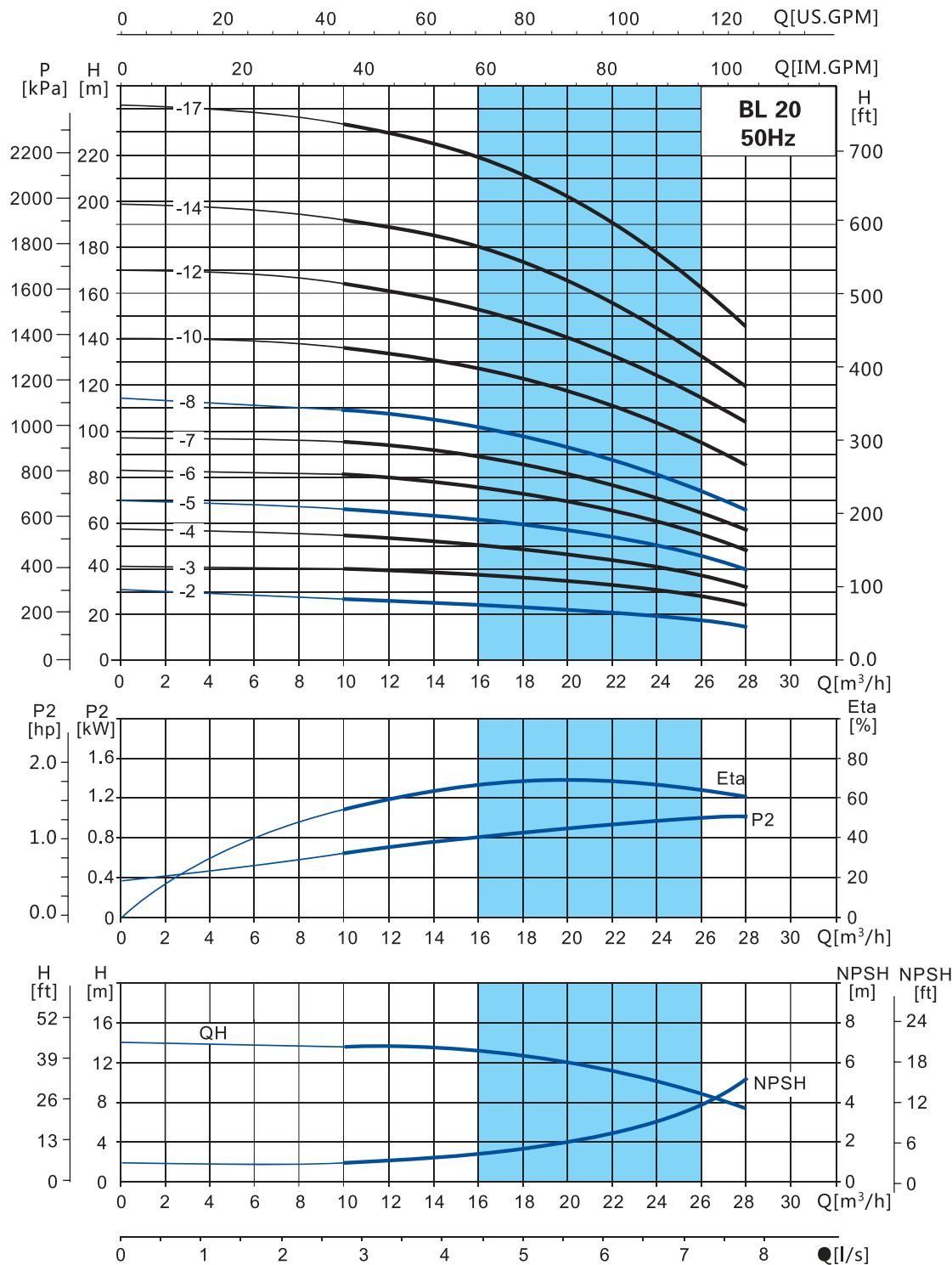
Model	Power		Q (m³/h)	H (m)	8	10	12	14	16	18	20	Head Range (m)
	kW	HP			27	26	25	24	22	21	19	19~27
BL 16-2	2.2	3			41	40	38	37	34	32	29	29~41
BL 16-3	3	4			54	53	52	49	46	43	38	38~54
BL 16-4	4	5.5			68	67	65	62	58	54	48	48~68
BL 16-5	5.5	7.5			82	80	78	74	70	64	58	58~82
BL 16-6	5.5	7.5			96	95	91	87	82	76	68	68~96
BL 16-7	7.5	10			110	108	104	99	94	86	77	77~110
BL 16-8	7.5	10			138	136	131	125	118	109	97	97~138
BL 16-10	11	15			166	162	157	150	141	130	116	116~166
BL 16-12	11	15			194	190	184	175	166	152	136	136~194
BL 16-14	15	20			222	217	210	200	189	174	156	156~222
BL 16-16	15	20										



Dimensions & Weight

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

Performance Curve - BL 20

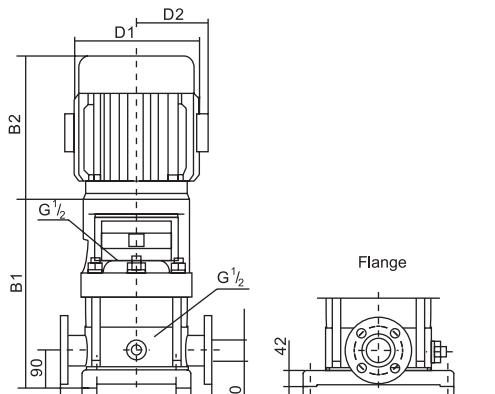


It is recommended to be used within lift range.



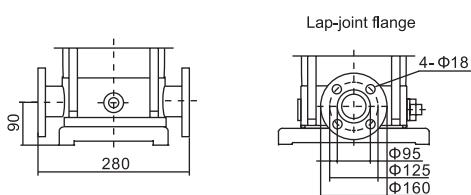
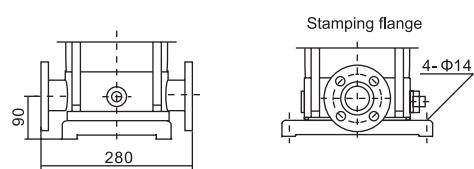
Performance Table

Model	Power		Q (m³/h)	H (m)	14	16	18	20	22	24	26	Head Range (m)
	kW	HP			27	25	24	23	22	20	18	18~27
BL 20-2	2.2	3			40	38	37	35	33	30	27	27~40
BL 20-3	4	5.5			54	51	49	47	44	41	37	37~54
BL 20-4	5.5	7.5			67	62	60	58	55	50	45	45~67
BL 20-5	5.5	7.5			81	75	73	70	66	61	55	55~81
BL 20-6	7.5	10			95	89	86	82	77	71	65	65~95
BL 20-7	7.5	10			109	102	99	94	89	82	75	75~109
BL 20-8	11	15			136	128	124	118	111	103	95	95~136
BL 20-10	11	15			164	154	149	142	133	124	114	114~164
BL 20-12	15	20			192	180	174	166	156	145	133	133~192
BL 20-14	15	20			234	219	212	202	190	177	162	162~234
BL 20-17	18.5	25										

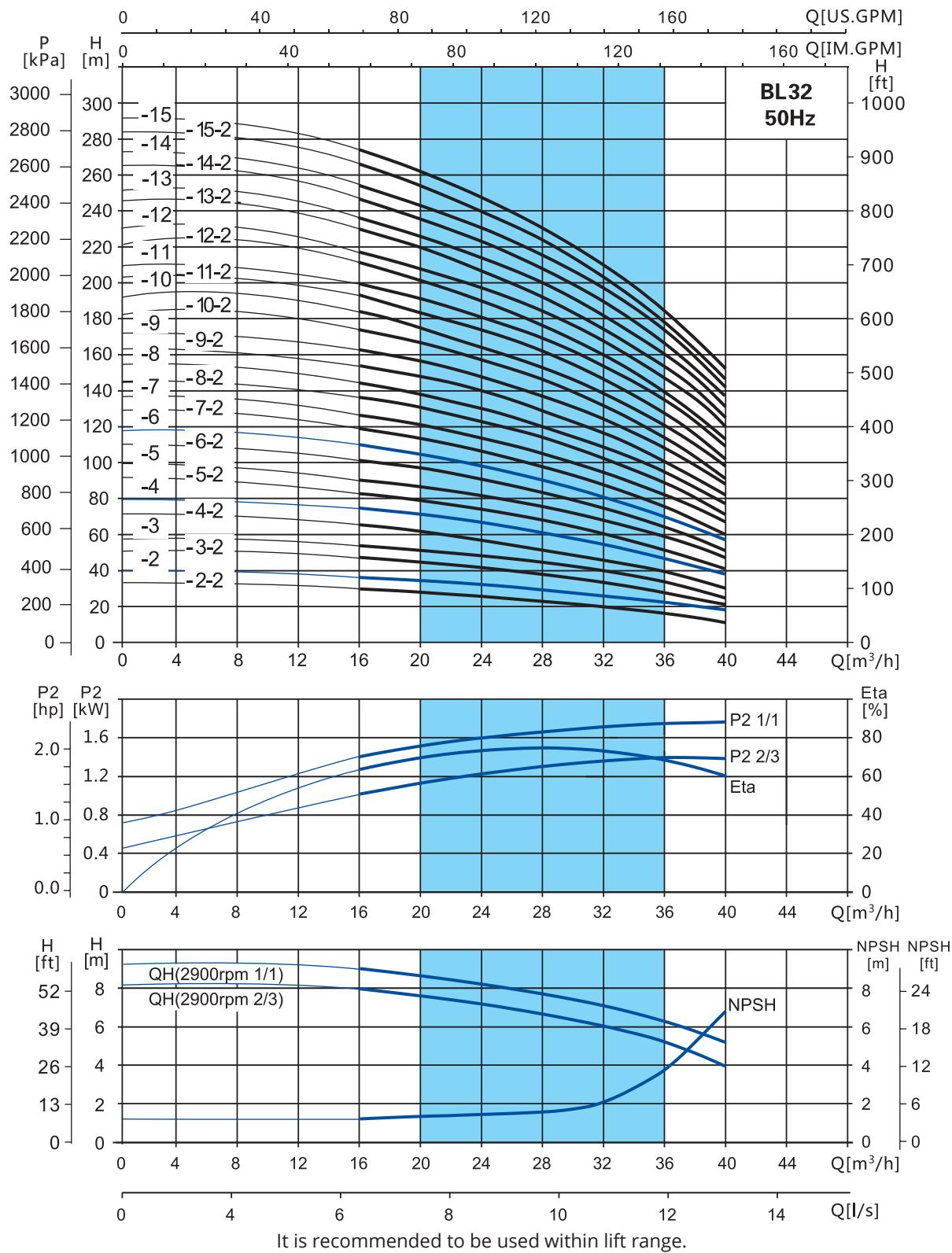


Dimensions & Weight

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

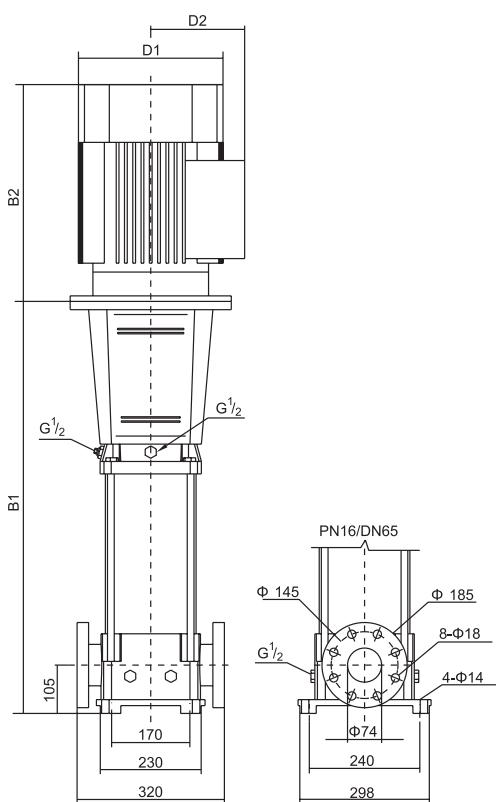


Performance Curve - BL 32



Performance Table

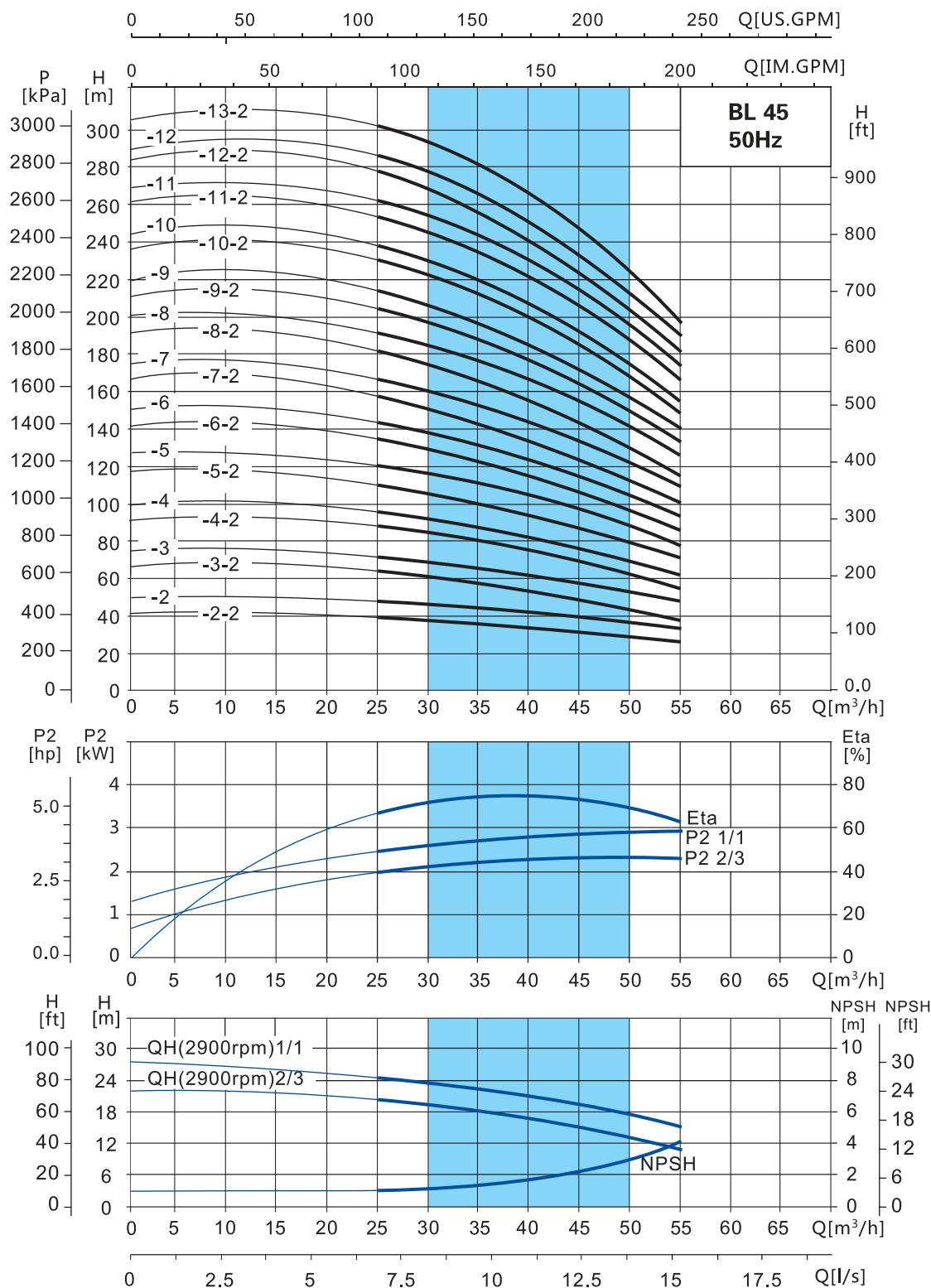
Model	Power		Q (m³/h)	16	20	24	28	32	36	Head Range (m)
	kW	HP								
BL 32-2-2	3	4		29	28	26	23	20	16	16~29
BL 32-2	4	5.5		36	34	32	29	27	23	23~36
BL 32-3-2	5.5	7.5		47	44	41	38	33	28	28~47
BL 32-3	5.5	7.5		54	51	48	44	40	35	35~54
BL 32-4-2	7.5	10		65	62	58	53	46	40	40~65
BL 32-4	7.5	10		72	69	65	59	53	47	47~72
BL 32-5-2	11	15		83	79	74	68	60	52	52~83
BL 32-5	11	15		90	86	81	74	67	59	59~90
BL 32-6-2	11	15		101	97	90	83	74	65	65~101
BL 32-6	11	15		108	104	97	90	81	72	72~108
BL 32-7-2	15	20		119	114	107	98	88	78	78~119
BL 32-7	15	20		126	121	113	105	95	85	85~126
BL 32-8-2	15	20		136	131	123	114	102	90	90~136
BL 32-8	15	20		144	138	130	120	109	97	97~144
BL 32-9-2	18.5	25		154	148	140	129	117	102	102~154
BL 32-9	18.5	25		162	156	147	136	124	109	109~162
BL 32-10-2	18.5	25		175	166	157	146	131	115	115~175
BL 32-10	18.5	25		182	173	164	152	138	122	122~182
BL 32-11-2	22	30		193	184	173	164	146	128	128~193
BL 32-11	22	30		200	191	180	168	153	135	135~200
BL 32-12-2	22	30		211	201	189	178	160	140	140~211
BL 32-12	22	30		218	208	196	184	167	147	147~218
BL 32-13-2	30	40		230	218	206	193	174	153	153~230
BL 32-13	30	40		237	225	213	200	181	160	160~237
BL 32-14-2	30	40		247	235	222	210	189	165	165~247
BL 32-14	30	40		255	242	229	216	196	172	172~255
BL 32-15-2	30	40		266	253	239	224	203	178	178~266
BL 32-15	30	40		274	260	246	231	210	185	185~274

H
(m)


Dimensions & Weight

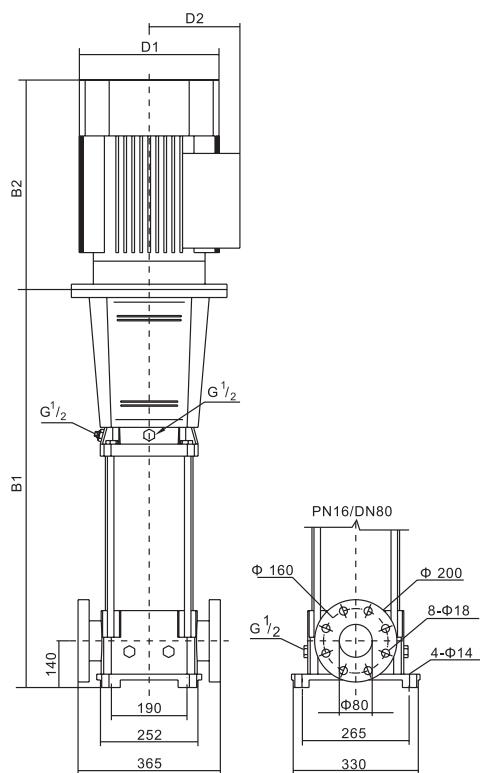
Model	Dim.(mm)					N.W.(kg)
	B1	B2	B1+B2	D1	D2	
BL 32-2-2	634	325	959	191	140	74/78
BL 32-2	634	355	989	212	163	81/85
BL 32-3-2	724	395	1119	258	163	100/104
BL 32-3	724	395	1119	258	163	100/104
BL 32-4-2	794	395	1189	258	163	106/110
BL 32-4	794	395	1189	258	163	106/110
BL 32-5-2	894	498	1392	315	251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

Performance Curve - BL 45



Performance Table

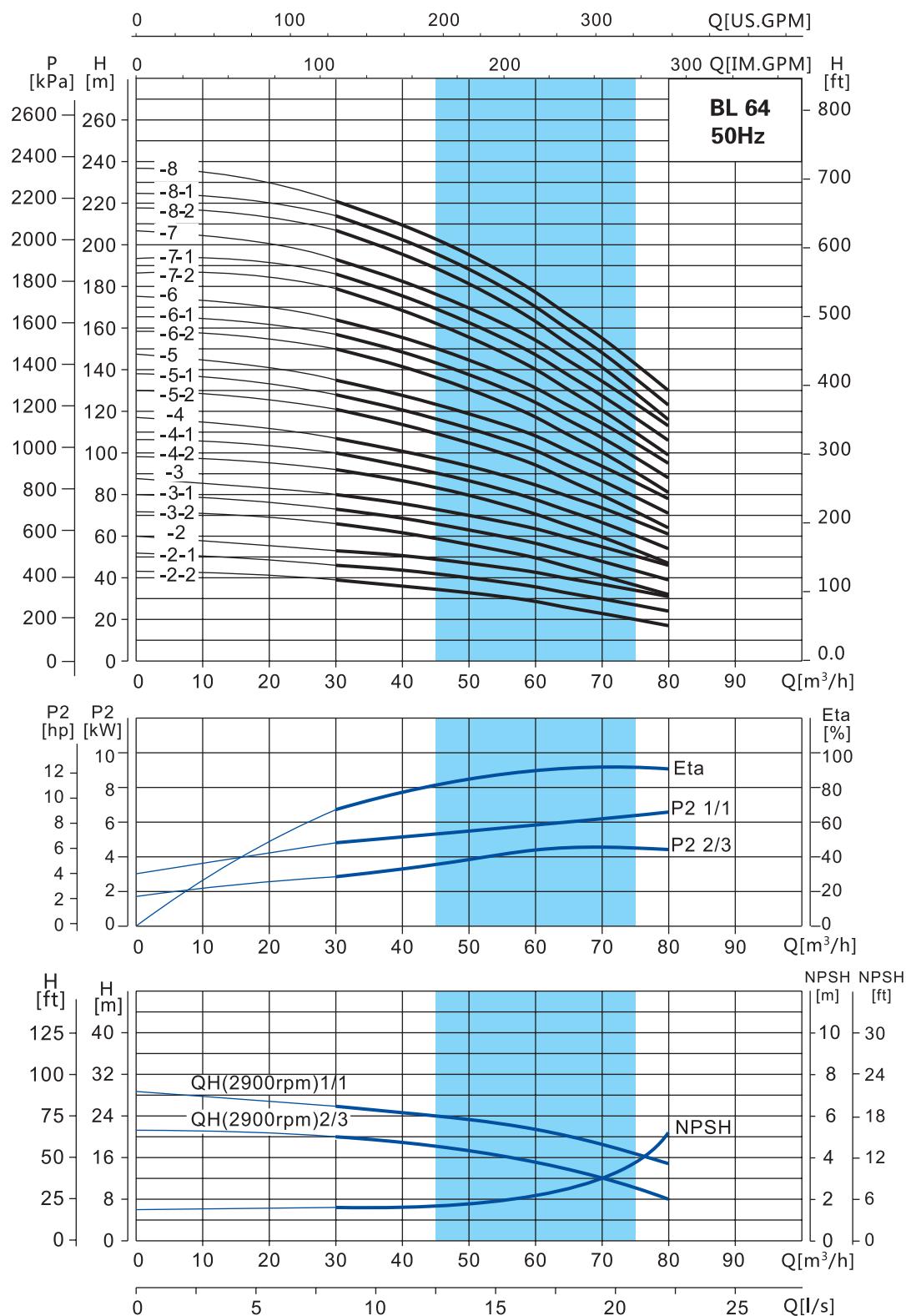
Model	Power		Q (m³/h)	25	30	35	40	45	50	55
	kW	HP								
BL 45-2-2	5.5	7.5		40	38	36	33	30	27	23
BL 45-2	7.5	10		48	46	44	42	39	35	31
BL 45-3-2	11	15		63	61	58	54	50	44	38
BL 45-3	11	15		71	69	66	63	58	53	47
BL 45-4-2	15	20		87	84	80	75	69	62	54
BL 45-4	15	20		95	92	88	84	78	71	62
BL 45-5-2	18.5	25		111	107	102	96	88	80	69
BL 45-5	18.5	25		119	115	110	105	97	88	78
BL 45-6-2	22	50		135	130	124	117	108	97	85
BL 45-6	22	50		143	138	132	125	116	106	93
BL 45-7-2	30	50		158	152	146	138	127	115	100
BL 45-7	30	60		166	161	154	146	135	124	109
BL 45-8-2	30	60		182	175	168	159	146	133	116
BL 45-8	30	60		190	184	176	167	159	141	124
BL 45-9-2	30	60		205	198	190	180	166	150	132
BL 45-9	37	60		214	207	198	188	174	159	140
BL 45-10-2	37	40		230	221	212	200	185	168	147
BL 45-10	37	40		238	230	220	209	193	177	155
BL 45-11-2	45	40		255	246	236	223	206	188	165
BL 45-11	45	40		263	255	244	232	214	196	173
BL 45-12-2	45	40		280	270	259	245	226	206	181
BL 45-12	45	30		289	280	268	255	236	216	190
BL 45-13-2	45	30		305	294	282	267	247	225	198



Dimensions & Weight

Model	Dim.(mm)					N.W.(kg)
	B1	B2	B1+B2	D1	D2	
BL 45-2-2	716	395	1111	258	163	109/117
BL 45-2	716	395	1111	258	163	113/121
BL 45-3-2	826	498	1324	315	251	190/197
BL 45-3	826	498	1324	315	251	190/197
BL 45-4-2	906	498	1404	315	251	204/211
BL 45-4	906	498	1404	315	251	204/211
BL 45-5-2	986	542	1528	315	251	225/233
BL 45-5	986	542	1528	315	251	225/233
BL 45-6-2	1066	578	1644	355	267	272/279
BL 45-6	1066	578	1644	355	267	272/279
BL 45-7-2	1146	669	1815	397	299	351/359
BL 45-7	1146	669	1815	397	299	354/361
BL 45-8-2	1226	669	1895	397	299	351/359
BL 45-8	1226	669	1895	397	299	354/361
BL 45-9-2	1306	669	1975	397	299	380/388
BL 45-9	1386	669	2055	397	299	358/366
BL 45-10-2	1386	669	2055	397	299	385/392
BL 45-10	1466	669	2135	446	299	385/392
BL 45-11-2	1466	709	2175	446	322	450/457
BL 45-11	1546	709	2255	446	322	450/457
BL 45-12-2	1546	709	2255	446	322	454/462
BL 45-12	1626	709	2335	446	322	454/462
BL 45-13-2	1626	709	2335	446	322	458/465

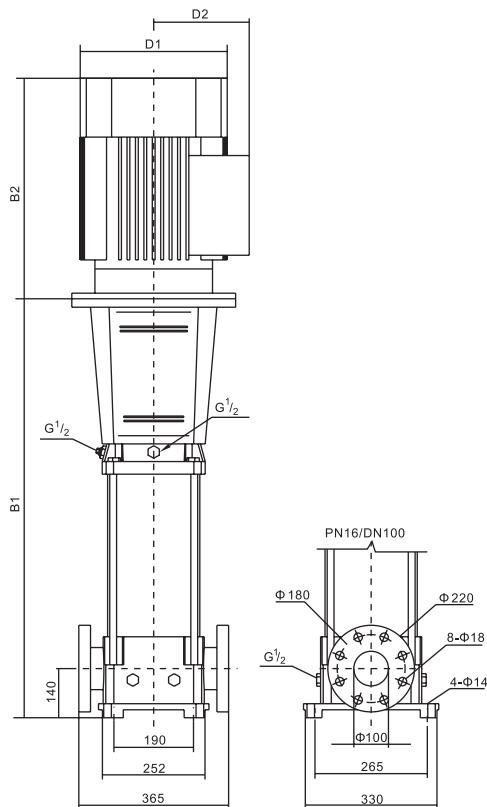
Performance Curve - BL 64



Performance Table

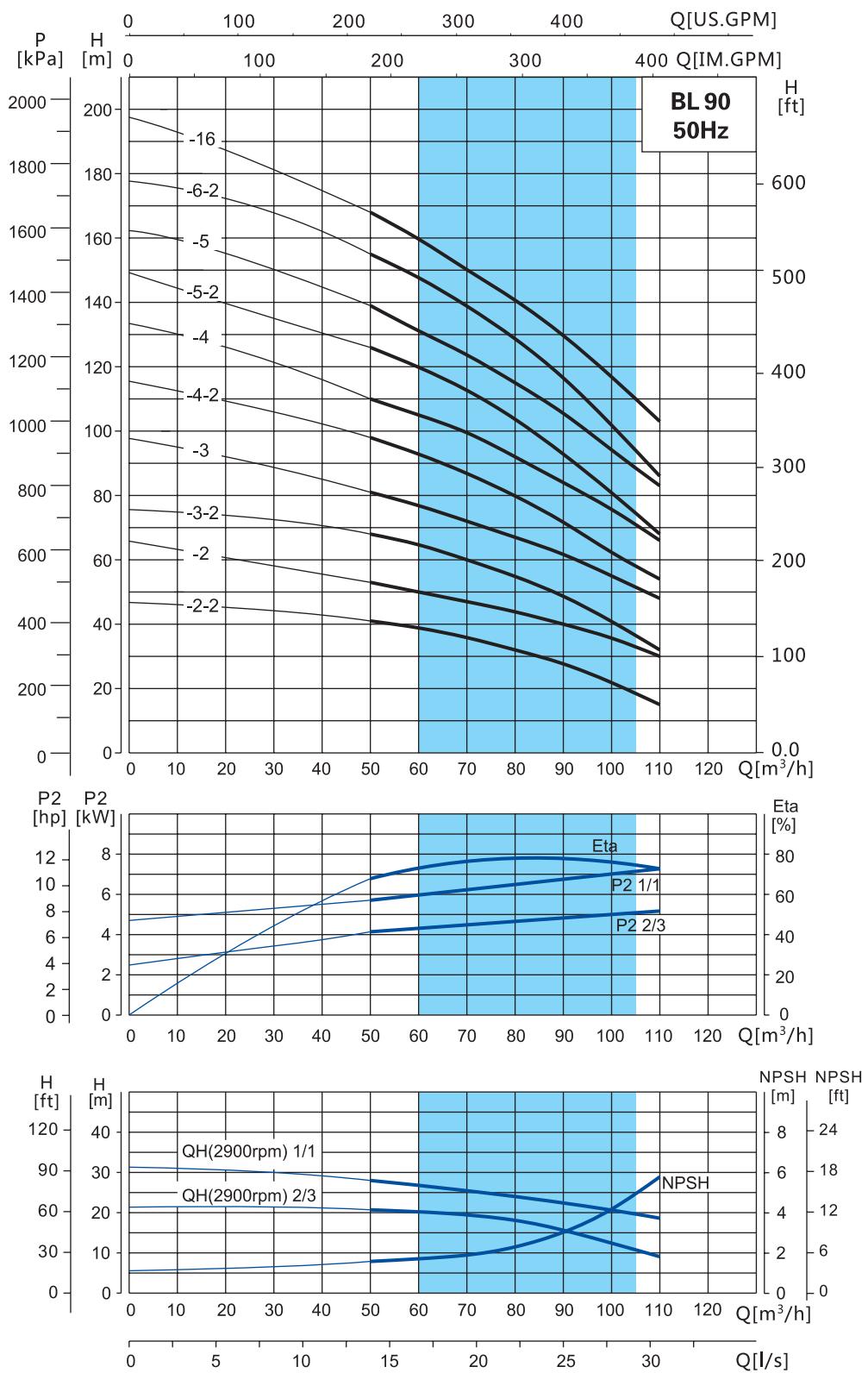
Model	Power		Q (m³/h)	30	40	50	60	64	70	80
	kW	HP		30	40	50	60	64	70	80
BL 64-2-2	7.5	10		39	36	33	29	26	23	17
BL 64-2-1	11	15		46	44	40	36	33	30	24
BL 64-2	11	15		53	51	47	43	40	37	30
BL 64-3-2	15	20		66	62	56	50	46	41	32
BL 64-3-1	15	20		73	69	63	57	53	48	39
BL 64-3	18.5	25		80	76	71	65	60	56	46
BL 64-4-2	18.5	25		92	87	80	71	66	60	47
BL 64-4-1	22	30		100	94	87	78	73	67	54
BL 64-4	22	30		107	101	94	85	80	74	61
BL 64-5-2	30	40		121	114	105	95	88	80	64
BL 64-5-1	30	40		128	121	112	102	95	87	71
BL 64-5	30	40		136	129	119	109	102	94	78
BL 64-6-2	30	40		150	142	131	118	110	101	81
BL 64-6-1	37	50		157	149	138	125	117	108	88
BL 64-6	37	50		164	156	145	132	124	115	95
BL 64-7-2	37	50		179	169	156	141	132	121	99
BL 64-7-1	37	50		186	176	163	148	139	128	106
BL 64-7	45	60		193	183	170	155	146	135	112
BL 64-8-2	45	60		207	196	182	164	154	142	116
BL 64-8-1	45	60		215	203	189	171	161	149	123
BL 64-8	45	60		221	210	196	178	168	156	130

Dimensions & Weight



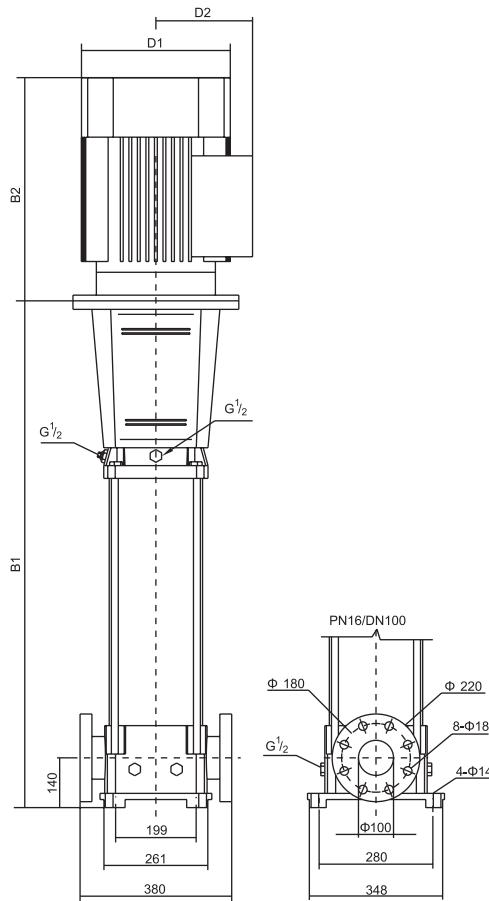
Model	Dim.(mm)					N.W.(kg)
	B1	B2	B1+B2	D1	D2	
BL 64-2-2	685	390	1075	259	203	133/141
BL 64-2-1	715	498	1213	314	251	197/204
BL 64-2	715	498	1213	314	251	197/204
BL 64-3-2	825	498	1323	314	251	210/218
BL 64-3-1	825	498	1323	314	251	210/218
BL 64-3	825	542	1367	314	251	228/235
BL 64-4-2	905	542	1447	314	251	231/238
BL 64-4-1	905	578	1483	355	267	274/282
BL 64-4	905	578	1483	355	267	274/282
BL 64-5-2	985	669	1653	397	299	354/361
BL 64-5-1	985	669	1653	397	299	354/361
BL 64-5	985	669	1653	397	299	354/361
BL 64-6-2	1065	669	1734	397	299	358/366
BL 64-6-1	1065	669	1734	397	299	380/388
BL 64-6	1065	669	1734	397	299	380/388
BL 64-7-2	1145	669	1814	397	299	386/394
BL 64-7-1	1145	669	1814	397	299	386/394
BL 64-7	1145	709	1864	446	322	445/453
BL 64-8-2	1225	709	1934	446	322	450/457
BL 64-8-1	1225	709	1934	446	322	450/457
BL 64-8	1225	709	1934	446	322	450/457

Performance Curve - BL 90



Performance Table

Model	Power		Q (m³/h)	50	60	70	80		90		100		110
	kW	HP											
BL 90-2-2	11	15	H (m)	41	39	36	32	28	22	15			
BL 90-2	15	20		53	50	47	44	40	36	30			
BL 90-3-2	18.5	25		68	65	60	55	49	41	32			
BL 90-3	22	30		81	77	72	67	62	55	48			
BL 90-4-2	30	40		98	93	87	80	72	62	50			
BL 90-4	30	40		110	105	100	92	84	76	66			
BL 90-5-2	37	50		126	120	113	104	93	81	68			
BL 90-5	37	50		139	131	124	115	106	94	83			
BL 90-6-2	45	60		155	148	139	129	117	102	86			
BL 90-6	45	60		168	160	150	141	130	117	103			

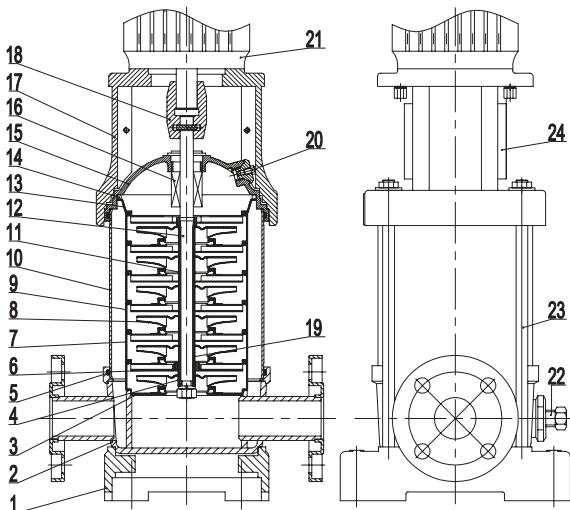


Dimensions & Weight

Model	Dim.(mm)					N.W.(kg)
	B1	B2	B1+B2	D1	D2	
BL 90-2-2	771	498	1269	314	251	196/204
BL 90-2	771	498	1269	314	251	207/214
BL 90-3-2	863	542	1405	314	251	227/235
BL 90-3	863	578	1441	355	267	269/277
BL 90-4-2	955	669	1624	397	299	341/349
BL 90-4	955	669	1624	397	299	341/349
BL 90-5-2	1047	669	1716	397	299	376/383
BL 90-5	1047	669	1716	397	299	376/383
BL 90-6-2	1139	709	1848	446	322	439/447
BL 90-6	1139	709	1848	446	322	439/447

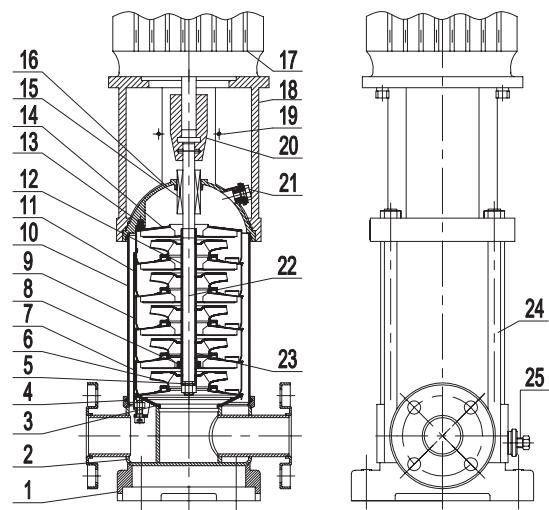
Components & Materials

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	Protection Blade	SUS304	AISI304

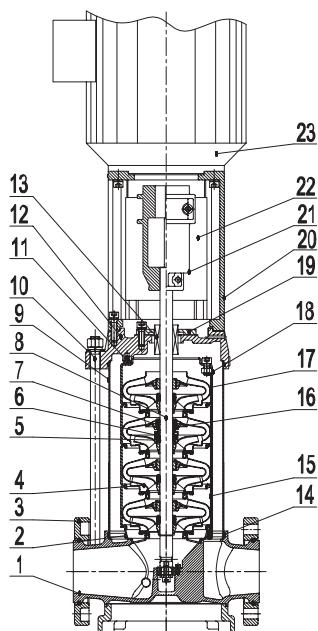
BL8 BL12 BL16 BL20



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	Protection 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



BL 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	Protection Blade	SUS304	AISI304
23	Motor	Standard Motor	Standard Motor

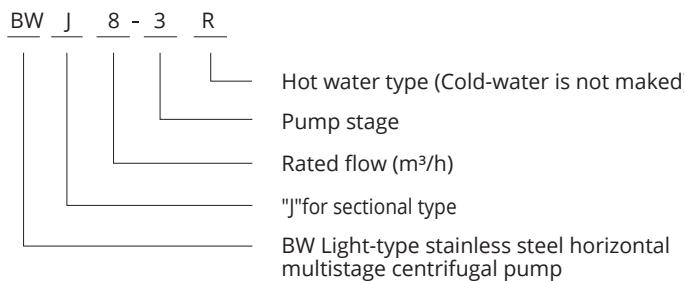
Horizontal Multi-Stage Centrifugal Pumps

CATALOGUE FOR 50Hz



BWJ

Model Instruction



Overview Of The Product

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

Applications Fields

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

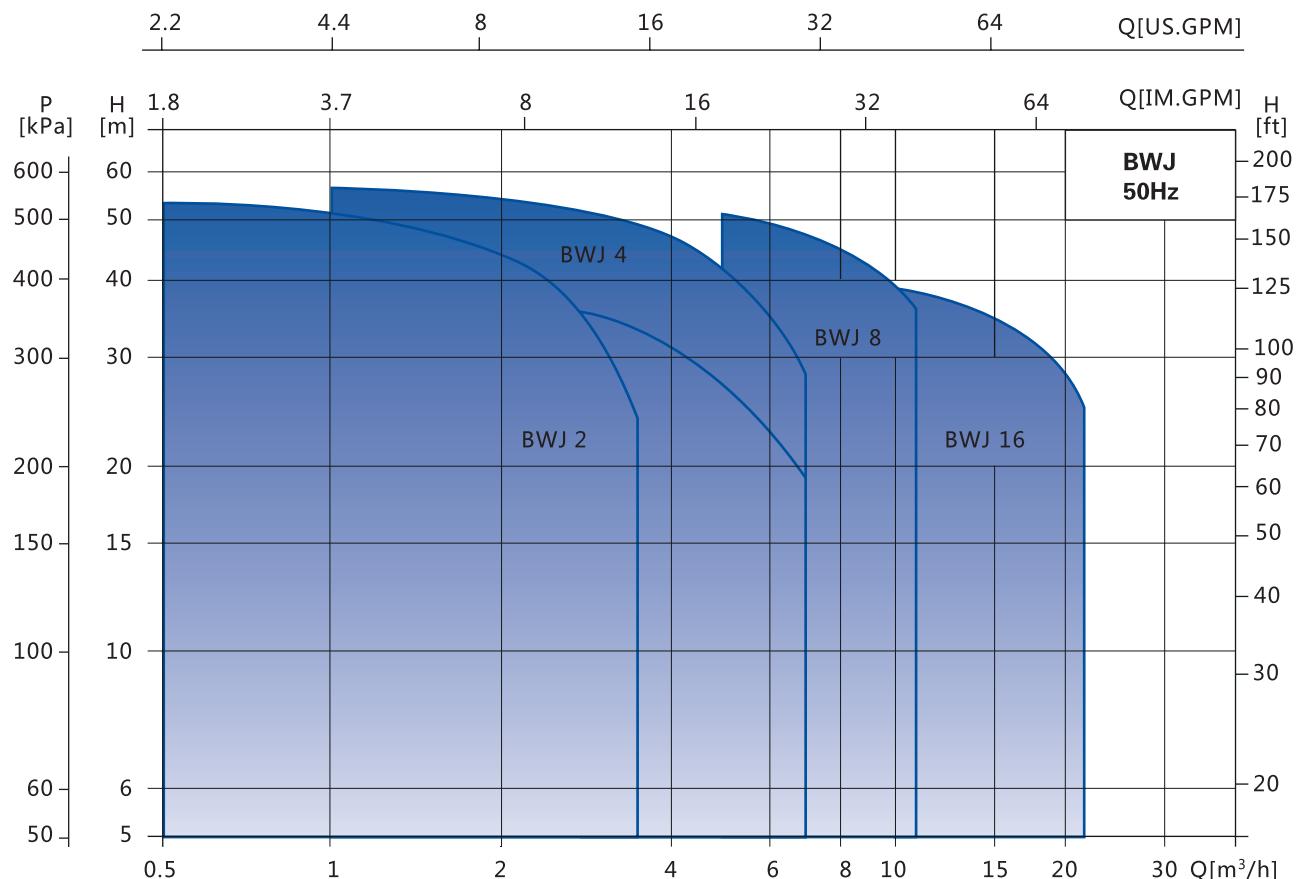
Certificate



Optional Available On Request

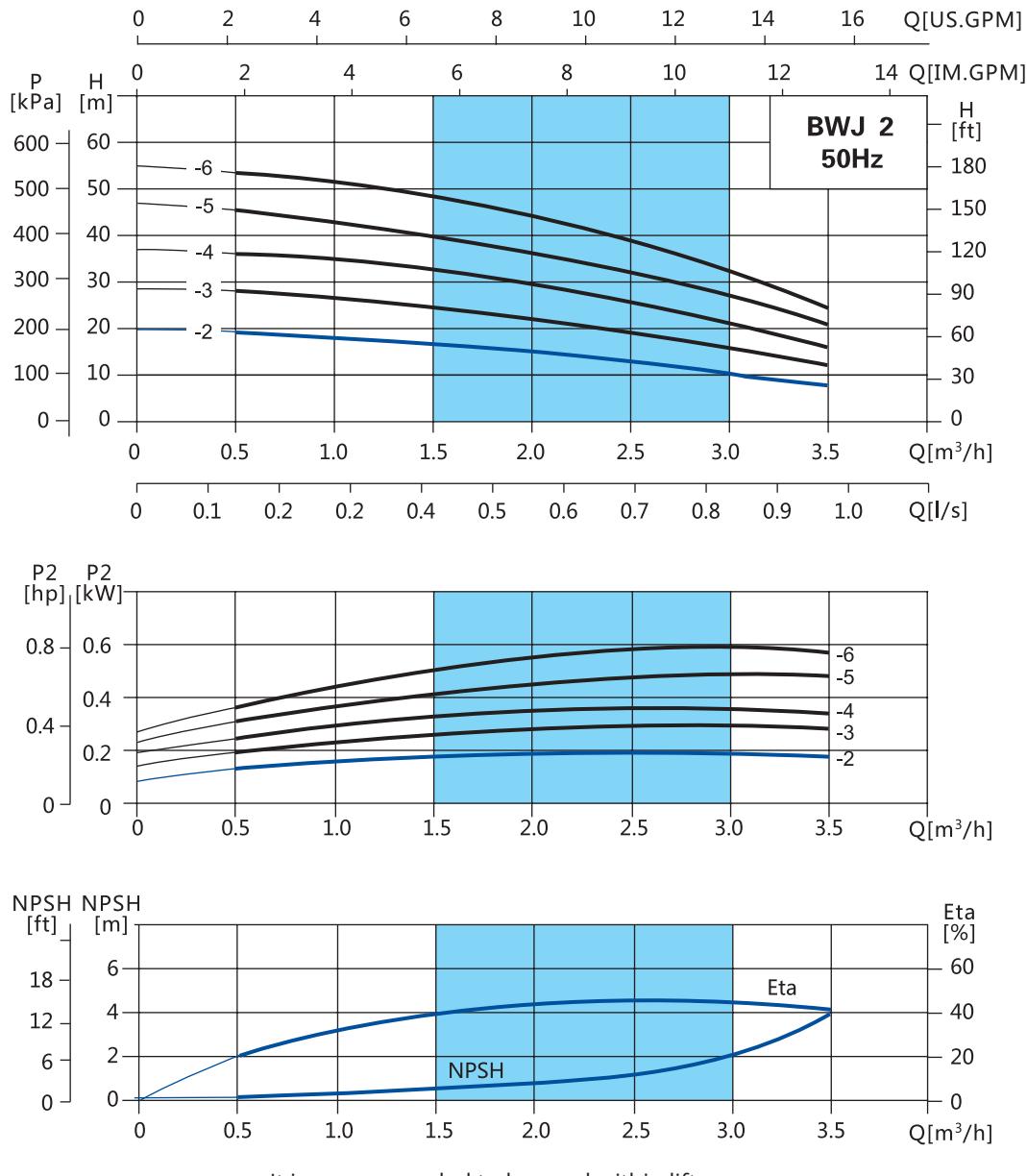
- Full-enclosed and ventilating two-pole standard motor
- Protection class: IP55
- Insulation class: F
- Standard voltage (50Hz): Single phase 220V
Three phase:380V or 220V

Performance Curve



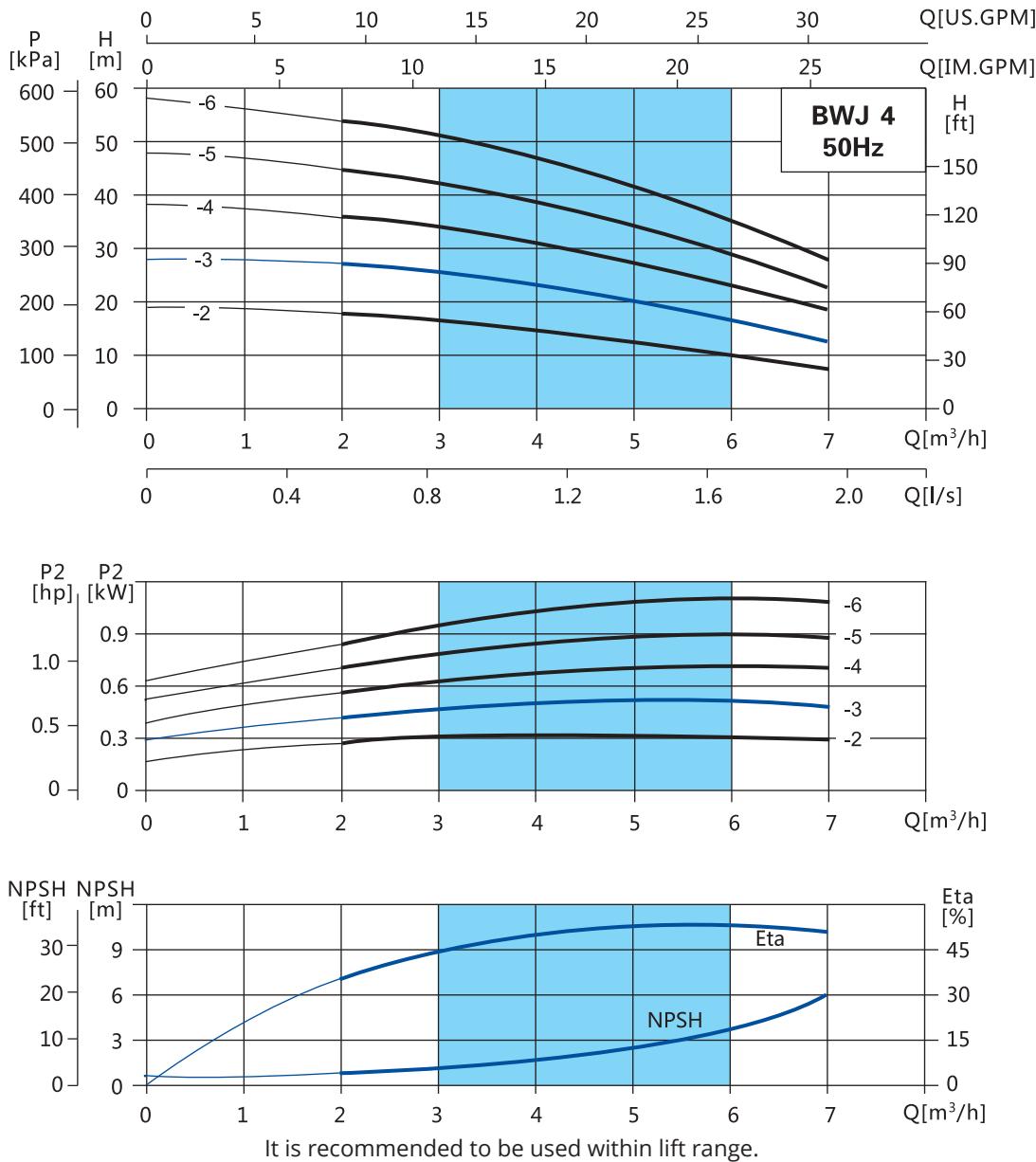
Model	BWJ 2	BWJ 4	BWJ 8	BWJ 16
Rated Flow(m^3/h)	2	4	8	16
Flow Range(m^3/h)	0.5~3	1~6	5~10	8~20
Max. Pressure(bar)	5.5	4	5	4
Motor Power(kW)	0.37~0.75	0.55~1.1	0.75~2.2	2.2~3
Max.Efficiency(%)	45	59	64	70
Inlet	G1	G1 $\frac{1}{4}$	G1 $\frac{1}{2}$	G1 $\frac{1}{2}$
Outlet	G1	G1	G1 $\frac{1}{4}$	G1 $\frac{1}{4}$

Performance Details-BWJ 2



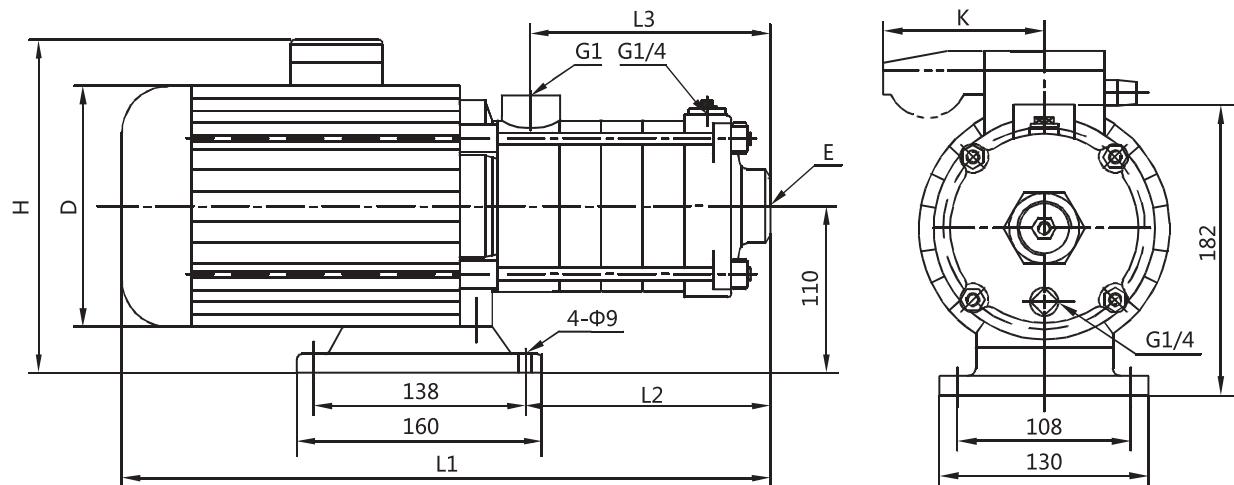
	Power		Q(m³/h)	0.5	1.0	1.5	2.0	2.5	3.0	Head Range (m)
	kW	HP								
BWJ 2-2	0.37	0.5	H (m)	19	18	16.5	15	13	10	10~19
BWJ 2-3	0.37	0.5		28	26.5	24.5	22	19	15.5	15.5~28
BWJ 2-4	0.55	0.75		36	34.5	33	29	25	20.5	20.5~36
BWJ 2-5	0.55	0.75		45.5	43	40	36	31.5	26.5	26.5~45.5
BWJ 2-6	0.75	1		53.5	51	48	44	39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

Performance Details-BWJ 4



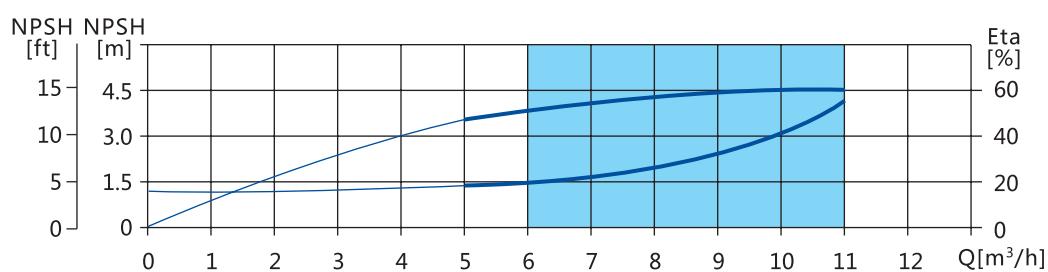
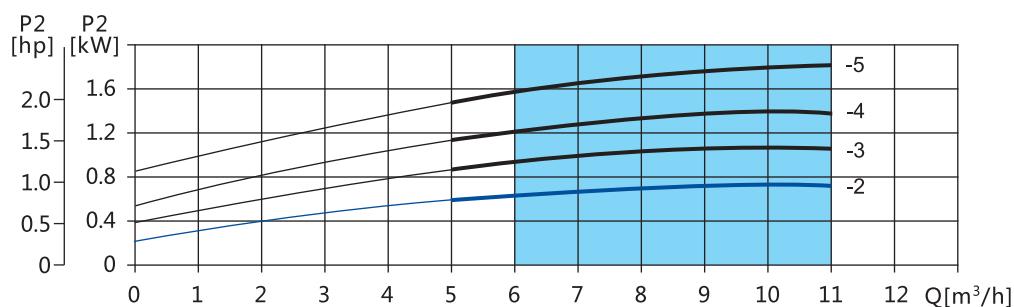
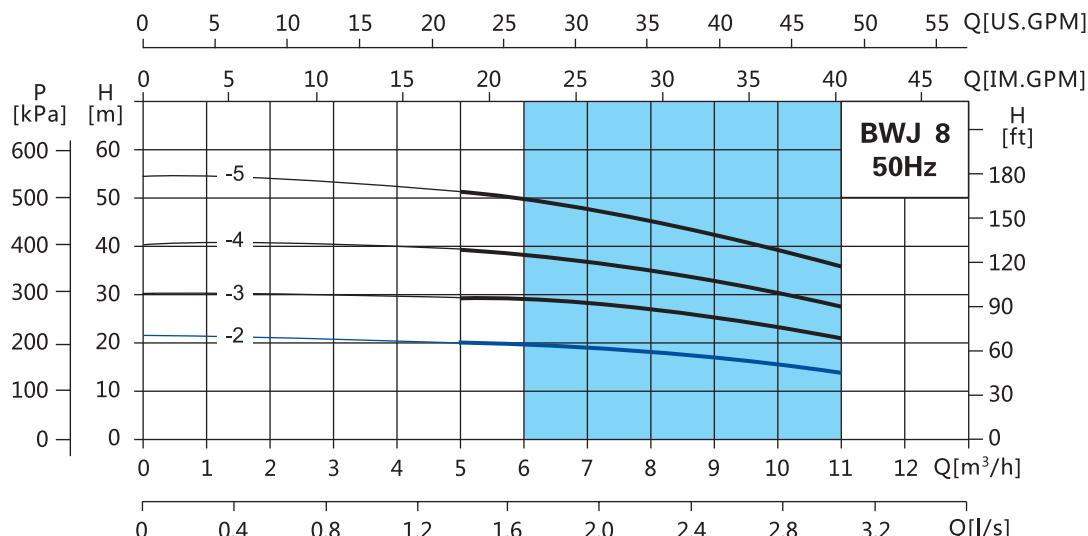
Model	Power		Q(m³/h)	1	2	3	4	5	6	Head Range (m)
	kW	HP		19	18	17	15	12.5	10	
BWJ 4-2	0.37	0.5	H (m)	28	27	26	23.5	20.5	18	18~28
BWJ 4-3	0.55	0.75		37.5	36	34	31	27	25	25~37.5
BWJ 4-4	0.75	1		47	45	42.5	39	34	29	29~47
BWJ 4-5	1.1	1.5		56	54	51	47	41.5	35.5	35.5~56
BWJ 4-6	1.1	1.5								

Dimensions & Weight



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

Performance Details-BWJ 8

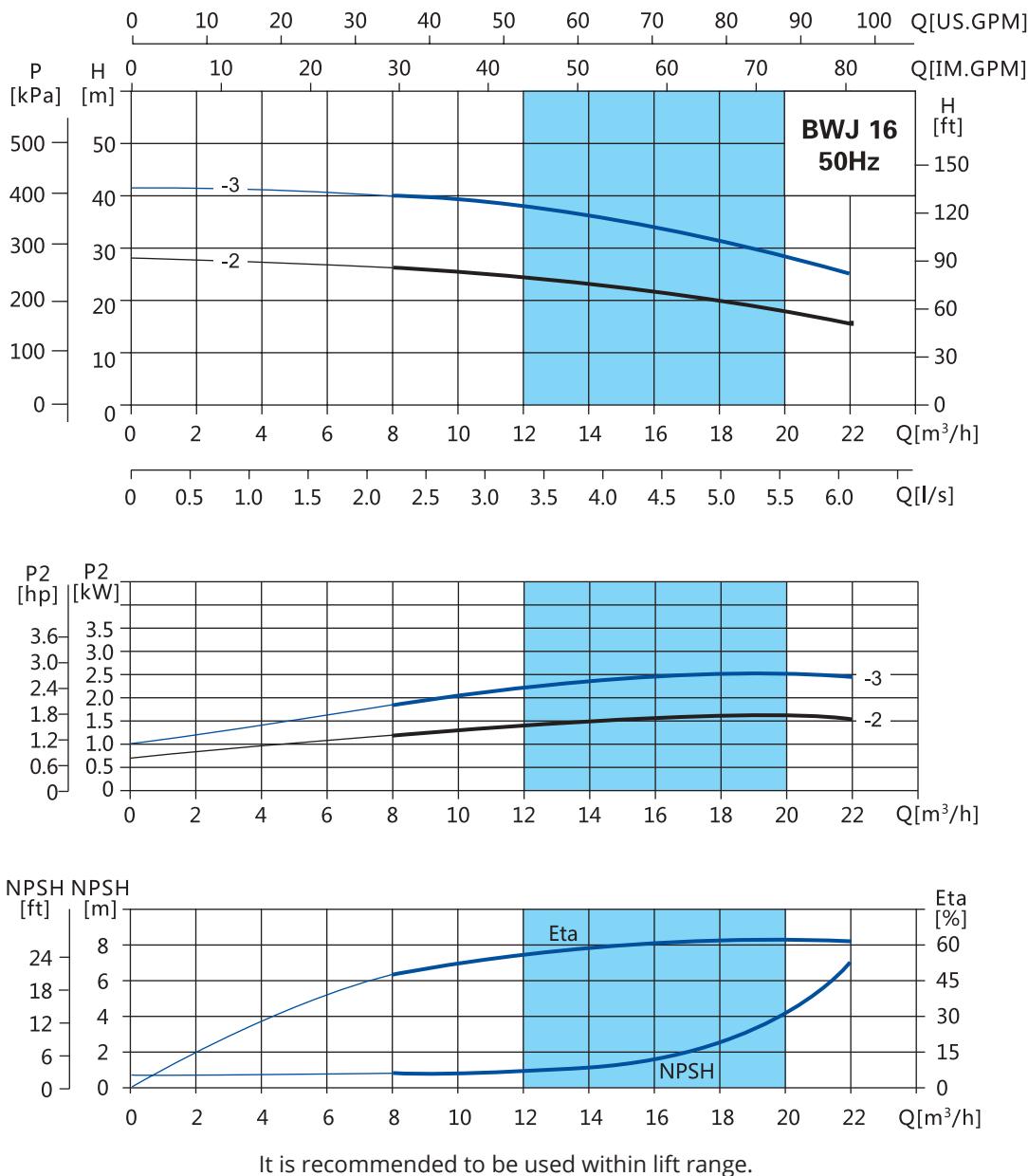


It is recommended to be used within lift range.

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

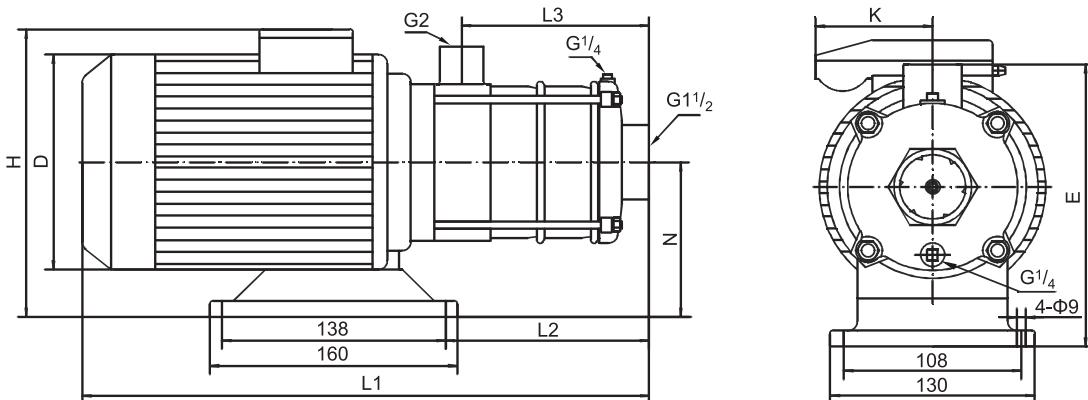


Performance Details-BWJ 16



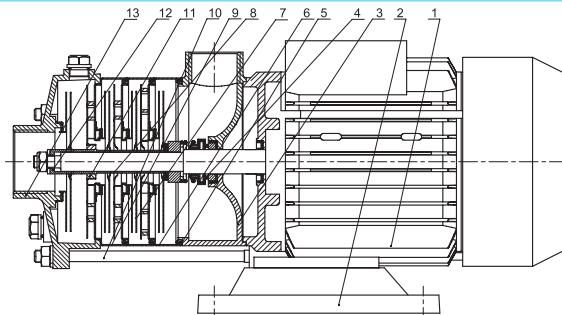
Model	Power		Q(m³/h)	8	10	12	14	16	18	20	Head Range (m)
	kW	HP		26	25	24	23	21.7	20	18	
BWJ 16-2	2.2	3	H (m)	26	25	24	23	21.7	20	18	18~26
BWJ 16-3	3	4		40	39	38	36	34	31.5	29	29~40

Dimensions & Weight



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

Components & Materials



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



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