

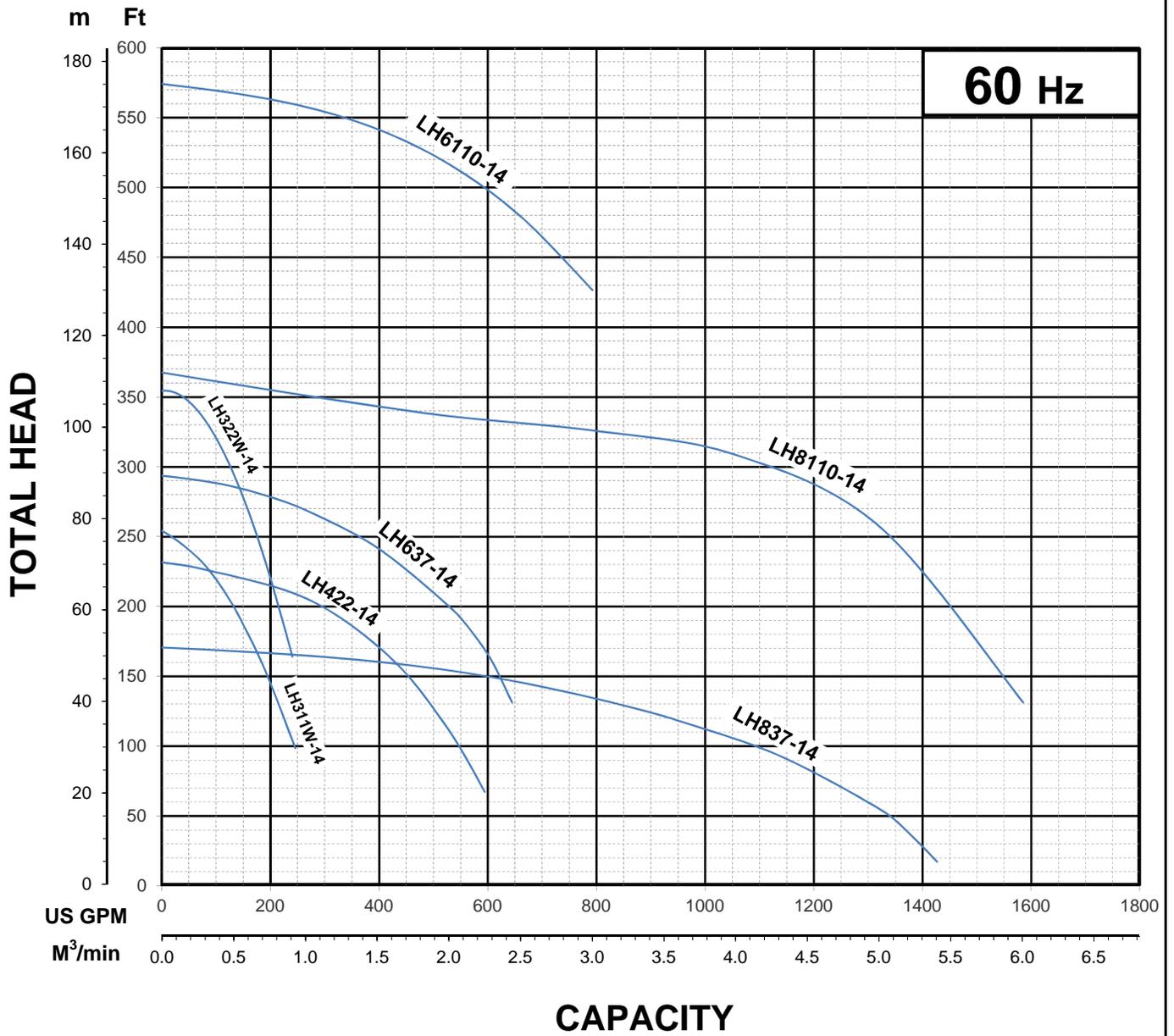


LH(-W) - SERIES (SCS14)

HIGH HEAD - STAINLESS STEEL CASTING DEWATERING PUMPS

PERFORMANCE RANGE

GROUP PERFORMANCE RANGE



Note

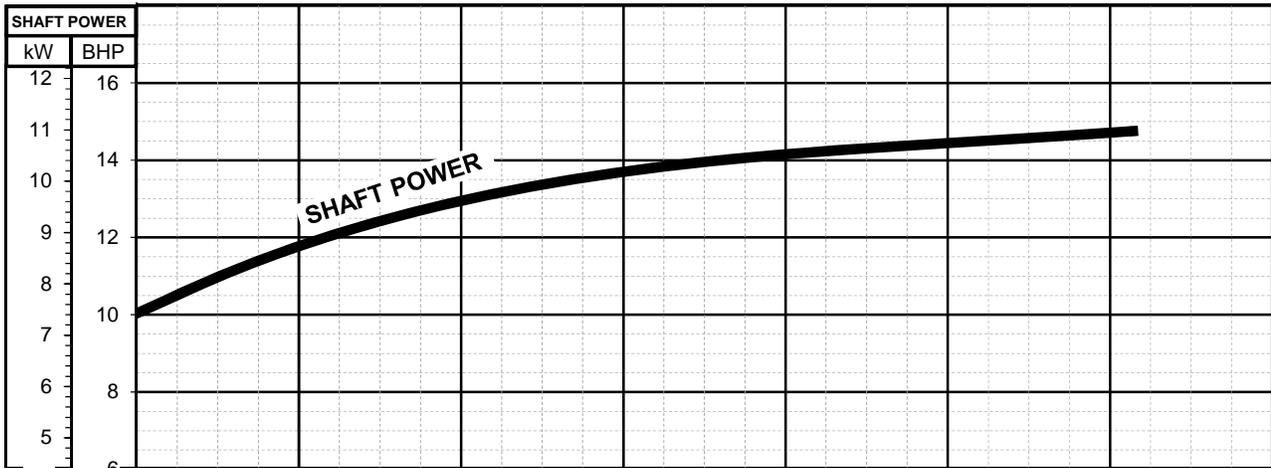
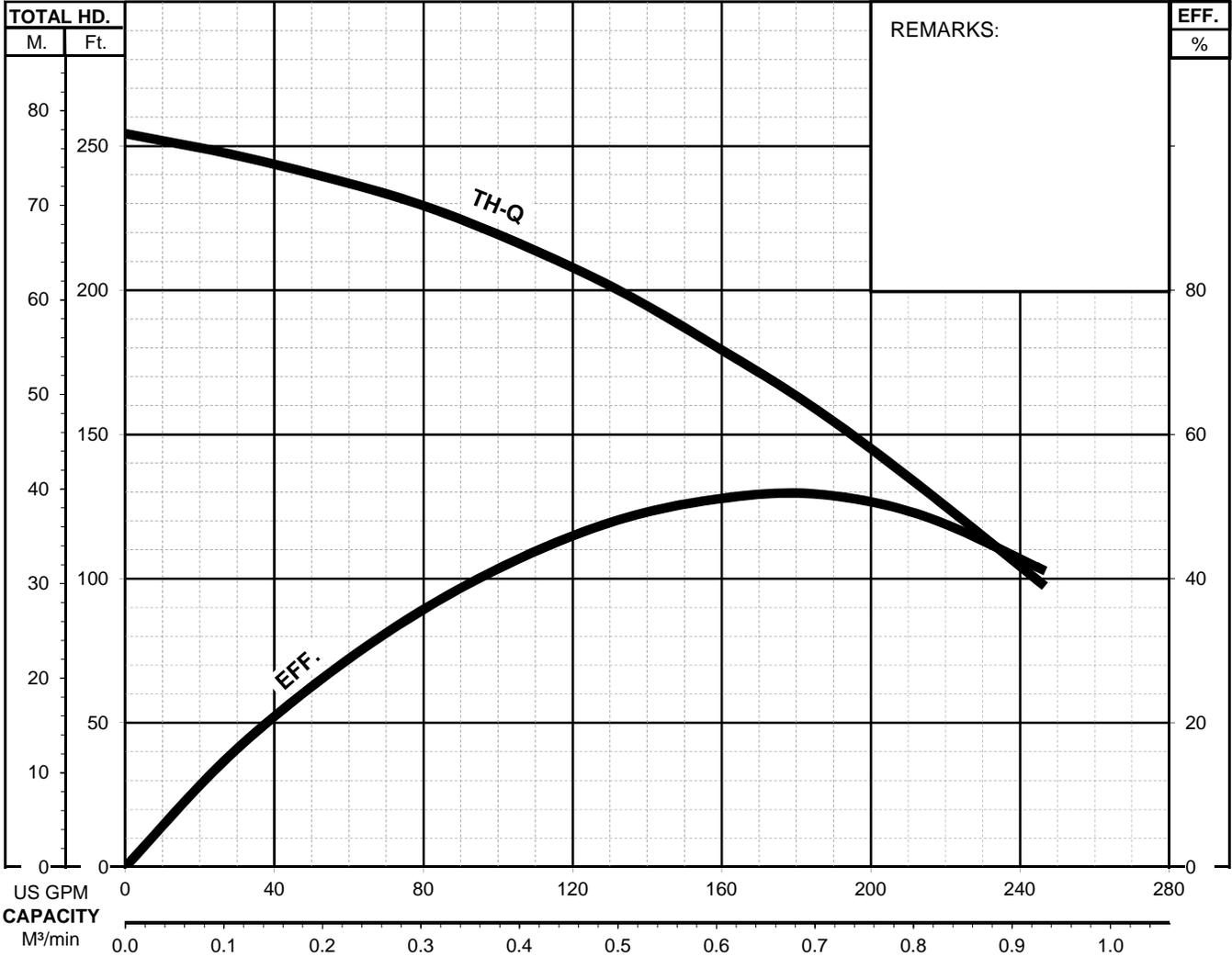


LH-W - SERIES (SCS14)

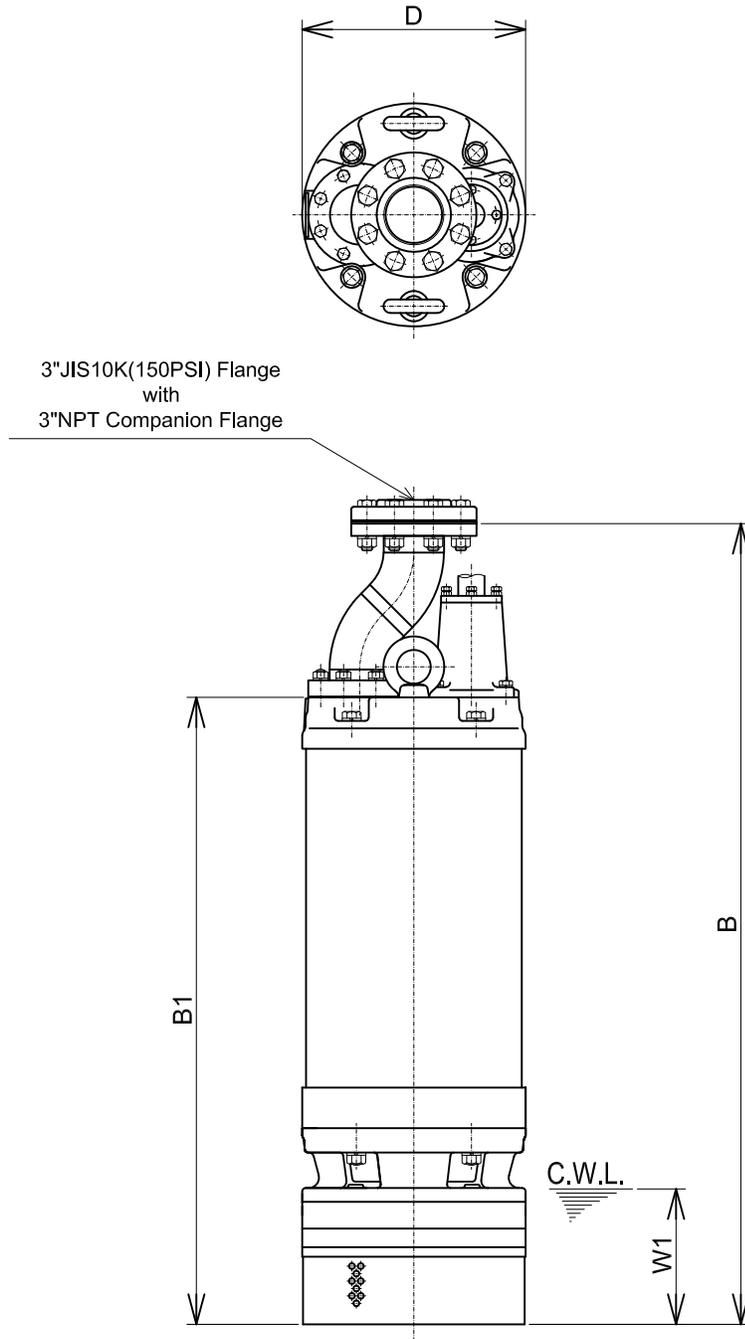
HIGH HEAD - STAINLESS STEEL CASTING DEWATERING PUMPS

PERFORMANCE
CURVE

MODEL	BORE	HP	KW	RPM	SOLIDS DIA.	LIQUID	SG.	VISCOSITY	TEMP.
LH311W-14-60	3"/80mm	15.0	11.0	3465	0.334"/8.5mm	Water	1.0	1.123cSt.	60°F
PUMP TYPE	PHASE	VOLTAGE	AMPERAGE	HZ	STARTING METHOD	INS. CLASS			
Dewatering Pump	3	208/230/460/575	42.0/37.0/18.5/14.5	60	Direct On Line	F			
CURVE No.	DATE	PHASE	VOLTAGE	AMPERAGE	HZ	STARTING METHOD	INS. CLASS		
-	-	-	-	-	-	-	-		



LH311W-14-60



3"JIS10K(150PSI) Flange
 with
 3"NPT Companion Flange

C.W.L. :Continuous running Water Level
 The dimension of B and B1 are reference

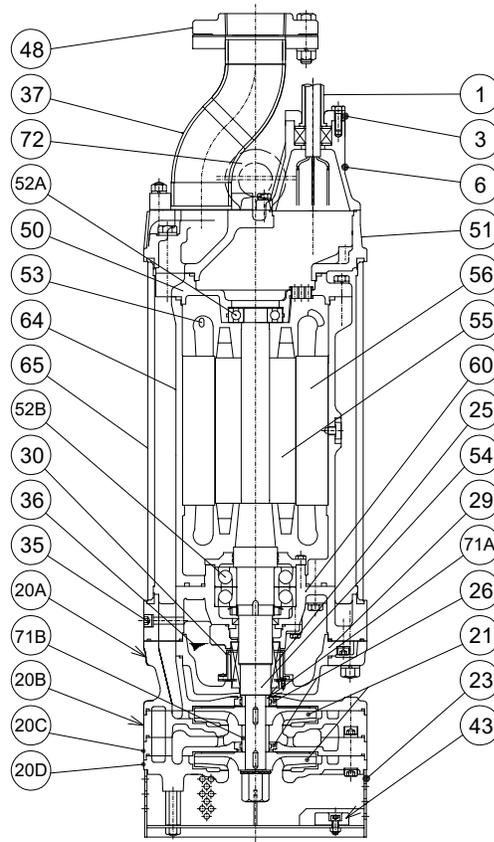
DIMENSIONS:USCS (Inch)

Model	HP	NOM. SIZE	Pump & Motor			C.W.L.	*Wt. (lbs.)
			B	B1	D	W1	
LH311W-14-60	15	3"	46 10/16	36 1/2	13	7 7/8	705

DIMENSIONS:METRIC (mm)

*Excluding Cable

Model	HP	NOM. SIZE	Pump & Motor			C.W.L.	*Wt. (kg)
			B	B1	D	W1	
LH311W-14-60	11	80	1184	927	330	200	320

LH311W-14-60


ITEM#	DESCRIPTION	MAIN MATERIAL / NOTE	ASTM, AISI CODE	RELATED EN CODE	Q'TY
1	Power Cable	Chloroprene Sheath AWG8/4, 14/2-65ft			1
3	Gland	Stainless Steel Casting	A743 CF-8M	GX5CrNiMo19-11-2	1
6	Stuffing Box	Stainless Steel Casting	A743 CF-8M	GX5CrNiMo19-11-2	1
20A	Upper Pump Casing	Stainless Steel Casting	A743 CF-8M	GX5CrNiMo19-11-2	1
20B	Lower Pump Casing	Stainless Steel Casting	A743 CF-8M	GX5CrNiMo19-11-2	1
20C	Upper Pump Casing	Stainless Steel Casting	A743 CF-8M	GX5CrNiMo19-11-2	1
20D	Lower Pump Casing	Stainless Steel Casting	A743 CF-8M	GX5CrNiMo19-11-2	1
21	Impeller	Stainless Steel Casting	A743 CF-8M	GX5CrNiMo19-11-2	2
23	Suction Strainer	Stainless Steel	S 31600	1.4401	1
25	Mechanical Seal	Silicon Carbide / HT-4550N			1
26	Labyrinth Ring	Stainless Steel	S 31600	1.4401	2
29	Oil Casing	Stainless Steel Casting	A743 CF-8M	GX5CrNiMo19-11-2	1
30	Oil Lifter	PBT Resin W/GF40			1
35	Oil Plug	Stainless Steel	S 31600	1.4401	3
36	Lubricant	Turbine Oil ISO VG32 or SAE 10W-20			
37	Discharge Pipe	Stainless Steel / 3" JIS10K	S 31600	1.4401	1
43	Cathodic Protection Plate	Zinc Anode			2
48	Companion Flange	Stainless Steel Casting / NPT 3" JIS10K	A743 CF-8M	GX5CrNiMo19-11-2	1
50	Motor Bracket	Stainless Steel Casting	A743 CF-8M	GX5CrNiMo19-11-2	1
51	Head Cover	Stainless Steel Casting	A743 CF-8M	GX5CrNiMo19-11-2	1
52A	Upper Bearing	#6307ZC3			1
52B	Lower Bearing	#7311DBC3			1
53	Motor Protector				3
54	Shaft	Stainless Steel (Wet end)	S 31600	1.4401	1
55	Rotor				1
56	Stator				1
60	Bearing Housing	Stainless Steel Casting	A743 CF-8M	GX5CrNiMo19-11-2	1
64	Motor Housing	Stainless Steel Casting	A743 CF-8M	GX5CrNiMo19-11-2	1
65	Outer Cover	Stainless Steel	S 31600	1.4401	1
71A	Shaft Sleeve (Upper)	Stainless Steel	S 31600	1.4401	1
71B	Shaft Sleeve (Lower)	Stainless Steel	S 31600	1.4401	1
72	Lifting Lug Bolt	Stainless Steel	S 31600	1.4401	2



LH-14 SERIES DEWATERING PUMPS

SAMPLE SPECIFICATIONS

1. SCOPE OF SUPPLY -

Furnish and install TSURUMI Model _____ Submersible Pump(s).

Each unit shall be capable of delivering _____ GPM (_____ m³/min) at _____ Feet (_____ m) TDH. The pump(s) shall be designed to pump waste water or effluent without damage during operation. The pump(s) shall be designed so that the shaft power required (BHP)/(kW) shall not exceed the motor rated output throughout the entire operating range of the pump performance curve. Pump(s) shall be of the top discharge, flow through design.

2. MATERIALS OF CONSTRUCTION -

Construction of major parts of the pumping unit(s) shall be cast stainless steel, A743 CF-8M, including impellers and field adjustable/replaceable wear plates. All exposed fasteners shall be stainless steel. All units up to 75 HP and LH875/890/8110 shall be furnished with 150 lb. (10 kg/cm²) flat face flange and NPT companion flange. LH675/690/6110 shall be furnished with 300 lb. (20 kg/cm²) flat face flange and NPT companion flange. Impellers shall be of the multi-vane enclosed solids handling design equipped with back pump out vanes and shall be slip fit to the shaft and key driven. The unit(s) shall include built in cathodic protection.

3. MECHANICAL SEAL -

All units shall be furnished with a dual inside mechanical shaft seal located completely out of the pumpage, running in a separate oil filled chamber and further protected by an exclusionary oil seal located between the bottom seal faces and the fluid being pumped. The oil chamber shall be fitted with a device that shall provide positive lubrication of the top mechanical seal, (down to one third of the standard oil level). The device shall not consume any additional electrical power. Mechanical seals shall be rated to preclude the incursion of water up to 42.6 PSI (98.4 Ft.) submergence. Units shall have silicon carbide mechanical seal faces. Mechanical seal hardware shall be stainless steel. Unit(s) shall incorporate seal pressure relief ports. Units 75 Hp and above shall be supplied with electrode type seal sensor. All unit(s) shall be fitted with a replaceable shaft sleeve.

4. MOTOR-

The pump motor(s) shall be _____ HP., _____ kW., _____ V., 60 Hz. 3 Phase and shall be NEMA MG-1, Design Type B equivalent. Motor(s) shall be rated at full load amps. Motor(s) shall have a 1.15 service factor and shall be rated for 20 starts per hour. Motor(s) shall be air filled, copper wound, class F or B (up to 30 HP) insulated with built in thermal protection for each winding. Motor shaft shall be 420 stainless steel and shall be supported by two high temperature bearings, with a B-10 life rating at best efficiency point of 60,000 hours. On units up to 60 HP, the bottom bearing shall be two row, double shielded, C3, deep groove type ball bearing, and the top bearing shall be single row, double shielded, C3, deep groove type ball bearing. On units 75 HP and above, the bottom bearing shall be re-greasable, two row, C3, angular contact type ball bearing, and the top bearing shall be re-greasable, single row, C3, cylindrical roller bearing. Motors shall be D.O.L. or star-delta start (40 HP and above), and shall be suitable for across the line start or variable speed applications, utilizing a properly sized variable frequency drive.

5. POWER CABLE AND CABLE ENTRANCE -

The pump power cable shall be suitable for submersible pump applications and shall be field replaceable utilizing standard submersible pump cable. The cable entrance shall incorporate built in strain relief and a combination three way mechanical compression sealing. The cable entrance assembly shall contain an anti-wicking block to eliminate water incursion into the motor due to capillary wicking should the power cable be accidentally damaged.