

Series:

Discharge Bore:

**Motor Output / Pole:** 

KRD/KRS(Slurry)

80 - 200mm

4 - 18kW / 4-pole

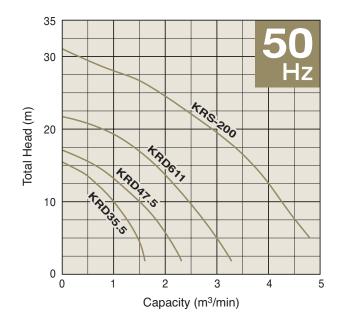


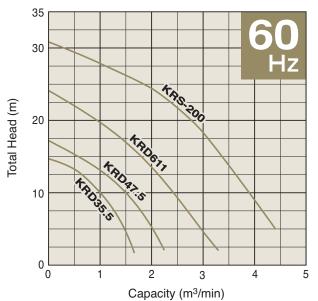
The KRD/KRS-series of slurry-handling type is a submersible three-phase cast iron heavy-duty slurry pump driven by a 4-pole motor. It is equipped with a high-chromium cast iron agitator that assists smooth suction of the settled matters. The other wear parts such as the impeller and the suction plate are also made of high-chromium cast iron for extra durability. The top discharge, side flow design assures efficient motor cooling even when it operates with its motor exposed to air.

# **Selection Table**

Model	Discharge Bore mm	Motor Output kW	Phase	Starting Method	Pole	Dry Weight 50/60Hz kg
KRD35.5	80	5.5	3-phase	Direct on Line	4	107
KRD47.5	100	7.5	3-phase	Direct on Line	4	154
KRD611	150	11	3-phase	Direct on Line	4	175/167
KRS-200	200	18	3-phase	Direct on Line	4	395

# **Performance Curves**







Model

# **KRD35.5**

**KRD-series** 

5.5kW, 3-phase

# Type of Pump

Submersible slurry pump for construction and foundation works, mining, and quarries, etc.

### Type of Fluid

Water containing sand, mud, and slurry

Temperature: 0 to 40°C

# **Discharge Bore & Connection**

80mm, Hose Coupling

# **Motor Output**

5.5kW

#### **Power Supply**

Three-phase

### **Starting Method**

Direct on Line (Star-Delta available on special request)

#### Motor

Continuous-duty rated, dry-type induction motor

Insulation Class: F

Degree of Protection: IP68

No. of Poles & Speed (Synchronous Speed)

4-pole, 1500/1800min<sup>-1</sup> (50/60Hz)

Power Supply Voltages & Rated Currents

50Hz 60Hz

380V - 12.5A 220V - 21.0A 400V - 12.1A 380V - 11.8A 415V - 11.7A 440V - 10.5A

#### **Power Cable**

Sheath: Chloroprene rubber Standard Length: 8m 380 to 600V supply:

1 x 4 x 2.5mm<sup>2</sup>, O.D. 12.4mm (60245 IEC 66)

or 1 x 4 x 3.5mm<sup>2</sup>, O.D. 16.8mm

200 to 240V supply:

1 x 4 x 4mm<sup>2</sup>, O.D. 13.8mm (60245 IEC 66)

or 1 x 4 x 3.5mm<sup>2</sup>, O.D. 16.8mm

# Dry Weight (excluding cable)

107kg

#### **Impeller**

Semi-open impeller made of high-chromium cast iron

Solids Passage 50Hz –  $\phi$ 30mm 60Hz –  $\phi$ 30mm

### **Agitator**

High-chromium cast iron

### **Suction Plate**

Made of high-chromium cast iron, excellent in abrasion-resistance

### Cable Entry with Anti-Wicking Block

Watertight cable entry with strain-relief device. The antiwicking 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

### Oil Seal (Lip Seal)

Used as a "Dust Seal", it protects the mechanical seal from abrasive particles.

### **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), 1850ml

#### **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.

# Optional Accessory

# **Male Threaded Coupling**

# Special Specifications

High Temperature Liquids Version (60·80°C)



Model

# **KRD47.5**

**KRD-series** 

7.5kW, 3-phase

# Type of Pump

Submersible slurry pump for construction and foundation works, mining, and quarries, etc.

#### Type of Fluid

Water containing sand, mud, and slurry

Temperature: 0 to 40°C

# **Discharge Bore & Connection**

100mm, Hose Coupling

# **Motor Output**

7.5kW

#### **Power Supply**

Three-phase

### **Starting Method**

Direct on Line (Star-Delta available on special request)

#### Motor

Continuous-duty rated, dry-type induction motor

Insulation Class: F

Degree of Protection: IP68

No. of Poles & Speed (Synchronous Speed)

4-pole, 1500/1800min<sup>-1</sup> (50/60Hz)

Power Supply Voltages & Rated Currents

50Hz 60Hz

380V - 15.8A 220V - 28.0A 400V - 15.0A 380V - 15.0A 415V - 15.0A 440V - 13.5A

#### **Power Cable**

Sheath: Chloroprene rubber Standard Length: 8m 200 to 600V supply:

1 x 4 x 4mm<sup>2</sup>, O.D. 13.8mm (60245 IEC 66)

or 1 x 4 x 5.5mm<sup>2</sup>, O.D. 19.8mm

### Dry Weight (excluding cable)

154kg

#### **Impeller**

Semi-open impeller made of high-chromium cast iron

Solids Passage 50Hz –  $\phi$ 30mm 60Hz –  $\phi$ 30mm

### **Agitator**

High-chromium cast iron

### **Suction Plate**

Made of high-chromium cast iron, excellent in abrasion-resistance

### Cable Entry with Anti-Wicking Block

Watertight cable entry with strain-relief device. The antiwicking 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

### Oil Seal (Lip Seal)

Used as a "Dust Seal", it protects the mechanical seal from abrasive particles.

### **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), 2300ml

#### **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.

# Optional Accessory

# **Male Threaded Coupling**

# Special Specifications

High Temperature Liquids Version (60·80°C)



Model

# **KRD611**

**KRD-series** 

11kW, 3-phase

### Type of Pump

Submersible slurry pump for construction and foundation works, mining, and quarries, etc.

#### Type of Fluid

Water containing sand, mud, and slurry

Temperature: 0 to 40°C

# **Discharge Bore & Connection**

150mm, Hose Coupling

# **Motor Output**

11kW

#### **Power Supply**

Three-phase

### **Starting Method**

Direct on Line (Star-Delta available on special request)

### Motor

Continuous-duty rated, dry-type induction motor

Insulation Class: F

Degree of Protection: IP68

No. of Poles & Speed (Synchronous Speed)

4-pole, 1500/1800min<sup>-1</sup> (50/60Hz)

Power Supply Voltages & Rated Currents

50Hz 60Hz

380V - 23.0A 220V - 40.5A 400V - 22.5A 380V - 22.5A 415V - 22.5A 440V - 20.0A

#### **Power Cable**

Sheath: Chloroprene rubber Standard Length: 8m 380 to 600V supply:

1 x 4 x 4mm<sup>2</sup>, O.D. 13.8mm (60245 IEC 66)

or 1 x 4 x 5.5mm<sup>2</sup>, O.D. 19.8mm

200 to 240V supply:

1 x 4 x 6mm<sup>2</sup>, O.D. 19.0mm (60245 IEC 66)

or 1 x 4 x 8mm<sup>2</sup>, O.D. 21.7mm

# Dry Weight (excluding cable)

50Hz – 175kg 60Hz – 167kg

#### **Impeller**

Semi-open impeller made of high-chromium cast iron

Solids Passage 50Hz –  $\phi$ 30mm 60Hz –  $\phi$ 30mm

### **Agitator**

High-chromium cast iron

### **Suction Plate**

Made of high-chromium cast iron, excellent in abrasion-resistance

### Cable Entry with Anti-Wicking Block

Watertight cable entry with strain-relief device. The antiwicking 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

### Oil Seal (Lip Seal)

Used as a "Dust Seal", it protects the mechanical seal from abrasive particles.

### **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), 2300ml

#### **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.

# Optional Accessory

# **Male Threaded Coupling**

# Special Specifications

High Temperature Liquids Version (60·80°C)

Model

# **KRS-200**

KRS(Slurry)-series

18kW, 3-phase

### Type of Pump

Submersible slurry pump for construction and foundation works, mining, and quarries, etc.

### Type of Fluid

Water containing sand, mud, and slurry

Temperature: 0 to 40°C

# **Discharge Bore & Connection**

200mm, Hose Coupling

# **Motor Output**

18kW

#### **Power Supply**

Three-phase

### **Starting Method**

Direct on Line (Star-Delta available on special request)

#### Motor

Continuous-duty rated, dry-type induction motor

Insulation Class: F

Degree of Protection: IP68

No. of Poles & Speed (Synchronous Speed)

4-pole, 1500/1800min<sup>-1</sup> (50/60Hz)

Power Supply Voltages & Rated Currents

50Hz 60Hz

380V - 36.5A 220V - 62.0A 400V - 35.0A 380V - 34.5A 415V - 34.5A 440V - 31.0A

#### **Power Cable**

Sheath: Chloroprene rubber Standard Length: 10m 380 to 600V supply:

1 x 4 x 14mm<sup>2</sup>, O.D. 25.6mm

200 to 240V supply:

1 x 4 x 22mm<sup>2</sup>, O.D. 31.6mm

# Dry Weight (excluding cable)

395kg

#### Impeller

Semi-open impeller made of high-chromium cast iron

Solids Passage 50Hz –  $\phi$ 30mm 60Hz –  $\phi$ 30mm

### **Agitator**

High-chromium cast iron

### **Adjustable Suction Plate**

Made of high-chromium cast iron, excellent in abrasionresistance. It can be improved by adjusting impeller clearance.

### Cable Entry with Anti-Wicking Block

Watertight cable entry with strain-relief device. The antiwicking 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

# Oil Seal (Lip Seal)

Used as a "Dust Seal", it protects the mechanical seal from abrasive particles.

### **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), 6500ml

# **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.

# Optional Accessory

# **Male Threaded Coupling**

# Special Specifications

High Temperature Liquids Version (60°C)

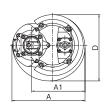
Model

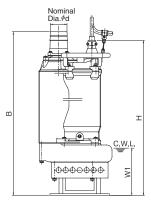
**DIMENSIONS** 

KRD35.5 to KRS-200

KRD/KRS-series 80 - 200mm

C. W. L.: Continuous Running Water Level





Unit: mm

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Model	d	Α	A1	В	D	Н	W1
KRD35.5	80	351	259	838	326	815	265
KRD47.5	100	418	305	936	379	886	270
KRD611(50Hz)	150	436	323	961	407	913	270
KRD611(60Hz)	150	418	305	961	379	913	270
KRS-200	200	576	445	1182	530	1140	285