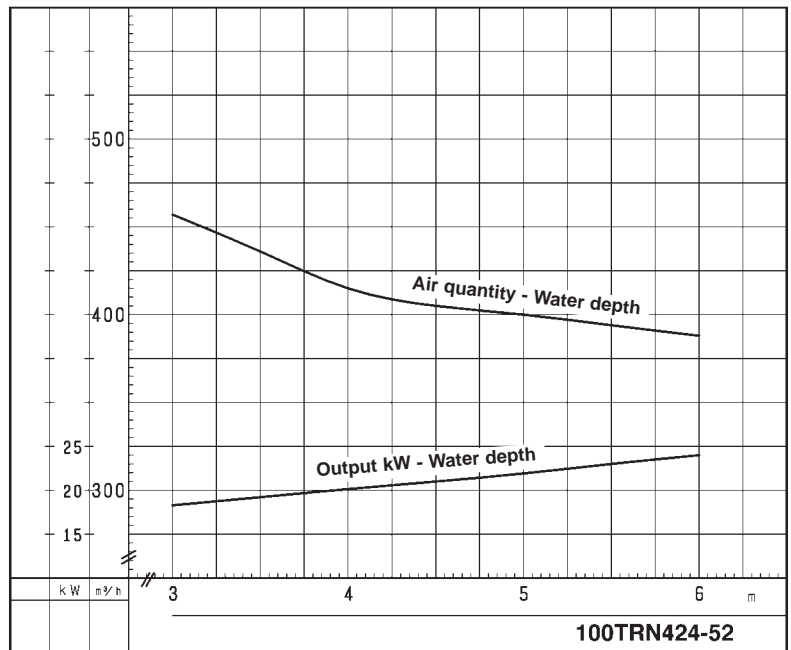
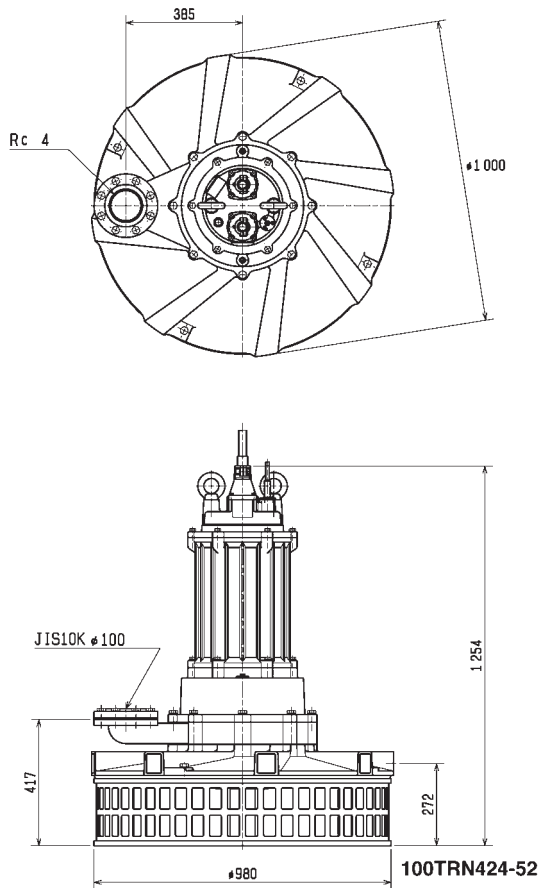


Data Sheet 100TRN424-52



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, 1465 r.p.m.
 Star-delta-start

Voltage:	400V, 50Hz, 3-phase
Power input:	28,8kW
Power output:	24,0kW
Nominal current:	48,0A
Start current:	311,0A

Electric Cable

20m H07RN-F 4Cx4mm²
 20m H07RN-F 3Cx4mm²
 20m 2PNCT 2Cx1,25mm²

Motor Protection

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

Weight

460 kg (dry weight of the pump without cable)

Air inlet

100 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:	SCS1 (DIN 1.4008)
Guide vane:	FC200 (EN-GJL-200)
Air passage:	FC200 (EN-GJL-200)
Bearing housing:	FC150 (EN-GJL-150)
Shaft:	SUS420J1 (EN-X20Cr13)

Noise level

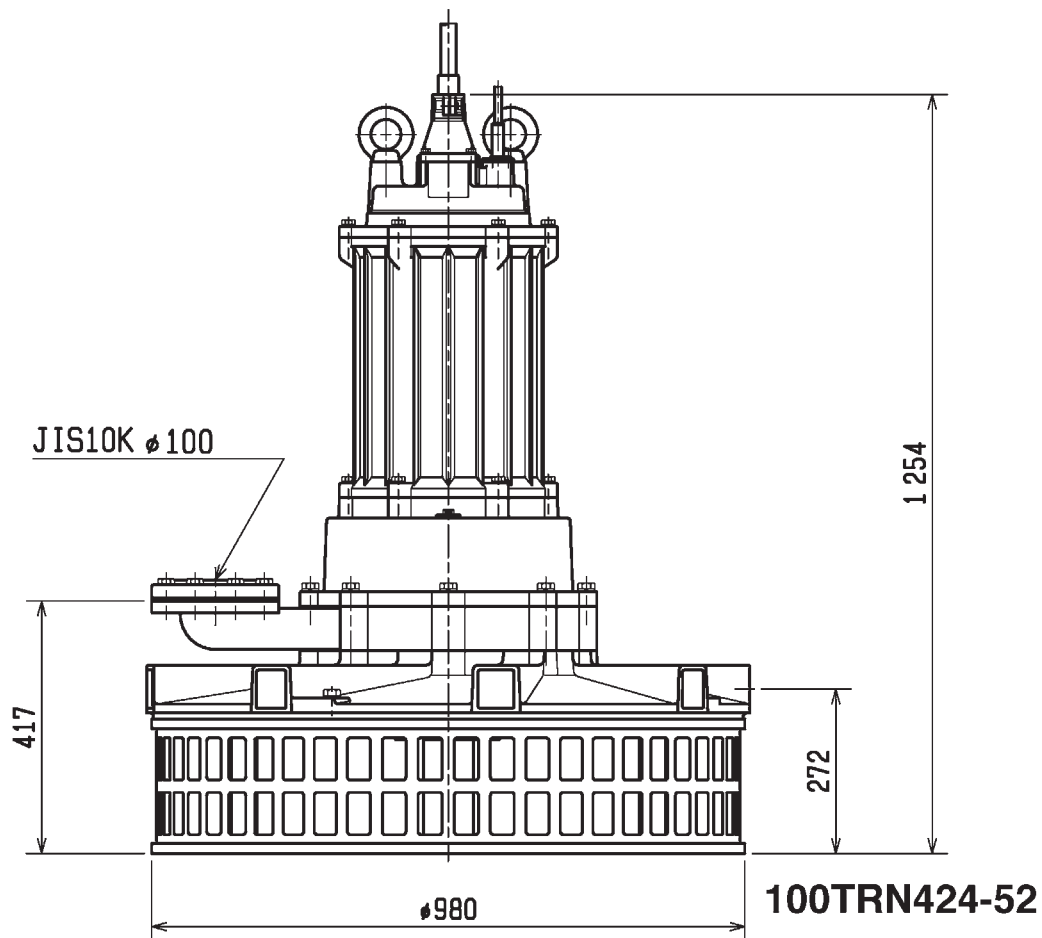
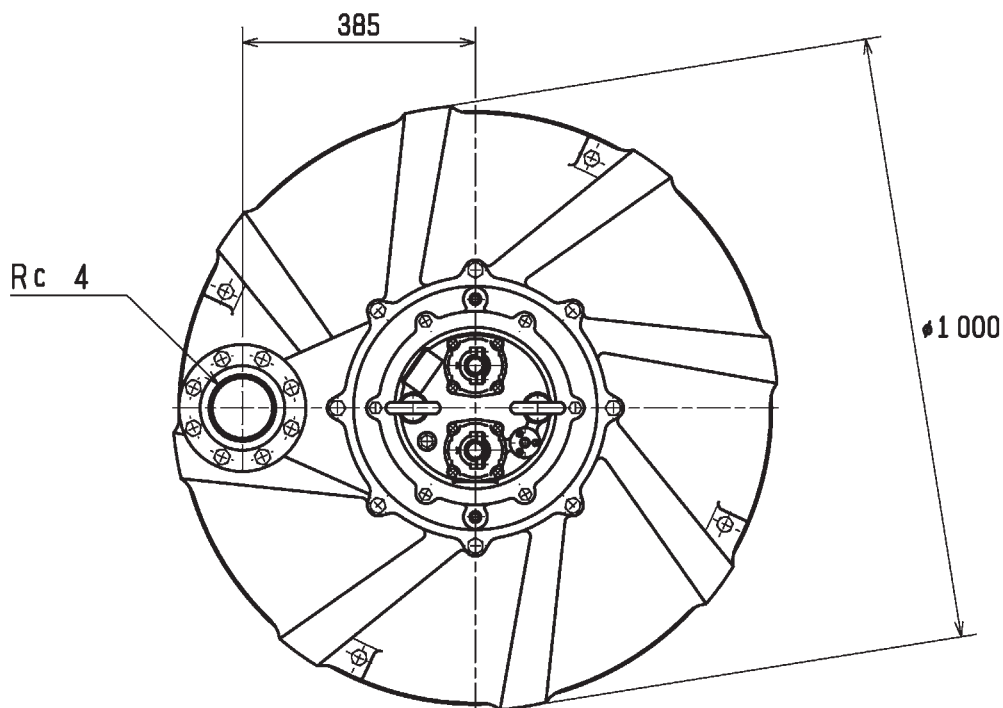
74 d-BA, under following conditions:
 water depth: 6m

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.

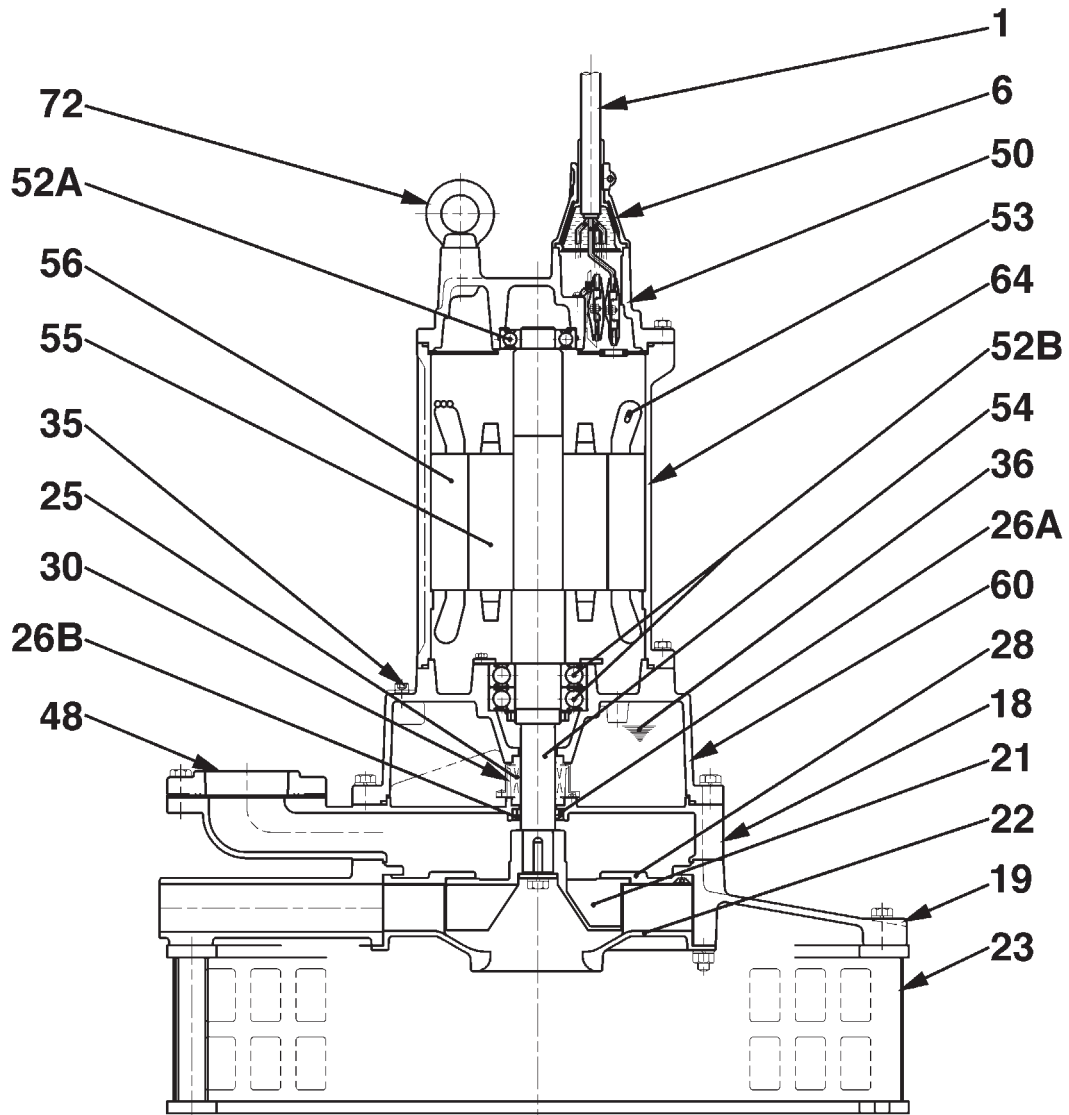
Lifting chain (not included)

Straight chain ø11mm (1140kg), shackle ø16mm (900kg)
 Sling chain ø11mmx8Lx2 (1140kg), shackle ø16mm (900kg)

Dimensional Drawing 100TRN424-52



Sectional Drawing 100TRN424-52



100TRN424-52

No.	Description	Qty.	Remarks	No.	Description	Qty.	Remarks
1	Cable	3	H07RN-F	48	Screwed Flange	1	FC200 (EN-GJL-200)
6	Stuffing Box	2	FC150 (EN-GJL-150)	50	Motor Bracket	1	FC200 (EN-GJL-200)
18	Air Passage	1	FC200 (EN-GJL-200)	52A	Upper Bearing	1	6309ZZC3
19	Guide Vane	1	FC200 (EN-GJL-200)	52B	Lower Bearing	1	6312ZZC3
21	Impeller	1	SCS1 (DIN GX12Cr14)	53	Motor Protector	3	
22	Suction Cover	1	SCS1 (DIN GX12Cr14)	54	Shaft	1	SUS420J1 (EN X20Cr13)
23	Strainer Stand	1	SS400 (DIN 1.0040) + SUS304 (EN X5CrNi18-10)	55	Rotor	1	
25	Mechanical Seal	1	H-45	56	Stator Complete	1	
26A	Distance Piece	1	Carbon Steel Pipe	60	Bearing Housing	1	FC150 (EN-GJL-150)
26B	Oil Seal	1	VC45686	64	Motor Frame	1	FC200 (EN-GJL-200)
28	Middle Plate	1	SCS1 (DIN GX12Cr14)	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)				

Aerator Performance Curve

100TRN424-52

Air Inlet Bore	100 mm
Air Quantity	388,0 Nm ³ /h
Water Depth	6,0 mAq
Max. Water Depth	6,0 mAq
Motor Output	24,0 kW
Motor Input	28,8 kW
Phase	3
Voltage	400 V
Frequency	50 Hz
Rated Current	48,0 A
Starting Current	311,0 A
Poles	4
Revolution	S.S. 1465 r.p.m.
Starting Method	star-delta
Insulation Class	F

