

NO. A-14662-2

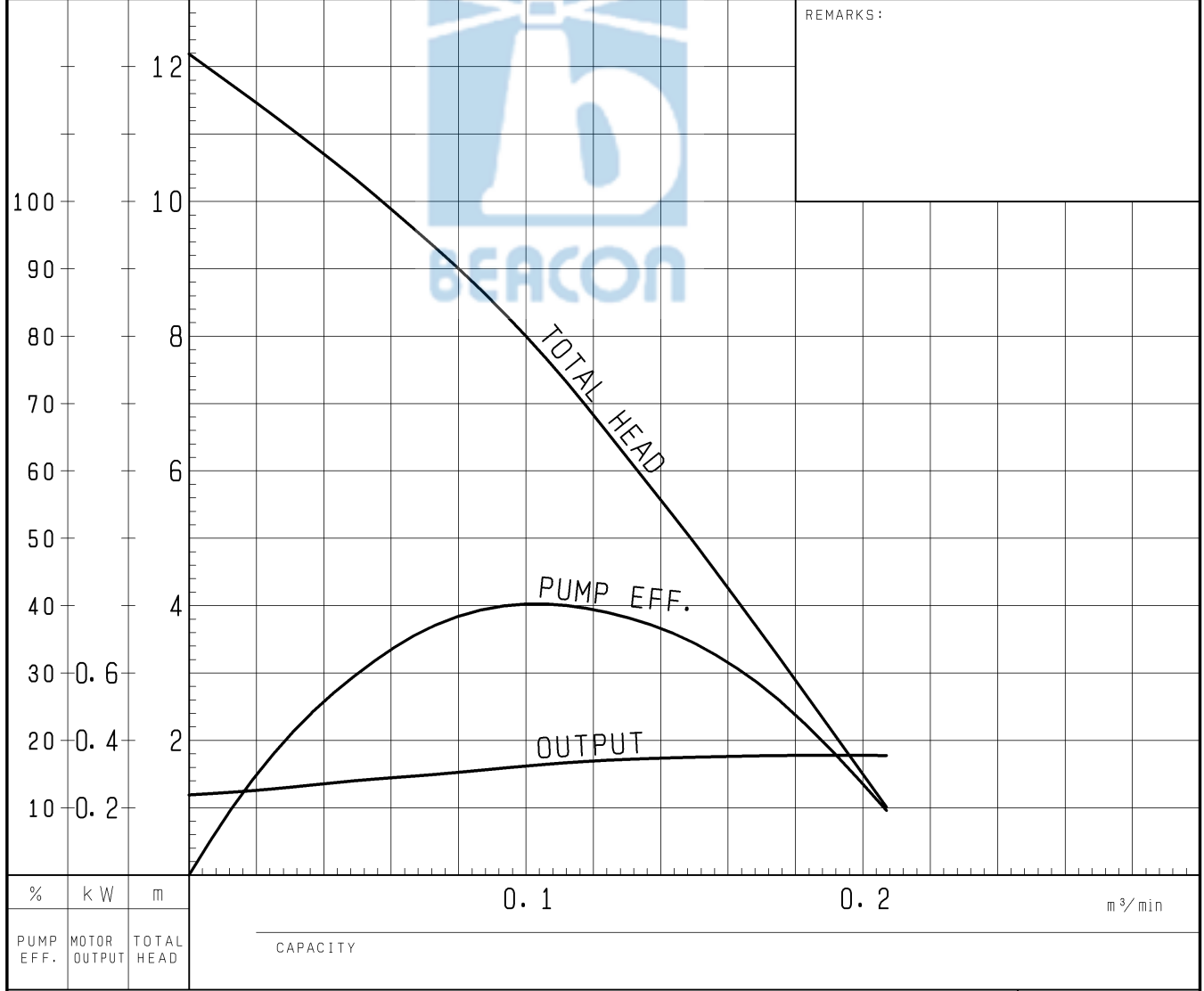
PUMP PERFORMANCE CURVES

TYPE	Submersible Portable Dewatering Pump	MODEL	HS2.4S -53 HSZ2.4S -53	FREQUENCY	50 Hz
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CUSTOMER'S NAME _____

EQUIPMENT TITLE _____ NO. _____

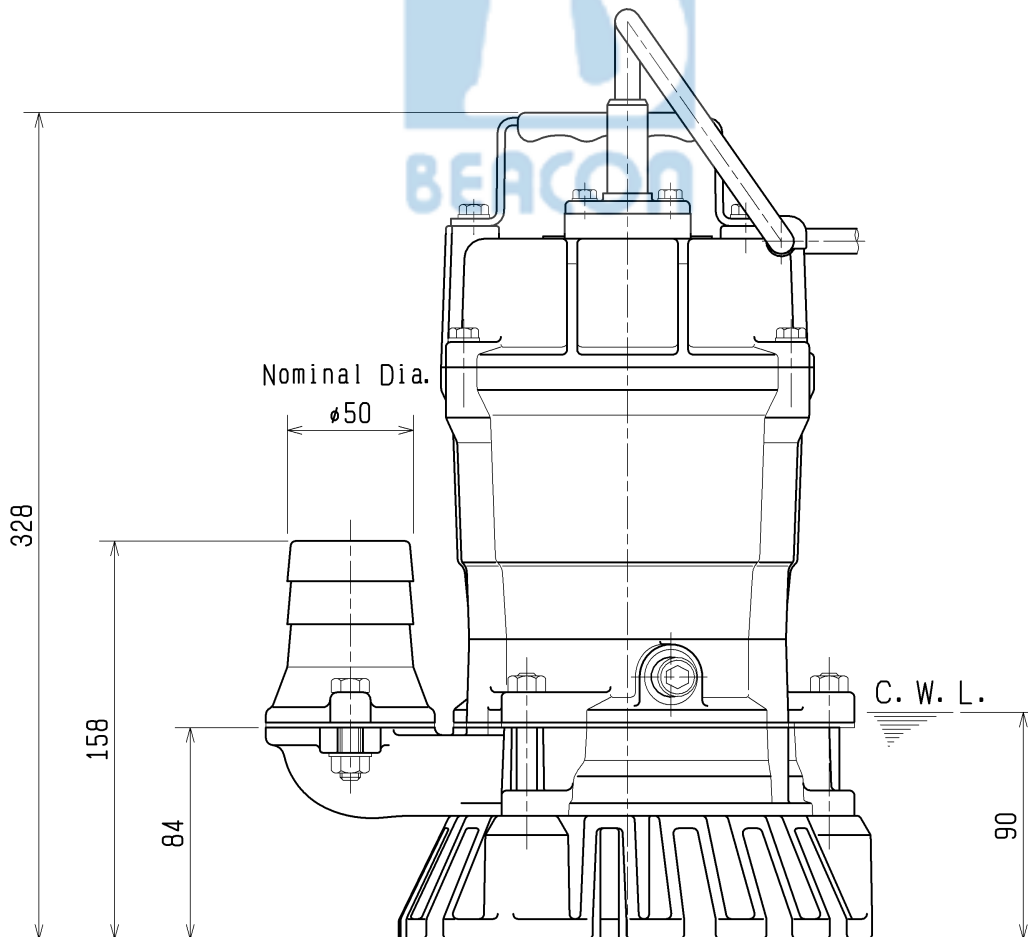
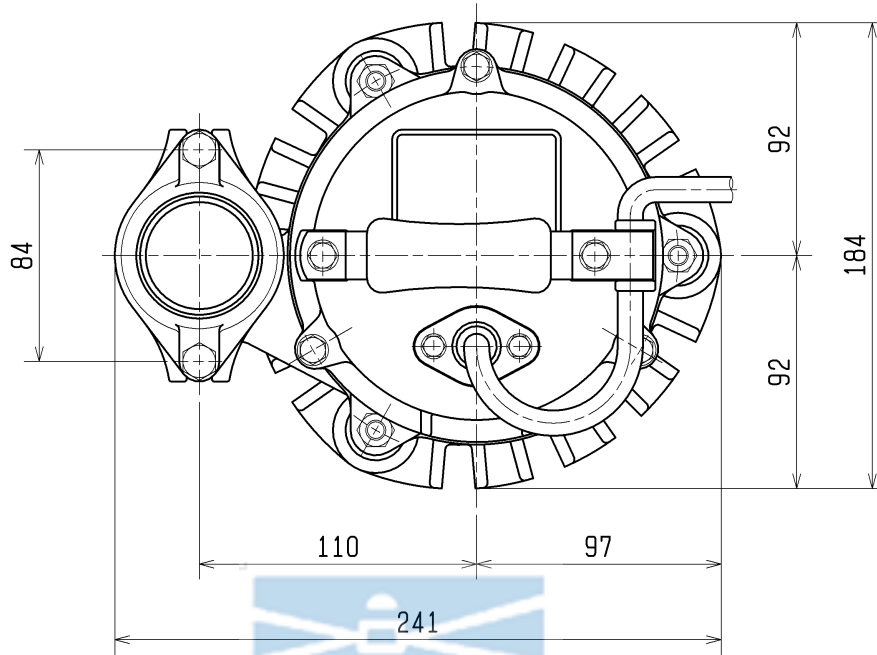
	STANDARD SPECIFICATIONS	REQUIRED SPECIFICATIONS
DISCHARGE BORE	50 mm	mm
TOTAL HEAD	8 m	m
CAPACITY	0.1 m ³ /min	m ³ /min
MOTOR OUTPUT	0.4 kW	kW
PHASE x VOLTAGE	1 ϕ x V	ϕ x V
CURRENT	A	A
POLES / REVOLUTION	2 P / S. S. 3000 min ⁻¹	P / min ⁻¹
STARTING METHOD	CAPACITOR MOTOR	
INSULATION CLASS	E	



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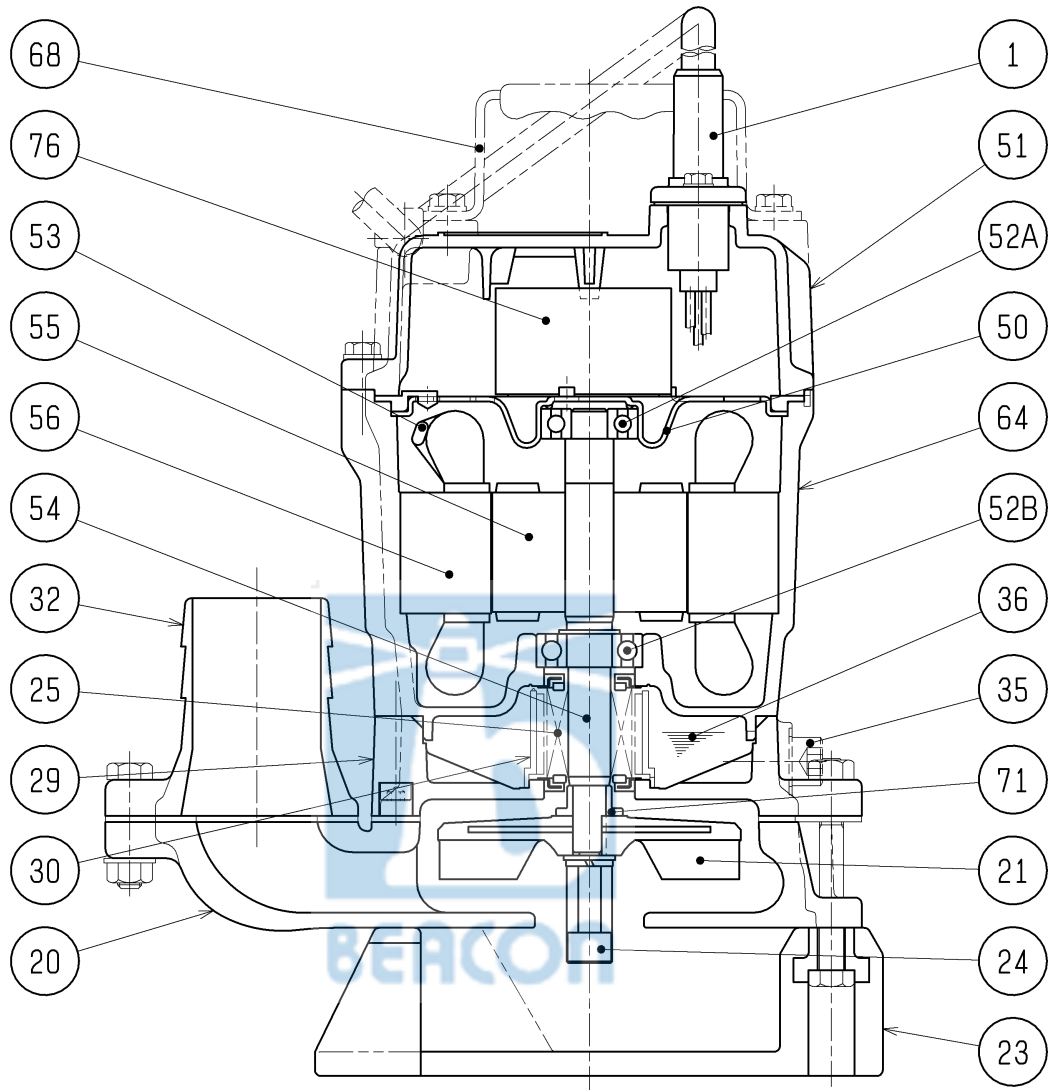
DIMENSION DRAWING		No.	No. A-09152-3
TYPE	Submersible Portable Dewatering Pump	MODEL	HS2.4S -53/63

Approximate
Weight(※)
11.3kg
※excluding cable



C. W. L. :Continuous running Water Level

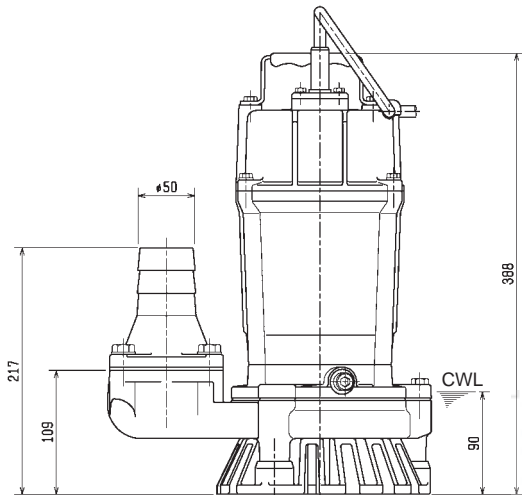
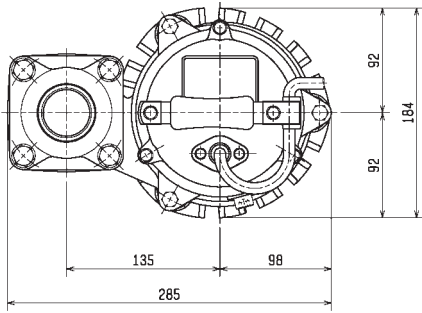
SECTIONAL DRAWING		No.	No. A-09153-7
TYPE	Submersible Portable Dewatering Pump	MODEL	HS2.4S -53/63



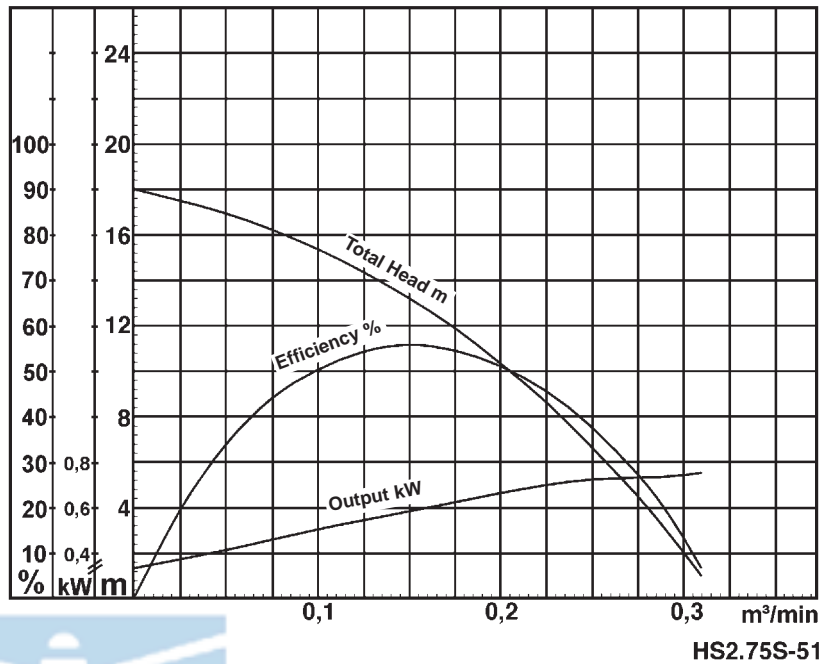
REQ. SPECIFICATION		

No.	DESCRIPTION	QTY	MATERIAL / NOTE	No.	DESCRIPTION	QTY	MATERIAL / NOTE
1	Cable	1	PVC Sheath	52A	Upper Bearing	1	6201ZC3
20	Pump Casing	1	Gray Iron Casting	52B	Lower Bearing	1	6202ZC3
21	Impeller	1	Urethane Rubber	53	Motor Protector	1	
23	Strainer Stand	1	Vinyl Chloride	54	Shaft	1	Stainless Steel 403
24	Agitator	1	Sintered Alloy	55	Rotor	1	
25	Mechanical Seal	1	W-14VCA	56	Stator	1	
29	Oil Casing	1	Gray Iron Casting	64	Motor Frame	1	Aluminium Die Casting
30	Oil Lifter	1	Plastic	68	Handle	1	Steel Sheet & Natural Rubber
32	Hose Coupling	1	Aluminium Die Casting	71	Shaft Sleeve	1	Stainless Steel 304
35	Oil Plug	1	Stainless Steel 304	76	Capacitor	1	
36	Lubricant		Turbine Oil (ISO VG32)				
50	Motor Bracket	1	Steel Sheet				
51	Motor Head Cover	1	Aluminium Die Casting				

Data Sheet HS2.75S-51



CWL = Continuous running water level
HS2.75S-51
dimensions in mm



Classification

Electric submersible pump
Protection class IP68
Depth of submersion max. 20m
Semi-vortex impeller with Agitator
Max. solid handling 7mm
Suitable for rain water, ground water, sand carrying water

Electric Motor

Dry-type submersible induction motor
Insulation class E, 2 poles, 2812 r.p.m.
Capacitor start
Voltage: 110V/230V, 50Hz, 1-phase
Power input: 1,05kW
Power output: 0,75kW
Nominal current: 10,0A(110V) / 4,6A(230V)
Start current: 27,0A(110V) / 14,0A(230V)

Electric cable

10m HO7RN-F 3Cx1,5mm² (110V)
10m HO7RN-F 3Cx1mm² (230V)

Motor Protection

Circle thermal protector
(snap-action bi-metal device)

Shaft Seal

Double mechanical seal in oil bath
additional lubrication by oil lifting device
Primary Seal:
silicon carbide on silicon carbide
Secondary Seal:
carbon on ceramic

Bearings

Shielded ball bearings, maintenance-free

Materials

Impeller: Urethane rubber
Casing: FCD700 (EN-GJS-700-2)
Motor frame: Aluminium alloy casting
Shaft: SUS403 (EN-X6Cr13)

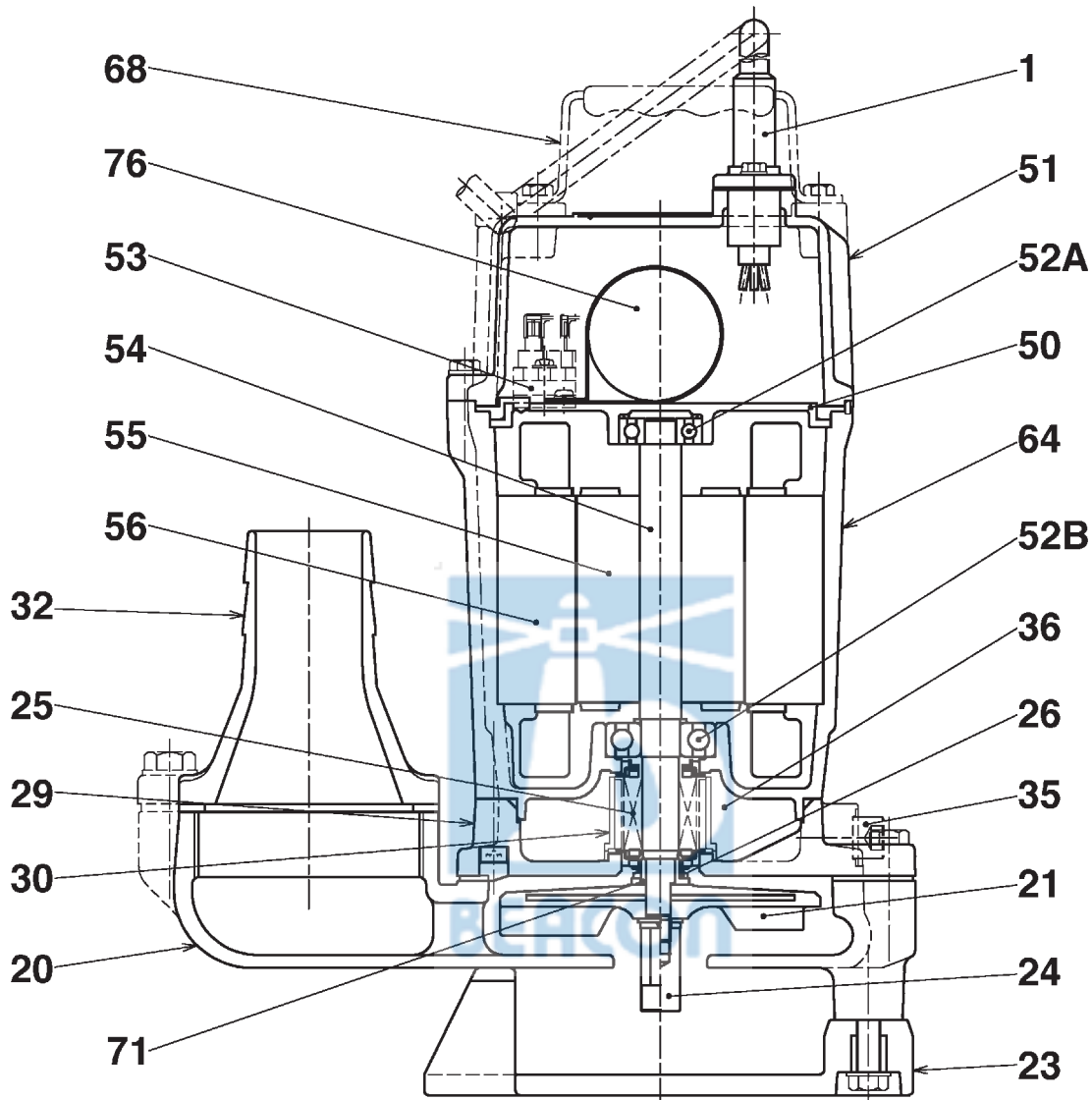
Discharge Connection

2" (50mm) BS-Coupling (threaded flange)

Weight

18,2 kg (dry weight of the pump without cable)

Sectional Drawing HS2.75S-51



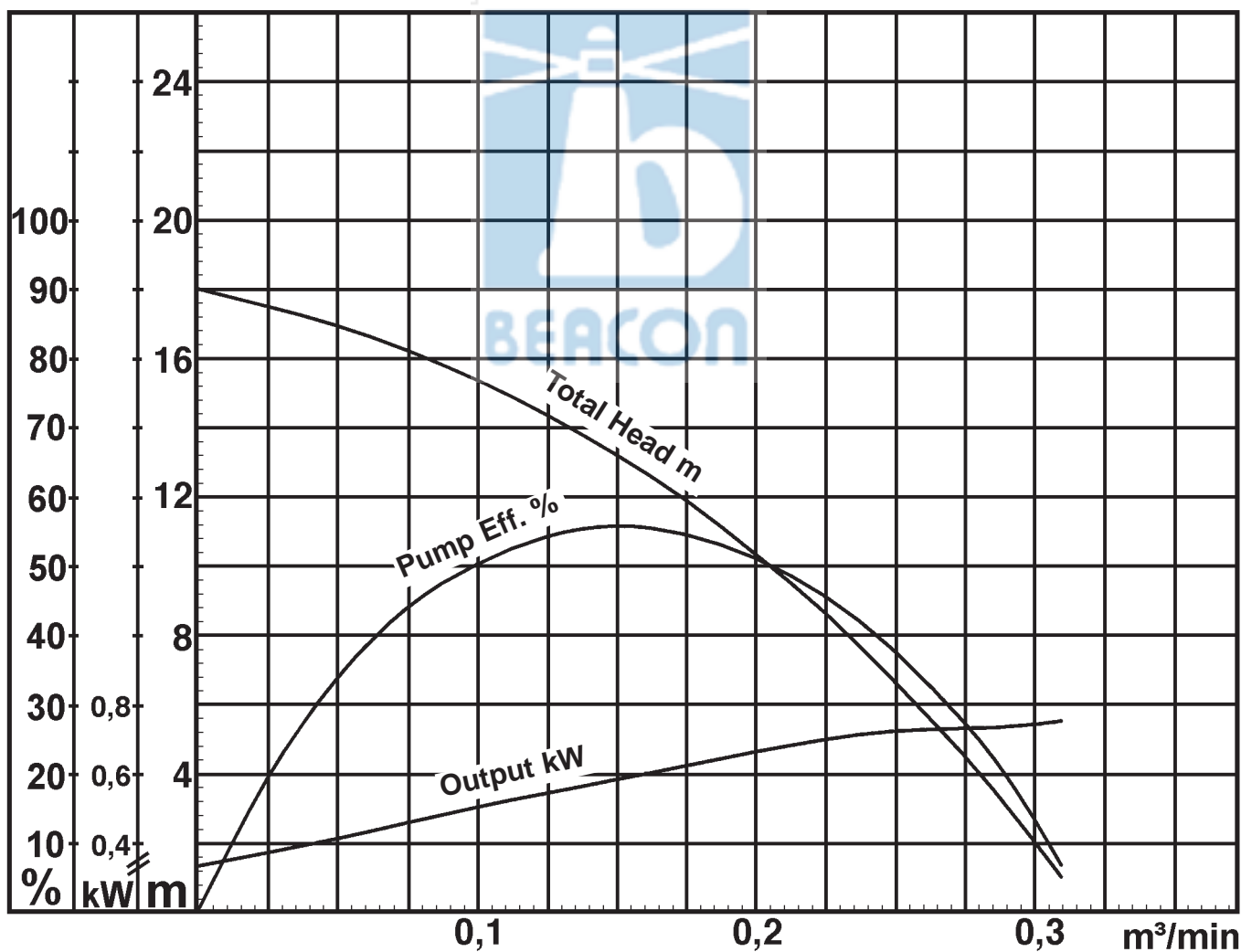
HS2.75S-51

No.	Description	Qty.	Remarks	No.	Description	Qty.	Remarks
1	Cabtyre Cable	1	H07RN3Cx1mm ² x10m	50	Motor Bracket	1	Aluminium die casting
20	Pump Casing	1	FCD700 (EN-GJS-700-2)	51	Head Cover	1	Aluminium die casting
21	Impeller	1	Urethane rubber	52A	Upper Bearing	1	6201ZZC3
23	Strainer Stand	1	PVC	52B	Lower Bearing	1	6302ZZC3
24	Stirrer	1	Sintered Alloy	53	Motor Protector	1	
25	Mechanical Seal	1	W-14VL	54	Shaft	1	SUS403 (EN-X6Cr13)
26	V-Seal	1	Nitril Butadiene Rubber	55	Rotor	1	
29	Oil Casing	1	FC200 (EJ-GJL-200)	56	Stator Complete	1	
30	Oil Lifter	1	Plastic	64	Motor Frame	1	Aluminium die casting
32	Hose Coupling	1	Aluminium die casting	68	Handle	1	Steel plate/natural rubber
35	Oil Plug	1	SUS304 (EN-X5CrNi18-10)	71	Shaft Sleeve	1	SUS304 (EN-X5CrNi18-10)
36	Lubricant	1	Turbine oil ISO VG 32	76	Capacitor	1	

Pump Performance Curve

HS2.75S-51

Discharge Bore	50 mm
Total Head	max.15 m
Capacity	max. 0,30 m ³ /min
Motor Output	0,75 kW
Motor Input	1,05 kW
Phase	1
Voltage	110/230 V
Frequency	50 Hz
Rated Current	10,0/4,6 A
Starting Current	27,0/14,0 A
Poles	2
Revolution	S.S. 2812 r.p.m.
Starting Method	Capacitor
Insulation Class	E



HS2.75S-51

NO. A-20953-2

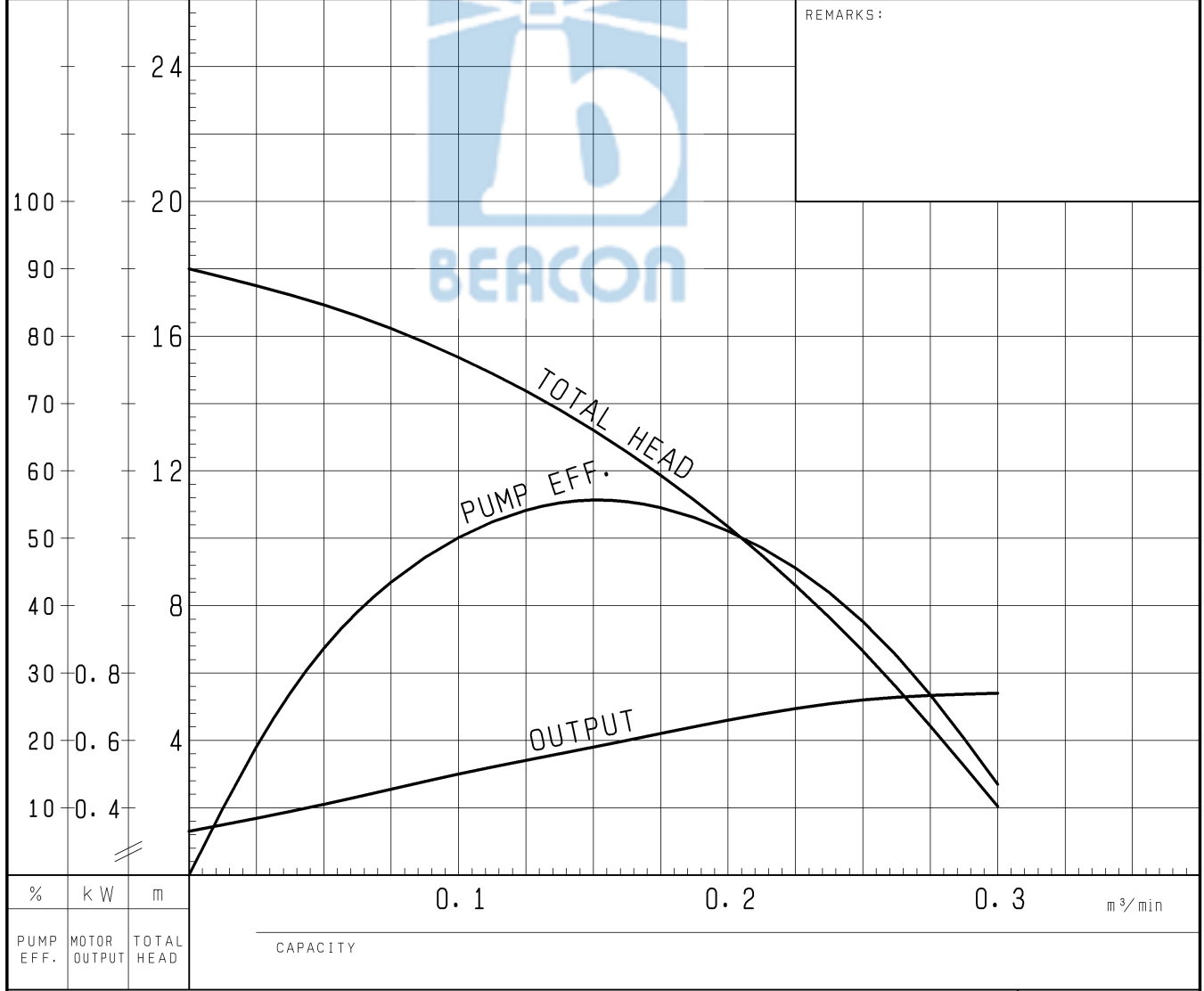
PUMP PERFORMANCE CURVES

TYPE Submersible Portable Dewatering Pump	MODEL HS3.75S -52 HSZ3.75S -52	FREQUENCY 50 Hz
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CUSTOMER'S NAME _____

EQUIPMENT TITLE _____ NO. _____

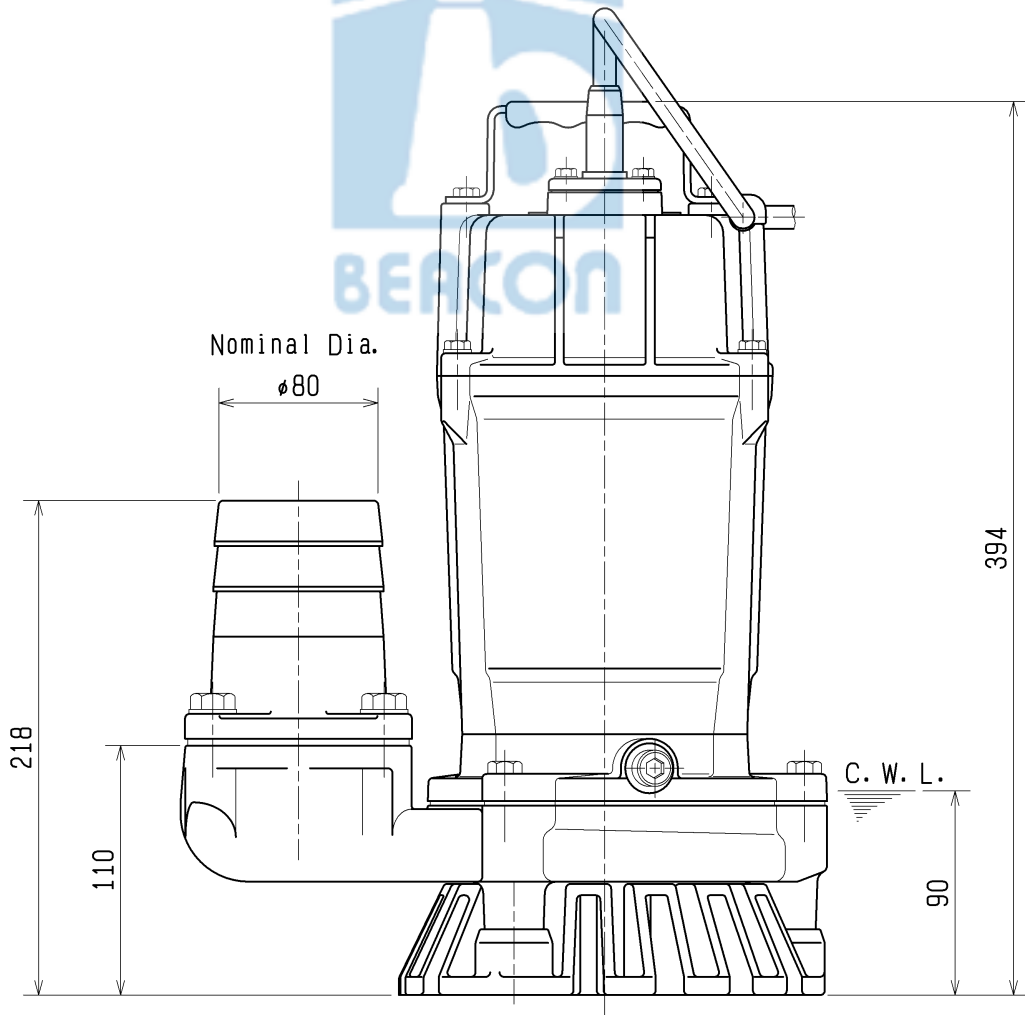
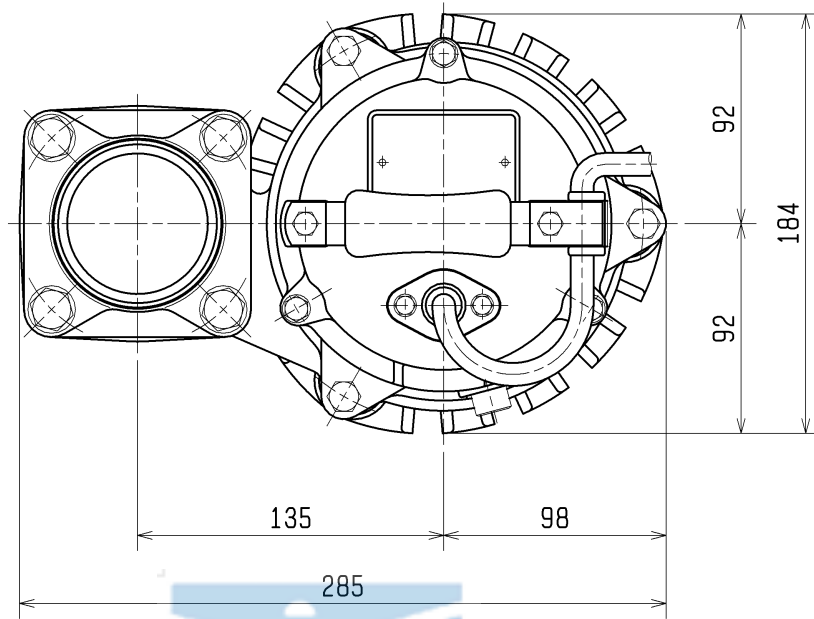
	STANDARD SPECIFICATIONS	REQUIRED SPECIFICATIONS
DISCHARGE BORE	80 mm	mm
TOTAL HEAD	MAX. 18 m	m
CAPACITY	MAX. 0.30 m ³ /min	m ³ /min
MOTOR OUTPUT	0.75 kW	kW
PHASE x VOLTAGE	1 ϕ x V	ϕ x V
CURRENT	A	A
POLES / REVOLUTION	2 P / S. S. 3000 min ⁻¹	P / min ⁻¹
STARTING METHOD	CAPACITOR MOTOR	
INSULATION CLASS	E	



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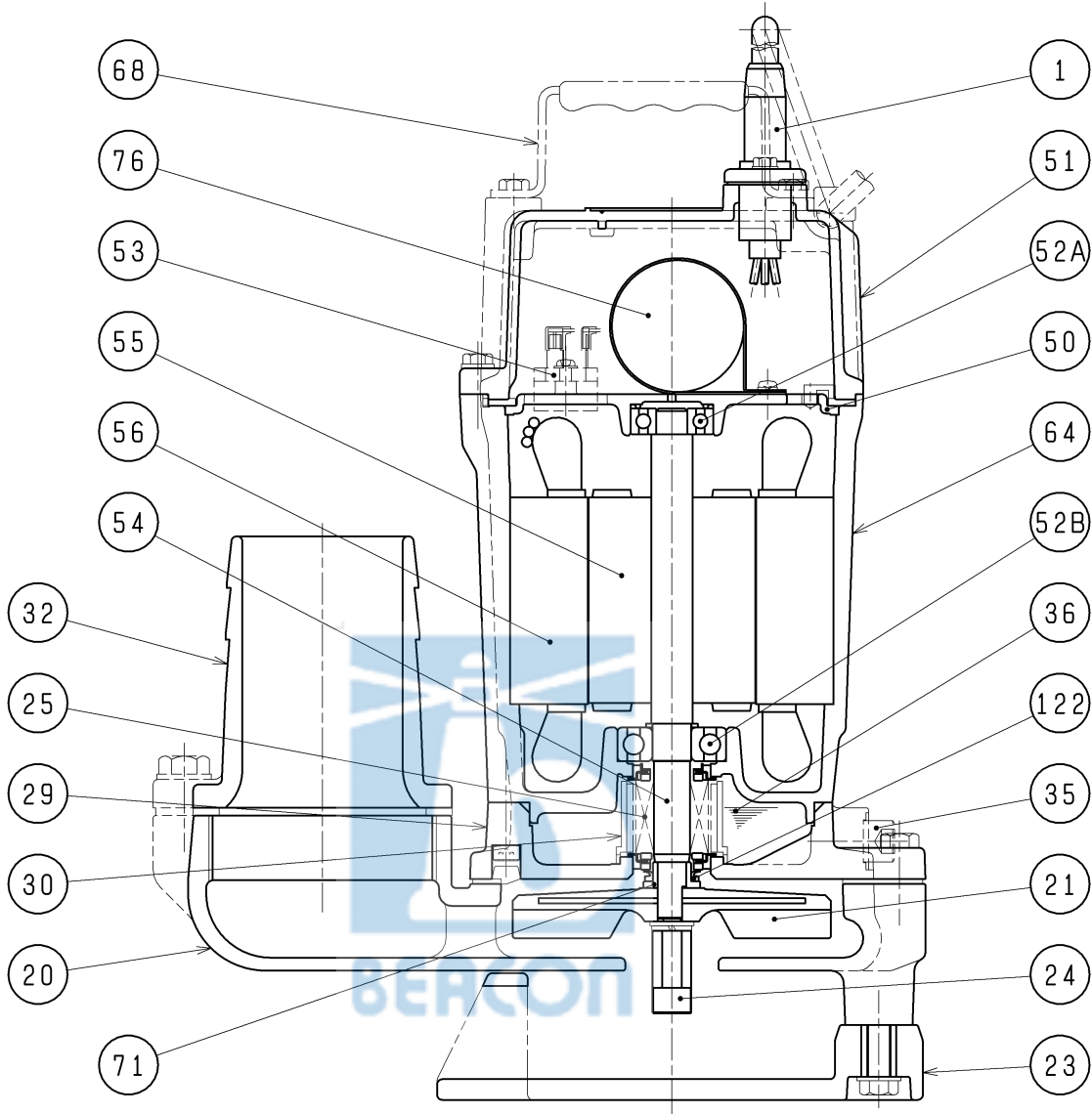
DIMENSION DRAWING		No.	No. A-20956-2
TYPE	Submersible Portable Dewatering Pump	MODEL	HS3.75S -52/62

Approximate Weight (※)
16.8kg
※excluding cable



C.W.L. :Continuous running Water Level

SECTIONAL DRAWING		No.	No. A-20964-2
TYPE	Submersible Portable Dewatering Pump	MODEL	HS3.75S -52/62



REQ. SPECIFICATION	

※ the wetted part

No.	DESCRIPTION	Q'TY	MATERIAL / NOTE	No.	DESCRIPTION	Q'TY	MATERIAL / NOTE
1	Cabtyre Cable	1	PVC Sheath	52A	Upper Bearing	1	6201ZC3
20	Pump Casing	1	Ductile Iron Casting	52B	Lower Bearing	1	6302ZC3
21	Impeller	1	Urethane Rubber	53	Motor Protector	1	
23	Strainer Stand	1	Vinyl Chloride	54	Shaft	1	Stainless Steel 403(※)
24	Agitator	1	Sintered Alloy	55	Rotor	1	
25	Mechanical Seal	1	W-14VC	56	Stator	1	
29	Oil Casing	1	Ductile Iron Casting	64	Motor Frame	1	Aluminium Die Casting
30	Oil Lifter	1	Plastic	68	Handle	1	Steel Sheet & Natural Rubber
32	Hose Coupling	1	Aluminium Die Casting	71	Shaft Sleeve	1	Stainless Steel 304
35	Oil Plug	1	Stainless Steel 304	76	Capacitor	1	
36	Lubricant		Turbine Oil (ISO VG32)	122	V-ring	1	Nitrile Butadiene Rubber
50	Motor Bracket	1	Aluminium Die Casting				
51	Motor Head Cover	1	Aluminium Die Casting				

New Product Release

New Drainage pump HS3.75SL

No.: NPR 69-002

Date: 8nd Nov, 2019

A low head, high volume capacity of HS(Z)3.75SL are launched in as HS series. (This time, only 50Hz version is available. 60Hz version will be launched later on.)

New HS(Z)3.75SL are as well as the existing HS series with their wear-prone parts constructed of wear-resistant materials, they are also superbly durable. Moreover, the shaft incorporates an agitator.

The new HS(Z)3.75SL casing and impeller height are higher than the existing HS series.

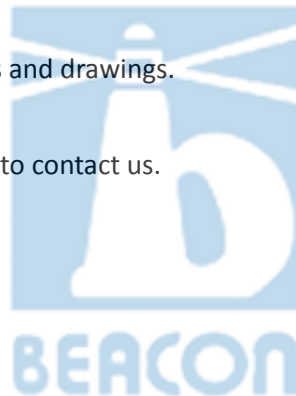
■ Interchangeability between HS(Z)3.75S

All components except impeller and pump casing will be interchangeable.

Please find attached specification sheets and drawings.

If you have any request, please feel free to contact us.

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INTERNATIONAL SALES DIVISION



Series: HS	Discharge Bore: 50-80mm	Motor Output / Pole: 0.4-0.75kW / 2-pole
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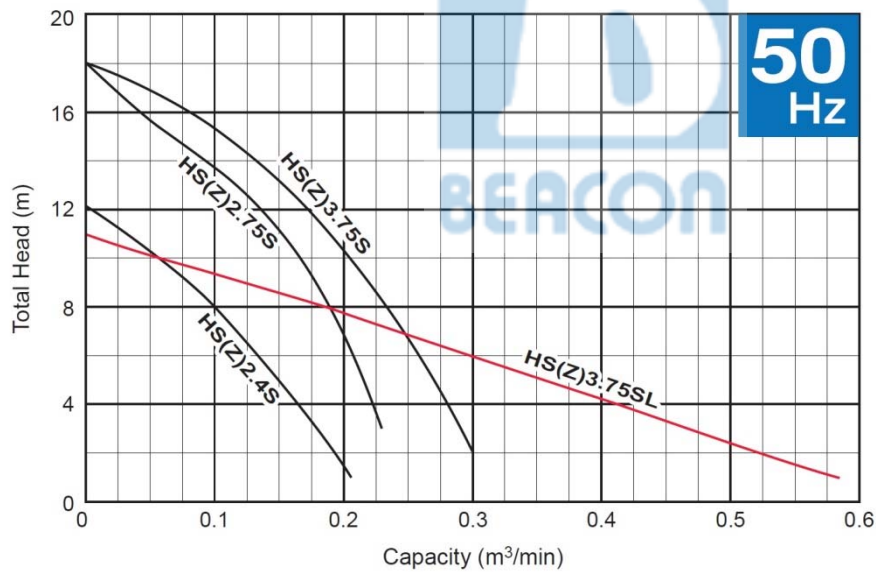


The HS-series is a submersible single-phase portable drainage pump. Though it is a single-phase unit, the pump has the durability equivalent to three-phase drainage pumps, since the wear parts are made of abrasion-resistant materials. The side discharge, spiral design allows smoother passage of the sucked solid matters. The shaft-mounted agitator prevents "Air Lock" that tends to take place on vortex or semi-vortex pumps.

Selection Table

Model	Discharge Bore mm	Motor Output kW	Phase	Starting Method	Pole	Dry Weight kg
HS2.4S	50	0.4	1-phase	Capacitor Run	2	11.3
HS2.75S	50	0.75	1-phase	Capacitor Run	2	16.4
HS3.75S	80	0.75	1-phase	Capacitor Run	2	16.8
HS3.75SL	80	0.75	1-phase	Capacitor Run	2	19.6

Performance Curves



SPECIFICATIONS	Model	HS-series 0.75kW, 1-phase
<p>Type of Pump Submersible drainage pump for construction and foundation works, floodwater drainage, etc.</p> <p>Type of Fluid Stormwater, groundwater, wash water, and sand-carrying water</p> <p>Temperature: 0 to 40°C</p> <p>Discharge Bore & Connection 80mm, Hose Coupling</p> <p>Motor Output 0.75kW</p> <p>Power Supply Single-phase</p> <p>Starting Method Capacitor Run</p> <p>Motor Continuous-duty rated, dry-type induction motor</p> <p>Insulation Class: E Degree of Protection: IP68</p> <p>No. of Poles & Speed (Synchronous Speed) 2-pole, 3000min⁻¹ (50Hz)</p> <p>Power Supply Voltages & Rated Currents 50Hz 110V – 10.5A 220V – 4.9A 230V – 4.8A 240V – 4.7A</p> <p>Power Cable Sheath: PVC Standard Length: 5m 1 x 3 x 1.25mm², O.D. 10.1mm</p> <p>Dry Weight (excluding cable) 19.6kg</p>	<p>Impeller Vortex impeller deigned for “high-gap structure”, made of urethane rubber</p> <p>Solids Passage 50Hz – ϕ7mm</p> <p>Agitator Sintered alloy</p> <p>Cable Entry with Anti-Wicking Block Watertight cable entry with strain-relief device. The anti-wicking block prevents water incursion due to capillary action should the power cable be damaged or the end submerged.</p> <p>Bearing Permanently lubricated, deep-groove, double-shielded C3 ball bearings</p> <p>Shaft 403 stainless steel</p> <p>Shaft Seal (Mechanical Seal) Furnished with a double-face mechanical seal located in oil chamber. Both upper and lower seal faces always run in a clean environment.</p> <p>Upper Seal Face: Ceramic + Carbon Lower Seal Face: SiC + Ceramic</p> <p>V-Ring Used as a “Dust Seal”, it protects the mechanical seal from abrasive particles.</p> <p>OIL LIFTER (Patented) Equipped in oil chamber. It forcibly supplies lubricating oil to the mechanical seal and continues to supply the oil to the upper seal faces even if lubricant falls below the rated volume.</p> <p>Type of Lubricating Oil & Volume Turbine Oil (ISO VG32), 160ml</p> <p>Motor Protection Device A circle thermal protector built in the motor housing. Directly cuts the motor circuit if excessive heat builds up or an overcurrent condition occurs in the motor.</p>	

DIMENSIONS

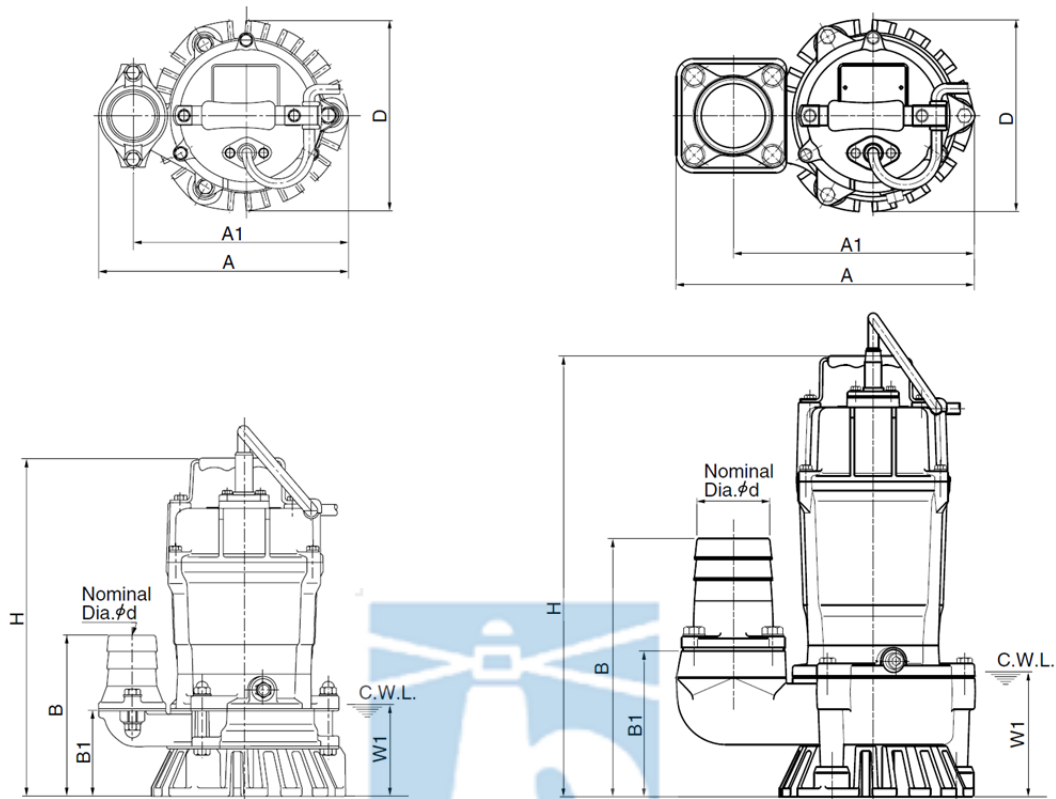
Model

HS2.4S to HS3.75SL

HS-series

50·80mm

C. W. L. : Continuous Running Water Level



Unit: mm

Model	d	A	A1	B	B1	D	H	W1
HS2.4S	50	241	207	158	84	184	328	90
HS2.75S	50	285	233	218	110	184	394	90
HS3.75S	80	285	233	218	110	184	394	90
HS3.75SL	80	288	233	249	141	184	425	120

Series: HSZ	Discharge Bore: 50-80mm	Motor Output / Pole: 0.4-0.75kW / 2-pole
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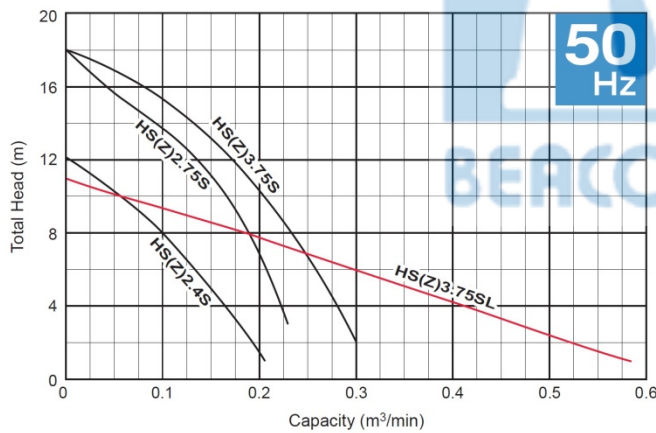


The HSZ-series is a submersible single-phase automatic portable drainage pump. The automatic operation, controlled by a single float switch, reduces power consumption and extends operating life. Though the pump is a single-phase unit, it has the durability equivalent to three-phase drainage pumps, since the wear parts are made of abrasion-resistant materials. The side discharge, spiral design allows smoother passage of the sucked solid matters. The shaft-mounted agitator prevents "Air Lock" that tends to take place on vortex or semi-vortex pumps.

Selection Table

Model	Discharge Bore mm	Motor Output kW	Phase	Starting Method	Pole	Dry Weight kg
HSZ2.4S	50	0.4	1-phase	Capacitor Run	2	11.3
HSZ2.75S	50	0.75	1-phase	Capacitor Run	2	16.4
HSZ3.75S	80	0.75	1-phase	Capacitor Run	2	16.8
HSZ3.75SL	80	0.75	1-phase	Capacitor Run	2	19.6

Performance Curves



SPECIFICATIONS	Model	HS-series
	HSZ3.75SL	0.75kW, 1-phase
<p>Type of Pump Submersible drainage pump for construction and foundation works, floodwater drainage, etc.</p> <p>Automatic Control Device Float Switch</p> <p>Type of Fluid Stormwater, groundwater, wash water, and sand-carrying water Temperature: 0 to 40°C</p> <p>Discharge Bore & Connection 80mm, Hose Coupling</p> <p>Motor Output 0.75kW</p> <p>Power Supply Single-phase</p> <p>Starting Method Capacitor Run</p> <p>Motor Continuous-duty rated, dry-type induction motor</p> <p>Insulation Class: E Degree of Protection: IP68</p> <p>No. of Poles & Speed (Synchronous Speed) 2-pole, 3000min⁻¹ (50Hz)</p> <p>Power Supply Voltages & Rated Currents 50Hz 110V – 10.5A 220V – 4.9A 230V – 4.8A 240V – 4.7A</p> <p>Power Cable Sheath: PVC Standard Length: 5m 1 x 3 x 1.25mm², O.D. 10.1mm</p> <p>Dry Weight (excluding cable) 19.6kg</p>	<p>Impeller Vortex impeller deigned for “high-gap structure”, made of urethane rubber</p> <p>Solids Passage 50Hz – ϕ7mm</p> <p>Agitator Sintered alloy</p> <p>Cable Entry with Anti-Wicking Block Watertight cable entry with strain-relief device. The anti-wicking block prevents water incursion due to capillary action should the power cable be damaged or the end submerged.</p> <p>Bearing Permanently lubricated, deep-groove, double-shielded C3 ball bearings</p> <p>Shaft 403 stainless steel</p> <p>Shaft Seal (Mechanical Seal) Furnished with a double-face mechanical seal located in oil chamber. Both upper and lower seal faces always run in a clean environment.</p> <p>Upper Seal Face: Ceramic + Carbon Lower Seal Face: SiC + Ceramic</p> <p>V-Ring Used as a “Dust Seal”, it protects the mechanical seal from abrasive particles.</p> <p>OIL LIFTER (Patented) Equipped in oil chamber. It forcibly supplies lubricating oil to the mechanical seal and continues to supply the oil to the upper seal faces even if lubricant falls below the rated volume.</p> <p>Type of Lubricating Oil & Volume Turbine Oil (ISO VG32), 160ml</p> <p>Motor Protection Device A circle thermal protector built in the motor housing. Directly cuts the motor circuit if excessive heat builds up or an overcurrent condition occurs in the motor.</p>	
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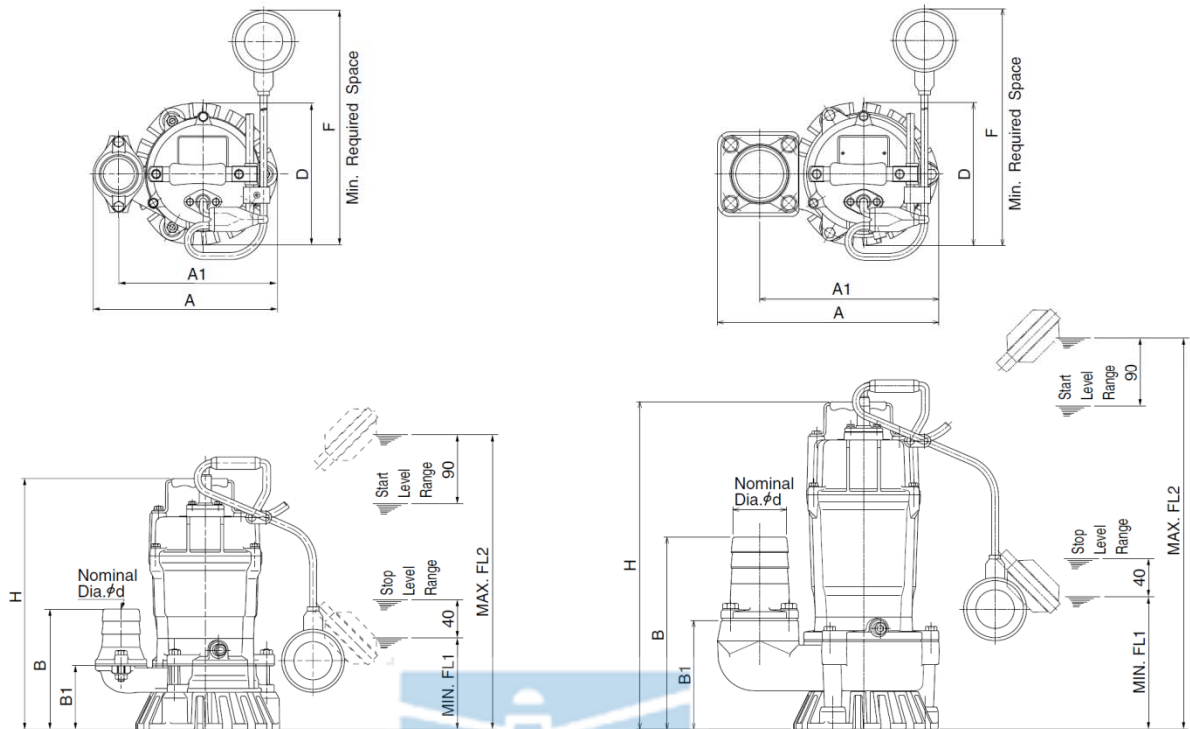
DIMENSIONS

Model

HSZ2.4S to HSZ3.75SL

HSZ-series

50·80mm



Unit: mm

Model	d	A	A1	B	B1	D	F	H	FL1	FL2
HSZ2.4S	50	241	207	158	84	184	340	328	120	385
HSZ2.75S	50	285	233	218	110	184	370	394	150	475
HSZ3.75S	80	285	233	218	110	184	370	394	150	475
HSZ3.75SL	80	288	233	249	141	184	400	425	180	505

BEACON