Submersible Automatic General Dewatering Pumps

HSZ

The Tsurumi Best Seller HS-series is Now Available in Automatic Model with Float Switch

Automatic Operation with Float Switch
The pump employs a float switch for automatic operation to prevent dry running and lower power consumption.

Spiral Design
The large channel in the spiral casing allows sand and silt-laden water to pass through efficiency.

Air Lock Prevention
The shaft-mounted agitator prevents the “air lock” that tends to take place on vortex pumps.

Simple Structure
The pump section can be disassembled and reassembled using a single 13-mm box wrench.

Illustration of Float-action

■ Applications

- Draining at civil engineering or building sites
- Draining storm water, groundwater, or puddles
- Draining from basements or utility pits

Amenics
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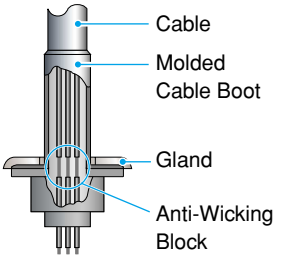
HSZ

Features

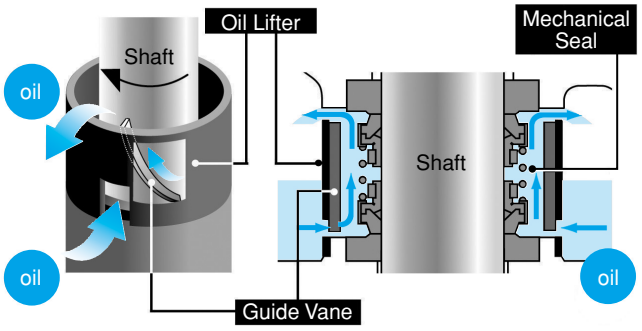
Anti-wicking Cable Entry

Gaps between lead cores are sealed to prevent ingress of water into the motor caused by water traveling along lead cores by capillary action.



Oil Lifter (Patent Pending)

The Oil Lifter mechanism functions to supply oil to the top seal faces even if the lubricant in the oil chamber falls below the rated value, and to stably lubricate and cool the seal faces. This unique mechanism helps extend the service life of the mechanical seal.



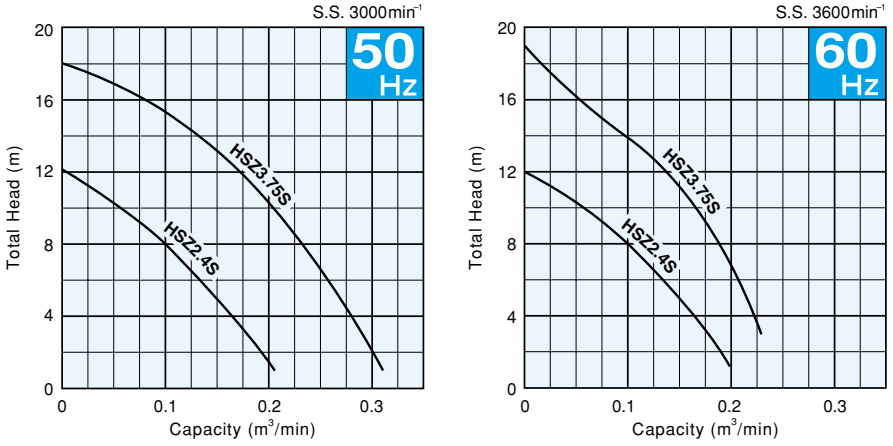
Major Standard Specifications

Discharge Bore mm			50	80(50)
Motor Output kW			0.4 - 0.75	
Pumping Fluid	Type of Fluid		Rain, Spring, Ground, Sand Carrying Water	
	Fluid Temperature		0 to 40°C	
Pump	Structure	Impeller	Semi-vortex	
		Shaft Seal	Double Mechanical Seal (with Oil Lifter)	
		Bearing	Double-shielded Ball Bearing	
	Materials	Impeller	Urethane Rubber	
		Casing	Gray Cast Iron (0.4kW) Ductile Cast Iron (0.75kW)	
		Shaft Seal	Silicon Carbide	
Motor	Type, Pole		Dry Type Submersible Induction Motor, 2-pole	
	Insulation		Class E	
	Phase		Single-phase	
	Starting Method		Capacitor Run	
	Protection Device (Built-in)		Miniature Thermal Protector (0.4kW) Circle Thermal Protector (0.75kW)	
	Lubricant		Turbine Oil (ISO VG32)	
	Materials	Frame	Aluminium Alloy Die-casting	
		Shaft	403 Stainless Steel	
		Cable	PVC	
Discharge Connection			Hose Coupling	

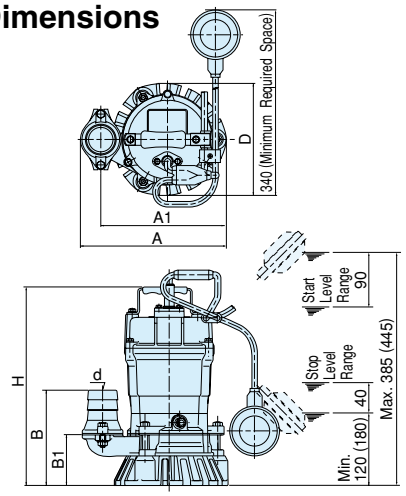
Electrical Specifications of Float Switch

Type of Switch	Micro-switch
Max. Current	16A-110V, 12A-250V
Material of Housing	Polypropylene
Material of Cable	Chloroprene Rubber

Performance Curves



Dimensions



*The figure in parentheses is for the HSZ3.75S.

Standard Specifications 50/60Hz

Discharge Bore mm	Model	Motor Output kW	Phase	Starting Method	Start Level mm	Stop Level mm	Dry Weight kgs	Cable Length m	Dimensions mm						
									d	A	A1	B	B1	D	H
50	HSZ2.4S	0.4	Single	Capacitor Run	385 $^{+0}_{-90}$	120 $^{+40}_{-0}$	11.3	5	50	241	207	158	84	184	328
80(50)	HSZ3.75S	0.75	Single	Capacitor Run	445 $^{+0}_{-90}$	180 $^{+40}_{-0}$	17.5	5	80(50)	285	233	217	109	184	388

- 50 mm discharge available upon request. Note that smaller discharge may increase friction loss.
- The length of the float cable cannot be adjusted. ● Dry weight excluding cable

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