

### Tsurumi Manufacturing Co., Ltd.

Tsurumi Manufacturing Company, Limited was founded in Osaka in 1924. Since the foundation, Tsurumi has consistently devoted its efforts to the creation and development of advanced water utilization technologies. Tsurumi has also innovated the pump manufacturing technologies in a constant pursuit of new opportunities and new fields that contribute to the advancement of our society and environment. This effort epitomizes its management policy "Dedicated to pursuing close communication between people and water through innovative creation and respect for harmony with nature."

### **Production Bases**

Kyoto Plant production facility boasts industry-leading scale and equipment, including extensive testing and research facilities. Its integrated system encompasses all product stages from development to production and is capable of manufacturing small, large, and special-purpose pumps having the capacity of 1,000,000 unit a year.

Yonago Plant in Tottori Prefecture specializes in development and production of large pumps for pumping stations and liquid-ring vacuum pumps. Tsurumi also operates cutting-edge plants in Taiwan, China and Korea that are capable of mass-producing products with short lead times. All plants work together to form a highly efficient production system.

### **Global Operations**

Tsurumi introduced its overseas strategy in the 1960s. Our technical capabilities gained recognition first Asia in the 1970s and then in the United States and Europe in the 1980s. Following these initial successes, we sought to accelerate the overseas strategy through our International Sales Division. Remarkable successes in fields including construction, civil engineering, mining, power plant, industrial wastewater, domestic wastewater, sewage treatment, flood control, facilities designed to bring people into closer contact with water, and scenery creation have proven Tsurumi's creativity and capability to the world.



### **Overseas Subsidiaries**

U.S.A.
Tsurumi (America), Inc.
Germany
Tsurumi (Europe) GmbH
U.A.E.
Tsurumi Pump Middle East F
South Africa

Tsurumi Pumps Africa

# Thailand Tsurumi Pump (Thailand) Co., Ltd. Singapore Tsurumi (Singapore) Pte. Ltd. Malaysia FZE Tsurumi Pump (M) Sdn. Bhd. Indonesia Pt. Tsurumi Pompa Indonesia

Hong Kong
H&E Tsurumi Pump Co., Ltd.
China
Shanghai Tsurumi Pump Co., Ltd.
Taiwan
Tsurumi Pump Taiwan Co., Ltd.
Korea
Tsurumi Pump Korea Co., Ltd.









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Recommended

**Generator Sizes** 

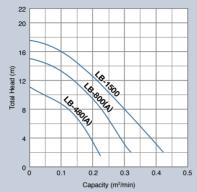
## 03-04

# LB/LB-A

The LB-series is a submersible singlephase portable drainage pump. The topdischarge,flow-thru design provides maximum motor cooling efficiency allowing continuous operation at low water levels.

The LB-A is an automatic pump without cumbersome floats. An innovative electrode type relay unit built into the pump automatically starts and stops the pump to eliminate dryrunning. This mechanism greatly reduces power consumption and extends operating life!





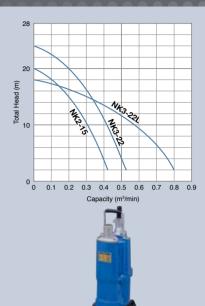






The NK-series is a submersible single-phase portable drainage pump having a larger output motor. Though it is a single-phase unit, the pump has the durability equivalent to three-phase drainage pumps, since the wear parts are made of abrasion-resistant materials. The top-discharge, side-flow design assures efficient motor cooling even when it operates with its motor exposed to air. The slim design allows the pump to be placed in a confined space.





TECHNICAL DATA		LB-480 LB-480A	LB-800 LB-800A	LB-1500	
Discharge Bore	mm	50	50(	80)	
Motor Output	kW	0.48	0.75	1.5	
Phase			Single		
Starting Method		Capaci	tor Run	Capacitor Start	
Motor Protection		Circle Thermal			
Impeller		Vortex made of urethane rubber			
Voltage	V		230		
Current	А	3	3 5		
Weight	kg	10.4 13.1 11 13.7		33	
Cable Length	m				
LxWxH	mm	189 x 187 x 286 223 x 187 x 286	186 x 187 x 341 223 x 187 x 341	187 x 187 x 593	

TECHNICAL D	ATA	NK2-15 NK3-22		NK3-22L	
Discharge Bore	mm	5	0	80	
Motor Output	kW	1.5	2	.2	
Phase		Single			
Starting Method		Capacitor Start	Capacitor Start + Capacitor Run		
Motor Protection		Circle Thermal			
Impeller		Vortex made	Semi-open made of high-chromium iron		
Voltage	٧		230		
Current	А	12	13.5	14.5	
Weight	kg	29 40			
Cable Length	m	10			
L×W×H	mm	240 x 240 x 563 236 x 216 x 669			



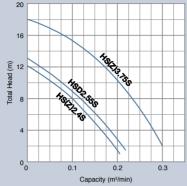
# HS/HSZ·HSD

The HS-series is a submersible singlephase portable drainage pump. The side-discharge, spiral design allows smoother passage of the sucked solid matters. The shaft-mounted agitator prevents "Air Lock", and suspends solids to assist in pumping sediments.

The HSZ-series is an automatic pump. An automatic operation, controlled by a single float switch, reduces power consumption and extends operating life.

The HSD is suitable for slurry use. An incorporated impeller and agitator are made of high-chromium cast iron.



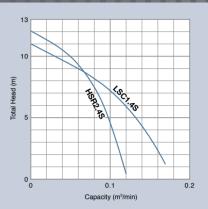




# HSR·LSC·LSP 05-06

The HSR, LSC and LSP are a submersible single-phase portable residue drainage pump. The pump can start pumping if there is water with its level of 5mm or more and can continue pumping. Due to the major components are made of aluminum alloy and synthetic rubber, it is lightweight and easy to carry. The LSC and LSP prevent reverse-flow of the sucked water when the pump stops its operation. The LSP has a suction attachment, supplied as standard, makes the pump drain water down to floor level.







TECHNICAL DATA		HS2.4S HSZ2.4S			
Discharge Bore	mm	50	80(50)	50	
Motor Output	kW	0.4	0.75	0.55	
Phase		Single			
Starting Method		Capacitor Run			
Motor Protection		Miniature Thermal Circle Thermal			
Impeller		Vortex made of	Vortex made of high-chromium iron		
Voltage	٧		230		
Current	А	3	5	4	
Weight	kg	11.3	16.8	14	
Cable Length	m				
LxWxH	mm	241 x 184 x 328 241 x 340 x 328	285 x 184 x 394 285 x 370 x 394	241 x 186 x 391	

TECHNICAL E	DATA	HSR2.4S	LSC1.4S	LSP1.4S	
Discharge Bore	mm	50	2	5	
Motor Output	kW	0.4	0.	48	
Phase			Single		
Starting Method			Capacitor Run		
Motor Protection		Miniature Thermal			
Impeller		Vortex made of urethane rubber			
Voltage	V	230			
Current	А		3		
Weight	kg	10.8	12	16.5	
Cable Length	m	5			
LxWxH	mm	227 x 162 x 282 196 x 196 x 316		300 x 265 x 307	
Max. Vacuum	kPa	-	_	73.3	



The KTZ-series is Tsurumi's flagship line of submersible pumps. Made with a cast iron body and high-chromium iron impeller, the pumps can withstand the most demanding conditions found in construction, aggregate and mining applications. Versatility is increased as each model has the capability of being easily converted between high head and high volume performance with a simple change of impeller, suction plate and hose coupling.

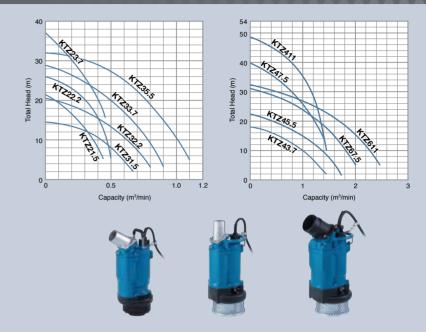
### **Registration of Design**

Tsurumi has registered the design of the KTZ-series in major countries. Design rights are granted under the laws of each country.









TECHNICAL D	ATA	KTZ21.5 KTZ31.5	KTZ22.2 KTZ32.2	KTZ23.7 KTZ33.7	KTZ35.5
Discharge Bore	mm		50 80		80
Motor Output	kW	1.5	2.2	3.7	5.5
Phase			Thr	ree	
Starting Method		Direct on Line			
Motor Protection		Circle Thermal			
Impeller		Semi-open made of high-chromium iron			
Voltage	V		40	00	
Current	А	3.5	5	7.7	11.4
Weight	kg	34 33	35 34	60	74
Cable Length	m	8			
LxWxH	mm	235 x 216 x 548	235 x 216 x 568	283 x 252 x 675	306 x 258 x 719

TECHNICAL D	)ATA	KTZ43.7	KTZ45.5	KTZ47.5 KTZ67.5	KTZ411 KTZ611
Discharge Bore	mm	10	00		00 50
Motor Output	kW	3.7	5.5	7.5	11
Phase			Thr	ree	
Starting Method		Direct on Line			
Motor Protection		Circle Thermal			
Impeller		Semi-open made of high-chromium iron			
Voltage	V	400			
Current	А	7.7	11.4	15	22
Weight	kg	60	74	101	130
Cable Length	m	8			
L×W×H	mm	283 x 252 x 690	306 x 258 x 734	330 x 314 x 812 361 x 314 x 874	374 x 350 x 864 374 x 350 x 884



# **KTZE**

Heavy-duty

The KTZE-series is an automatic model of the KTZ-series. An innovative electrode type relay unit built into the pump automatically starts and stops the pump to eliminate dry-running. This mechanism greatly reduces power consumption and extends operating life!

### **Registration of Design**

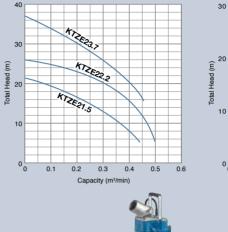
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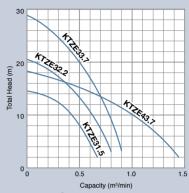
### Electrode Control Device

Consisting of an electric probe and relay unit, this enables automatic operation, reduces power consumption and extends operating life.









09-10





TECHNICAL D	ATA	KTZE21.5 KTZE22.2		KTZE23.7	
Discharge Bore	mm		50		
Motor Output	kW	1.5	2.2	3.7	
Phase			Three		
Starting Method		Direct on Line			
Motor Protection		Circle Thermal			
Impeller		Semi-open made of high-chromium iron			
Voltage	V		400		
Current	А	3.5	5	7.7	
Weight	kg	39	41	69	
Cable Length	m	8			
LxWxH	mm	235 x 216 x 628	235 x 216 x 648	283 x 252 x 755	

TECHNICAL D	ATA	KTZE31.5 KTZE32.2		KTZE33.7	KTZE43.7
Discharge Bore	mm		80		100
Motor Output	kW	1.5	2.2	3	.7
Phase		Three			
Starting Method		Direct on Line			
Motor Protection		Circle Thermal			
Impeller		Semi-open made of high-chromium iron			
Voltage	V		40	00	
Current	А	3.5	3.5 5 7.7		.7
Weight	kg	38 40 69			9
Cable Length	m	8			
L×W×H	mm	235 x 216 x 628	235 x 216 x 648	283 x 252 x 755	283 x 252 x 770



The KTV-series is a submersible three-phase portable drainage pump. Though it is a three-phase unit, the pump is designed to weigh lighter for portability, yet it can be used for pumping liquid found in ordinary construction and foundation works. The top-discharge, side-flow design assures efficient motor cooling even when it operates with its motor exposed to air. The slim design allows the pump to be placed in a confined space.



TECHNICAL D	)ATA	KTV2-8	KTV2-15	KTV2-22		
Discharge Bore	mm	50	50(80)			
Motor Output	kW	0.75	1.5	2.2		
Phase			Three			
Starting Method			Direct on Line			
Motor Protection			Circle Thermal			
Impeller		Vortex made of urethane rubber Vortex made of ductile iron				
Voltage	V	400				
Current	Α	1.8	3.3	4.3		

21

240 x 240 x 396

23

240 x 240 x 416

8

30				40					
Total Head (m) 20	10 10 10 10 10 10 10 10 10 10 10 10 10 1	25.25		Total Head (m	N2.37H		(N.3.35)		
0	0.2	0.4	0.6	0	0.2	0.4	0.6	0.8	1.0
	Capacity (	m³/min)				Capacity	(m³/min)		
									A STATE OF THE STA

TECHNICAL D	АТА	KTV2-37H	KTV2-37H KTV2-37				
Discharge Bore	mm	50	80(	00)			
Motor Output	kW	3	5.5				
Phase			Three				
Starting Method		Direct on Line					
Motor Protection		Circle Thermal					
Impeller		Vortex made of ductile iron					
Voltage	V		400				
Current	А	7	.4	11			
Weight	kg	3	6	47			
Cable Length	m	8					
L×W×H	mm	285 x 28	35 x 510	300 x 300 x 545			



11.5

5

200 x 200 x 369

Α kg

mm

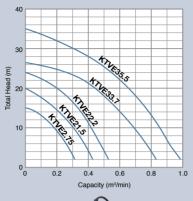
Weight

Cable Length

 $L \times W \times H$ 

# KTVE

The KTVE-series is an automatic model of the KTV-series. An innovative electrode type relay unit built into the pump automatically starts and stops the pump to eliminate dry-running. This mechanism greatly reduces power consumption and extends operating life!







					1	ı	
TECHNICAL DATA		KTVE2.75	KTVE21.5	KTVE22.2	KTVE33.7	KTVE35.5	
Discharge Bore	mm	50	500	80)	80(100)		
Motor Output	kW	0.75	1.5	2.2	3.7	5.5	
Phase			Three				
Starting Method			Direct on Line				
Motor Protection		Circle Thermal					
Impeller		Vortex made of urethane rubber					
Voltage	٧			400			
Current	А	1.8	3.3	4.3	7.4	11	
Weight	kg	12.7	21.5	24.5	39.5	52	
Cable Length	m	5	8				
L×W×H	mm	200 x 200 x 417	240 x 240 x 426		285 x 285 x 585	300 x 300 x 620	

# THOSE THAT KNOW QUALITY, KNOW TSURUMI.



The LH-series is a submersible three-phase cast iron high head drainage pump. Being the pump cylindrical and slim, it can be installed in a well casing for deep well dewatering. The center flange construction assures a stable installation even if it is fixed by the discharge pipe. The topdischarge, flow-thru design provides maximum motor cooling efficiency allowing continuous operation at low water levels and extended dry-run capability. The pump incorporates seal pressure relief ports that prevent the pumping pressure from applying to the shaft seal.\* \* excluding LH33.0



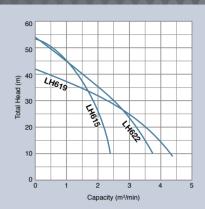




TECHNICAL DATA		LH33.0 LH422		LH430	
Discharge Bore	mm	80	10	00	
Motor Output	kW	3	22	30	
Phase					
Starting Method		Direct (	Star-Delta		
Motor Protection		Circle 1	Miniature Thermal		
mpeller		Semi-open made of high-chromium iron	igh-chromium iron		
/oltage	٧		400		
Current	А	6.5	40.5	55	
Weight	kg	42	350	355	
Cable Length	m	20	1	0	
_ x W x H	mm	185 x 185 x 645	420 x 4	20 x 1352	

100		
80	Lu.	
(m) ad (m)	LH430 LH422	
Total Head (m)		
20	1433.0	
0		
0	1 2 Capacity (m³/min)	3







TECHNICAL DATA		LH615 LH619		LH622		
Discharge Bore	mm		150			
Motor Output	kW	15 19		22		
Phase		Three				
Starting Method		Direct on Line				
Motor Protection		Circle Thermal				
Impeller		Closed made of high-chromium iron				
Voltage	V		400			
Current	А	27.5	36	40.5		
Weight	kg	213	350	360		
Cable Length	m	10				
L×W×H	mm	330 x 330 x 1014	420 x 4	20 x 1423		



LH8110

LH890

LH875

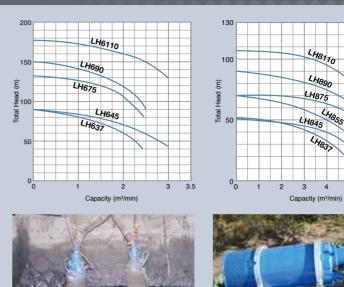
LH845



The LH-series is a submersible three-phase cast iron high head drainage pump. Being the pump cylindrical and slim, it can be installed in a well casing for deep well dewatering. The center flange construction assures a stable installation even if it is fixed by the discharge pipe. The topdischarge, flow-thru design provides maximum motor cooling efficiency allowing continuous operation at low water levels and extended dry-run capability. The pump incorporates seal pressure relief ports that prevent the pumping pressure from applying to the shaft seal.







TECHNICAL D	АТА	LH637	LH645	LH675	LH690	LH6110	
Discharge Bore	mm			150			
Motor Output	kW	37	45	75	90	110	
Phase		Three					
Starting Method		Star-Delta					
Motor Protection		Miniature Thermal					
Impeller		Closed made of high-chromium iron					
Voltage	V			400			
Current	А	67	81	130	166	205	
Weight	kg	495	510	865	1100	1200	
Cable Length	m	10			20		
LxWxH	mm	530 x 53	80 x 1448	563 x 563 x 1716	592 x 592 x 1787		

TECHNICAL DATA		LH837	LH845	LH855	LH875	LH890	LH8110	
Discharge Bore	mm			20	00			
Motor Output	kW	37	45	55	75	90	110	
Phase			Three					
Starting Method			Star-Delta					
Motor Protection			Miniature Thermal					
Impeller			Closed made of high-chromium iron					
Voltage	V			40	00			
Current	А	67	81	100	130	166	205	
Weight	kg	495	510	810	865	1150	1250	
Cable Length	m	10			20			
L×W×H	mm	530 x 53	0 x 1448	563 x 56	63 x 1716	592 x 592 x 1787		



Flow-thru

Center Flange Dual Impeller

High-head

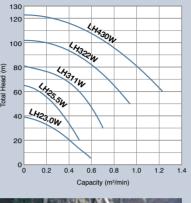
The LH-W-series is a submersible three-phase cast iron extra high head drainage pump having dual impellers. Being the pump cylindrical and slim, it can be installed in a well casing for deep well dewatering. The center flange construction assures a stable installation even if it is fixed by the discharge pipe. The pump incorporates seal pressure relief ports that prevent the pumping pressure from applying to the shaft seal.\*

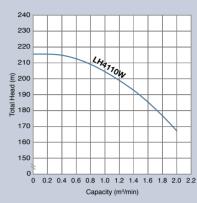
\* excluding LH23.0W















TECHNICAL DATA		LH23.0W	LH25.5W	LH311W	LH322W		
Discharge Bore	mm	5	60	80			
Motor Output	kW	3	5.5	11	22		
Phase			Three				
Starting Method		Direct on Line					
Motor Protection		Circle Thermal					
Impeller		Dual semi-open Dual closed made of high-chromium iron					
Voltage	٧		40	00			
Current	А	6.5	11	22	39		
Weight	kg	46	80	130	304		
Cable Length	m	20					
LxWxH	mm	185 x 185 x 630	254 x 254 x 750	270 x 270 x 1024	330 x 330 x 1235		

TECHNICAL DATA		LH430W	LH4110W		
Discharge Bore	mm	1(	00		
Motor Output	kW	30	110		
Phase		Three			
Starting Method		Star-Delta			
Motor Protection		Miniature Thermal			
Impeller		Dual closed made of high-chromium iron	Dual back-to-back closed made of high-chromium iron		
Voltage	V	40	00		
Current	А	53	209		
Weight	kg	324	1270		
Cable Length	m	20			
LxWxH	mm	365 x 365 x1375	616 x 616 x 1825		



# **KRS**

The KRS-series is a submersible three-phase cast iron drainage pump driven by a 4-pole motor. The cast iron body, combined with the low speed motor, presents high durability for use in the most demanding conditions. The top-discharge, side-flow design assures efficient motor cooling even if the pump runs with its motor exposed to air.\*

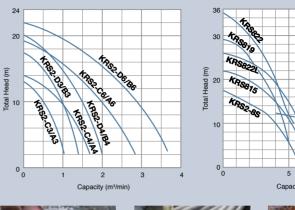
\* Model KRS1022 is a top-discharge, flow-thru design. It provides maximum motor cooling efficiency allowing continuous operation at low water levels and extended dry-run capability.





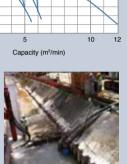
KRS1022	

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KRS1022

TECHNICAL D	АТА	KRS2- KRS2- KRS2- KRS2- KRS2- C3/A3 D3/B3 C4/A4 D4/B4 C6/A6			KRS2- D6/B6		
Discharge Bore	mm	8	0	10	00	15	50
Motor Output	kW	2.2	3.	.7	5.5	7.5	11
Phase		Three					
Starting Method				Direct	on Line		
Motor Protection			Circle Thermal				
Impeller			Semi-open made of ductile iron				
Voltage	V			40	00		
Current	Α	5.1	8	3	12.1	15	22
Weight	kg	72	91	88	98	130	158
Cable Length	m	8					
LxWxH	mm	340 x 315 x 620	365 x 350 x 705	350 x 320 x 720	365 x 350 x 710	415 x 373 x 767	434 x 407 x 813

TECHNICAL D	ATA	KRS2-8S	KRS815	KRS819	KRS822	KRS822L	KRS1022
Discharge Bore	mm			200			250
Motor Output	kW	11	15	18.5		22	
Phase			Three				
Starting Method				Direct of	on Line		
Motor Protection			Circle Thermal				
Impeller			Semi-open made of ductile iron Close				
Voltage	V			40	00		
Current	А	22	31.9	35.5	44	l.6	45.7
Weight	kg	174	240	360	38	30	390
Cable Length	m	8 10					
LxWxH	mm	473 x 409 x 933	481 x 440 x 1069		576 x 530 x 1241		525 x 525 x 1419



# GSZ-4

Three-phase

 $L \times W \times H$ 

mm

The GSZ-4-series is a submersible three-phase cast iron high volume drainage pump driven by a 4-pole motor. The side-discharge, spiral design allows smoother passage of the sucked solid matters. The motor is cooled by a water jacket allows the pump to operate at low water levels for extended period of time without the fear of overheating. The pump incorporates seal pressure relief ports that prevent the pumping pressure from applying to the shaft seal.



TECHNICAL D	ATA	GSZ5-37-4H	GSZ5-37-4H GSZ5-37-4			
Discharge Bore	mm	150	20	00		
Motor Output	kW	3	37 45			
Phase			Three			
Starting Method			Star-Delta			
Motor Protection			Miniature Thermal			
Impeller		Closed made of cast 304 stainless steel	Closed made of hi	igh-chromium iron		
Voltage	٧		400			
Current	А	7	6	87		
Weight	kg	595	566	583		
Cable Length	m		10			

65 60 50		60 50 40	G822:75.4		
Total Head (m) 05 00 06	Color at a	Total Head (m) 20	GG L	35 G	\$2.75.91
10	0 5 11	10	5	10	15 18
	Capacity (m <sup>9</sup> /min)			city (m³/min)	
			1		

TECHNICAL D	ATA	GSZ2-55-4	GSZ2-75-4L				
Discharge Bore	mm		250				
Motor Output	kW	55	7	5			
Phase		Three					
Starting Method		Star-Delta					
Motor Protection		Miniature Thermal					
Impeller		Closed made of high-chromium iron					
Voltage	V		400				
Current	А	108	15	52			
Weight	kg	1091	1141	1200			
Cable Length	m		10				
LxWxH	mm	1050 x 70	08 x 1927	1050 x 739 x 1972			



915 x 660 x 1583

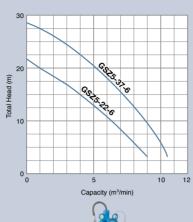
915 x 660 x 1591

900 x 700 x 1553

# GSZ-6

The GSZ-6-series is a submersible three-phase high power drainage pump driven by a 6-pole motor. In combination with abrasion-resistant wear parts, the very low speed motor ensures extremely long wear life. The side-discharge, spiral design allows smoother passage of the sucked solid matters. The motor is cooled by a water jacket allows the pump to operate at low water levels for extended period of time without the fear of overheating. The pump incorporates seal pressure relief ports that prevent the pumping pressure from applying to the shaft seal.



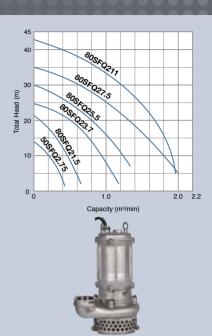






The SFQ-series is a submersible cast stainless steel high head corrosion-resistant pump designed for handling aggressive and corrosive liquid. The all wetted parts are made of 316 stainless steel, the pumps can withstand the most demanding conditions found in construction, aggregate and mining applications. The side-discharge, spiral design allows smoother passage of the sucked solid matters. The pump with 5.5kW and above motor incorporates seal pressure relief ports that prevent the pumping pressure from applying to the shaft seal.





25-26

TECHNICAL D	ATA	GSZ5-22-6	GSZ5-37-6		
Discharge Bore	mm	20	00		
Motor Output	kW	22	37		
Phase		Three			
Starting Method		Direct on Line	Star-Delta		
Motor Protection		Miniature Thermal			
Impeller		Semi-open made of	high-chromium iron		
Voltage	V	40	00		
Current	А	47	79		
Weight	kg	685	796		
Cable Length	m	10			
LxWxH	mm	965 x 720 x 1360	1047 x 804 x 1421		

TECHNICAL D	ATA	50SFQ2.75	80SFQ21.5	80SFQ23.7	80SFQ25.5	80SFQ27.5	80SFQ211
Discharge Bore	mm	50			80		
Motor Output	kW	0.75	1.5	3.7	5.5	7.5	11
Phase			Three				
Starting Method			Direct on Line Star-Delta				Star-Delta
Motor Protection			Circle Thermal Miniature Thermal				
Impeller			Semi-op	en made of c	ast 316 stainl	ess steel	
Voltage	V			40	00		
Current	А	2	3.8	7.3	11.3	14.3	21
Weight	kg	22	36	52	124	123	143
Cable Length	m	6 8					
LxWxH	mm	252 x 196 x 398	329 x 221 x 484	359 x 257 x 542	635 x 3	60 x 844	635 x 360 x 892

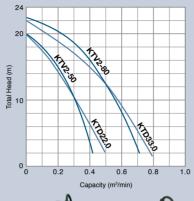


## **KTD·KTV**

The KTD-series is a submersible threephase cast iron heavy-duty slurry pump. It is equipped with an agitator that suspends solids to assist in pumping sediments. The pump parts such as the impeller and the suction cover are made of wear-resistant materials.

The KTV-series of slurry-handling type is a submersible three-phase portable slurry pump. Though the pump is a three-phase unit, it is designed to weigh lighter for portability, yet it can be used for pumping slurry. The top-discharge, side-flow design assures efficient motor cooling even if the pump runs with its motor exposed to air.



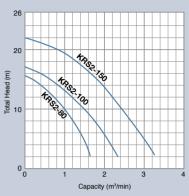




# **KRS**

The 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 iron agitator that suspends solids to assist in pumping sediments. 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 if the pump runs with its motor exposed to air.





27-28



TECHNICAL D	ATA	KTD22.0	KTD33.0	KTV2-50	KTV2-80		
Discharge Bore	mm	50	80	50(80)	80(100)		
Motor Output	kW	2	3	2	3		
Phase			Three				
Starting Method			Direct on Line				
Motor Protection			Circle Thermal				
Impeller			Semi-open made of Vortex made of high-chromium iron high-chromium iron				
Voltage	V		40	00			
Current	А	4.5	6.5	3.8	6.1		
Weight	kg	38	65	25	38		
Cable Length	m	8					
LxWxH	mm	235 x 221 x 550	297 x 266 x 644	250 x 250 x 450	295 x 295 x 550		

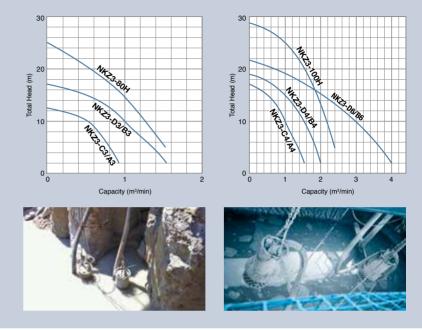
TECHNICAL E	DATA	KRS2-80	KRS2-150		
Discharge Bore	mm	80	100	150	
Motor Output	kW	4 6		9	
Phase		Three			
Starting Method		Direct on Line			
Motor Protection		Circle Thermal			
Impeller		Semi-c	pen made of high-chromi	um iron	
Voltage	٧		400		
Current	Α	9.5	13	18.5	
Weight	kg	105	143	170	
Cable Length	m	8			
LxWxH	mm	349 x 326 x 800	415 x 374 x 835	433 x 407 x 898	



Agitator

The NKZ-series is a submersible three-phase cast iron slurry pump driven by a 4-pole motor. It is equipped with an agitator that assists smooth suction of settled matters. The side-discharge, spiral design allows smoother passage of the sucked solid matters. The motor is cooled by a water jacket that assures efficient motor cooling even when it operates with its motor exposed to air.





TECHNICAL D	ATA	NKZ3-C3/A3 NKZ3-D3/B3		NKZ3-80H		
Discharge Bore	mm		80			
Motor Output	kW	2.2	3.7	5.5		
Phase		Three				
Starting Method		Direct on Line				
Motor Protection		Circle Thermal				
Impeller		Semi-open made of ductile iron Semi-open made of high-chromium iron				
Voltage	٧		400			
Current	А	5.1	8	12.1		
Weight	kg	91 100 132				
Cable Length	m	8				
LxWxH	mm	466 x 368 x 664	466 x 368 x 709	491 x 400 x 753		

TECHNICAL D	ATA	NKZ3-C4/A4 NKZ3-D4/B4 NKZ3-100H NKZ			NKZ3-D6/B6	
Discharge Bore	mm		100			
Motor Output	kW	3.7	5.5	1	1	
Phase			Three			
Starting Method			Direct	on Line		
Motor Protection			Circle Thermal			
Impeller		Semi-open mad	de of ductile iron	Semi-open made of high-chromium iron	Semi-open made of ductile iron	
Voltage	V		40	00		
Current	А	8	12.1	22	22	
Weight	kg	97	115	196	192	
Cable Length	m		8	3		
LxWxH	mm	466 x 368 x 709	482 x 382 x 714	546 x 413 x 840	618 x 449 x 797	

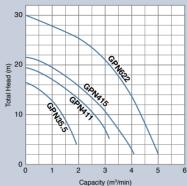


Spiral

## **GPN**

The GPN-series is a submersible three-phase, heavy-duty slurry pump incorporating an agitator to suspend solids enabling the pump to handle high concentration slurries. Being equipped with high-chromium cast iron wear parts, the pump delivers outstanding durability. The side-discharge, spiral design allows smoother passage of the sucked solid matters. The motor is cooled by a water jacket allows the pump to operate at low water levels for extended period of time without the fear of overheating.

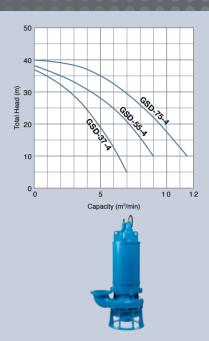






# GSD

The GSD-series is a submersible three-phase high volume slurry pump incorporating an agitator to suspend solids enabling the pump to handle high concentration slurries. Being equipped with high-chromium cast iron wear parts, the pump delivers outstanding durability. The side-discharge, spiral design allows smoother passage of the sucked solid matters. The motor is cooled by a water jacket allows the pump to operate at low water levels for extended period of time without the fear of overheating. The pump incorporates seal pressure relief ports that prevent the pumping pressure from applying to the shaft seal.



TECHNICAL D	АТА	GPN35.5	GPN411 GPN415		GPN622	
Discharge Bore	mm	80	10	00	150	
Motor Output	kW	5.5	11	15	22	
Phase			Three			
Starting Method			Direct on Line			
Motor Protection			Circle Thermal Miniature Thermal			
Impeller		S	Semi-open made of	high-chromium iro	n	
Voltage	V		40	00		
Current	А	12.1	22	28.5	42.5	
Weight	kg	145	217	220	415	
Cable Length	m	8	8 10			
LxWxH	mm	487 x 390 x 796	617 x 4	52 x 879	725 x 572 x 1102	

TECHNICAL E	ATA	GSD-37-4	GSD-55-4	GSD-75-4	
Discharge Bore	mm	200	250		
Motor Output	kW	37	55 75		
Phase		Three			
Starting Method		Star-Delta			
Motor Protection		Miniature Thermal			
Impeller		Closed made of high-chromium iron			
Voltage	V	400			
Current	А	76	108	152	
Weight	kg	685	1100	1215	
Cable Length	m	10			
L×W×H	mm	915 x 660 x 1583 1050 x 708 x 1927			



# **Options**

### Seawater-resistant version

Pumps can be combined with a seawater-resistant kit that adds a "galvanic anode" and "seawater-resistant special cast iron impeller," and enables about two years of service\*.

\* The service period depends on operating conditions.

### High voltage version

Pumps can be fabricated to 690V or 1000V ratings that are often required for mining applications. The pumps meet mining safety standards as they come with shielded cables and motors with built-in diodes for ground-fault checks.

### High temperature liquid version

Pumps are applicable to high temperature liquids of up to  $90^{\circ}$ C. Pumps of the standard specification can discharge liquids of up to  $40^{\circ}$ C.

### Corrosion-resistant version

Pumps can be fabricated with all fluid-contacting parts made of 316 stainless steel, including the impeller, pump casing, motor frame, outer cover, strainer stand, and flange.

For applicable models and details, contact your dealer.

### **Recommended Generator Sizes**

			Single	e-
	Motor Output (kW)	50Hz	60Hz	
Model		230V	220V	
Wodel		AC Max. Output at starting (kVA)		
LB-480(A)	0.48	1.6	1.5	
LB-800(A)	0.75	2.4	2.8	
LB-1500	1.5	12	9.1	
NK2-15	1.5	11	12	
NK3-22	2.2	12	12	
NK3-22I	22	12	12	

-pnase				
			50Hz	60Hz
	Model	Motor Output (kW)	230V	220V
	Wodel		AC Max. Output at starting (kVA)	
	HS(Z)2.4S	0.4	1.6	1.5
	HS(Z)3.75S	0.75	3.4	4.0
	HSD2.55S	0.55	2.5	2.6
	HSR2.4S	0.4	1.6	1.5
	LSC1.4S	0.48	1.6	1.5
	LSP1.4S	0.48	1.6	1.5

			Three
		50Hz	60Hz
Model	Motor Output	400V	380V
Model	(kW)	AC Max. Output at starting (kVA)	
KTZ(E)21.5 / 31.5	1.5	7.6	6.9
KTZ(E)22.2 / 32.2	2.2	12	11
KTZ(E)23.7 / 33.7 / 43.7	3.7	20	17
KTZ35.5 / 45.5	5.5	29	24
KTZ47.5 / 67.5	7.5	41	33
KTZ411 / 611	11	53	43
KTV2-8	0.75	3.7	3.9
KTV2-15	1.5	6.6	8.0
KTV2-22	2.2	10	11
KTV2-37(H)	3.7	17	20
KTV3-55	5.5	23	24
KTVE2.75	0.75	3.7	3.9
KTVE21.5	1.5	6.6	8.0
KTVE22.2	2.2	10	11
KTVE33.7	3.7	17	20
KTVE35.5	5.5	23	24
LH33.0	3	16	14
LH615	15	59	55
LH619	19	87	83
LH422 / 622	22	100	94
LH430	30	135	125
LH637 / 837	37	*159	*142
LH645 / 845	45	*208	*184
LH855	55	*272	*214
LH675 / 875	75	*350	*276
LH690 / 890	90	*381	*294
LH6110 / 8110	110	*473	*485
LH23.0W	3	16	14
LH25.5W	5.5	23	22
LH311W	11	47	45
LH322W	22	100	94
LH430W	30	135	125
LH4110W	110	*473	*485
50SFQ2.75	0.75	4.0	4.7
80SFQ21.5	1.5	12	11
80SFQ23.7	3.7	20	17
80SFQ25.5	5.5	29	24
80SFQ27.5	7.5	41	33
80SFQ211	11	*55	*45

e-phase				
			50Hz	60Hz
Mod	lol.	Motor Output (kW)	400V	380V
IVIOC	Model		AC Max. Output at starting (kVA)	
KRS2-C3 / /	43	2.2	11	11
KRS2-D3 / E	33	3.7	17	17
KRS2-C4 / /	44	3.7	17	17
KRS2-D4 / E	34	5.5	30	28
KRS2-C6 / /	46	7.5	32	34
KRS2-D6 / E	36	11	54	49
KRS2-8S		11	54	49
KRS815		15	72	60
KRS819		19	86	68
KRS822(L)		22	109	83
KRS1022		22	89	72
GSZ5-37-4(	H)	37	*177	*143
GSZ4-45-4		45	*215	*171
GSZ2-55-4		55	*381	*416
GSZ2-75-4(	L)	75	*381	*416
GSZ5-22-6		22	111	87
GSZ5-37-6		37	*170	*135
KTD22.0		2	12	11
KTD33.0		3	20	17
KTV2-50		2	10	11
KTV2-80		3	17	20
KRS2-80		4	30	28
KRS2-100		6	32	34
KRS2-150		9	54	49
NKZ3-C3 / /	43	2.2	11	11
NKZ3-D3 / I	33	3.7	17	17
NKZ3-C4 / /	44	3.7	17	17
NKZ3-80H		5.5	30	28
NKZ3-D4 / I	34	5.5	30	28
NKZ3-100H		11	54	49
NKZ3-D6 / I	36	11	54	49
GPN35.5		5.5	30	28
GPN411		11	54	49
GPN415		15	54	49
GPN622		22	100	82
GSD-37-4		37	*177	*143
GSD-55-4		55	*381	*416
GSD-75-4		75	*381	*416
*In the	case of Star	-Delta starti	ng, devide	them by 1.5

<sup>\*</sup>In the case of Star-Delta starting, devide them by 1.5.

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	IF101-A NPC-F-L-T Printed in Japan