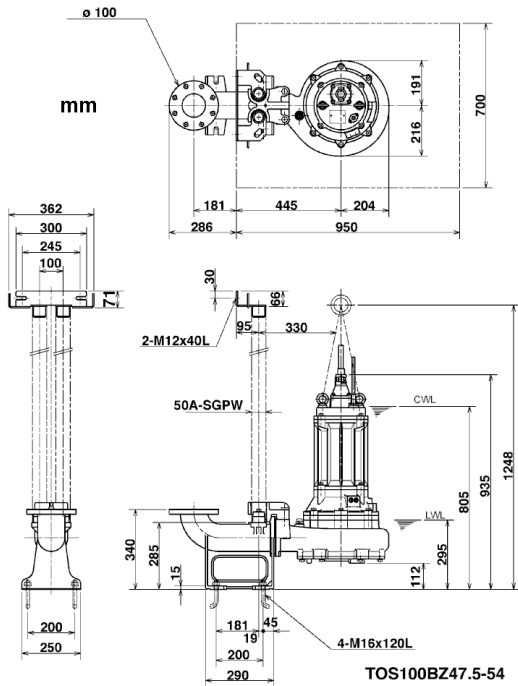
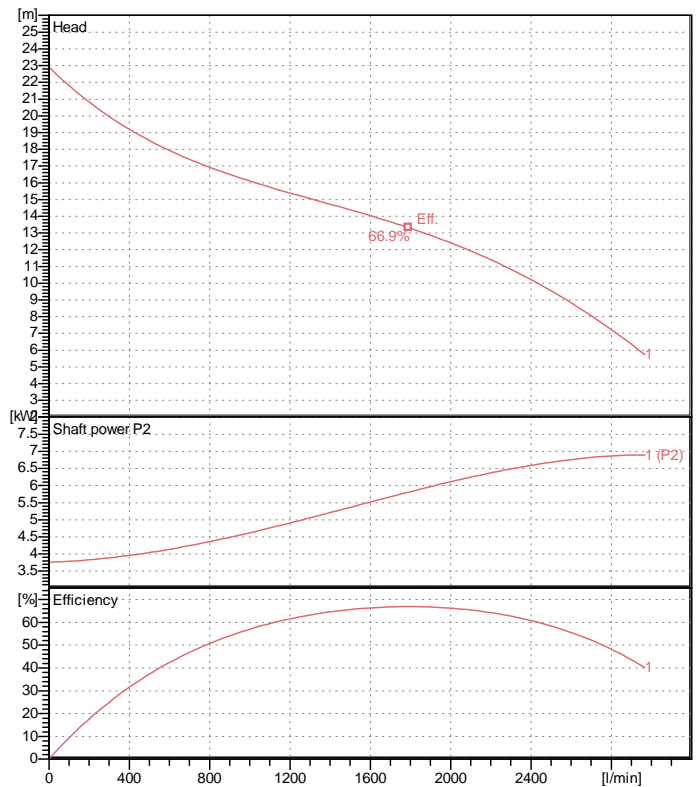


# Data sheet 100BZ47.5-54



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



## Specification

Electric submersible pump  
Degree of protection IP 68  
Depth of submersion max. 15 m  
Type of impeller Single channel impeller  
Free passage 80 mm  
Suitable for:  
sewage water

## Electric motor

Dry-type submersible induction motor  
Insulation class F 4 Poles 1455 1/min  
Starting mode Directly  
Rated voltage 400 V 50 Hz 3~  
Power uptake 9.16 kW  
Rated power 7.50 kW  
Rated current 15.9 A  
Start current 89.0 A

## Cable

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

## Motor Protection

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

## Shaft seal

Double inside 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)    |
| Pump casing   | FC200 (EN-GJL-200)    |
| Suction cover | FC200 (EN-GJL-200)    |
| Motor Frame   | FC150 (EN-GJL-150)    |
| Shaft         | SUS420J2 (EN-X30Cr13) |

## Discharge size

4" (100mm) JIS 10K screwed-in mating flange  
guide rail fitting optional

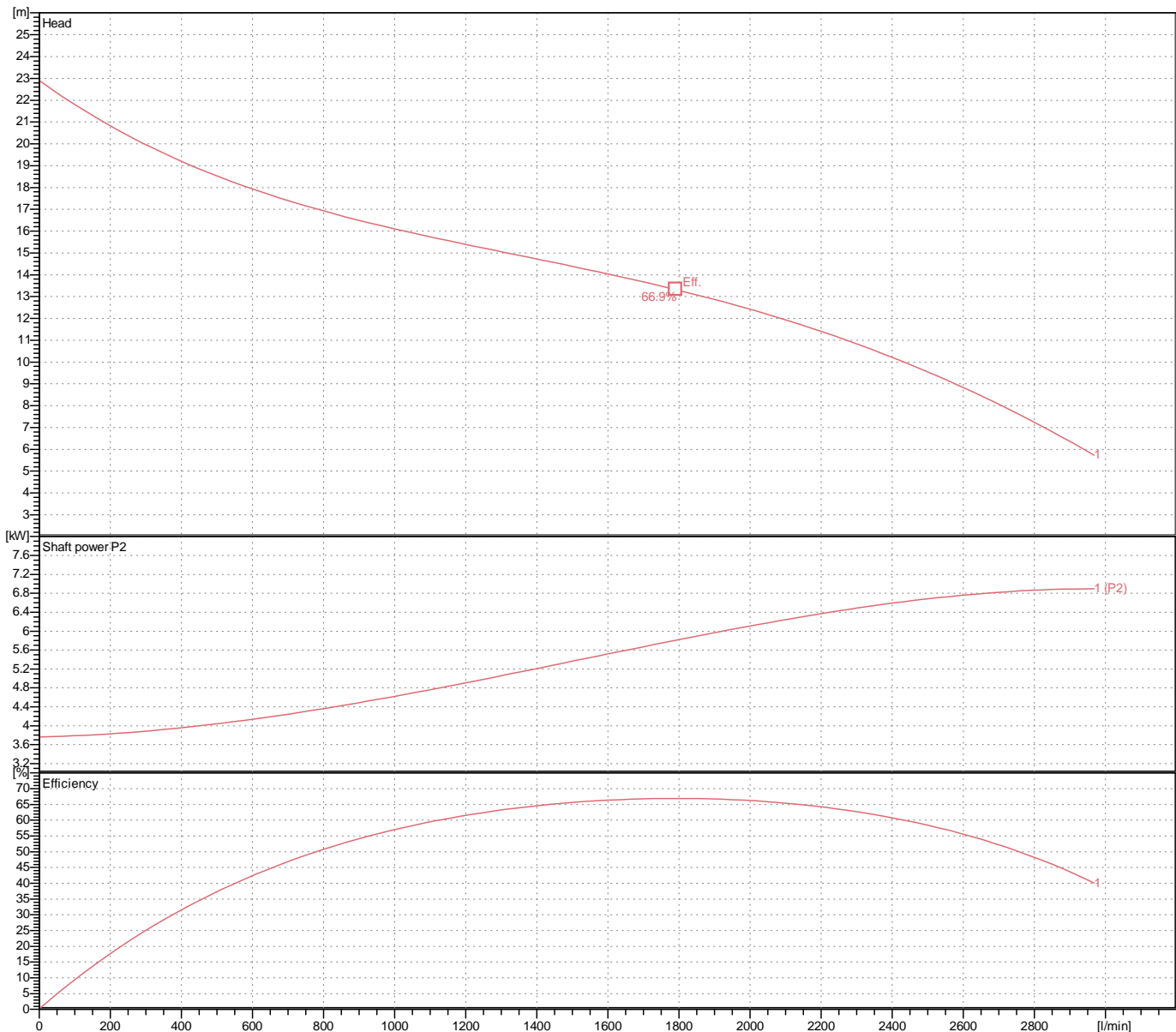
## Weight

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

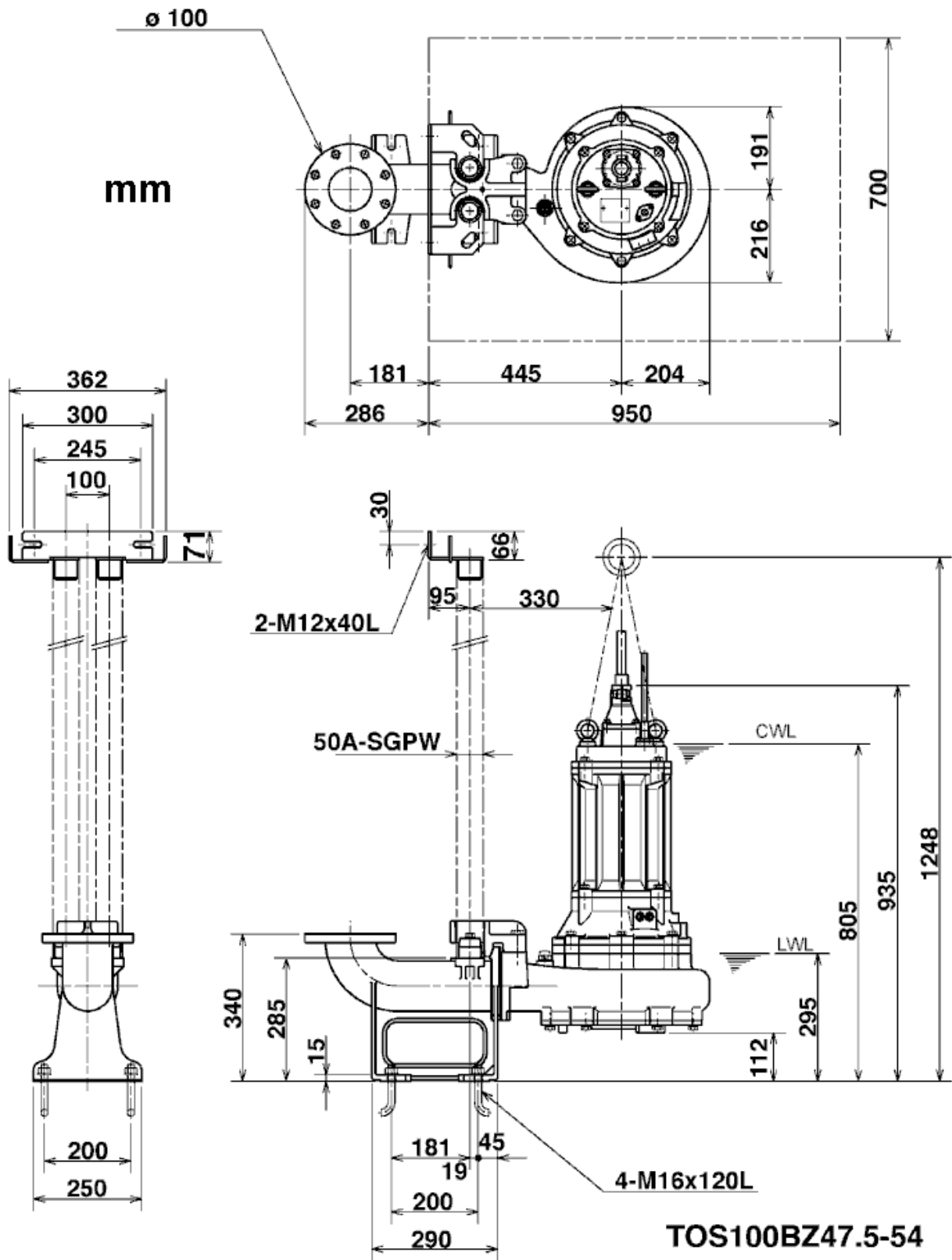
# Performance curve

## 100BZ47.5-54

|                  |              |
|------------------|--------------|
| Discharge port   | 4"           |
| Head             | 22.9 m       |
| Flow             | 2967.7 l/min |
| Rated power      | 7.50 kW      |
| Power input      | 9.16 kW      |
| Phases           | 3~           |
| Voltages         | 400 V        |
| Frequency        | 50 Hz        |
| Rated current    | 15.9 A       |
| Starting current | 89.04 A      |
| Number of poles  | 4            |
| Speed            | 1455 1/min   |
| Starting mode    | Directly     |
| Insulation class | F            |



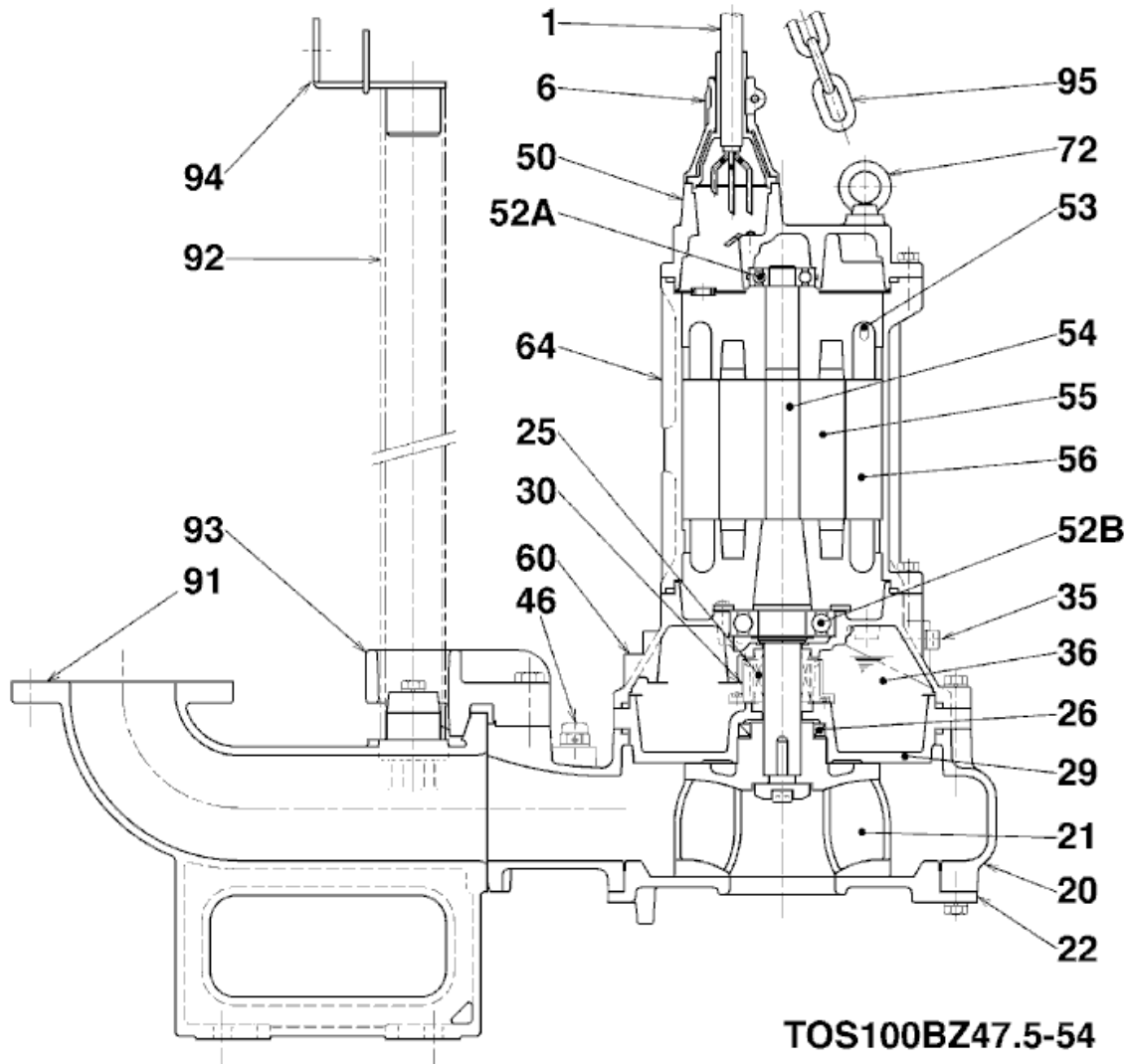
# Dimensions TOS100BZ47.5-54



**TOS100BZ47.5-54**

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

# Sectional drawing TOS100BZ47.5-54



| No. | Description              | Remark                      | No. | Description              | Remark                     |
|-----|--------------------------|-----------------------------|-----|--------------------------|----------------------------|
| 1   | Cable                    | H07RN-F 4Cx4mm <sup>2</sup> | 54  | Shaft                    | SUS420J2 (EN-X30Cr13)      |
| 6   | Cable entry              | FC200 (EN-GJL-200)          | 55  | Rotor                    | .                          |
| 20  | Pump casing              | FC200 (EN-GJL-200)          | 56  | Stator                   | .                          |
| 21  | Impeller                 | FC200 (EN-GJL-200)          | 60  | Bearing Housing          | FC150 (EN-GJL-150)         |
| 22  | Suction cover            | FC200 (EN-GJL-200)          | 64  | Motor Frame              | FC150 (EN-GJL-150)         |
| 25  | Mechanical seal          | H-35A                       | 72  | Eye screw (2x)           | Construction steel SS400   |
| 26  | Oil seal                 | TC608212                    | 91  | duck foot bend           | FC200 (EN-GJL-200)         |
| 29  | Oil casing               | FC200 (EN-GJL-200)          | 92  | Guide pipe (option) (2x) | Galvanized steel pipe SGPW |
| 30  | Oil distributor          | Plastic                     | 93  | guide support            | FCD45 (EN-GJS-450-10)      |
| 35  | Oil screw (2x)           | SUS304 (EN-X5CrNi18-10)     | 94  | Guide pipe holder        | SUS304 (EN-X5CrNi18-10)    |
| 36  | Lubricant                | Turbine oil (ISO VG32)      | 95  | Lifting chain            | Construction steel SS400   |
| 46  | Air vent valve           | Nylon                       |     |                          |                            |
| 50  | Motor cover              | FC200 (EN-GJL-200)          |     |                          |                            |
| 52A | Upper bearing            | 6306ZZC3                    |     |                          |                            |
| 52B | Lower bearing            | 6309ZZC3                    |     |                          |                            |
| 53  | Miniature protector (3x) | .                           |     |                          |                            |