

Floating Decanter:

FHP

Discharge Bore:

40 - 80mm

Motor Output / Pole:

0.25 - 1.5kW / 2-pole

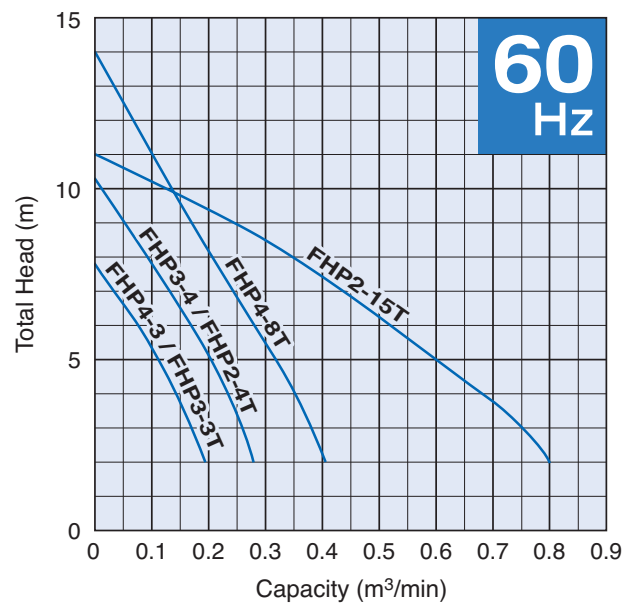
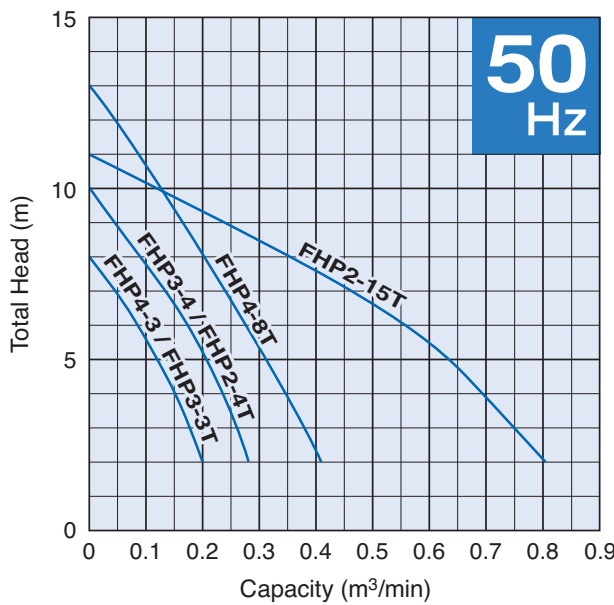


The FHP-series is a floating decanter designed for discharging supernatant liquid in SBR. It consists of a submersible pump, sludge sensor, and a float. The sludge sensor is a monitoring device that prevents unexpected inflow of sludge or other sediment and helps the pump solely discharge supernatant liquid. When the pump is not in operation, a check ball incorporated in the intake closes the suction opening by buoyancy, thus preventing the inflow of floating sludge into the suction casing.

Selection Table

Model	Discharge Bore mm	Motor Output kW	Phase	Pole
FHP4-3	40	0.25	1-phase	2
FHP3-3T	40	0.25	3-phase	2
FHP3-4	50	0.4	1-phase	2
FHP2-4T	50	0.4	3-phase	2
FHP4-8T	50	0.75	3-phase	2
FHP2-15T	80	1.5	3-phase	2

Performance Curves



SPECIFICATIONS	Model	FHP-series
		0.25kW, 1-phase

<p>Type of Equipment Floating decanter with a built-in submersible pump and sludge sensor suitable for discharging supernatant liquid in SBR</p> <p>Type of Fluid Treated water</p> <p>Temperature: 0 to 40°C</p> <p>Discharge Bore & Connection 40mm, Hose Coupling</p> <p>Motor Output 0.25kW</p> <p>Power Supply Single-phase</p> <p>Starting Method Capacitor Start</p> <p>Motor Continuous-duty rated, dry-type induction motor</p> <p>Insulation Class: E (available in F on special request) Degree of Protection: IP68</p> <p>No. of Poles & Speed (Synchronous Speed) 2-pole, 3000/3600min⁻¹ (50/60Hz)</p> <p>Power Supply Voltages & Rated Currents</p> <table border="0"> <tr> <td>50Hz</td> <td>60Hz</td> </tr> <tr> <td>220V – 3.2A</td> <td>110V – 5.5A</td> </tr> <tr> <td>230V – 3.0A</td> <td>220V – 2.7A</td> </tr> <tr> <td>240V – 2.9A</td> <td></td> </tr> </table> <p>Power Cable Sheath: PVC Standard Length: 6m 100 to 240V supply: 1 × 3 × 1.25mm², O.D. 10.1mm</p> <p>Dry Weight (excluding cable) 29kg</p>	50Hz	60Hz	220V – 3.2A	110V – 5.5A	230V – 3.0A	220V – 2.7A	240V – 2.9A		<p>Impeller Semi-open two-channel impeller, dynamically balanced</p> <p>Solids Passage 50Hz – φ15mm 60Hz – φ15mm</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 420 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>Primary Seal Face: SiC + Ceramic Secondary Seal Face: Ceramic + Carbon</p> <p>Oil Seal (Lip Seal) Used as a “Dust Seal”; it protects the mechanical seal from abrasive particles.</p> <p>Type of Lubricating Oil & Volume Turbine Oil (ISO VG32), 190ml</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>
50Hz	60Hz								
220V – 3.2A	110V – 5.5A								
230V – 3.0A	220V – 2.7A								
240V – 2.9A									

Standard Accessory

Lifting Chain 3m (with Shackles)

Optional Accessories
Guide Rail Fitting Set

- Guide Support
- Guide Hook
- Guide Pipe Fixing Plate
- Stopper

SPECIFICATIONS	Model	FHP3-3T	
		FHP-series	
		0.25kW, 3-phase	

<p>Type of Equipment Floating decanter with a built-in submersible pump and sludge sensor suitable for discharging supernatant liquid in SBR</p> <p>Type of Fluid Treated water</p> <p>Temperature: 0 to 40°C</p> <p>Discharge Bore & Connection 40mm, Hose Coupling</p> <p>Motor Output 0.25kW</p> <p>Power Supply Three-phase</p> <p>Starting Method Direct on Line</p> <p>Motor Continuous-duty rated, dry-type induction motor</p> <p>Insulation Class: E (available in F on special request) Degree of Protection: IP68</p> <p>No. of Poles & Speed (Synchronous Speed) 2-pole, 3000/3600min⁻¹ (50/60Hz)</p> <p>Power Supply Voltages & Rated Currents</p> <table border="0"> <tr> <td>50Hz</td> <td>60Hz</td> </tr> <tr> <td>380V – 1.0 A</td> <td>220V – 1.7A</td> </tr> <tr> <td>400V – 0.95A</td> <td>380V – 1.0A</td> </tr> <tr> <td>415V – 0.95A</td> <td>440V – 0.9A</td> </tr> </table> <p>Power Cable Sheath: PVC Standard Length: 6m 200 to 600V supply: 1 × 4 × 1.25mm², O.D. 11.1mm</p> <p>Dry Weight (excluding cable) 27kg</p>	50Hz	60Hz	380V – 1.0 A	220V – 1.7A	400V – 0.95A	380V – 1.0A	415V – 0.95A	440V – 0.9A	<p>Impeller Semi-open two-channel impeller, dynamically balanced</p> <p>Solids Passage 50Hz – φ15mm 60Hz – φ15mm</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 420 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>Primary Seal Face: SiC + Ceramic Secondary Seal Face: Ceramic + Carbon</p> <p>Oil Seal (Lip Seal) Used as a “Dust Seal”; it protects the mechanical seal from abrasive particles.</p> <p>Type of Lubricating Oil & Volume Turbine Oil (ISO VG32), 190ml</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>
50Hz	60Hz								
380V – 1.0 A	220V – 1.7A								
400V – 0.95A	380V – 1.0A								
415V – 0.95A	440V – 0.9A								

Standard Accessory

Lifting Chain 3m (with Shackles)

Optional Accessories

Guide Rail Fitting Set

- Guide Support
- Guide Hook
- Guide Pipe Fixing Plate
- Stopper

SPECIFICATIONS	Model	FHP3-4	
		FHP-series 0.4kW, 1-phase	

<p>Type of Equipment Floating decanter with a built-in submersible pump and sludge sensor suitable for discharging supernatant liquid in SBR</p> <p>Type of Fluid Treated water</p> <p>Temperature: 0 to 40°C</p> <p>Discharge Bore & Connection 50mm, Hose Coupling</p> <p>Motor Output 0.4kW</p> <p>Power Supply Single-phase</p> <p>Starting Method Capacitor Start</p> <p>Motor Continuous-duty rated, dry-type induction motor</p> <p>Insulation Class: E (available in F on special request) Degree of Protection: IP68</p> <p>No. of Poles & Speed (Synchronous Speed) 2-pole, 3000/3600min⁻¹ (50/60Hz)</p> <p>Power Supply Voltages & Rated Currents</p> <table border="0"> <tr> <td>50Hz</td> <td>60Hz</td> </tr> <tr> <td>220V – 3.6A</td> <td>110V – 6.7A</td> </tr> <tr> <td>230V – 3.6A</td> <td>220V – 3.4A</td> </tr> <tr> <td>240V – 3.6A</td> <td></td> </tr> </table> <p>Power Cable Sheath: PVC Standard Length: 6m 100 to 240V supply: 1 × 3 × 1.25mm², O.D. 10.1mm</p> <p>Dry Weight (excluding cable) 29kg</p>	50Hz	60Hz	220V – 3.6A	110V – 6.7A	230V – 3.6A	220V – 3.4A	240V – 3.6A		<p>Impeller Semi-open two-channel impeller, dynamically balanced</p> <p>Solids Passage 50Hz – φ15mm 60Hz – φ15mm</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 420 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>Primary Seal Face: SiC + Ceramic Secondary Seal Face: Ceramic + Carbon</p> <p>Oil Seal (Lip Seal) Used as a “Dust Seal”; it protects the mechanical seal from abrasive particles.</p> <p>Type of Lubricating Oil & Volume Turbine Oil (ISO VG32), 190ml</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>
50Hz	60Hz								
220V – 3.6A	110V – 6.7A								
230V – 3.6A	220V – 3.4A								
240V – 3.6A									

Standard Accessory

Lifting Chain 3m (with Shackles)

Optional Accessories

Guide Rail Fitting Set

- Guide Support
- Guide Hook
- Guide Pipe Fixing Plate
- Stopper

SPECIFICATIONS	Model	FHP2-4T									
		FHP-series 0.4kW, 3-phase									
<p>Type of Equipment Floating decanter with a built-in submersible pump and sludge sensor suitable for discharging supernatant liquid in SBR</p> <p>Type of Fluid Treated water</p> <p>Temperature: 0 to 40°C</p> <p>Discharge Bore & Connection 50mm, Hose Coupling</p> <p>Motor Output 0.4kW</p> <p>Power Supply Three-phase</p> <p>Starting Method Direct on Line</p> <p>Motor Continuous-duty rated, dry-type induction motor</p> <p>Insulation Class: E (available in F on special request) Degree of Protection: IP68</p> <p>No. of Poles & Speed (Synchronous Speed) 2-pole, 3000/3600min⁻¹ (50/60Hz)</p> <p>Power Supply Voltages & Rated Currents</p> <table border="0"> <tr> <td>50Hz</td> <td>60Hz</td> </tr> <tr> <td>380V – 1.2A</td> <td>220V – 1.8A</td> </tr> <tr> <td>400V – 1.1A</td> <td>380V – 1.2A</td> </tr> <tr> <td>415V – 1.1A</td> <td>440V – 1.0A</td> </tr> </table> <p>Power Cable Sheath: PVC Standard Length: 6m 200 to 600V supply: 1 × 4 × 1.25mm², O.D. 11.1mm</p> <p>Dry Weight (excluding cable) 27kg</p>	50Hz	60Hz	380V – 1.2A	220V – 1.8A	400V – 1.1A	380V – 1.2A	415V – 1.1A	440V – 1.0A	<p>Impeller Semi-open two-channel impeller, dynamically balanced</p> <p>Solids Passage 50Hz – φ15mm 60Hz – φ15mm</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 420 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>Primary Seal Face: SiC + Ceramic Secondary Seal Face: Ceramic + Carbon</p> <p>Oil Seal (Lip Seal) Used as a “Dust Seal”; it protects the mechanical seal from abrasive particles.</p> <p>Type of Lubricating Oil & Volume Turbine Oil (ISO VG32), 190ml</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>		
50Hz	60Hz										
380V – 1.2A	220V – 1.8A										
400V – 1.1A	380V – 1.2A										
415V – 1.1A	440V – 1.0A										
<p>Standard Accessory</p> <p>Lifting Chain 3m (with Shackles)</p>		<p>Optional Accessories</p> <p>Guide Rail Fitting Set</p> <ul style="list-style-type: none"> • Guide Support • Guide Hook • Guide Pipe Fixing Plate • Stopper 									
TSURUMI MANUFACTURING CO., LTD.											

SPECIFICATIONS	Model	FHP4-8T	
		FHP-series 0.75kW, 3-phase	

<p>Type of Equipment Floating decanter with a built-in submersible pump and sludge sensor suitable for discharging supernatant liquid in SBR</p> <p>Type of Fluid Treated water</p> <p>Temperature: 0 to 40°C</p> <p>Discharge Bore & Connection 50mm, Hose Coupling</p> <p>Motor Output 0.75kW</p> <p>Power Supply Three-phase</p> <p>Starting Method Direct on Line</p> <p>Motor Continuous-duty rated, dry-type induction motor</p> <p>Insulation Class: E (available in F on special request) Degree of Protection: IP68</p> <p>No. of Poles & Speed (Synchronous Speed) 2-pole, 3000/3600min⁻¹ (50/60Hz)</p> <p>Power Supply Voltages & Rated Currents</p> <table border="0"> <tr> <td>50Hz</td> <td>60Hz</td> </tr> <tr> <td>380V – 1.9A</td> <td>220V – 3.5A</td> </tr> <tr> <td>400V – 1.9A</td> <td>380V – 1.9A</td> </tr> <tr> <td>415V – 2.0A</td> <td>440V – 1.7A</td> </tr> </table> <p>Power Cable Sheath: PVC Standard Length: 6m 200 to 600V supply: 1 × 4 × 1.25mm², O.D. 11.1mm</p> <p>Dry Weight (excluding cable) 28kg</p>	50Hz	60Hz	380V – 1.9A	220V – 3.5A	400V – 1.9A	380V – 1.9A	415V – 2.0A	440V – 1.7A	<p>Impeller Semi-open two-channel impeller, dynamically balanced</p> <p>Solids Passage 50Hz – φ15mm 60Hz – φ15mm</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 420 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>Primary Seal Face: SiC + Ceramic Secondary Seal Face: Ceramic + Carbon</p> <p>Oil Seal (Lip Seal) Used as a “Dust Seal”; it protects the mechanical seal from abrasive particles.</p> <p>Type of Lubricating Oil & Volume Turbine Oil (ISO VG32), 420ml</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>
50Hz	60Hz								
380V – 1.9A	220V – 3.5A								
400V – 1.9A	380V – 1.9A								
415V – 2.0A	440V – 1.7A								

Standard Accessory

Lifting Chain 3m (with Shackles)

Optional Accessories
Guide Rail Fitting Set

- Guide Support
- Guide Hook
- Guide Pipe Fixing Plate
- Stopper

SPECIFICATIONS	Model	FHP2-15T	
		FHP-series 1.5kW, 3-phase	

Type of Equipment

Floating decanter with a built-in submersible pump and sludge sensor suitable for discharging supernatant liquid in SBR

Type of Fluid

Treated water

Temperature: 0 to 40°C

Discharge Bore & Connection

80mm, Hose Coupling

Motor Output

1.5kW

Power Supply

Three-phase

Starting Method

Direct on Line

Motor

Continuous-duty rated, dry-type induction motor

Insulation Class: F

Degree of Protection: IP68

No. of Poles & Speed (Synchronous Speed)

2-pole, 3000/3600min⁻¹ (50/60Hz)

Power Supply Voltages & Rated Currents

50Hz	60Hz
380V – 3.5A	220V – 6.0A
400V – 3.5A	380V – 3.4A
415V – 3.5A	440V – 3.2A

Power Cable

Sheath: PVC

Standard Length: 6m

200 to 600V supply:

1 × 4 × 1.25mm², O.D. 11.1mm

Dry Weight (excluding cable)

60kg

Impeller

Semi-open two-channel impeller, dynamically balanced

Solids Passage

50Hz – φ15mm

60Hz – φ15mm

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.

Bearing

Permanently lubricated, deep-groove, double-shielded C3 ball bearings

Shaft

420 stainless steel

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.

Primary Seal Face: SiC + Ceramic

Secondary Seal Face: Ceramic + Carbon

Oil Seal (Lip Seal)

Used as a "Dust Seal"; it protects the mechanical seal from abrasive particles.

Type of Lubricating Oil & Volume

Turbine Oil (ISO VG32), 1050ml

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.

Standard Accessory

Lifting Chain 5m (with Shackles)

Optional Accessories
Guide Rail Fitting Set

- Guide Support
- Guide Hook
- Guide Pipe Fixing Plate
- Stopper

DIMENSIONS

Model

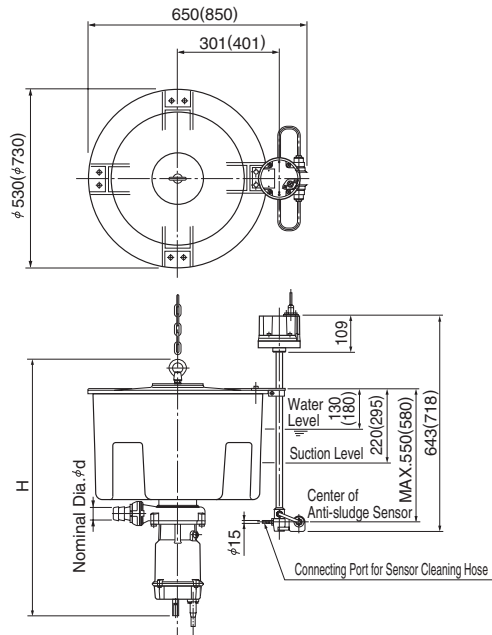
FHP4-3 to FHP2-15T

FHP-series

40 - 80mm

Unit: mm

Model	d	H
FHP4-3	40	799
FHP3-3T	40	766
FHP3-4	50	799
FHP2-4T	50	766
FHP4-8T	50	818
FHP2-15T	80	991



*Figure in () shows the dimensions of model FHP2-15T.