SERIES
TRN/BER
PLS with Aeration Kit
SUBMERSIBLE AERATORS
Submersible Self-aspirating Aerators

Tsurumi’s submersible aerators are used at water treatment facilities to aerate and agitate industrial wastewater, livestock wastewater and other water that needs treating. More specifically, they provide the primary aeration in reactor tanks and aeration tanks at the heart of the water treatment process, and aeration and agitation in flow regulating tanks. These aerators produce tiny bubbles in the wastewater by furiously mixing in air they draw from above the wastewater’s surface, and discharge the aerated wastewater to the outside. The mixed flow of air and water contains a high amount of dissolved oxygen and makes aeration and agitation very efficient.

Tsurumi offers two kinds of aerators in three series. The TRN-series features Tsurumi’s baseline submersible aerators that produce a high amount of dissolved oxygen and enable efficient aeration and agitation, while the BER-series and the PLS-series with aeration kit are submersible jet aerators that generate a powerful unidirectional flow. All three series are built to draw air themselves while submerged in wastewater, so they can aerate and agitate wastewater without requiring a blower, which greatly reduces both installation space and noise.

The TRN-series is built to draw air on its own by generating negative pressure behind a patented semi-open impeller with the flow the impeller creates. The air drawn from above the wastewater’s surface is furiously mixed in with the wastewater under the mechanical force of the impeller and guide vanes, to form tiny bubbles. The aerated flow is equally discharged in all directions and the synergistic effect of the airlift and convection that this mechanism causes produces a high amount of dissolved oxygen and enables efficient aeration and agitation.

The BER and PLS (with aeration kit) series combine a submersible pump and venturi-jet based diffuser. They draw in air from above the wastewater by generating negative pressure around the nozzle with the flow from the pump. The air is mixed into the wastewater by this jet injector mechanism and sprayed underwater by the diffuser, to aerate and agitate the wastewater at the same time. In the process, tiny bubbles form inside the diffuser and increase the amount of dissolved oxygen in the wastewater. The powerful unidirectional jet that results can efficiently agitate long narrow tanks, as well as wider areas when multiple units are used.

Despite their simple structures, Tsurumi submersible aerators are packed with original technologies that have been tested and proven over many years of R&D and market use, such as an anti-wicking cable, dual inside mechanical seals with silicon carbide faces and Oil Lifter. Moreover, they are designed and built for the degree of reliability and durability required for 24 hour-a-day continuous operation. Plus, when it is time for maintenance, it suffices to raise just the pump from the tank; the tank does not need to be drained as is the case of a plate/tube diffuser, so these aerators are economically beneficial in terms of running costs.
TRN: Submersible aerators that generate tiny bubbles to produce a high amount of dissolved oxygen and enable efficient aeration and agitation
BER: Submersible jet aerators optimized for pre-aeration and prevention of bacterial spoilage
PLS with Aeration Kit: Lightweight, compact resin-made submersible jet aerators for shallow water application

### Selection Table

<table>
<thead>
<tr>
<th>Submersible Aerators</th>
<th>Submersible Jet Aerators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air-inlet Bore mm</td>
<td>TRN [32 - 150 mm]</td>
</tr>
<tr>
<td></td>
<td>BER [25 - 50 mm]</td>
</tr>
<tr>
<td></td>
<td>PLS with Aeration Kit [25 mm]</td>
</tr>
<tr>
<td>Motor Output kW</td>
<td>0.75 - 40</td>
</tr>
<tr>
<td></td>
<td>0.75 - 5.5</td>
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<tr>
<td></td>
<td>0.15 - 0.75</td>
</tr>
<tr>
<td>Pole</td>
<td>2 - 4</td>
</tr>
<tr>
<td></td>
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<tr>
<td>Impeller m</td>
<td>Patented Semi-open</td>
</tr>
<tr>
<td></td>
<td>Channel</td>
</tr>
<tr>
<td></td>
<td>Vortex</td>
</tr>
<tr>
<td>Max. Water Depth m</td>
<td>TRN [3.5 - 6.0]</td>
</tr>
<tr>
<td></td>
<td>BER [3.5 - 6.0]</td>
</tr>
<tr>
<td></td>
<td>PLS with Aeration Kit [1.2]</td>
</tr>
<tr>
<td>No. of Outlets</td>
<td>TRN [8 - 8 (Multiple Directions)]</td>
</tr>
<tr>
<td></td>
<td>BER [1 (One Direction)]</td>
</tr>
</tbody>
</table>

#### Features
- **Guide Rail Fitting System**
  - Built with a patented semi-open impeller to draw in air on its own. Can aerate and agitate wastewater without requiring a blower. (Not capable of anaerobic agitation.)
  - Discharges mixed flow of air and water radially in multiple directions and generates a powerful agitational force from the synergistic action of the airlift and convective flow.
  - Obtains a high level of dissolved oxygen by furiously mixing air and water with the impeller and guide vanes to form tiny bubbles.
  - Capable of deep-water aeration in combination with a general-purpose blower.
  - Built with a patented semi-open impeller to draw in air on its own. Can aerate and agitate wastewater without requiring a blower. (Not capable of anaerobic agitation.)
  - Discharges mixed flow of air and water radially in multiple directions and generates a powerful agitational force from the synergistic action of the airlift and convective flow.
  - Obtains a high level of dissolved oxygen by furiously mixing air and water with the impeller and guide vanes to form tiny bubbles.
  - Capable of deep-water aeration in combination with a general-purpose blower. Does not require a high-pressure blower.

#### Applications
- Aeration, pre-aeration and mixing at wastewater treatment plant
- Oxygen supply at aquariums and fish farms (Requires lubricant change to liquid paraffin.)

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**Guide Rail Fitting System (BER-series only)**

The guide rail fitting system connects the pump to and from the piping easily just by lowering and hoisting the pump, allowing easy maintenance and inspection without the need to enter the sump.

#### Accessories
- Silencer & Valve Set
- Lifting Chain 5m (with Shackles)
- Guide Support
- Guide Hook
- Suction Casing
- Threaded Oval Flange
- Diffuser

#### Model Number Designation

**TRN / PLS (with Aeration Kit) series**

<table>
<thead>
<tr>
<th>Discharge bore in millimeters</th>
<th>TRN</th>
<th>BER</th>
<th>PLS with Aeration Kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRN</td>
<td>80</td>
<td>4</td>
<td>17</td>
</tr>
<tr>
<td>BER</td>
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<tr>
<td>PLS with Aeration Kit</td>
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</table>

<table>
<thead>
<tr>
<th>Name of the series</th>
<th>Number of the poles of the motor</th>
<th>Rated motor output in kilowatts x 1/10</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRN</td>
<td>S</td>
<td>25</td>
</tr>
<tr>
<td>BER</td>
<td>S</td>
<td>22</td>
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**BER series**

Rated motor output in kilowatts x 1/10

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**BER series**

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<td>BER</td>
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**Submersible Aerators: TRN series**

- **Start of operation**
  Mixed flow of air-water is discharged in multiple directions.

- **Rising by airlift**
  Tiny bubbles produce a high amount of dissolved oxygen.

- **Agitation by convection**
  The rising bubbles enable efficient aeration and agitation.

**Submersible Jet Aerators: BER / PLS (with Aeration Kit) series**

- **Rising by airlift**
  Mixed flow of air-water is jetted in one direction. Tiny bubbles produce a high amount of dissolved oxygen.

- **Agitation by convection**
  The rising bubbles enable efficient aeration and agitation.

**Special Offer for TRN series**

*How to aerate in tank deeper than max. water depth*

- **In combination with a blower**
  (Example of installation in a 10 m-deep tank)

  - Blowers must be inverter-driven.
  - Provide 1 blower for each submersible aerator.

**Optional specifications**

- **With stand**
  - Discharged flow
  - Intake flow
  - Blower compartment
  - Depth pressurized by blower
  - Self-aspirating depth of submersible aerator (Max. water depth)

- **With draft tube**
  - Discharged flow
  - Intake flow
  - Blower compartment
  - Depth pressurized by blower
  - Self-aspirating depth of submersible aerator (Max. water depth)

- Applicable for deep tank aeration below max. water depth. Because it draws air on its own, the aerator works with a general-purpose blower instead of a high-pressure blower.

- **With stand (0.5 m)**
  - Illustration shows the 0.75kW aerator.
  - Applicable output: 0.75 - 40kW

- **With draft tube (1.0/1.5 m)**
  - Illustration shows the 40kW aerator.
  - Applicable output: 2.2 - 40kW
Mixed Flow of Air-water
Tiny bubbles are discharged in multiple/direction, whereby creating convective currents that agitate the water. As the bubbles rise, a large amount of oxygen dissolves in the water.

Anti-wicking Cable Entry
Prevents water incursion due to capillary action should the cable sheath be damaged or the end of cable submerged. Also prevents moist air from infiltrating the motor housing and condensation from forming inside the housing due to temperature differences between the housing and outside air.

Motor Protector
Miniature Thermal Protector
Single-phase:
Detects excess heat, therefore, protecting the pump against overheating and dry-running.
Three-phase:
React to excessive heat caused by dry-running. The bimetal strip opens to cause the control panel to shut the power supply.
Circle Thermal Protector
Directly cuts the motor circuit if excessive heat builds up or overcurrent occurs in the motor.

Dual Inside Mechanical Seals with Silicon Carbide Face
Isolated in the oil chamber where a clean, non-corrosive and abrasion-free lubricating environment is maintained. Compared with the water-cooled outside mechanical seal, it reduces the risk of failure caused by dry-heating and adhering matter. The Silicon carbide provides 5 times higher corrosion, wear and heat resistance than the tungsten carbide. Rubber parts are made of NBR or FPM (FKM) which provides higher resistance to heat and chemicals.

Oil Lifter
Provides lubrication and cooling of the seal faces down to 1/3 of normal oil level, thus maintaining a stable shaft sealing effect and prolonging seal life longer. The Oil Lifter is Tsurumi original design.

Submersible Self-aspirating Aerators: TRN series
The aspirated air, mixed with water viciously by mechanical forces inside the impeller and guide vane, transforms into tiny bubbles. Moreover, the mixed flow of air and water is evenly discharged in multiple directions along the circumference.

Submersible Self-aspirating Jet Aerators: BER & PLS (with Aeration Kit) series
With the jet injector mechanism, the aspirated air mixes with water and is ejected through the diffuser, simultaneously agitating and aerating the ponded water. The mixed air-water is ejected powerfully in one direction, which effectively agitates the water across a wide area.

Mixed Flow of Air-water
Tiny bubbles are discharged in multiphase direction, whereby creating convective currents that agitate the water. As the bubbles rise, a large amount of oxygen dissolves in the water.
Submersible aerators that generate tiny bubbles to produce a high amount of dissolved oxygen and enable efficient aeration and agitation

The TRN-series is a submersible self-aspirating aerator designed for aeration and mixing of wastewater. The liquid flow generated by Tsurumi’s patented semi-open impeller causes negative pressure to form on the backside of the impeller vanes and draw in air from above the water’s surface. The aspirated air, mixed with water viciously by mechanical forces inside the impeller and guide vane, transforms into tiny bubbles. Moreover, the mixed flow of air and water is evenly discharged in multiple directions along the circumference. The compounded action of the air lift and convective currents that are generated in the process makes aeration and agitation very efficient and increases the amount of oxygen dissolved in the water.

The impeller, guide vane and other mechanical features of the TRN-series are patented under the Tsurumi brand in major countries around the world.

Air Flow Rate - Water Depth Curves
The air flow rates are expressed at the standard condition, i.e. temperature of 20℃, 1 atm and may vary by up to approximately 5%.

Convection Pattern & Recommended Tank Dimensions

Main Convection
Convection made by rising bubbles. (The minimum distance that must be provided between each aerator)

Sub-convection
The maximum convection that can keep solids suspended to prevent sedimentation of solids.

Accessory
• Silencer & Valve Set

Weights excluding cable
Patented

<table>
<thead>
<tr>
<th>Model</th>
<th>Air-inlet Bore mm</th>
<th>Motor Output kW</th>
<th>Phase</th>
<th>Starting Method</th>
<th>Solids Passage</th>
<th>Max. Water Depth m</th>
<th>No. of Outlets</th>
<th>Dimensions L x H mm</th>
<th>Dry Weight kg</th>
<th>Cable Length m</th>
</tr>
</thead>
</table>
BER: Submersible jet aerators optimized for pre-aeration and prevention of bacterial spoilage

The BER-series and PLS with aeration kit series are a submersible self-aspirating jet aerators combined a submersible pump with a venturi-jet based diffuser. The liquid flow generated by the submerged pump causes negative pressure to form around the nozzle, whereby drawing in air from above the water’s surface. With this jet injector mechanism, the aspirated air mixes with water and is ejected through the diffuser, simultaneously agitating and aerating the ponded water. The mixed air-water is ejected powerfully in one stroke, thereby agitating the water across a wide area. Because the PLS-series uses food-grade liquid paraffin for lubricating oil, this jet aerator is safe and fish-friendly if used for water circulation and aeration of aquariums, aquaculture/fish farms.

**BER**

<table>
<thead>
<tr>
<th>Model</th>
<th>Air inlet Bore (mm)</th>
<th>Motor Output kW</th>
<th>Phase Starting Method</th>
<th>Solids Passage (mm)</th>
<th>Max. Water Depth (m)</th>
<th>Dimensions L x H (mm)</th>
<th>Dry Weight kg</th>
<th>Cable Length (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8-BER</td>
<td>TOS-8BER</td>
<td>25</td>
<td>Three D.O.L.</td>
<td>4/3.5</td>
<td>0.75</td>
<td>674 x 464 / 674 x 514</td>
<td>28</td>
<td>25</td>
</tr>
<tr>
<td>15-BER</td>
<td>TOS-15BER</td>
<td>32</td>
<td>Three D.O.L.</td>
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<td>1.5</td>
<td>895 x 562 / 910 x 603</td>
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<td>22-BER</td>
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<td>Three D.O.L.</td>
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<td>2</td>
<td>1158 x 705 / 1162 x 793</td>
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<tr>
<td>37-BER</td>
<td>TOS-37BER</td>
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<td>Three D.O.L.</td>
<td>5</td>
<td>2.5</td>
<td>1163 x 779 / 1167 x 862</td>
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<td>87</td>
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<tr>
<td>55-BER</td>
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<td>Three D.O.L.</td>
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<td>4</td>
<td>1415 x 942 / 1422 x 1006</td>
<td>142</td>
<td>120</td>
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**PLS with Aeration Kit**

<table>
<thead>
<tr>
<th>Model</th>
<th>Air inlet Bore (mm)</th>
<th>Motor Output kW</th>
<th>Phase Starting Method</th>
<th>Solids Passage (mm)</th>
<th>Max. Water Depth (m)</th>
<th>Dimensions L x H (mm)</th>
<th>Dry Weight kg</th>
<th>Cable Length (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8-BER</td>
<td>TOS-8BER</td>
<td>25</td>
<td>Single Capitoli</td>
<td>38 (10)</td>
<td>1.2</td>
<td>390 x 316</td>
<td>7.6</td>
<td>5</td>
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<tr>
<td>15-BER</td>
<td>TOS-15BER</td>
<td>32</td>
<td>Single Capitoli</td>
<td>24 (10)</td>
<td>1.2</td>
<td>390 x 321</td>
<td>8.5</td>
<td>5</td>
</tr>
<tr>
<td>22-BER</td>
<td>TOS-22BER</td>
<td>50</td>
<td>Single Capitoli</td>
<td>24 (10)</td>
<td>1.2</td>
<td>396 x 321</td>
<td>10.4</td>
<td>5</td>
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</tbody>
</table>

**Air Flow Rate - Water Depth Curves**

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**Convection Pattern & Recommended Tank Dimensions (BER-series)**

<table>
<thead>
<tr>
<th>Model</th>
<th>Motor Output kW</th>
<th>Max Water Depth (m)</th>
<th>Max. Tank Dimensions (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8-BER</td>
<td>0.75</td>
<td>4 / 3.5</td>
<td>2 / 4 / 3.5</td>
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<tr>
<td>15-BER</td>
<td>1.5</td>
<td>4</td>
<td>3.5 / 4.5</td>
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<tr>
<td>22-BER</td>
<td>2.2</td>
<td>4.5</td>
<td>4.5 / 4.5</td>
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<tr>
<td>37-BER</td>
<td>3.7</td>
<td>5</td>
<td>5 / 5 / 5</td>
</tr>
<tr>
<td>55-BER</td>
<td>5.5</td>
<td>6</td>
<td>7 / 7 / 7</td>
</tr>
</tbody>
</table>

**Accessories (BER-series only)**

- **Free Standing**
  - Silencer & Valve Set
  - Lifting Chain 5m (with Shackles)
  - Suction Casing
  - Threaded Oval Flange

- **Guide Rail Fitting**
  - Silencer & Valve Set
  - Lifting Chain 5m (with Shackles)
  - Threaded Oval Flange
  - Guide Support
  - Guide Hook

- **Guides**
  - Guide Rail Fitting
  - Guide Support
  - Guide Hook

- **Threaded Oval Flange**

- **Diffuser**

- **Suction Casing**

- **D. O. L.**

- **Capacitor Run**

- **Air-inlet**

- **Bore**

- **Model**

- **Length**

- **Width**

- **Depth**

- **Air Flow Rate (m³/h)**

- **Water Depth (m)**

- **Current**

- **Water Flow Rate (m³/h)**

- **Max. Water Depth (m)**

- **Max. Tank Dimensions (mm)**

- **Guide Rail Fitting**

- **Suction Casing**

- **Guide Support**

- **Guide Hook**

- **Threaded Oval Flange**

- **Diffuser**

- **S.S. 1500 min⁻¹ (2.2kW and above)**

- **S.S. 1800 min⁻¹ (2.2kW and above)**

- **S.S. 3000 min⁻¹ (1.5kW and below)**

- **S.S. 3600 min⁻¹ (1.5kW and below)**
## Specifications

### PUMP

<table>
<thead>
<tr>
<th>Feature</th>
<th>TRN</th>
<th>BER</th>
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<td>25</td>
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<tr>
<td>Air-inlet Connection</td>
<td>JIS 10kg/cm² Flange</td>
<td>Threaded Flange</td>
<td>Structure Steel + Nylon Coated</td>
</tr>
<tr>
<td>Diffuser</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Solids Passage (mm)</td>
<td>10</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Impeller</td>
<td>410 Stainless Steel Casting</td>
<td>410 Stainless Steel Casting</td>
<td>410 Stainless Steel Casting</td>
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<tr>
<td>Suction Cover</td>
<td>410 Stainless Steel Casting</td>
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<td>410 Stainless Steel</td>
<td>410 Stainless Steel</td>
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<td>Nitrile Butadiene Rubber</td>
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</tr>
<tr>
<td>Air Passage &amp; Guide Vane/Casing</td>
<td>—</td>
<td>Gray Cast Iron</td>
<td>Gray Cast Iron</td>
</tr>
<tr>
<td>Shaft Seal</td>
<td>Dual Inside Mechanical Seals (with Oil Lifter)</td>
<td>Dual Inside Mechanical Seals (with Oil Lifter)</td>
<td>Dual Inside Mechanical Seals (with Oil Lifter)</td>
</tr>
</tbody>
</table>

### MOTOR

<table>
<thead>
<tr>
<th>Feature</th>
<th>TRN</th>
<th>BER</th>
<th>PLS with Aeration Kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Continuous-duty Rated, Dry-type Induction Motor</td>
<td>Continuous-duty Rated, Dry-type Induction Motor</td>
<td>Continuous-duty Rated, Dry-type Induction Motor</td>
</tr>
<tr>
<td>Output (kW)</td>
<td>0.75</td>
<td>0.75</td>
<td>0.75</td>
</tr>
<tr>
<td>Phase</td>
<td>Three</td>
<td>Three</td>
<td>Single</td>
</tr>
<tr>
<td>Pole</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Speed (5.5/59Hz) (m/min)</td>
<td>3000/3600</td>
<td>3000/3600</td>
<td>3000/3600</td>
</tr>
<tr>
<td>Insulation</td>
<td>F</td>
<td>E</td>
<td>E</td>
</tr>
<tr>
<td>Starting Method</td>
<td>D.O.L.</td>
<td>D.O.L.</td>
<td>Capacitor Run</td>
</tr>
<tr>
<td>Motor Protector (built-in)</td>
<td>CTP</td>
<td>MTP</td>
<td>MTP</td>
</tr>
<tr>
<td>Lubricant (ml)</td>
<td>1400</td>
<td>1400</td>
<td>440</td>
</tr>
<tr>
<td>Frame</td>
<td>Gray Cast Iron</td>
<td>Gray Cast Iron</td>
<td>304 Stainless Steel</td>
</tr>
<tr>
<td>Shaft</td>
<td>420 Stainless Steel</td>
<td>420 Stainless Steel</td>
<td>420 Stainless Steel</td>
</tr>
<tr>
<td>Power Cable (m)</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Max. Water Depth (m)</td>
<td>3.5</td>
<td>3.5</td>
<td>4.0 / 3.5</td>
</tr>
<tr>
<td>No. of Outlets</td>
<td>6 (Multiple Directions)</td>
<td>6 (Multiple Directions)</td>
<td>6 (Multiple Directions)</td>
</tr>
<tr>
<td>Dry Weight (kg)</td>
<td>55</td>
<td>55</td>
<td>55</td>
</tr>
</tbody>
</table>

### Notes
- *Max. water depth is the load limit of the motor. The load placed on the motor increases the deeper the submersible aerator is installed, therefore if the aerator is operated below the max. water depth, the overload will trip the motor protection device and stop the aerator from running continuously.
- *All weights excluding cable
- *Star-Delta available upon request
- *Weights of guide rail fitting excluding duckfoot bend
- *Figure in ( ) shows the solids passage of the pump with a strainer.
Tsurumi can supply pumps and water treatment equipment as a total package.

**Submersible Sewage Pumps / Channel Impeller**
- Tsurumi basic sewage pumps, wide range lineup
- Available in automatic model or guide rail fitting system
- Discharge Bore: 50 - 800 mm
- Motor Output: 0.4 - 110 kW
- Total Head: 9 - 70 m
- Max. Capacity: 110 m³/min

**Submersible Cutter Pumps / Cutter Impeller**
- Incorporated cutting mechanism
- Available in automatic model or guide rail fitting system
- Discharge Bore: 50 - 200 mm
- Motor Output: 0.75 - 37 kW
- Total Head: 11.4 - 70 m
- Max. Capacity: 7.1 m³/min

**Submersible Resin Made Pumps**
- "VANCS": corrosion-resistant pumps made of special resin
- Fish-friendly lubricating oil suitable for water feature, fish farm
- Wide variation; large solids type, high head type, horizontal type
- Available in automatic model or guide rail fitting system
- Discharge Bore: 32 - 80 mm
- Motor Output: 0.15 - 3.7 kW
- Total Head: 3.9 - 34 m
- Max. Capacity: 0.95 m³/min

**Submersible Stainless Steel Casting Pumps**
- Corrosion-resistant pumps made of 316 stainless steel casting
- Suitable for acidic, chemical fluids of low pH value
- Available in guide rail fitting system
- Discharge Bore: 50 - 80 mm
- Motor Output: 0.4 - 11 kW
- Total Head: 11.1 - 44 m
- Max. Capacity: 2.08 m³/min

**Submersible Mixers**
- Generate powerful jet of water using a propeller
- Low water level type designed to operate in water as shallow as 500 mm [MRL]
- Available in wide variations, including cast iron or stainless steel casting construction
- Motor Output: 0.25 - 4 kW
- Flow Rate: 1.32 - 19 m³/min

**Floating Scum Skimmers**
- Collection of floating scum in the wastewater treatment
- Water, air and scum are drawn simultaneously by jet-injector mechanism
- Keep suction mouth relative position with the water surface
- Discharge Bore: 50 mm
- Motor Output: 0.4 - 0.75 kW

**Floating Decanters**
- Discharge supernatant liquid in SBR
- Consists of submersible pump, sludge sensor, and float
- Sludge sensor prevents inflow of sludge or sediment and helps discharge supernatant liquid
- Discharge Bore: 40 - 80 mm
- Motor Output: 0.25 - 1.5 kW

**Multi-disc Dehydrators**
- Wide product lineup; treating capacity in a range of 3 to 216 kgDS/h
- Utilize both gravity filtration and screw displacement compression systems [MDQ, MDC]
- Utilize both gravity filtration and compression dehydration systems [JD]
- Major parts made of stainless steel
- Treating Capacity: 3 - 216 kgDS/h
- Total Motor Output: 0.6 - 3.15 kW

**Rotary Air Blowers**
- 3-lobe spur rotor designed for corrosion resistance, heat resistance and durability
- Low noise, low vibration, ease of maintenance and high efficiency
- Available in air-cooled type or water-cooled type, optional helical rotor
- Discharge Bore: 50 - 350 mm
- Air Volume: 0.72 - 246.8 m³/min

**Bar Screens**
- Screening wastewater
- Available in front screen type or rear screen type
- Major parts made of stainless steel
- Bar Spacing: 1 - 50 mm
- Motor Output: 0.09 - 0.1 kW
- Max. Capacity: 223 m³/h