

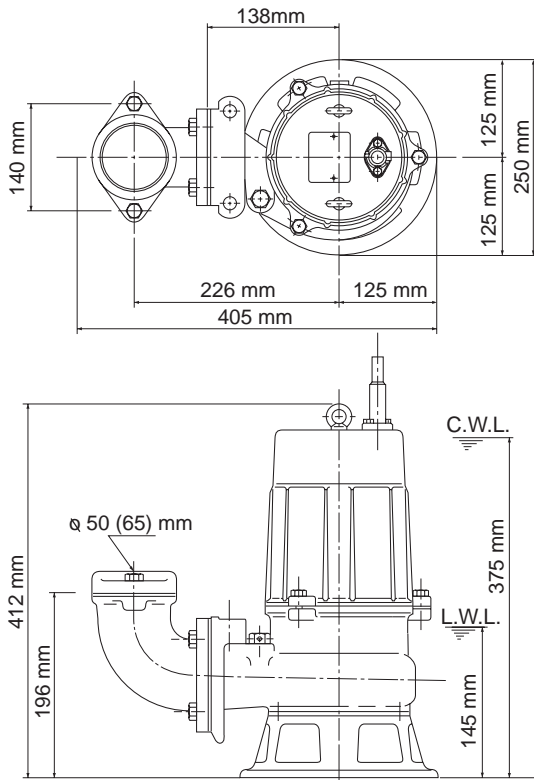


# TSURUMI PUMP

## 50C2.75 (8-CE2)

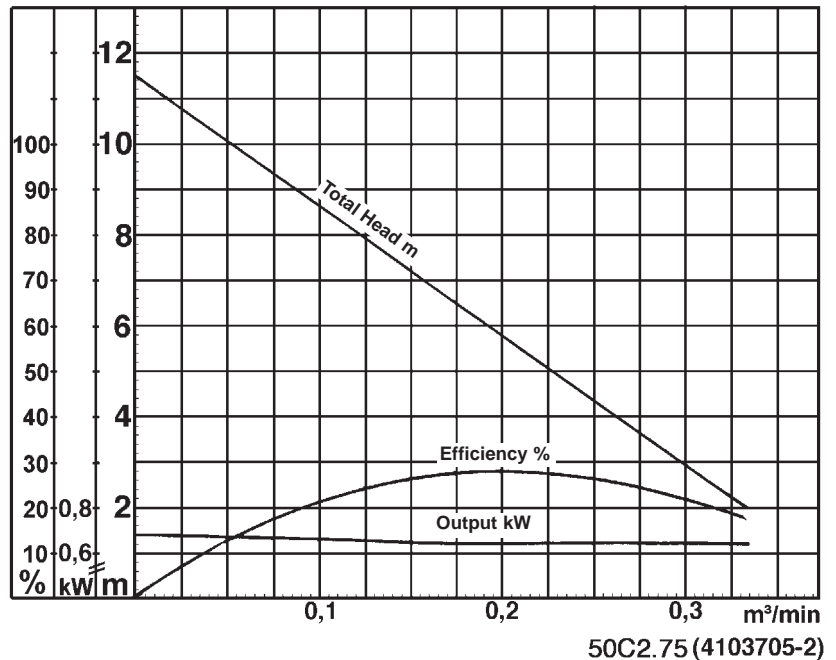
- data sheet
  - parts list
  - exploded view
  - dimensional drawing free standing type
  - dimensional drawing TOS-type
  - sectional drawing free standing type
  - sectional drawing TOS-type
  - performance curve
- 
- parts list as Excel-spreadsheet

# Data Sheet 50C2.75



C.W.L. = Continuous running water level  
L.W.L. = Lowest running water level

50C2.75



50C2.75 (4103705-2)

## Classification

Electric submersible pump  
Protection class IP68  
Depth of submersion max. 30m  
1-channel impeller, non-clogging type with cutter mechanism  
Impeller passage 21mm  
Suitable for waste water and liquids carrying waste and solid matters

## Electric Motor

Dry-type submersible induction motor,  
Insulation class E, 2 poles, 2850 r.p.m.  
Direct on line start  
Voltage: 400V, 50Hz, 3-phase  
Power input: 1,10kW  
Power output: 0,75kW  
Nominal current: 2,1A  
Start current: 9,9A

## Electric Cable

10m H07RN-F 4Cx1,5mm<sup>2</sup>

## 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) with sintered tungsten carbide alloy tip  
Casing: FC200 (EN-GJL-200)  
Suction Cover: FCD700 (EN-GJS-700-2)  
Motor frame: FC200 (EN-GJL-200)  
Shaft: SUS403 (EN-X6Cr13)

## Discharge Connection

2" (50mm) special screwed-in mating flange  
Guide rail fitting optional

## Weight

24 kg (dry weight of the pump without cable)

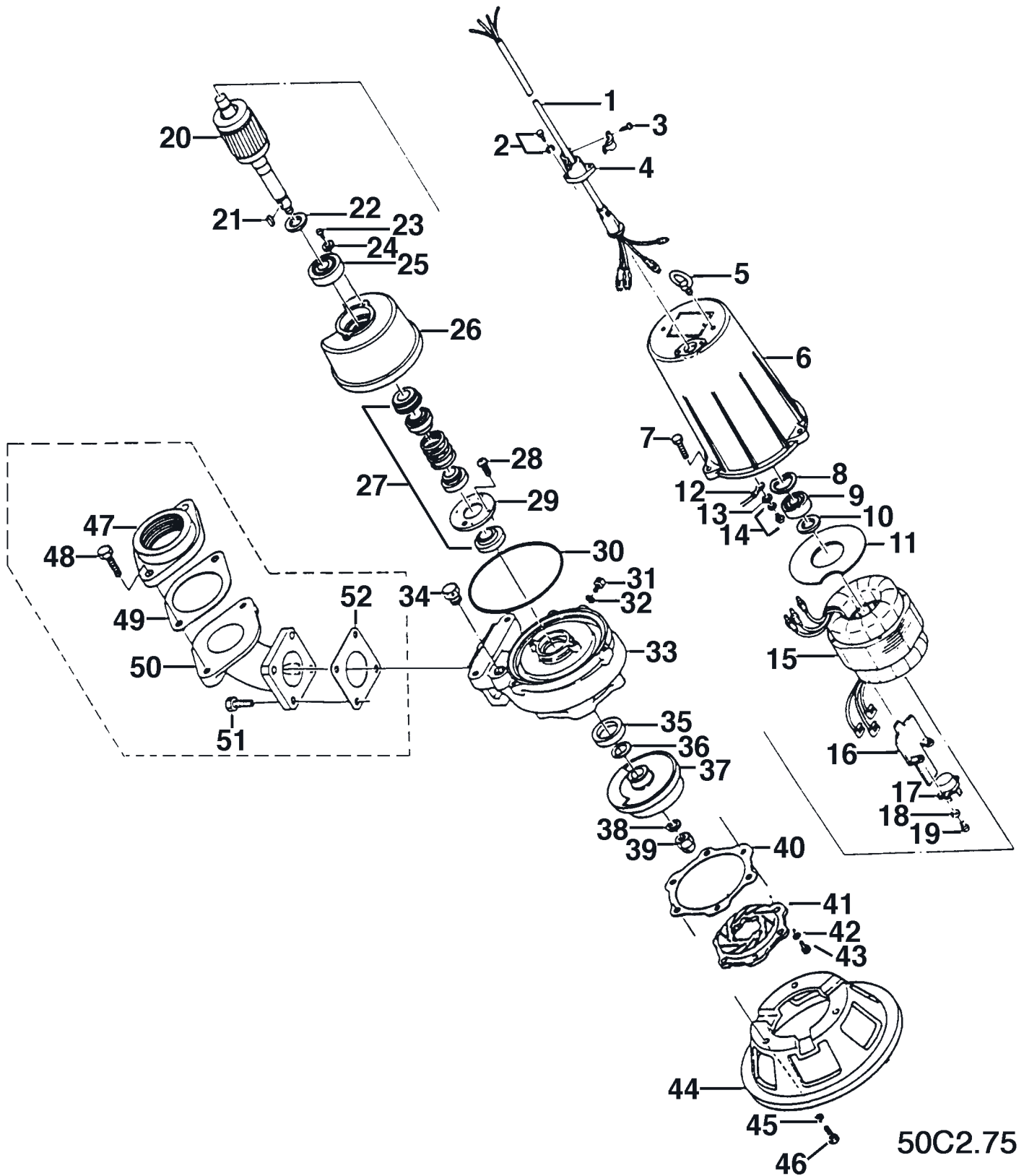
# 50C2.75

Control No. ICE2-8-1-1

28.08.2004

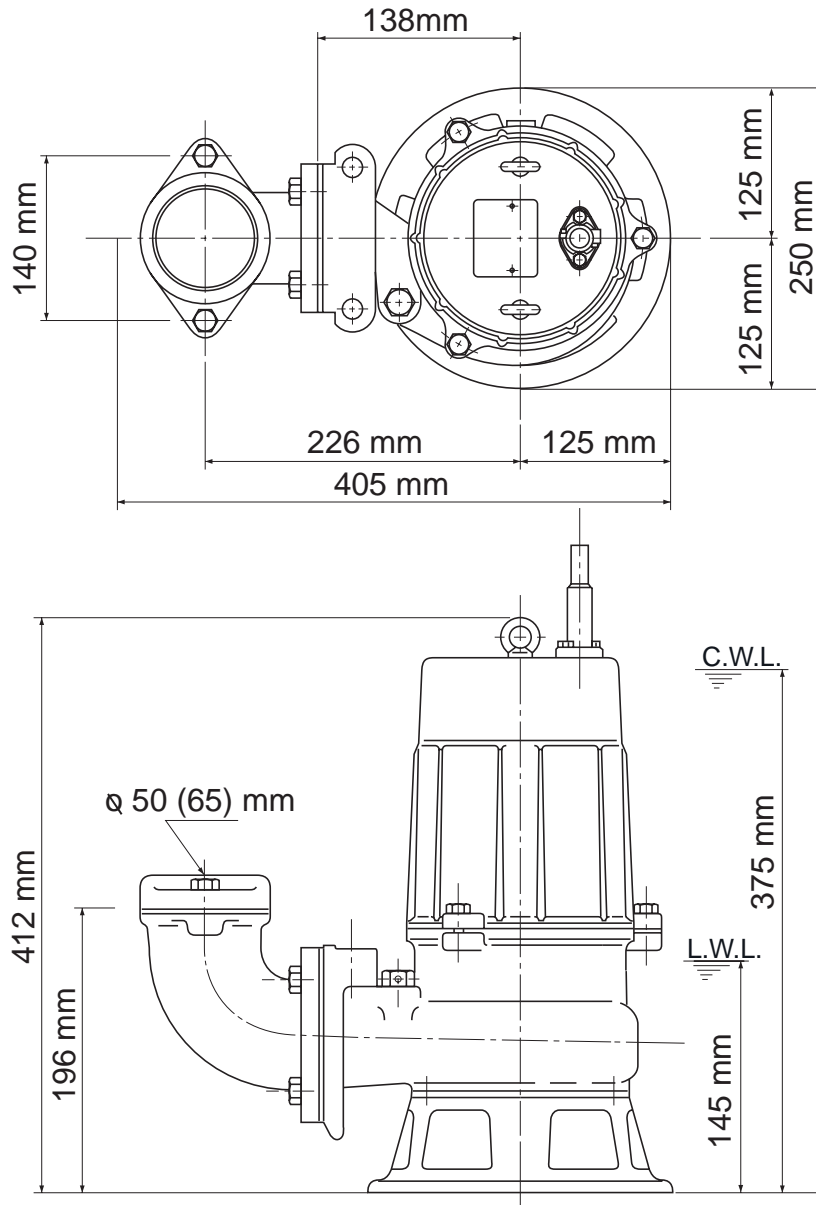
ITEM	CODE No.	DESCRIPTION	Q'TY	SIZE	MATERIAL	REMARKS
1	001-482-16	Cabtyre Cable Set	10m	H07RN4Cx1,5mm <sup>2</sup> (CEE)	LBT (HAR)	
2	140-427-17	Hex. Bolt	2	M5x15	SUS304	
3	143-071-24	Cross-Recessed Pan Tapping Screw	1	M4x12	SUS304	
4	003-100-13	Gland	1		SUS304	
5	072-105-12	Eyebolt	2	M8	SS	
6	064-276-23	Motor Frame	1		FC	
7	140-056-11	Hex. Bolt	3	M8x30	SUS304	
8	142-194-18	Wave Washer	1	#6203	SK-5	
9	052-102-17	Bearing (old)	1	6203ZZC3		
9	052-186-15	Bearing (new)	1	AC-6203ZZC3	SPC	
10	061-152-10	Bearing Collar	1	ø17,1xø23x1,6t	SPC	
11	058-115-11	Lead Wire Protection Plate	1	ø52xø115x1t	Resin	
12	009-112-16	Earth Terminal	1set	1,25mm <sup>2</sup>		
13	142-124-20	Plain Washer	1	M4	SPC	
14	143-086-22	Cross-Recessed Pan Screw	1	M4x8	SWRM	
15	056-828-18	Stator	1set			400V / 415V
15	056-864-16	Stator	1set			380V
16	127-143-15	Protector Fixing Plate (old)	1	8-BE2	SPC	
16	127-226-13	Protector Fixing Plate (new)	1	8-BE2	SPC	
17	053-239-17	Motor Protector	1	KA311-DAXL66	(T)	380V
17	053-267-14	Motor Protector	1	KA311-DAXL63	(T)	400V / 415V
18	142-124-20	Plain Washer	2	M4	SPC	
19	143-016-18	Cross-Recessed Pan Screw	2	M4x12	SWRM	
20	055-735-14	Rotor & Shaft	1set			
21	147-040-13	Impeller Key	1	5x5x16l	SUS	
22	061-158-16	Bearing Collar	1	ø20,1xø28x1,6t	SPC	
23	143-028-13	Cross-Recessed Pan Screw	2	M5x10	SWRM	
24	062-187-17	Bearing Fixing Washer	2	ø5,5xø18x2,3t	SPC	
25	052-107-12	Bearing	1	6304ZZC3		
26	060-227-14	Bearing Housing	1		FC	
27	025-243-17	Mechanical Seal	1	H-20T	SiC	Oil (ISO VG32 400ml)
28	143-070-10	Cross-Recessed Pan Screw	2	M5x6	SWRM	
29	030-122-15	Seal Stopper	1	H-20	SPC	
30	122-072-17	O-Ring	1	P-140	NBR	*
31	035-112-17	Oil Plug	1	M8x12	SUS304	
32	121-248-13	Packing	1	ø8,2xø13,5x2t	PE-Sheet	*
33	020-610-14	Pump Casing	1	8-BEH2	FC	
34	046-107-13	Air Release Valve	1	PT-½"	Nylon	
35	026-107-24	Oil Seal	1	DD-32488	NBR	
36	040-104-25	Impeller Shirn		ø18,2xø29x0,3t	SUS304	
37	021-732-16	Impeller	1	50Hz	FC	
37	021-733-17	Impeller	1	60Hz	FC	
38	142-165-10	Spring Washer	1	M12	SUS304	
39	141-118-15	Hex. Cap Nut	1	M12(H=15,5)	SUS304	
40	120-145-16	Suction Cover Packing		ø112xø129x0,3t(6)	PE-Sheet	
41	022-570-17	Suction Cover	1	8-CE2	FCD	
42	142-163-18	Spring Washer	3	M8	SUS304	
43	140-051-16	Hex. Bolt	3	8x15	SUS304	
44	023-331-17	Strainer Stand	1	No. 1	FCD	
45	142-163-18	Spring Washer	3	M8	SUS304	
46	140-055-10	Hex. Bolt	3	M8x25	SUS304	
47	048-104-16	Screwed Flange	1	50mm (P.C.140)	FC	
48	140-099-16	Hex. Bolt	2	M12x40	SUS304	
49	121-137-18	Packing	1	MBT (P.C. 140)	NR	*
50	037-117-18	Discharge Bend	1	50mm (122-16)	FC	
51	140-078-19	Hex. Bolt	4	M10x35	SUS304	
52	121-142-16	Packing	1	90mm <sup>2</sup> (P.C. 98)	NBR	*
	173-336-10	Packing O-Ring Set	1set	(*)		

# Exploded View 50C2.75



50C2.75

# Dimensional Drawing 50C2.75

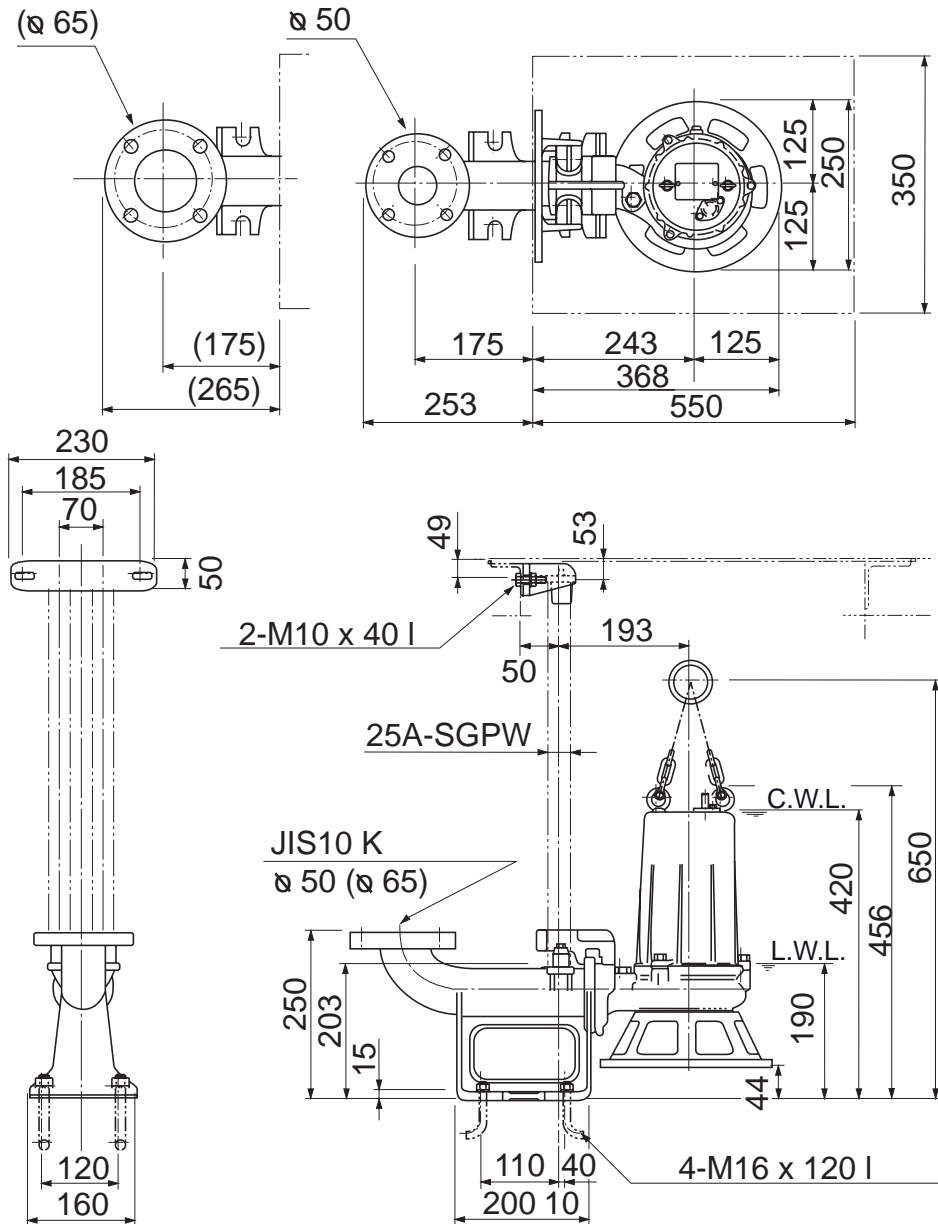


**50C2.75**

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

# Dimensional Drawing TOS50C2.75

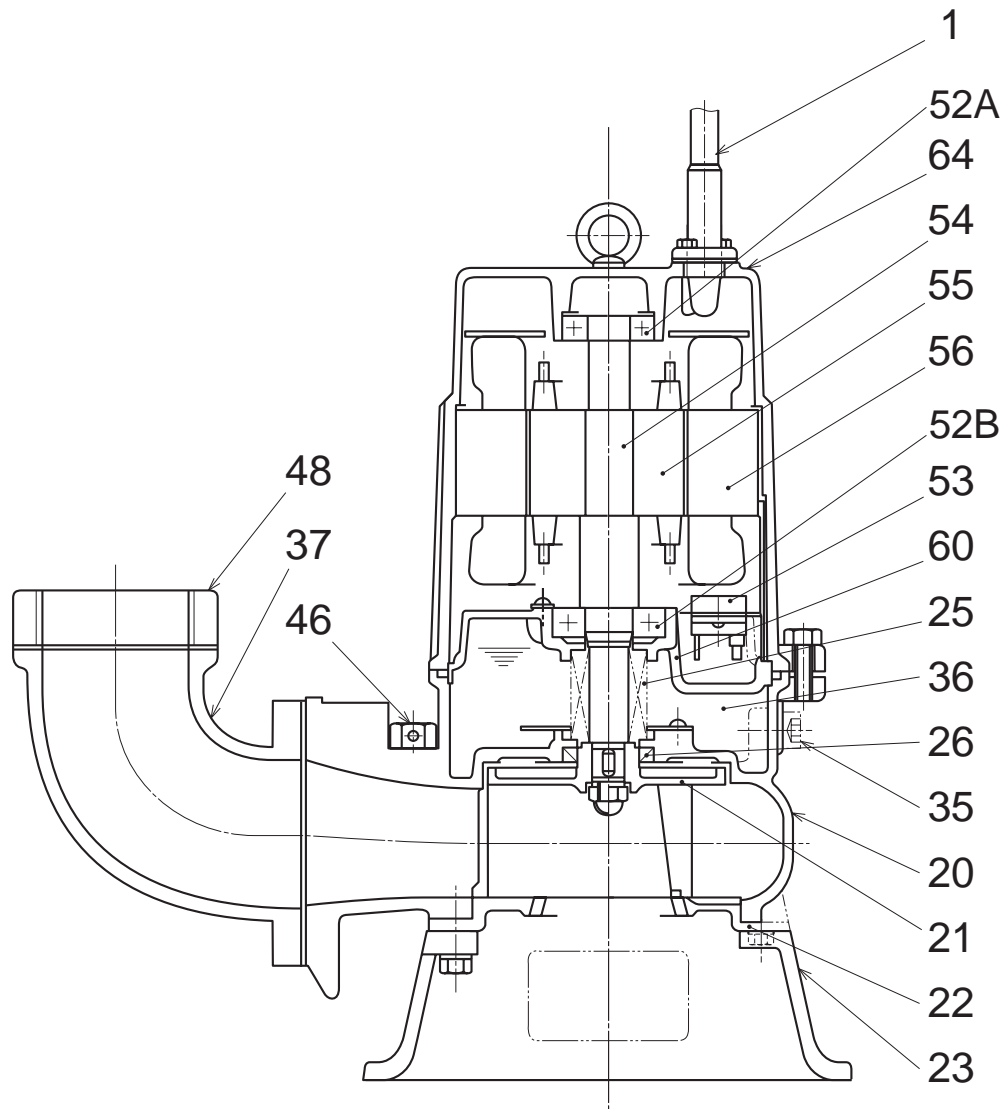
Dimensions in mm



**50C2.75**

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

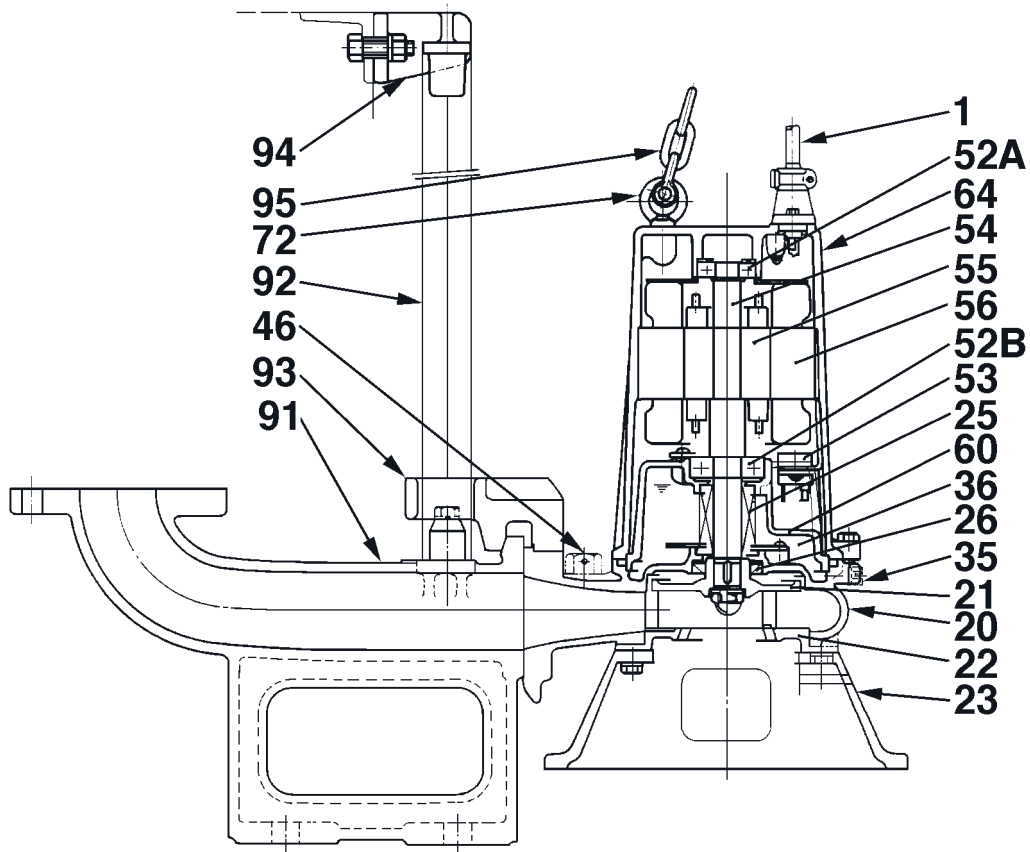
# Sectional Drawing 50C2.75



**50C2.75**

No.	Description	Qty.	Remarks	No.	Description	Qty.	Remarks
1	Cabtyre Cable	1	H07RN-F	53	Motor Protector	1	
20	Pump Casing	1	FC200 (EN-GJL-200)	54	Shaft	1	SUS403 (EN-X6Cr13)
21	Impeller	1	FC200 (EN-GJL-200)+Tungsten Carbide	55	Rotor	1	
22	Suction Cover	1	FCD700 (EN-GJS-700-2)	56	Stator Complete	1	
23	Stand	1	Iron Casting FCMB	60	Bearing Housing	1	FC200 (EN-GJL-200)
25	Mechanical Seal	1	H-20A	64	Motor Frame	1	FC200 (EN-GJL-200)
26	Oil Seal	1	DD-32488				
35	Oil Plug	1	SUS304 (EN-X5CrNi18-10)				
36	Lubricant		Turbine Oil (ISO VG32)				
37	Discharge Bend	1	FC200 (EN-GJL-200)				
46	Air Release Valve	1	Brass Rod				
48	Screw Flange	1	FC200 (EN-GJL-200)				
52A	Upper Bearing	1	6203ZZC3				
52B	Lower Bearing	1	6304ZZC3				

# Sectional Drawing TOS50C2.75



50C2.75 (A-00288-4)

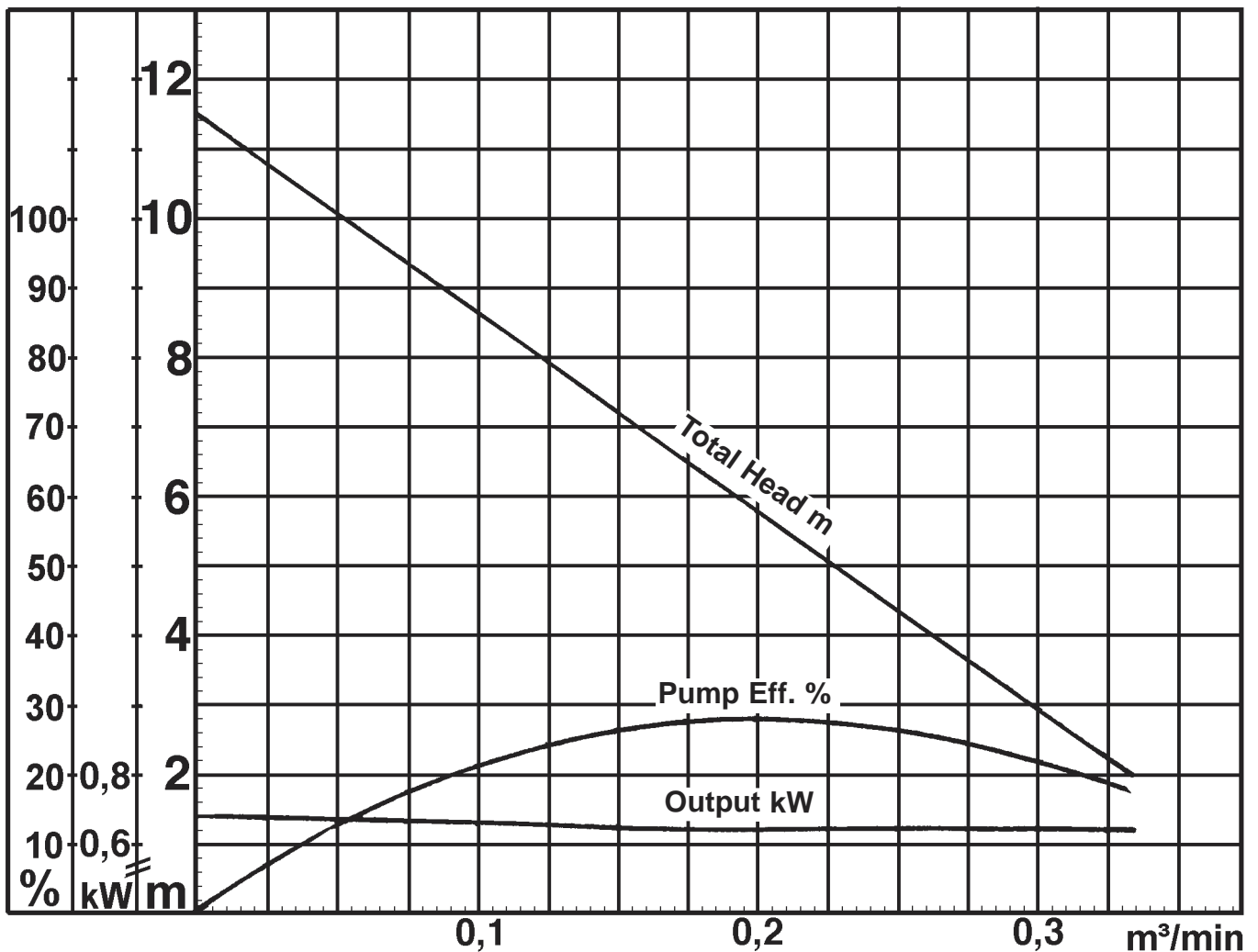
No.	Description	Qty.	Remarks	No.	Description	Qty.	Remarks
1	Cabtyre Cable	1	H07RN-F	55	Rotor	1	
20	Pump Casing	1	FC200 (EN-GJL-200)	56	Stator Complete	1	
21	Impeller	1	FC200 (EN-GJL-200)+Tungsten Carbide	60	Bearing Housing	1	FC200 (EN-GJL-200)
22	Suction Cover	1	FCD700 (EN-GJS-700-2)	64	Motor Frame	1	FC200 (EN-GJL-200)
23	Stand	1	Iron Casting FCMB	72	Lifting Eye Bolt	2	SS400 (DIN 1.0040)
25	Mechanical Seal	1	H-20A	91	Duck Foot Bend	1	FC200 (EN-GJL-200)
26	Oil Seal	1	DD-32488	92	Guide Pipe (Option)	2	Galvanized Steel Pipe
35	Oil Plug	1	SUS304 (EN-X5CrNi18-10)	93	Guide Hook	1	FCD450 (EN-GJS-450-10)
36	Lubricant		Turbine Oil (ISO VG32)	94	Guide Support	1	FCD450 (EN-GJS-450-10)
46	Air Release Valve	1	Brass Rod	95	Lifting Chain	1	SS400 (DIN 1.0040)
52A	Upper Bearing	1	6203ZZC3				
52B	Lower Bearing	1	6304ZZC3				
53	Motor Protector	1					
54	Shaft	1	SUS403 (EN-X6Cr13)				



# Pump Performance Curve

## 50C2.75

Discharge Bore	50 mm
Total Head	3,0 m
Capacity	0,30 m <sup>3</sup> /min
Motor Output	0,75 kW
Motor Input	1,10 kW
Phase	3
Voltage	400 V
Frequency	50 Hz
Rated Current	2,10 A
Starting Current	9,90 A
Poles	2
Revolution	S.S. 2850 r.p.m.
Starting Method	direct on line
Insulation Class	E



50C2.75 (4103705-2)