BD/BD-SH 60Hz SERIES

SUBMERSIBLE DEWATERING PUMPS

BD 30HP

ADTC

BD

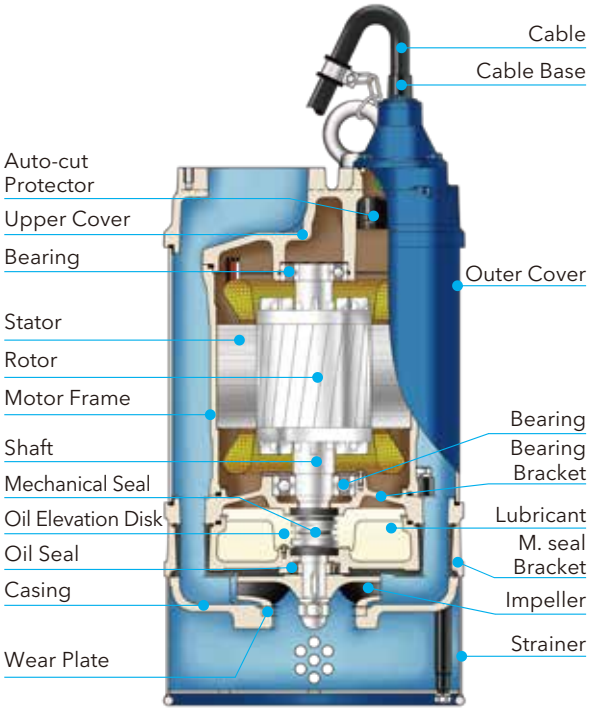
FEATURES

- Compact, robust and easy handling for all construction and civil engineering dewatering application conditions.
- SPHC double outer casing, water cooling motor for continuous duty, and low water level conditions.
- High efficient special impeller design in High Chrome Alloy steel (HiCrFC), with a hardness of 55 - 60 Rockwell, to stand high abrasive applications.
- The mechanical seal bracket is covered by EPDM with anti-abrasive wear. The casing is heat-treated nodular cast iron (FCD500) and the wear plate is made of high chrome alloy steel (HiCrFC) to resist the intensive abrasiveness of sand and gravel.
- Standard accessories include the cable with an epoxy resin sealed water-resistant cable base, Auto-cut motor protector, double mechanical seals, oil seal design, and High Solid Epoxy coating.
- Optional ADTC (Adapter Connection) Casing to connect suction with inline pipe, allowing surface/ inline/deep well pumping.

PRODUCT NOMENCLATURE

150(200)	BD	2	22
Discharge mm	Type	Pole	kW

Close Impeller



BD
SUBMERSIBLE DEWATERING PUMPS

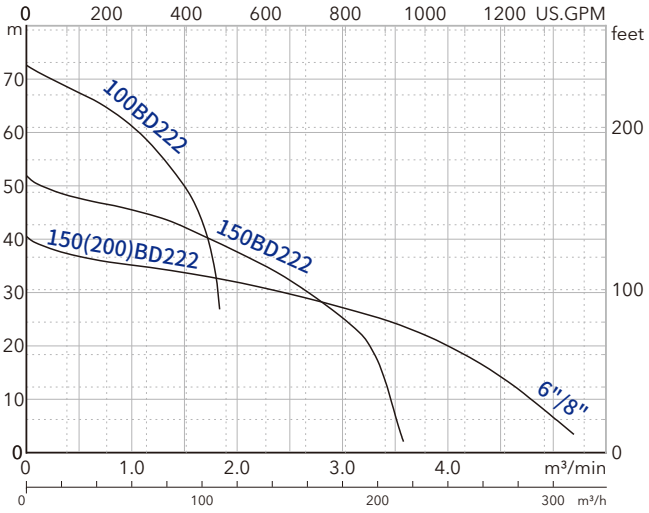
APPLICATIONS

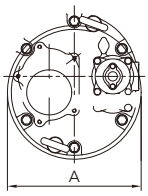
- Dewatering for Civil engineering, tunneling, groundworks, mining and manhole sewer, and infrastructure construction, etc.
- River restoration, Dredging ditch drainage.
- Flood control and large volume dewatering.
- Wastewater Treatment in steel mills.

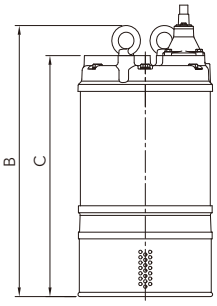
SPECIFICATIONS

Item		Description
Limits of Use	Liquid Temp.	0~40°C (32~104°F)
	Applications	Construction sites • Basins dewatering
Type	Frequency	60Hz
	Motor	2P(3600rpm) • Dry Motor
	Insulation	Class H
	Protection	IP68
	Protector	Auto-cut
	Bearing	Ball type
	M.seal	Double M.seals
	Impeller	Close
Material	Outer cover	SPHC / 620
	Upper Cover	FC200 / ASTM-30
	Motor Frame	FC200 / ASTM-30
	Shaft	SUS420J2 / ASTM 420 F
	M.seal	CA/CE & SiC/SiC
	Casing+ Wear Plate	FCD500 / Gr.65-45-12 + HiCrFC
	Impeller	HiCrFC
	Cable	VCT or SOW
Optional		Pumps can be customized to fit specifications

PERFORMANCE CURVES







PERFORMANCE SPECS.

※ Note : Weight Without Cable & Outlet.

Model	Output HP(kW)	Discharge Inch(mm)	Phase Ø	Start Method	Standard m-m³/min	Standard ft-GPM	Solid Passage mm(inch)	Weight kg(lb)	Dimensions mm A	B	C
100BD222	30(22)	4"(100)	3	DOL	61-1.0	200.1-264	10(3/8")	225(496)	403	813	721
150BD222	30(22)	6"(150)	3	DOL	37-2.0	121.4-530	10(3/8")	223(492)	403	813	721
150(200)BD222	30(22)	6"(150) / 8"(200)	3	DOL	31.5-2.0 / 20-4.0	103.4-530 / 65.6-1060	20(3/4")	222(489)	403	813	721

50BD23.0SH

ADTC

BD-SH

FEATURES

- The pump can be used in narrow spaces such as 8-inch diameter pipes for construction dewatering, deep well water supply, and mine dewatering (Figure 1).
- The dual impeller design doubles the pumping head compared to a single impeller, meeting high-head dewatering needs.
- A high-pressure shaft seal ensures durability and reliability of longer operating time under high-head and pressure conditions.
- The casing cover is made with heat-treated nodular cast-iron FCD500, reducing wear and tear.
- Casting parts are coated with high-solids epoxy to improve anti-corrosion resistance and extend product life.
- Standard accessories include an epoxy resin-sealed cable base, an auto-cut motor protector, silicon carbide double mechanical seals, oil seal design, and high-solid epoxy coating.

Open Impeller

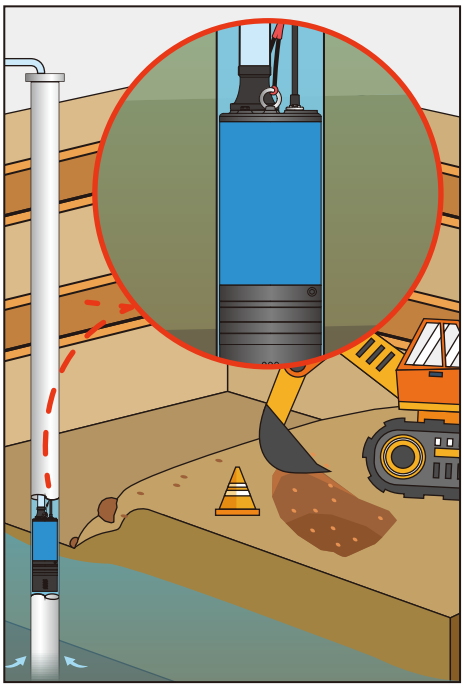
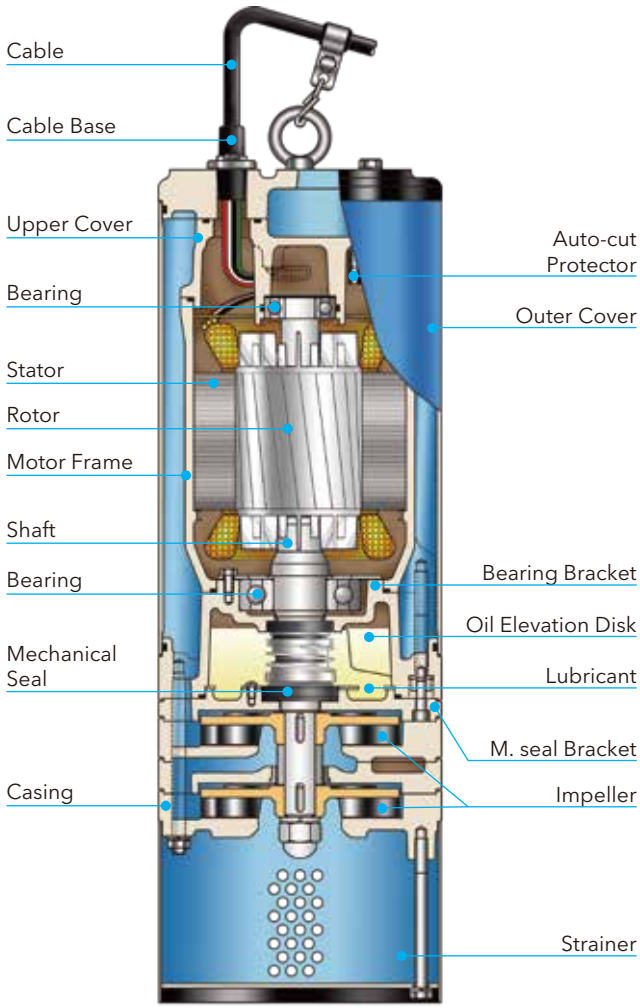


Figure1. The pump can be installed in an 8-inch well for dewatering.



BD-SH

SUBMERSIBLE DEWATERING PUMPS

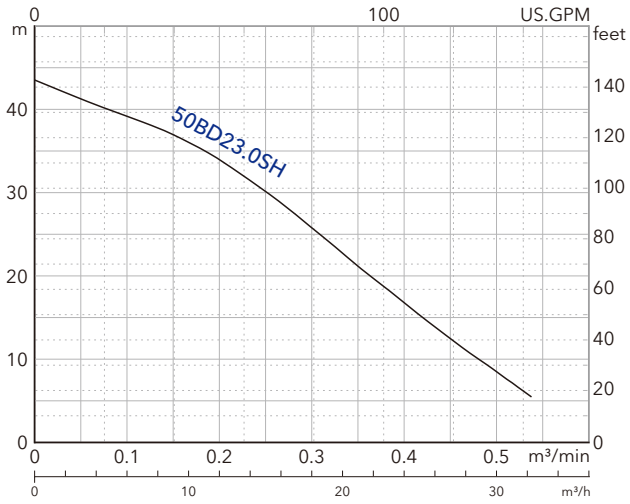
APPLICATIONS

- Dewatering for Civil engineering, tunneling, groundworks, mining, manhole sewer, and infrastructure construction, etc.
- Working shaft water supply and dewatering.
- Any other application require tandem connection for positive pressure and high-head conditions.

PRODUCT NOMENCLATURE

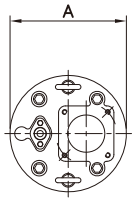
50	BD	2	3.0	SH
Discharge	Type	Pole	kW	high heads

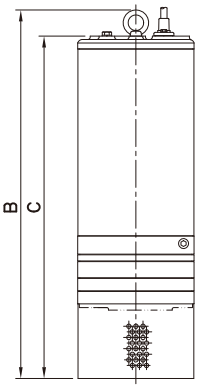
PERFORMANCE CURVES



SPECIFICATIONS

Item		Description
Limits of Use	Liquid Temp.	0~40°C (32~104°F)
	Applications	Construction sites • Basins dewatering
Type	Frequency	60Hz
	Motor	2P(3600rpm) • Dry Motor
	Insulation	Class F
	Protection	IP68
	Protector	Auto-cut
	Bearing	Ball type
	M.seal	Double M.seals
	Impeller	Open
Material	Outer cover	SPCC / A366
	Upper Cover	FC200 / ASTM-30
	Motor Frame	FC200 / ASTM-30
	Shaft	SUS403 / ASTM 403
	M.seal	CA/CE & SiC/SiC
	Casing+ Wear Plate	FCD500 / Gr.65-45-12 + SUS304 / AISI 304
	Impeller	HiCrFC
	Cable	VCT or SOW
Optional		Pumps can be customized to fit specifications





PERFORMANCE SPECS.

※ Note : Weight Without Cable & Outlet.

Model	Output HP(kW)	Discharge Inch(mm)	Phase Ø	Start Method	Standard m-m³/min	Standard ft-GPM	Solid Passage mm(inch)	Weight kg(lb)	Dimensions mm A	Dimensions mm B	Dimensions mm C
50BD23.0SH	4(3.0)	2"(50)	3	DOL	33-0.2	108.3-52	7(1/4")	46(101)	187	593	551

OPTIONAL OUTLET SET

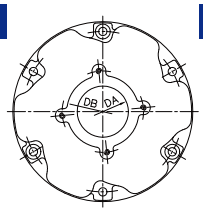
Output HP(kW)	Discharge inch(mm)	Lower PCD*Holes	LOH Hose Connection	LOT Male Thread Connection	LOF Flange Connection	LKF Double Flange Set	LEB Elbow Sets	LOC Center Line Flange
								
4(3.0)	2"(50)	98*4	LOH2-98	LOT2-98	LOF2-120-125*98	LKF2-120*98	LEBX-98	LOC2-120*98
30(22)	4"(100)	185*5	LOH4-185	LOT4-185	-	-	-	-
	6"(150)	185*5	LOH6-185	LOT6-185	-	-	-	LOC6-240*185
	8"(200)	185*5	LOH8-185	-	-	-	-	-

※Pumps require center align could adapt with LOC sets, which can prevent center of gravity (CG) swift under pipe connection, keep dewatering in alignment with pipe arrangement.

OPTIONAL ADTC (ADAPTER CONNECTION) CASING

a

b



c

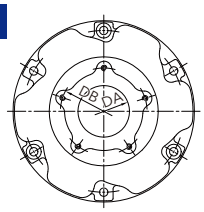


Figure	Model	mm		Bolt Size	Screw Number
		DA	DB		
a	50BD23.0SH	55	98	M8*25L	4
b	100BD222	100	175	M12*30L	4
b	150BD222	110	175	M12*35L	4
c	150(200)BD222	120	185	M12*35L	5

※The water inlet needs to be wider than the DA to ensure sufficient water supply.

PRODUCT NOMENCLATURE

LOH	4	–	185
Type	Discharge		PCD

LOF	2	–	120-125	*	98
Type	Discharge		PCD (upper flange)		PCD (lower flange)

PARTS: LOF FLANGE CONNECTION

The optional LOF flange connection can be purchased to convert the BD-SH Series into an ADTC (Adapter Connection) type for tandem connection in a positive pressure environment.

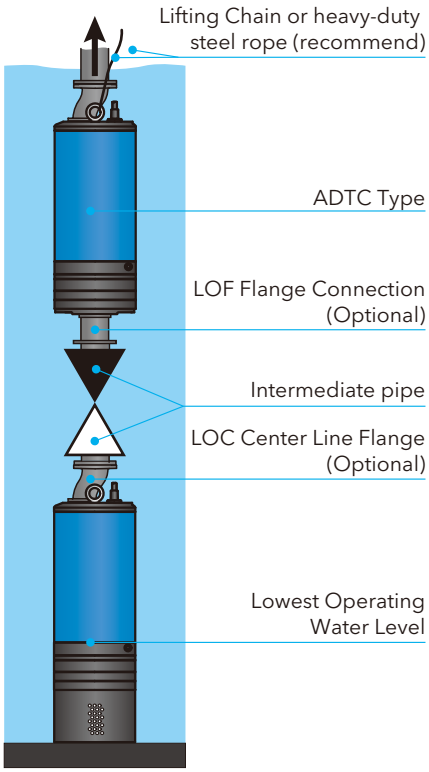
TANDEM CONNECTION

Tandem Connection involves linking two BD-SH Series pumps to double the head compared to a single pump under the same flow.

Caution for Installation:

For guidance and technical support on tandem connection, please consult your HCP distributor for model selection, piping, and installation methods.

1. Tandem Connection can double the pump's head, operating between 40~70m; the maximum pressure the pump can handle is 7.0kg/cm2, and the pumps must be connected by an intermediate pipe.
2. Check the weight-bearing capacity for the 2 eyebolts on each pump and ensure the weight of the intermediate pipes and the weight force exerted on the eyebolts during installation and lifting do not exceed the weight-bearing capacity at all times.
3. The lower pump must be installed at the pit bottom. Do not hang the pump in mid-air nor put the weight of the intermediate pipe and the upper pump on the lower pump.
4. The pump must be vertically installed at the pit bottom to maintain a constant pumping pressure. Do not install the pumps horizontally in the pit nor on the ground.
5. Do not connect pumps of different models. Incorrect connection will lead to operation failure and malfunction.



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