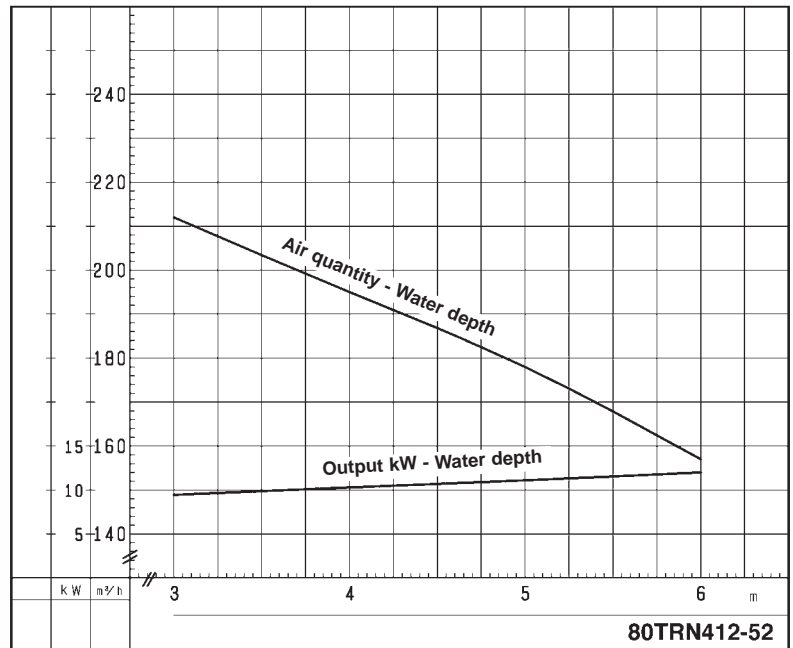
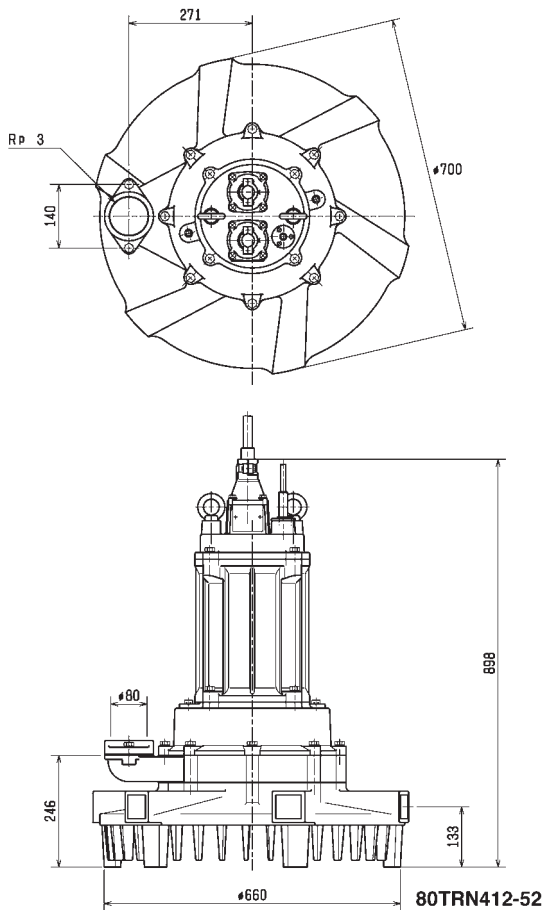


Data Sheet 80TRN412-52



Classification

Electric submersible aerator
 Protection class IP68
 Depth of submersion:
 max. 6m (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, 1445 r.p.m.
 Star-delta-start

Voltage:	400V, 50Hz, 3-phase
Power input:	14,8kW
Power output:	12,0kW
Nominal current:	25,7A
Start current:	128,0A

Electric Cable

10m H07RN-F 4Cx2,5mm²
 10m H07RN-F 3Cx2,5mm²
 10m 2PNCT 2Cx1,25mm²

Motor Protection

Miniature protector in motor windings
 (snap-action bi-metal device)

Weight

200 kg (dry weight of the pump without cable)

Air inlet

80 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

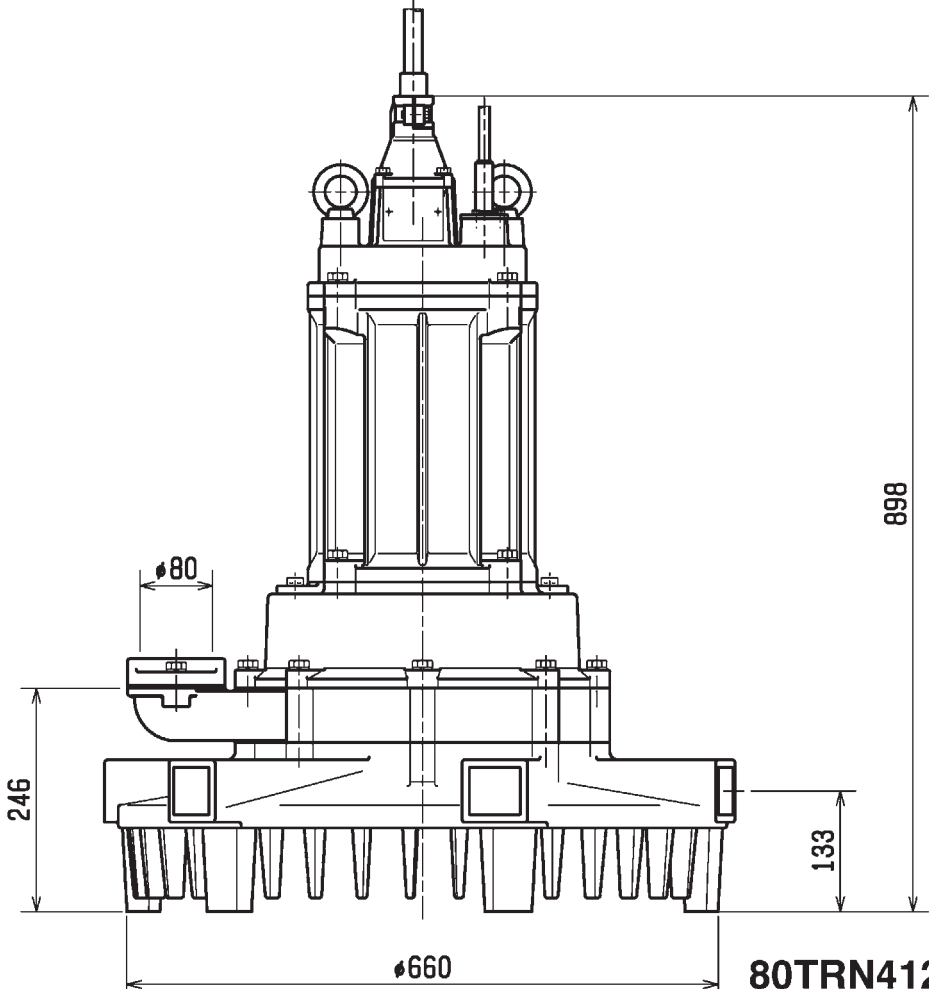
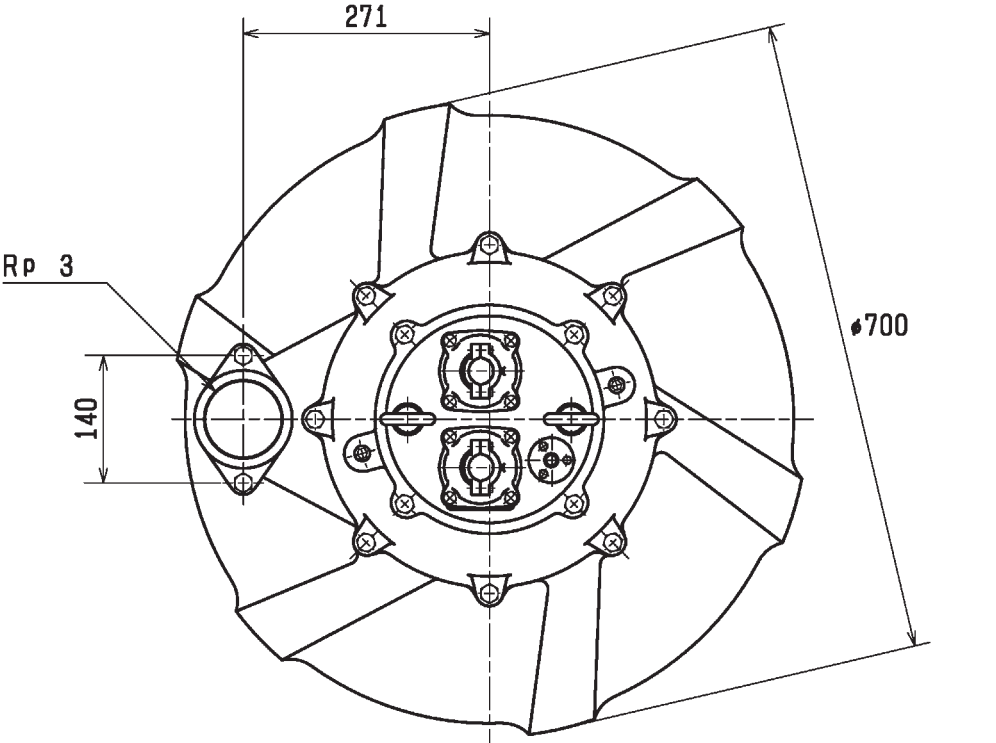
73 d-BA, under following conditions:
 water depth: 6m

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)

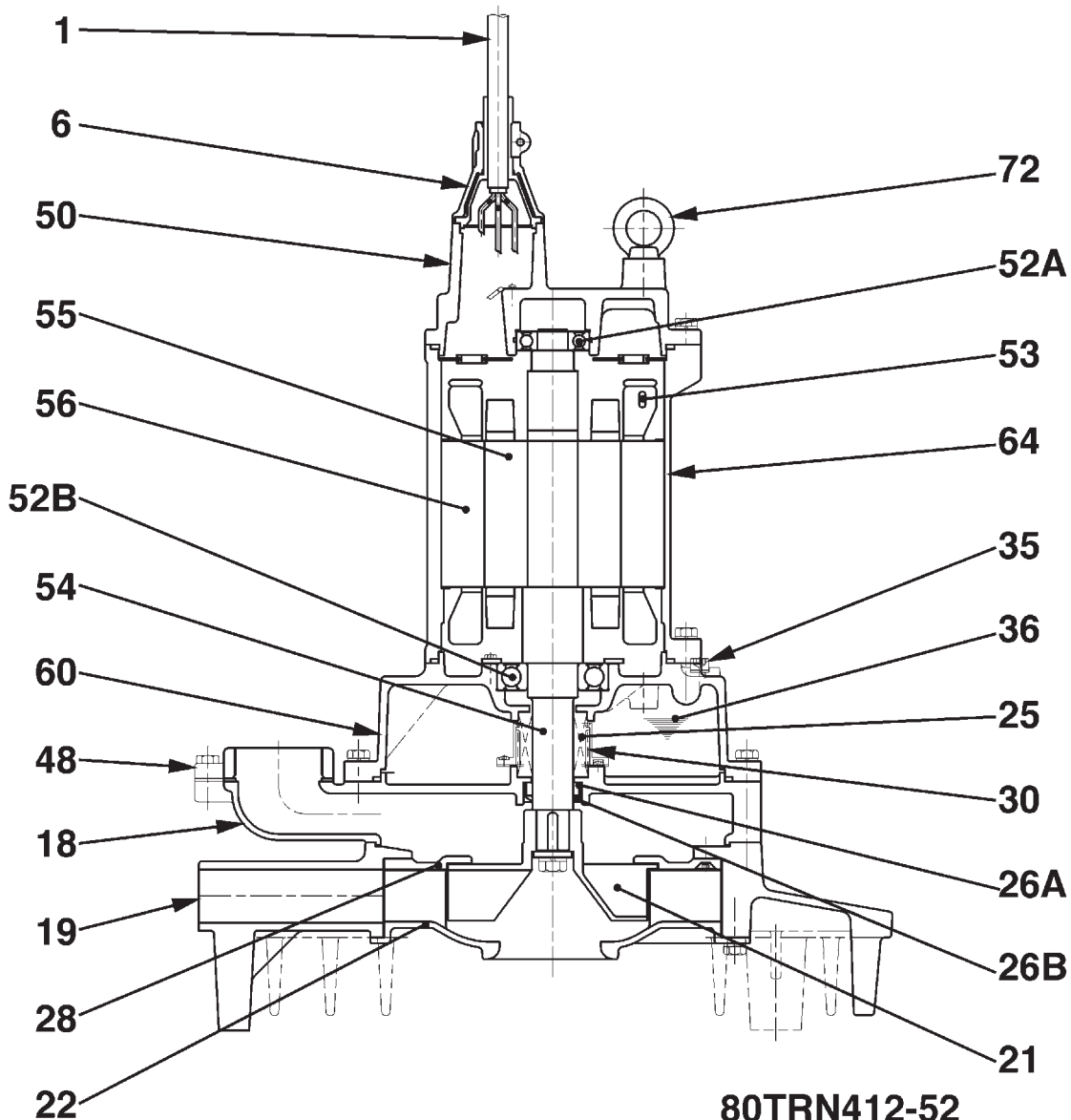
Straight chain ø9mm (760kg), shackle ø10mm (400kg)
 Sling chain ø9mmx7Lx2 (760kg), shackle ø10mm (400kg)

Dimensional Drawing 80TRN412-52



80TRN412-52

Sectional Drawing 80TRN412-52



80TRN412-52

No.	Description	Qty.	Remarks	No.	Description	Qty.	Remarks
1	Cabtyre Cable	3	H07RN-F	50	Motor Bracket	1	FC200 (EN-GJL-200)
6	Stuffing Box	2	FC150 (EN-GJL-150)	52A	Upper Bearing	1	6306ZZC3
18	Air Passage	1	FC200 (EN-GJL-200)	52B	Lower Bearing	1	6310ZZC3
19	Guide Vane	1	FC200 (EN-GJL-200)	53	Motor Protector	3	
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

80TRN412-52

Air Inlet Bore	80 mm
Air Quantity	157,0 Nm ³ /h
Water Depth	6,0 mAq
Max. Water Depth	6,0 mAq
Motor Output	12,0 kW
Motor Input	14,8 kW
Phase	3
Voltage	400 V
Frequency	50 Hz
Rated Current	25,7 A
Starting Current	128,0 A
Poles	4
Revolution	S.S. 1445 r.p.m.
Starting Method	star-delta
Insulation Class	F

