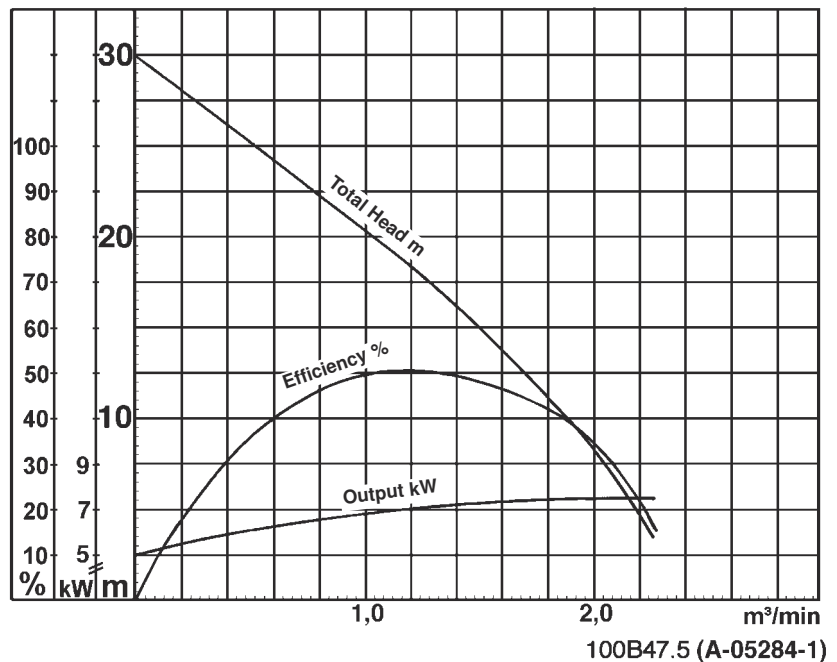
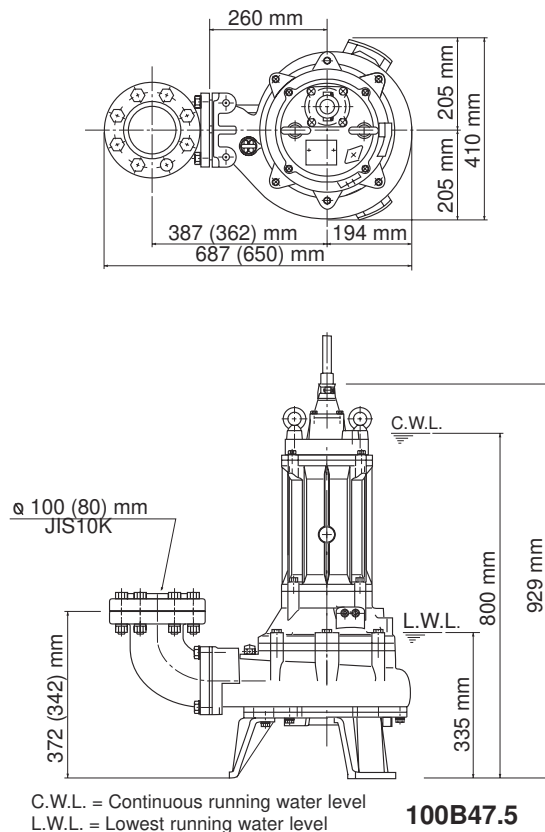




100B47.5 (100-7.5-4B4)

- data sheet
 - parts list
 - exploded view
 - dimensional drawing free standing type
 - dimensional drawing TOS-type
 - sectional drawing free standing type
 - sectional drawing TOS-type
 - performance curve
-
- parts list as Excel-spreadsheet

Data Sheet 100B47.5



Classification

Electric submersible pump
Protection class IP68
Depth of submersion max. 30m
2-channel impeller, shrouded type
Impeller passage 40mm
Suitable for sewage water, various waste water

Electric Motor

Dry-type submersible induction motor,
Insulation class F, 4 poles, 1450 r.p.m.
Direct on line start
Voltage: 400V, 50Hz, 3-phase
Power input: 9,8kW
Power output: 7,5kW
Nominal current: 17,0A
Start current: 85,0A

Electric Cable

10m H07RN-F 4Cx4mm²

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:
silicon carbide on silicon carbide

Bearings

Shielded ball bearings, maintenance-free

Materials

Impeller:	FC200 (EN-GJL-200)
Casing:	FC200 (EN-GJL-200)
Suction Cover:	FC200 (EN-GJL-200)
Motor frame:	FC200 (EN-GJL-200)
Shaft:	SUS403 (EN-X6Cr13)

Discharge Connection

4" (100mm) JIS10K screwed-in mating flange
Guide rail fitting optional

Weight

152kg (dry weight of the pump without cable)

100B47.5

Control No. IB4-2-1-1

08.06.2005

ITEM	CODE No.	DESCRIPTION	Q'TY	SIZE	MATERIAL		REMARKS
1	001-	Cabtyre Cable Set	10m				
2	140-055-10	Hex. Bolt	4	M8x25	SUS304		
3	142-163-18	Spring Washer	4	M8	SUS304		
4	070-107-18	Cable Clamp	1		FC		
5	140-035-14	Hex. Bolt	2	M6x20	SUS304		
6	006-126-14	Stuffing Box	1	No. 2	FC		
7	008-143-13	Rubber Boots	1	KR2-8	CR		
8	143-085-21	Cross-Recessed Pan Screw	2	M4x6	SWRM		
9	009-130-10	Solderless Terminal	1	R-5.5-4	CU		
10	009-101-12	Terminal (C/W Screw)	3	ø12x(ø6,6xø6,6)x25l	BSBM		
11	009-123-10	Terminal	6	P-5,5	CU		
12	002-129-15	Heat Shrink Tube	m	EVA(ø14x1t)	(Yen/m)		
13	002-132-11	Heat Shrink Tube	m	A4(ø17x0,3t)	(Yen/m)		
14	072-107-14	Eyebolt	2	M16	SS		
15	140-098-15	Hex. Bolt	4	M12x35	SUS304		
16	142-165-10	Spring Washer	4	M12	SUS304		
17	050-439-10	Motor Bracket	1		FC		
18	122-173-19	O-Ring	1	V-225	NBR	*	
19	142-198-12	Wave Washer	1	6306	SK-5		
20	122-245-13	O-Ring	1	71,4xø3,1	NBR	*	
21	052-109-14	Bearing	1	6306ZZC3			
22	058-185-12	Lead Wire Protection Plate	1	ø80xø224x1,6t	SPHC		
23	143-126-12	Cross-Recessed Pan Screw	2	M4x12	SWRM		
24	053-418-25	Motor Protector	1	KA324-HKZL00	(H. C.)		
25	055-743-15	Rotor and Shaft	1Set	400V			
26	147-067-16	Impeller Key	1	10x8x32l	SUS		
27	056-	Stator	1Set	400V			
28	064-506-12	Motor Frame	1		FC		
29	140-100-11	Hex. Bolt	4	M12x45	SUS304		
30	142-165-10	Spring Washer	4	M12	SUS304		
31	122-006-10	O-Ring	1	P-8	NBR	*	
32	144-550-12	Stator Set Bolt	1	M8x12,5	SUS304		
33	122-173-19	O-Ring	1	V-225	NBR	*	
34	140-032-37	Hex. Bolt	3	M6x15	SWRM		
35	062-182-12	Bearing Fixing Plate	1	ø92xø130x4,5t	SS		
36	052-112-10	Bearing	1	6309ZZC3			
37	146-027-11	Retaining Ring	1	C45	SK-5		
38	060-430-12	Bearing Housing	1		FC		
39	121-247-12	Packing	2	ø11,8xø18x2t	PE-Sheet	*	
40	035-113-18	Oil Plug	2	M12x14	SUS304		
41	140-099-16	Hex. Bolt	2	M12x40	SUS304		
42	142-165-10	Spring Washer	2	M12	SUS304		
43	140-104-15	Hex. Bolt	4	M12x65	SUS304		
44	142-165-10	Spring Washer	4	M12	SUS304		
45	025-195-13	Mechanical Seal	1	H-35A	SiC+CCB		Oil (ISO VG32) 5200ml
		< Oil Ring >					
46, 47	143-070-10	Cross-Recessed Pan Screw (old)	3	M5x6	SWRM		
46, 47	030-110-23	Oil Ring (old)	1	H-30/35	SPC		
		< Oil Lifter >					
46, 47	143-070-10	Cross-Recessed Pan Screw (new)	2	M5x6	SWRM		
46, 47	030-156-18	Oil Lifter (new)	1	H-35(A)(T)	Resin		
46, 47	143-070-10	Cross-Recessed Pan Screw (new)	3	M5x6	SWRM		
46, 47	030-150-12	Seal Stopper (new)	1	H-35(A)(T)	SPCC		
48	122-159-19	O-Ring	1	G-280	NBR	*	
49	029-187-14	Oil Casing	1	100-5.5/7.5-4B2	FC		
50	122-159-19	O-Ring	1	G-280	NBR	*	
51	026-115-12	Oil Seal	1	TC-608212	NBR		
52	021-805-24	Impeller 50Hz	1	50Hz	FC		
52	021-806-25	Impeller 60Hz	1	60Hz	FC		
53	142-202-10	Impeller Fixing Washer	1	ø13xø52x15t	SUS304		
54	144-293-27	Hex. Socket Set Screw	2	M6x12	SUS304		
55	140-303-16	Hex. Socket Cap Screw	1	M12x40	SUS304		
56	046-107-13	Air Release Valve	1	PT-1/2"	Nylon		
57	140-130-36	Hex. Bolt	8	M16x70 (100mm)	SWRM		
57	140-129-32	Hex. Bolt	8	M16x65 (80mm)	SWRM		
58	048-109-11	Screwed Flange	1	JIS10Kx100mm	FC		
58	048-108-10	Screwed Flange	1	JIS10Kx80mm	FC		
59	121-106-34	Packing	1	JIS10Kx100mm	NBR		
59	121-105-17	Packing	1	JIS10Kx80mm	NBR		
60	037-115-16	Discharge Bend	1	100x100mm(S-4)	FC		
60	037-155-18	Discharge Bend	1	100x80mm(S-4B)	FC		
61	142-166-37	Spring Washer	8	M16	SWRH		
62	141-008-11	Hex. Nut	8	M16	SUS304		
63	121-153-10	Packing	1	160(P.C.165)	NBR	*	
64	140-124-11	Hex. Bolt	4	M16x40	SUS304		

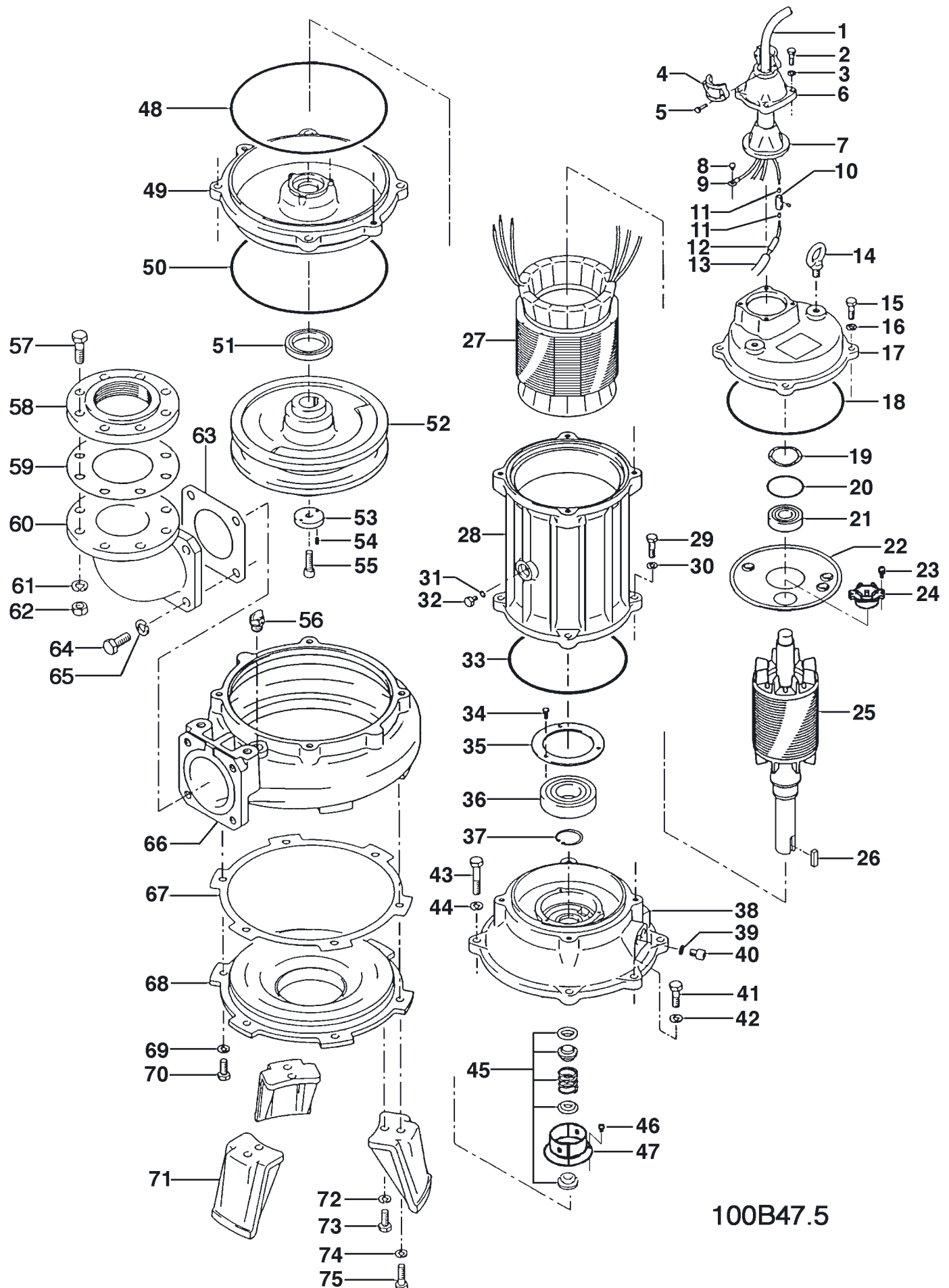
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Control No. IB4-2-1-1

08.06.2005

ITEM	CODE No.	DESCRIPTION	Q'TY	SIZE	MATERIAL		REMARKS
65	142-166-11	Spring Washer	4	M16	SUS304		
66	020-531-23	Pump Casing	1	100-5.5/7.5-4B2	FC		
67	120-102-11	Suction Cover Packing		ø301xø328x0,3t	PE-Sheet		
68	022-521-13	Suction Cover	1	100-5.5/7.5-4B2	FC		
69	142-165-10	Spring Washer	3	M12	SUS304		
70	140-097-14	Hex Bolt	3	M12x30	SUS304		
71	023-288-18	Pump Stand	3	55/110-CE2	FC		
72	142-165-10	Spring Washer	3	M12	SUS304		
73	140-097-14	Hex. Bolt	3	M12x30	SUS304		
74	142-165-10	Spring Washer	3	M12	SUS304		
75	140-099-16	Hex. Bolt	3	M12x40	SUS304		
	173-536-12	Packing O-Ring Set	1Set	(*)			

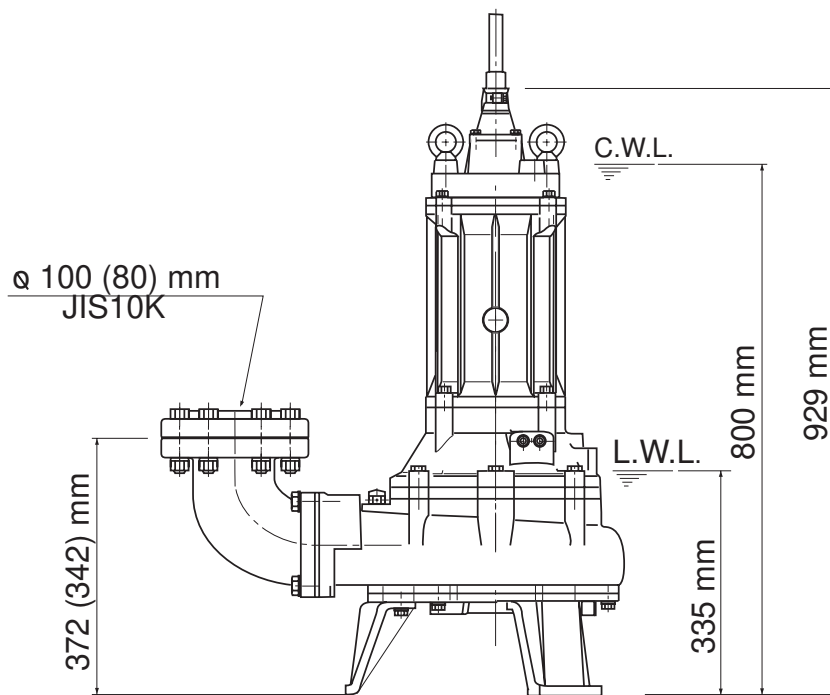
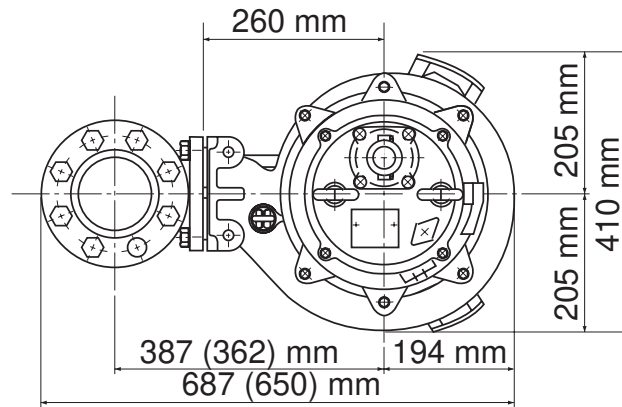
Exploded View 100B47.5



100B47.5

Dimensional Drawing

100B47.5



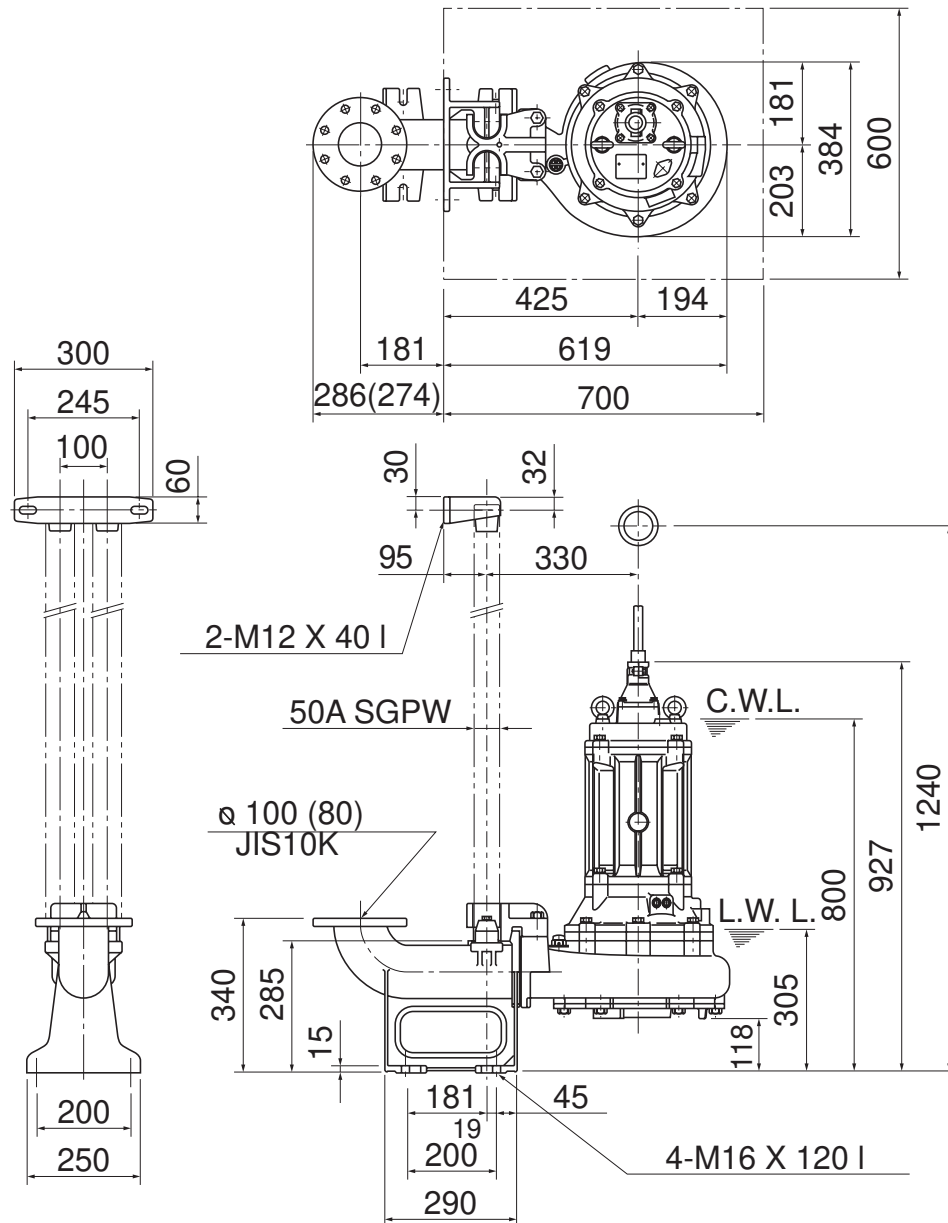
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CWL: Continuous Running Water Level
LWL: Lowest Running Water Level

Dimensional Drawing

TOS100B47.5

Dimensions in mm

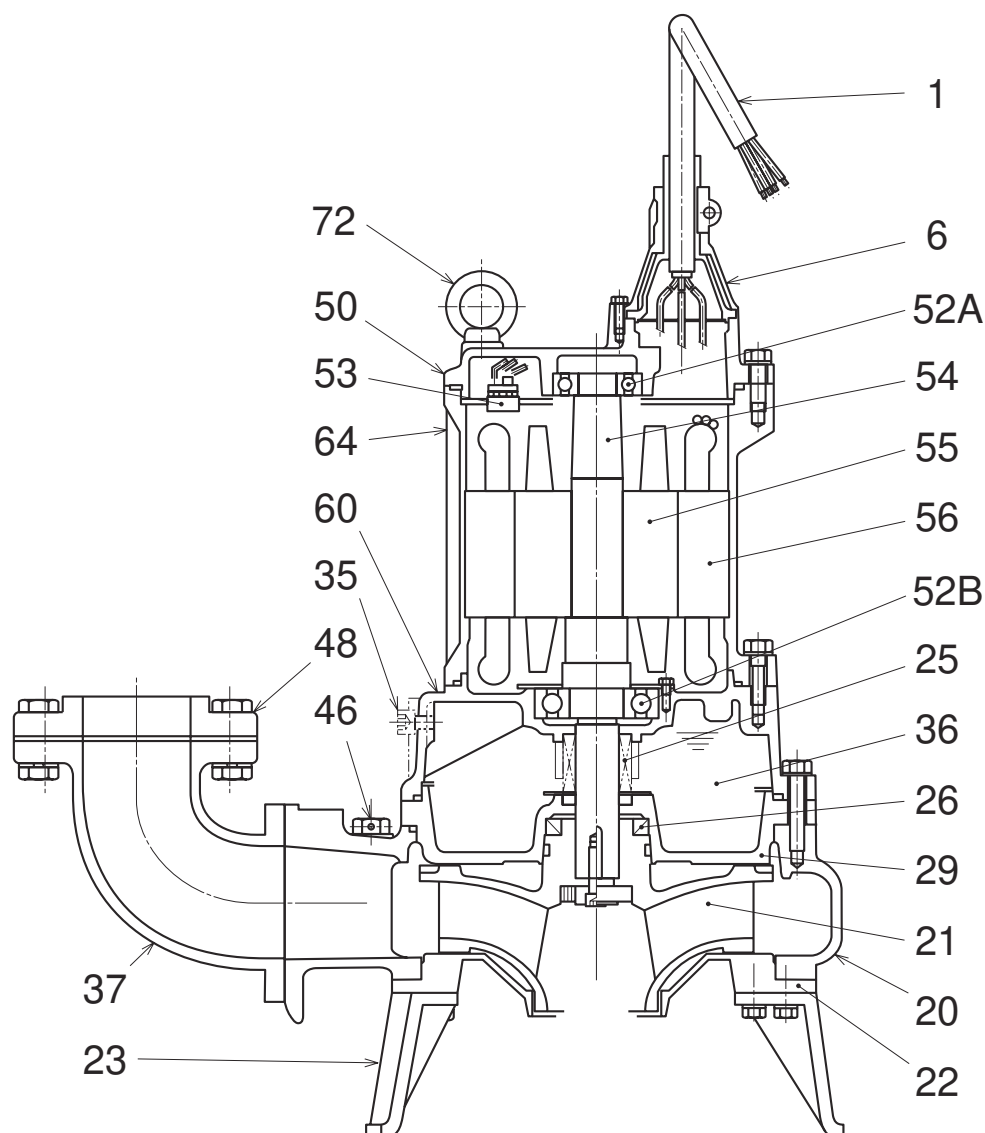


TOS100B47.5

CWL: Continuous Running Water Level
LWL: Lowest Running Water Level

Sectional Drawing

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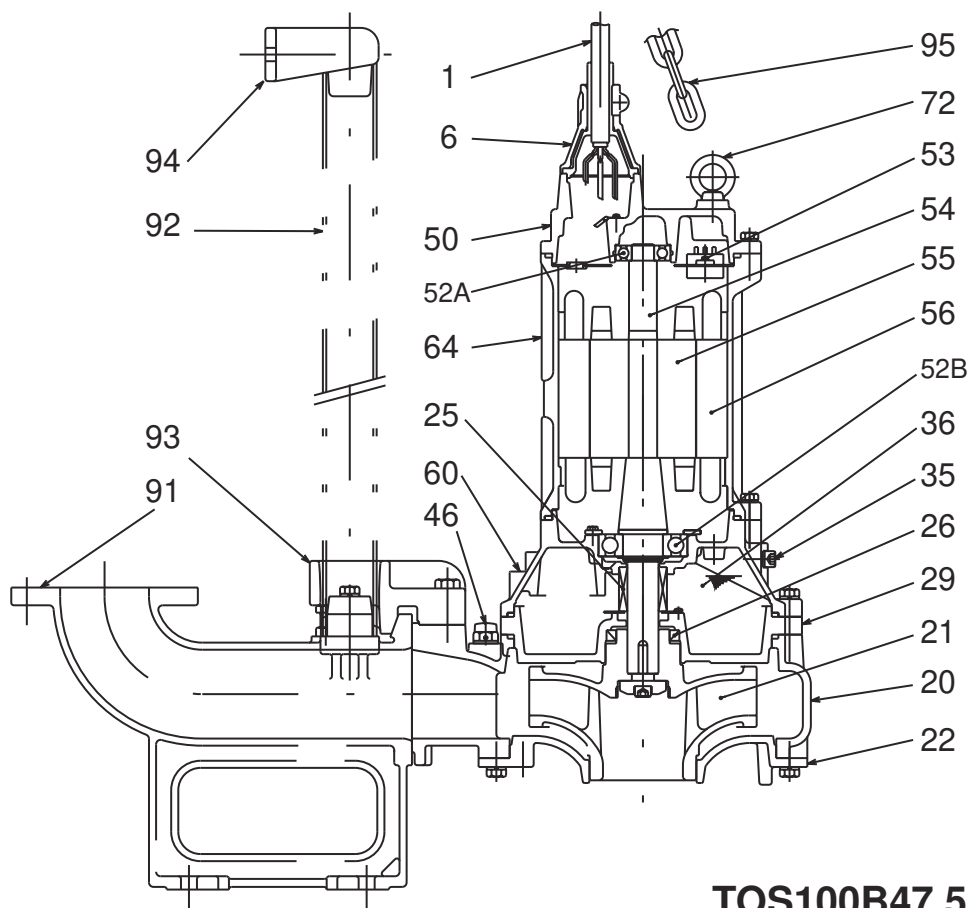


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No.	Description	Qty.	Remarks	No.	Description	Qty.	Remarks
1	Cabtyre Cable	1	10m H07RN-F 4Cx4mm ²	50	Motor Bracket	1	FC200 (EN-GJL-200)
6	Stuffing Box	1	FC200 (EN-GJL-200)	52A	Upper Bearing	1	6306ZZC3
20	Pump Casing	1	FC200 (EN-GJL-200)	52B	Lower Bearing	1	6309ZZC3
21	Impeller	1	FC200 (EN-GJL-200)	53	Motor Protector	1	
22	Suction Cover	1	FC200 (EN-GJL-200)	54	Shaft	1	SUS403 (EN-X6Cr13)
23	Pump Stand	3	FCD450 (EN-GJS-450-10)	55	Rotor	1	
25	Mechanical Seal	1	H-35A	56	Stator Complete	1	
26	Oil Seal	1	TC608212	60	Bearing Housing	1	FC200 (EN-GJL-200)
29	Oil Casing	1	FC200 (EN-GJL-200)	64	Motor Frame	1	FC200 (EN-GJL-200)
35	Oil Plug	2	SUS304 (EN-X5CrNi18-10)	72	Eyebolt	2	SS400 (DIN 1.0040)
36	Lubricant		Turbine Oil (ISO VG32)				
37	Discharge Bend	1	FC200 (EN-GJL-200)				
46	Air Release Valve	1	Nylon				
48	Screwed Flange	1	FC200 (EN-GJL-200)				

Sectional Drawing

TOS100B47.5



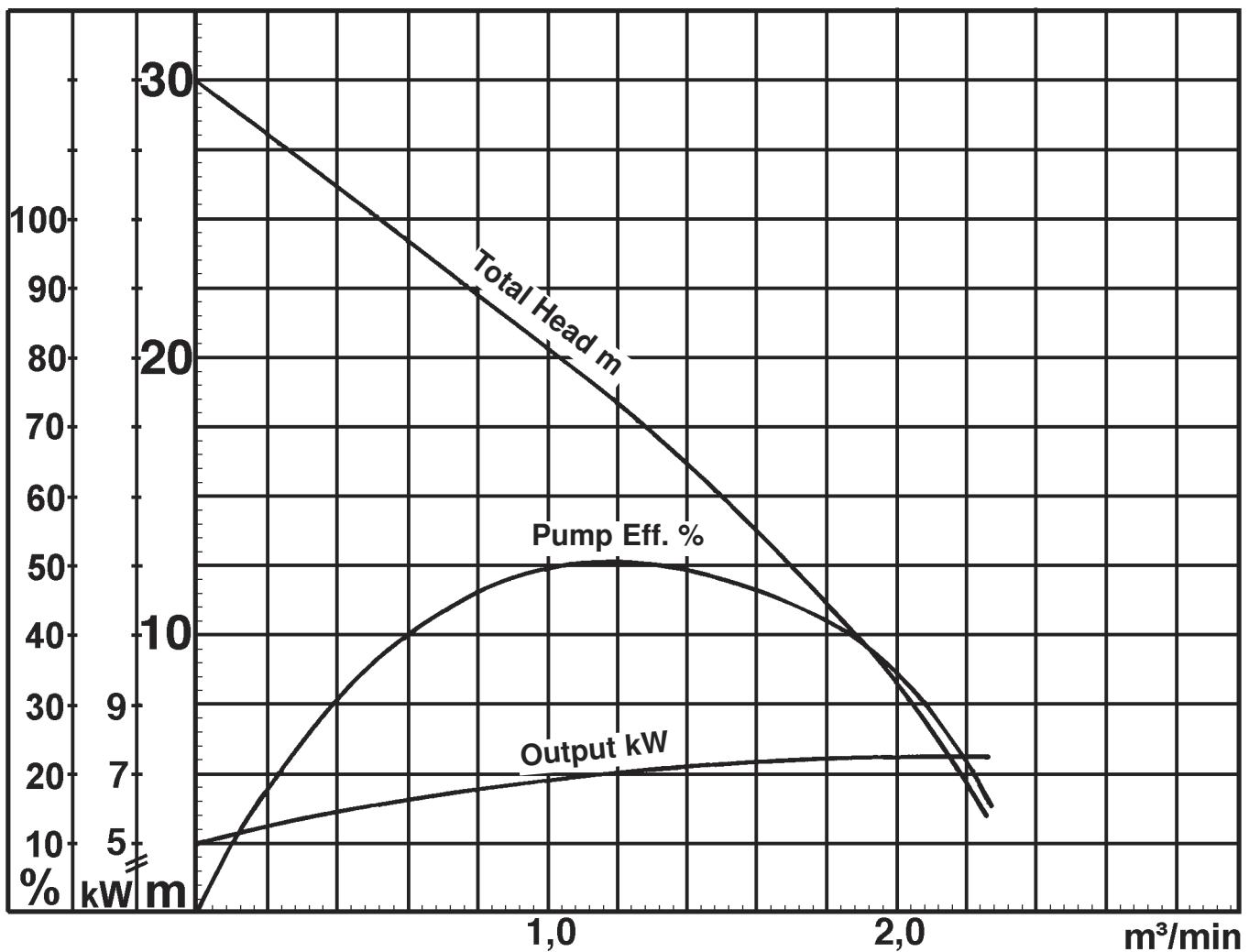
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No.	Description	Qty.	Remarks	No.	Description	Qty.	Remarks
1	Cabtyre Cable	1	10m H07RN-F 4Cx4mm ²	53	Motor Protector	1	
6	Stuffing Box	1	FC200 (EN-GJL-200)	54	Shaft	1	SUS403 (EN-X6Cr13)
20	Pump Casing	1	FC200 (EN-GJL-200)	55	Rotor	1	
21	Impeller	1	FC200 (EN-GJL-200)	56	Stator Complete	1	
22	Suction Cover	1	FC200 (EN-GJL-200)	60	Bearing Housing	1	FC200 (EN-GJL-200)
25	Mechanical Seal	1	H-35A	64	Motor Frame	1	FC200 (EN-GJL-200)
26	Oil Seal	1	TC-608212	72	Lifting Eye Bolt	2	SS400 (DIN 1.0040)
29	Oil Casing	1	FC200 (EN-GJL-200)	91	Duck Foot Bend	1	FC200 (EN-GJL-200)
35	Oil Plug	1	SUS304 (EN-X5CrNi18-10)	92	Guide Pipe (Option)	2	Carbon Steel Pipe SGPW
36	Lubricant		Turbine Oil (ISO VG32)	93	Guide Hook	1	FCD450 (EN-GJS-450-10)
46	Air Release Valve	1	Nylon	94	Guide Support	1	FCD450 (EN-GJS-450-10)
50	Motor Bracket	1	FC200 (EN-GJL-200)	95	Lifting Chain	1	SS400 (DIN 1.0040)
52A	Upper Bearing	1	6306ZZC3				
52B	Lower Bearing	1	6309ZZC3				

Pump Performance Curve

100B47.5

Discharge Bore	100 mm
Total Head	20 m
Capacity	1,0 m ³ /min
Motor Output	7,50 kW
Motor Input	9,88 kW
Phase	3
Voltage	400 V
Frequency	50 Hz
Rated Current	17,0 A
Starting Current	85,0 A
Poles	4
Revolution	S.S. 1450 r.p.m.
Starting Method	direct on line
Insulation Class	F



100B47.5 (A-05284-1)