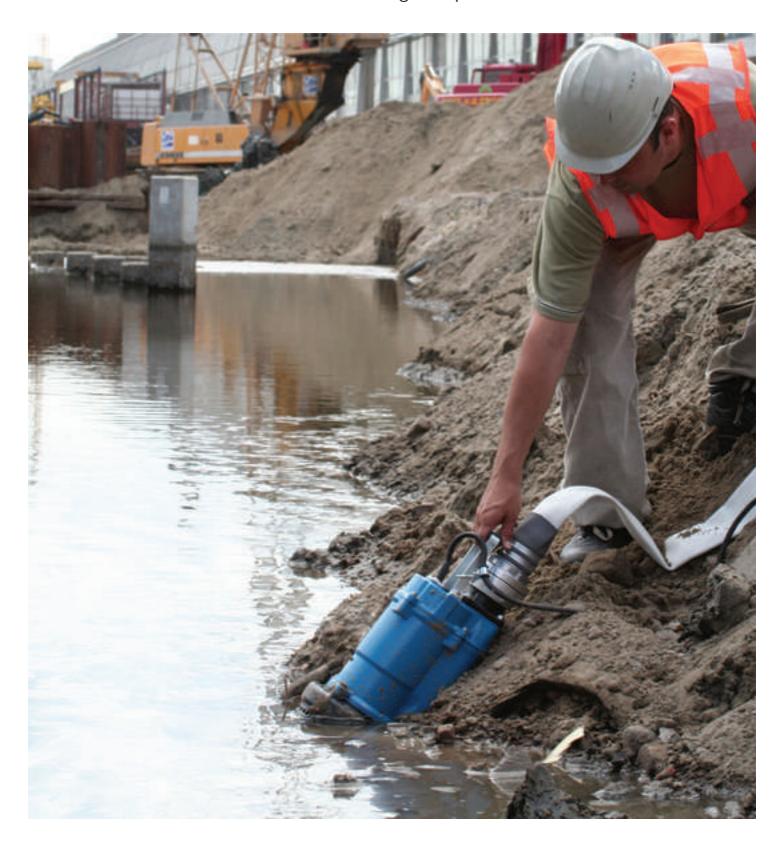


Contractors' Pumps

Tsurumi products are distributed worldwide and renowned for their advanced technological design. For professional use.



Latest Technology - Highest Quality

A - Tsurumi Stuffing Box - absolutely watertight

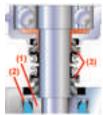


The stuffing box is located at the cable entry section and takes the part of sealing off water. As the cable conductors consist of twisted wires, water may penetrate into the motor by the capillary phenomenon when cable sheath or insulation is damaged or when the end of the cable is submerged. The construction is such that a certain part of the insulation of each conductor is peeled and filled with rubber or epoxy resin for the complete sealing.

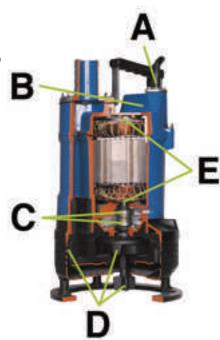
B - Continuous use under dry-run

Located directly above the motor windings, a snap-action self-resetting bi-metal device cuts off voltage from all three phase windings simultaneously if the current is too large in one, two or all three windings, or if the windings get too hot. Tsurumi enables measurement of winding resistance and insulation from the far end of the cable, without ever removing the cover from the motor in the field.

C - Double mechanical SiC seal in oil bath



The interaction of a ring rotating with the shaft and a fixed ring, below and above an oil bath, assumes the critical role of withstanding pumping pressure and preventing water from seeping into the motor. The seals of all Tsurumi contractors 'pumps, even in the 400W-class, have sealing rings of Silicon Carbide. No other material has greater hardness, selflubrication is slightly better than that of directly comparable materials. Resistance to temperature fluctuation and corrosion is also the best available.



D - Increased wear resistance of pump casing and impeller

As contractors 'pumps are used in unpredictable circumstances, Tsurumi has gone a long way towards making the impeller capable of the impossible and towards providing spare motor power to match. Tsurumi contractors 'pumps are used extensively for bentonite mud, often with earth in the case of the models fitted with an agitator.

E - Ball bearings of highest quality

Due to the high quality of the shaft and the bear rings all pumps can be run horizontally when entirely submerged.



Oil Lifter

A special patented guide vane is attached inside the oil chamber. With the motor rotation oil is pumped up. Therefore even at low oil level lubrication and cooling of the mechanical seal is secured.

Top Discharge

(water jacket)

Pumped water flows between the outer cover and the motor, cooling the motor and discharging as illustrated (forced motor cooling

over tor, as

arrangement). The pump can be run continuously in air.

Top Discharge

(side flow)

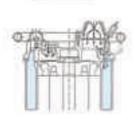
Pumped water cools the motor and discharges as illustrated. The motor can be cooled even when pumping a small amount of water. The top discharge arrangement allows access into areas with space limitations.



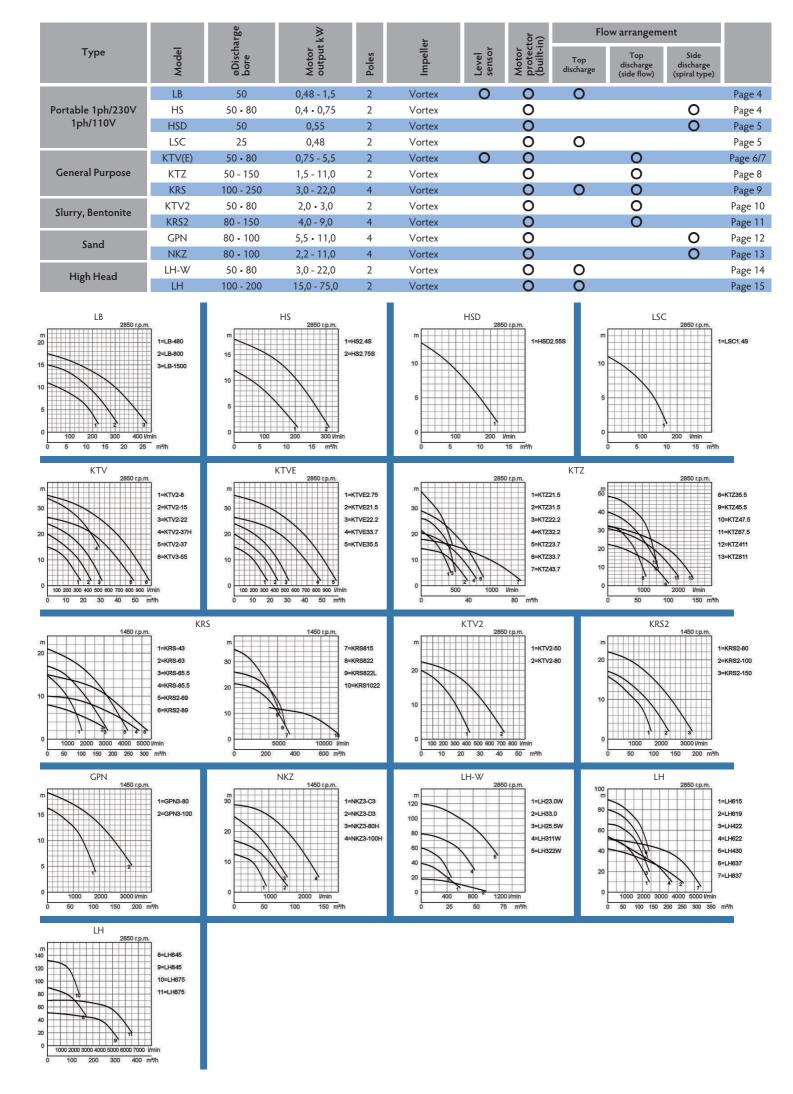
Side Discharge

(spiral type

The spiral type pump features a large waterway area as illustrated and carries sand suspensions or slurry very effectively. Since a high performance motor is used, the pump can be run continuously in air.



Water Jacket - Inner and outer motor casing - flow-through-design - perfect cooling under dry-runconditions.



Portable Contractors' Pumps

Model	Colour code curve	e mm	Motor output kW	Rated current A	ad max. m	Capacity max. I/min	/ weight kg w/o	x. solid ıdling ø mm	x. water depth	Cable length m	Dimensions in mm:							
Mo	S	Bore	Wo	Rat	Head	Cap I/m	Dry w cable	Max. handl	Max.	Cal	d	Α	A1	В	D	D1	Н	W1
LB-480	1	50	0,48	2,9	11,0	225	10,4	6	20	10	50	187	161	286	231	-	228	50
LB-480A		50	0,48	2,9	11,0	225	11,0	6	20	10	50	187	161	286	231	223	228	115
LB-800	<u>2</u>	50	0,75	5,0	15,0	310	13,2	6	20	10	50	187	160	341	230	-	283	50
LB-800A		50	0,75	5,0	15,0	310	13,8	6	20	10	50	187	160	341	230	223	283	170
LB-1500	3	50	1,5	15,4	17,5	440	33	6	50	10	50	187	122	600	-	-	518	80

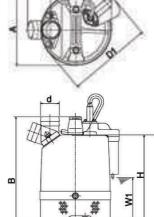


1-phase



Light Duty Drainage Pump -
LB-480A and LB-800A with
level control





W1: continuous running water level

15 10 400 l/min

Model	Colour code curve	re mm	Motor output kW	Rated current A	ad max. m	Capacity max. I/min	y weight kg w/o ole	x. solid ndling ø mm	x. water depth	Cable length m	Dim	Dimensions in mm:						
¥	ပိ	Bore	×	Ra	Ŧ	g <u>∓</u>	cal	Max. handl	Max. m	Ü	d	Α	A1	В	B1	D	Н	W1
HS2.4S	1	50	0,4	2,6	12,2	207	11,3	7	20	10	50	240	207	158	84	185	348	90
HS2.75S	2	50	0,75	4,6	18,0	300	18,2	7	20	10	50	285	233	217	109	184	388	90
HS3.75S		80	0,75	4,6	18,0	300	19,0	7	20	10	80	285	233	217	109	184	388	90

Spring water, Rain water, Ground water, Sand carrying water

HS	1-phase 50Hz
	50Hz



Light Duty Drainage Pump equipped with spiral casing

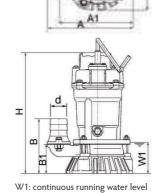
Pump	Compo-	impelier	Semi-vortex impelier				
	nents	Shaft Seal	Double mechanical seal				
		Bearings	Shielded ball bearings				
	Material	Impeller	Urethane rubber				
		Casing	Ductile iron casting EN-GJS-700-2				
		Shaft Seal	Silicon carbide in oil bath				
Motor	Type, Poles		Induction motor, 2 poles				
	Lubrication		Turbine oil (ISO VG32)				
	Motor Prote	ector (built-in)	Miniature protector				
	Insulation		Insulation class E				
	Phase / Volt	age	Single phase 230V / 110V / 50Hz				
	Material	Casing	Aluminium die casting				
		Shaft	Stainless steel EN-X6Cr13				
		Cable	Rubber, H07RN-F				

0-40°C

Pumping Fluid

Temperature

Type of Fluid



			2850	r.p.m.
n				
5				
5				
	100	200		2 300 l/m
0	5	10	15	m³/h

In the event of abrasive and corrosive utilization, stronger wear and tear will take place naturally in certain components. In this regard, please pay attention to our website www.tsurumi-europe.com/english/applications.htm.

Threaded flange/Hose coupling

Portable Contractors' Pumps

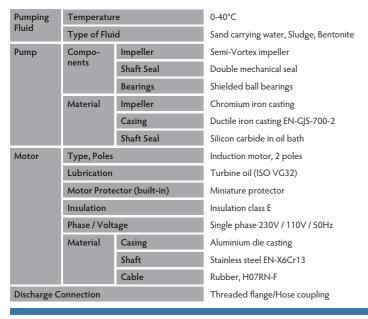
Model	Colour code curve	e mm	tor output kW	ed current A	ad max. m	oacity max. in	weight kg w/o	k. solid Idling ø mm	k. water depth	ole length m	Dimensions in mm:							
Wo	Col	Bore	Wo	Rat	He	Cap I/mi	Dry	Max	Max m	Cable	d	Α	A1	В	B1	D	Н	W1
HSD2.55S	1	50	0,55	3,6	13,2	220	15,0	10	20	10	50	234	200	171	97	162	391	105

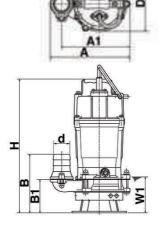


1-phase

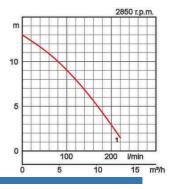


Portable Agitator Pump for sludge and bentonite





W1: continuous running water level



Model	Colour code curve	Bore mm	Motor output kW	Rated current A	Head max. m	Capacity max. I/min	Dry weight kg w/o cable	Max. solid handling ø mm	Max. water depth m	Cable length m
LSC1.4S	1	25	0,48	2,9	11,0	170	12,0	6	20	10

LSC	1-phase 50Hz
	30112



Residue Water Pump removal of residual water down to 1mm

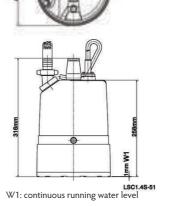
	nents	Shaft Seal	Double mechanical seal
		Bearings	Shielded ball bearings
	Material	Impeller	Urethane rubber
		Casing	Ethylene propylene rubber
		Suction Plate	Steelplate+Urethane rubber
		Shaft Seal	Silicon carbide in oil bath
Motor	Type, Poles		Induction motor, 2 poles
	Lubrication		Turbine oil (ISO VG32)
	Motor Prote	ctor (built-in)	Miniature protector
	Insulation		Insulation class E
	Phase / Volt	age	Single phase 230V / 110V / 50Hz
	Material	Casing	Aluminium die casting
Shaft		Shaft	Stainless steel EN-X6Cr13
Cable			Rubber H07RN-F

Temperature
Type of Fluid

Pump

Discharge Connection

Compo- Impeller



	1	_	00	_			-	00		mir	-
						,\			-	+	F
			_	/	1						
\	\	\									

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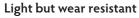
Cleaning water, Water on floor, Puddles

Semi-Vortex impeller

Hose coupling



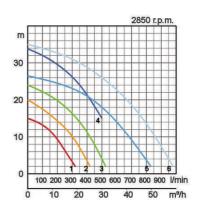
Model	Colour code curve	Bore mm	Motor output kW	Rated current A	Head max. m	Capacity max. I/min	Dry weight kg w/o cable	Max. solid handling ø mm	Max. water depth m	Cable length m
KTV2-8	1	50	0,75	1,8	15,0	320	11,5	6	20	10
KTV2-15	2	50	1,5	3,3	20,0	420	20	8,5	30	20
KTV2-22	3	50	2,2	4,3	24,0	525	23,0	8,5	30	20
KTV2-37H	4	50	3,7	7,4	33,8	500	36,0	8,5	30	20
KTV2-37	O 5	80	3,7	7,4	26,5	830	36,0	8,5	30	20
KTV3-55	6	80	5,5	11,0	35,0	980	47	8,5	30	20



The KTV-series combines high tech materials for maximum durability, yet lightweight and portable.



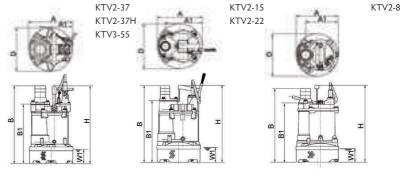
ø Discharge	bore mm		50,80					
Pumping	Temperatu	re	0-40°C					
Fluid	Type of Flu	id	Spring water, Rain water, Ground water, Sand carrying water					
Pump	Compo-	Impeller	Semi-Vortex impeller					
	nents	Shaft Seal	Double mechanical seal					
		Bearings	Shielded ball bearings					
	Material	Impeller	Urethane rubber, Ductile iron casting EN-GJS-700-2					
		Casing	Synthetic rupper					
		Shaft Seal	Silicon carbide in oil bath					
Motor	Type, Poles		Induction motor, 2 poles					
	Lubrication		Turbine oil (ISO VG32)					
	Motor Prote	ector (built-in)	Circle thermal cut-out					
	Insulation		Insulation class E					
	Phase / Volt	age	3-phase / 400V / 50Hz / d.o.l.					
	Material Casing		Aluminium die casting					
		Shaft	Stainless steel EN-X30Cr13, Stainless steel EN-X6Cr13					
		Cable	Rubber, H07RN-F					
Discharge (Connection		Threaded flange/Hose coupling					





Dimensions in mm:

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



W1: continuous running water level

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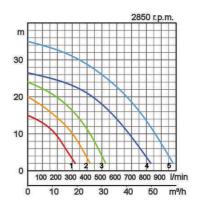
Model	Colour code curve	Bore mm	Motor output kW	Rated current A	Head max. m	Capacity max. I/min	Dry weight kg w/o cable	Max. solid handling ø mm	Max. water depth m	Cable length m
KTVE2.75	1	50	0,75	1,8	15,0	320	12,7	6	20	10
KTVE21.5	2	50	1,5	3,3	20,0	420	22	8,5	30	20
KTVE22.2	3	50	2,2	4,3	24,0	525	25	8,5	30	20
KTVE33.7	4	80	3,7	7,4	26,5	830	40	8,5	30	20
KTVE35.5	O 5	80	5,5	11,0	35,0	980	52,0	8,5	30	20

Electrode Auto Control System

The KTVE-type is equipped with a new electrode type control system. Pump operation is started when the water level rises and contacts the electrode. When the the water-electrode contact is lost the timer starts operating, after one minute pump operation is stopped.



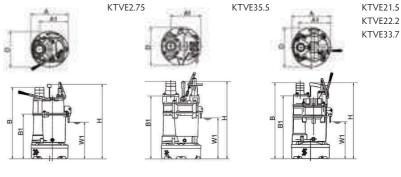
ø Discharge	bore mm		50,80					
Pumping Fluid	Temperatur	·e	0-40°C					
riuid	Type of Flui	d	Spring water, Rain water, Ground water, Sand carrying water					
Pump	Compo-	Impeller	Semi-Vortex impeller					
	nents	Shaft Seal	Double mechanical seal					
	Bearings		Shielded ball bearings					
	Material	Impeller	Urethane rubber,Ductile iron casting EN-GJS-700-2					
		Casing	Synthetic rupper					
	Shaft Seal		Silicon carbide in oil bath					
Motor	Type, Poles		Induction motor, 2 poles					
	Lubrication		Turbine oil (ISO VG32)					
	Motor Prote	ector (built-in)	Circle thermal cut-out					
	Insulation		Insulation class E					
	Phase / Volt	age	3-phase / 400V / 50Hz / d.o.l.					
	Material	Casing	Aluminium die casting					
		Shaft	Stainless steel EN-X30Cr13, Stainless steel EN-X6Cr13					
		Cable	Rubber, H07RN-F					
Discharge C	onnection		Threaded flange/Hose coupling					





Dimensions in mm:

Model	Α	A1	В	B1	D	Н	W1
KTVE2.75	200	155	401	329	200	417	234
KTVE21.5	240	187	482	400	240	486	265
KTVE22.2	240	187	482	400	240	486	265
KTVE33.7	285	211	585	462	285	585	327
KTVE35.5	-	229	620	497	300	620	357



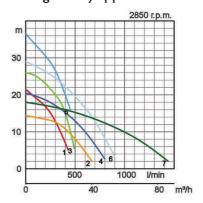
In the event of abrasive and corrosive utilization, stronger wear and tear will take place naturally in certain components. In this regard, please pay attention to our website www.tsurumi-europe.com/english/applications.htm.

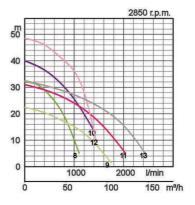


- 1												
Model	Colour code curve	Bore mm	Motor output kW	Rated current A	Head max. m	Capacity max. I/min	Dry weight kg w/o cable	Max. solid handling ø mm	Max. water depth m	Cable length m		
KTZ21.5	1	50	1,5	3,5	21,5	430	30,0	8,5	50	20		
KTZ31.5	<u>2</u>	80	1,5	3,5	14,4	670	30,0	8,5	50	20		
KTZ22.2	O 3	50	2,2	5,0	26,0	500	34,0	8,5	50	20		
KTZ32.2	4	80	2,2	5,0	20,5	800	34,0	8,5	50	20		
KTZ23.7	O 5	50	3,7	7,7	36,5	450	63	8,5	50	20		
KTZ33.7	O 6	80	3,7	7,7	29,0	900	63	8,5	50	20		
KTZ43.7	7	100	3,7	7,7	18,0	1440	63	8,5	50	20		
KTZ35.5	8	80	5,5	11,4	32,0	1100	82,0	10	50	20		
KTZ45.5	O 9	100	5,5	11,4	22,5	1750	82,0	10	50	20		
KTZ47.5	1 0	100	7,5	15,0	40,0	1400	105,0	12	50	20		
KTZ67.5	1 1	150	7,5	15,0	31,0	2040	107,0	20	50	20		
KTZ411	12	100	11,0	22,0	48,5	1440	133,0	12	50	20		
KTZ611	<u>13</u>	150	11,0	22,0	32,5	2440	136,0	20	50	20		
ø Discharge	bore mm	50,80,100,150										
Pumping	Temperatur	erature 0-40°C										
Fluid	Type of Flui	id		Spring	g water, Ra	in water, G	round wate	er, Sand ca	rrying wate	r		
Pump	Compo-											
	nents	Shaft Se	al	Doub	Double mechanical seal							
		Bearing			Shielded ball bearings							
	Material	Impelle			mium iron c							
		Casing			iron casting	0	00					
		Suction	Plate	Ductil	e iron casti	ng EN-GJS-	-500-7					
		Shaft Se	al	Silico	n carbide ir	oil bath						
Motor	Type, Poles			Induc	tion motor	, 2 poles						
	Lubrication		Turbine oil (ISO VG32)									
	Motor Prote	ector (buil	t-in)	Circle	thermal cu	it-out						
	Insulation			Insula	tion class F							
	Phase / Volt	age		3-pha	se / 400V /	50Hz / d.c	o.l.					
	Material	Casing		Grey	iron casting	EN-GJL-20	00					
		Shaft		Stainl	ess steel EN	l-X30Cr13						
		Cable		Rubb	Rubber, H07RN-F							



Standard Submersible Drainage Pump generally applicable

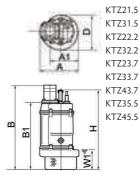




Dimensions in mm:

Discharge Connection

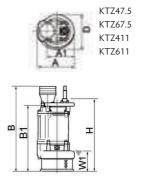
Model	Α	A1	В	B1	D	Н	W1
KTZ21.5	235	173	509	401	216	478	120
KTZ31.5	235	173	509	401	216	478	120
KTZ22.2	235	173	529	421	216	498	120
KTZ32.2	235	173	529	421	216	498	120
KTZ23.7	283	208	627	504	252	637	150
KTZ33.7	283	208	627	504	252	637	150
KTZ43.7	283	208	642	504	252	637	150
KTZ35.5	306	218	671	548	259	688	150
KTZ45.5	306	218	686	548	259	688	150
KTZ47.5	330	240	764	626	314	687	190
KTZ67.5	330	240	799	626	314	687	190
KTZ411	373	260	806	645	350	740	190
KTZ611	373	260	826	645	350	740	190



Threaded flange/Hose coupling

KTZ22.2 KTZ32.2 KTZ23.7 KTZ33.7 KTZ43.7 KTZ35.5 KTZ45.5

 $\hbox{W1: continuous running water level}\\$



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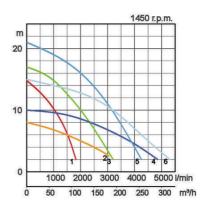
| Page 08 Updated 09/2009

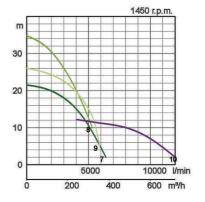
Model	Colour code curve	Boremm	Motor output kW	Rated current A	Head max. m	Capacity max. I/min	Dry weight kg w/o cable	Max. solid handling ø mm	Max. water depth m	Cable length m
KRS-43	1	100	3,0	6,5	14,8	1820	95,0	12	30	20
KRS-63	2	150	3,0	6,5	8,0	3250	97,0	15	30	20
KRS-65.5	3	150	5,5	12,1	17,0	3200	118,0	20	30	20
KRS-85.5	4	200	5,5	12,1	10,0	4850	118,0	20	30	20
KRS2-69	O 5	150	9,0	19,0	21,0	4250	155,0	20	30	20
KRS2-89	6	200	9,0	19,0	15,0	5300	175,0	30	30	20
KRS815	7	200	15,0	29,0	21,5	6400	235,0	25	40	20
KRS822	8	200	22,0	42,0	34,8	5300	390,0	25	40	20
KRS822L	0 9	200	22,0	42,0	26,0	5900	390,0	25	40	20
KRS1022	1 0	250	22,0	45,0	12,2	12000	450,0	25	40	20



Heavy Duty Dewatering Pump 4-pole motor - excellent durability

ø Discharge	bore mm		100,150,200,250					
Pumping	Temperatu	re	0-40°C					
Fluid	Type of Flu	id	Spring water, Rain water, Ground water, Sand carrying water					
Pump	Compo-	Impeller	Semi-open type impeller,Closed type impeller					
	nents	Shaft Seal	Double mechanical seal					
		Bearings	Shielded ball bearings					
	Material	Impeller	Ductile iron casting EN-GJS-700-2					
		Casing	Grey iron casting EN-GJL-200					
	Suction Plate		Grey iron casting EN-GJL-200					
		Shaft Seal	Silicon carbide in oil bath					
Motor	Type, Poles		Induction motor, 4 poles					
	Lubrication		Turbine oil (ISO VG32)					
	Motor Prote	ector (built-in)	Circle thermal cut-out					
	Insulation		Insulation class E,Insulation class F,Insulation class B					
	Phase / Volt	age	3-phase / 400V / 50Hz / d.o.l.					
	Material	Casing	Grey iron casting EN-GJL-150, Grey iron casting EN-GJL-200					
		Shaft	Stainless steel EN-X30Cr13					
		Cable	Rubber, H07RN-F					
Discharge (Connection		Threaded flange,Hose coupling					





Dimensions in mm:

Model	Α	A1	В	B1	D	Н	W1
KRS-43	378	288	723	586	347	651	170
KRS-63	385	295	867	686	365	777	300
KRS-65.5	423	303	790	608	369	698	190
KRS-85.5	445	325	942	710	413	800	295
KRS2-69	487	371	812	630	424	743	200
KRS2-89	470	354	933	701	403	814	300
KRS815	481	347	1069	837	440	949	275
KRS822	572	445	1238	1006	530	1156	345
KRS822L	572	445	1238	1006	530	1156	345
KRS1022	520	260	1439	1156	-	-	450



KRS-43 KRS-63 KRS-65.5 KRS-85.5 KRS2-69 KRS2-89 KRS815 KRS822 KRS822L

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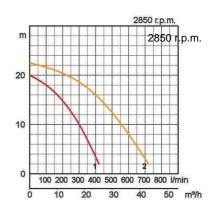


Model	Colour code curve	Bore mm	Motor output kW	Rated current A	Head max. m	Capacity max. I/min	Dry weight kg w/o cable	Max. solid handling ø mm	Max. water depth m	Cable length m
KTV2-50	1	50	2,0	3,8	20,0	420	25	10	30	20
KTV2-80	2	80	3,0	6,1	22,5	720	38	10	30	20

Light Weight Bentonite Pump A powerful slurry pump using KTV pumps as a base. Features wear resistance, durability and extra light weight.



ø Discharge	bore mm		50,80				
Pumping Fluid	Temperatur	re	0-40°C				
Fluid	Type of Flui	id	Sludge, Slurry, Liquids containing mud				
Pump	Compo-	Impeller	Semi-Vortex impeller				
	nents	Shaft Seal	Double mechanical seal				
		Bearings	Shielded ball bearings				
	Material	Impeller	Chromium iron casting				
		Casing	Synthetic rupper				
	Shaft Seal		Silicon carbide in oil bath				
Motor	Type, Poles		Induction motor, 2 poles				
	Lubrication		Turbine oil (ISO VG32)				
	Motor Prote	ector (built-in)	Circle thermal cut-out				
	Insulation		Insulation class E				
	Phase / Volt	age	3-phase / 400V / 50Hz / d.o.l.				
	Material	Casing	Aluminium die casting				
		Shaft	Stainless steel EN-X6Cr13				
	Cable		Rubber, H07RN-F				
Discharge (Connection		Threaded flange/Hose coupling				



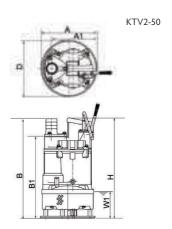


Dimensions in mm:

D	J						
Model	Α	A1	В	B1	D	Н	W1
KTV2-50	250	192	450	368	250	454	120
KTV2-80	295	216	550	427	295	550	130

KTV2-80

W1: continuous running water level



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KRS2

Specifications:

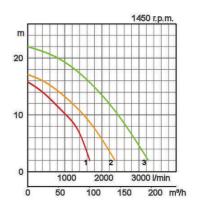
Model	Colour code curve	Boremm	Motor output kW	Rated current A	Head max. m	Capacity max. I/min	Dry weight kg w/o cable	Max. solid handling ø mm	Max. water depth m	Cable length m
KRS2-80	1	80	4,0	9,5	15,8	1670	105,0	30	30	20
KRS2-100	2	100	6,0	13,0	17,1	2350	145,0	30	30	20
KRS2-150	3	150	9,0	18,5	22,0	3250	170,0	30	30	20

Heavy Duty Slurry Pump

Tsurumi's typical slurry pumps with a 4-pole motor for an increased lifetime and greater convenience.



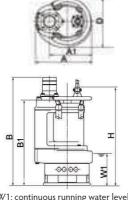
ø Discharge	bore mm		80,100,150					
Pumping Fluid	Temperatu	re	0-40°C					
riuia	Type of Flu	id	Sludge, Slurry, Liquids containing sandy mud and/or bentonit					
Pump	Compo-	Impeller	Open type impeller					
	nents	Shaft Seal	Double mechanical seal					
		Bearings	Shielded ball bearings					
	Material	Impeller	Chromium iron casting					
		Casing	Grey iron casting EN-GJL-200					
		Suction Plate	Chromium iron casting					
		Shaft Seal	Silicon carbide in oil bath					
Motor	Type, Poles	5	Induction motor, 4 poles					
	Lubrication	1	Turbine oil (ISO VG32)					
	Motor Prot	ector (built-in)	Circle thermal cut-out					
	Insulation		Insulation class E,Insulation class B					
	Phase / Vol	tage	3-phase / 400V / 50Hz / d.o.l.					
	Material	Casing	Grey iron casting EN-GJL-150					
		Shaft	Stainless steel EN-X30Cr13					
		Cable	Rubber, H07RN-F					
Discharge C	Connection		Threaded flange/Hose coupling					





Dimensions in mm:

Model	Α	A1	В	B1	D	Н	W1
KRS2-80	350	260	786	666	326	766	250
KRS2-100	415	305	815	678	373	754	250
KRS2-150	434	324	879	699	407	811	250



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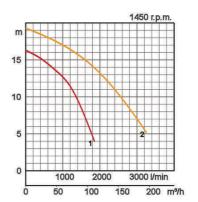
Model	Colour code curve	Bore mm	Motor output kW	Rated current A	Head max. m	Capacity max. I/min	Dry weight kg w/o cable	Max. solid handling ø mm	Max. water depth m	Cable length m
GPN3-80	1	80	5,5	12,1	16,3	1900	145,0	30	40	20
GPN3-100	_ 2	100	11,0	22,0	19,3	3250	217	30	40	20

Heavy Duty Sand Pump

A special steel impeller and suction plate have greatly increased the pump's life. The casing is designed to have wide passing area, thorough thickness and anti-abrasion material.



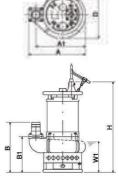
ø Discharge	bore mm		80,100					
Pumping Fluid	Temperatur	·e	0-40°C					
Fluid	Type of Flui	d	Sludge, Slurry, Liquids containing sandy mud and/or bentonite					
Pump	Compo- nents	Impeller	Open type impeller					
	nents	Shaft Seal	Double mechanical seal					
		Bearings	Shielded ball bearings					
	Material	Impeller	Chromium iron casting					
		Casing	Grey iron casting EN-GJL-200					
		Suction Plate	Chromium iron casting					
		Shaft Seal	Silicon carbide in oil bath					
Motor	Type, Poles		Induction motor, 4 poles					
	Lubrication		Turbine oil (ISO VG32)					
	Motor Prote	ector (built-in)	Circle thermal cut-out					
	Insulation		Insulation class E,Insulation class B					
	Phase / Volt	age	3-phase / 400V / 50Hz / d.o.l.					
	Material	Casing	Grey iron casting EN-GJL-150					
		Shaft	Chromium-molybdenum steel (DIN 1.7220)					
		Cable	Rubber, H07RN-F					
Discharge C	onnection		Threaded flange/Hose coupling					





Dimensions in mm:

Model	Α	A1	В	B1	D	Н	W1
GPN3-80	487	426	429	307	390	777	270
GPN3-100	617	517	481	328	450	860	295



 $W1: continuous\ running\ water\ level$

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NKZ 400V 50Hz

Specifications:

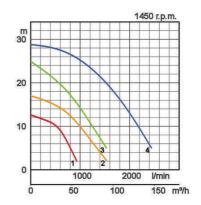
Model	Colour code curve	Bore mm	Motor output kW	Rated current A	Head max. m	Capacity max. I/min	Dry weight kg w/o cable	Max. solid handling ø mm	Max. water depth m	Cable length m
NKZ3-C3	1	80	2,2	5,1	12,6	930	91,0	30	30	20
NKZ3-D3	2	80	3,7	8,0	17,0	1540	100,0	30	30	20
NKZ3-80H	3	80	5,5	12,1	24,9	1530	132	20	30	20
NKZ3-100H	4	100	11,0	22,0	28,8	2440	196	20	30	20

All Purpose Sand Pumps

All pumps in this series provide very smooth passage of sandy earth and slime. A forcibly cooled motor ensures long and continuous pump operations exposed to the air.



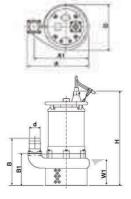
ø Discharge	bore mm		80,100				
Pumping Fluid	Temperatur	re	0-40°C				
riuia	Type of Flui	id	Liquids containing sandy mud, Sand carrying water				
Pump	Compo-	Impeller	Open type impeller				
	nents	Shaft Seal	Double mechanical seal				
		Bearings	Shielded ball bearings				
	Material	Impeller	Ductile iron casting EN-GJS-700-2, Chromium iron casting				
		Casing	Grey iron casting EN-GJL-200				
		Suction Plate	Grey iron casting EN-GJL-200,Ductile iron casting EN-GJS-700-2				
		Shaft Seal	Silicon carbide in oil bath				
Motor	Type, Poles		Induction motor, 4 poles				
	Lubrication		Turbine oil (ISO VG32)				
	Motor Prote	ector (built-in)	Circle thermal cut-out				
	Insulation		Insulation class E,Insulation class B				
	Phase / Volt	age	3-phase / 400V / 50Hz / d.o.l.				
	Material	Casing	Grey iron casting EN-GJL-150				
		Shaft	Stainless steel EN-X30Cr13				
		Cable	Rubber, H07RN-F				
Discharge C	Connection		Threaded flange/Hose coupling				





Dimensions in mm:

Model	Α	A1	В	B1	D	Н	W1
NKZ3-C3	467	405	371	249	370	664	225
NKZ3-D3	467	405	371	249	370	664	225
NKZ3-80H	491	430	387	264	401	754	220
NK73-100H	547	486	422	284	414	841	240



 $W1: continuous\ running\ water\ level$

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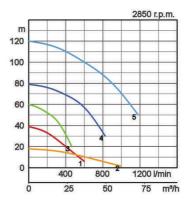
Model	Colour code curve	Bore mm	Motor output kW	Rated current A	Head max. m	Capacity max. I/min	Dry weight kg w/o cable	Max. solid handling ø mm	Max. water depth m	Cable length m
LH23.0W	1	50	3,0	6,5	39,0	600	46,0	6	50	20
LH33.0	2	80	3,0	6,5	17,9	1000	42,0	6	50	20
LH25.5W	3	50	5,5	11,0	60,0	465	80,0	6	50	20
LH311W	4	80	11,0	22,0	79,0	825	130,0	8,5	50	20
LH322W	O 5	80	22,0	39,0	120,0	1180	304,0	8,5	50	20

High Head Pumps - Slim Design

High water pressure resistance (50m H2O). Top discharge with center flange, efficient cooling by water jacket.



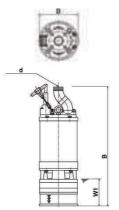
ø Discharge	bore mm		50,80			
Pumping	Temperatur	re	0-40°C			
Fluid	Type of Flui	id	Spring water, Rain water, Ground water, Sand carrying water			
Pump	Compo-	Impeller	Closed type impeller			
	nents	Shaft Seal	Double mechanical seal			
		Bearings	Shielded ball bearings			
	Material	Impeller	Chromium iron casting			
		Shaft Seal	Silicon carbide in oil bath			
		Casing	Grey iron casting EN-GJL-200,Ductile iron casting			
Motor	Type, Poles		Induction motor, 2 poles			
	Lubrication		Turbine oil (ISO VG32)			
	Motor Prote	ector (built-in)	Circle thermal cut-out			
	Insulation		Insulation class F,Insulation class B			
	Phase / Volt	age	3-phase / 400V / 50Hz / d.o.l.			
	Material	Casing	Grey iron casting EN-GJL-200			
		Shaft	Stainless steel EN-X30Cr13			
		Cable	Rubber, H07RN-F			
Discharge C	onnection		Threaded flange JIS 20K Flange			





Dimensions in mm:

Model	d	В	D	W1
LH23.0W	50	591	185	150
LH33.0	80	591	185	150
LH25.5W	50	750	240	170
LH311W	80	1030	270	200
I H322\X/	80	1234	330	300



W1: continuous running water level

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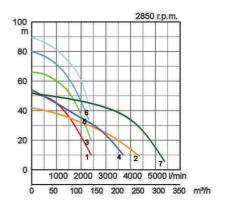


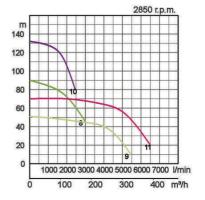
Model	Colour code curve	Bore mm	Motor output kW	Rated current A	Head max. m	Capacity max. I/min	Dry weight kg w/o cable	Max. solid handling ø mm	Max. water depth m	Cable length m
LH615	1	150	15,0	27,5	52,0	2400	213,0	8,5	50	20
LH619	2	150	19,0	36,0	42,0	4370	350,0	12	50	20
LH422	3	100	22,0	40,5	66,0	2400	350,0	6	50	20
LH622	4	150	22,0	40,5	54,0	3750	360,0	12	50	20
LH430	O 5	100	30,0	55,0	80,0	2300	355,0	6	50	20
LH637	6	150	37,0	67,0	89,5	2380	495,0	6	50	20
LH837	7	200	37,0	67,0	51,8	5375	495,0	20	50	20
LH645	8	150	45,0	81,0	90,0	2975	510,0	6	50	20
LH845	0 9	200	45,0	81,0	50,9	5450	510,0	20	50	20
LH675	1 0	150	75,0	130,0	132,0	2450	850,0	6	50	20
LH875	1 1	200	75,0	130,0	70,0	6500	850,0	20	50	20



High Head Pumps - Deep Well Draining

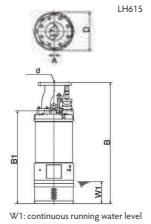
ø Discharge bore mm			100,150,200				
Pumping	Temperature		0-40°C				
Fluid	Type of Flu	id	Spring water, Rain water, Ground water, Sand carrying water				
Pump	Compo-	Impeller	Closed type impeller				
	nents	Shaft Seal	Double mechanical seal				
		Bearings	Shielded ball bearings				
	Material	Impeller	Chromium iron casting				
		Casing	Ductile iron casting EN-GJS-450-10,Grey iron casting EN-GJL-				
		Shaft Seal	Silicon carbide in oil bath				
Motor	Type, Poles		Induction motor, 2 poles				
	Lubrication		Turbine oil (ISO VG32)				
	Motor Prote	ector (built-in)	Circle thermal cut-out,Miniature protector				
	Insulation		Insulation class B,Insulation class F				
	Phase / Voltage		3-phase / 400V / 50Hz / d.o.l.				
	Material	Casing	Grey iron casting EN-GJL-200				
		Shaft	Stainless steel EN-X30Cr13				
		Cable	Rubber, H07RN-F				
Discharge Connection			JIS 10K Flange,JIS 20K Flange				

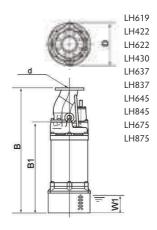




Dimensions in mm:

Model	d	Α	В	B1	D	W1
LH615	150	7	1014	777	330	185
LH619	150	-	1352	1051	420	250
LH422	100	-	1352	1051	420	250
LH622	150	-	1352	1051	420	250
LH430	100	-	1352	1051	420	250
LH637	150	-	1448	1027	530	180
LH837	200	-	1488	1027	530	180
LH645	150	-	1448	1027	530	180
LH845	200	-	1488	1027	530	180
LH675	150	-	1676	1255	550	200
LH875	200	-	1716	1255	550	200





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Contributing to World-wide Prosperity and Understanding through Worker- and Environment-friendly Production.

Designed for increased productivity through fully integrated streamlined production systems, Tsurumi 's factory in Kyoto (Japan) features a production capacity of a full 1 million pumps per year. Large-scale modern R&D facilities offer optimum conditions for experimenting and testing of even super-large pumps and for developing new products to expand the possibilites and applications of pumps. To provide optimum conditions for our main asset, our workers, as well as for the environment, special emphasis is placed on optimized working conditions with airconditioning, minimized dust and exhaust gas emission, comprehensive recycling and waste recovery.

Tsurumi (Europe) GmbH

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We reserve the right to change specifications and designs herein for improvement without prior notice. Our pumps are for professional use only. In the event that Tsurumi (Europe) GmbH have, in exceptional cases taken over, a manufacturer's warranty, this entitles the enduser to assert remedy free of charge against Tsurumi (Europe) GmbH due to any defect to the product occurring during the guarantee period (see below), also then when the warranty claims against the seller do not or no longer exist. In the event of malfunction, which is attributable to the improper handling by the enduser, no guarantee claim shall arise. Further claims shall not result from the warranty, unless if something to the contrary has explicitly been determined. The decision as to whether remedy is effected by way of replacement or repair shall be at the choice of Tsurumi (Europe) GmbH. The claims shall be time barred after a period of three months after expiry of the guarantee period, however, not before expiry of the warranty period which is valid towards the seller. In the event of doubt, the warranty period shall correspond with the warranty period which is valid between the end-user and his seller.

