



Submersible Drainage Pumps

KTV/KTVE KRS



Compact, sturdy, and powerful submersible pumps Ideal for the most demanding construction jobs

Pumps must have solid structure, operate safe and easy, and offer high mobility.

Now, you'll have to cap each of these attributes with the word "extra" when it comes to drainage pumps for construction work.

Tsurumi has done it — not in word but in deed.

Deliberately arranging on-the-job requirements in product design,

Tsurumi has built a new series of extra powerful submersible pumps which ideally matches any demanding draining jobs.

Each and every one of these products which represent Tsurumi's years of pump-making expertise has been hallmarked through daily work at many construction sites in the world.

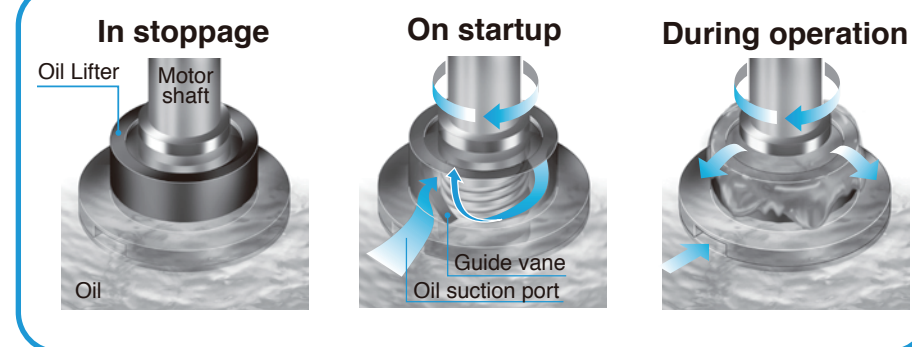
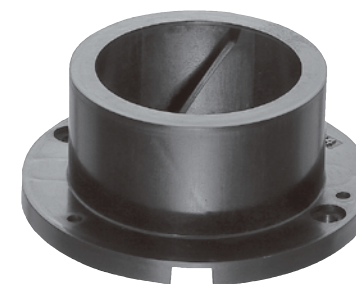
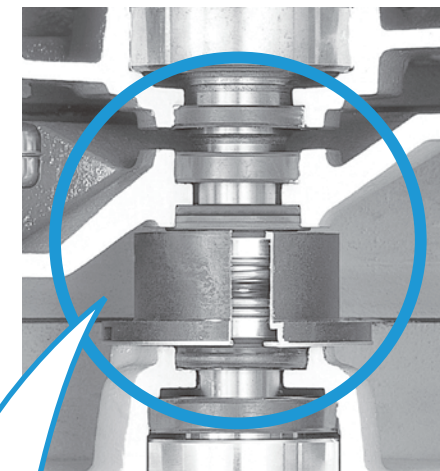
Oil Lifter (Patented)

This Oil Lifter was developed to improve quality and reliability of our submersible pump by enhancing sealing performance of the mechanical seal.

* The Oil Lifter is a lubrication device for the mechanical seal that is the heart of the submersible pump.

* The Oil Lifter stabilizes and enhances mechanical seal lubrication and cooling effect.

* Offers stable sealing performances even if the oil level drops. Facilitates periodic inspection.



KTV

Submersible Semi-vortex Drainage Pumps

for General Construction Work
2-pole Motor Series

Compact

The height has been reduced by a maximum of 181 mm (133 mm for KTV 2-15 and KTV 2-37) from Tsurumi's conventional equivalents by eliminating unnecessary room in the motor and the pump. These pumps are the smallest in this class in the industry.

Lightweight

Pump materials have been changed in part to die-cast aluminum and specially treated synthetic rubber. This has reduced the weight of all models in this series by more than 10 kg compared with Tsurumi's conventional pumps of the same type. An ergonomically devised handle facilitates the relocation of the pump at a construction site.

Rugged

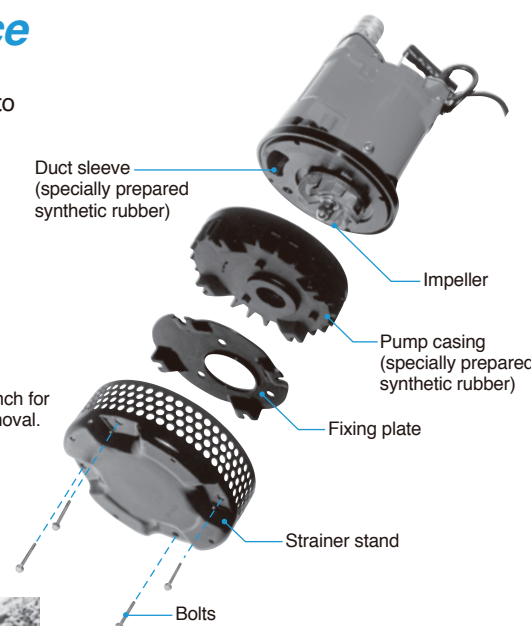
The die-cast aluminum part is protected with the casing, wearing plate, and duct sleeve, all made of specially prepared synthetic rubber. This has resulted in amazingly increased resistance to wear and in the following additional virtues.

- Greatly reduced maintenance service intervals.
- A pump immune to calcium carbonate deposits or scale; if any, readily removed.
- No clogging, thanks to the semi-vortex flow construction.

Low maintenance

The pump's lower part can be disassembled with a box wrench to facilitate maintenance services.

Lower part is disassembled with a box wrench for effortless maintenance without impeller removal.



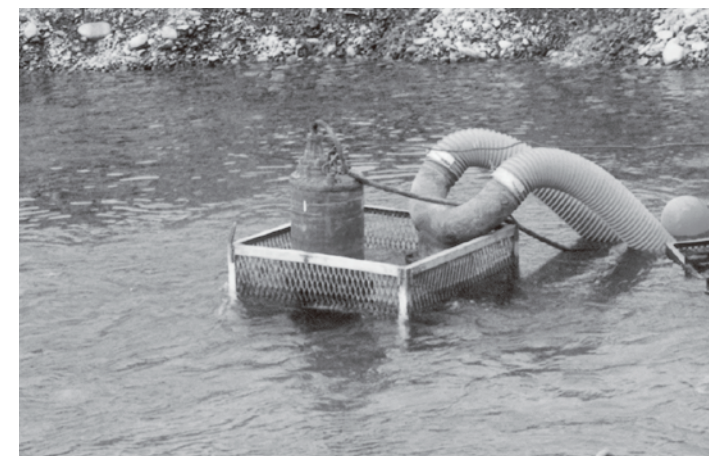
KRS

Submersible Drainage Pumps

for General Construction Work
4-pole Motor Series

Rugged

KRS-series, another cast iron pumps with 4-pole motor, represent Tsurumi's multipurpose pumps for their simple construction, superb durability, and high efficiency. Tsurumi's years of expertise and innovative techniques are fully utilized in every component of these pumps which have own user's unparalleled credit and admiration.





Excellent durability secured by Tsurumi's long pump-making experience renders these pumps multipurpose ranging from construction work to installation in facilities.

Major Standard Specifications

Item	Discharge bore (mm)	
	50	80
Pumping fluid	Type of fluid	Rain water, Ground water, Sand carrying water
	Liquid temperature	0 ~ 40°C
	Impeller	Semi-vortex
	Shaft seal	Double mechanical seal
	Bearing	Shielded ball bearing
Pump	Impeller	Synthetic rubber(0.75kW) Ductile iron casting
	Casing	Synthetic rubber
	Shaft seal (mechanical seal)	Silicon carbide
	Materials	
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
	Lubricant	Turbine oil (ISO VG32)
	Materials	
Discharge connection	Frame	Aluminum alloy casting
	Shaft	Stainless steel #420 / #403
	Cable	PVC Chloroprene rubber

Standard Accessories

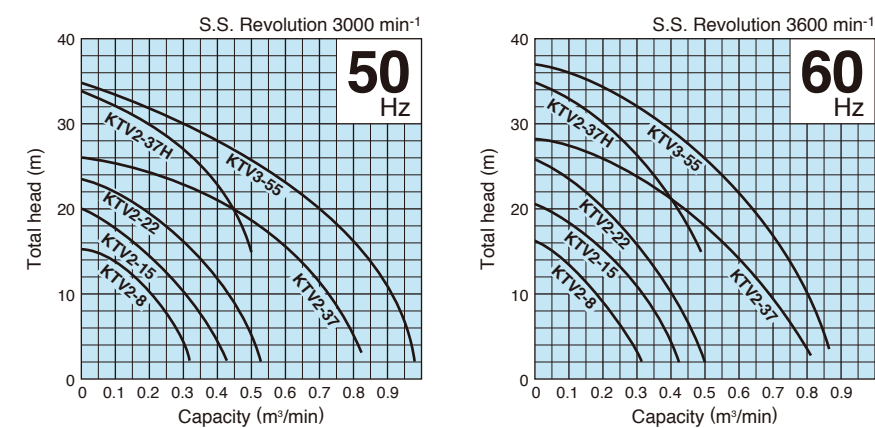
- Cabtyre cable1 pc
- Hose coupling1 pc
- Hose band (0.75kW only).....1 pc

Optional Specifications

- Extended cable
- Special paint



Performance Curves



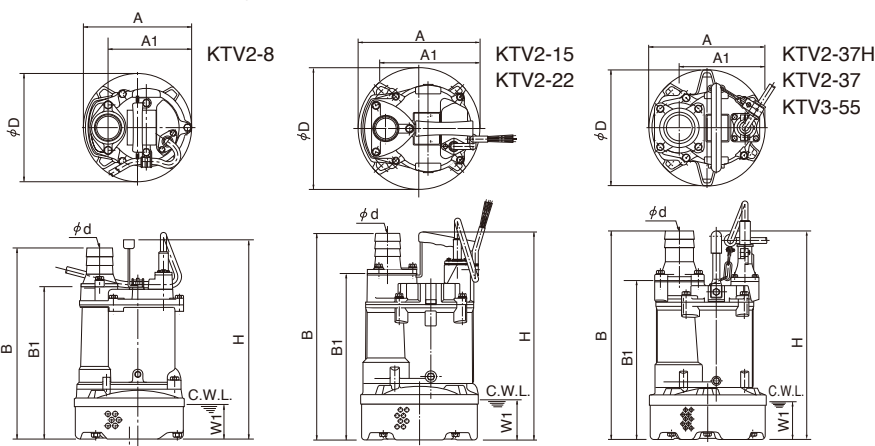
Specifications 50/60Hz

Discharge Bore mm	Model	Motor Output kW	Phase	Total Head m	Capacity m³/min	Starting Method	Dry Weight kgs	Length of Cabtyre Cable m
50	KTV2-8	0.75	Three-phase	10	0.18	D.O.L.	11.5	5
50	KTV2-15	1.5	Three-phase	15	0.20	D.O.L.	20.5	8
50	KTV2-22	2.2	Three-phase	20	0.20	D.O.L.	23.0	8
50	KTV2-37H	3.7	Three-phase	30	0.20	D.O.L.	35.0	8
80	KTV2-37	3.7	Three-phase	18	0.50	D.O.L.	36.0	8
80	KTV3-55	5.5	Three-phase	22	0.60	D.O.L.	46.5	8

• Dry weight of the pump excluding cable.

Dimensions Unit:mm

C.W.L.: Continuous Running Water Level



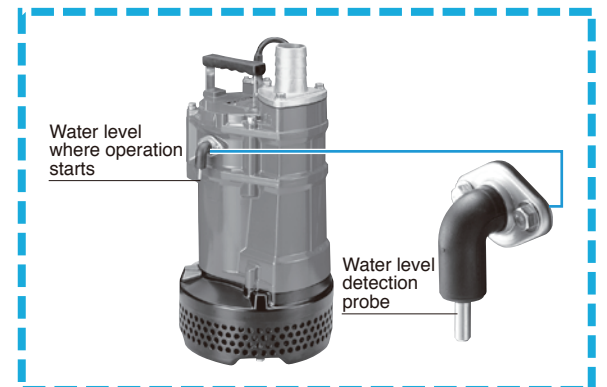
Model	d	A	A1	B	B1	D	H	W1
KTV2-8	50	200	155	353	281	200	369	65
KTV2-15	50	240	187	392	310	240	396	80
KTV2-22	50	240	187	412	330	240	416	80
KTV2-37H	50	285	211	510	387	285	510	90
KTV2-37	80	285	211	510	387	285	510	90
KTV3-55	80	300	229	545	422	300	545	90



Probe type automatic pump (KTVE model)

Unit is turned on/off by probe-type water level sensor to prevent draught water flow when the water level drops.

Enhances durability of the pump itself by reducing radical part wear while saving energy.



Major Standard Specifications

Item	Discharge bore (mm)	
	50	80
Pumping fluid	Type of fluid	Rain water, Ground water, Sand carrying water
	Liquid temperature	0 ~ 40°C
	Impeller	Semi-vortex
	Shaft seal	Double mechanical seal
	Bearing	Shielded ball bearing
Pump	Impeller	Synthetic rubber(0.75kW) Ductile iron casting
	Casing	Synthetic rubber
	Shaft seal (mechanical seal)	Silicon carbide
	Materials	
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
	Lubricant	Turbine oil (ISO VG32)
	Materials	
Discharge connection	Frame	Aluminum alloy casting
	Shaft	Stainless steel #420 / #403
	Cable	PVC Chloroprene rubber

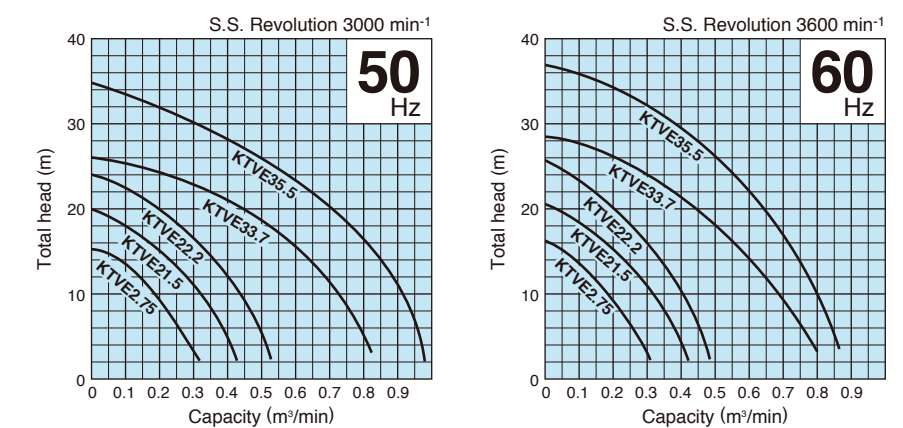
Standard Accessories

- Cabtyre cable1 pc
- Hose coupling1 pc
- Hose band (0.75kW only).....1 pc

Optional Specifications

- Extended cable
- Special paint

Performance Curves

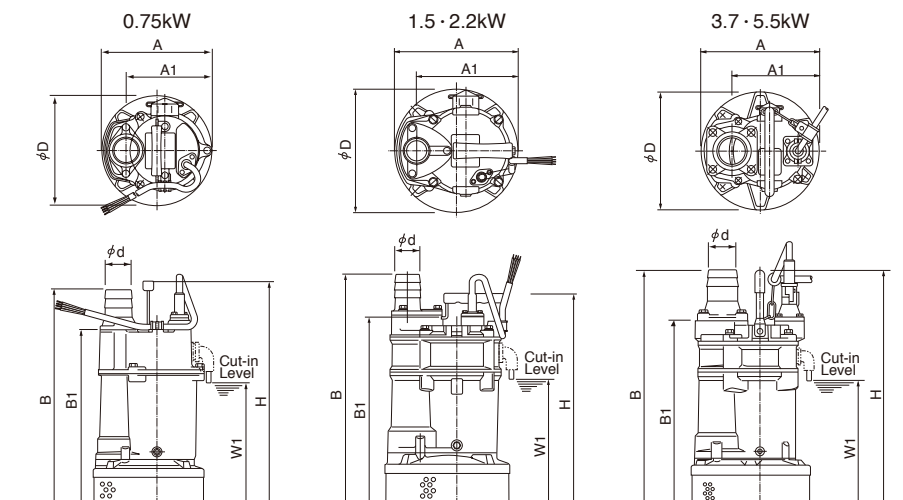


Specifications 50/60Hz

Discharge Bore mm	Model	Motor Output kW	Phase	Total Head m	Capacity m³/min	Starting Method	Dry Weight kgs	Length of Cabtyre Cable m
50	KTVE2.75	0.75	Three-phase	10	0.18	D.O.L.	12.7	5
50	KTVE21.5	1.5	Three-phase	15	0.20	D.O.L.	21.5	8
50	KTVE22.2	2.2	Three-phase	20	0.20	D.O.L.	24.5	8
80	KTVE33.7	3.7	Three-phase	18	0.50	D.O.L.	39.5	8
80	KTVE35.5	5.5	Three-phase	22	0.60	D.O.L.	52.0	8

• Dry weight of the pump excluding cable.

Dimensions Unit:mm



Model	d	A	A1	B	B1	D	H	W1
KTVE2.75	50	200	155	401	329	200	417	234
KTVE21.5	50	240	187	462	380	240	426	266
KTVE22.2	50	240	187	462	380	240	426	266
KTVE33.7	80	285	210	585	462	285	585	327
KTVE35.5	80	300	229	620	497	300	620	357



Major Standard Specifications

Item		Discharge bore (mm)				80	100	150	200	250	
Pumping fluid	Type of fluid		Rain water, Ground water, Sand carrying water								
	Liquid temperature		0 ~ 40℃								
Pump	Components	Impeller	Semi-open type, Closed type (KRS1022)								
		Shaft seal	Double mechanical seal								
		Bearing	Shielded ball bearing								
	Materials	Impeller	Ductile iron casting								
		Casing	Gray iron casting								
		Suction cover	Gray iron casting								
		Shaft seal (mechanical seal)	Silicon carbide								
Motor	Type, Poles		Dry-type submersible induction motor, 4 poles								
	Insulation		Class E, B, F								
	Phase / Voltage		Three-phase / 220V, 380V, 400V, 415V, 440V, 460V								
	Motor protector(Built-in)		Circle thermal protector								
	Lubricant		Turbine oil (ISO VG32)								
	Materials	Frame	Gray iron casting								
		Shaft	Stainless steel #420								
		Cable	Chloroprene rubber								
Discharge connection			Hose coupling								

Standard Accessories

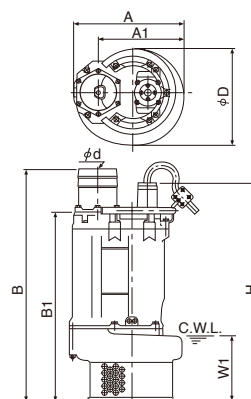
- Cabtyre cable1 pc
- Hose coupling1 pc

Optional Specifications

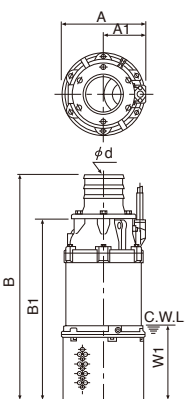
- Extended cable
- Special paint

C.W.L.: Continuous Running Water Level

Other types than KRS1022

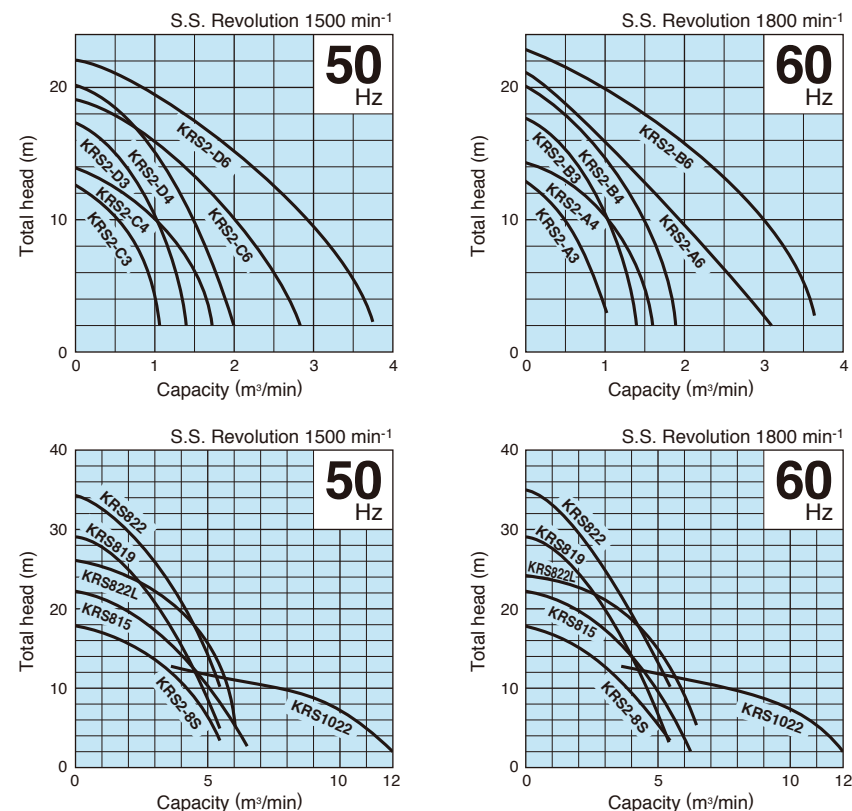


KRS1022



A wide variety of models offer the perfect freedom of choosing the most suitable one.

Performance Curves



Specifications 50/60Hz

Discharge Bore mm	Model	Motor Output kW	Phase	Total Head m	Capacity m³/min	Starting Method	Dry Weight kgs	Length of Cabtyre Cable m
80	KRS2-C3/A3	2.2	Three-phase	10	0.5	D.O.L.	72	8
80	KRS2-D3/B3	3.7	Three-phase	15	0.5	D.O.L.	91/89	8
100	KRS2-C4/A4	3.7	Three-phase	10	1.0	D.O.L.	88	8
100	KRS2-D4/B4	5.5	Three-phase	15	1.0	D.O.L.	98/95	8
150	KRS2-C6/A6	7.5	Three-phase	10	2.0	D.O.L.	130	8
150	KRS2-D6/B6	11	Three-phase	15	2.0	D.O.L.	158/150	8
200	KRS2-8S	11	Three-phase	10	4.0	D.O.L.	174	8
200	KRS815	15	Three-phase	15	4.0	D.O.L.	240	8
200	KRS819	18.5	Three-phase	20/15	3.0/4.0	D.O.L.	360	10
200	KRS822	22	Three-phase	30/20	2.0/4.0	D.O.L.	380	10
200	KRS822L	22	Three-phase	15	5.0	D.O.L.	380	10
250	KRS1022	22	Three-phase	10	8.0	D.O.L.	390	10

• Dry weight of the pump excluding cable.

Dimensions Unit:mm

Model	d	A	A1	B	B1	D	H	W1
KRS2-C3/A3	80	340	255	620	499	315	600	145
KRS2-D3	80	365	275	705	584	350	685	155
KRS2-B3	80	350	260	705	584	320	685	155
KRS2-C4/A4	100	350	260	720	584	320	685	155
KRS2-D4	100	365	275	710	574	350	675	155
KRS2-B4	100	350	260	710	574	320	675	155
KRS2-C6	150	415	305	767	585	373	685	175
KRS2-A6	150	415	305	767	585	373	685	175
KRS2-D6	150	434	324	813	632	407	744	180
KRS2-B6	150	415	305	812	630	373	742	175
KRS2-8S	200	472	356	933	701	403	814	300
KRS815	200	481	347	1069	837	440	949	275
KRS819	200	572	445	1238	1006	530	1156	345
KRS822	200	572	445	1238	1006	530	1156	345
KRS822L	200	572	445	1238	1006	530	1156	345
KRS1022	250	520	250	1439	1156	—	—	450

The low head version is equipped with a specially developed motor to minimize unnecessary power consumption for maximal cost economy.



Major Standard Specifications

Item		Discharge bore (mm)		
		100	150	200
Pumping fluid	Type of fluid	Rain water, Ground water Sand carrying water		
	Liquid temperature	0 ~ 40℃		
Pump	Components	Impeller	Semi-open type, Closed type (KRS-63-85.5)	
		Shaft seal	Double mechanical seal	
		Bearing	Shielded ball bearing	
	Materials	Impeller	Ductile iron casting	
		Casing	Gray iron casting	
		Suction cover	Gray 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		
	Lubricant	Turbine oil (ISO VG32)		
	Materials	Frame	Gray iron casting	
		Shaft	Stainless steel #420	
		Cable	Chloroprene rubber	
Discharge connection		Hose coupling		

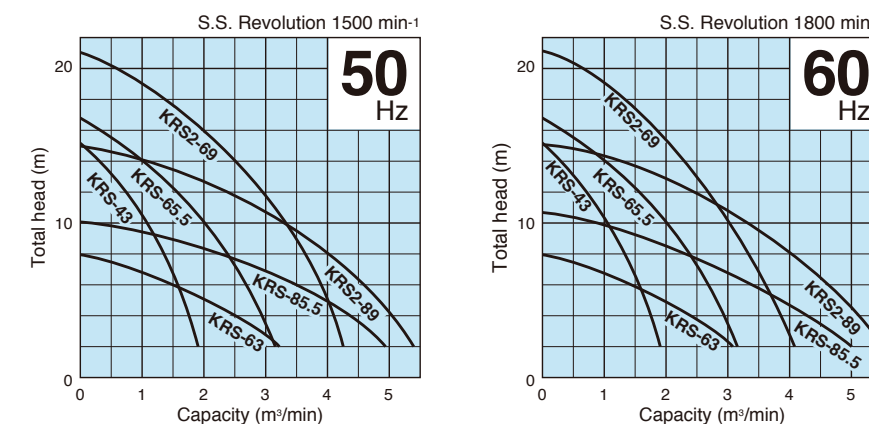
Standard Accessories

- Cabtyre cable1 pc
- Hose coupling1 pc

Optional Specifications

- Extended cable
- Special paint

Performance Curves



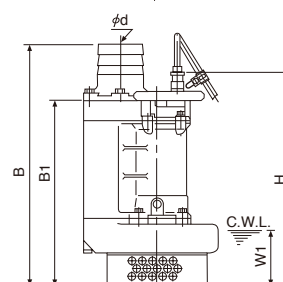
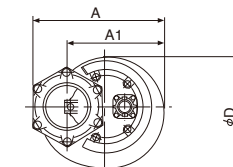
Specifications 50/60Hz

Discharge Bore mm	Model	Motor Output kW	Phase	Total Head m	Capacity m³/min	Starting Method	Dry Weight kgs	Length of Cabtyre Cable m
100	KRS-43	3.0	Three-phase	10	1.0	D.O.L.	95	8
150	KRS-63	3.0	Three-phase	5	2.0	D.O.L.	95	8
150	KRS-65.5	5.5	Three-phase	10	2.0	D.O.L.	115	8
150	KRS2-69	9.0	Three-phase	16	2.0	D.O.L.	155	8
200	KRS-85.5	5.5	Three-phase	5	3.8	D.O.L.	125	8
200	KRS2-89	9.0	Three-phase	8	4.0	D.O.L.	175	8

• Dry weight of the pump excluding cable.

Dimensions Unit:mm

C.W.L.: Continuous Running Water Level



Model	d	A	A1	B	B1	D	H	W1
KRS-43	100	378	288	723	561	347	622	170
KRS-63	150	384	294	866	686	365	747	300
KRS-65.5	150	425	305	790	608	370	669	190
KRS2-69	150	490	372	812	630	424	742	200
KRS-85.5	200	446	326	941	710	413	771	295
KRS2-89	200	473	355	933	701	408	813	300



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

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