

Series:

KTZ

Discharge Bore:

50·80mm

Motor Output / Pole:

1.5 - 5.5kW / 2-pole



The KTZ-series is a submersible three-phase cast iron high head heavy-duty drainage pump. The cast iron body with high-chromium cast iron impeller enables it to withstand demanding conditions found in construction, aggregate and mining applications. The top discharge, side flow design assures efficient motor cooling even when it operates with its motor exposed to air. The slim design allows the pump to be placed in a confined space. The discharge direction is selectable between vertical and inclined, which prevents folding or bending of the discharge hose.

Registration of Design

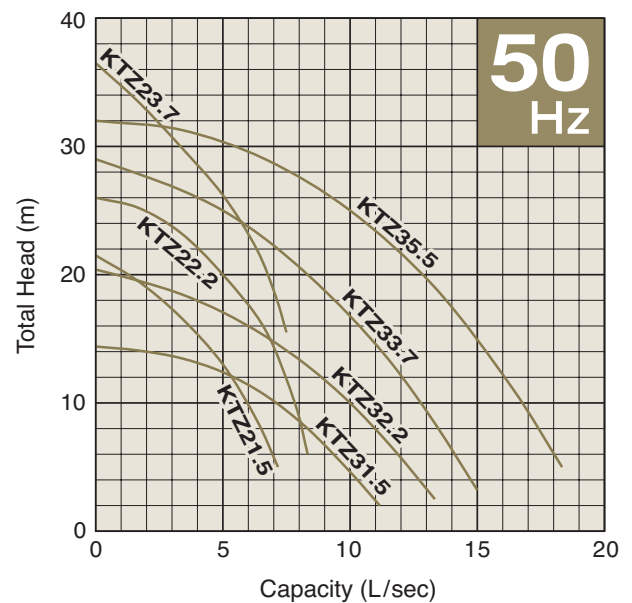
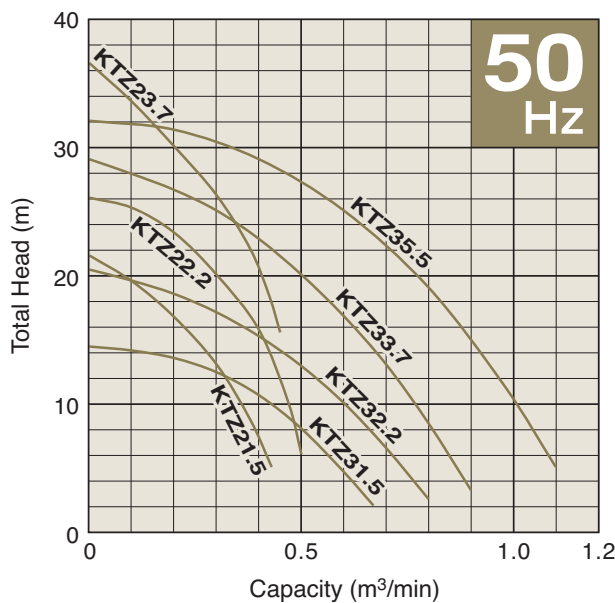
Tsurumi has registered the design of the KTZ-series in major countries. Design rights are granted under the laws of each country.

Selection Table

Model	Discharge Bore mm	Motor Output kW	Phase	Starting Method	Pole	Dry Weight kg
KTZ21.5	50	1.5	3-phase	Direct on Line	2	35
KTZ22.2 (*)	50	2.2	3-phase	Direct on Line	2	36
KTZ23.7 (*)	50	3.7	3-phase	Direct on Line	2	62
KTZ31.5	80	1.5	3-phase	Direct on Line	2	34
KTZ32.2 (*)	80	2.2	3-phase	Direct on Line	2	35
KTZ33.7 (*)	80	3.7	3-phase	Direct on Line	2	62
KTZ35.5 (*)	80	5.5	3-phase	Direct on Line	2	76

* : available for 1000V supply

Performance Curves



SPECIFICATIONS	Model	KTZ21.5	
		KTZ-series 1.5kW, 3-phase	
<p>Type of Pump Submersible high head drainage pump for construction and foundation works, floodwater drainage, etc.</p> <p>Type of Fluid Stormwater, groundwater, wash water, and sand-carrying water</p> <p>Temperature: 0 to 40°C</p> <p>Discharge Bore & Connection 50mm (2"), Multi-directional BSPT Male Threaded Coupling</p> <p>Motor Output 1.5kW</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: 415V: F Degree of Protection: IP68</p> <p>No. of Poles & Speed (Synchronous Speed) 2-pole, 3000min⁻¹ (50Hz)</p> <p>Power Supply Voltages & Rated Currents 50Hz 415V – 3.6A</p> <p>Power Cable 415V: PVC sheathed 600V cable (H07VV-F equiv.) Standard Length: 15m x 1 cable 4 x 1.25mm², O.D. 11.1mm</p> <p>Dry Weight (excluding cable) 35kg</p>	<p>Impeller Semi-open impeller made of high-chromium cast iron</p> <p>Solids Passage: ϕ8.5mm</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 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), 740ml</p> <p>Motor Protection Device 415V: Circle Thermal Protector (CTP) 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>		
<p>Optional Accessories</p> <p>Multi-directional Hose Nipple</p>		<p>Special Specifications (415V only)</p> <p>High Temperature Liquids Version (60°C)</p>	

SPECIFICATIONS	Model	KTZ22.2	
		KTZ-series 2.2kW, 3-phase	

<p>Type of Pump Submersible high head drainage pump for construction and foundation works, floodwater drainage, etc.</p> <p>Type of Fluid Stormwater, groundwater, wash water, and sand-carrying water</p> <p>Temperature: 0 to 40°C</p> <p>Discharge Bore & Connection 50mm (2"), Multi-directional BSPT Male Threaded Coupling</p> <p>Motor Output 2.2kW</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: 415V: F, 1000V: H Degree of Protection: IP68</p> <p>No. of Poles & Speed (Synchronous Speed) 2-pole, 3000min⁻¹ (50Hz)</p> <p>Power Supply Voltages & Rated Currents 50Hz 415V – 5.3A 1000V – 2.2A</p> <p>Power Cable 415V: PVC sheathed 600V cable (H07VV-F equiv.) Standard Length: 15m x 1 cable 4 x 1.25mm², O.D. 11.1mm</p> <p>1000V: PCP sheathed, overall screened 1.1kV Mining cable PLATINUM®, 1.1/1.1kV, MES5G2.5SCR Standard Length: 20m x 1 cable 3 x 2.5mm² + GC control + 2 x Ground, O.D. 18.8mm (acceptable Macey® 4-pin Plug)</p> <p>Dry Weight (excluding cable) 36kg</p>	<p>Impeller Semi-open impeller made of high-chromium cast iron</p> <p>Solids Passage: ϕ8.5mm</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 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), 740ml</p> <p>Motor Protection Device 415V: Circle Thermal Protector (CTP) 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> <p>1000V: MTP & Ground-Check Diode The MTPs are connected with a diode (3A-1000V) in series into the Ground-Check circuit in the motor. If excessive heat builds up and the bimetal strip opens, or Ground-fault happens, the power supply can be shut off by using an external control panel.</p>
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Optional Accessories

Multi-directional Hose Nipple

SPECIFICATIONS	Model	KTZ23.7	
		KTZ-series 3.7kW, 3-phase	

<p>Type of Pump Submersible high head drainage pump for construction and foundation works, floodwater drainage, etc.</p> <p>Type of Fluid Stormwater, groundwater, wash water, and sand-carrying water</p> <p>Temperature: 0 to 40°C</p> <p>Discharge Bore & Connection 50mm (2"), Multi-directional BSPT Male Threaded Coupling</p> <p>Motor Output 3.7kW</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: 415V: F, 1000V: H Degree of Protection: IP68</p> <p>No. of Poles & Speed (Synchronous Speed) 2-pole, 3000min⁻¹ (50Hz)</p> <p>Power Supply Voltages & Rated Currents 50Hz 415V – 8.0A 1000V – 3.6A</p> <p>Power Cable 415V: PCP sheathed 600V cable (H07RN-F equiv.) Standard Length: 15m x 1 cable 4 x 2.0mm², O.D. 14.4mm</p> <p>1000V: PCP sheathed, overall screened 1.1kV Mining cable PLATINUM®, 1.1/1.1kV, MES5G2.5SCR Standard Length: 20m x 1 cable 3 x 2.5mm² + GC control + 2 x Ground, O.D. 18.8mm (acceptable Macey® 4-pin Plug)</p> <p>Dry Weight (excluding cable) 62kg</p>	<p>Impeller Semi-open impeller made of high-chromium cast iron</p> <p>Solids Passage: φ8.5mm</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 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), 1250ml</p> <p>Motor Protection Device 415V: Circle Thermal Protector (CTP) 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> <p>1000V: MTP & Ground-Check Diode The MTPs are connected with a diode (3A-1000V) in series into the Ground-Check circuit in the motor. If excessive heat builds up and the bimetal strip opens, or Ground-fault happens, the power supply can be shut off by using an external control panel.</p>
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<p>Optional Accessories</p> <p>Multi-directional Hose Nipple Seawater-Resistant Kit</p> <ul style="list-style-type: none"> Galvanic Anodes (with Fittings, Seal Putty) Seawater-Resistant Special Cast Iron Impeller 	<p>Special Specifications (415V only)</p> <p>High Temperature Liquids Version (60°C)</p>
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SPECIFICATIONS	Model	KTZ31.5	
		KTZ-series 1.5kW, 3-phase	
<p>Type of Pump Submersible high head drainage pump for construction and foundation works, floodwater drainage, etc.</p> <p>Type of Fluid Stormwater, groundwater, wash water, and sand-carrying water</p> <p>Temperature: 0 to 40°C</p> <p>Discharge Bore & Connection 80mm (3"), Multi-directional BSPT Male Threaded Coupling</p> <p>Motor Output 1.5kW</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: 415V: F Degree of Protection: IP68</p> <p>No. of Poles & Speed (Synchronous Speed) 2-pole, 3000min⁻¹ (50Hz)</p> <p>Power Supply Voltages & Rated Currents 50Hz 415V – 3.6A</p> <p>Power Cable 415V: PVC sheathed 600V cable (H07VV-F equiv.) Standard Length: 15m x 1 cable 4 x 1.25mm², O.D. 11.1mm</p> <p>Dry Weight (excluding cable) 34kg</p>	<p>Impeller Semi-open impeller made of high-chromium cast iron</p> <p>Solids Passage: ϕ8.5mm</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 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), 740ml</p> <p>Motor Protection Device 415V: Circle Thermal Protector (CTP) 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>		
<p>Optional Accessories</p> <p>Multi-directional Hose Nipple</p>		<p>Special Specifications (415V only)</p> <p>High Temperature Liquids Version (60°C)</p>	

SPECIFICATIONS	Model	KTZ-series
		2.2kW, 3-phase
<p>Type of Pump Submersible high head drainage pump for construction and foundation works, floodwater drainage, etc.</p> <p>Type of Fluid Stormwater, groundwater, wash water, and sand-carrying water</p> <p>Temperature: 0 to 40°C</p> <p>Discharge Bore & Connection 80mm (3"), Multi-directional BSPT Male Threaded Coupling</p> <p>Motor Output 2.2kW</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: 415V: F, 1000V: H Degree of Protection: IP68</p> <p>No. of Poles & Speed (Synchronous Speed) 2-pole, 3000min⁻¹ (50Hz)</p> <p>Power Supply Voltages & Rated Currents 50Hz 415V – 5.3A 1000V - 2.2A</p> <p>Power Cable 415V: PVC sheathed 600V cable (H07VV-F equiv.) Standard Length: 15m x 1 cable 4 x 1.25mm², O.D. 11.1mm</p> <p>1000V: PCP sheathed, overall screened 1.1kV Mining cable PLATINUM®, 1.1/1.1kV, MES5G2.5SCR Standard Length: 20m x 1 cable 3 x 2.5mm² + GC control + 2 x Ground, O.D. 18.8mm (acceptable Macey® 4-pin Plug)</p> <p>Dry Weight (excluding cable) 35kg</p>		<p>Impeller Semi-open impeller made of high-chromium cast iron</p> <p>Solids Passage: ϕ8.5mm</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 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), 740ml</p> <p>Motor Protection Device 415V: Circle Thermal Protector (CTP) 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> <p>1000V: MTP & Ground-Check Diode The MTPs are connected with a diode (3A-1000V) in series into the Ground-Check circuit in the motor. If excessive heat builds up and the bimetal strip opens, or Ground-fault happens, the power supply can be shut off by using an external control panel.</p>
<p>Optional Accessories</p> <p>Multi-directional Hose Nipple</p>		

SPECIFICATIONS	Model	KTZ33.7	
		KTZ-series 3.7kW, 3-phase	

<p>Type of Pump Submersible high head drainage pump for construction and foundation works, floodwater drainage, etc.</p> <p>Type of Fluid Stormwater, groundwater, wash water, and sand-carrying water</p> <p>Temperature: 0 to 40°C</p> <p>Discharge Bore & Connection 80mm (3"), Multi-directional BSPT Male Threaded Coupling</p> <p>Motor Output 3.7kW</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: 415V: F, 1000V: H Degree of Protection: IP68</p> <p>No. of Poles & Speed (Synchronous Speed) 2-pole, 3000min⁻¹ (50Hz)</p> <p>Power Supply Voltages & Rated Currents 50Hz 415V – 8.0A 1000V – 3.6A</p> <p>Power Cable 415V: PCP sheathed 600V cable (H07RN-F equiv.) Standard Length: 15m x 1 cable 4 x 2.0mm², O.D. 14.4mm</p> <p>1000V: PCP sheathed, overall screened 1.1kV Mining cable PLATINUM®, 1.1/1.1kV, MES5G2.5SCR Standard Length: 20m x 1 cable 3 x 2.5mm² + GC control + 2 x Ground, O.D. 18.8mm (acceptable Macey® 4-pin Plug)</p> <p>Dry Weight (excluding cable) 62kg</p>	<p>Impeller Semi-open impeller made of high-chromium cast iron</p> <p>Solids Passage: ϕ8.5mm</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 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), 1250ml</p> <p>Motor Protection Device 415V: Circle Thermal Protector (CTP) 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> <p>1000V: MTP & Ground-Check Diode The MTPs are connected with a diode (3A-1000V) in series into the Ground-Check circuit in the motor. If excessive heat builds up and the bimetal strip opens, or Ground-fault happens, the power supply can be shut off by using an external control panel.</p>
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<p>Optional Accessories</p> <p>Multi-directional Hose Nipple Seawater-Resistant Kit</p> <ul style="list-style-type: none"> Galvanic Anodes (with Fittings, Seal Putty) Seawater-Resistant Special Cast Iron Impeller 	<p>Special Specifications (415V only)</p> <p>High Temperature Liquids Version (60°C)</p>
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SPECIFICATIONS	Model	KTZ35.5	
		KTZ-series 5.5kW, 3-phase	

<p>Type of Pump Submersible high head drainage pump for construction and foundation works, floodwater drainage, etc.</p> <p>Type of Fluid Stormwater, groundwater, wash water, and sand-carrying water</p> <p>Temperature: 0 to 40°C</p> <p>Discharge Bore & Connection 80mm (3"), Multi-directional BSPT Male Threaded Coupling</p> <p>Motor Output 5.5kW</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: 415V: F, 1000V: H Degree of Protection: IP68</p> <p>No. of Poles & Speed (Synchronous Speed) 2-pole, 3000min⁻¹ (50Hz)</p> <p>Power Supply Voltages & Rated Currents 50Hz 415V – 11.3A 1000V – 4.6A</p> <p>Power Cable 415V: PCP sheathed 600V cable (H07RN-F equiv.) Standard Length: 15m x 1 cable 4 x 3.5mm², O.D. 16.8mm</p> <p>1000V: PCP sheathed, overall screened 1.1kV Mining cable PLATINUM®, 1.1/1.1kV, MES5G2.5SCR Standard Length: 20m x 1 cable 3 x 2.5mm² + GC control + 2 x Ground, O.D. 18.8mm (acceptable Macey® 4-pin Plug)</p> <p>Dry Weight (excluding cable) 76kg</p>	<p>Impeller Semi-open impeller made of high-chromium cast iron</p> <p>Solids Passage: φ8.5mm</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 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), 1100ml</p> <p>Motor Protection Device 415V: Circle Thermal Protector (CTP) 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> <p>1000V: MTP & Ground-Check Diode The MTPs are connected with a diode (3A-1000V) in series into the Ground-Check circuit in the motor. If excessive heat builds up and the bimetal strip opens, or Ground-fault happens, the power supply can be shut off by using an external control panel.</p>
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<p>Optional Accessories</p> <p>Multi-directional Hose Nipple</p>	<p>Special Specifications (415V only)</p> <p>High Temperature Liquids Version (60 • 80°C)</p>
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Series:

KTZ

Discharge Bore:

100 · 150mm

Motor Output / Pole:

3.7 - 22kW / 2-pole



The KTZ-series is a submersible three-phase cast iron high head heavy-duty drainage pump. The cast iron body with high-chromium cast iron impeller enables it to withstand demanding conditions found in construction, aggregate and mining applications. The top discharge, side flow design assures efficient motor cooling even when it operates with its motor exposed to air. The slim design allows the pump to be placed in a confined space. The discharge direction is selectable between vertical and inclined, which prevents folding or bending of the discharge hose. The pump with 7.5 to 22kW motor incorporates seal pressure relief ports that prevent the pumping pressure from applying to the shaft seal.

Registration of Design

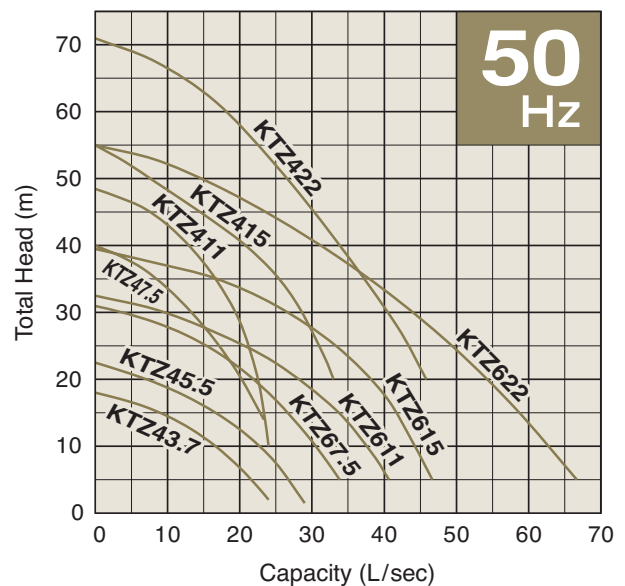
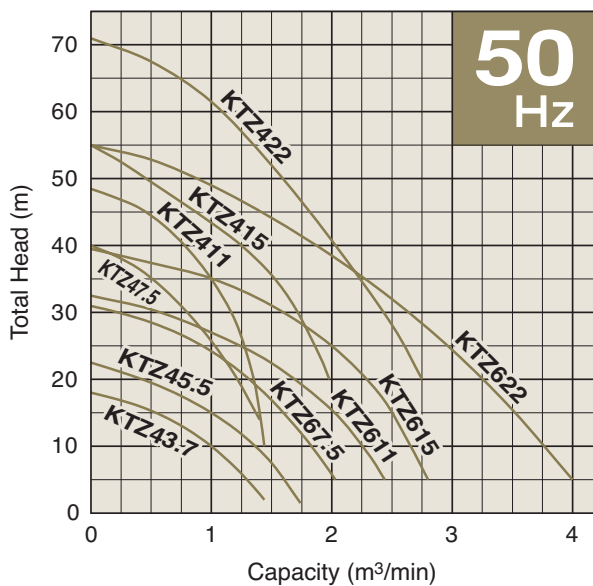
Tsurumi has registered the design of the KTZ-series in major countries. Design rights are granted under the laws of each country.

Selection Table

Model	Discharge Bore mm	Motor Output kW	Phase	Starting Method	Pole	Dry Weight kg
KTZ43.7 (*)	100	3.7	3-phase	Direct on Line	2	62
KTZ45.5 (*)	100	5.5	3-phase	Direct on Line	2	77
KTZ47.5 (*)	100	7.5	3-phase	Direct on Line	2	104
KTZ411 (*)	100	11	3-phase	Direct on Line	2	133
KTZ415 (*)	100	15	3-phase	Direct on Line	2	146
KTZ422 (*)	100	22	3-phase	Direct on Line	2	295
KTZ67.5 (*)	150	7.5	3-phase	Direct on Line	2	103
KTZ611 (*)	150	11	3-phase	Direct on Line	2	133
KTZ615 (*)	150	15	3-phase	Direct on Line	2	147
KTZ622 (*)	150	22	3-phase	Direct on Line	2	296

* : available for 1000V supply

Performance Curves



SPECIFICATIONS	Model	KTZ43.7	
		KTZ-series 3.7kW, 3-phase	

<p>Type of Pump Submersible high head drainage pump for construction and foundation works, floodwater drainage, etc.</p> <p>Type of Fluid Stormwater, groundwater, wash water, and sand-carrying water</p> <p>Temperature: 0 to 40°C</p> <p>Discharge Bore & Connection 100mm (4"), Multi-directional BSPT Male Threaded Coupling</p> <p>Motor Output 3.7kW</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: 415V: F, 1000V: H Degree of Protection: IP68</p> <p>No. of Poles & Speed (Synchronous Speed) 2-pole, 3000min⁻¹ (50Hz)</p> <p>Power Supply Voltages & Rated Currents 50Hz 415V – 8.0A 1000V – 3.6A</p> <p>Power Cable 415V: PCP sheathed 600V cable (H07RN-F equiv.) Standard Length: 15m x 1 cable 4 x 2.0mm², O.D. 14.4mm</p> <p>1000V: PCP sheathed, overall screened 1.1kV Mining cable PLATINUM®, 1.1/1.1kV, MES5G2.5SCR Standard Length: 20m x 1 cable 3 x 2.5mm² + GC control + 2 x Ground, O.D. 18.8mm (acceptable Macey® 4-pin Plug)</p> <p>Dry Weight (excluding cable) 62kg</p>	<p>Impeller Semi-open impeller made of high-chromium cast iron</p> <p>Solids Passage: φ8.5mm</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 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), 1250ml</p> <p>Motor Protection Device 415V: Circle Thermal Protector (CTP) 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> <p>1000V: MTP & Ground-Check Diode The MTPs are connected with a diode (3A-1000V) in series into the Ground-Check circuit in the motor. If excessive heat builds up and the bimetal strip opens, or Ground-fault happens, the power supply can be shut off by using an external control panel.</p>
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<p>Optional Accessories</p> <p>Multi-directional Hose Nipple Seawater-Resistant Kit</p> <ul style="list-style-type: none"> Galvanic Anodes (with Fittings, Seal Putty) Seawater-Resistant Special Cast Iron Impeller 	<p>Special Specifications (415V only)</p> <p>High Temperature Liquids Version (60°C)</p>
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SPECIFICATIONS	Model	KTZ45.5	
		KTZ-series 5.5kW, 3-phase	
<p>Type of Pump Submersible high head drainage pump for construction and foundation works, floodwater drainage, etc.</p> <p>Type of Fluid Stormwater, groundwater, wash water, and sand-carrying water</p> <p>Temperature: 0 to 40°C</p> <p>Discharge Bore & Connection 100mm (4"), Multi-directional BSPT Male Threaded Coupling</p> <p>Motor Output 5.5kW</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: 415V: F, 1000V: H Degree of Protection: IP68</p> <p>No. of Poles & Speed (Synchronous Speed) 2-pole, 3000min⁻¹ (50Hz)</p> <p>Power Supply Voltages & Rated Currents 50Hz 415V – 11.3A 1000V – 4.6A</p> <p>Power Cable 415V: PCP sheathed 600V cable (H07RN-F equiv.) Standard Length: 15m x 1 cable 4 x 3.5mm², O.D. 16.8mm</p> <p>1000V: PCP sheathed, overall screened 1.1kV Mining cable PLATINUM®, 1.1/1.1kV, MES5G2.5SCR Standard Length: 20m x 1 cable 3 x 2.5mm² + GC control + 2 x Ground, O.D. 18.8mm (acceptable Macey® 4-pin Plug)</p> <p>Dry Weight (excluding cable) 77kg</p>	<p>Impeller Semi-open impeller made of high-chromium cast iron</p> <p>Solids Passage: ϕ8.5mm</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 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), 1100ml</p> <p>Motor Protection Device 415V: Circle Thermal Protector (CTP) 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> <p>1000V: MTP & Ground-Check Diode The MTPs are connected with a diode (3A-1000V) in series into the Ground-Check circuit in the motor. If excessive heat builds up and the bimetal strip opens, or Ground-fault happens, the power supply can be shut off by using an external control panel.</p>		
<p>Optional Accessories Multi-directional Hose Nipple</p>	<p>Special Specifications (415V only) High Temperature Liquids Version (60•80°C)</p>		

SPECIFICATIONS	Model	KTZ-series	
		7.5kW, 3-phase	

<p>Type of Pump Submersible high head drainage pump for construction and foundation works, floodwater drainage, etc.</p> <p>Type of Fluid Stormwater, groundwater, wash water, and sand-carrying water</p> <p>Temperature: 0 to 40°C</p> <p>Discharge Bore & Connection 100mm (4"), Multi-directional BSPT Male Threaded Coupling</p> <p>Motor Output 7.5kW</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: 415V: F, 1000V: H Degree of Protection: IP68</p> <p>No. of Poles & Speed (Synchronous Speed) 2-pole, 3000min⁻¹ (50Hz)</p> <p>Power Supply Voltages & Rated Currents 50Hz 415V – 14.9A 1000V – 6.2A</p> <p>Power Cable 415V: PCP sheathed 600V cable (H07RN-F equiv.) Standard Length: 15m x 1 cable 4 x 5.5mm², O.D. 19.8mm</p> <p>1000V: PCP sheathed, overall screened 1.1kV Mining cable PLATINUM®, 1.1/1.1kV, MES5G2.5SCR Standard Length: 20m x 1 cable 3 x 2.5mm² + GC control + 2 x Ground, O.D. 18.8mm (acceptable Macey® 4-pin Plug)</p> <p>Dry Weight (excluding cable) 104kg</p>	<p>Impeller Semi-open impeller made of high-chromium cast iron</p> <p>Solids Passage: ϕ12mm</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>Labyrinth Ring Made of 304 stainless steel, equipped to provide a better countermeasure against wear caused by high pressure generated in the casing.</p> <p>Pressure Relief Ports Protect the mechanical seal against excessive pressure, and also protect the seal faces from abrasive particles by drawing the particles away.</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), 760ml</p> <p>Motor Protection Device 415V: Circle Thermal Protector (CTP) 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> <p>1000V: MTP & Ground-Check Diode The MTPs are connected with a diode (3A-1000V) in series into the Ground-Check circuit in the motor. If excessive heat builds up and the bimetal strip opens, or Ground-fault happens, the power supply can be shut off by using an external control panel.</p>
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<p>Optional Accessories</p> <p>Multi-directional Hose Nipple</p>	<p>Special Specifications (415V only)</p> <p>High Temperature Liquids Version (60•80°C)</p>
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SPECIFICATIONS	Model	KTZ411	
		KTZ-series 11kW, 3-phase	

Type of Pump

Submersible high head drainage pump for construction and foundation works, floodwater drainage, etc.

Type of Fluid

Stormwater, groundwater, wash water, and sand-carrying water

Temperature: 0 to 40°C

Discharge Bore & Connection

100mm (4"),
Multi-directional BSPT Male Threaded Coupling

Motor Output

11kW

Power Supply

Three-phase

Starting Method

Direct on Line

Motor

Continuous-duty rated, dry-type induction motor

Insulation Class: 415V: F, 1000V: H

Degree of Protection: IP68

No. of Poles & Speed (Synchronous Speed)

2-pole, 3000min⁻¹ (50Hz)

Power Supply Voltages & Rated Currents

50Hz

415V – 21.6A 1000V – 9.0A

Power Cable

415V:

PCP sheathed 600V cable (H07RN-F equiv.)

Standard Length: 15m x 1 cable

4 x 5.5mm², O.D. 19.8mm

1000V:

PCP sheathed, overall screened 1.1kV Mining cable

PLATINUM®, 1.1/1.1kV, MES5G2.5SCR

Standard Length: 20m x 1 cable

3 x 2.5mm² + GC control + 2 x Ground, O.D. 18.8mm
(acceptable Macey® 4-pin Plug)

Dry Weight (excluding cable)

133kg

Impeller

Semi-open impeller made of high-chromium cast iron

Solids Passage: ϕ 12mm

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.

Upper Seal Face: SiC + SiC

Lower Seal Face: SiC + SiC

Labyrinth Ring

Made of 304 stainless steel, equipped to provide a better countermeasure against wear caused by high pressure generated in the casing.

Pressure Relief Ports

Protect the mechanical seal against excessive pressure, and also protect the seal faces from abrasive particles by drawing the particles away.

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.

Type of Lubricating Oil & Volume

Turbine Oil (ISO VG32), 760ml

Motor Protection Device

415V: Circle Thermal Protector (CTP)

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.

1000V: MTP & Ground-Check Diode

The MTPs are connected with a diode (3A-1000V) in series into the Ground-Check circuit in the motor.

If excessive heat builds up and the bimetal strip opens, or Ground-fault happens, the power supply can be shut off by using an external control panel.

Optional Accessories
Multi-directional Hose Nipple
Seawater-Resistant Kit

- Galvanic Anodes (with Fittings, Seal Putty)
- Seawater-Resistant Special Cast Iron Impeller

Special Specifications (415V only)
High Temperature Liquids Version (60•80°C)

SPECIFICATIONS	Model	KTZ-series
	KTZ415	
		15kW, 3-phase
<p>Type of Pump Submersible high head drainage pump for construction and foundation works, floodwater drainage, etc.</p> <p>Type of Fluid Stormwater, groundwater, wash water, and sand-carrying water</p> <p>Temperature: 0 to 40°C</p> <p>Discharge Bore & Connection 100mm (4"), Multi-directional BSPT Male Threaded Coupling</p> <p>Motor Output 15kW</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: 415V: F, 1000V: H Degree of Protection: IP68</p> <p>No. of Poles & Speed (Synchronous Speed) 2-pole, 3000min⁻¹ (50Hz)</p> <p>Power Supply Voltages & Rated Currents 50Hz 415V – 27.4A 1000V – 12.1A</p> <p>Power Cable 415V: PCP sheathed 600V cable (H07RN-F equiv.) Standard Length: 15m x 1 cable 4 x 5.5mm², O.D. 19.8mm</p> <p>1000V: PCP sheathed, overall screened 1.1kV Mining cable PLATINUM®, 1.1/1.1kV, MES5G2.5SCR Standard Length: 20m x 1 cable 3 x 2.5mm² + GC control + 2 x Ground, O.D. 18.8mm (acceptable Macey® 4-pin Plug)</p> <p>Dry Weight (excluding cable) 146kg</p>	<p>Impeller Semi-open impeller made of high-chromium cast iron</p> <p>Solids Passage: ϕ12mm</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>Labyrinth Ring Made of 304 stainless steel, equipped to provide a better countermeasure against wear caused by high pressure generated in the casing.</p> <p>Pressure Relief Ports Protect the mechanical seal against excessive pressure, and also protect the seal faces from abrasive particles by drawing the particles away.</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), 820ml</p> <p>Motor Protection Device 415V: Circle Thermal Protector (CTP) 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> <p>1000V: MTP & Ground-Check Diode The MTPs are connected with a diode (3A-1000V) in series into the Ground-Check circuit in the motor. If excessive heat builds up and the bimetal strip opens, or Ground-fault happens, the power supply can be shut off by using an external control panel.</p>	
<p>Optional Accessories</p> <p>Multi-directional Hose Nipple</p>		

SPECIFICATIONS	Model	KTZ-series
	KTZ422	22kW, 3-phase
<p>Type of Pump Submersible high head drainage pump for construction and foundation works, floodwater drainage, etc.</p> <p>Type of Fluid Stormwater, groundwater, wash water, and sand-carrying water</p> <p>Temperature: 0 to 40°C</p> <p>Discharge Bore & Connection 100mm (4"), Multi-directional BSPT Male Threaded Coupling</p> <p>Motor Output 22kW</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: 415V: F, 1000V: H Degree of Protection: IP68</p> <p>No. of Poles & Speed (Synchronous Speed) 2-pole, 3000min⁻¹ (50Hz)</p> <p>Power Supply Voltages & Rated Currents 50Hz 415V – 36.6A 1000V – 14.9A</p> <p>Power Cable 415V: PCP sheathed 600V cable (H07RN-F equiv.) Standard Length: 15m x 1 cable 4 x 14mm² + 2 x 2mm², O.D. 25.2mm</p> <p>1000V: PCP sheathed, overall screened 1.1kV Mining cable PLATINUM®, 1.1/1.1kV, MES5G2.5SCR Standard Length: 20m x 1 cable 3 x 2.5mm² + GC control + 2 x Ground, O.D. 18.8mm (acceptable Macey® 4-pin Plug)</p> <p>Dry Weight (excluding cable) 295kg</p>		<p>Impeller Semi-open impeller made of high-chromium cast iron</p> <p>Solids Passage: ϕ8.5mm</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 Upper: Permanently lubricated, deep-groove, double-shielded C3 ball bearing Lower: Duplex angular contact ball bearing mounted back-to-back</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>Labyrinth Ring Made of 304 stainless steel, equipped to provide a better countermeasure against wear caused by high pressure generated in the casing.</p> <p>Pressure Relief Ports Protect the mechanical seal against excessive pressure, and also protect the seal faces from abrasive particles by drawing the particles away.</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), 2000ml</p> <p>Motor Protection Device 415V: Miniature Thermal Protector (MTP) A miniature thermal protector is embedded in each winding of the motor. Should excessive heat builds up, the bimetal strip opens to cause the control panel to shut the power supply.</p> <p>1000V: MTP & Ground-Check Diode The MTPs are connected with a diode (3A-1000V) in series into the Ground-Check circuit in the motor. If excessive heat builds up and the bimetal strip opens, or Ground-fault happens, the power supply can be shut off by using an external control panel.</p>
<p>Optional Accessory</p> <p>Multi-directional Hose Nipple</p>		

SPECIFICATIONS	Model	KTZ67.5	
		KTZ-series 7.5kW, 3-phase	

Type of Pump

Submersible high head drainage pump for construction and foundation works, floodwater drainage, etc.

Type of Fluid

Stormwater, groundwater, wash water, and sand-carrying water

Temperature: 0 to 40°C

Discharge Bore & Connection

150mm (6"),
Multi-directional BSPT Male Threaded Coupling

Motor Output

7.5kW

Power Supply

Three-phase

Starting Method

Direct on Line

Motor

Continuous-duty rated, dry-type induction motor

Insulation Class: 415V: F, 1000V: H

Degree of Protection: IP68

No. of Poles & Speed (Synchronous Speed)

2-pole, 3000min⁻¹ (50Hz)

Power Supply Voltages & Rated Currents

50Hz

415V – 14.9A 1000V – 6.2A

Power Cable

415V:

PCP sheathed 600V cable (H07RN-F equiv.)

Standard Length: 15m x 1 cable

4 x 5.5mm², O.D. 19.8mm

1000V:

PCP sheathed, overall screened 1.1kV Mining cable

PLATINUM®, 1.1/1.1kV, MES5G2.5SCR

Standard Length: 20m x 1 cable

3 x 2.5mm² + GC control + 2 x Ground, O.D. 18.8mm
(acceptable Macey® 4-pin Plug)

Dry Weight (excluding cable)

103kg

Impeller

Semi-open impeller made of high-chromium cast iron

Solids Passage: φ20mm

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.

Upper Seal Face: SiC + SiC

Lower Seal Face: SiC + SiC

Labyrinth Ring

Made of 304 stainless steel, equipped to provide a better countermeasure against wear caused by high pressure generated in the casing.

Pressure Relief Ports

Protect the mechanical seal against excessive pressure, and also protect the seal faces from abrasive particles by drawing the particles away.

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.

Type of Lubricating Oil & Volume

Turbine Oil (ISO VG32), 760ml

Motor Protection Device

415V: Circle Thermal Protector (CTP)

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.

1000V: MTP & Ground-Check Diode

The MTPs are connected with a diode (3A-1000V) in series into the Ground-Check circuit in the motor.

If excessive heat builds up and the bimetal strip opens, or Ground-fault happens, the power supply can be shut off by using an external control panel.

Optional Accessories

Multi-directional Hose Nipple

Special Specifications (415V only)

High Temperature Liquids Version (60•80°C)

SPECIFICATIONS	Model	KTZ611	
		KTZ-series 11kW, 3-phase	

Type of Pump

Submersible high head drainage pump for construction and foundation works, floodwater drainage, etc.

Type of Fluid

Stormwater, groundwater, wash water, and sand-carrying water

Temperature: 0 to 40°C

Discharge Bore & Connection

150mm (6"),
Multi-directional BSPT Male Threaded Coupling

Motor Output

11kW

Power Supply

Three-phase

Starting Method

Direct on Line

Motor

Continuous-duty rated, dry-type induction motor

Insulation Class: 415V: F, 1000V: H

Degree of Protection: IP68

No. of Poles & Speed (Synchronous Speed)

2-pole, 3000min⁻¹ (50Hz)

Power Supply Voltages & Rated Currents

50Hz

415V – 21.6A 1000V – 9.0A

Power Cable

415V:

PCP sheathed 600V cable (H07RN-F equiv.)

Standard Length: 15m x 1 cable

4 x 5.5mm², O.D. 19.8mm

1000V:

PCP sheathed, overall screened 1.1kV Mining cable

PLATINUM®, 1.1/1.1kV, MES5G2.5SCR

Standard Length: 20m x 1 cable

3 x 2.5mm² + GC control + 2 x Ground, O.D. 18.8mm
(acceptable Macey® 4-pin Plug)

Dry Weight (excluding cable)

133kg

Impeller

Semi-open impeller made of high-chromium cast iron

Solids Passage: φ20mm

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.

Upper Seal Face: SiC + SiC

Lower Seal Face: SiC + SiC

Labyrinth Ring

Made of 304 stainless steel, equipped to provide a better countermeasure against wear caused by high pressure generated in the casing.

Pressure Relief Ports

Protect the mechanical seal against excessive pressure, and also protect the seal faces from abrasive particles by drawing the particles away.

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.

Type of Lubricating Oil & Volume

Turbine Oil (ISO VG32), 760ml

Motor Protection Device

415V: Circle Thermal Protector (CTP)

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.

1000V: MTP & Ground-Check Diode

The MTPs are connected with a diode (3A-1000V) in series into the Ground-Check circuit in the motor.

If excessive heat builds up and the bimetal strip opens, or Ground-fault happens, the power supply can be shut off by using an external control panel.

Optional Accessories
Multi-directional Hose Nipple
Seawater-Resistant Kit

- Galvanic Anodes (with Fittings, Seal Putty)
- Seawater-Resistant Special Cast Iron Impeller

Special Specifications (415V only)
High Temperature Liquids Version (60•80°C)

SPECIFICATIONS	Model	KTZ615	
		KTZ-series 15kW, 3-phase	

Type of Pump

Submersible high head drainage pump for construction and foundation works, floodwater drainage, etc.

Type of Fluid

Stormwater, groundwater, wash water, and sand-carrying water

Temperature: 0 to 40°C

Discharge Bore & Connection

150mm (6"),
Multi-directional BSPT Male Threaded Coupling

Motor Output

15kW

Power Supply

Three-phase

Starting Method

Direct on Line

Motor

Continuous-duty rated, dry-type induction motor

Insulation Class: 415V: F, 1000V: H

Degree of Protection: IP68

No. of Poles & Speed (Synchronous Speed)

2-pole, 3000min⁻¹ (50Hz)

Power Supply Voltages & Rated Currents

50Hz

415V – 27.4A 1000V – 12.1A

Power Cable

415V:

PCP sheathed 600V cable (H07RN-F equiv.)

Standard Length: 15m x 1 cable

4 x 5.5mm², O.D. 19.8mm

1000V:

PCP sheathed, overall screened 1.1kV Mining cable

PLATINUM®, 1.1/1.1kV, MES5G2.5SCR

Standard Length: 20m x 1 cable

3 x 2.5mm² + GC control + 2 x Ground, O.D. 18.8mm
(acceptable Macey® 4-pin Plug)

Dry Weight (excluding cable)

147kg

Impeller

Semi-open impeller made of high-chromium cast iron

Solids Passage: φ20mm

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.

Upper Seal Face: SiC + SiC

Lower Seal Face: SiC + SiC

Labyrinth Ring

Made of 304 stainless steel, equipped to provide a better countermeasure against wear caused by high pressure generated in the casing.

Pressure Relief Ports

Protect the mechanical seal against excessive pressure, and also protect the seal faces from abrasive particles by drawing the particles away.

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.

Type of Lubricating Oil & Volume

Turbine Oil (ISO VG32), 820ml

Motor Protection Device

415V: Circle Thermal Protector (CTP)

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.

1000V: MTP & Ground-Check Diode

The MTPs are connected with a diode (3A-1000V) in series into the Ground-Check circuit in the motor.

If excessive heat builds up and the bimetal strip opens, or Ground-fault happens, the power supply can be shut off by using an external control panel.

Optional Accessories

Multi-directional Hose Nipple

SPECIFICATIONS	Model	KTZ-series
	KTZ622	
		22kW, 3-phase
<p>Type of Pump Submersible high head drainage pump for construction and foundation works, floodwater drainage, etc.</p> <p>Type of Fluid Stormwater, groundwater, wash water, and sand-carrying water</p> <p>Temperature: 0 to 40°C</p> <p>Discharge Bore & Connection 150mm (6"), Multi-directional BSPT Male Threaded Coupling</p> <p>Motor Output 22kW</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: 415V: F, 1000V: H Degree of Protection: IP68</p> <p>No. of Poles & Speed (Synchronous Speed) 2-pole, 3000min⁻¹ (50Hz)</p> <p>Power Supply Voltages & Rated Currents 50Hz 415V – 36.6A 1000V – 14.9A</p> <p>Power Cable 415V: PCP sheathed 600V cable (H07RN-F equiv.) Standard Length: 15m x 1 cable 4 x 14mm² + 2 x 2mm², O.D. 25.2mm</p> <p>1000V: PCP sheathed, overall screened 1.1kV Mining cable PLATINUM®, 1.1/1.1kV, MES5G2.5SCR Standard Length: 20m x 1 cable 3 x 2.5mm² + GC control + 2 x Ground, O.D. 18.8mm (acceptable Macey® 4-pin Plug)</p> <p>Dry Weight (excluding cable) 296kg</p> <p>Optional Accessory Multi-directional Hose Nipple</p>	<p>Impeller Semi-open impeller made of high-chromium cast iron</p> <p>Solids Passage: ϕ12mm</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 Upper: Permanently lubricated, deep-groove, double-shielded C3 ball bearing Lower: Duplex angular contact ball bearing mounted back-to-back</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>Labyrinth Ring Made of 304 stainless steel, equipped to provide a better countermeasure against wear caused by high pressure generated in the casing.</p> <p>Pressure Relief Ports Protect the mechanical seal against excessive pressure, and also protect the seal faces from abrasive particles by drawing the particles away.</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), 2000ml</p> <p>Motor Protection Device 415V: Miniature Thermal Protector (MTP) A miniature thermal protector is embedded in each winding of the motor. Should excessive heat builds up, the bimetal strip opens to cause the control panel to shut the power supply.</p> <p>1000V: MTP & Ground-Check Diode The MTPs are connected with a diode (3A-1000V) in series into the Ground-Check circuit in the motor. If excessive heat builds up and the bimetal strip opens, or Ground-fault happens, the power supply can be shut off by using an external control panel.</p>	

DIMENSIONS

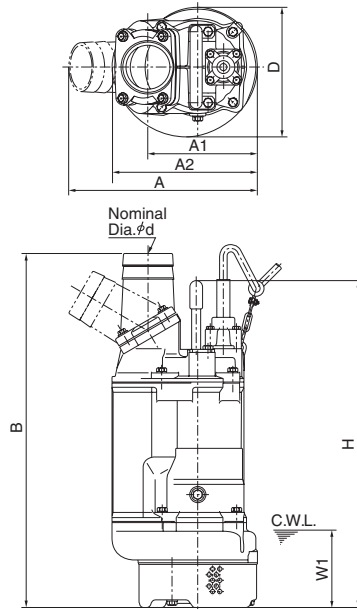
Model

KTZ21.5 to KTZ622

KTZ-series

50 - 150mm

C. W. L. : Continuous Running Water Level



* The illustration in the dimensional drawing is general specifications.

Unit: mm

Model	d	A	A1	A2	B	D	H	W1
KTZ21.5	50	261	173	235	529	216	648	120
KTZ22.2 (*)	50	261	173	235	549	216	668	120
KTZ23.7 (*)	50	338	213	283	667	252	637	150
KTZ31.5	80	268	173	235	529	216	648	120
KTZ32.2 (*)	80	268	173	235	549	216	668	120
KTZ33.7 (*)	80	353	213	283	677	252	637	150
KTZ35.5 (*)	80	363	223	306	721	258	688	150
KTZ43.7 (*)	100	368	213	283	687	252	637	150
KTZ45.5 (*)	100	379	223	306	731	258	688	150
KTZ47.5 (*)	100	401	245	330	809	314	697	190
KTZ411 (*)	100	408	260	374	836	350	740	190
KTZ415 (*)	100	408	260	374	906	350	810	190
KTZ422 (*)	100	525	360	485	1197	413	1123	330
KTZ67.5 (*)	150	394	285	367	810 - 839	314	697	190
KTZ611 (*)	150	438	260	374	856	350	740	190
KTZ615 (*)	150	438	260	374	926	350	810	190
KTZ622 (*)	150	555	360	485	1217	413	1123	330

* : available for 1000V supply