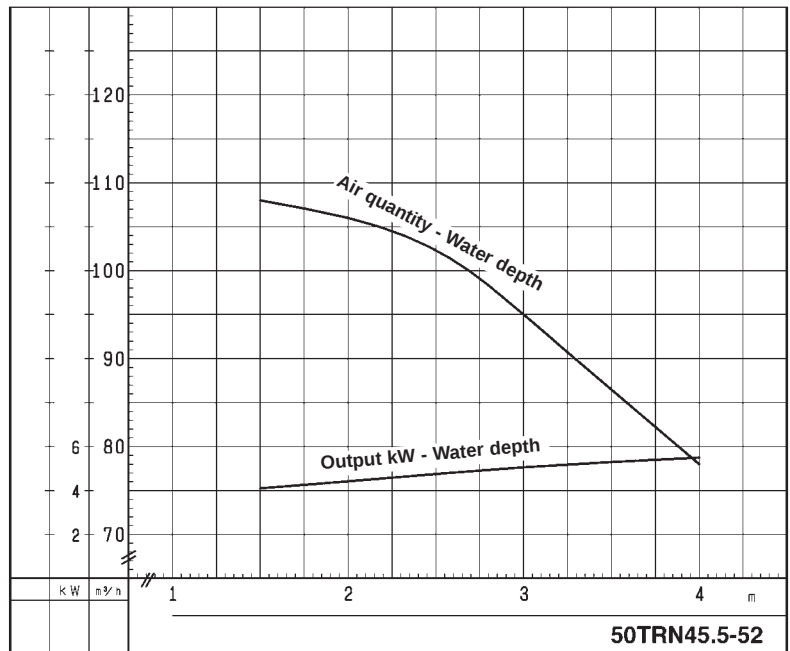
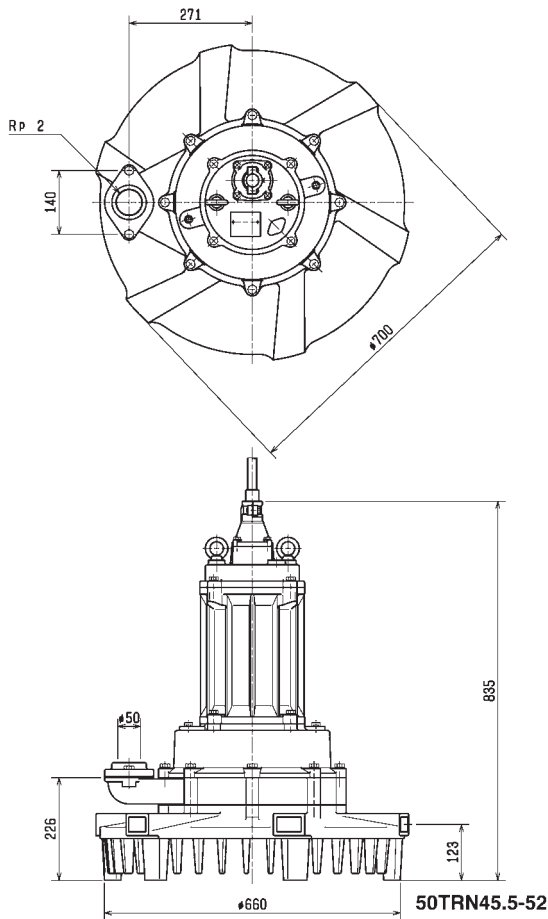


Data Sheet 50TRN45.5-52



Classification

Electric submersible aerator
Protection class IP68
Depth of submersion:
max. 4m (self-aspiring), max. 10m (with blower)
Open type impeller
Purpose: aeration of activated sludge
(municipal sewage only)

Electric Motor

Dry-type submersible induction motor,
Insulation class F, 4 poles, 1443 r.p.m.
Direct on line start
Voltage: 400V, 50Hz, 3-phase
Power input: 6,92kW
Power output: 5,50kW
Nominal current: 12,1A
Start current: 63,0A

Electric Cable

10m H07RN-F 4Cx2,5mm²

Motor Protection

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

Weight

170 kg (dry weight of the pump without cable)

Air inlet

50 mm screwed-in flange

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:	SCS1 (DIN 1.4008)
Suction Cover:	SCS1 (DIN 1.4008)
Middle Plate:	SUS410 (EN-X10Cr13)
Guide vane:	FC200 (EN-GJL-200)
Air passage:	FC200 (EN-GJL-200)
Bearing housing:	FC150 (EN-GJL-150)
Shaft:	SUS420J2 (EN-X30Cr13)

Noise level

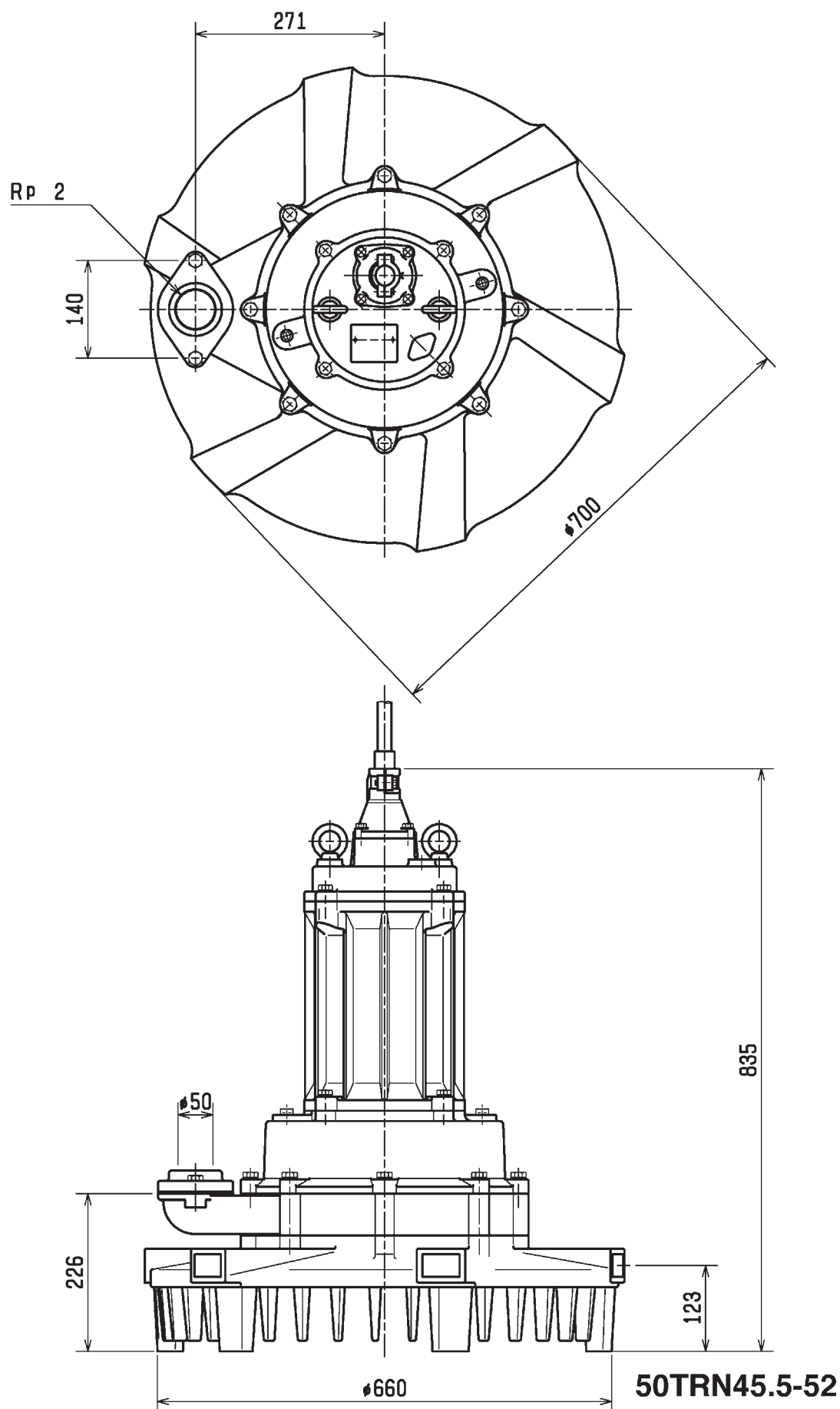
70 d-BA, under following conditions:
water depth: 4,0m

Silencer is set 1,6m above ground level. Microphone for measurement is placed at a distance of 1m from the silencer and 1,6m above ground level.

Lifting chain (not included)

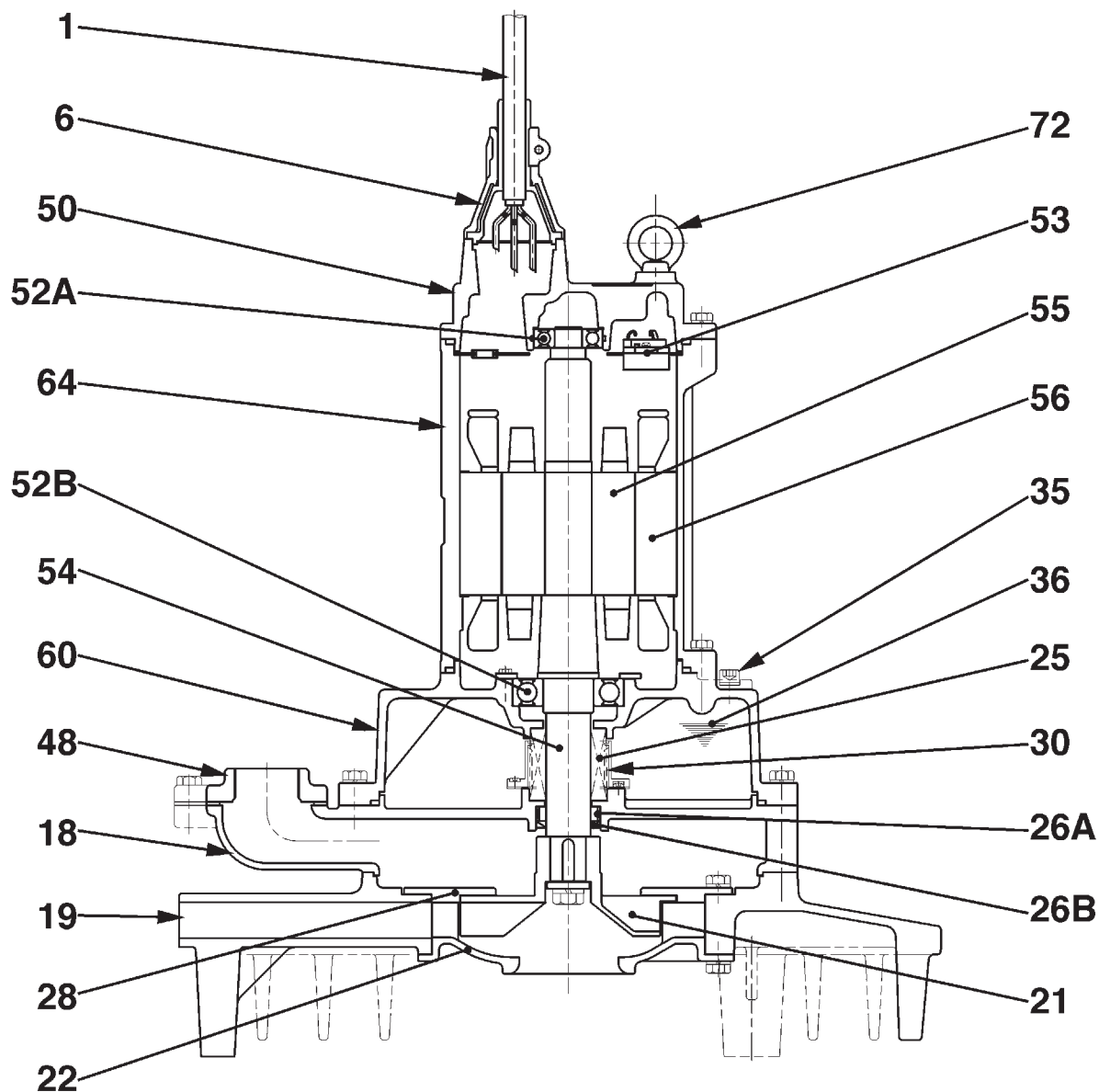
Straight chain ø9mm (760kg), shackle ø10mm (400kg)
Sling chain ø9mmx7Lx2 (760kg), shackle ø10mm (400kg)

Dimensional Drawing 50TRN45.5-52



Sectional Drawing

50TRN45.5-52



50TRN45.5-52

No.	Description	Qty.	Remarks	No.	Description	Qty.	Remarks
1	Cabtyre Cable	1	H07RN-F	50	Motor Bracket	1	FC200 (EN-GJL-200)
6	Stuffing Box	1	FC150 (EN-GJL-150)	52A	Upper Bearing	1	6305ZZC3
18	Air Passage	1	FC200 (EN-GJL-200)	52B	Lower Bearing	1	6309ZZC3
19	Guide Vane	1	FC200 (EN-GJL-200)	53	Motor Protector	1	
21	Impeller	1	SCS1 (DIN GX12Cr14)	54	Shaft	1	SUS420J2 (EN X30Cr13)
22	Suction Cover	1	SCS1 (DIN GX12Cr14)	55	Rotor	1	
25	Mechanical Seal	1	H-40	56	Stator Complete	1	
26A	Distance Piece	1	Carbon Steel Pipe	60	Bearing Housing	1	FC150 (EN-GJL-150)
26B	Oil Seal	1	VC40586	64	Motor Frame	1	FC200 (EN-GJL-200)
28	Middle Plate	1	SUS410 (EN-X10Cr13)	72	Lifting Eye Bolt	2	SUS304 (EN-X5CrNi18-10)
30	Oil Lifter	1	Plastic				
35	Oil Plug	2	SUS304 (EN-X5CrNi18-10)				
36	Lubricant		Turbine Oil (ISO VG32)				
48	Screwed Flange	1	FC200 (EN-GJL-200)				

Aerator Performance Curve

50TRN45.5-52

Air Inlet Bore	50 mm
Air Quantity	78,0 Nm³/h
Water Depth	4,0 mAq
Max. Water Depth	4,0 mAq
Motor Output	5,50 kW
Motor Input	6,92 kW
Phase	3
Voltage	400 V
Frequency	50 Hz
Rated Current	12,1 A
Starting Current	63,0 A
Poles	4
Revolution	S.S. 1443 r.p.m.
Starting Method	d.o.l.
Insulation Class	F

