

# Submersible Sewage Pumps with Vortex Impeller

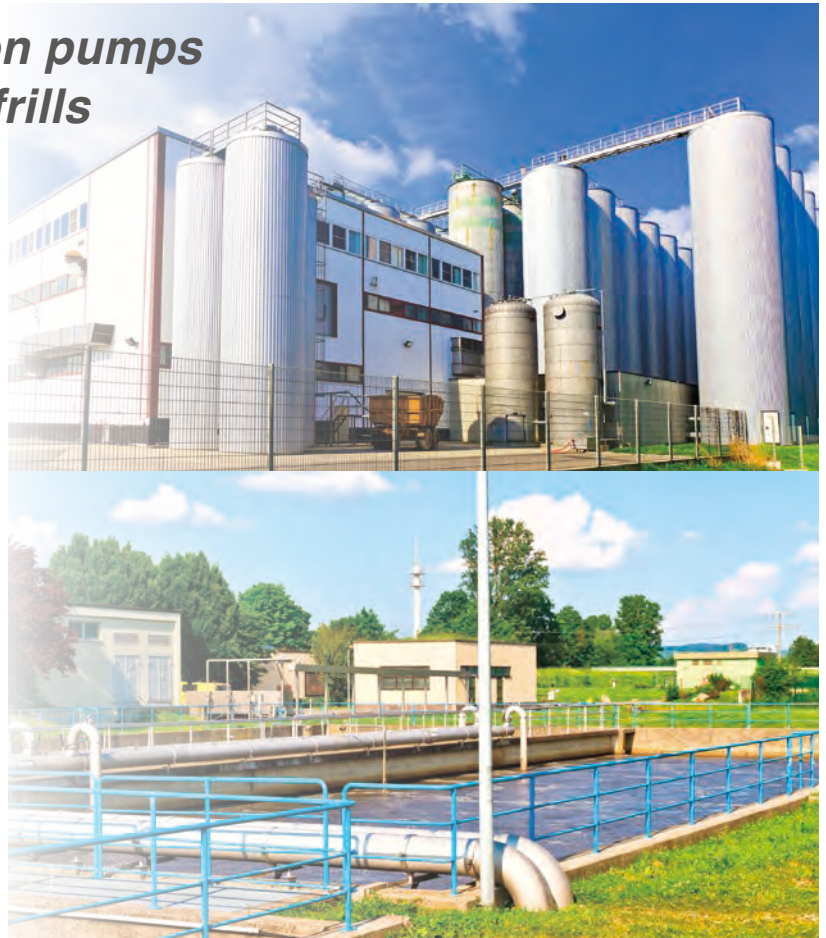


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*Compact type cast iron pumps  
with no unnecessary frills*



**UT**



**UTZ**  
Automatic model

## **UT/UTZ** SERIES

are compact and economical, heavy-duty submersible pumps with a vortex impeller for sewage and wastewater applications. These pumps feature a wide 35 mm large solids passage with a semi-vortex design that reduces clogging of fibrous matter to a minimum.

Moreover, these pumps are loaded with field-tested and proven Tsurumi technologies including an anti-wicking cable, dual inside mechanical seals with silicon carbide face and Oil Lifter. And, these pumps come with resin guide rail fitting device that enables easy installation and maintenance.

The UTZ-series pumps are automatic models equipped with a simple float switch that prevents dry-running operation and reduces power consumption.

All Tsurumi pumps are designed and built to deliver the high degree of reliability, durability and quality required for continuous duty.

## **Applications**

- Transferring wastewater between the tanks (Johkasou/septic tanks) at small-scale treatment facility
- Draining sewage from factory, residence, hotel, restaurant, etc.
- Pumping rainwater and spring water at a place where solid matters are likely to run into the water

# Features

## 1 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.

## 2 Motor Protector

Reacts to excessive heat caused by overcurrent or dry-running to protect pumps. It not only cuts off the motor circuit automatically but also resets by itself. When the motor cools down to a safe operating temperature, the motor restarts.

## 3 Dual Inside Mechanical Seals with Silicon Carbide Face

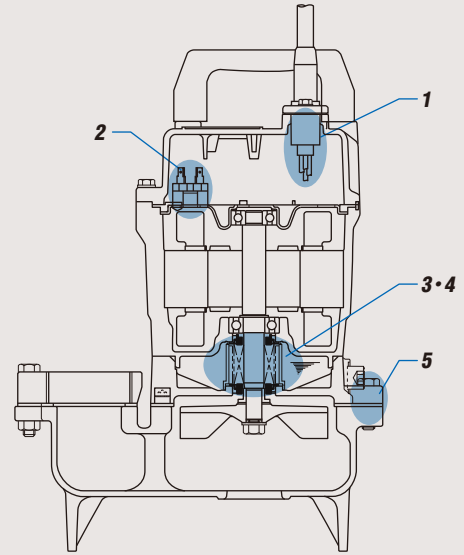
Isolated in the oil chamber where a clean, non-corrosive and abrasion-free lubricating environment is maintained. Compared with the water-cooled outside mechanical seal, it reduces the risk of failure caused by dry-heating and adhering matter. The silicon carbide provides 5 times higher corrosion, wear and heat resistance than the tungsten carbide.

## 4 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.

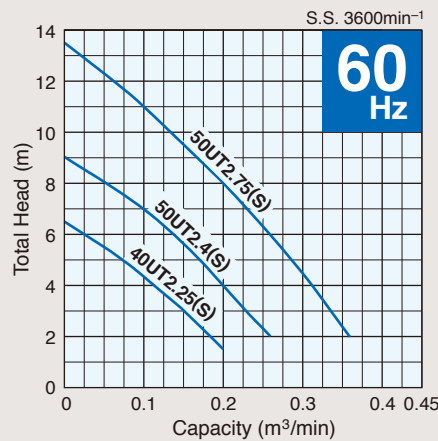
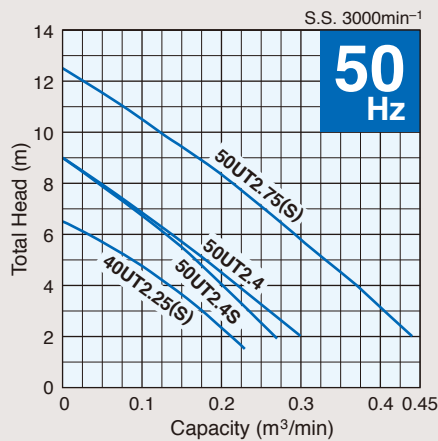
## 5 Back Pull-out Design

Enables the motor to be separated from the pump unit with the impeller attached, by removing the bolts between the oil casing and the pump casing. This design facilitates maintenance and inspection of the principal parts of the pump.



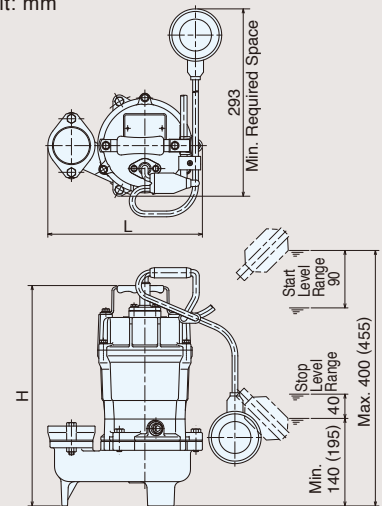
# Performance Curves

Standard and Automatic models have the identical performance.



# Dimensions

Unit: mm



\*The figure in parentheses is for the 50UT2.75S.

# Model Selection

| Discharge Bore mm | Model         |           |                    | Motor Output kW | Phase  | Starting Method | Solids Passage mm | Dimensions L x H mm | Dry Weight kg | Cable Length m |
|-------------------|---------------|-----------|--------------------|-----------------|--------|-----------------|-------------------|---------------------|---------------|----------------|
|                   | Free Standing | Automatic | Guide Rail Fitting |                 |        |                 |                   |                     |               |                |
| 40                | 40UT2.25S     | 40UT2.25S | (TOK4-A)           | 0.25            | Single | Capacitor Run   | 35                | 239 x 350           | 13.5          | 5              |
| 40                | 40UT2.25      | —         | (TOK4-A)           | 0.25            | Three  | D.O.L.          | 35                | 239 x 350           | 13            | 5              |
| 50                | 50UT2.4S      | 50UT2.4S  | (TOK4-A)           | 0.4             | Single | Capacitor Run   | 35                | 242 x 350           | 13.5          | 5              |
| 50                | 50UT2.4       | —         | (TOK4-A)           | 0.4             | Three  | D.O.L.          | 35                | 242 x 350           | 13            | 5              |
| 50                | 50UT2.75S     | 50UT2.75S | (TOK4-A)           | 0.75            | Single | Capacitor Run   | 35                | 242 x 406           | 16.5          | 5              |
| 50                | 50UT2.75      | —         | (TOK4-A)           | 0.75            | Three  | D.O.L.          | 35                | 242 x 387           | 15.5          | 5              |

• For use in combination with the guide rail fitting, order the pump and the TOK4-A guide rail fitting individually.

• Weights excluding cable

Product images and specifications may differ from actual products due to improvements. The OO series and model OO are indicated with our series/model codes in this catalog.

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