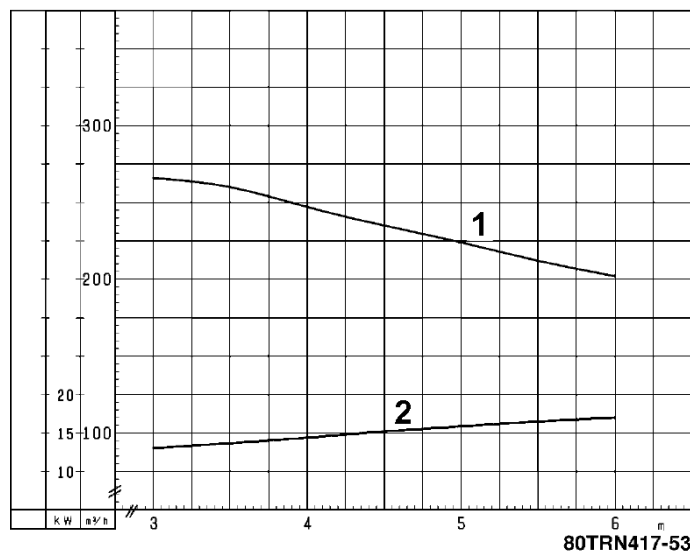
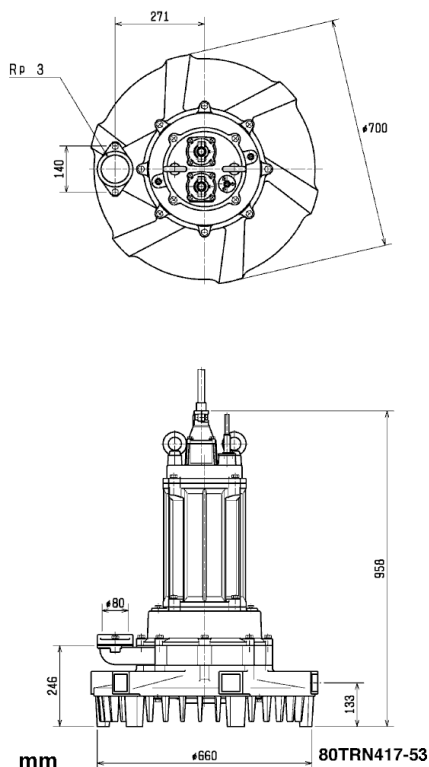




1 ... Air quantity - Water depth

2 ... Output kW - Water depth

## Specification

Electric submersible aerator  
 Degree of protection IP 68  
 Pressure resistance max. 6m (self-aspiring)  
 Open type / closed type impeller  
 Free passage  
 aeration of activated sludge  
 (municipal sewage, food industry)

## Electric motor

Dry-type submersible induction motor  
 Insulation class F, 4 poles, 1449 r.p.m.  
 Starting mode Star-delta-start  
 Rated voltage 400V, 50Hz, 3-phase  
 Rated power 17,0 kW  
 Power uptake 20,6 kW  
 Rated current 32,2 A  
 Start current 189,0 A

## Cable

20m NSSHÖU 4Cx2,5mm²  
 20m NSSHÖU 3Cx2,5mm²  
 20m 2PNCT 2Cx1,25mm²

## Motor Protection

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

## Weight

220 kg (dry weight of the pump only without cable)

## Air passage

3" Gewindeflansch

## Shaft seal

Double inside mechanical seal in oil bath

Primary seal

Silicon carbide on silicon carbide

Secondary seal

Ceramic on carbon

## 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           | SUS420J2 (EN-X30Cr13) |

## Noise level

72 d-BA under following conditions:  
 water depth 6,0 mAq

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)

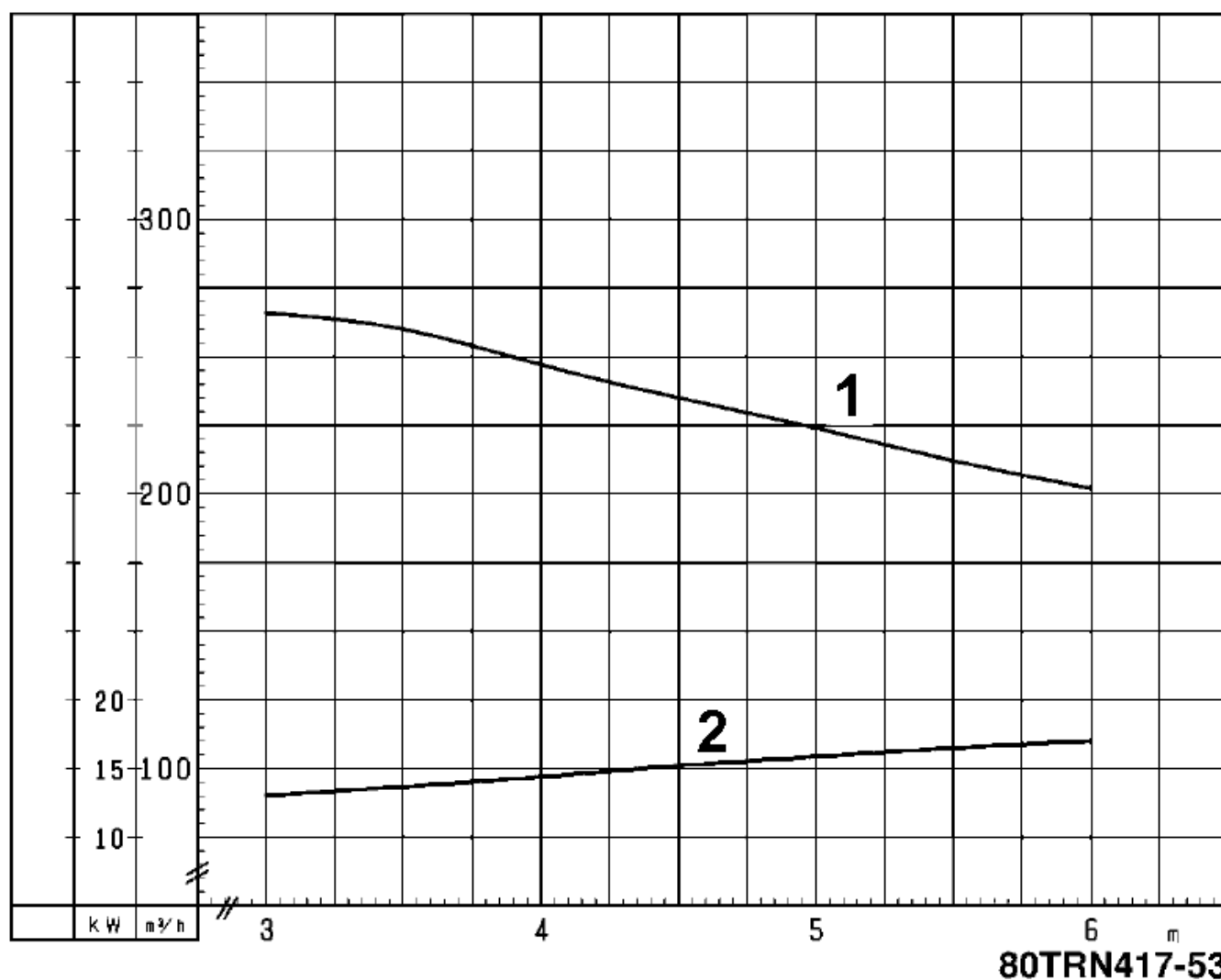
Straight chain ø9mm (760kg), shackle ø10mm (400kg)

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

# Performance curve

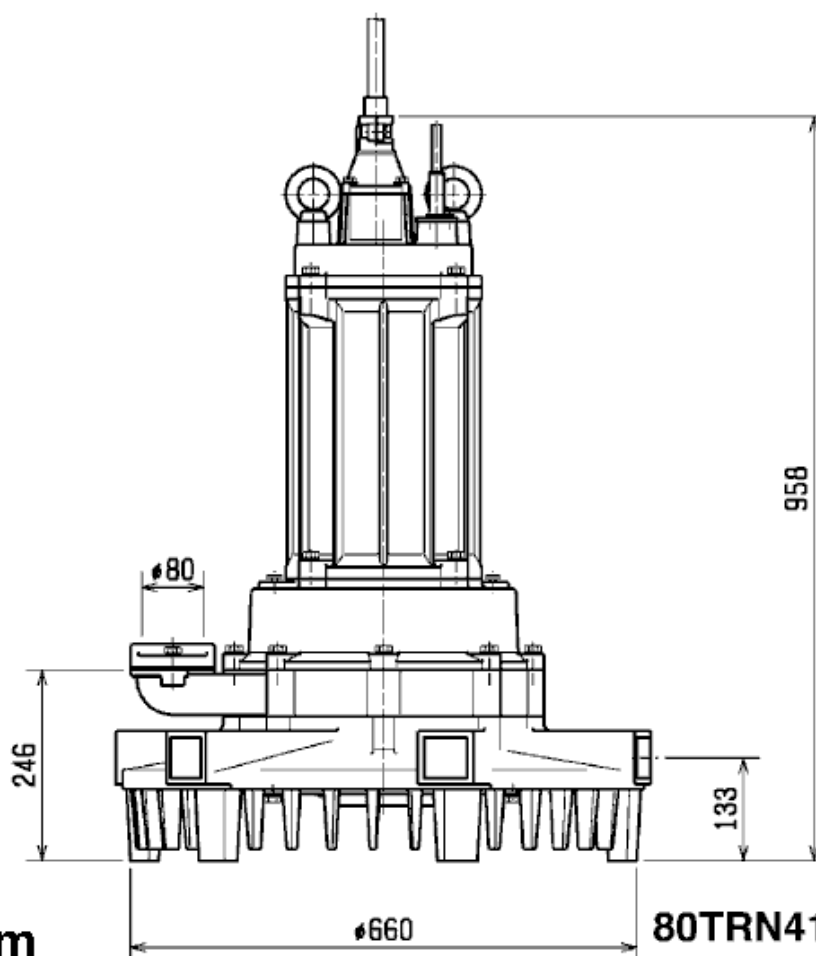
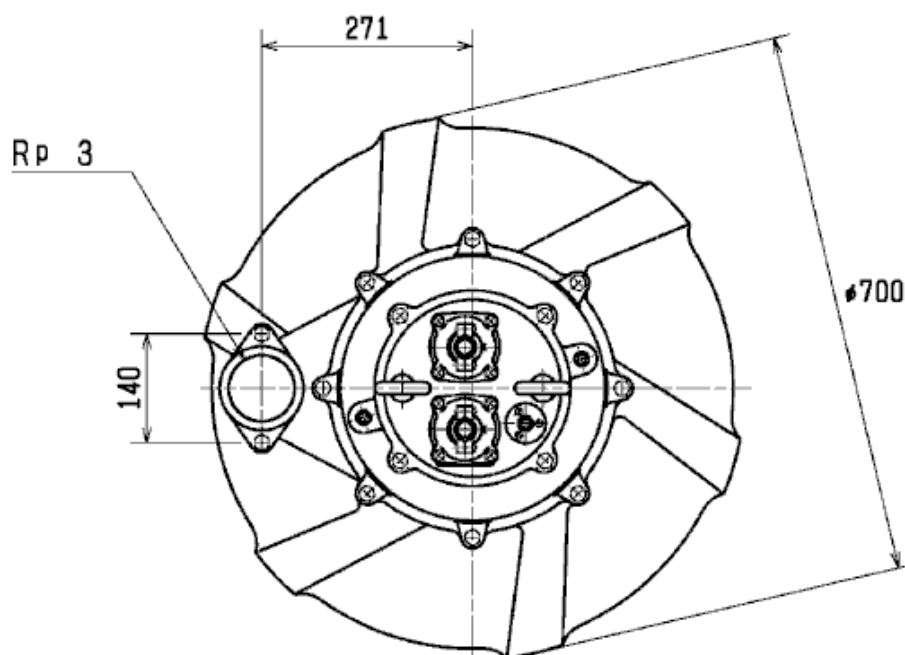
## 80TRN417-53

|                  |                  |
|------------------|------------------|
| Air passage      | 3"               |
| Air quantity     | 202,0 Nm³/h      |
| water depth      | 6,0 mAq          |
| max. water depth | 6,0 mAq          |
| Rated power      | 17,0 kW          |
| Power input      | 20,6 kW          |
| Phases           | 3                |
| Voltages         | 400 V            |
| Frequency        | 50 Hz            |
| Rated current    | 32,2 A           |
| Starting current | 189,0 A          |
| Number of poles  | 4                |
| Speed            | 1449 U/min       |
| Starting mode    | Star-delta-start |
| Insulation class | F                |



# Dimensions

## 80TRN417-53



mm

CWL: Continuous running water level  
LWL: Lowest running water level

**TSURUMI PUMP**

Tsurumi (Europe) GmbH

2025-03-03

V.01.02.2025

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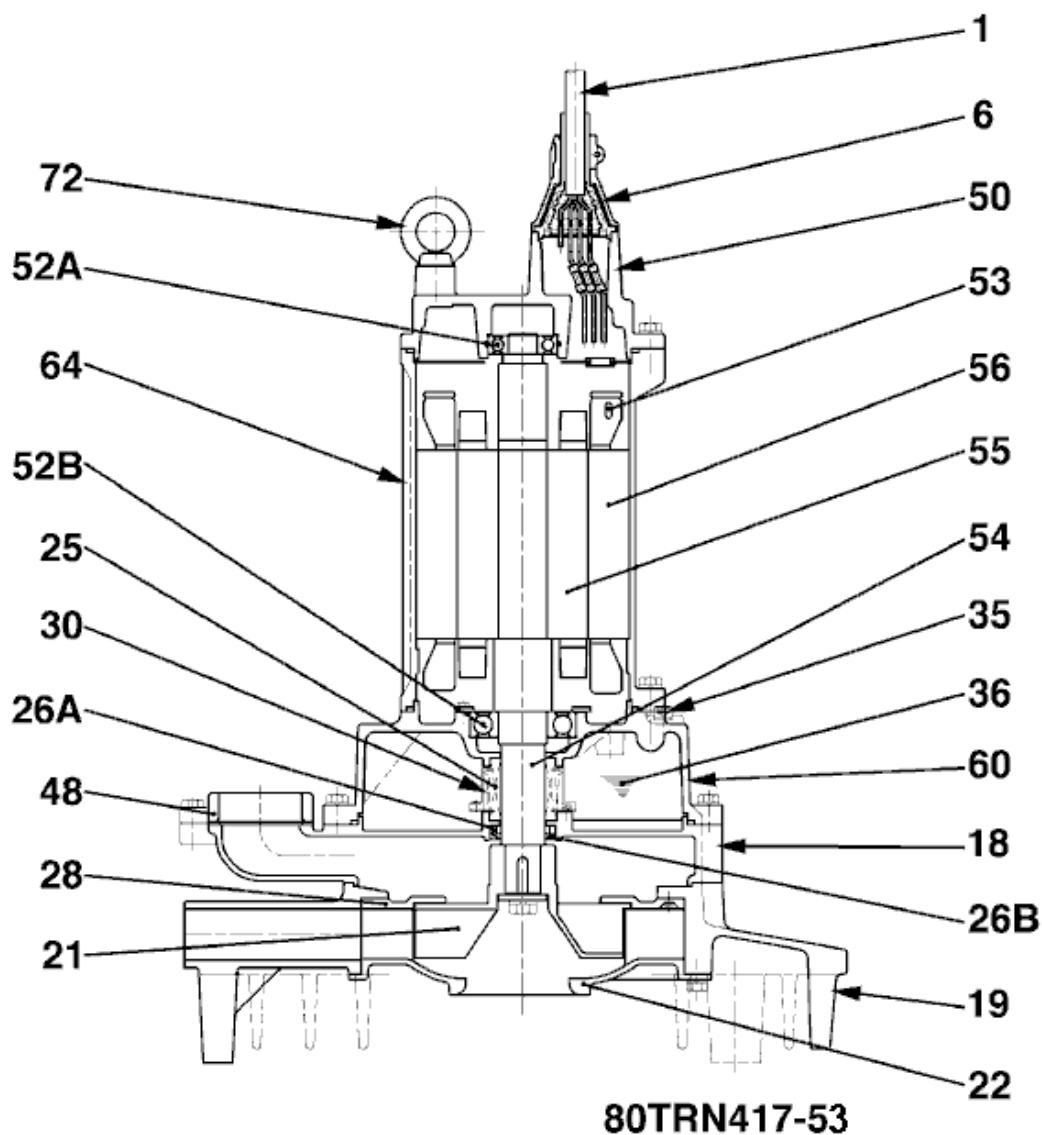
Fax: +49-211-417937-480

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www.tsurumi.eu

# Sectional drawing

## 80TRN417-53



| No. | Description           | Remark                  | No. | Description              | Remark                  |
|-----|-----------------------|-------------------------|-----|--------------------------|-------------------------|
| 1   | Connection cable (3x) | NSSHÖU                  | 52B | Lower bearing            | 6310ZZC3                |
| 6   | Cable entry (2x)      | FC150 (EN-GJL-150)      | 53  | Miniature protector (3x) | .                       |
| 18  | Air passage           | FC200 (EN-GJL-200)      | 54  | Shaft                    | SUS420J2 (EN-X30Cr13)   |
| 19  | Guide vane            | FC200 (EN-GJL-200)      | 55  | Rotor                    | .                       |
| 21  | Impeller              | SCS1 (DIN 1.4008)       | 56  | Stator                   | .                       |
| 22  | Suction cover         | SCS1 (DIN 1.4008)       | 60  | Bearing Housing          | FC150 (EN-GJL-150)      |
| 25  | Mechanical seal       | H-45X                   | 64  | Motor Frame              | FC200 (EN-GJL-200)      |
| 26A | Distance piece        | Carbon steel pipe       | 72  | Eye screw (2x)           | SUS304 (EN-X5CrNi18-10) |
| 26B | Oil seal              | VC45686                 |     |                          |                         |
| 28  | Middle Plate          | SCS1 (DIN 1.4008)       |     |                          |                         |
| 30  | Oil distributor       | Plastic                 |     |                          |                         |
| 35  | Oil screw (2x)        | SUS304 (EN-X5CrNi18-10) |     |                          |                         |
| 36  | Lubricant             | Turbine oil (ISO VG32)  |     |                          |                         |
| 48  | Screwed Flange        | FC200 (EN-GJL-200)      |     |                          |                         |
| 50  | Motor cover           | FC200 (EN-GJL-200)      |     |                          |                         |
| 52A | Upper bearing         | 6306ZZC3                |     |                          |                         |