

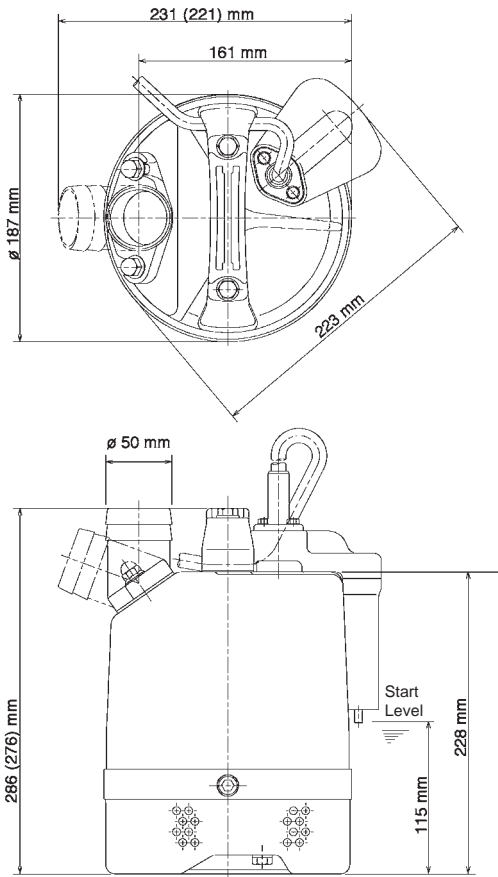


# TSURUMI PUMP

## LB-480A-51/52

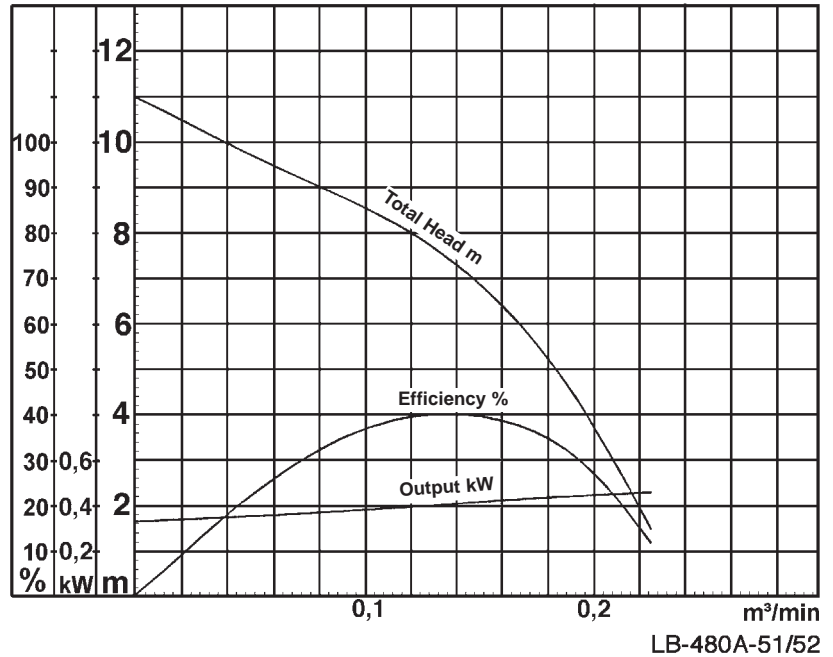
- data sheet
  - parts list
  - exploded view
  - dimensional drawing
  - sectional drawing
  - performance curve
- 
- parts list as Excel-spreadsheet

# Data Sheet LB-480A-51/52



Dimensions of LB-480A-51 in brackets

LB-480A-51/52



LB-480A-51/52

## Classification

Automatic electric submersible pump with water sensor (electrodes)  
 Protection class IP68  
 Depth of submersion max. 20m  
 Semi-vortex impeller  
 Max. solid handling 6mm  
 Suitable for rain water, font water, ground water, sand carrying water

## Electric Motor

Dry-type submersible induction motor  
 Insulation class E, 2 poles, 2850 r.p.m.  
 Capacitor start  
 Voltage: 110V/230V, 50Hz, 1-phase  
 Power input: 0,59kW  
 Power output: 0,48kW  
 Nominal current: 6,2A(110V) / 2,9A(230V)  
 Start current: 14,2A(110V) / 6,83A(230V)

## Electric cable

10m HO7RN-F 3Cx1,5mm<sup>2</sup> (110V)  
 10m HO7RN-F 3Cx1mm<sup>2</sup> (230V)

## Motor Protection

Miniatur protector in windings  
 (snap-action bi-metal device)

## Shaft Seal

Double mechanical seal in oil bath  
 Primary Seal:  
 silicon carbide on silicon carbide  
 Secondary Seal:  
 carbon on ceramic

## Bearings

Shielded ball bearings, maintenance-free

## Materials

Impeller:	Urethane rubber
Casing:	Ethylene propylene rubber
Suction Plate:	Ethylene propylene rubber
Motor frame:	Aluminium alloy casting
Shaft:	SUS403 (EN-X6Cr13)

## Discharge Connection

2" (50mm) BS-Coupling (threaded flange)

## Weight

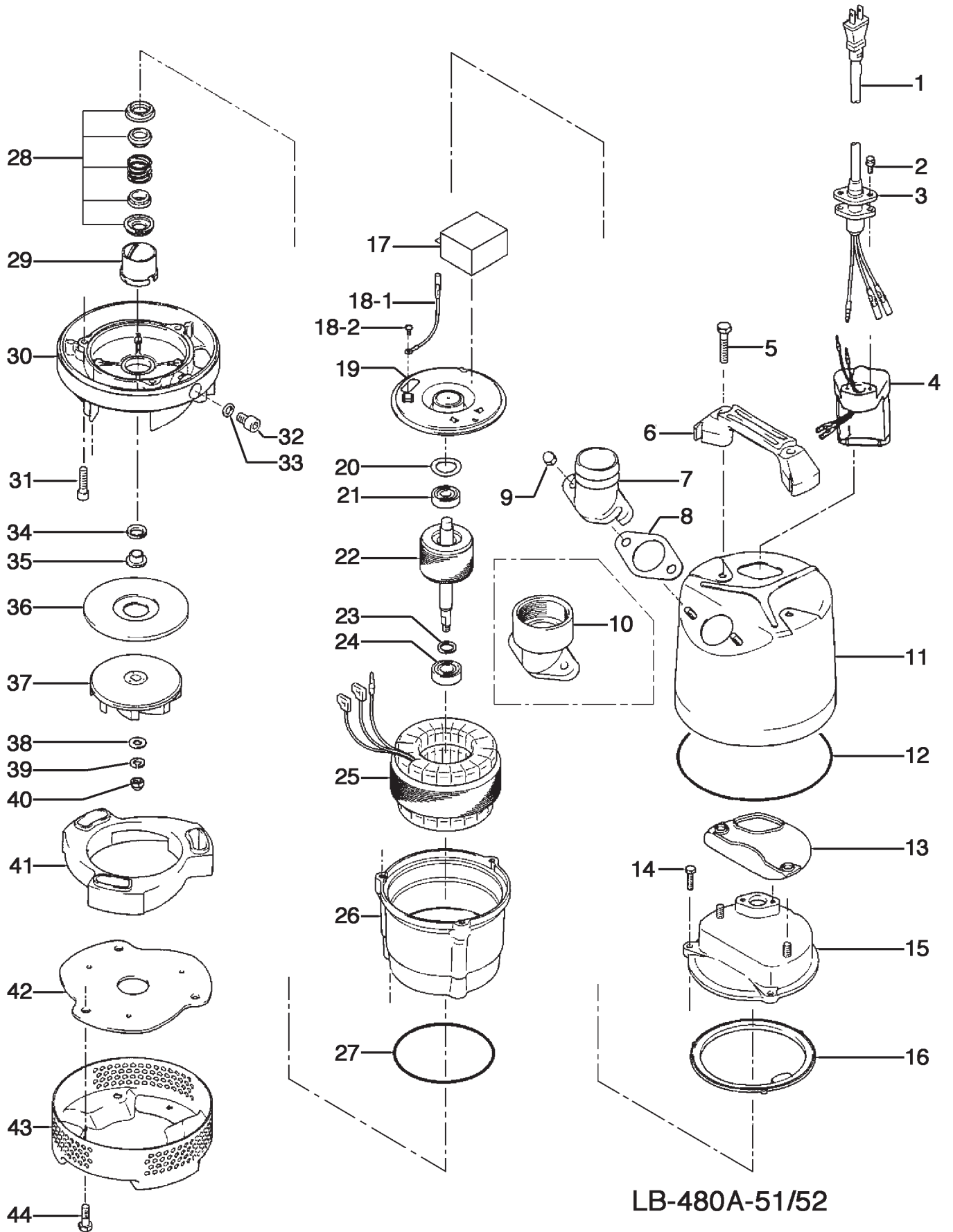
11,0 kg (dry weight of the pump without cable)

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19.06.2006

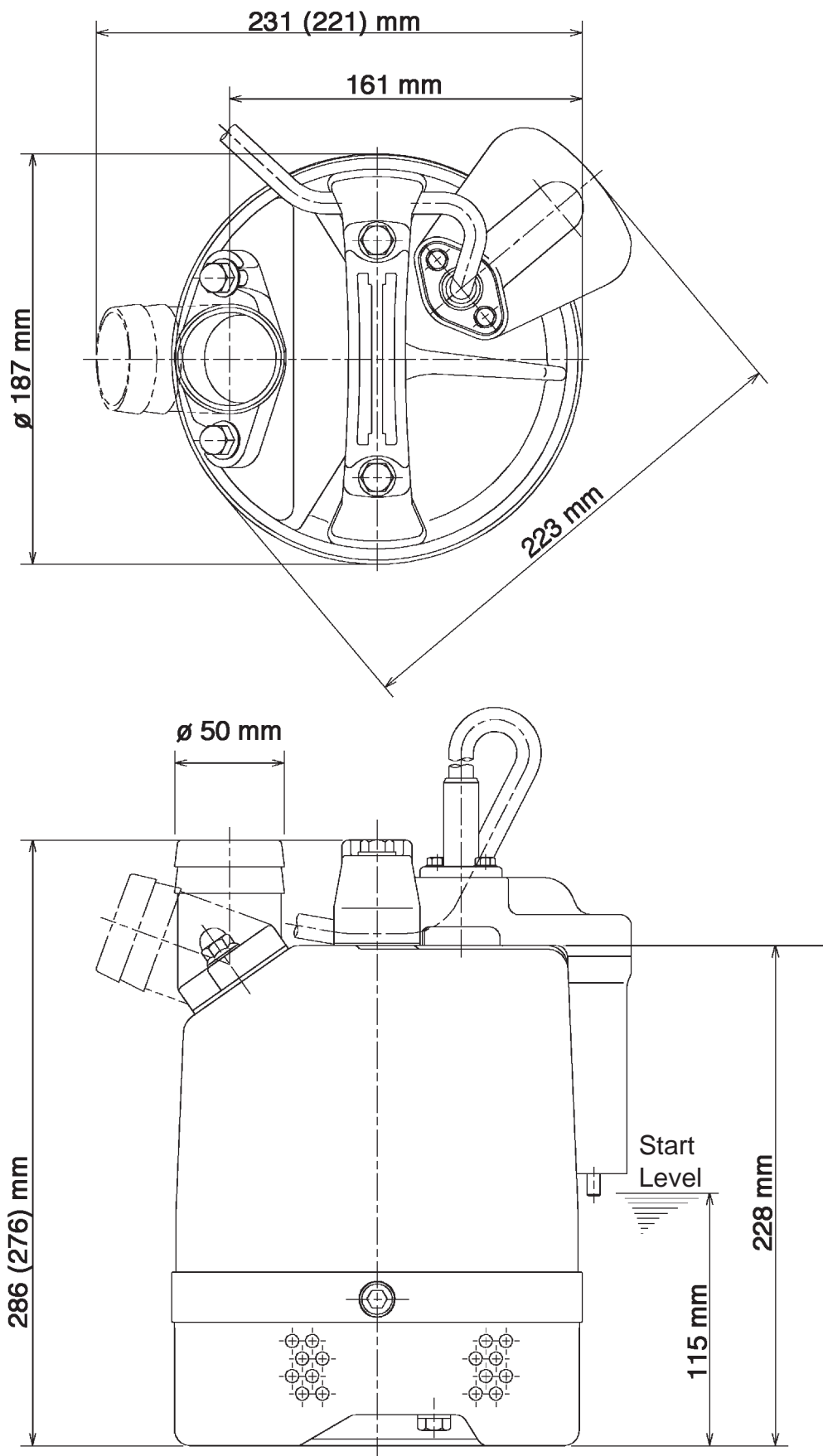
ITEM	CODE No.	DESCRIPTION	Q'TY	SIZE	MATERIAL	REMARKS
1	001-000-78	Cabtyre Cable	10m	H07RN3Cx1mm <sup>2</sup> (w/ plug)	HAR	230V
1	001-000-79	Cabtyre Cable	10m	H07RN3Cx1,5mm <sup>2</sup> (w/o plug)	HAR	110V
1A	061-TEG-01	Cable Repair Kit	1			
2	140-427-17	Hex. Bolt (w/Plain Washer)	2	M5x15	SUS304	
3	003-100-13	Gland	1		LB	
4	114-000-15	Relay Unit 230V	1			230V
4	114-000-14	Relay Unit 110V	1			110V
5	140-505-10	Hex. Bolt (w/Plain Washer)	2	M5x55	SUS304	
6	068-000-06	Handle	1	LB-250/480-51/61	Resin	
7	032-000-12	Hose Coupling	1	50mm (LB-480-51/61)	ADC	
7	032-000-23	Screwed Flange	1	50mm		
8	121-587-17	Packing	1	LB2-250/480-51/61	NBR	*
9	141-144-10	Hex.nat (w/Flange)	2	M8	SUS304	
10	032-000-03	Screwed Flange 50mm inside thread	1	50mm(LB-480-51/61)		
10	032-000-04	Screwed Flange 40mm inside thread	1	40mm(LB-480-51/61)		
11	065-382-13	Outer Cover	1	LB-250/480-51/61	SPC	
12	122-453-16	O-Ring	1	172xØ2.7	NBR	*
13	121-434-18	Packing	1	LB3-250/480	Rubber	*
14	140-396-16	Hex.Bolt (w/Plain Washer)	3	M6x20	SUS304	
15	051-282-19	Head Cover	1		ADC	
16	121-546-14	Packing	1	Ø120xØ142x6.2t	NBR	*
17	076-159-13	Capacitor@110V-50HZ(ENG)	1	SH-CAP,270VAC-33MF		
17	076-161-18	Capacitor@220/230/240-50HZ(EUR)	1	SH-CAP,500VAC-9MF		
18-1	009-000-02	Earth Terminal	1			
18-2	143-203-14	Pan Screw	1	M4x5	BSBM	
19	050-486-12	Motor Bracket	1		SECD	
20	142-451-16	Wave Washer	2	BWW-6201.D=32,T=0.25	SUP	
21	052-100-15	Bearing	1	6201ZZC3		
22	055-889-14	Rotor	1Set	w/bearing		
23	061-180-17	Bearing Coller	1		SS	
24	052-101-16	Bearing	1	6202ZZC3		
25	056-C67-13	Stator@110V-50HZ(ENG)	1Set			110V
25	056-C70-19	Stator@220/230/240-50HZ(EUR)	1Set			230V
26	064-508-14	Motor Frame	1		ADC	
27	122-133-17	O-Ring	1	G-110	NBR	*
28	025-291-10	Mechanical Seal	1	W-14VL	SiC+CCBN	Oil 150 ml (ISO VG32)
29	030-000-09	Oil Lifter	1	W-14VL	Resin	
30	029-000-70	Oil Casing	1	LB-250/480-51/61	ADC	
31	140-252-19	Hex.Socket Cap Screw	3	M6x20	SUS304	
32	035-124-12	Oil Plug	1	M10x15	SUS304	
33	121-246-11	Packing	1	Ø10.3xØ16x2t	PE	*
34	122-441-11	V-Ring	1	VR-14	NBR	
35	071-292-14	Shaft Sleeve	1	LB3-250/480	SUS304	
36	031-000-01	Wear Ring	1	LB-250/480-51/61	Nylon	
37	021-L80-12	Impeller	1	50Hz	Rubber	
37	021-L79-18	Impeller	1	60Hz	Rubber	
38	142-127-10	Plain Washer	1	M8	SUS304	
39	142-163-18	Spring Washer	1	M8	SUS304	
40	141-030-12	Hex.Cap Nut	1	M8	SUS304	
41	020-B89-19	Pump Casing	1	LB-250/480-51/61	Rubber	
42	022-001-28	Suction Cover	1	LB-250/480-51/61	SPHC	
43	023-547-18	Strainer Stand	1	LB-250/480-51/61	SPC	
44	140-503-18	Hex.Bolt (w/Plain Washer)	3	M8x16	SUS304	
		<Packing O-Ring Set>				
	173-567-12	Packing O-Ring Set	1Set	(*)		

# Exploded View LB-480A-51/52



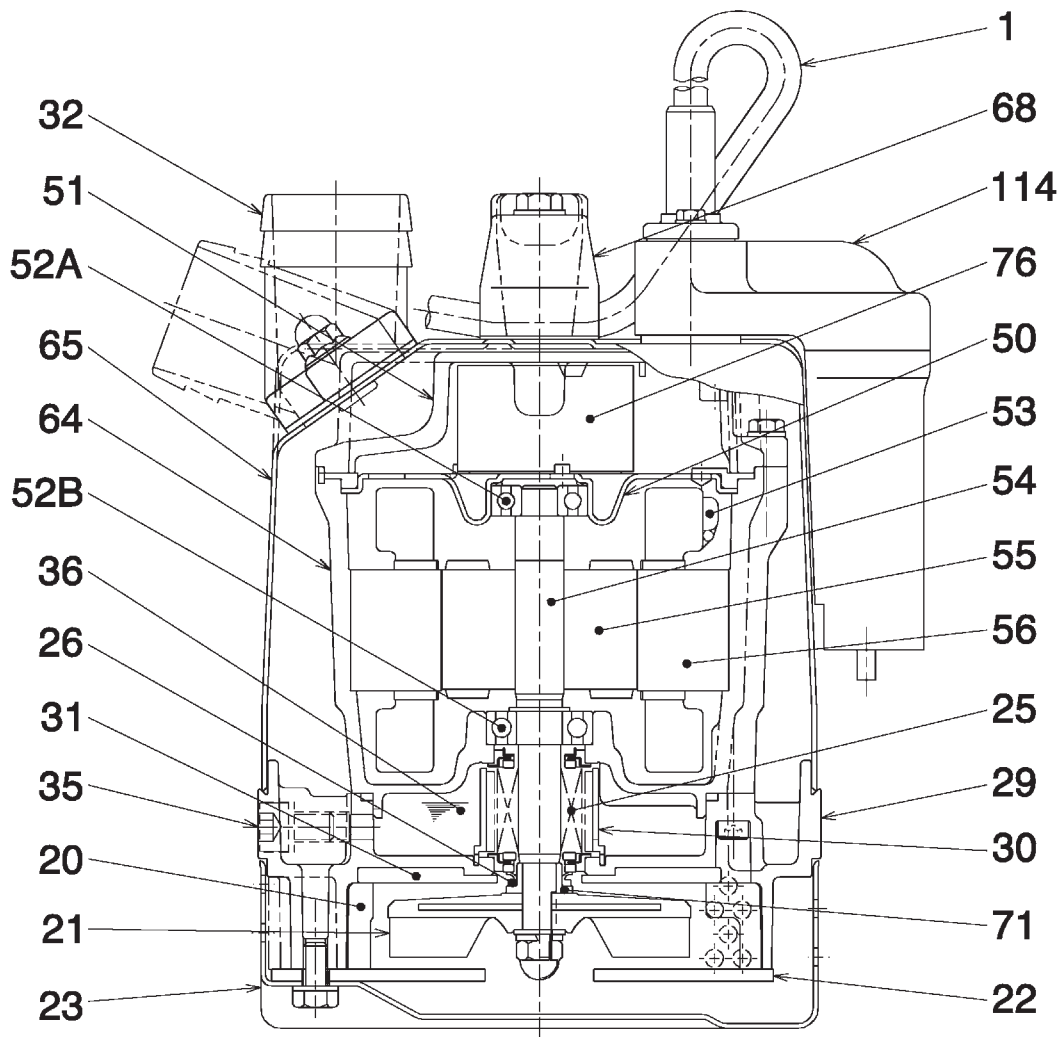
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# Dimensional Drawing LB-480A-51/52



LB-480A-51/52

# Sectional Drawing LB-480A-51/52



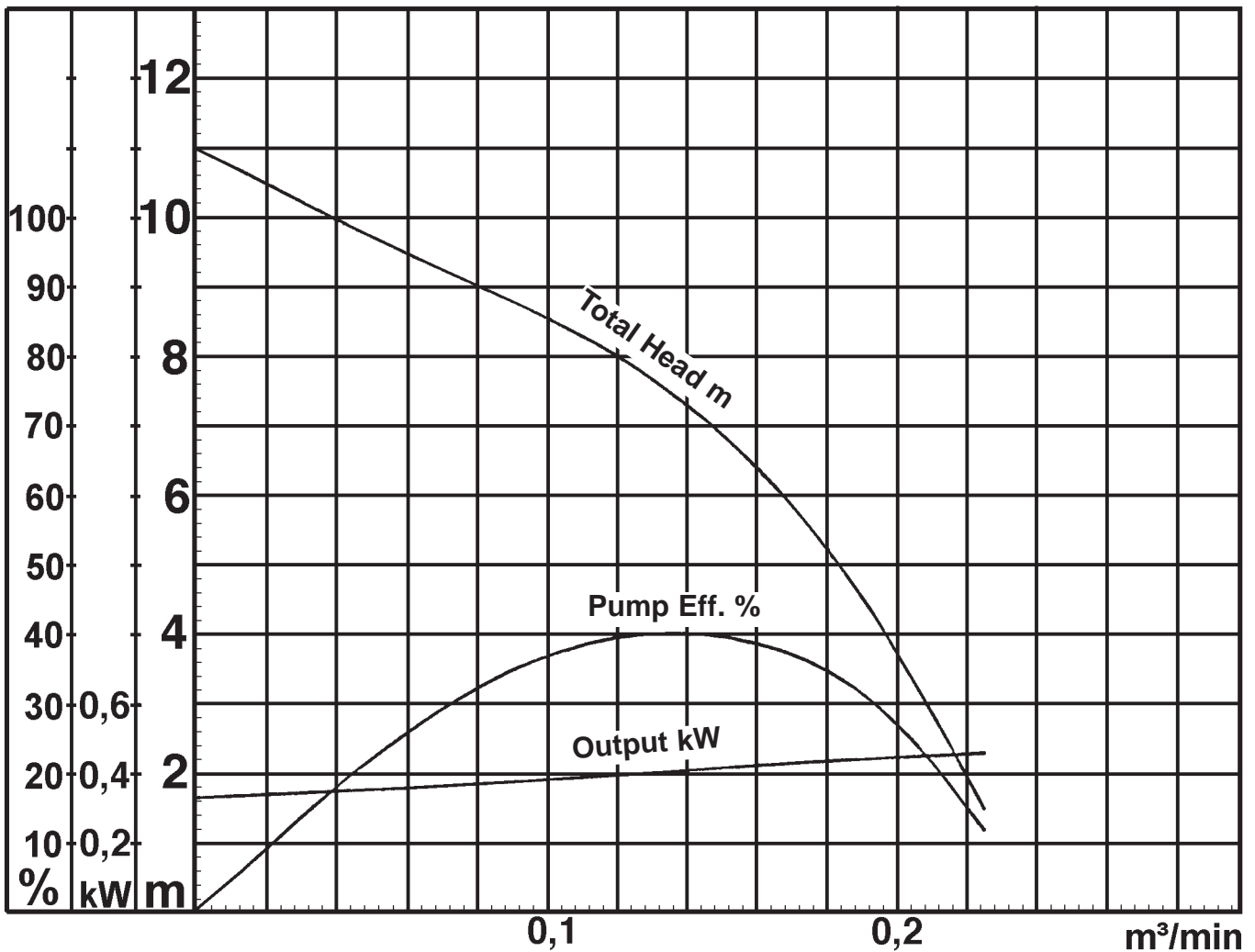
**LB-480A-51/52**

No.	Description	Qty.	Remarks	No.	Description	Qty.	Remarks
1	Cabtyre Cable	1	H07RN-F	51	Motor Head cover	1	Aluminium Die Casting
20	Pump Casing	1	Ethylene Propylene Rubber	52A	Upper Bearing	1	6201ZZC3
21	Impeller	1	Urethane Rubber	52B	Lower Bearing	1	6202ZZC3
22	Suction Cover	1	Steel Plate	53	Motor Protector	1	
23	Strainer Stand	1	Steel Plate	54	Shaft	1	SUS403 (EN-X6Cr13)
25	Mechanical Seal	1	W-14VL	55	Rotor	1	
26	V-Seal	1	Nitrile Butadien Rubber	56	Stator	1	
29	Oil Casing	1	Aluminium Die Casting	64	Motor Frame	1	Aluminium Die Casting
30	Oil Lifter	1	Plastic	65	Outer Cover	1	Steel Plate
31	Wearing Plate	1	Nylon	68	Handle	1	Steel Plate & Rubber
32	Hose Coupling	1	Aluminium Die Casting	71	Shaft Sleeve	1	SUS304 (EN-X5CrNi18-10)
35	Oil Plug	1	SUS304 (EN-X5CrNi18-10)	76	Capacitor	1	
36	Lubricant	1	Turbine Oil (ISO VG32)	114	Relay Unit	1	Styrene Butadiene Rubber
50	Motor Bracket	1	Steel Plate				

# Pump Performance Curve

## LB-480A-51/52

Discharge Bore	50 mm
Total Head	max. 11 m
Capacity	max. 0,22 m <sup>3</sup> /min
Motor Output	0,48 kW
Motor Input	0,59 kW
Phase	1
Voltage	110/230 V
Frequency	50 Hz
Rated Current	6,2/2,9 A
Starting Current	14,2/6,83 A
Poles	2
Revolution	S.S. 2850 r.p.m.
Starting Method	Capacitor
Insulation Class	E



LB-480A-51/52