



Dual-stage high head pumps - for professional use

The recent developments of civil engineering and architectural technologies are increasing the necessity of digging deeper into the earth. This requires a submersible pump with a rugged construction that can withstand the high pressure so deep in the water.



## Water jacket

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. The pump can be run continuously in air.



#### Iron casting - superior to aluminium

Casing and motor frame made of grey iron casting, impeller made of high chromium iron casting



## Seal pressure relief ports

Mechanical seal faces are only subjected to submergence pressure and are protected against water hammer.

## Double inside mechanical Seal (SiC/SiC)

Double inside mechanical seals with silicon carbide faces run inside an oil lifter in an oil chamber. Additional protection by a lip seal combined with replaceable stainless steel shaft sleeve. This represents the most durable seal design available.



#### Dual impeller (except for: LH33.0)

Two high chromium iron casting impellers increase the pumping power to realize high-head-specifications.

34 21 20C

LH322W

## Components:

01	Cable	043	Cathodic protection	plate	
)06	Cable entrance	050	Motor cover		37
)20A	Pump casing	051	Head cover		72
)20B.	Pump casing	052A	Upper bearing		53 52A
)20C	Pump casing	052B	Lower bearing		65
)21	Impeller	053	Motor protector		52B
)23	Strainer	054	Shaft		36
)25	Mechanical seal	055	Rotor		20A
)26.	Labyrinth ring	056	Stator		71B
)29	Oil casing	060	Bearing housing		20B
)30	Oil lifter	064	Motor casing		23
)34	Wear ring	065	Jacket		
)35	Oil plug	071A	Shaft sleeve		
)36	Lubricant	071B	Shaft sleeve		
)37	Discharge bend	072	Eye bolt		

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	Pressure resistance max. m	Cable length m
LH23.0W	0 1	50	3,0	6,5	39,0	600	46,0	6	25	20
LH33.0	2	80	3,0	6,5	18,0	1000	42,0	6	25	20
LH25.5W	03	50	5,5	11,0	65,0	490	80,0	6	30	20
LH311W	4	80	11,0	22,0	81,0	700	130,0	8,5	30	20
LH322W	5	80	22,0	39,0	102,0	940	304,0	8,5	30	20
LH430W	6	100	30,0	53,0	123,0	940	324,0	8,5	30	20
LH4110W	7	100	110,0	209,0	216,0	2000	1270,0	8,0	30	20



## ø Discharge bore mm

Pumping	Type of Fluid					
Fluid	Temperature	2				
Pump	Compo-	Impeller				
	nents	Shaft Seal				
		Bearings				
	Material	Impeller				
		Shaft Seal				
		Casing				
Motor	Lubrication					
	Insulation					
	Phase / Voltage					
	Motor Protector (built-in)					
	Type, Poles					
	Material	Casing				
		Shaft				
		Cable				
Discharge Connection						

50, 80, 100						
Spring water, Rain water, Ground water, Sand carrying water						
0-40°C						
Closed type impeller						
Double mechanical seal						
Shielded ball bearings						
Chromium iron casting						
Silicon carbide in oil bath						
Grey iron casting EN-GJL-200, Ductile iron casting EN-GJS-450-10						
Turbine oil (ISO VG32)						
Insulation class F, Insulation class B						
3-phase / 400V / 50Hz / d.o.l., 3-phase / 400V / 50Hz / s.d.						
Circle thermal cut-out, Miniature protector						
Induction motor, 2 poles, IP68						
Grey iron casting EN-GJL-200						
Stainless steel EN-X30Cr13						
Rubber, NSSHÖU						
Threaded flange, JIS 20K Flange						





#### Dimensions in mm:

Model	d	В	D	D1	W1
LH23.0W	50	591	185	-	150
LH33.0	80	591	185	-	150
LH25.5W	50	750	240	-	170
LH311W	80	1030	270	-	200
LH322W	80	1234	330	-	300
LH430W	100	1375	330	-	300
LH4110W	100	1825	616	592	380





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.eu/english/applications.htm.

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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

Wahlerstr. 10 D-40472 Düsseldorf Tel.: +49 (0)211-4179373 Fax: +49 (0)211-417937-480 Email: sales@tsurumi.eu www.tsurumi.eu

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