

Series: KRDX	Discharge Bore: 80 - 100mm	Motor Output / Pole: 3.7 - 7.5kW / 4-pole
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The KRDX-series is a submersible three-phase heavy-duty explosion-proof slurry pump driven by a 4-pole motor. It is equipped with a high-chromium cast iron agitator that assists the smooth suction of the settled material. Among other parts subject to wear, impellers and suction plates are made of high-chromium cast iron, with the pump casing and motor frame made of ductile cast iron, which provides excellent wear resistance for both types of parts. The top discharge, side flow design assures efficient motor cooling even when it operates with its motor exposed to air.

Explosion-proof Code

IECEX: Ex d I Mb

ATEX:  I M2 Ex d I Mb

South Africa: Ex d I Mb

Temperature range of Ambient and Liquid: 0 to 40 °C

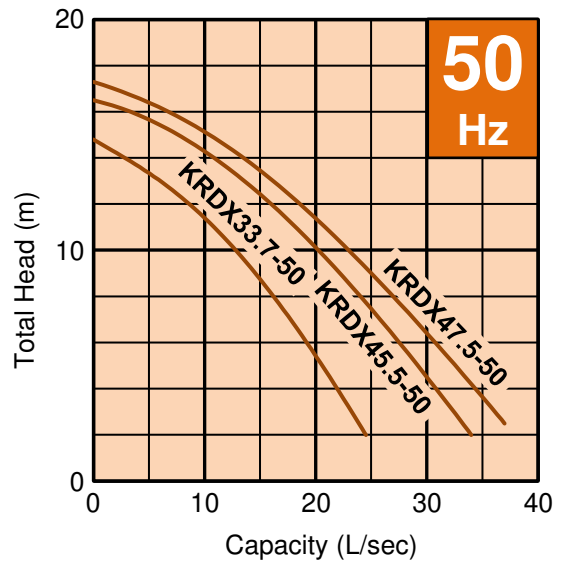
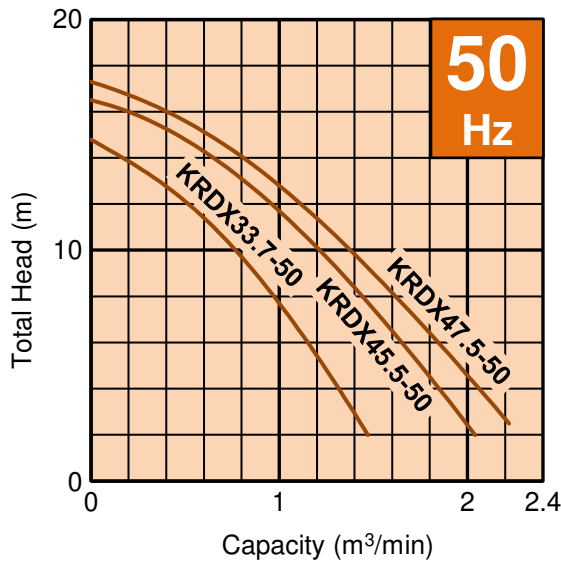
The pump should be operated with cooling by pumped liquid.


Please make sure the pump casing is fully submerged in the water.


Selection Table


Model	Discharge Bore mm	Motor Output kW	Phase	Starting Method	Pole	Dry Weight kg
KRDX33.7-50	80	3.7	3-phase	Direct on Line	4	155
KRDX45.5-50	100	5.5	3-phase	Direct on Line	4	175
KRDX47.5-50	100	7.5	3-phase	Direct on Line	4	186

Performance Curves



SPECIFICATIONS	Model KRDX33.7-50	KRDX-series
		3.7kW, 3-phase
<p>Type of Pump Submersible explosion-proof slurry pump for construction and foundation works, mining, quarries, etc.</p> <p>Explosion-proof Code IECEX: Ex d I Mb ATEX:  I M2 Ex d I Mb South Africa: Ex d I Mb</p> <p>Type of Fluid Water containing sand, mud, and slurry Specific Gravity 1.0 ~ 1.1 (less than 15% Wt. of sand) Temperature: 0 to 40°C</p> <p>Discharge Bore & Connection 80mm(3"), 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 (with cooling by pumped water), flame-ploof enclosure, dry-type induction motor Insulation Class: H Degree of Protection: IP68</p> <p>No. of Poles & Speed (Synchronous Speed): 4-pole, 1500min⁻¹ (50Hz)</p> <p>Power Supply Voltages & Rated Currents: 50Hz 380V - (8.6A) 660V - (5.0A) 400V - (8.2A) 690V - (4.8A) 500V - 6.4A 1000V - 3.3A 525V - 6.3A 550V - 6.4A</p> <p>Power Cable for General: NSSHOU (screened), 0.6/1kV Mining cable 3x2.5 + 3x2.5/3E + 3x1.5ST (cut-off 2x1.5ST) Standard Length: 20m x 1 cable 3 x 2.5mm² + GC control + Ground, OD. 17.1~19.1mm</p> <p>for South Africa: SANS Type 41 (screened), 640/1100V Mining cable 3x2.5SC + 1x2.5mm² Standard Length: 15m x 1 cable 3 x 2.5mm² + GC control + Ground, OD. 18.5~20.4mm</p> <p>Dry Weight (excluding cable) 155kg (50Hz)</p>	<p>Impeller Semi-open impeller made of high-chromium cast iron</p> <p>Solids Passage 50Hz - ϕ21mm</p> <p>Agitator High-chromium cast iron</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, non-contact sealed ball bearings</p> <p>Upper Bearing: 6306LLB Lower Bearing: 6308LLB</p> <p>Shaft 410 stainless steel</p> <p>Shaft Seal (Mechanical Seal) Furnished with 2 mechanical seals 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 & Shaft Sleeve Made of alloy tool 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 seals against excessive pressure, and also protect the seal faces from abrasive by drawing the particles away.</p> <p>Type of Lubricating Oil & Volume Turbine Oil (ISO VG32), 1050ml</p> <p>Motor Protection Device Miniature Thermal Protectors & Ground-Check Diode A miniature thermal protector is embedded in each winding of the motor. The MTPs are connected with a diode in series into the Ground-Check circuit in the motor. If excessive heat builds up and the bimetal strip opens, Ground-fault happens, the power supply can be shut off by using an external control panel.</p> <p>Diode for General: 1N5408 (3A-1000V) Diode for South Africa: D16K 1K6VC (16A-1600V)</p>	
<p>Optional Accessories 80mm(3") Hose Nipple Impeller Nut for non-agitation</p>		

SPECIFICATIONS	Model KRDX45.5-50	KRDX-series												
		5.5kW, 3-phase												
<p>Type of Pump Submersible explosion-proof slurry pump for construction and foundation works, mining, quarries, etc.</p> <p>Explosion-proof Code IECEX: Ex d I Mb ATEX:  I M2 Ex d I Mb South Africa: Ex d I Mb</p> <p>Type of Fluid Water containing sand, mud, and slurry Specific Gravity 1.0 ~ 1.1 (less than 15% Wt. of sand)</p> <p>Temperature: 0 to 40°C</p> <p>Discharge Bore & Connection 100mm(4"), 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 (with cooling by pumped water), flame-ploof enclosure, dry-type induction motor</p> <p>Insulation Class: H Degree of Protection: IP68</p> <p>No. of Poles & Speed (Synchronous Speed): 4-pole, 1500min⁻¹ (50Hz)</p> <p>Power Supply Voltages & Rated Currents:</p> <table border="0"> <tr> <td>50Hz</td> <td></td> </tr> <tr> <td>380V - (12.6A)</td> <td>660V - (7.2A)</td> </tr> <tr> <td>400V - (11.9A)</td> <td>690V - (6.9A)</td> </tr> <tr> <td>500V - 9.4A</td> <td>1000V - 4.8A</td> </tr> <tr> <td>525V - 9.1A</td> <td></td> </tr> <tr> <td>550V - 8.9A</td> <td></td> </tr> </table> <p>Power Cable for General: NSSHOU (screened), 0.6/1kV Mining cable 3x2.5 + 3x2.5/3E + 3x1.5ST (cut-off 2x1.5ST) Standard Length: 20m x 1 cable 3 x 2.5mm² + GC control + Ground, OD. 17.1~19.1mm</p> <p>for South Africa: SANS Type 41 (screened), 640/1100V Mining cable 3x2.5SC + 1x2.5mm² Standard Length: 15m x 1 cable 3 x 2.5mm² + GC control + Ground, OD. 18.5~20.4mm</p> <p>Dry Weight (excluding cable) 175kg (50Hz)</p>	50Hz		380V - (12.6A)	660V - (7.2A)	400V - (11.9A)	690V - (6.9A)	500V - 9.4A	1000V - 4.8A	525V - 9.1A		550V - 8.9A		<p>Impeller Semi-open impeller made of high-chromium cast iron</p> <p>Solids Passage 50Hz - ϕ28mm</p> <p>Agitator High-chromium cast iron</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, non-contact sealed ball bearings</p> <p>Upper Bearing: 6306LLB Lower Bearing: 6308LLB</p> <p>Shaft 410 stainless steel</p> <p>Shaft Seal (Mechanical Seal) Furnished with 2 mechanical seals 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 & Shaft Sleeve Made of alloy tool 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 seals against excessive pressure, and also protect the seal faces from abrasive by drawing the particles away.</p> <p>Type of Lubricating Oil & Volume Turbine Oil (ISO VG32), 1050ml</p> <p>Motor Protection Device Miniature Thermal Protectors & Ground-Check Diode A miniature thermal protector is embedded in each winding of the motor. The MTPs are connected with a diode in series into the Ground-Check circuit in the motor. If excessive heat builds up and the bimetal strip opens, Ground-fault happens, the power supply can be shut off by using an external control panel.</p> <p>Diode for General: 1N5408 (3A-1000V) Diode for South Africa: D16K 1K6VC (16A-1600V)</p>	
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<p>Optional Accessories 100mm(4") Hose Nipple Impeller Nut for non-agitation</p>														
<p align="center">TSURUMI MANUFACTURING CO.,LTD.</p>														

SPECIFICATIONS	Model	KRDX47.5-50	KRDX-series
			7.5kW, 3-phase
<p>Type of Pump Submersible explosion-proof slurry pump for construction and foundation works, mining, quarries, etc.</p> <p>Explosion-proof Code IECEX: Ex d I Mb ATEX:  I M2 Ex d I Mb South Africa: Ex d I Mb</p> <p>Type of Fluid Water containing sand, mud, and slurry Specific Gravity 1.0 ~ 1.1 (less than 15% Wt. of sand) Temperature: 0 to 40°C</p> <p>Discharge Bore & Connection 100mm(4"), 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 (with cooling by pumped water), flame-proof enclosure, dry-type induction motor Insulation Class: H Degree of Protection: IP68 No. of Poles & Speed (Synchronous Speed): 4-pole, 1500min⁻¹ (50Hz) Power Supply Voltages & Rated Currents: 50Hz 380V - (16.6A) 660V - (9.6A) 400V - (15.8A) 690V - (9.1A) 500V - 12.1A 1000V - 6.3A 525V - 12.0A 550V - 11.9A</p> <p>Power Cable for General: NSSHOU (screened), 0.6/1kV Mining cable 3x2.5 + 3x2.5/3E + 3x1.5ST (cut-off 2x1.5ST) Standard Length: 20m x 1 cable 3 x 2.5mm² + GC control + Ground, OD. 17.1~19.1mm for South Africa: SANS Type 41 (screened), 640/1100V Mining cable 3x2.5SC + 1x2.5mm² Standard Length: 15m x 1 cable 3 x 2.5mm² + GC control + Ground, OD. 18.5~20.4mm</p> <p>Dry Weight (excluding cable) 186kg (50Hz)</p>	<p>Impeller Semi-open impeller made of high-chromium cast iron Solids Passage 50Hz - ϕ33mm</p> <p>Agitator High-chromium cast iron</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, non-contact sealed ball bearings Upper Bearing: 6306LLB Lower Bearing: 6309LLB</p> <p>Shaft 410 stainless steel</p> <p>Shaft Seal (Mechanical Seal) Furnished with 2 mechanical seals 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</p> <p>Labyrinth Ring & Shaft Sleeve Made of alloy tool 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 seals against excessive pressure, and also protect the seal faces from abrasive by drawing the particles away.</p> <p>Type of Lubricating Oil & Volume Turbine Oil (ISO VG32), 1050ml</p> <p>Motor Protection Device Miniature Thermal Protectors & Ground-Check Diode A miniature thermal protector is embedded in each winding of the motor. The MTPs are connected with a diode in series into the Ground-Check circuit in the motor. If excessive heat builds up and the bimetal strip opens, Ground-fault happens, the power supply can be shut off by using an external control panel. Diode for General: 1N5408 (3A-1000V) Diode for South Africa: D16K 1K6VC (16A-1600V)</p>		
<p>Optional Accessories 100mm(4") Hose Nipple Impeller Nut for non-agitation</p>			

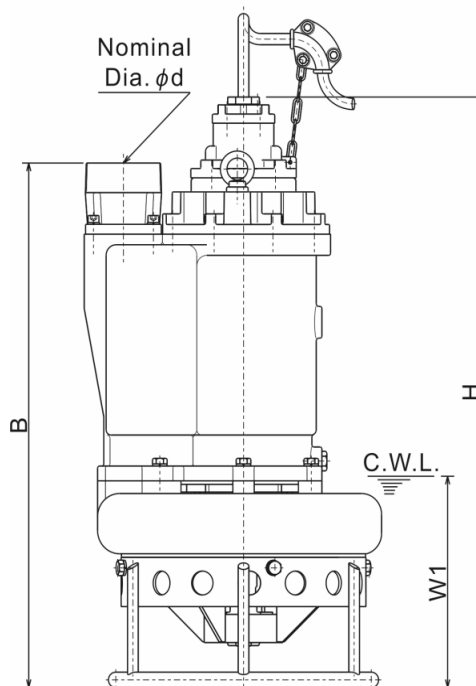
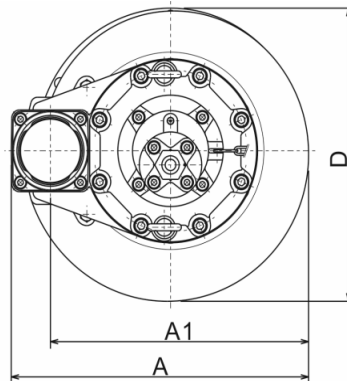
DIMENSIONS

Model **KRDX33.7/45.5/47.5-50**

KRDX-series

80 - 100mm

C.W.L. : Continuous Running Water Level
Do not operate the pump below the C.W.L.



Unit: mm

Model	d	A	A1	B	D	H	W1
KRDX33.7-50	80	415	356	701	369	829	290
KRDX45.5-50	100	446	387	745	416	838	300
KRDX47.5-50	100	446	387	775	416	868	300