

## 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.

**Start Level**

**Stop Level**



**Illustration of Float-action**

### ■ Applications

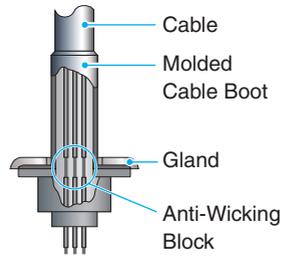
- Draining at civil engineering or building sites
- Draining storm water, groundwater, or puddles
- Draining from basements or utility pits

# HSZ

## Features

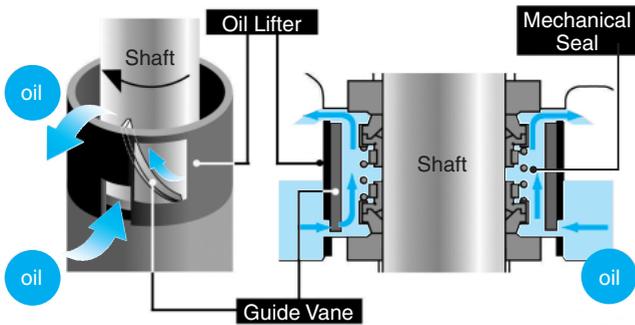
### Anti-wicking Cable Entry

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 (Patented)

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.



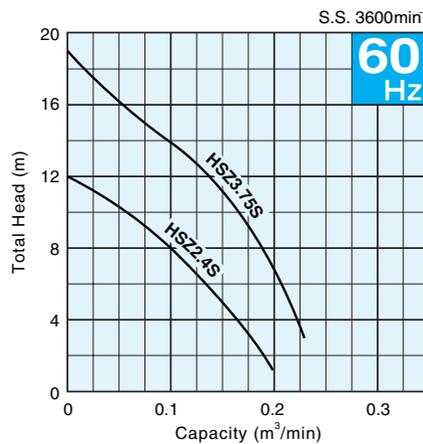
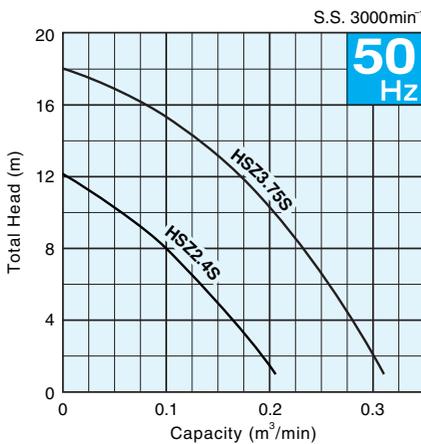
## Major Components & Specifications

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)	
	Materials	Bearing	Double-shielded Ball Bearing	
		Impeller	Urethane Rubber	
Motor	Type, Pole	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		

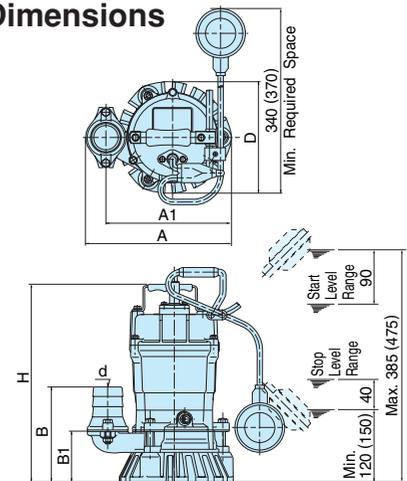
## Electrical Specifications of Float Switch

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.

## Model Selection

Discharge Bore mm	Model	Motor Output kW	Phase	Starting Method	Start Level mm	Stop Level mm	Dry Weight kg	Cable Length m	Dimensions mm						
									d	A	A1	B	B1	D	H
50	HSZ2.4S	0.4	Single	Capacitor Run	385 <sup>+0</sup> <sub>-.90</sub>	120 <sup>+40</sup> <sub>-.0</sub>	11.3	5	50	241	207	158	84	184	328
80(50)	HSZ3.75S	0.75	Single	Capacitor Run	475 <sup>+0</sup> <sub>-.90</sub>	150 <sup>+40</sup> <sub>-.0</sub>	16.8	5	80(50)	285	233	218	110	184	394

- 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

We reserve the right to change the specifications and designs for improvement without prior notice.

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