

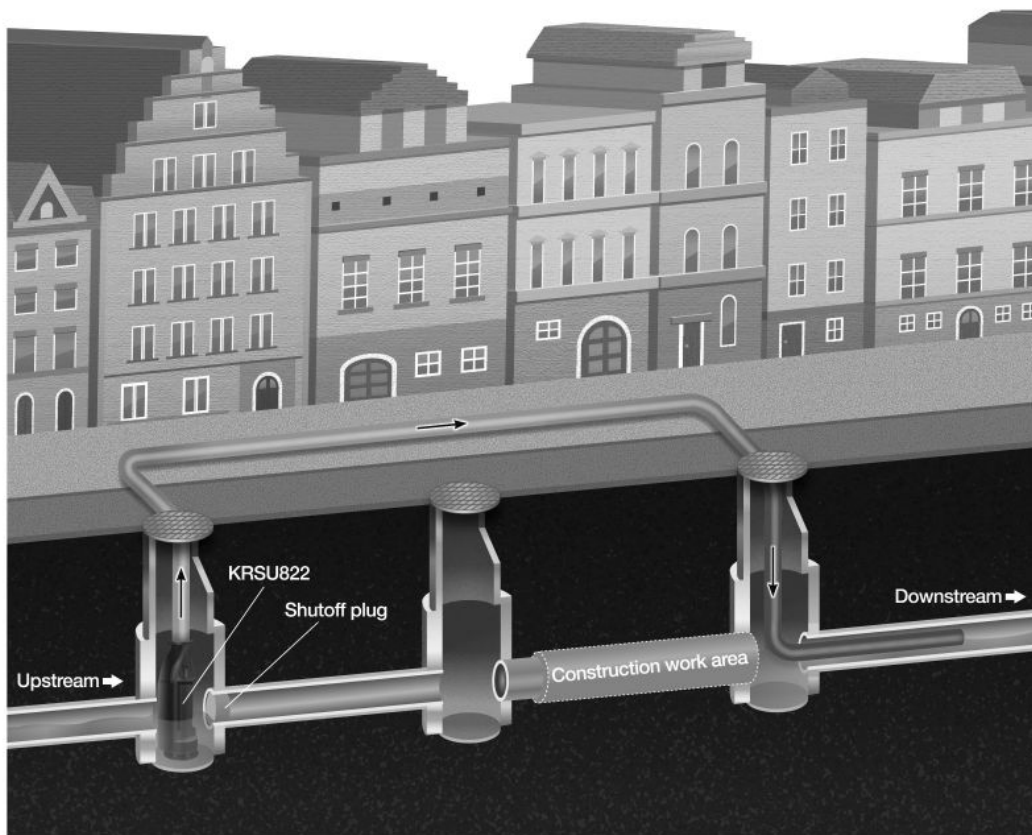
Series:	Discharge Bore:	Motor Output / Pole:
KRSU	200mm	22kW / 4-pole



The KRSU pump of submersible three-phase cast iron heavy-duty pump is designed and built specifically for temporarily bypassing drainage in sewer construction work. With a maximum head of 26.5m, maximum capacity of 5.7m³/min, and space-saving design of 546mm in diameter, this pump plays an active role in drainage in the deep confined space of a manhole.

Also, with its semi-vortex structure, this pump provides a large solids passage of 56mm in diameter, which prevents any clogging of solids matter. The top discharge, side flow design assures efficient motor cooling even when operating with the motor exposed to air.

Submersible Sewer Bypass Pumping



Since sewage piping suffers from aging-related deterioration and can be damaged by earthquakes, sewage piping requires repairs and replacing at regular intervals. In sewage piping repair work, consideration should be given to area residents inconvenienced by the repair work, and additionally to work efficiency and the safety and health of workers who handle inflow sewage. For this purpose, provisional draining that temporarily bypasses sewage via a pump is extremely effective.

As a pump for bypassing sewage between manholes in sewage piping renewal work, Tsurumi offers the KRSU822 pump of submersible sewer bypass pump. This pump features a maximum head of 26.5m, a maximum capacity of 5.7m³/min, and a compact space-saving design of just 546mm in diameter. Normally, with engine pumps, it is difficult to suck up fluid from a depth of 7m or more, but the KRSU submersible pump can fit in the deep limited confines of a manhole and there play an active role in draining the manhole.

In addition, with its semi-vortex structure, this pump provides a large solids passage of 56 mm in diameter, which prevents clogging of solids matter. In fact, it is particularly effective towards preventing clogging of fibrous solids in the impeller, which is the biggest problem in draining sewage. The stand has a bottom plate structure so that the pump can stably stand by itself even when the pump is placed on earth, sand or sludge.

The KRSU822 has a top discharge, side flow structure that effectively cools the motor even when the pump runs with the motor exposed to air. Thus, the KRSU822 is highly suited as a bypass pump.

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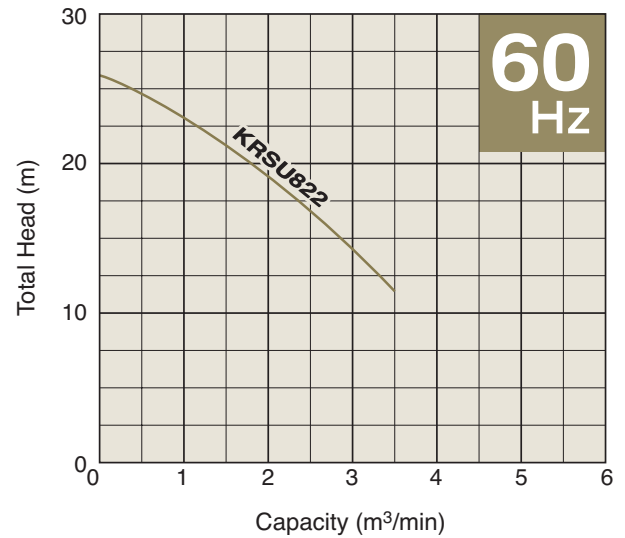
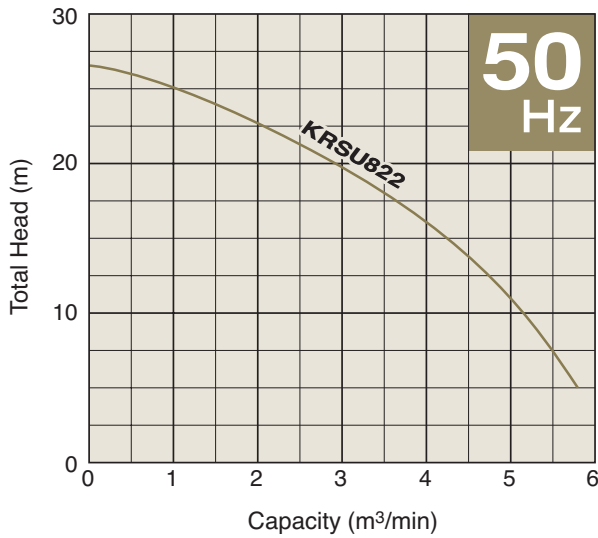
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Selection Table

Model	Discharge Bore mm	Motor Output kW	Phase	Starting Method	Pole	Dry Weight kg
KRSU822	200	22	3-phase	Direct on Line	4	430

Performance Curves



SPECIFICATIONS	Model	KRSU822	KRSU-series
			22kW, 3-phase

<p>Type of Pump Submersible pump for provisional sewage bypass between manholes</p> <p>Type of Fluid Sewage, wastewater, and water carrying solid matters</p> <p>Temperature: 0 to 40°C</p> <p>Discharge Bore & Connection 200mm, JIS 10kg/cm² Flange</p> <p>Motor Output 22kW</p> <p>Power Supply Three-phase</p> <p>Starting Method Direct on Line (Star-Delta available on special request)</p> <p>Motor Continuous-duty rated, dry-type induction motor</p> <p>Insulation Class: F Degree of Protection: IP68</p> <p>No. of Poles & Speed (Synchronous Speed) 4-pole, 1500/1800min⁻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 – 46.8A</td> <td>220V – 80.3A</td> </tr> <tr> <td>400V – 44.6A</td> <td>380V – 46.8A</td> </tr> <tr> <td>415V – 44.0A</td> <td>440V – 40.2A</td> </tr> </table> <p>Power Cable Sheath: Chloroprene rubber Standard Length: 10m 380 to 600V supply: 1 x 4 x 14mm², O.D. 25.6mm 200 to 240V supply: 1 x 4 x 22mm², O.D. 31.6mm</p> <p>Dry Weight (excluding cable) 430kg</p>	50Hz	60Hz	380V – 46.8A	220V – 80.3A	400V – 44.6A	380V – 46.8A	415V – 44.0A	440V – 40.2A	<p>Impeller Vortex impeller, made of gray cast iron, dynamically balanced</p> <p>Solids Passage 50Hz – ϕ56mm 60Hz – ϕ56mm</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>Upper Seal Face: SiC + SiC Lower Seal Face: SiC + SiC</p> <p>Oil Seal (Lip Seal) Used two as a “Dust Seal”, it protects the mechanical seal from abrasive particles.</p> <p>OIL LIFTER Equipped in oil chamber. It forcibly supplies lubricating oil to the mechanical seal and continues to supply the oil to the upper seal faces even if lubricant falls below the rated volume.</p> <p>Type of Lubricating Oil & Volume Turbine Oil (ISO VG32), 6500ml</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 – 46.8A	220V – 80.3A								
400V – 44.6A	380V – 46.8A								
415V – 44.0A	440V – 40.2A								

Optional Accessory
Hose Coupling

DIMENSIONS

Model

KRSU822

KRSU-series

200mm

Unit: mm

C. W. L. : Continuous Running Water Level

