

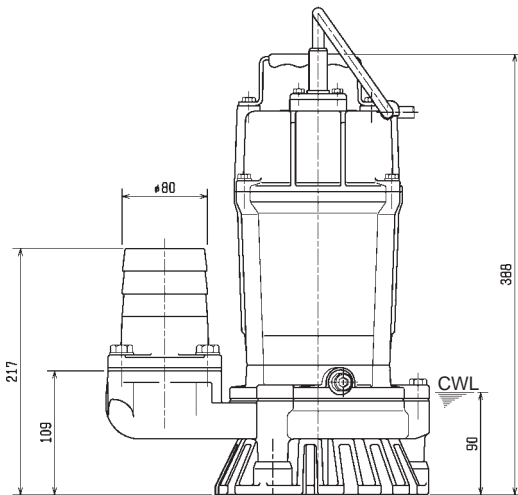
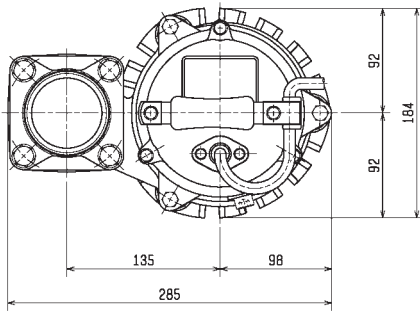


TSURUMI PUMP

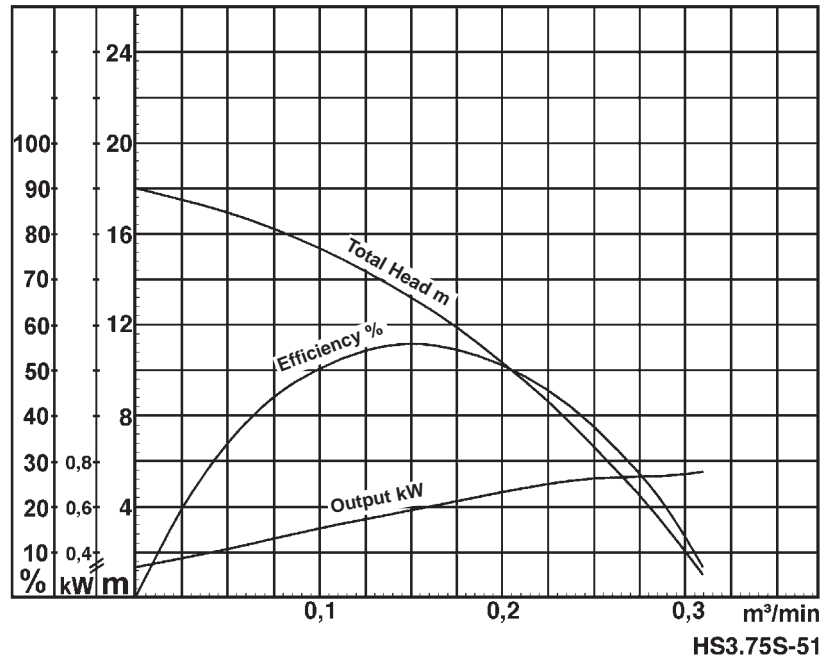
HS3.75S-51

- data sheet
 - parts list
 - exploded view
 - dimensional drawing
 - sectional drawing
 - performance curve
-
- parts list as Excel-spreadsheet

Data Sheet HS3.75S-51



CWL = Continuous running water level
HS3.75S-51
dimensions in mm



Classification

Electric submersible pump
Protection class IP68
Depth of submersion max. 20m
Semi-vortex impeller with Agitator
Max. solid handling 7mm
Suitable for rain water, ground water, sand carrying water

Electric Motor

Dry-type submersible induction motor
Insulation class E, 2 poles, 2820 r.p.m.
Capacitor start
Voltage: 110V/230V, 50Hz, 1-phase
Power input: 1,15kW
Power output: 0,75kW
Nominal current: 10,0A(110V) / 4,6A(230V)
Start current: 27,0A(110V) / 14,0A(230V)

Electric cable

10m HO7RN-F 3Cx1,5mm² (110V)
10m HO7RN-F 3Cx1mm² (230V)

Motor Protection

Circle thermal protector
(snap-action bi-metal device)

Shaft Seal

Double mechanical seal in oil bath
additional lubrication by oil lifting device
Primary Seal:
silicon carbide on silicon carbide
Secondary Seal:
carbon on ceramic

Bearings

Shielded ball bearings, maintenance-free

Materials

Impeller: Urethane rubber
Casing: FCD700 (EN-GJS-700-2)
Motor frame: Aluminium alloy casting
Shaft: SUS403 (EN-X6Cr13)

Discharge Connection

3" (80mm) BS-Coupling (threaded flange)

Weight

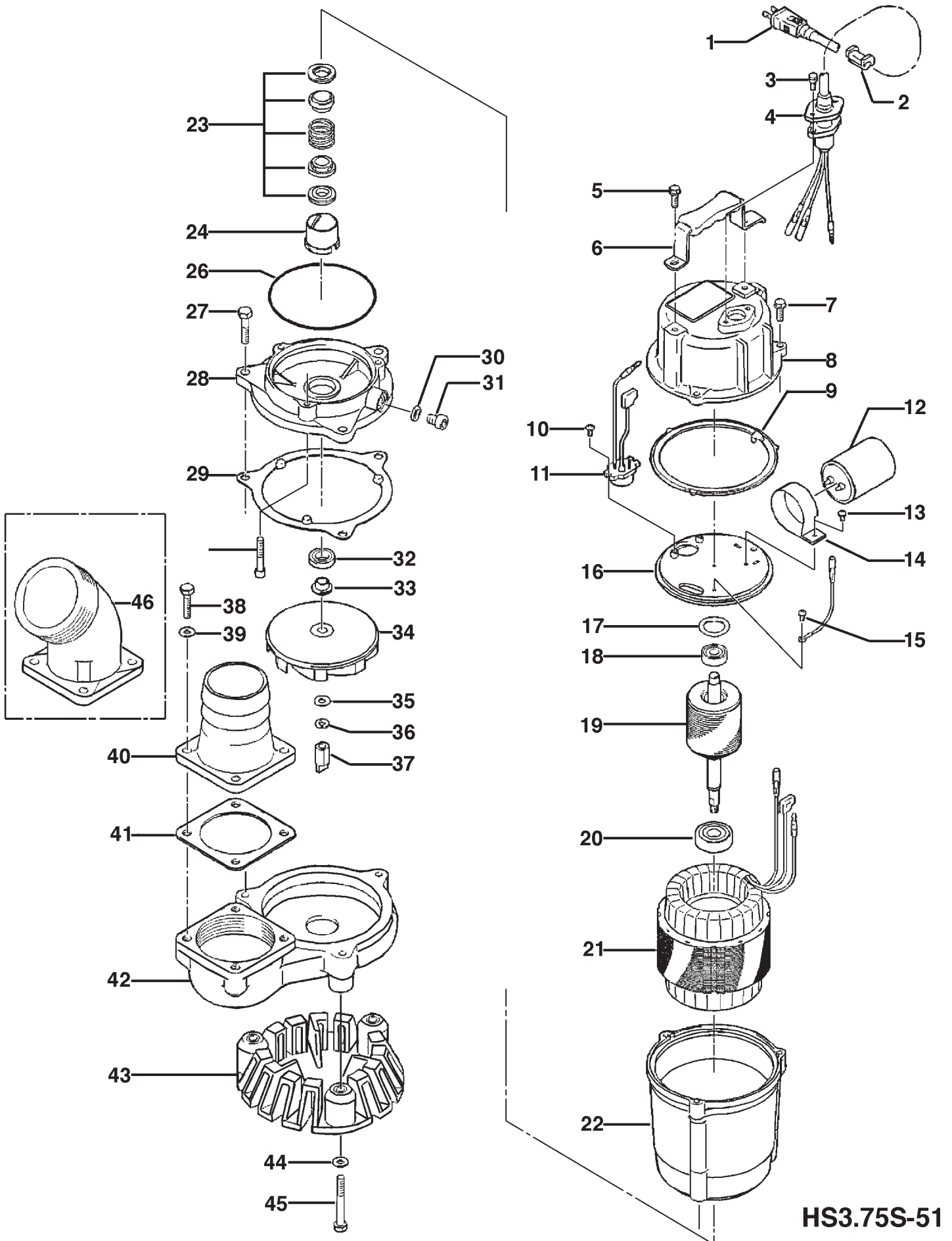
19,0 kg (dry weight of the pump without cable)

HS3.75S-51

10.01.2006

ITEM	CODE No.	DESCRIPTION	Q'TY	SIZE	MATERIAL	WEIGHT kg	REMARKS
1	001-003-47	Cabtyre Cable Set (10m) 110V-50Hz (E	1	H07RN3Gx1.5mm2(PCE-V	LB(HAR)		
1	001-453-18	Cabtyre Cable Set (10m) 220/230/240V	1				
1A	061-TEG-01	Cable Repair Kit	1				
2	010-134-18	Cable Clip Rubber (for EUR)	1	HS3-4	NBR		
2	010-163-16	Cable Clip Rubber	1	HS2.4S	NBR		
3	140-427-17	Hex.Bolt (w/plain washer)	2	M5x15	SUS304		
4	003-100-13	Grand	1		SUS316		
5	140-032-37	Hex.Bolt	2	M6x15	SWRM		
6	068-272-18	Handle	1	HS2.4(S)-50/60	SPCNR		
7	140-396-34	Hex.Bolt (w/Spring Washer/Plain Wash	3	M6x20	SUS304		
8	051-000-21	Motor Head Cover	1		ADC		
9	121-000-72	Packing	1	d121xd140x2.8t	NBR		*
10	143-127-13	Pan Screw (w/Spring Washer/Plain Was	2	M4x8	SWRM		
11	053-000-63	Motor Protector 110V-50Hz (ENG)	1	KA142-BBTL21F	(T.C)		
11	053-001-35	Motor Protector 220/230/240V-50Hz (EU	1	KA142-BPVL25F	(T.C)		
12	076-000-29	Capacitor 110V-50Hz (ENG)	1	80MF-250VAC(d50x90L)			
12	076-000-30	Capacitor 220/230/240V-50Hz (EUR)	1	20MF-440VAC(d45x85L)			
13	143-086-22	Pan Screw (w/Spring Washer)	1	M4x8	SWRM		
14	127-000-34	Capacitor Fixing Plate 110V-50Hz (ENG	1	d50			
14	127-000-35	Capacitor Fixing Plate 220/230/240V-50	1	d45			
15	140-000-44	Hex.Bolt (w/Spring Washer/Plain Wash	1	M4x8	SWRM		
16	050-000-48	Motor Bracket	1		SECD		
17	142-000-41	Wave Washer	1	#6201(T=0.4)	S65CM		
18	052-100-15	Bearing	1	6201ZZC3			
19	055-001-23	Rotor	1Set	w/Bearing			
20	052-152-12	Bearing	1	6302ZZC3			
21	056-003-52	Stator 110V-50Hz (ENG)	1Set				
21	056-003-53	Stator 220/230/240V-50Hz (EUR)	1Set				
22	064-000-62	Motor Frame	1		ADC		
23	025-291-10	Mechanical Seal (for EUR/ENG)	1	W-14VL	SiC+CCBN		OIL ISO VG32 (160ml)
24	030-000-09	Oil Lifter	1	W-14VL	Resin		
25	122-133-17	O-Ring	1	G-110	NBR		*
26	140-056-37	Hex.Bolt	3	M8x30	SWRM		
27	029-000-57	Oil Casing	1	HS3.75S/HS2.75S	FCD		
28	121-000-74	Packing	1	HS3.75S/HS2.75S	NR		*
29	140-256-26	Hex. Socket Cap Bolt	3	M6x35	SCM		
30	121-246-11	Packing	1	d10.3xd16x2t	PE		*
31	035-124-12	Oil Plug	1	M10x15	SUS304		
32	122-441-11	V-Ring	1	VR-14	NBR		
33	071-292-14	Shaft Sleeve	1	LB3-250/480	SUS304		
34	021-004-37	Impeller (50Hz)	1	HSZ3.75S-51	Uretane Rubber		
34	021-004-38	Impeller (60Hz)	1	HSZ3.75S-61	Uretane Rubber		
35	142-127-10	Plain Washer	1	M8	SUS304		
36	142-163-18	Spring Washer	1	M8	SUS304		
37	024-174-13	Stirrer	1	HS2.4(S)(M8)	Sintered Alloy		
38	140-076-33	Hex.Bolt	4	M10x30	SWRM		
39	142-128-24	Plain Washer	4	M10	SPC		
40	032-116-12	Hose Coupling	1	80mm(KT)	ADC		
40	032-000-34	Hose Coupling	1	NPT-3(45)	FC		
41	121-181-17	Packing	1	KT-15	NBR		*
42	020-001-57	Pump Casing	1	HS3.75S/HS2.75S	FCD		
43	023-000-50	Strainer Stand	1	HS3.75S	PVC		
44	142-127-23	Plain Washer	3	M8	SPC		
45	140-057-38	Hex.Bolt	3	M8x35	SWRM		
46	032-000-36	Hose Coupling (for EUR)	1	BSPT-3	FC		
		<Packing O-Ring Set>					
		Packing O-Ring Set	1Set	(*)			

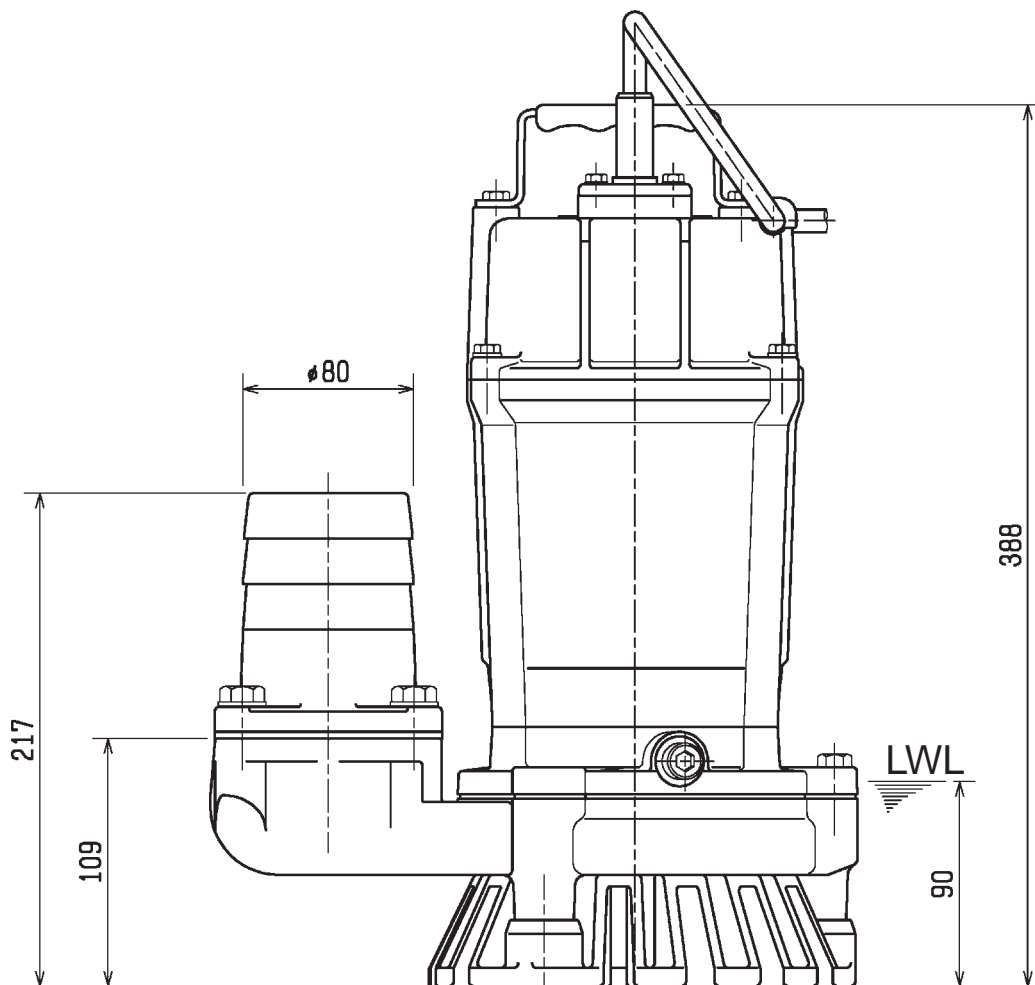
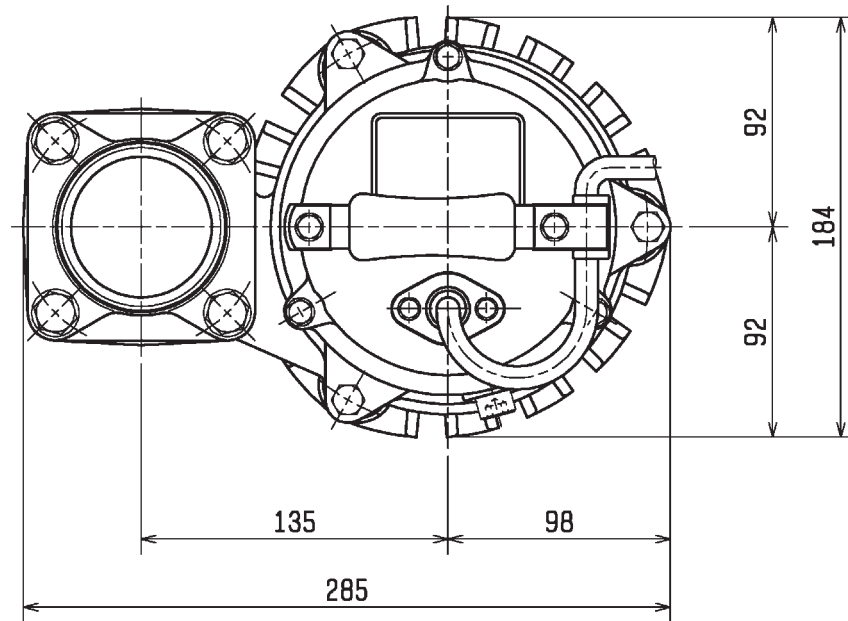
Exploded View HS3.75S-51



HS3.75S-51

Dimensional Drawing HS3.75S-51

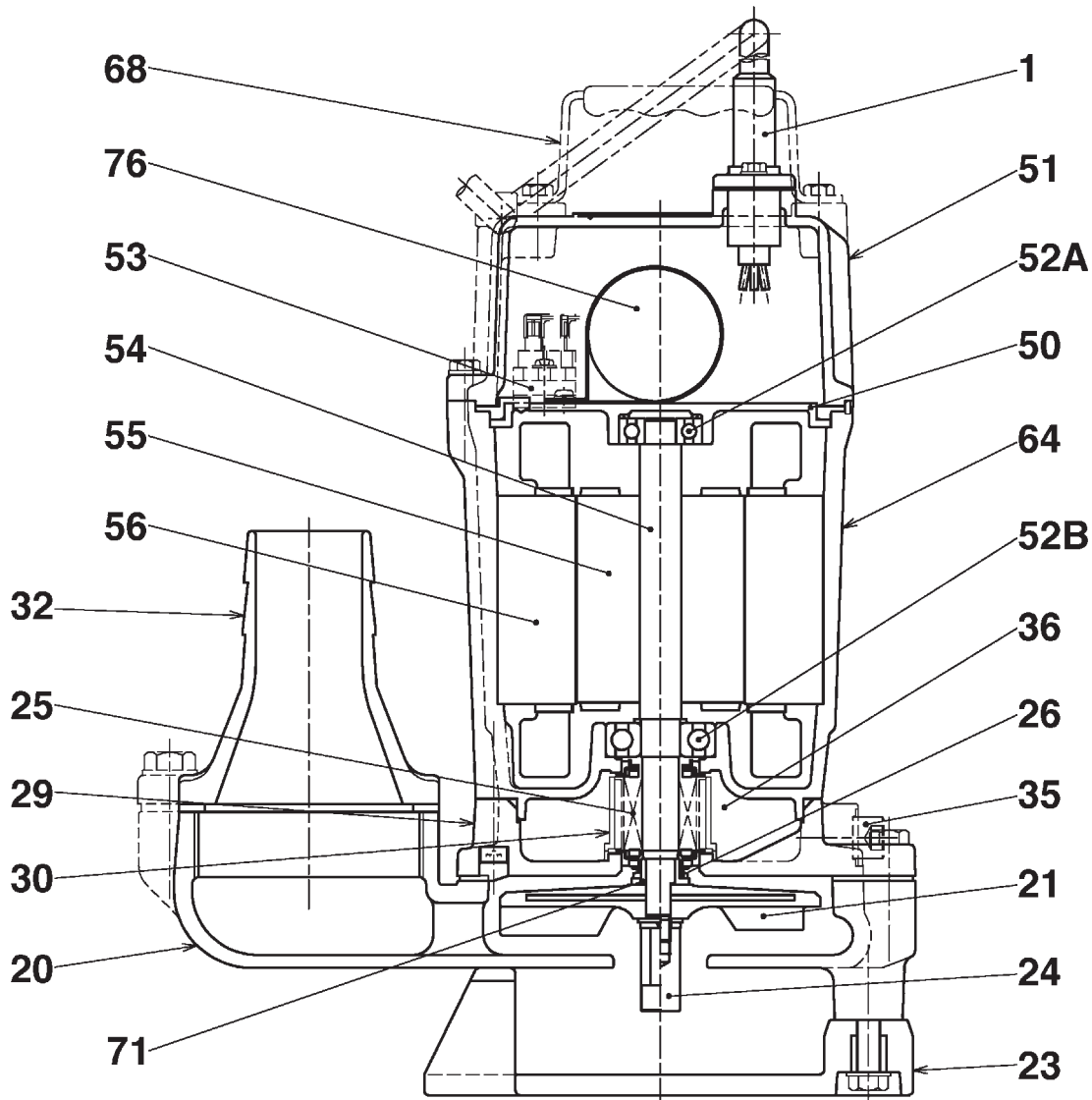
Dimensions in mm



LWL: Lowest Running Water Level

HS3.75S-51

Sectional Drawing HS3.75S-51



HS3.75S-51

No.	Description	Qty.	Remarks	No.	Description	Qty.	Remarks
1	Cabtyre Cable	1	H07RN3Cx1mm ² x10m	50	Motor Bracket	1	Aluminium die casting
20	Pump Casing	1	FCD700 (EN-GJS-700-2)	51	Head Cover	1	Aluminium die casting
21	Impeller	1	Urethane rubber	52A	Upper Bearing	1	6201ZZC3
23	Strainer Stand	1	PVC	52B	Lower Bearing	1	6302ZZC3
24	Stirrer	1	Sintered Alloy	53	Motor Protector	1	
25	Mechanical Seal	1	W-14VL	54	Shaft	1	SUS403 (EN-X6Cr13)
26	V-Seal	1	Nitril Butadiene Rubber	55	Rotor	1	
29	Oil Casing	1	FC200 (EJ-GJL-200)	56	Stator Complete	1	
30	Oil Lifter	1	Plastic	64	Motor Frame	1	Aluminium die casting
32	Hose Coupling	1	Aluminium die casting	68	Handle	1	Steel plate/natural rubber
35	Oil Plug	1	SUS304 (EN-X5CrNi18-10)	71	Shaft Sleeve	1	SUS304 (EN-X5CrNi18-10)
36	Lubricant	1	Turbine oil ISO VG 32	76	Capacitor	1	

Pump Performance Curve

HS3.75S-51

Discharge Bore	80 mm
Total Head	max.15 m
Capacity	max. 0,30 m ³ /min
Motor Output	0,75 kW
Motor Input	1,15 kW
Phase	1
Voltage	110/230 V
Frequency	50 Hz
Rated Current	10,0/4,6 A
Starting Current	27,0/14,0 A
Poles	2
Revolution	S.S. 2820 r.p.m.
Starting Method	Capacitor
Insulation Class	E

