



XBD-GJ Long Shaft Vertical Turbine Pump



Product Overview

The turbine fire pump consists of multiple centrifugal impellers, guide sleeves, water pipes, transmission shafts, pump seat motors, and other components. The pump seat and motor are located above the water tank, and the power of the motor is transmitted to the impeller shaft through a transmission shaft concentric with the water pipe, thereby generating flow and pressure.

Application

Mainly used for fire hydrant fire extinguishing, automatic sprinkler fire extinguishing and other fire extinguishing systems in industrial and mining enterprises, engineering construction, and high-rise buildings as well as buildings, municipal water supply and drainage, etc.

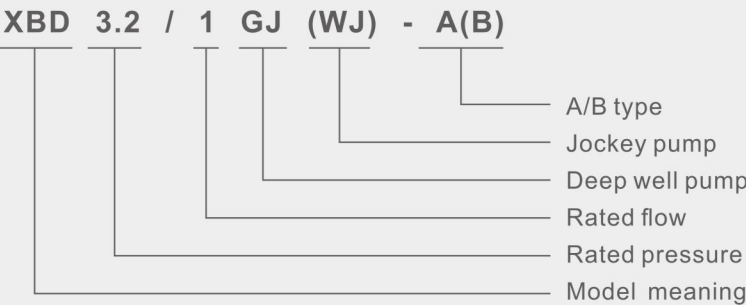
Operating Condition

- 1. Generally non-corrosive clean water.
- 2. The solid content in water (by weight) is not more than 0.01%
- 3. The pH value is within the range of 6.5-8.5
- 4. The hydrogen sulfide content is not more than 1.5 mg/L
- 5. The water temperature should not be higher than 40°C

Performance Range

Flow: 5-110L/s
Head: 32-200m
Power: 3-200kW
RPM: 2900/1450 r/min

Model Definition



Instruction

The turbine fire pump consists of three parts: the working portion, the water pipe portion, and the surface potion.

1. The working portion

This part consists of working parts and water filter parts.

The working parts are composed of guide shell, impeller, tapered sleeve, shell bearing, impeller shaft and other parts, and the impeller is a closed structure. The shells are connected by bolts.

Wear rings can be equipped on the guide shell and impeller.

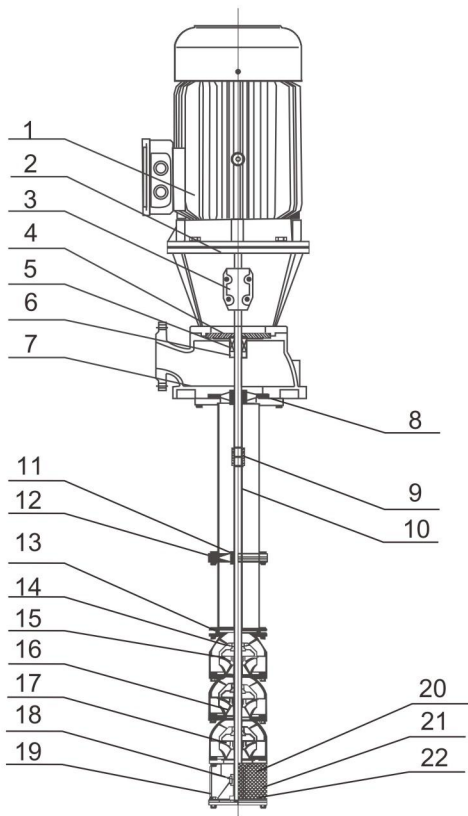
2. Water pipe portion

This part is composed of water pipes, drive shafts, couplings and bracket components.

The water pipe is connected by flange, and the transmission shaft material is 2Cr13 or stainless steel.

3. Surface portion

Part is composed of pump base components, motor, motor bracket, coupling and other components.



Material Description

No.	Item	Material
1	Motor	Subassembly
2	Motor support	QT400-18
3	Coupling	ZG235-150
4	Seal cover	QT100-18
5	Mechanical seal	Carbon-SIC-NBR
6	Seal holder	ZG235-450
7	Outlet	QT400-18
8	Pump bracket	QT400-18
9	Coupling	ZG235-150
10	Shaft	20Cr13
11	Support bearing	QT450
12	Bracket	QT100-18
13	Top bowl	QT100-18
14	Bearing-bowl	Rubber
15	Dish bowl	20Cr13
16	Impeller	06Cr19ni10
17	Middle bowl	QT400-18
18	Bearing	Rubber
19	Suction bell	QT100-18
20	Filter	O6Cr19ni10
21	Thrust disc	20Cr13
22	Forward thrust plate	A mixture of teflon

Performance Parameter

Model	Outlet	Rated flow	Rated pressure	Rated speed	Power
	mm	L/s	MPa	r/min	kW
XBD3.2/3WJ-A	50	3	0.32	2900	2.2
XBD4.0/3WJ-A	50	3	0.40	2900	3
XBD5.0/3WJ-A	50	3	0.50	2900	4
XBD6.0/3WJ-A	50	3	0.60	2900	4
XBD7.0/3WJ-A	50	3	0.70	2900	5.5
XBD8.0/3WJ-A	50	3	0.80	2900	5.5
XBD9.0/3WJ-A	50	3	0.90	2900	5.5
XBD10.0/3WJ-A	50	3	1.00	2900	7.5
XBD12.0/3WJ-A	50	3	1.20	2900	7.5
XBD13.0/3WJ-A	50	3	1.30	2900	11
XBD15.0/3WJ-A	50	3	1.50	2900	11
XBD16.0/3WJ-A	50	3	1.60	2900	15
XBD17.0/3WJ-A	50	3	1.70	2900	15
XBD20.3/3WJ-A	50	3	2.03	2900	15
XBD3.2/5WJ-A	50	5	0.32	2900	4
XBD4.0/5WJ-A	50	5	0.40	2900	4
XBD4.5/5WJ-A	50	5	0.45	2900	5.5
XBD5.0/5WJ-A	50	5	0.50	2900	5.5
XBD5.5/5WJ-A	50	5	0.55	2900	5.5
XBD6.0/5WJ-A	50	5	0.60	2900	5.5
XBD6.5/5WJ-A	50	5	0.65	2900	7.5
XBD7.0/5WJ-A	50	5	0.70	2900	7.5
XBD7.5/5WJ-A	50	5	0.75	2900	7.5
XBD8.0/5WJ-A	50	5	0.80	2900	7.5
XBD8.5/5WJ-A	50	5	0.85	2900	7.5
XBD9.0/5WJ-A	50	5	0.90	2900	11
XBD9.5/5WJ-A	50	5	0.95	2900	11
XBD10.0/5WJ-A	50	5	1.00	2900	11
XBD11.0/5WJ-A	50	5	1.10	2900	11
XBD12.0/5WJ-A	50	5	1.20	2900	15
XBD13.0/5WJ-A	50	5	1.30	2900	15
XBD14.0/5WJ-A	50	5	1.40	2900	15
XBD15.0/5WJ-A	50	5	1.50	2900	15
XBD16.0/5WJ-A	50	5	1.60	2900	18.5
XBD18.2/5WJ-A	50	5	1.82	2900	18.5
XBD3.2/5GJ-A	50	5	0.32	2900	4
XBD4.2/5GJ-A	50	5	0.42	2900	5.5
XBD5.1/5GJ-A	50	5	0.51	2900	5.5
XBD5.6/5GJ-A	50	5	0.56	2900	7.5
XBD6.0/5GJ-A	50	5	0.60	2900	7.5
XBD7.0/5GJ-A	50	5	0.70	2900	7.5
XBD8.0/5GJ-A	50	5	0.80	2900	11

Performance Parameter

Model	Outlet	Rated flow	Rated pressure	Rated speed	Power
	mm	L/s	MPa	r/min	kW
XBD9.8/5GJ-A	50	5	0.98	2900	11
XBD10.4/5GJ-A	50	5	1.04	2900	11
XBD11.0/5GJ-A	50	5	1.10	2900	15
XBD12.6/5GJ-A	50	5	1.26	2900	15
XBD13.0/5GJ-A	50	5	1.30	2900	15
XBD14.5/5GJ-A	50	5	1.45	2900	15
XBD16.5/5GJ-A	50	5	1.65	2900	18.5
XBD3.0/10GJ-A	100	10	0.3	2900	7.5
XBD4.2/10GJ-A	100	10	0.42	2900	11
XBD5.0/10GJ-A	100	10	0.50	2900	11
XBD5.3/10GJ-A	100	10	0.53	2900	11
XBD6.7/10GJ-A	100	10	0.67	2900	15
XBD8.1/10GJ-A	100	10	0.81	2900	15
XBD9.1/10GJ-A	100	10	0.91	2900	18.5
XBD10.0/10GJ-A	100	10	1.00	2900	18.5
XBD11.2/10GJ-A	100	10	1.12	2900	22
XBD12.0/10GJ-A	100	10	1.20	2900	30
XBD13.0/10GJ-A	100	10	1.30	2900	22
XBD13.7/10GJ-A	100	10	1.37	2900	22
XBD14.3/10GJ-A	100	10	1.43	2900	30
XBD16.5/10GJ-A	100	10	1.65	2900	30
XBD18.5/10GJ-A	100	10	1.85	2900	37
XBD6.4/15GJ-A	100	15	0.64	2900	18.5
XBD7.8/15GJ-A	100	15	0.78	2900	18.5
XBD9.2/15GJ-A	100	15	0.92	2900	22
XBD9.0/15GJ-A	100	15	0.90	2900	30
XBD10.6/15GJ-A	100	15	1.06	2900	30
XBD13.0/15GJ-A	100	15	1.30	2900	37
XBD13.4/15GJ-A	100	15	1.34	2900	37
XBD14.8/15GJ-A	100	15	1.48	2900	45
XBD15.0/15GJ-A	100	15	1.50	2900	45
XBD16.0/15GJ-A	100	15	1.60	2900	45
XBD3.4/20GJ-A	100	20	0.34	2900	11
XBD4.5/20GJ-A	100	20	0.45	2900	15
XBD5.0/20GJ-A	100	20	0.50	2900	18.5
XBD5.6/20GJ-A	100	20	0.56	2900	22
XBD6.0/20GJ-A	100	20	0.60	2900	22
XBD6.5/20GJ-A	100	20	0.65	2900	22
XBD7.5/20GJ-A	100	20	0.75	2900	30
XBD8.0/20GJ-A	100	20	0.80	2900	30
XBD9.4/20GJ-A	100	20	0.94	2900	37
XBD10.0/20GJ-A	100	20	1.00	2900	37

Performance Parameter

Model	Outlet	Rated flow	Rated pressure	Rated speed	Power
	mm	L/s	MPa	r/min	kW
XBD11.0/20GJ-A	100	20	1.10	2900	37
XBD12.7/20GJ-A	100	20	1.27	2900	45
XBD14.0/20GJ-A	100	20	1.40	2900	55
XBD16.0/20GJ-A	100	20	1.60	2900	75
XBD4.5/25GJ-A	100	25	0.45	2900	18.5
XBD5.5/25GJ-A	100	25	0.55	2900	22
XBD6.5/25GJ-A	100	25	0.65	2900	30
XBD7.5/25GJ-A	100	25	0.75	2900	37
XBD8.5/25GJ-A	100	25	0.85	2900	37
XBD9.0/25GJ-A	100	25	0.90	2900	45
XBD9.5/25GJ-A	100	25	0.95	2900	45
XBD10.5/25GJ-A	100	25	1.05	2900	45
XBD11.5/25GJ-A	100	25	1.15	2900	55
XBD12.0/25GJ-A	100	25	1.20	2900	55
XBD12.5/25GJ-A	100	25	1.25	2900	55
XBD13.0/25GJ-A	100	25	1.30	2900	75
XBD13.5/25GJ-A	100	25	1.35	2900	75
XBD14.5/25GJ-A	100	25	1.45	2900	75
XBD15.0/25GJ-A	100	25	1.50	2900	90
XBD15.5/25GJ-A	100	25	1.55	2900	90
XBD16.0/25GJ-A	100	25	1.60	2900	75
XBD17.3/25GJ-A	100	25	1.73	2900	110
XBD3.6/30GJ-A	100	30	0.36	2900	18.5
XBD4.0/30GJ-A	100	30	0.40	2900	22
XBD4.5/30GJ-A	100	30	0.45	2900	22
XBD5.0/30GJ-A	100	30	0.50	2900	30
XBD5.5/30GJ-A	100	30	0.55	2900	30
XBD6.0/30GJ-A	100	30	0.60	2900	30
XBD7.5/30GJ-A	100	30	0.75	2900	37
XBD8.5/30GJ-A	100	30	0.85	2900	45
XBD9.0/30GJ-A	100	30	0.90	2900	45
XBD10.0/30GJ-A	100	30	1.00	2900	55
XBD11.0/30GJ-A	100	30	1.10	2900	55
XBD11.3/30GJ-A	100	30	1.13	2900	55
XBD12.0/30GJ-A	100	30	1.20	2900	75
XBD12.5/30GJ-A	100	30	1.25	2900	75
XBD13.0/30GJ-A	100	30	1.30	2900	75
XBD13.5/30GJ-A	100	30	1.35	2900	75
XBD14.5/30GJ-A	100	30	1.45	2900	90
XBD15.0/30GJ-A	100	30	1.50	2900	90
XBD16.1/30GJ-A	100	30	1.61	2900	90
XBD17.0/30GJ-A	100	30	1.70	2900	90

Performance Parameter

Model	Outlet	Rated flow	Rated pressure	Rated speed	Power
	mm	L/s	MPa	r/min	kW
XBD3.2/35GJ-A	150	35	0.32	2900	18.5
XBD5.0/35GJ-A	150	35	0.50	2900	30
XBD6.2/35GJ-A	150	35	0.62	2900	37
XBD7.0/35GJ-A	150	35	0.70	2900	45
XBD8.8/35GJ-A	150	35	0.88	2900	55
XBD9.0/35GJ-A	150	35	0.90	2900	55
XBD10.0/35GJ-A	150	35	1.00	2900	75
XBD13.0/35GJ-A	150	35	1.30	2900	90
XBD13.5/35GJ-A	150	35	1.35	2900	90
XBD15.0/35GJ-A	150	35	1.50	2900	110
XBD16.0/35GJ-A	150	35	1.60	2900	110
XBD3.2/40GJ-A	150	40	0.32	2900	22
XBD4.0/40GJ-A	150	40	0.40	2900	30
XBD4.3/40GJ-A	150	40	0.43	2900	30
XBD5.5/40GJ-A	150	40	0.55	2900	37
XBD6.5/40GJ-A	150	40	0.65	2900	45
XBD7.5/40GJ-A	150	40	0.75	2900	55
XBD8.2/40GJ-A	150	40	0.82	2900	55
XBD9.2/40GJ-A	150	40	0.92	2900	75
XBD9.5/40GJ-A	150	40	0.95	2900	75
XBD10.5/40GJ-A	150	40	1.05	2900	75
XBD11.0/40GJ-A	150	40	1.10	2900	75
XBD11.5/40GJ-A	150	40	1.15	2900	75
XBD12.5/40GJ-A	150	40	1.25	2900	90
XBD13.5/40GJ-A	150	40	1.35	2900	90
XBD14.5/40GJ-A	150	40	1.45	2900	110
XBD15.0/40GJ-A	150	40	1.50	2900	110
XBD16.0/40GJ-A	150	40	1.60	2900	110
XBD17.0/40GJ-A	150	40	1.70	2900	132
XBD18.0/40GJ-A	150	40	1.80	2900	132
XBD5.0/45GJ-A	150	45	0.50	2900	37
XBD6.0/45GJ-A	150	45	0.60	2900	45
XBD7.0/45GJ-A	150	45	0.70	2900	55
XBD8.0/45GJ-A	150	45	0.80	2900	55
XBD9.0/45GJ-A	150	45	0.90	2900	75
XBD10.0/45GJ-A	150	45	1.00	2900	75
XBD12.0/45GJ-A	150	45	1.20	2900	90
XBD14.0/45GJ-A	150	45	1.40	2900	110
XBD14.3/45GJ-A	150	45	1.43	2900	132
XBD15.0/45GJ-A	150	45	1.50	2900	132
XBD16.0/45GJ-A	150	45	1.60	2900	132
XBD17.0/45GJ-A	150	45	1.70	2900	132

Performance Parameter

Model	Outlet	Rated flow	Rated pressure	Rated speed	Power
	mm	L/s	MPa	r/min	kW
XBD3.6/50GJ-A	150	50	0.36	2900	30
XBD4.2/50GJ-A	150	50	0.42	2900	37
XBD5.1/50GJ-A	150	50	0.51	2900	45
XBD6.0/50GJ-A	150	50	0.60	2900	55
XBD7.0/50GJ-A	150	50	0.70	2900	55
XBD8.4/50GJ-A	150	50	0.84	2900	75
XBD9.0/50GJ-A	150	50	0.90	2900	75
XBD11.0/50GJ-A	150	50	1.10	2900	90
XBD12.0/50GJ-A	150	50	1.20	2900	110
XBD12.8/50GJ-A	150	50	1.28	2900	110
XBD14.0/50GJ-A	150	50	1.40	2900	132
XBD4.2/60GJ-A	150	60	0.42	2900	45
XBD5.5/60GJ-A	150	60	0.55	2900	55
XBD6.7/60GJ-A	150	60	0.67	2900	75
XBD7.3/60GJ-A	150	60	0.73	2900	75
XBD8.1/60GJ-A	150	60	0.81	2900	75
XBD9.2/60GJ-A	150	60	0.92	2900	90
XBD10.8/60GJ-A	150	60	1.08	2900	110
XBD12.2/60GJ-A	150	60	1.22	2900	132
XBD13.0/60GJ-A	150	60	1.30	2900	132
XBD5.8/70GJ-A	150	70	0.58	2900	75
XBD7.0/70GJ-A	150	70	0.70	2900	90
XBD7.8/70GJ-A	150	70	0.78	2900	90
XBD9.4/70GJ-A	150	70	0.94	2900	110
XBD10.4/70GJ-A	150	70	1.04	2900	132
XBD11.0/70GJ-A	150	70	1.10	2900	132
XBD12.0/70GJ-A	150	70	1.20	2900	160
XBD13.0/70GJ-A	150	70	1.30	2900	160
XBD4.5/80GJ-B	200	80	0.45	1450	55
XBD5.0/80GJ-B	200	80	0.50	1450	75
XBD6.0/80GJ-B	200	80	0.6	1450	75
XBD6.5/80GJ-B	200	80	0.65	1450	90
XBD7.0/80GJ-B	200	80	0.70	1450	90
XBD8.0/80GJ-B	200	80	0.80	1450	110
XBD8.2/80GJ-B	200	80	0.82	1450	110
XBD9.0/80GJ-B	200	80	0.9	1450	110
XBD9.5/80GJ-B	200	80	0.95	1450	132
XBD9.8/80GJ-B	200	80	0.98	1450	132
XBD10.0/80GJ-B	200	80	1.00	1450	132
XBD10.5/80GJ-B	200	80	1.05	1450	160
XBD11.0/80GJ-B	200	80	1.10	1450	160
XBD11.5/80GJ-B	200	80	1.15	1450	160

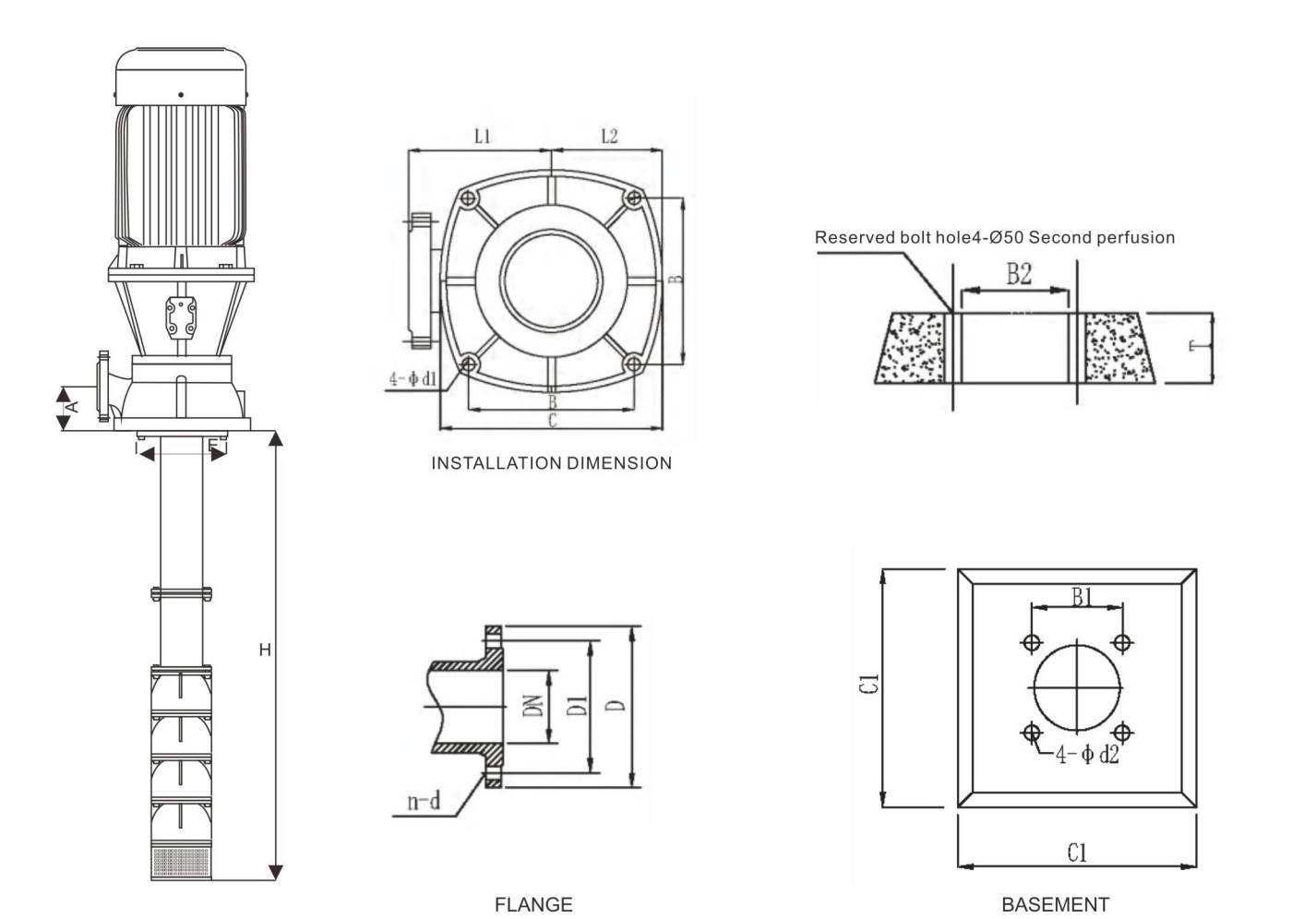
Performance Parameter

Model	Outlet	Rated flow	Rated pressure	Rated speed	Power
	mm	L/s	MPa	r/min	kW
XBD6.5/85GJ-B	200	85	0.65	1450	90
XBD9.0/85GJ-B	200	85	0.9	1450	132
XBD5.0/90GJ-B	200	90	0.50	1450	75
XBD6.0/90GJ-B	200	90	0.60	1450	90
XBD7.0/90GJ-B	200	90	0.70	1450	110
XBD8.0/90GJ-B	200	90	0.80	1450	132
XBD9.0/90GJ-B	200	90	0.90	1450	132
XBD10.0/90GJ-B	200	90	1.00	1450	160
XBD11.0/90GJ-B	200	90	1.10	1450	160
XBD4.5/100GJ-B	200	100	0.45	1450	75
XBD5.5/100GJ-B	200	100	0.55	1450	90
XBD6.5/100GJ-B	200	100	0.65	1450	110
XBD7.0/100GJ-B	200	100	0.70	1450	110
XBD7.6/100GJ-B	200	100	0.76	1450	132
XBD8.0/100GJ-B	200	100	0.80	1450	132
XBD9.0/100GJ-B	200	100	0.90	1450	160
XBD10.0/100GJ-B	200	100	1.00	1450	160
XBD7.5/105GJ-B	200	105	0.75	1450	132
XBD3.6/110GJ-B	200	110	0.36	1450	75
XBD4.5/110GJ-B	200	110	0.45	1450	75
XBD5.1/110GJ-B	200	110	0.51	1450	90
XBD6.3/110GJ-B	200	110	0.63	1450	110
XBD7.2/110GJ-B	200	110	0.72	1450	132
XBD8.1/110GJ-B	200	110	0.81	1450	160
XBD8.5/110GJ-B	200	110	0.85	1450	160
XBD11.0/110GJ-B	200	110	1.1	1450	200
XBD12.0/110GJ-B	200	110	1.2	1450	220
XBD4.0/120GJ-B	200	120	0.4	1450	75
XBD5.2/120GJ-B	200	120	0.52	1450	110
XBD6.4/120GJ-B	200	120	0.64	1450	132
XBD7.6/120GJ-B	200	120	0.76	1450	160
XBD8.8/120GJ-B	200	120	0.88	1450	185
XBD10.0/120GJ-B	200	120	1	1450	200
XBD11.2/120GJ-B	200	120	1.12	1450	220
XBD3.3/130GJ-B	250	130	0.33	1450	75
XBD5.4/130GJ-B	250	130	0.54	1450	110
XBD8.1/130GJ-B	250	130	0.81	1450	160
XBD10.8/130GJ-B	250	130	1.08	1450	220
XBD3.2/140GJ-B	250	140	0.32	1450	75
XBD5.2/140GJ-B	250	140	0.52	1450	110
XBD7.8/140GJ-B	250	140	0.78	1450	185
XBD10.4/140GJ-B	250	140	1.04	1450	220

Performance Parameter

Model	Outlet	Rated flow	Rated pressure	Rated speed	Power
	mm	L/s	MPa	r/min	kW
XBD3.2/150GJ-B	250	150	0.32	1450	75
XBD5.0/150GJ-B	250	150	0.5	1450	132
XBD7.5/150GJ-B	250	150	0.75	1450	185
XBD3.0/160GJ-B	250	160	0.3	1450	75
XBD4.8/160GJ-B	250	160	0.48	1450	132
XBD7.2/160GJ-B	250	160	0.72	1450	185
XBD9.0/160GJ-B	250	160	0.9	1450	220
XBD3.0/180GJ-B	250	180	0.3	1450	90
XBD6.0/180GJ-B	250	180	0.6	1450	185
XBD9.0/180GJ-B	250	180	0.9	1450	250
XBD12.0/180GJ-B	250	180	1.2	1450	355
XBD15.0/180GJ-B	250	180	1.5	1450	450
XBD3.2/200GJ-B	250	200	0.32	1450	110
XBD6.4/200GJ-B	250	200	0.64	1450	200
XBD9.6/200GJ-B	250	200	0.96	1450	315
XBD12.8/200GJ-B	250	200	1.28	1450	400
XBD3.0/250GJ-B	250	250	0.3	1450	132
XBD6.0/250GJ-B	250	250	0.6	1450	250
XBD9.0/250GJ-B	250	250	0.9	1450	355
XBD12.0/250GJ-B	250	250	1.2	1450	500
XBD15.0/250GJ-B	250	250	1.5	1450	600
XBD2.4/300GJ-B	250	300	0.24	1450	110
XBD4.8/300GJ-B	250	300	0.48	1450	220
XBD7.2/300GJ-B	250	300	0.72	1450	355
XBD9.6/300GJ-B	250	300	0.96	1450	475
XBD2.5/350GJ-B	250	350	0.25	1450	160
XBD5.0/350GJ-B	250	350	0.5	1450	280

Installation Dimension



No.	INSTALLATION DIMENSION							FLANGE				BASEMENT				
	H	A	E	L1	B	C	4-Φd1	D	D1	DN	n-Φd	C1	B1	B2	T	4-Φd2
1-5L/S	Submerged Depth	130	Φ230	185	300	300	4-Φ22	165	125	50	4-Φ18	350	300	Φ250	400	4-Φ16
10-30L/S	Submerged Depth	180	Φ230	265	320	320	4-Φ22	220	180	100	4-Φ18	400	320	Φ280	400	4-Φ16
35-90L/S	Submerged Depth	185	Φ260	310	380	380	4-Φ22	285	240	150	8-Φ18	500	380	Φ350	400	4-Φ16
100-140L/S	Submerged Depth	200	Φ360	360	420	420	4-Φ22	340	295	200	12-Φ22	560	420	Φ400	400	4-Φ16