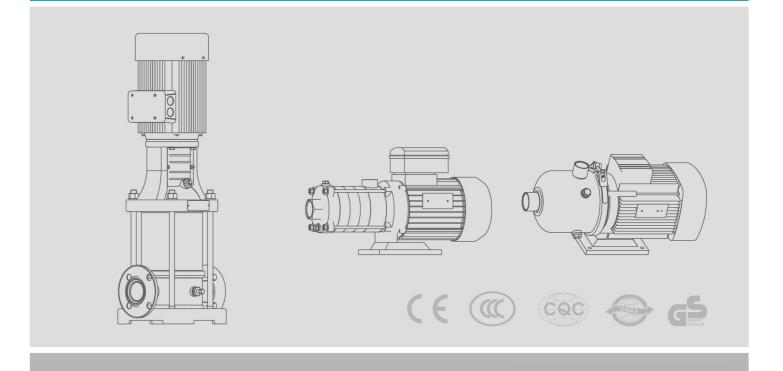


# Stainless Steel Multi-Stage Centrifugal Pump 50Hz



# About Us

### Our Management Team

Vossche was founded by Mr. Vossche Alton, who was born in Germany, but migrated to the USA in 1984 to set up his pump manufacturing business. From the rudiments of a small company, over 30 years ago, Vossche now boasts seven operational divisions each headed by a dedicated and highly qualified managing director. These divisions are:

- Product Planning
- Research and Design
- Product and Operations
- Sales and Marketing
- Logistics and Warehousing
- Export Sales
- Technical Support

Through these able teams, we have provided and continue to offer stellar quality products and services to consumers throughout the world including North America, South America, Europe, Africa, Asia and Australia.

### Our Company

Vossche headquarter is located in Texas USA, where we have a factory that covers an area larger than 140,000 square meters. Of these, 120,000 square meters cover building space, and our net capital is registered at USD 160 million. We have an average of 1,855 employees worldwide.

We produce over 2 million pump sets every year under 12 major categories with more than 2,000 specific models for power ranges 0.5kW - 200 kW. Our range of products can service needs in various industries including refrigeration, mining, metallurgy, domestic water supply, agricultural irrigation, municipal services, groundwater applications, water lifting, sewage water or clean water disposal systems, building and industrial water supply, heating and ventilation, spa baths and swimming pools, among many more.

### Vossche Pump Group

Together with our subsidiaries in strategic locations as well as affiliated distributors worldwide, Vossche believes in delivery of quality products for our consumers. As such, all our products undergo comprehensive production and operational testing to ensure that they adhere to the high standards we have set for ourselves. This is why our consumers trust us to deliver the best pumps in the market and are continuously satisfied with our outputs. In addition, we dedicate a huge amount of time and resources towards research, development and innovation to discover new and better models, applications and methods of production to continue adding value for clients.



### **BL/BLT**

### **VOSSCHE**

# **Vertical Multi-Stage Centrifugal Pumps**

**CATALOGUE FOR 50Hz** 







BLT





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 wastage of energy when liquid leak back to the pump cavity body.

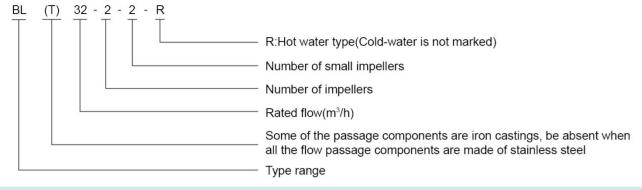


The pump core parts are designed to be multilevel interlocking, fastening nut locked, component system interlock assembly industry, to minimize the gap between the impeller per stage, improve the efficiency of the impeller water conservancy, and ensure the stability, reliablity and efficiency of the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

### **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**

- $^{\circ}$  Medium temperature: normal type:0°C  $\sim$ 68°C hot water type:0°C  $\sim$ 120°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**

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	•	•



Water treatment		
Ultra-filtration systems	•	C
Reverse osmosis systems	•	C
Softening, ionising, demineralizing systems	•	
Distillation sys tems	•	C
Separators	•	C
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-50HzThree 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

 $^{\circ}$ 

### **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<sub>b</sub>x10.2-NPSH-H<sub>f</sub>-h<sub>v</sub>-H<sub>s</sub>

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.: Suction pipe line loss (Value at maximum flow of corresponding pipeline):

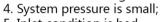
H<sub>v</sub>: Medium vapour pressure, m (Medium vapour pressure at corresponding temperature, the default medium is water, as shown in figure 4 on the right );

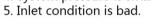
H<sub>s</sub>: Safety margin, m, general value is 0.5.

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;





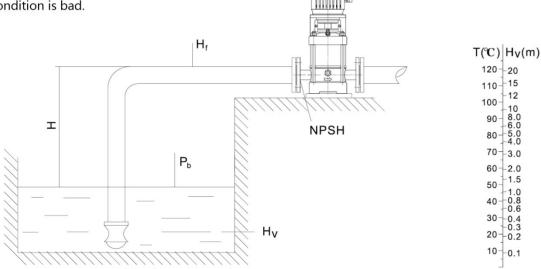


Fig. 1

### Fig. 2

-15

-1.5

### **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



### 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:

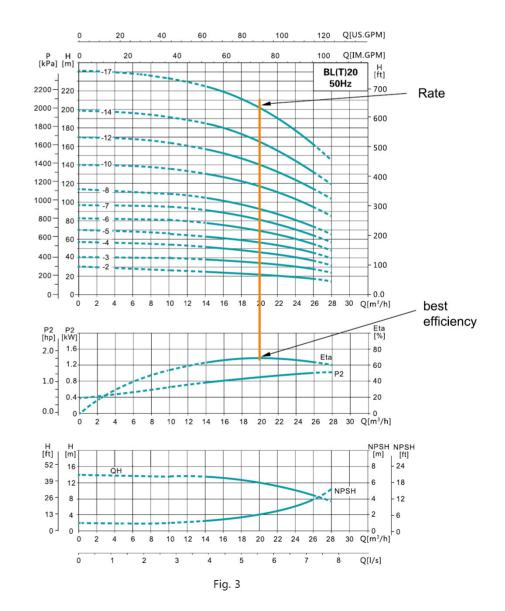
When sizing a pump the following must be taken into accounting:

- •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.





**BL/BLT** 



### **BL/BLT**

### 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 °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	<ol> <li>PH = 5-7 acidic medium.</li> <li>PH = 7-9, alkaline medium.</li> <li>Working conditions: hot water         <ul> <li>68 °C to 90 °C, containing a small amount of particles, oil.</li> </ul> </li> <li>With oil.</li> </ol>	Customer-made
EUUE	Container type E, moving ring and statil ring U, hard alloy U, epdm E	<ol> <li>Under ice water 0°C.</li> <li>A crystallization of alkaline medium.</li> <li>Containing a large number of granular media.</li> <li>More than 2 MPa pressure condition.</li> <li>No oil.</li> </ol>	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

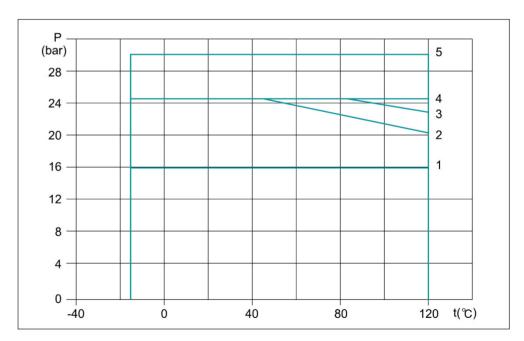


Fig. 4

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.

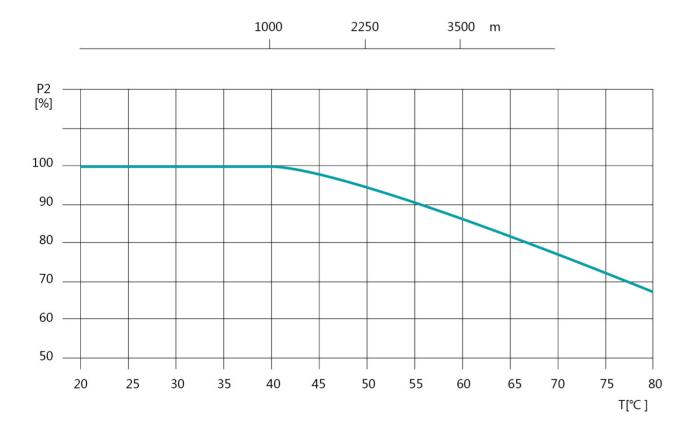
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### **BL/BLT**

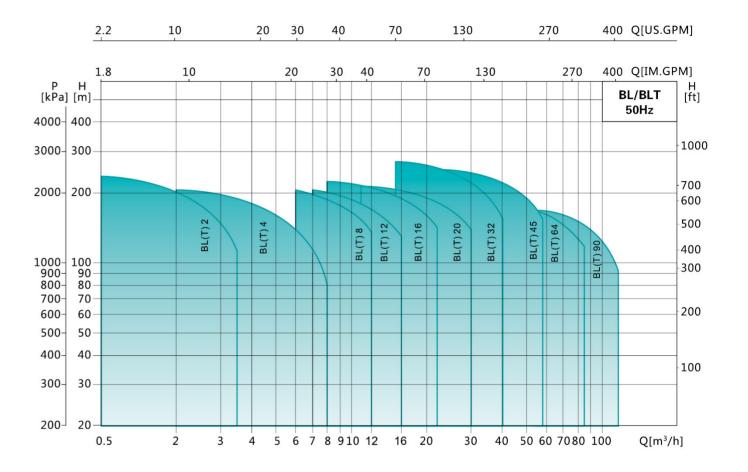
### **Maximum Ambient Temperature**

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.



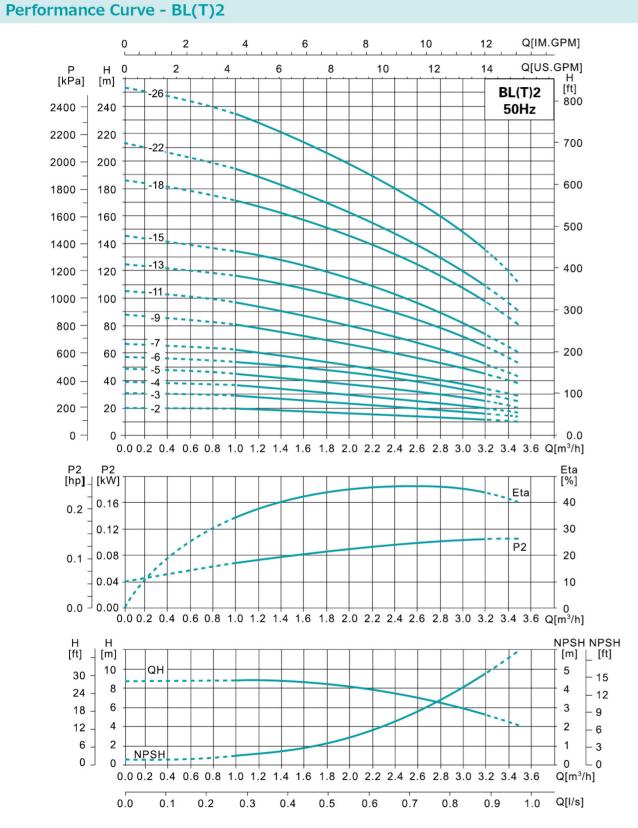
### Performance Range

**VVOSSCHE** 



### **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 (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 <sub>2</sub> 1 <sup>1</sup> / <sub>4</sub>	R <sub>2</sub> 1 <sup>1</sup> / <sub>4</sub>	R <sub>c</sub> 2	R <sub>c</sub> 2	R <sub>c</sub> 2	R <sub>c</sub> 2				

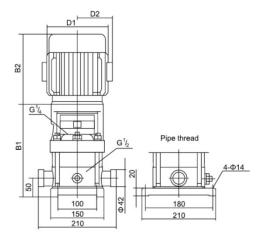


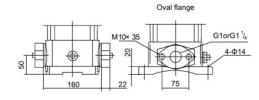
It is recommended to be used within lift range.

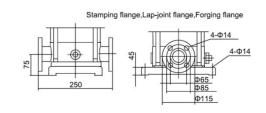


### **Performance Table**

Model	Model Power		Q	1	1.2	1.6	2	2.4	2.8	3.2	Head Range
Model	kW	HP	(m³/h)	'	1.2	1.0	2	2.4	2.0	5.2	(m)
BL(T)2-2	0.37	0.5		18	17	16	15	13	12	10	10~18
BL(T)2-3	0.37	0.5		27	26	24	22	20	18	15	15~27
BL(T)2-4	0.55	0.75		36	35	33	30	26	24	20	20~36
BL(T)2-5	0.55	0.75		45	43	40	37	33	30	24	24~45
BL(T)2-6	0.75	1		53	52	50	45	40	36	30	30~53
BL(T)2-7	0.75	1	Н	63	61	57	52	47	41	35	35~63
BL(T)2-9	1.1	1.5	(m)	80	78	73	67	61	54	45	45~80
BL(T)2-11	1.1	1.5		98	95	89	82	73	64	54	54~98
BL(T)2-13	1.5	2		116	114	106	98	89	78	65	65~116
BL(T)2-15	1.5	2		134	130	123	112	100	90	73	73~134
BL(T)2-18	2.2	3		161	157	148	136	121	108	91	91~161
BL(T)2-22	2.2	3		197	192	180	165	148	130	110	110~197
BL(T)2-26	3	4		232	228	214	198	179	158	130	130~232

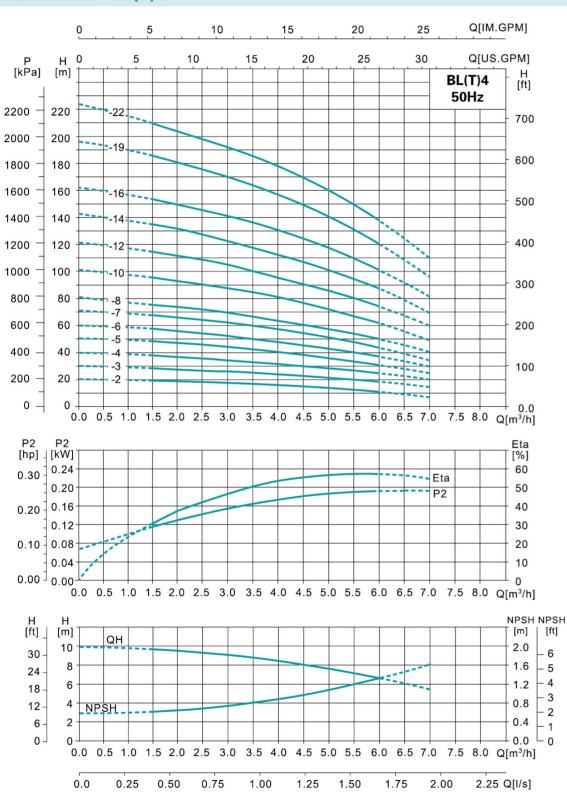






Madal		NI M/ (kg)				
Model	B1	B2	B1+B2	D1	D2	N.W.(kg)
BL(T)2-2	278	220	498	135	86	22/26
BL(T)2-3	278	220	498	135	86	22/26
BL(T)2-4	296	220	516	135	86	24/28
BL(T)2-5	314	220	534	135	86	24/28
BL(T)2-6	340	255	595	148	96	28/32
BL(T)2-7	358	255	613	148	96	28/32
BL(T)2-9	394	255	649	148	96	31/35
BL(T)2-11	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

### Performance Curve - BL(T)4

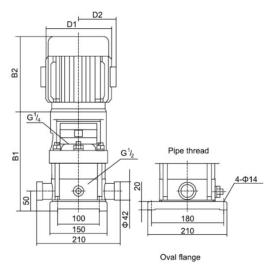


It is recommended to be used within lift range.



### **Performance Table**

Model	Model		Q	1.5	2	3	4	5	6	Head Range
Model	kW	HP	(m³/h)	1.5			-	J	0	(m)
BL(T)4-2	0.37	0.5		19	18	17	15	13	10	10~19
BL(T)4-3	0.55	0.75		28	27	26	24	20	18	18~28
BL(T)4-4	0.75	1		38	36	34	32	27	24	24~38
BL(T)4-5	1.1	1.5		47	45	43	40	34	31	31~47
BL(T)4-6	1.1	1.5		56	54	52	48	41	37	37~56
BL(T)4-7	1.5	2	Н	66	63	61	56	48	43	43~66
BL(T)4-8	1.5	2	(m)	74	72	70	64	55	50	50~74
BL(T)4-10	2.2	3		96	90	87	81	71	62	62~96
BL(T)4-12	2.2	3		114	108	104	95	85	75	75~114
BL(T)4-14	3	4		136	126	122	112	101	89	89~136
BL(T)4-16	3	4		152	144	140	129	115	101	101~152
BL(T)4-19	4	5.5		183	171	168	153	137	122	122~183
BL(T)4-22	4	5.5		211	200	192	178	160	138	138~211



# M10×35 G1orG1 <sup>1</sup>/<sub>4</sub> 4-Φ14

Stamping flange, Lap-joint flange, Forging flange

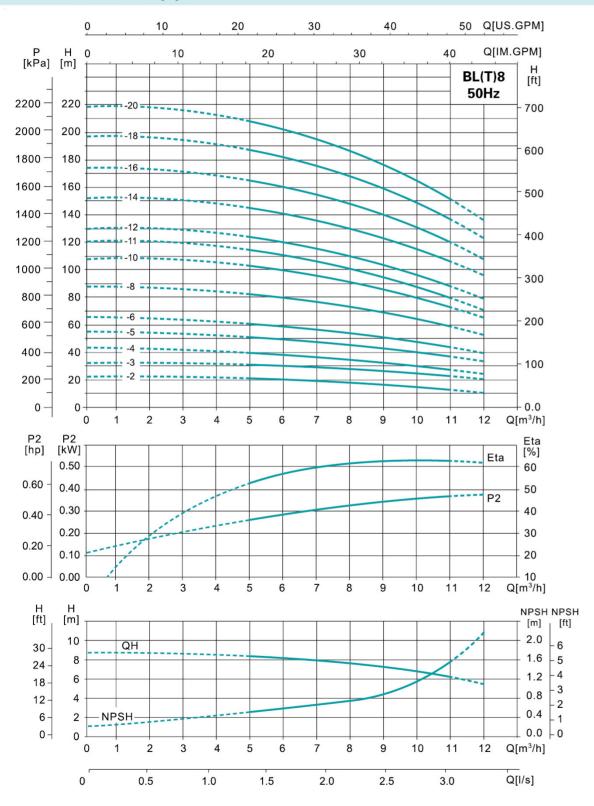
4-Φ18

4-Φ18

4-Φ100

Φ135

220.00		N.W.(kg)				
Model	B1	B2	B1+B2	D1	D2	14.4V.(Kg)
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

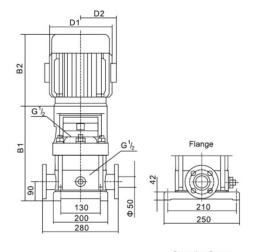


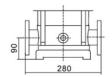
It is recommended to be used within lift range.

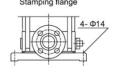


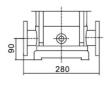
### **Performance Table**

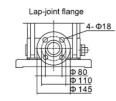
Model	Model Power		Q	_		_			40	44	Head Range
Wodel	kW	HP	(m³/h)	5	6	7	8	9	10	11	(m)
BL(T)8-2	0.75	1		20	19.5	19	18	17	16	14	14~20
BL(T)8-3	1.1	1.5		30	29.5	28.5	27	25	24	21	21~30
BL(T)8-4	1.5	2		41	39.5	38	36	34	32	28	28~41
BL(T)8-5	2.2	3		52	50	48	45	42	40	36	36~52
BL(T)8-6	2.2	3		62	60	57	54	51	48	43	43~62
BL(T)8-8	3	4	н	83	80	77	73	69	65	58	58~83
BL(T)8-10	4	5.5	(m)	104	100	97	92	87	81	73	73~104
BL(T)8-11	4	5.5		114	110	106	101	95	86	80	80~114
BL(T)8-12	5.5	7.5		124	120	116	111	104	92	87	87~124
BL(T)8-14	5.5	7.5		145	141	136	130	122	113	102	102~145
BL(T)8-16	5.5	7.5		166	161	156	148	139	130	118	118~166
BL(T)8-18	7.5	10		187	182	175	167	157	146	134	134~187
BL(T)8-20	7.5	10		208	202	195	186	175	163	150	150~208



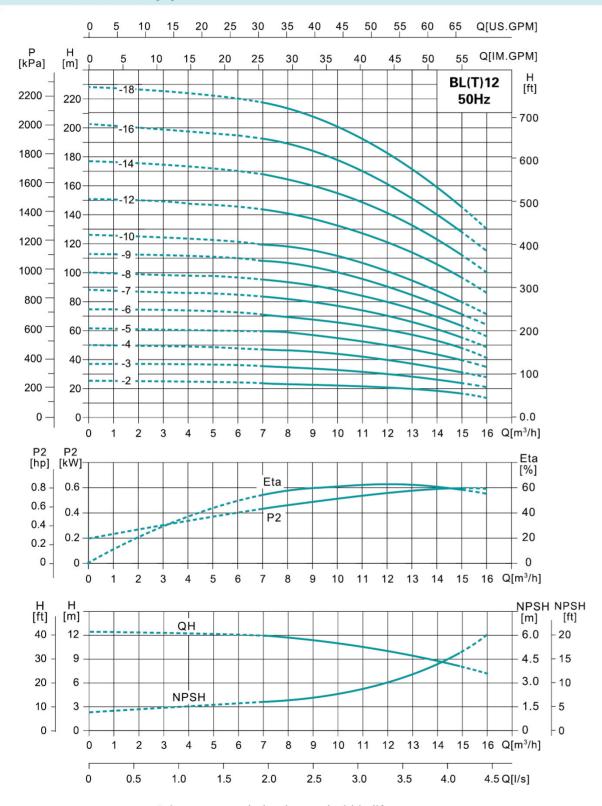








Model		NI MA (leas)				
Model	B1	B2	B1+B2	D1	D2	N.W.(kg)
BL(T)8-2	375	247	622	155	124	36/43
BL(T)8-3	405	247	652	155	124	38/45
BL(T)8-4	440	260	700	175	137	42/49
BL(T)8-5	470	285	755	175	137	46/53
BL(T)8-6	500	285	785	175	137	47/54
BL(T)8-8	570	232	893	195	151	55/63
BL(T)8-10	630	341	971	219	169	65/72
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

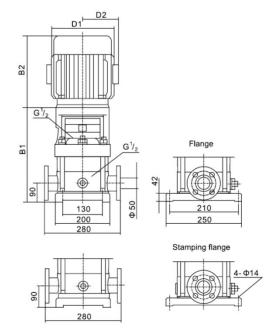


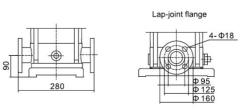
It is recommended to be used within lift range.



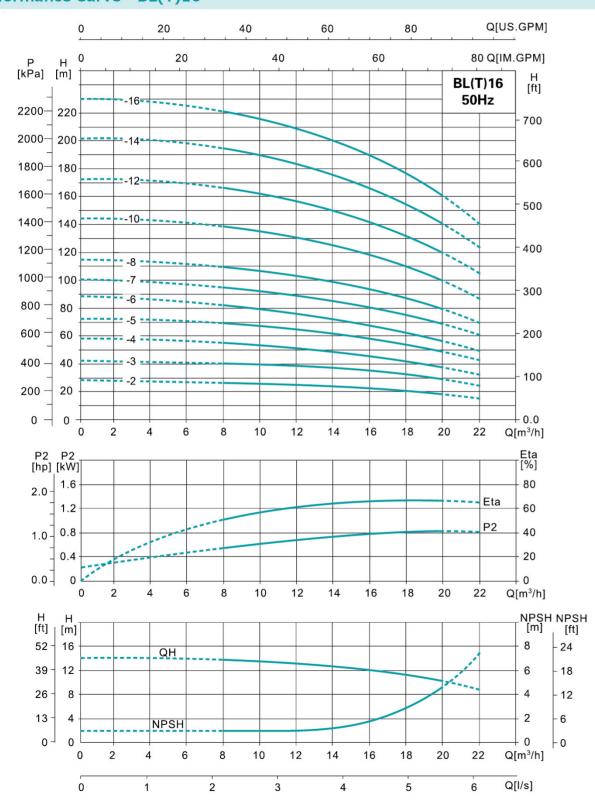
### **Performance Table**

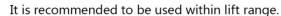
Model	Po	wer	Q	_		4.0				Head Range
Model	kW	HP	(m³/h)	7	8	10	12	14	15	(m)
BL(T)12-2	1.5	2		23.5	23	22	20	17	15	15.5~23.5
BL(T)12-3	2.2	3		35.5	35	33	30	26	23	23.5~35.5
BL(T)12-4	3	4		47	46	44	40	34	31	31~47
BL(T)12-5	3	4		59.5	58	55	50	43	39	39~59.5
BL(T)12-6	4	5.5		71.5	70	66	60	52	47	47~71.5
BL(T)12-7	5.5	7.5	н	83.5	82	77	70	61	55	55~83.5
BL(T)12-8	5.5	7.5	(m)	95.5	94	88	80	70	63	63~95.5
BL(T)12-9	5.5	7.5		108	106	100	91	79	71	71.5~108
BL(T)12-10	7.5	10		120	118	111	101	88	80	80~120
BL(T)12-12	7.5	10		143.5	141	133	121	106	96	96~143.5
BL(T)12-14	11	15		168	165	155	141	124	112	112~168
BL(T)12-16	11	15		192.5	189	178	162	142	128	128.5~192.5
BL(T)12-18	11	15		217	213	202	183	160	145	145~217





			Dim.(mm)	)		N.W.(kg)				
Model	B1	B2	B1+B2	D1	D2	IN.VV.(Ng)				
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				

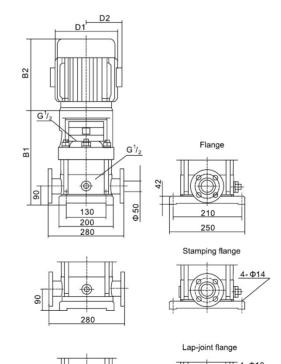






### **Performance Table**

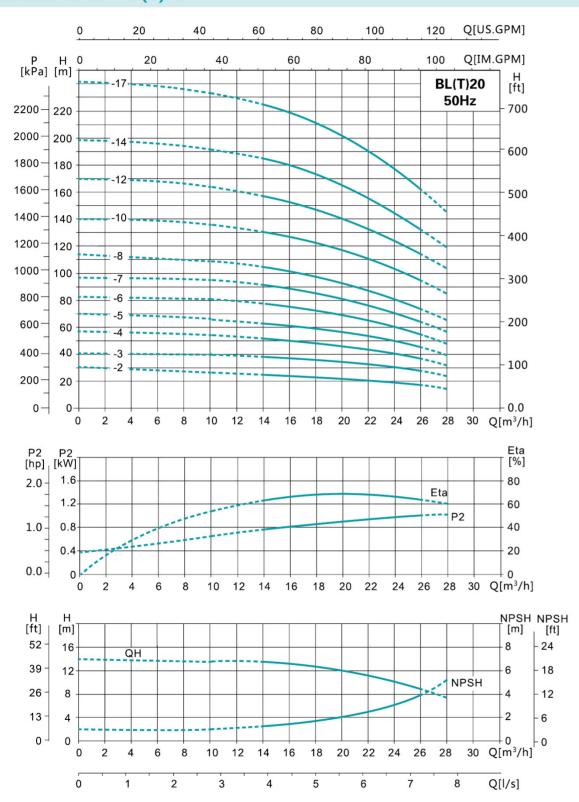
Model	Power		Q	_							Head Range
Model	kW	HP	(m³/h)	8	10	12	14	16	18	20	(m)
BL(T)16-2	2.2	3		27	26	25	24	22	21	19	19~27
BL(T)16-3	3	4		41	40	38	37	34	32	29	29~41
BL(T)16-4	4	5.5		54	53	52	49	46	43	38	38~54
BL(T)16-5	5.5	7.5		68	67	65	62	58	54	48	48~68
BL(T)16-6	5.5	7.5	Н	82	80	78	74	70	64	58	58~82
BL(T)16-7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



### **Dimensions & Weight**

		С	im.(mm)			NI W/ (kg)
Model	B1	B2	B1+B2	D1	D2	N.W.(kg)
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

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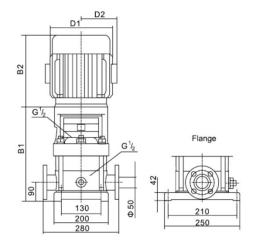


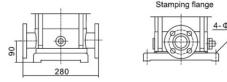
It is recommended to be used within lift range.

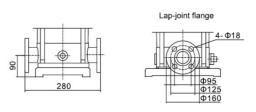


### **Performance Table**

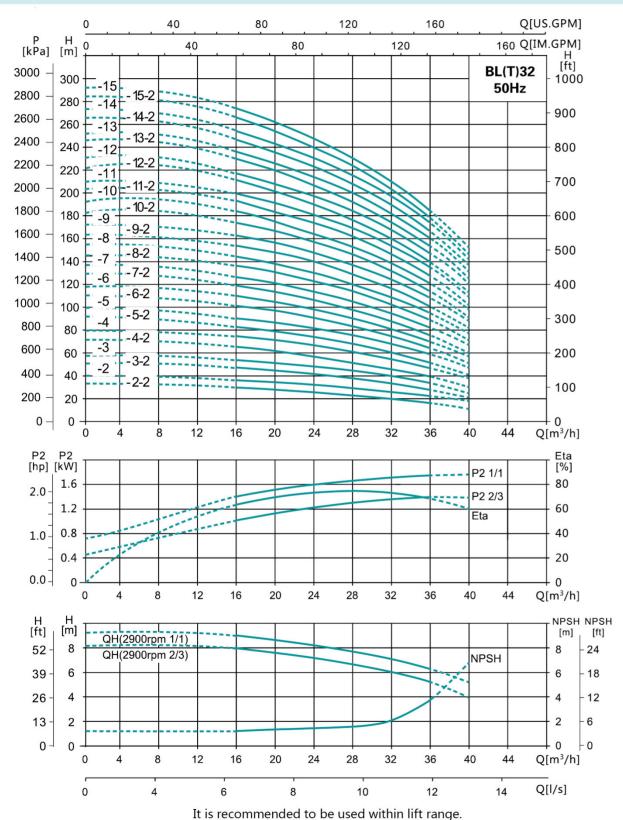
Model	Po	wer	Q	14				20 22			Head Range
Model	kW	HP	(m <sup>3</sup> /h)	14	16	18	20	22	24	26	(m)
BL(T)20-2	2.2	3		27	25	24	23	22	20	18	18~27
BL(T)20-3	4	5.5		40	38	37	35	33	30	27	27~40
BL(T)20-4	5.5	7.5		54	51	49	47	44	41	37	37~54
BL(T)20-5	5.5	7.5		67	62	60	58	55	50	45	45~67
BL(T)20-6	7.5	10	Н	81	75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







40000 B B			Dim.(mm)	)		
Model	B1	B2	B1+B2	D1	D2	N.W.(kg)
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





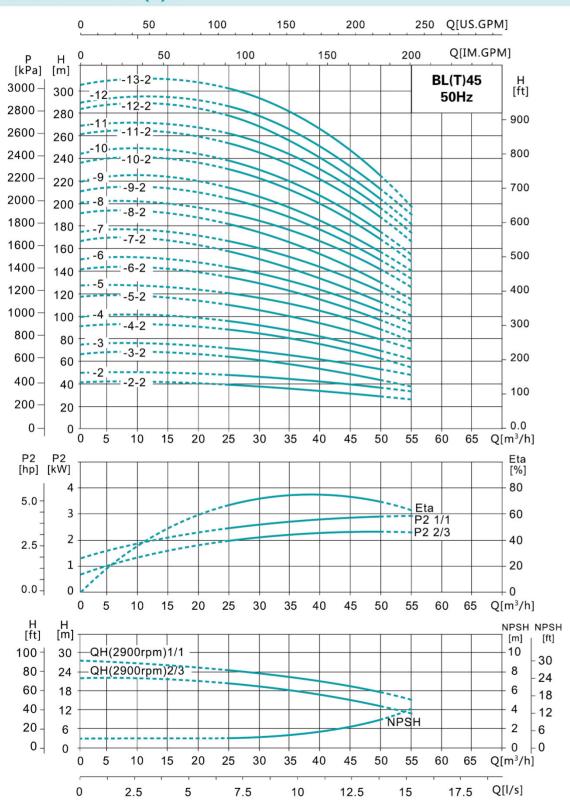
### **Performance Table**

Model Power		Q	16	20	24	28	32	36	Head Range	
Model	kW	HP	(m <sup>3</sup> /h)	16	20	24	26	32	36	(m)
BL(T)32-2-2	3	4		29	28	26	23	20	16	16~29
BL(T)32-2	4	5.5		36	34	32	29	27	23	23~36
BL(T)32-3-2	5.5	7.5		47	44	41	38	33	28	28~47
BL(T)32-3	5.5	7.5		54	51	48	44	40	35	35~54
BL(T)32-4-2	7.5	10		65	62	58	53	46	40	40~65
BL(T)32-4	7.5	10		72	69	65	59	53	47	47~72
BL(T)32-5-2	11	15		83	79	74	68	60	52	52~83
BL(T)32-5	11	15		90	86	81	74	67	59	59~90
BL(T)32-6-2	11	15		101	97	90	83	74	65	65~101
BL(T)32-6	11	15		108	104	97	90	81	72	72~108
BL(T)32-7-2	15	20		119	114	107	98	88	78	78~119
BL(T)32-7	15	20	Н	126	121	113	105	95	85	85~126
BL(T)32-8-2	15	20	(m)	136	131	123	114	102	90	90~136
BL(T)32-8	15	20	(111)	144	138	130	120	109	97	97~144
BL(T)32-9-2	18.5	25		154	148	140	129	117	102	102~154
BL(T)32-9	18.5	25		162	156	147	136	124	109	109~162
BL(T)32-10-2	18.5	25		175	166	157	146	131	115	115~175
BL(T)32-10	18.5	25		182	173	164	152	138	122	122~182
BL(T)32-11-2	22	30		193	184	173	164	146	128	128~193
BL(T)32-11	22	30		200	191	180	168	153	135	135~200
BL(T)32-12-2	22	30		211	201	189	178	160	140	140~211
BL(T)32-12	22	30		218	208	196	184	167	147	147~218
BL(T)32-13-2	30	40		230	218	206	193	174	153	153~230
BL(T)32-13	30	40		237	225	213	200	181	160	160~237
BL(T)32-14-2	30	40		247	235	222	210	189	165	165~247
BL(T)32-14	30	40		255	242	229	216	196	172	172~255
BL(T)32-15-2	30	40		266	253	239	224	203	178	178~266
BL(T)32-15	30	40		274	260	246	231	210	185	185~274

# D2 D1 G<sup>1</sup>/<sub>2</sub> PN16/DN65 Φ 145 Φ 185 8-Φ18 4-Φ14 170 230 320 298

Model			Dim.(mm)	)		N.W.(kg)	
Wodel	B1	B2	B1+B2	D1	D2	IN.VV.(Kg)	
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	

### Performance Curve - BL(T)45

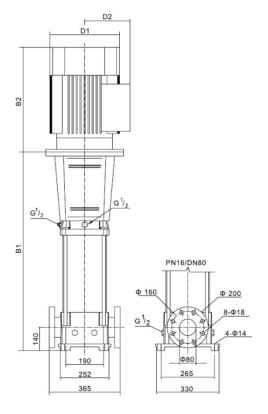


It is recommended to be used within lift range.



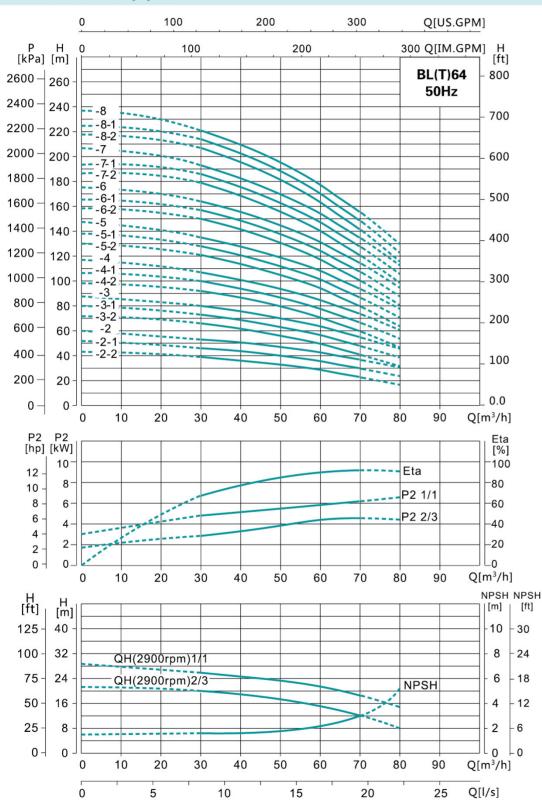
### **Performance Table**

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



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

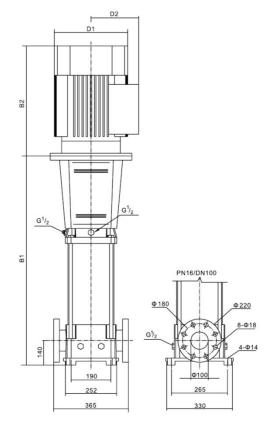
### Performance Curve - BL(T)64



It is recommended to be used within lift range.

### **Performance Table**

Model	Pov	wer	Q	30	40	50	00	0.4	70	Head Range
Model	kW	HP	(m³/h)	30	40	50	60	64	70	(m)
BL(T)64-2-2	7.5	10		39	36	33	29	26	23	23~39
BL(T)64-2-1	11	15		46	44	40	36	33	30	30~46
BL(T)64-2	11	15		53	51	47	43	40	37	37~53
BL(T)64-3-2	15	20		66	62	56	50	46	41	41~66
BL(T)64-3-1	15	20		73	69	63	57	53	48	48~73
BL(T)64-3	18.5	25		80	76	71	65	60	56	55~80
BL(T)64-4-2	18.5	25		92	87	80	71	66	60	60~92
BL(T)64-4-1	22	30		100	94	87	78	73	67	67~100
BL(T)64-4	22	30	Н	107	101	94	85	80	74	74~107
BL(T)64-5-2	30	40	(m)	121	114	105	95	88	80	80~121
BL(T)64-5-1	30	40	()	128	121	112	102	95	87	87~128
BL(T)64-5	30	40		136	129	119	109	102	94	94~136
BL(T)64-6-2	30	40		150	142	131	118	110	101	101~150
BL(T)64-6-1	37	50		157	149	138	125	117	108	108~157
BL(T)64-6	37	50		164	156	145	132	124	115	115~164
BL(T)64-7-2	37	50		179	169	156	141	132	121	121~179
BL(T)64-7-1	37	50		186	176	163	148	139	128	128~186
BL(T)64-7	45	60		193	183	170	155	146	135	135~193
BL(T)64-8-2	45	60		207	196	182	164	154	142	142~207
BL(T)64-8-1	45	60		215	203	189	171	161	149	149~215
BL(T)64-8	45	60		221	210	196	178	168	156	156~221

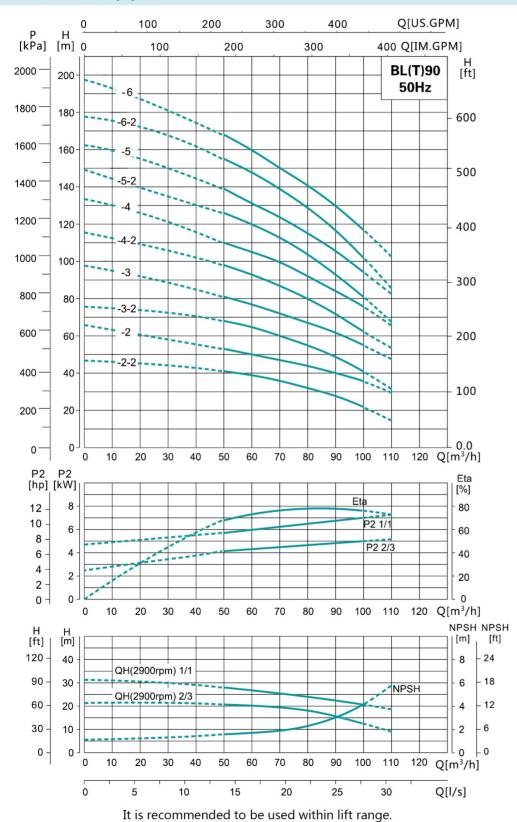


### **Dimensions & Weight**

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

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### Performance Curve- BL(T)90



### **Performance Table**

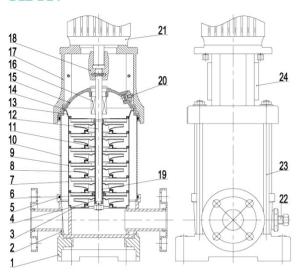
Model	Pov	ver	Q	50 60	70	80	90	100	Head Range	
Model	kW	HP	(m³/h)		60	70	00	90	100	(m)
BL(T)90-2-2	11	15		41	39	36	32	28	22	22~41
BL(T)90-2	15	20		53	50	47	44	40	36	36~53
BL(T)90-3-2	18.5	25		68	65	60	55	49	41	41~68
BL(T)90-3	22	30		81	77	72	67	62	55	55~81
BL(T)90-4-2	30	40	H (m)	98	93	87	80	72	62	62~98
BL(T)90-4	30	40	(111)	110	105	100	92	84	76	76~110
BL(T)90-5-2	37	50		126	120	113	104	93	81	81~126
BL(T)90-5	37	50		139	131	124	115	106	94	94~139
BL(T)90-6-2	45	60		155	148	139	129	117	102	102~155
BL(T)90-6	45	60		168	160	150	141	130	117	117~168

# PN16/DN100 Φ 180 Φ 220 Β-Φ18 Φ 199 261 280

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

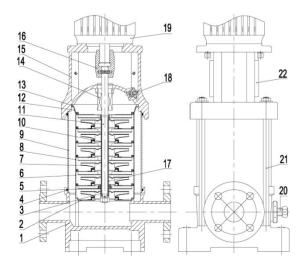
### **Components & Materials**

### 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

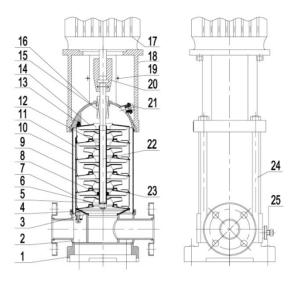
### BLT2 BLT4



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	Protection Blade	SUS304	AISI304

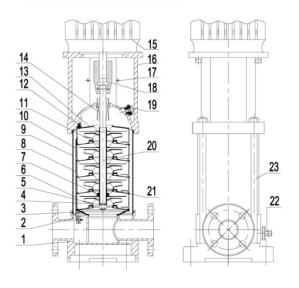
## **VOSSCHE**

### **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

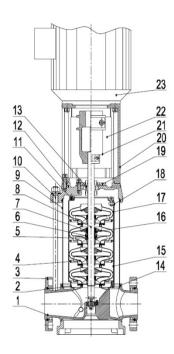
### BLT8 BLT12 BLT16 BLT20



NIa	Commonant	Nastavial	AICI/ACTAA
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	Protection 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#	

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### 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	Protection Blade	SUS304	AISI304
23	Motor	Standard Motor	Standard Motor

## Packing Sizes & Weight

	BL(T)2				BL(T)4		
Model	Dim.(mm) (LxWxH)	G.W.(kg)		Model	Dim.(mm) (LxWxH)	G.W.(kg)	
BL(T)2-2		26.9	31.1	BL(T)4-2	595x285x360	27.8	32.9
BL(T)2-3	595x285x360	27.1	31.4	BL(T)4-3	625x285x360	30.1	35.3
BL(T)2-4	005-005-000	29.1	33.3	BL(T)4-4	725x285x375	33.8	39
BL(T)2-5	625x285x360	29.5	33.8	BL(T)4-5	72382638373	36	41.2
BL(T)2-6	705005075	33.3	37.4	BL(T)4-6	785x285x375	36.8	42
BL(T)2-7	725x285x375	33.7	37.8	BL(T)4-7	0.45 005 005	40.4	45.9
BL(T)2-9	705 005 075	36.6	40.7	BL(T)4-8	845x285x385	41.2	46.7
BL(T)2-11	785x285x375	37.5	41.6	BL(T)4-10	885x285x385	45.4	50.9
BL(T)2-13	845x285x385	41.4	45.8	BL(T)4-12	935x285x385	46.7	52.2
BL(T)2-15	885x285x385	42.5	46.9	BL(T)4-14	1045x285x385	54.9	60.1
BL(T)2-18	935x285x385	47	51.3	BL(T)4-16	1135x290x385	56.6	61.8
BL(T)2-22	1045x290x385	49.2	53.5	BL(T)4-19	1205x315x390	65.9	71.1
BL(T)2-26	1135x290x385	57.9	62	BL(T)4-22	1285x315x390	68	74.2

Model	Dim.(mm) (LxWxH)	G.W	.(kg)	
BL(T)8-2		42.8	49.8	
BL(T)8-3	775x325x340	45.4	52.4	
BL(T)8-4	835x325x340	49.8	56.6	
BL(T)8-5	63383238340	53.6	60.5	
BL(T)8-6	885x325x415	55.3	62.2	
BL(T)8-8	985x325x405	64.9	72	
BL(T)8-10	1115x350x440	75.7	82.4	
BL(T)8-11	1115X350X440	77	83.8	
BL(T)8-12	1265x400x490	95.5	103.1	
BL(T)8-14	1325x400x490	98	105.7	
BL(T)8-16	1385x400x490	101.4	108.7	
BL(T)8-18	1445x400x490	108.1	115.5	
BL(T)8-20	1495x400x490	110.7	118	

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BL(T)12			BL(T)16			
Model	Dim.(mm) (LxWxH)	G.W(kg)	Model	Dim.(mm) (LxWxH)	G.W	(kg)
BL(T)12-2	775x325x340	55.8	BL(T)16-2	775x325x400	50.7	59.5
BL(T)12-3	7700200040	59.7	BL(T)16-3	885x325x415	59.6	68.6
BL(T)12-4	885x325x415	68.1	BL(T)16-4	945x325x415	68.8	77.8
BL(T)12-5	00333233413	69.2	BL(T)16-5	1115x400x490	89.8	98.6
BL(T)12-6	945x325x415	78.2	BL(T)16-6	1175x400x490	91.7	100.6
BL(T)12-7		99.7	BL(T)16-7	1210x400x490	95.9	106.8
BL(T)12-8	1175x400x490	100.9	BL(T)16-8	1265x400x490	97.3	108.6
BL(T)12-9		102	BL(T)16-10	1425x520x560	178	186.8
BL(T)12-10	4005400400	107.7	BL(T)16-12	1515x520x560	181.8	190.6
BL(T)12-12	1265x400x490	109.9	BL(T)16-14	1605x520x560	196.5	204.3
BL(T)12-14	1425x520x560	187.2	BL(T)16-16	1695x520x560	200.3	208.2
BL(T)12-16	1515x520x560	190.2	-	-	-	~
BL(T)12-18	1605x520x560	193.2	-	-	-	-

	BL(T)20		
Model	Dim.(mm) (LxWxH)	G.W	/(kg)
BL(T)20-2	775x325x400	52.8	59.6
BL(T)20-3	945x325x415	68.9	75.9
BL(T)20-4	1115x400x490	87.7	95.5
BL(T)20-5	111534003490	91	98.8
BL(T)20-6	1175x400x490	95	104.8
BL(T)20-7	1210x400x490	97.3	1107.1
BL(T)20-8	1335x520x560	174.4	183.3
BL(T)20-10	1425x520x560	179.4	188.3
BL(T)20-12	1515x520x560	194.3	202.4
BL(T)20-14	1605x520x560	198.1	206.4
BL(T)20-17	1805x520x560	220.6	231
-	- 1	-	-
-	-	-	-

	BL(T)32			BL(T)45					
Model	Dim.(mm) (LxWxH)	G.W	/(kg)	Model	Dim.(mm) (LxWxH)	G.W	(kg)		
BL(T)32-2-2		96.5	98.1	BL(T)45-2-2	000000000000000000000000000000000000000	141.4	148.7		
BL(T)32-2		90.5	90.1	BL(T)45-2	1245x465x532	137	144.7		
BL(T)32-3-2	1315x425x512	115.9	117.2	BL(T)45-3-2		101	11117		
BL(T)32-3		110.0	117.2		-	222.5	229.9		
BL(T)32-4-2		121.9	123.1	BL(T)45-3					
BL(T)32-4		12110	120.1	BL(T)45-4-2	1665x515x562	236.9	244.3		
BL(T)32-5-2		204.2	208.4	BL(T)45-4	1003/313/302	200.0	211.0		
BL(T)32-5				BL(T)45-5-2		258.4	005.7		
BL(T)32-6-2	1655x485x562	208.2	212.3	BL(T)45-5		258.4	265.7		
BL(T)32-6				BL(T)45-6-2					
BL(T)32-7-2 BL(T)32-7		222.3	226.2	BL(T)45-6	1735x545x612	306.5	313.9		
BL(T)32-7									
BL(T)32-8-2		230.4	233.2	BL(T)45-7-2		395.2	402.5		
BL(T)32-9-2	-			BL(T)45-7					
BL(T)32-9	1915x485x562	251.4	254	BL(T)45-8-2		397.9	405.0		
BL(T)32-10-2				BL(T)45-8			405.3		
BL(T)32-10		255.4	257.9	BL(T)45-9-2	2165x595x662	424.3	431.7		
BL(T)32-11-2		305.1	200 F	BL(T)45-9		402	409.7		
BL(T)32-11	2065x545x612	305.1	306.5	BL(T)45-10-2					
BL(T)32-12-2		308.9	310.3	BL(T)45-10		435.8	443.1		
BL(T)32-12		000.0	510.5	. ,					
BL(T)32-13-2		390.2	390.5	BL(T)45-11-2		500.71	508.1		
BL(T)32-13		000.2	000.0	BL(T)45-11	2365x645x712				
BL(T)32-14-2	2365x595x662	394.2	394.4	BL(T)45-12-2			540.5		
BL(T)32-14			334.4	BL(T)45-12		505.1	512.5		
BL(T)32-15-2		398.2	398.3	BL(T)45-13-2	2425x645x712	509	517		
BL(T)32-15				DL(1)45-13-2	242030403712	509	517		

	BL(T)64		
Model	Dim.(mm) (LxWxH)	G.W	(kg)
BL(T)64-2-2		161	171
BL(T)64-2-1		224.8	232.4
BL(T)64-2		221.0	202.1
BL(T)64-3-2		243	251
BL(T)64-3-1	1565x565x612	240	201
BL(T)64-3		260.3	268
BL(T)64-4-2		264	266
BL(T)64-4-1		306.9	314.6
BL(T)64-4		300.9	314.0
BL(T)64-5-2			
BL(T)64-5-1		386.8	394.4
BL(T)64-5			
BL(T)64-6-2	1865x645x662	393	401
BL(T)64-6-1		415	422
BL(T)64-6		110	
BL(T)64-7-2		430	438
BL(T)64-7-1		430	430
BL(T)64-7	2065x695x712	489.1	496.7
BL(T)64-8-2	2003X093X712		
BL(T)64-8-1		493.7	501.4
BL(T)64-8			
	BL(T)90		
Model	Dim.(mm) (LxWxH)	G.W	(kg)
BL(T)90-2-2	1515x515x562	239.8	247.4
DI /T\00 2	101030103002	220	220

Model	Dim.(mm) (LxWxH)	G.W	(kg)	
BL(T)90-2-2	1515x515x562	239.8	247.4	
BL(T)90-2	101000100002	239	236	
BL(T)90-3-2	4505,,505,,040	304.3	312	
BL(T)90-3	1565x565x612	262	270	
BL(T)90-4-2				
BL(T)90-4	1815x645x662	375.9	383.6	
BL(T)90-5-2	1013X043X002			
BL(T)90-5		419.8	427.4	
BL(T)90-6-2	1965x695x712	483	490.7	
BL(T)90-6	190000900712	403	490.7	





### BW/BWJ(T)

# **Horizontal Multi-Stage Centrifugal Pumps**

**CATALOGUE FOR 50Hz** 



BW



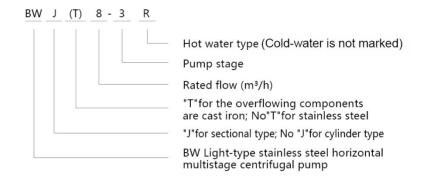
BWJ



**BWJT** 

### **Model Instruction**

**VOSSCHE** 



### **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 wetted parts 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**

- $^{\circ}$  Temperature range of medium: Normal type 0  $\sim$  +68°C, hot water type 0  $\sim$  +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 drving motor of high-power.
- © pH: 6.5 to 8.5

### **Applications Fields**

- Air conditioner systemIndustrial cleansing
  - Environmental application
- Water processing(Water purification)
- Fertilization/measuring system
- Other special applications

### Certificate

© Cooling System

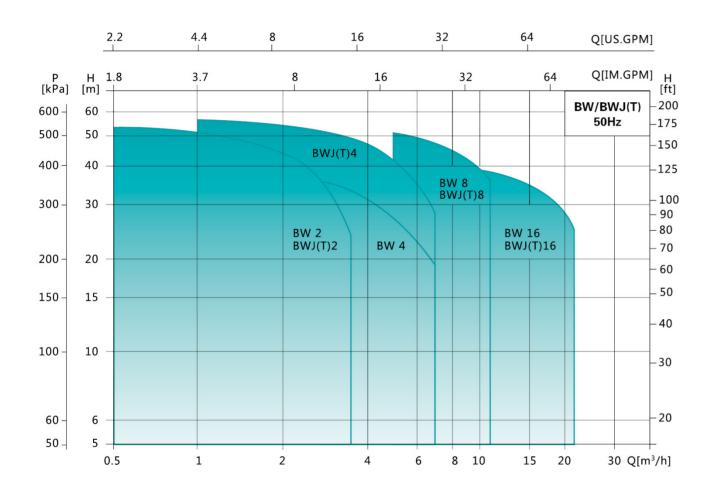


### **Optional Available On Request**

- 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

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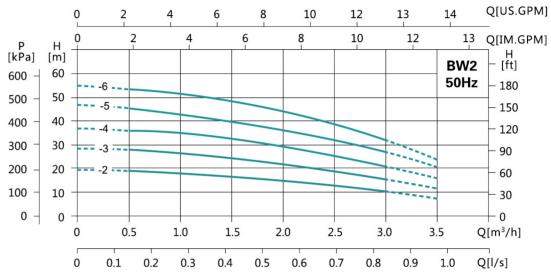
### **Performance Curve**

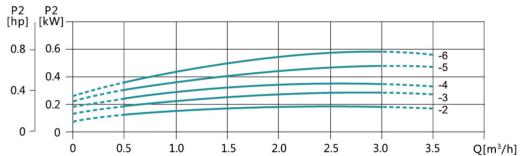


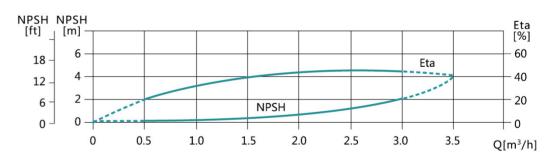
Model	BW2/BWJ(T)2	BW4/BWJ(T)4	BW8	BW16	BWJ(T)8	BWJ(T)16
Rated Flow(m³/h)	2	4	8	16	8	16
Flow Range(m³/h)	0.5~3	1~6	5~10	8~20	5~10	8~20
Max.Pressure(bar)	5.5	4	5	4	5	4
Motor Power(kW)	0.37~0.75	0.55~1.1	0.75~2.2	2.2~3	0.75~2.2	2.2~3
Max.Efficiency(%)	45	59	64	70	64	70
Inlet	G1	G1 <sup>1</sup> / <sub>4</sub>	G2	G2	G1 <sup>1</sup> / <sub>2</sub>	G1 <sup>1</sup> / <sub>2</sub>
Outlet	G1	G1	G2	G2	G1 <sup>1</sup> / <sub>4</sub>	G1 <sup>1</sup> / <sub>4</sub>



### **Performance Details-BW2**



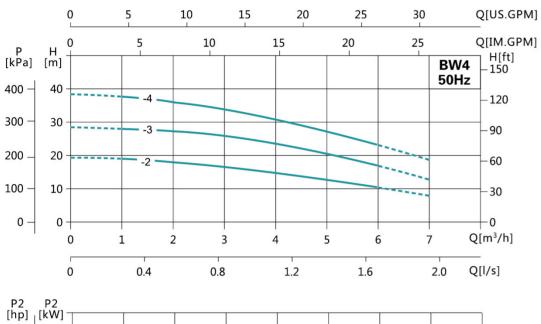


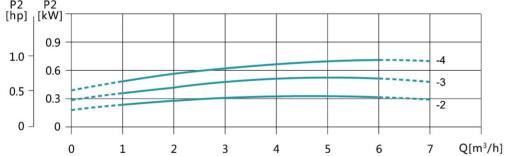


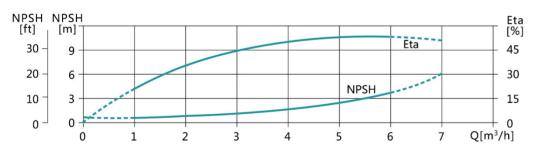
It is recommended to be used within lift range.

Model	Po <sup>s</sup>	wer HP	Q(m³/h)	0.5	1.0	1.5	2.0	2.5	3.0	Head Range (m)
BW2-2	0.37	0.5		19	18	16.5	15	13	10	10~19
BW2-3	0.37	0.5		28	26.5	24.5	22	19	15.5	15.5~28
BW2-4	0.55	0.75	H (m)	36	34.5	33	30	25	20.5	20.5~36
BW2-5	0.55	0.75		45.5	43	40	36	31.5	26.5	26.5~45.5
BW2-6	0.75	1		53.5	51	48	45	39	32	32~53.5

### **Performance Details-BW4**

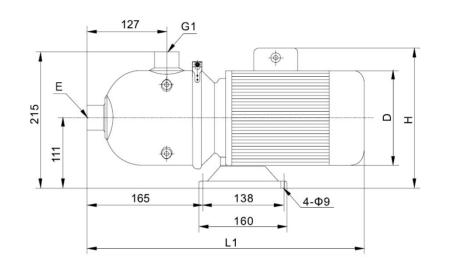


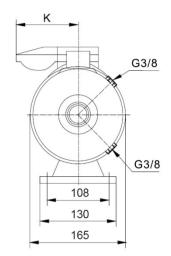




It is recommended to be used within lift range.

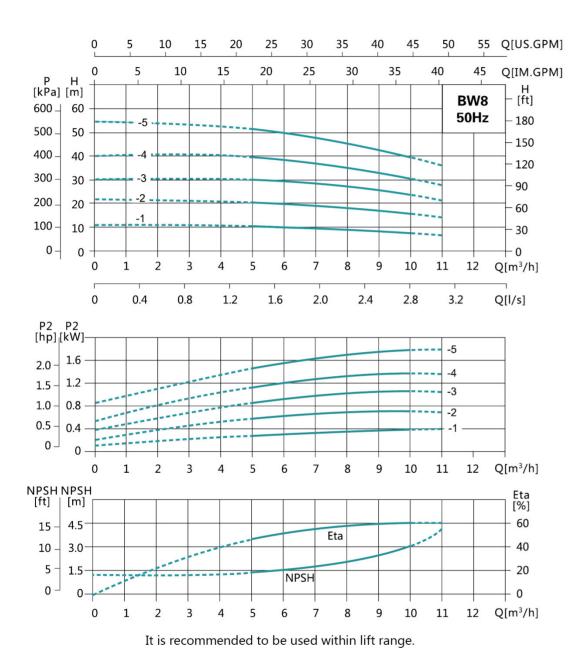
Model	Power		0 (3 (1-)	4		2	4	_	_	Head Range	
	kW	HP	Q(m³/h)	1	2	3	4	5	6	(m)	
	BW4-2	0.37	0.5		19	18	17	15	12.5	10	10~19
	BW4-3	0.55	0.75	H (m)	28	27	26	23.5	20.5	17	17~28
	BW4-4	0.75	1		37.5	36	34	31	27	23	23~37.5





Model		Dim.(mm)								
Model	L1	D	Н	E	К	N.W.(kg)				
BW2-2	402	137	215/230	G1		9.3				
BW2-3	402	137	215/230	G1		10.3				
BW2-4	402	137	215/230	G1		11.3				
BW2-5	402	137	215/230	G1		12.3				
BW2-6	426	156	225/245	G1	/100	14.3				
BW4-2	402	137	215/230	G1 <sup>1</sup> / <sub>4</sub>		10.3				
BW4-3	402	137	215/230	G1 <sup>1</sup> / <sub>4</sub>		11.8				
BW4-4	426	156	225/245	G1 <sup>1</sup> / <sub>4</sub>	/100	14.3				

**Performance Details-BW8** 

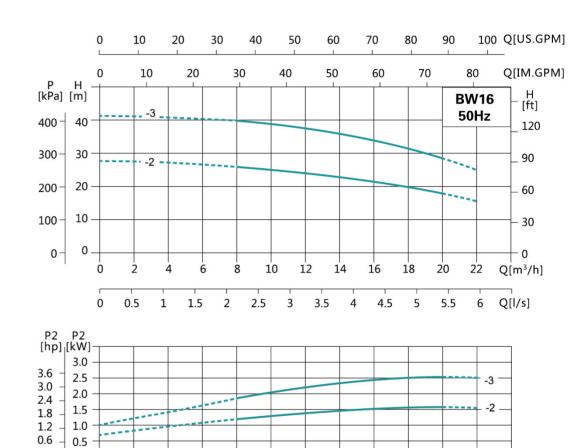


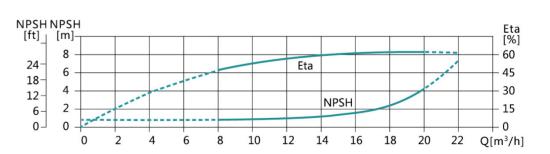
Model	Power		Q(m³/h)	5	6	7	8	9	10	Head Range
	kW	HP	Q(III /II)	3	6	1	0	9	10	(m)
BW8-2	0.75	1		20	19.5	19	18	17	15.5	15.5~20
BW8-3	1.1	1.5	н	29.5	29	28	27	25	23	23~29.5
BW8-4	1.5	2	(m)	39	38	37	35	33	30.5	30.5~39
BW8-5	2.2	3		51	49.5	47.5	45	42.5	39.5	39.5~51

### **Performance Details-BW16**

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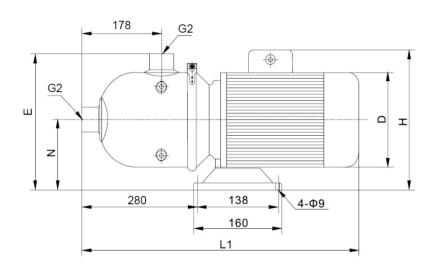
2<sup>2</sup> Q[m<sup>3</sup>/h]

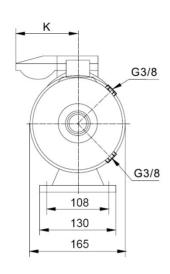
It is recommended to be used within lift range.

Model	Power		O(m <sup>3</sup> /h)		10	12	14	16	18	20	Head Range
Model	kW	HP	Q(m³/h)	δ	10	12	14	16	18	20	(m)
BW16-2	2.2	3	Н	26	25	24	23	21.7	20	18	18~26
BW16-3	3	4	(m)	40	39	38	36	34	31.5	29	29~40



### **Dimensions & Weight**

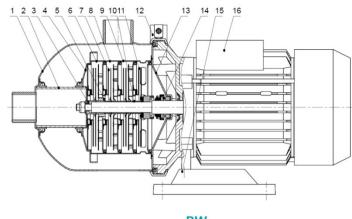




Model		Dim.(mm)							
Model	L1	E	N	D	Н	К			
BW8-2	540	268	118	156	230/265	/100	13		
BW8-3	540	268	118	156	230/265	/100	19		
BW8-4	590	268	118	169	240/270	/100	23		
BW8-5	590	268	118	169	240/270	/100	27		
BW16-2	590	268	118	169	240/270	/100	26		
BW16-3	627	280	130	194	270		33		



### **Components & Materials**



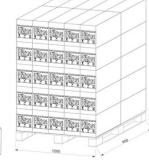
No.	Component	Material	AISI/ASTM
1	Pressure-resistant Component	SUS304	AISI304
2	Adapting Pipe	SUS304	AISI304
3	Lining	SUS304	AISI304
4	Platen Component	SUS304	AISI304
5	Bearing	YG 8	
6	Inlet Fluid Director	SUS304	AISI304
7	Impeller	SUS304	AISI304
8	Fluid Director With Bearings	SUS304	AISI304
9	Fluid Director	SUS304	AISI304
10	Round Bush	SUS304	AISI304
11	Outlet Fluid Director	SUS304	AISI304
12	Hooping Component	SUS304	AISI304
13	Front Cover Component	SUS304	AISI304
14	Mechanical Seal	Sic FPM	
15	Base	HT200	ASTM35B
16	Motor	Horizontal Motor(Lengthening Shaft)	

### Packing Sizes & Weight

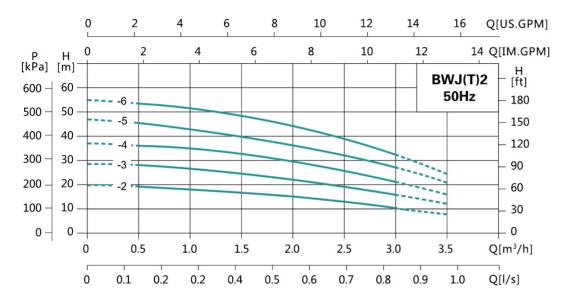
	BW2	
Model	Dim.(mm) (LxWxH)	G.W(kg)
BW2-2		10.5
BW2-3		11.5
BW2-4	450x240x330	12.5
BW2-5		13.5
BW2-6		15.5
	BW4	
Model	Dim.(mm) (LxWxH)	G.W(kg)
BW4-2		11.5
BW4-3	450x240x330	13
BW4-4		13.5

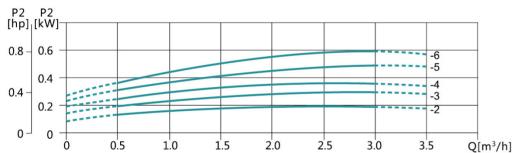
	BW8	
Model	Dim.(mm) (LxWxH)	G.W(kg)
BW8-2		14.5
BW8-3	630x300x350	20.5
BW8-4		24.5
BW8-5		28.5
	BW16	
Model	Dim.(mm) (LxWxH)	G.W(kg)
BW16-2	630x300x350	27.5
BW16-3	030x300x330	34.8

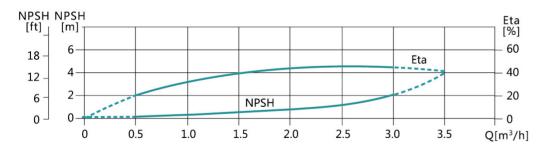




### Performance Details-BWJ(T)2



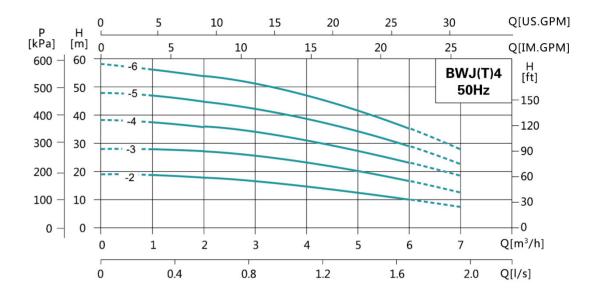


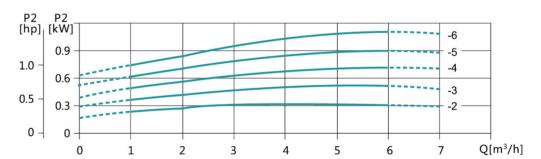


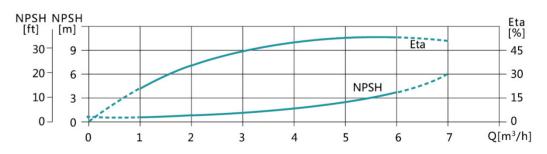
It is recommended to be used within lift range.

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

### Performance Details-BWJ(T)4



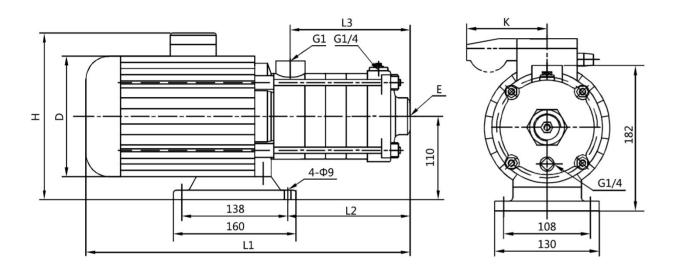




It is recommended to be used within lift range.

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

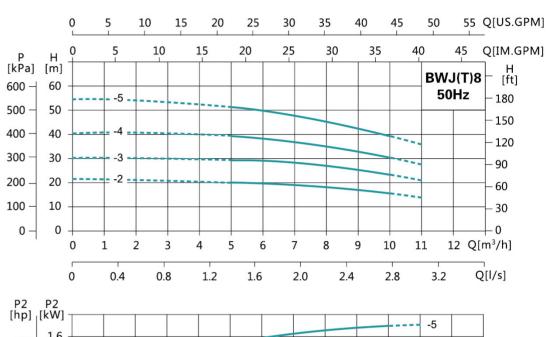
### **Dimensions & Weight**

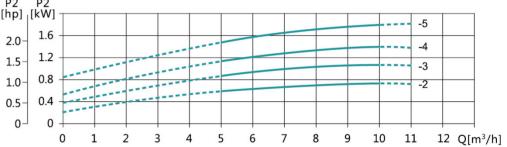


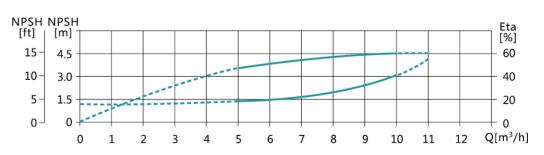
Model		Dim.(mm)										
Wodel	L1	L2	L3	D	Е	Н	К	N.W.(kg)				
BWJ(T)2-2	317	77	88	137	G1	215/230		9.3				
BWJ(T)2-3	335	95	105	137	G1	215/230		9.8				
BWJ(T)2-4	353	113	124	137	G1	215/230		10.6				
BWJ(T)2-5	371	131	142	137	G1	215/230		11				
BWJ(T)2-6	445	151	160	156	G1	225/245	/100	15.6				
BWJ(T)4-2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



### Performance Details-BWJ(T)8



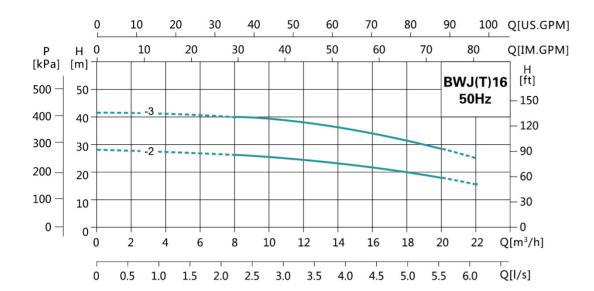


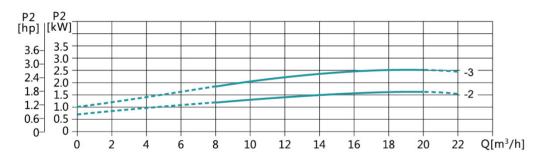


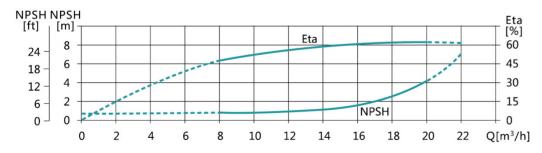
It is recommended to be used within lift range.

Madal	Po	wer	Q(m³/h)	5	6	7	0	9	40	Head Range
Model	kW	HP					8		10	(m)
BWJ(T)8-2	0.75	1		20	19.5	19	18	17	15.5	15.5~20
BWJ(T)8-3	1.1	1.5	н	29.5	29	28	27	25	23	23~29.5
BWJ(T)8-4	1.5	2	(m)	39	38	37	35	33	30.5	30.5~39
BWJ(T)8-5	2.2	3		51	49.5	47.5	45	42.5	39.5	39.5~51

Performance Details-BWJ(T)16





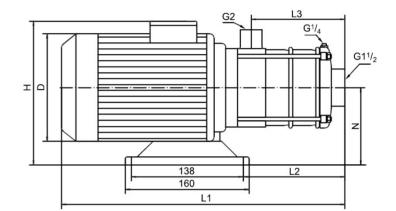


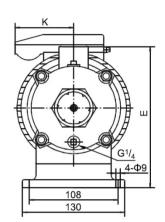
It is recommended to be used within lift range.

Model Power kW H	wer	Q(m³/h)	8	10	12	1.4	14 16	18	20	Head Range	
	HP	Q(III /II)				14				(m)	
BWJ(T)16-2	2.2	3	Н	26	25	24	23	21.7	20	18	18~26
BWJ(T)16-3	3	4	(m)	40	39	38	36	34	31.5	29	29~40



### **Dimensions & Weight**



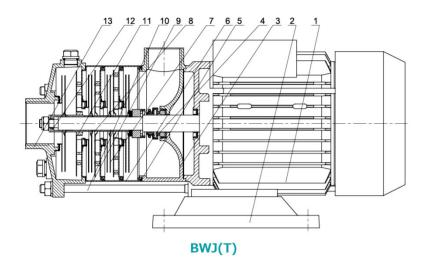


Model		Dim.(mm)										
Wodel	L1	L2	L3	Н	D	E	N	К	. N.W.(kg)			
BWJ(T)8-2	376	111	107	230/265	156	219	114	/100	17.9			
BWJ(T)8-3	406	141	137	230/265	156	219	114	/100	20			
BWJ(T)8-4	503	171	167	240/270	169	223	118	/100	24.5			
BWJ(T)8-5	533	201	197	240/270	169	223	118	/100	27.1			
BWJ(T)16-2	467	125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

 $m{4}$ 9



### **Components & Materials**



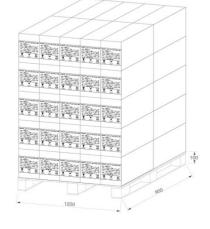
No.	Component	Material	AISI/ASTM
1	Motor	Horizontal Motor(Lengthening Shaft)	
2	Base	HT200	ASTM35B
3	Water Outlet Shell	SUS304/HT200	AISI304/ASTM35B
4	Mechanical Seal	SIC FPM	
5	Sealing Gasket	NBR	
6	Fluid Director	SUS304	AISI304
7	Impeller	SUS304	AISI304
8	Long Casing Bush	SUS304	AISI304
9	Fluid Director 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

### **Packing Sizes & Weight**

BWJ(T)2										
Model	Dim.	(mm) (Lx\	WxH)	G.W(kg)						
BWJ(T)2-2				11.5						
BWJ(T)2-3	400	240	330	12						
BWJ(T)2-4		240	330	12.8						
BWJ(T)2-5				13.2						
BWJ(T)2-6	560	240	330	17						
BWJ(T)4										
Model	Dim.	.(mm) (Lx	WxH)	G.W(kg)						
BWJ(T)4-2	400	240	330	12						
BWJ(T)4-3	400	240	330	13						
BWJ(T)4-4			330	16.5						
BWJ(T)4-5	560	240		19.8						
BWJ(T)4-6				20.5						

	BWJ(T)8									
Model	Dim.	Dim.(mm) (LxWxH)								
BWJ(T)8-2				19.4						
BWJ(T)8-3	630	300	350	21.5						
BWJ(T)8-4				26						
BWJ(T)8-5				28.6						
72	E	BWJ(T)1	6							
Model	Dim.	Dim.(mm) (LxWxH)								
BWJ(T)16-2	630	300	350	26.9						
BWJ(T)16-3	030	300	330	30.6						





### Shaft



Lining

### **Bearing inner**







Coupling





Shaft sleeve





### **Pump base**







### **Pump head**



### **Motor base**



### **Impeller**



