



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.

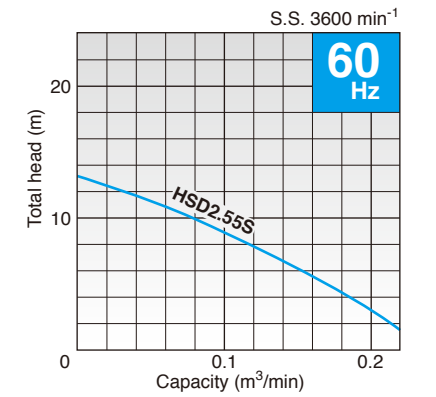
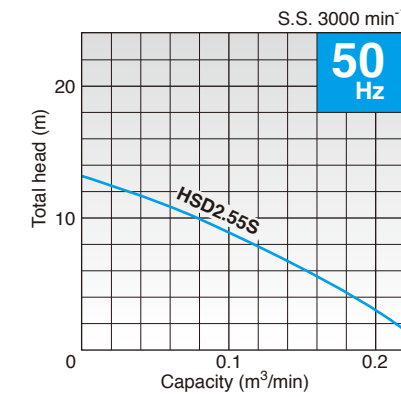
HSD

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

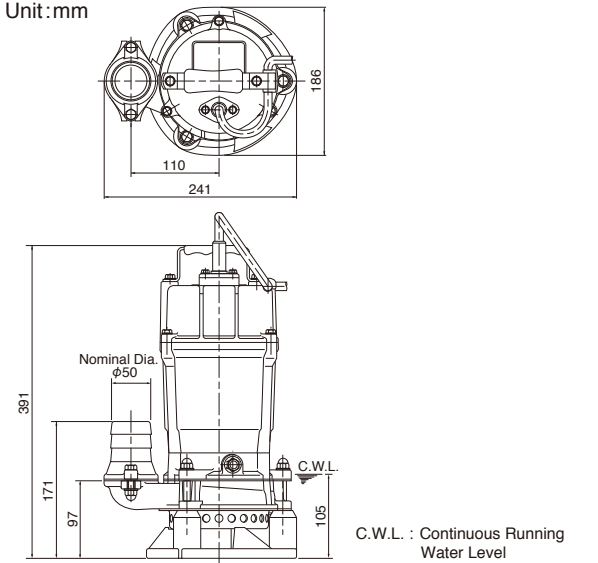
Item		Discharge bore size mm	50	
Pumping fluid	Type of fluid	Sludge, slurry, liquids containing sand and mud		
	Fluid temperature	0~40°C		
Pump	Structure	Impeller	Semi-vortex	
		Shaft seal	Double mechanical seal	
	Materials	Bearing	Shielded ball bearing	
		Impeller	Chromium iron casting	
Motor	Casing	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		
	Lubricant		Turbine oil (ISO VG32)	
		Frame	Aluminum alloy casting	
Shaft		Stainless steel #403		
Materials	Cable	PVC		
	Discharge connection	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

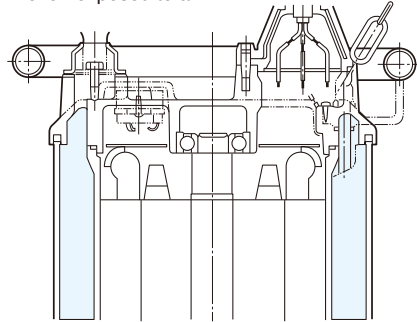
Dimensions Unit: mm



C.W.L.: Continuous Running Water Level

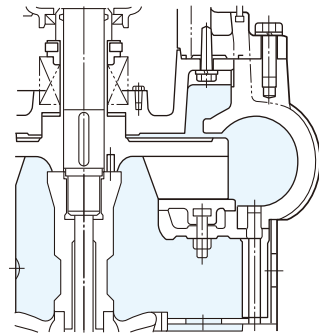
Forced Motor Cooling

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.



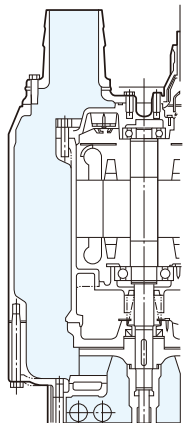
Spiral Design

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



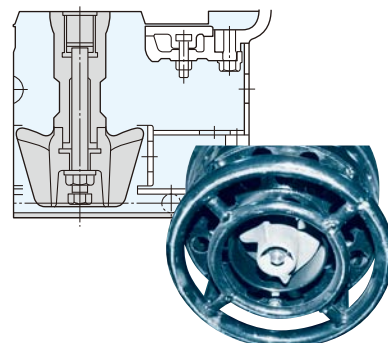
Side Flow Design

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.

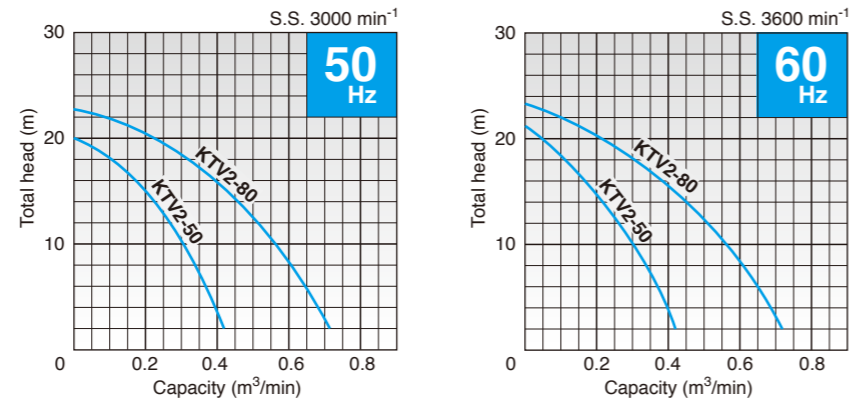


Cross-Section

NO.	DESCRIPTIONS	NO.	DESCRIPTIONS
1	Cabletyre 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

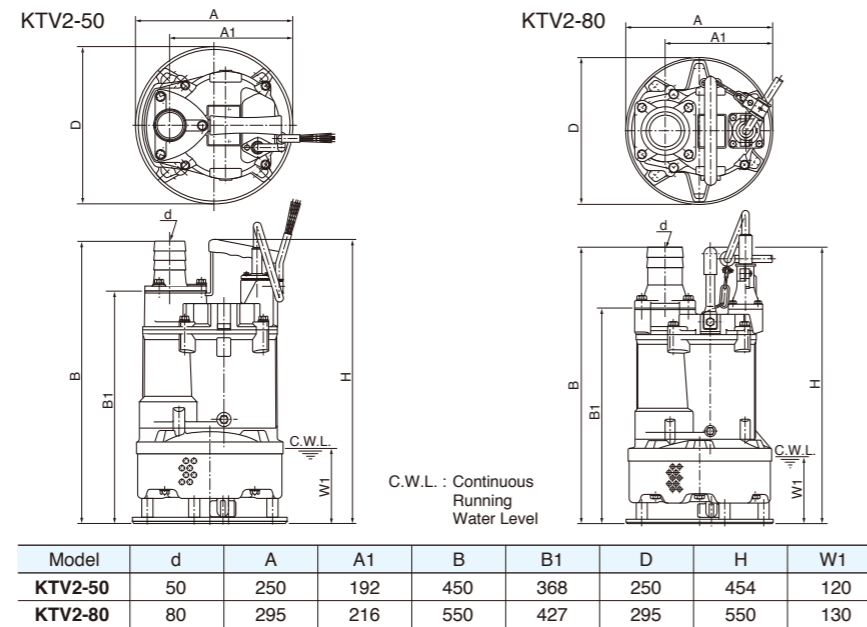
Discharge Bore mm	Model	Motor Output kW	Phase	Total Head m	Capacity m³/min	Starting Method	Dry Weight kgs	Cable Length m
50	KTV2-50	2	Three-phase	12	0.25	D.O.L.	25	8
80	KTV2-80	3	Three-phase	12	0.50	D.O.L.	38	8

* 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

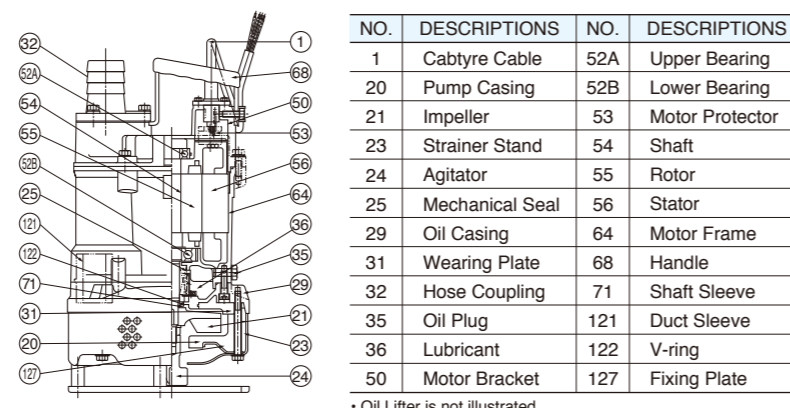


Standard Accessory

- Hose coupling 1pc.



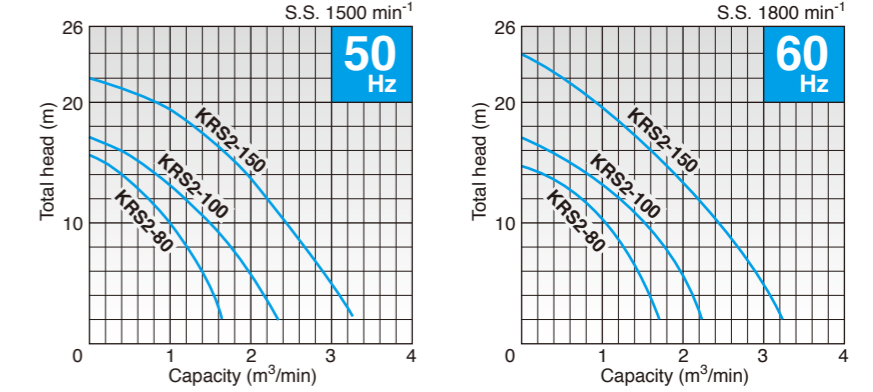
Cross-Section



* Oil Lifter is not illustrated.



Performance Curves



Standard Specifications 50/60Hz

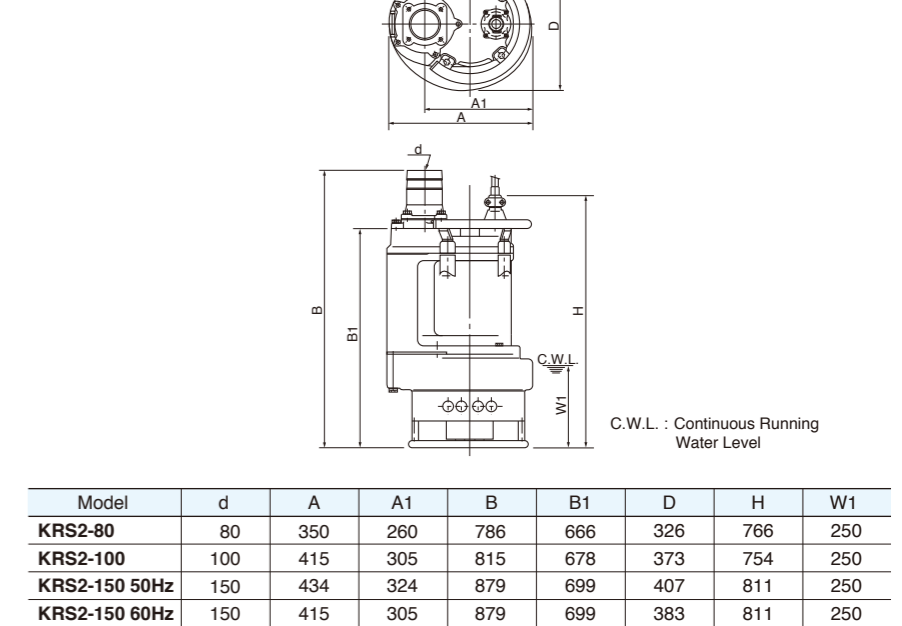
Discharge Bore mm	Model	Motor Output kW	Phase	Total Head m	Capacity m³/min	Starting Method	Dry Weight kgs	Cable Length m
80	KRS2-80	4	Three-phase	10	1.0	D.O.L.	105	8
100	KRS2-100	6	Three-phase	10	1.5	D.O.L.	143	8
150	KRS2-150	9	Three-phase	15	1.8	D.O.L.	170/162	8

* 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

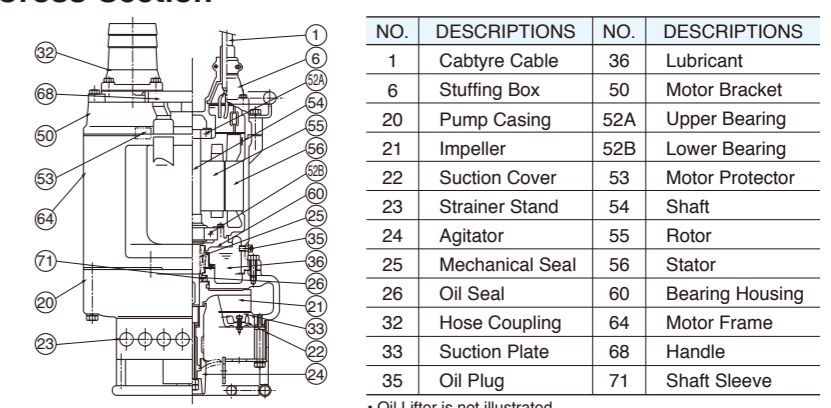


Standard Accessory

- Hose coupling 1pc.



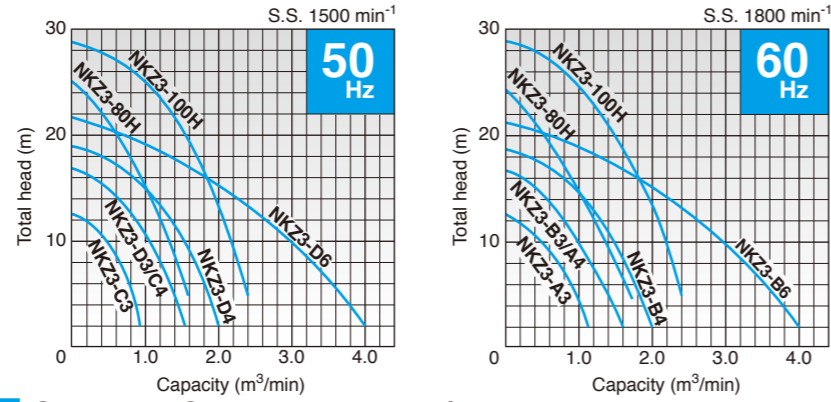
Cross-Section



* Oil Lifter is not illustrated.



Performance Curves

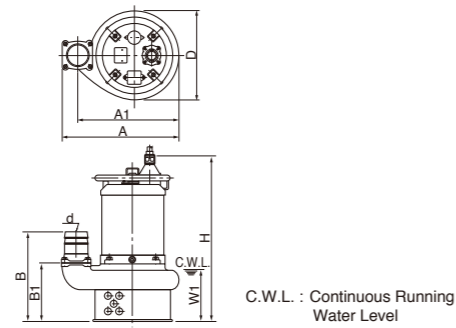


Standard Specifications 50/60Hz

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

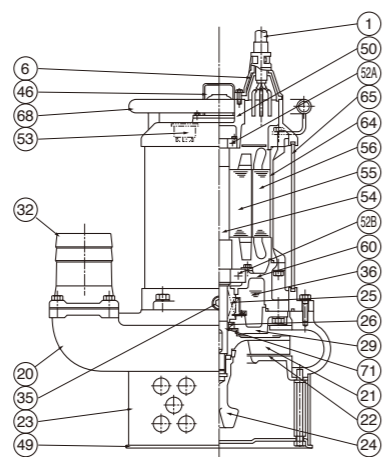
Item	Discharge bore size mm	80 100 150		
		Sludge, various types of slurry, liquid containing sandy mud		
Pumping fluid	Type of fluid	Sludge, various types of slurry, liquid containing sandy mud		
	Fluid temperature	0~40°C		
Pump	Structure	Impeller	Semi-open	
		Shaft seal	Double mechanical seal	
	Materials	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)	
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		
	Lubricant	Turbine oil (ISO VG32)		
Materials	Frame	Grey iron casting		
	Shaft	Stainless steel #420		
	Cable	Chloroprene rubber		
Discharge connection	Hose coupling			

Standard Accessory

- Hose coupling 1pc.



Cross-Section

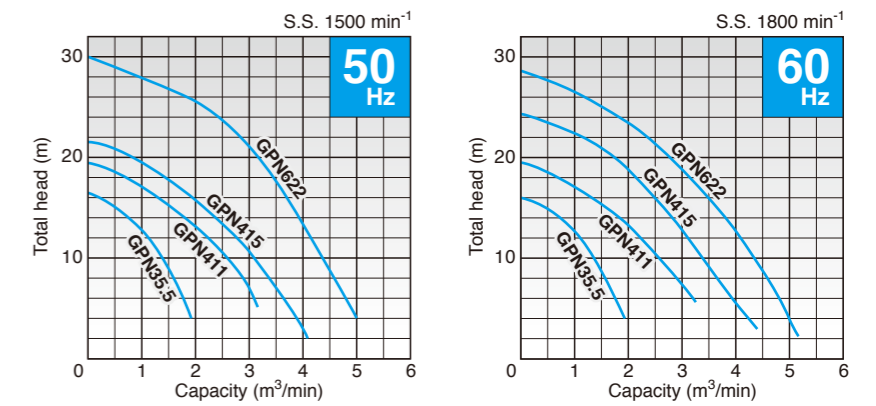


NO.	DESCRIPTIONS	NO.	DESCRIPTIONS
1	Cable	49	Bottom Plate
6	Stuffing Box	50	Motor Bracket
20	Pump Casing	52A	Upper Bearing
21	Impeller	52B	Lower Bearing
22	Suction Cover	53	Motor Protector
23	Strainer Stand	54	Shaft
24	Agitator	55	Rotor
25	Mechanical Seal	56	Stator
26	Oil Seal	60	Bearing Housing
29	Oil 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

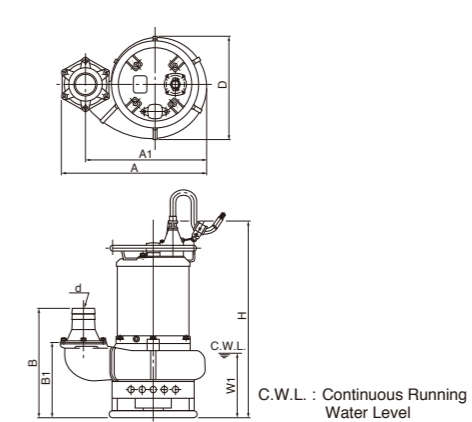


Standard Specifications 50/60Hz

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.

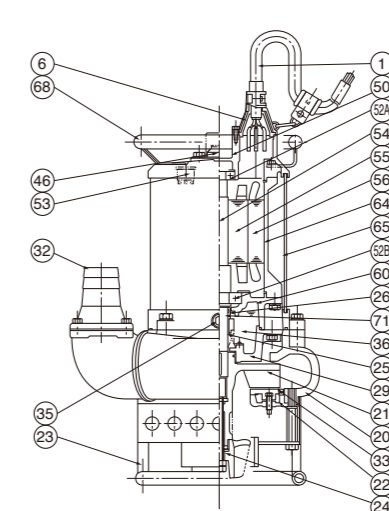


Standard Accessory

- 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		

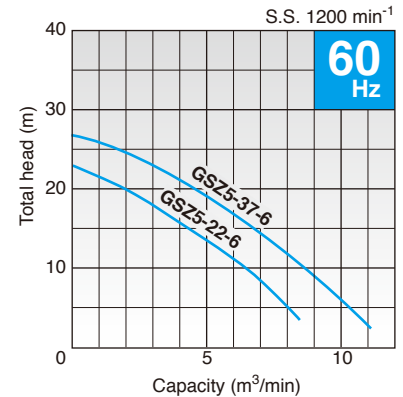
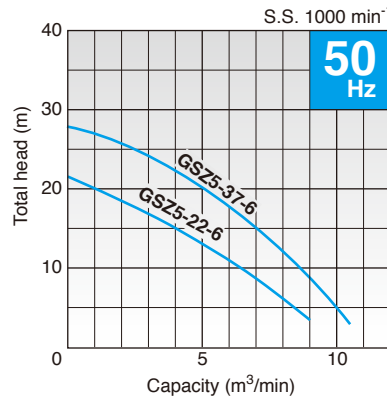
* Oil Litter is not installed.

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		

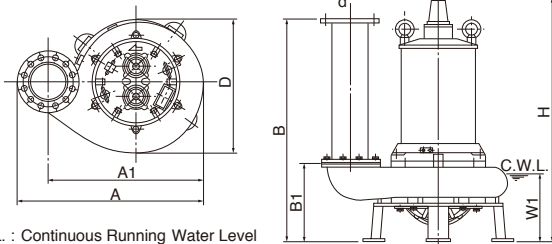
Standard Specifications 50/60Hz

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

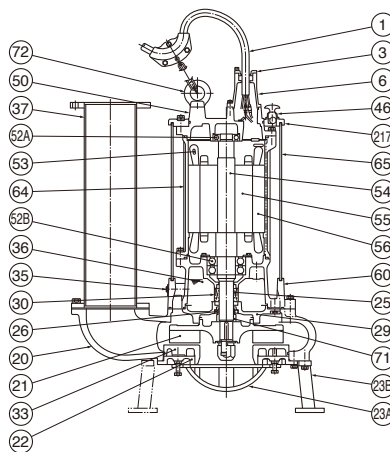
Dimensions

Unit : mm



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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