



Submersible Slurry Pumps

HSD/KTV/KRS NKZ/GPN GSZ-6



Innovations that ensure high durability and superb wear resistance

Single-phase portable pump fit for use in slurry dewatering in foundation works. Uses chromium iron casting for the impeller and agitator.

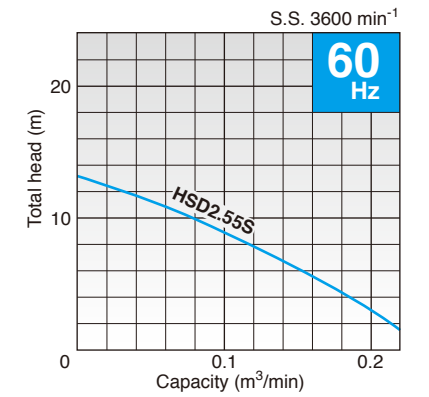
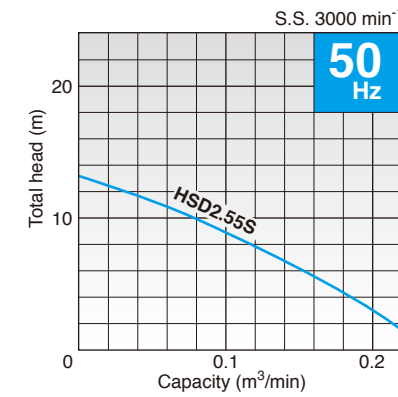
HSD

Specification Table

◎ Standard equipment △ Prepared to order

| Category | Submersible pumps | | | | | |
|---------------------------|-------------------|--------------------|--------|-------------------------------|--------|-------|
| | Slurry | Slurry (Bentonite) | | Slurry (General construction) | | |
| Series | HSD | KTV | KRS | NKZ | GPN | GSZ-6 |
| Discharge bore (mm) | 50 | 50~80 | 80~150 | 80~150 | 80~150 | 200 |
| Output (kW) | 0.55 | 2~3 | 4~9 | 2.2~11 | 5.5~22 | 22~37 |
| Poles | 2 | 2 | 4 | 4 | 4 | 6 |
| Forced motor cooling | | | | ◎ | ◎ | ◎ |
| Side flow design | | ◎ | ◎ | | | |
| Spiral design | ◎ | | | ◎ | ◎ | ◎ |
| Agitator | ◎ | ◎ | ◎ | ◎ | ◎ | |
| Guide rail fitting system | | | | △ | △ | |

Performance Curves



Major Standard Specifications

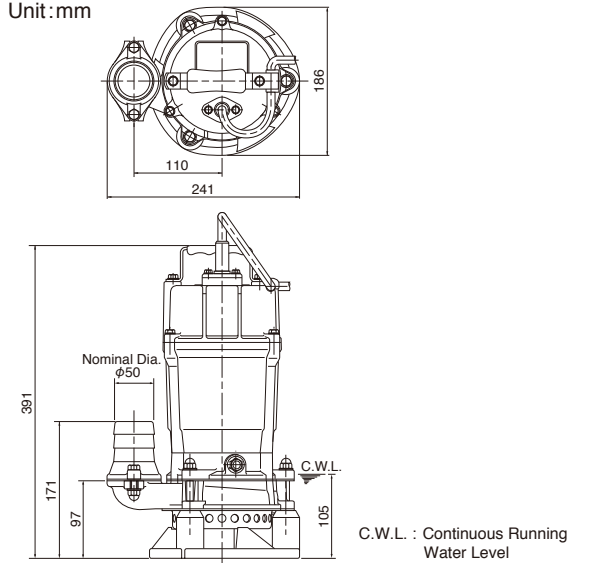
| Item | | Discharge bore size mm | 50 | |
|----------------------|------------------------------|---|------------------------|--|
| Pumping fluid | Type of fluid | Sludge, slurry, liquids containing sand and mud | | |
| | Fluid temperature | 0~40°C | | |
| Pump | Structure | Impeller | Semi-vortex | |
| | | Shaft seal | Double mechanical seal | |
| | Materials | Bearing | Shielded ball bearing | |
| | | Impeller | Chromium iron casting | |
| Motor | Casing | Ductile iron casting | | |
| | Shaft seal (mechanical seal) | Silicon carbide | | |
| Motor | Type, Poles | Dry-type submersible induction motor, 2 poles | | |
| | Insulation | Class E | | |
| | Phase / Voltage | Single-phase/ 110V, 220V, 230V, 240V | | |
| | Motor protector (Built-in) | Circle thermal protector | | |
| | Materials | Lubricant | Turbine oil (ISO VG32) | |
| | | Frame | Aluminum alloy casting | |
| Shaft | | Stainless steel #403 | | |
| Discharge connection | Cable | PVC | | |
| | | Hose coupling | | |

Standard Specifications 50/60Hz

| Discharge Bore mm | Model | Motor Output kW | Phase | Total Head m | Capacity m³/min | Starting Method | Dry Weight kgs | Cable Length m |
|-------------------|----------|-----------------|--------------|--------------|-----------------|-----------------|----------------|----------------|
| 50 | HSD2.55S | 0.55 | Single-phase | 9 | 0.1 | Capacitor Run | 14 | 5 |

* Dry weight excluding cable

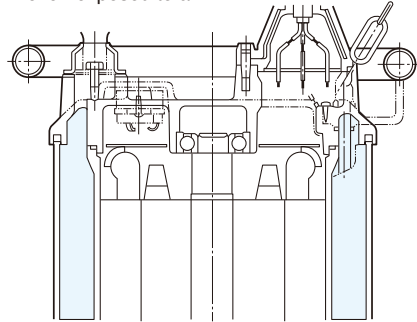
Dimensions Unit: mm



C.W.L. : Continuous Running Water Level

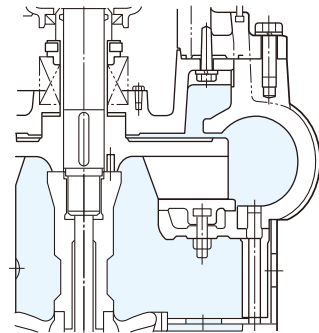
Forced Motor Cooling

As illustrated, a part of pumped fluid flows in between the outer cover and the motor housing before being discharged, thus cooling the motor on its way. This forced motor cooling construction assures the pump of long and continuous operations even exposed to air.



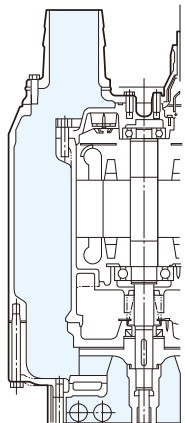
Spiral Design

The spiral design allows fluids containing slurry, sand, or mud to pass through smoothly.



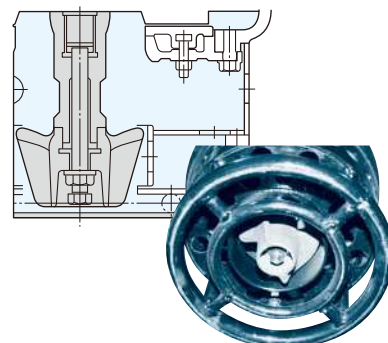
Side Flow Design

The side flow design not only makes the pump easier to install in narrow locations but also keeps the motor cooling forcibly even if the pump is operated continuously with its motor exposed to air.



Agitator

The agitator installed on the motor shaft extension forcibly agitates the fluid for easy and efficient transfer of slurry, sand, or mud.



Standard Accessories

- Hose coupling 1pc.
- Hose band 1pc.

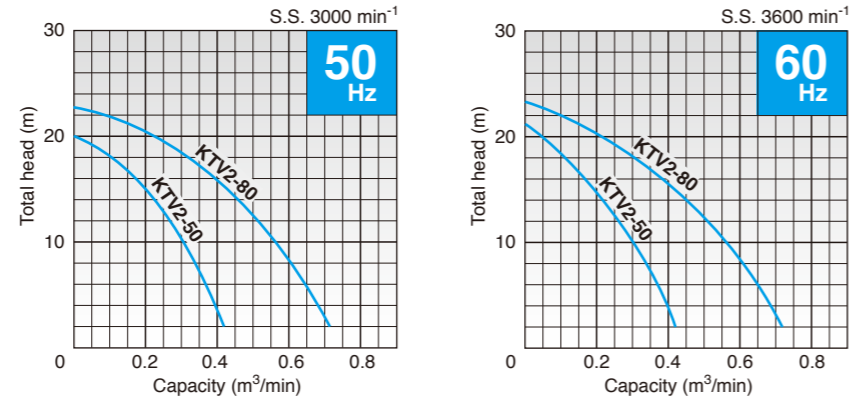


Cross-Section

| NO. | DESCRIPTIONS | NO. | DESCRIPTIONS |
|-----|-----------------|-----|------------------|
| 1 | Cable | 51 | Motor Head Cover |
| 20 | Pump Casing | 52A | Upper Bearing |
| 21 | Impeller | 52B | Lower Bearing |
| 23A | Strainer | 53 | Motor Protector |
| 23B | Stand | 54 | Shaft |
| 24 | Agitator | 55 | Rotor |
| 25 | Mechanical Seal | 56 | Stator |
| 29 | Oil Casing | 64 | Motor Frame |
| 30 | Oil Lifter | 68 | Handle |
| 32 | Hose Coupling | 71 | Shaft Sleeve |
| 35 | Oil Plug | 76 | Capacitor |
| 36 | Lubricant | 122 | V-ring |
| 50 | Motor Bracket | | |



Performance Curves



Standard Specifications 50/60Hz

| Discharge Bore mm | Model | Motor Output kW | Phase | Total Head m | Capacity m³/min | Starting Method | Dry Weight kgs | Cable Length m |
|-------------------|---------|-----------------|-------------|--------------|-----------------|-----------------|----------------|----------------|
| 50 | KTV2-50 | 2 | Three-phase | 12 | 0.25 | D.O.L. | 25 | 8 |
| 80 | KTV2-80 | 3 | Three-phase | 12 | 0.50 | D.O.L. | 38 | 8 |

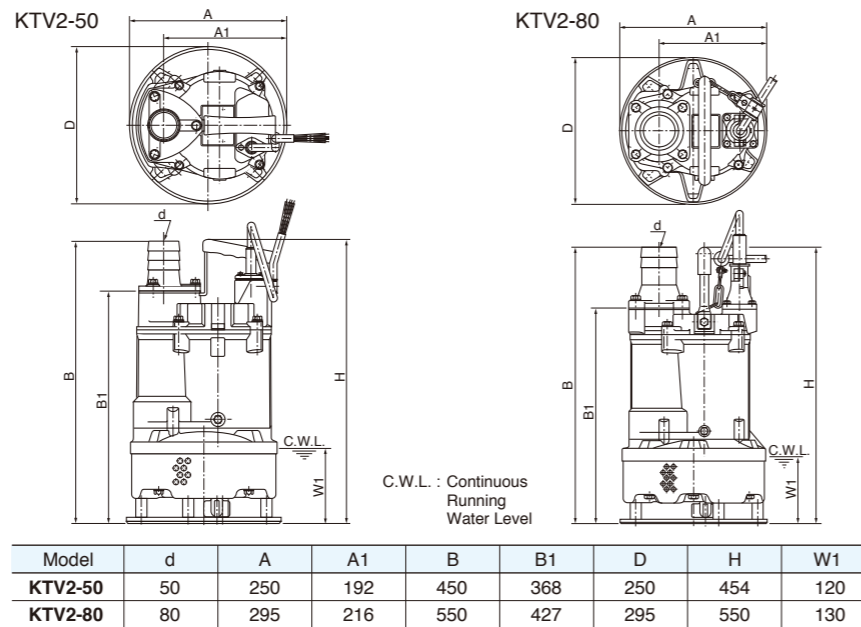
* Dry weight excluding cable

Major Standard Specifications

| Item | Discharge bore size mm | | |
|------------------------------|----------------------------|---|---|
| | 50 | 80 | |
| Pumping fluid | Type of fluid | Sludge, slurry, liquid containing mud | |
| | Fluid temperature | 0~40°C | |
| Pump | Structure | Impeller | Semi-vortex |
| | | Shaft seal | Double mechanical seal |
| | Materials | Bearing | Shielded ball bearing |
| | | Impeller | Chromium iron casting |
| | | Casing | Synthetic rubber (with casing retainer) |
| Shaft seal (mechanical seal) | Silicon carbide | | |
| Motor | Type, Poles | Dry-type submersible induction motor, 2 poles | |
| | Insulation | Class E | |
| | Phase / Voltage | Three-phase/ 220V, 380V, 400V, 415V, 440V, 460V | |
| | Motor protector (Built-in) | Circle thermal protector | |
| | Materials | Lubricant | Turbine oil (ISO VG32) |
| | | Frame | Aluminium alloy casting |
| Shaft | | Stainless steel #403 | |
| Discharge connection | Hose coupling | | |

Dimensions

Unit: mm

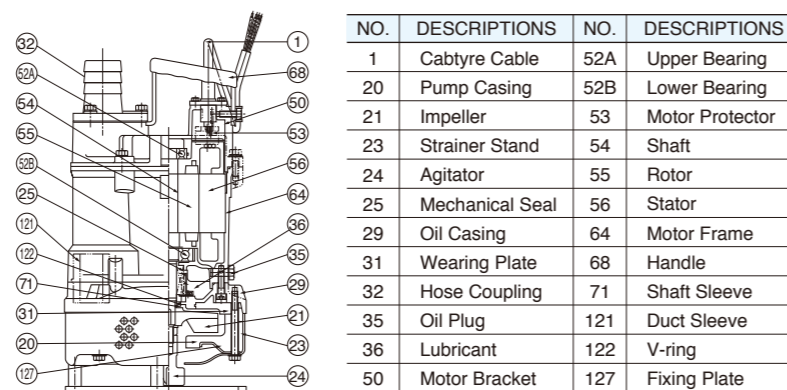


Standard Accessory

- Hose coupling 1pc.



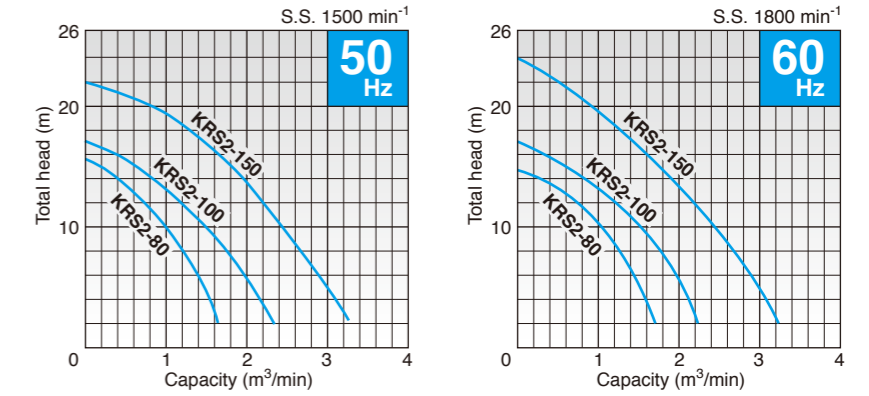
Cross-Section



* Oil Lifter is not illustrated.



Performance Curves



Standard Specifications 50/60Hz

| Discharge Bore mm | Model | Motor Output kW | Phase | Total Head m | Capacity m³/min | Starting Method | Dry Weight kgs | Cable Length m |
|-------------------|----------|-----------------|-------------|--------------|-----------------|-----------------|----------------|----------------|
| 80 | KRS2-80 | 4 | Three-phase | 10 | 1.0 | D.O.L. | 105 | 8 |
| 100 | KRS2-100 | 6 | Three-phase | 10 | 1.5 | D.O.L. | 143 | 8 |
| 150 | KRS2-150 | 9 | Three-phase | 15 | 1.8 | D.O.L. | 170/162 | 8 |

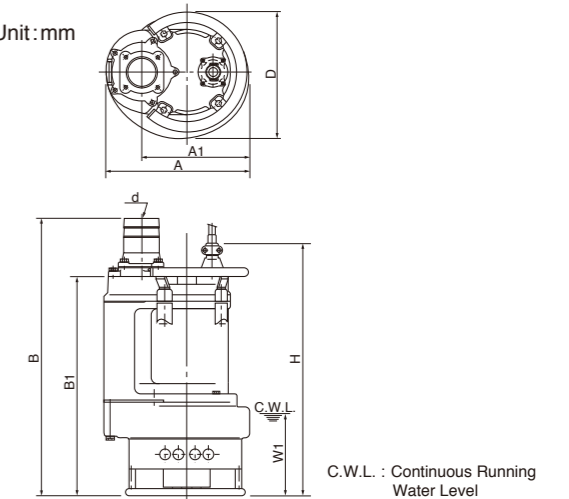
* Dry weight excluding cable

Major Standard Specifications

| Item | Discharge bore size mm | | | |
|------------------------------|----------------------------|---|------------------------|--|
| | 80 | 100 | 150 | |
| Pumping fluid | Type of fluid | Sludge, slurry, liquids containing sandy mud and/or bentonite | | |
| | Fluid temperature | 0~40°C | | |
| Pump | Structure | Impeller | Semi-open | |
| | | Shaft seal | Double mechanical seal | |
| | Materials | Bearing | Shielded ball bearing | |
| | | Impeller | Chromium iron casting | |
| | | Casing | Grey iron casting | |
| Shaft seal (mechanical seal) | Silicon carbide | | | |
| Motor | Type, Poles | Dry-type submersible induction motor, 4 poles | | |
| | Insulation | Class E · B | | |
| | Phase / Voltage | Three-phase/ 220V, 380V, 400V, 415V, 440V, 460V | | |
| | Motor protector (Built-in) | Circle thermal protector | | |
| | Materials | Lubricant | Turbine oil (ISO VG32) | |
| | | Frame | Grey iron casting | |
| Shaft | | Stainless steel #420 | | |
| Discharge connection | Hose coupling | | | |

Dimensions

Unit: mm



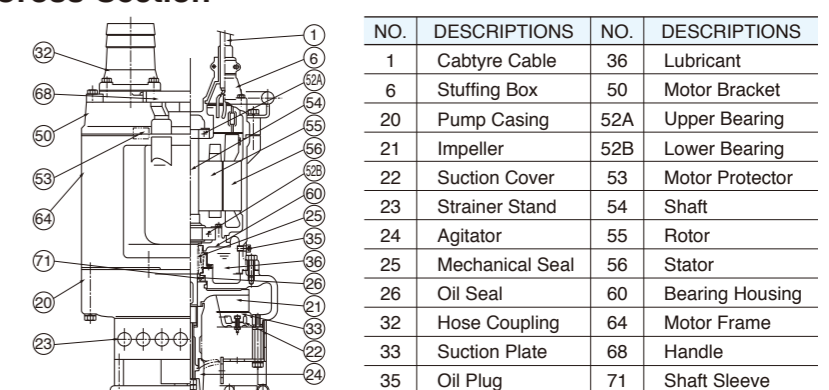
| Model | d | A | A1 | B | B1 | D | H | W1 |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|
| KRS2-80 | 80 | 350 | 260 | 786 | 666 | 326 | 766 | 250 |
| KRS2-100 | 100 | 415 | 305 | 815 | 678 | 373 | 754 | 250 |
| KRS2-150 50Hz | 150 | 434 | 324 | 879 | 699 | 407 | 811 | 250 |
| KRS2-150 60Hz | 150 | 415 | 305 | 879 | 699 | 383 | 811 | 250 |

Standard Accessory

- Hose coupling 1pc.



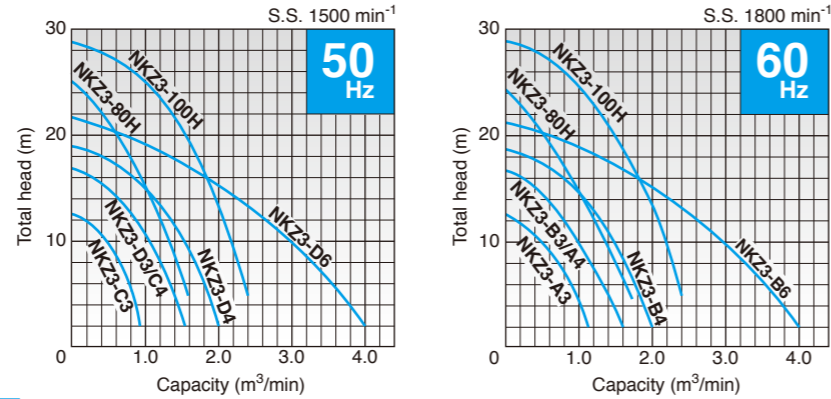
Cross-Section



* Oil Lifter is not illustrated.



Performance Curves

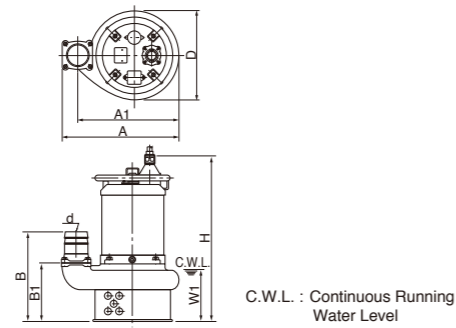


Standard Specifications 50/60Hz

| Discharge Bore mm | Model | Motor Output kW | Phase | Total Head m | Capacity m³/min | Starting Method | Dry Weight kgs | Cable Length m |
|-------------------|------------|-----------------|-------------|--------------|-----------------|-----------------|----------------|----------------|
| 80 | NKZ3-C3/A3 | 2.2 | Three-phase | 10 | 0.50 | D.O.L. | 91 | 8 |
| 80 | NKZ3-D3/B3 | 3.7 | Three-phase | 15 | 0.50 | D.O.L. | 100 | 8 |
| 80 | NKZ3-80H | 5.5 | Three-phase | 20 | 0.55 | D.O.L. | 132 | 8 |
| 100 | NKZ3-C4/A4 | 3.7 | Three-phase | 10 | 1.00 | D.O.L. | 97 | 8 |
| 100 | NKZ3-D4/B4 | 5.5 | Three-phase | 15 | 1.00 | D.O.L. | 115 | 8 |
| 100 | NKZ3-100H | 11 | Three-phase | 25 | 1.00 | D.O.L. | 196 | 8 |
| 150 | NKZ3-D6/B6 | 11 | Three-phase | 15 | 2.00 | D.O.L. | 192 | 8 |

* Dry weight excluding cable

Dimensions Unit : mm



| Model | d | A | A1 | B | B1 | D | H | W1 |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|
| NKZ3-C3/A3 | 80 | 467 | 405 | 371 | 249 | 370 | 664 | 225 |
| NKZ3-D3/B3 | 80 | 467 | 405 | 371 | 249 | 370 | 709 | 225 |
| NKZ3-80H | 80 | 491 | 430 | 387 | 264 | 401 | 754 | 220 |
| NKZ3-C4/A4 | 100 | 467 | 405 | 386 | 249 | 370 | 709 | 225 |
| NKZ3-D4/B4 | 100 | 485 | 424 | 382 | 245 | 380 | 715 | 220 |
| NKZ3-100H | 100 | 547 | 486 | 422 | 284 | 414 | 841 | 240 |
| NKZ3-D6/B6 | 150 | 620 | 520 | 458 | 266 | 450 | 798 | 240 |

Specific Installation

(Contact your nearest dealer for more information)

Guide Rail Fitting System

The guide rail fitting system connects the pump to and from the piping easily just by lowering and hoisting the pump, allowing easy maintenance and inspection without the need to enter the pit.



Major Standard Specifications

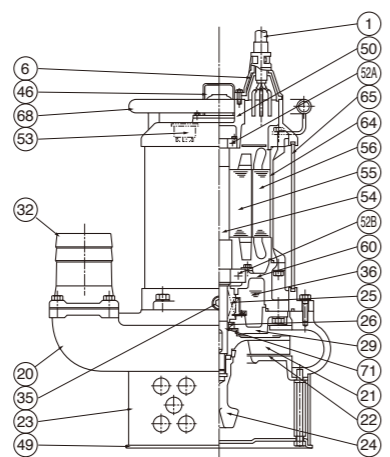
| Item | Discharge bore size mm | 80 100 150 | | | |
|----------------------|--------------------------------|--|---|-----|--|
| | | 80 | 100 | 150 | |
| Pumping fluid | Type of fluid | Sludge, various types of slurry, liquid containing sandy mud | | | |
| | Fluid temperature | 0~40°C | | | |
| | Structure | Impeller | Semi-open | | |
| | | Shaft seal | Double mechanical seal | | |
| Pump | Bearing | Shielded ball bearing | | | |
| | | Impeller | Ductile iron casting | | |
| | Chromium iron casting (H type) | | | | |
| | Casing | Grey iron casting | | | |
| | | Suction cover | Grey iron casting | | |
| | Ductile iron casting (H type) | | | | |
| Materials | Shaft seal (mechanical seal) | Silicon carbide | | | |
| | | Type, Poles | Dry-type submersible induction motor, 4 poles | | |
| Motor | Insulation | Class E · B | | | |
| | Phase / Voltage | Three-phase/ 220V, 380V, 400V, 415V, 440V, 460V | | | |
| | Motor protector (Built-in) | Circle thermal protector | | | |
| | Lubricant | Turbine oil (ISO VG32) | | | |
| | | Frame | Grey iron casting | | |
| | Shaft | | Stainless steel #420 | | |
| Cable | Chloroprene rubber | | | | |
| Discharge connection | Hose coupling | | | | |

Standard Accessory

- Hose coupling 1pc.



Cross-Section

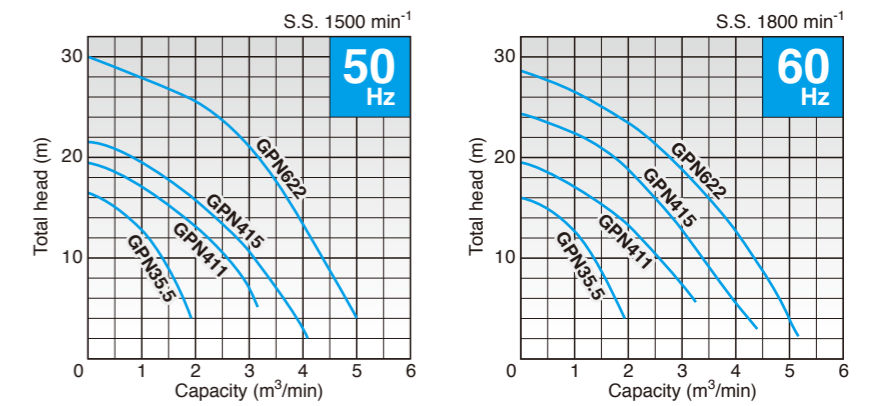


| NO. | DESCRIPTIONS | NO. | DESCRIPTIONS |
|-----|-------------------|-----|-----------------|
| 1 | Cable | 49 | Bottom Plate |
| 6 | Stuffing Box | 50 | Motor Bracket |
| 20 | Pump Casing | 52A | Upper Bearing |
| 21 | Impeller | 52B | Lower Bearing |
| 22 | Suction Cover | 53 | Motor Protector |
| 23 | Strainer Stand | 54 | Shaft |
| 24 | Agitator | 55 | Rotor |
| 25 | Mechanical Seal | 56 | Stator |
| 26 | Oil Seal | 60 | Bearing Housing |
| 29 | Oil Casing | 64 | Motor Frame |
| 32 | Hose Coupling | 65 | Outer Cover |
| 35 | Oil Plug | 68 | Handle |
| 36 | Lubricant | 71 | Shaft Sleeve |
| 46 | Air Release Valve | | |

* Oil Litter is not illustrated.



Performance Curves

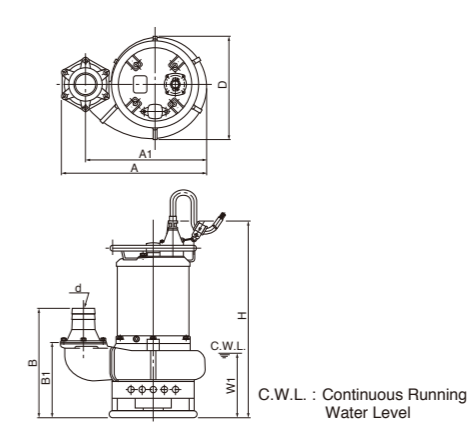


Standard Specifications 50/60Hz

| Discharge Bore mm | Model | Motor Output kW | Phase | Total Head m | Capacity m³/min | Starting Method | Dry Weight kgs | Cable Length m |
|-------------------|---------|-----------------|-------------|--------------|-----------------|-----------------|----------------|----------------|
| 80 | GPN35.5 | 5.5 | Three-phase | 12 | 1.1 | D.O.L. | 145 | 8 |
| 100 | GPN411 | 11 | Three-phase | 15 | 1.6 | D.O.L. | 217 | 8 |
| 100 | GPN415 | 15 | Three-phase | 18/213 | 1.3 | D.O.L. | 220 | 10 |
| 150 | GPN622 | 22 | Three-phase | 24.4/23.0 | 2.0 | D.O.L. | 415 | 10 |

* Dry weight excluding cable

Dimensions Unit : mm



| Model | d | A | A1 | B | B1 | D | H | W1 |
|---------|-----|-----|-----|-----|-----|-----|------|-----|
| GPN35.5 | 80 | 487 | 425 | 430 | 307 | 390 | 777 | 270 |
| GPN411 | 100 | 617 | 518 | 481 | 328 | 451 | 860 | 295 |
| GPN415 | 100 | 617 | 518 | 481 | 328 | 451 | 860 | 295 |
| GPN622 | 150 | 725 | 625 | 528 | 335 | 572 | 1102 | 300 |

Specific Installation

(Contact your nearest dealer for more information)

Guide Rail Fitting System

The guide rail fitting system connects the pump to and from the piping easily just by lowering and hoisting the pump, allowing easy maintenance and inspection without the need to enter the pit.

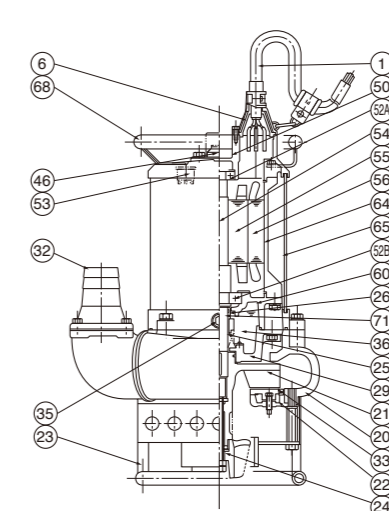


Standard Accessory

- Hose coupling 1pc.



Cross-Section



| NO. | DESCRIPTIONS | NO. | DESCRIPTIONS |
|-----|-----------------|-----|-------------------|
| 1 | Cable | 46 | Air Release Valve |
| 6 | Stuffing Box | 50 | Motor Bracket |
| 20 | Pump Casing | 52A | Upper Bearing |
| 21 | Impeller | 52B | Lower Bearing |
| 22 | Suction Cover | 53 | Motor Protector |
| 23 | Strainer Stand | 54 | Shaft |
| 24 | Agitator | 55 | Rotor |
| 25 | Mechanical Seal | 56 | Stator |
| 26 | Oil Seal | 60 | Bearing Housing |
| 29 | Oil Casing | 64 | Motor Frame |
| 32 | Hose Coupling | 65 | Outer Cover |
| 33 | Suction Plate | 68 | Handle |
| 35 | Oil Plug | 71 | Shaft Sleeve |
| 36 | Lubricant | | |

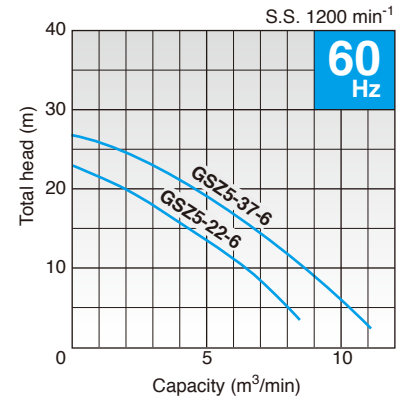
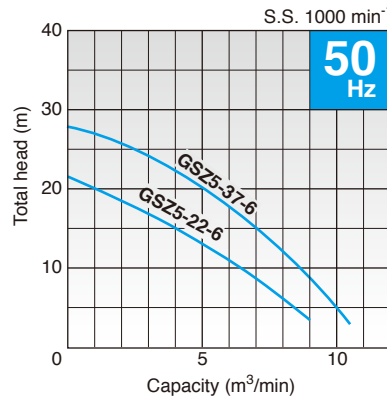
* Oil Litter is not installed.

GSZ-6

This powerful high-volume pump series features a special-steel impeller and a 6-pole motor.



Performance Curves



Major Standard Specifications

| | | | |
|------------------------------|----------------------------|--|------------------------|
| Item | Discharge bore size mm | 200 | |
| Pumping fluid | Type of fluid | Sludge, various types of slurry, liquid containing sandy mud | |
| | Fluid temperature | 0~40°C | |
| Pump | Structure | Impeller | Semi-open |
| | | Shaft seal | Double mechanical seal |
| | | Bearing | Shielded ball bearing |
| | Materials | Impeller | Chromium iron casting |
| | | Casing | Grey iron casting |
| | | Suction plate | Chromium iron casting |
| Shaft seal (mechanical seal) | Silicon carbide | | |
| Motor | Type, Poles | Dry-type submersible induction motor, 6 poles | |
| | Insulation | Class F | |
| | Phase / Voltage | Three-phase/ 220V, 380V, 400V, 415V, 440V, 460V | |
| | Motor protector (Built-in) | Miniature protector | |
| | Lubricant | Turbine oil (ISO VG32) | |
| | Materials | Frame | Grey iron casting |
| Shaft | | Stainless steel #420 | |
| Cable | | PVC Chloroprene rubber | |
| Discharge connection | JIS10K Flange | | |

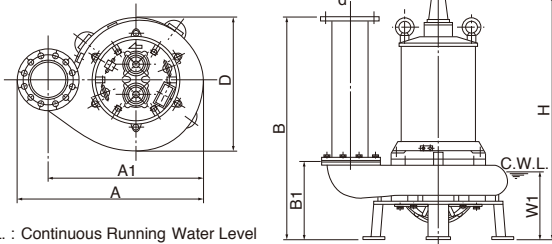
Standard Specifications 50/60Hz

| Discharge Bore mm | Model | Motor Output kW | Phase | Total Head m | Capacity m³/min | Starting Method | Dry Weight kgs | Cable Length m |
|-------------------|-----------|-----------------|-------------|--------------|-----------------|-----------------|----------------|----------------|
| 200 | GSZ5-22-6 | 22 | Three-phase | 15 | 4.0 | D.O.L. | 750 | 10 |
| 200 | GSZ5-37-6 | 37 | Three-phase | 20 | 5.0/4.5 | Star-Delta | 850 | 10 |

* Dry weight excluding cable

Dimensions

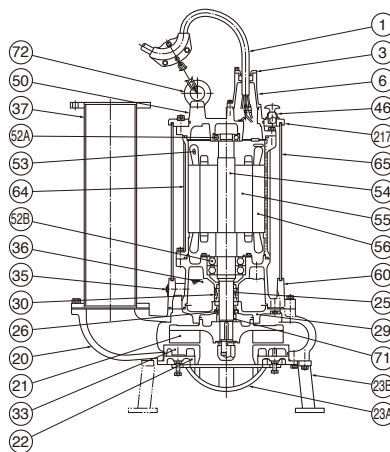
Unit : mm



C.W.L. : Continuous Running Water Level

| Model | d | A | A1 | B | B1 | D | H | W1 |
|-----------|-----|------|-----|------|-----|-----|------|-----|
| GSZ5-22-6 | 200 | 965 | 800 | 1202 | 474 | 720 | 1360 | 350 |
| GSZ5-37-6 | 200 | 1047 | 882 | 1283 | 430 | 804 | 1421 | 370 |

Cross-Section



| NO. | DESCRIPTIONS | NO. | DESCRIPTIONS |
|-----|-----------------|-----|-------------------|
| 1 | Cable | 37 | Discharge Pipe |
| 3 | Gland | 46 | Air Release Valve |
| 6 | Stuffing Box | 50 | Motor Bracket |
| 20 | Pump Casing | 52A | Upper Bearing |
| 21 | Impeller | 52B | Lower Bearing |
| 22 | Suction Cover | 53 | Motor Protector |
| 23A | Strainer | 54 | Shaft |
| 23B | Stand | 55 | Rotor |
| 25 | Mechanical Seal | 56 | Stator |
| 26 | Oil Seal | 60 | Bearing Housing |
| 29 | Oil Casing | 64 | Motor Frame |
| 30 | Oil Lifter | 65 | Outer Cover |
| 33 | Suction Plate | 71 | Shaft Sleeve |
| 35 | Oil Plug | 72 | Eye Bolt |
| 36 | Lubricant | 217 | Fixing Plate |

We reserve the right to change the specifications and designs for improvement without prior notice.

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