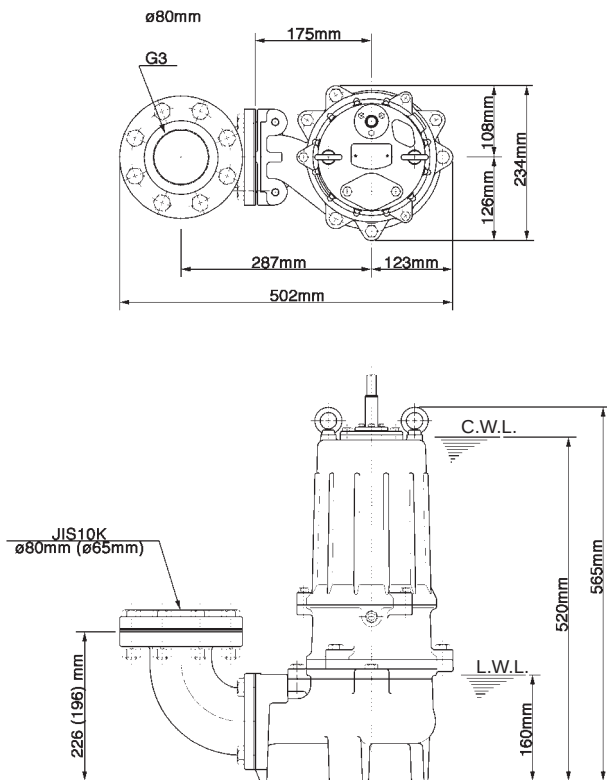
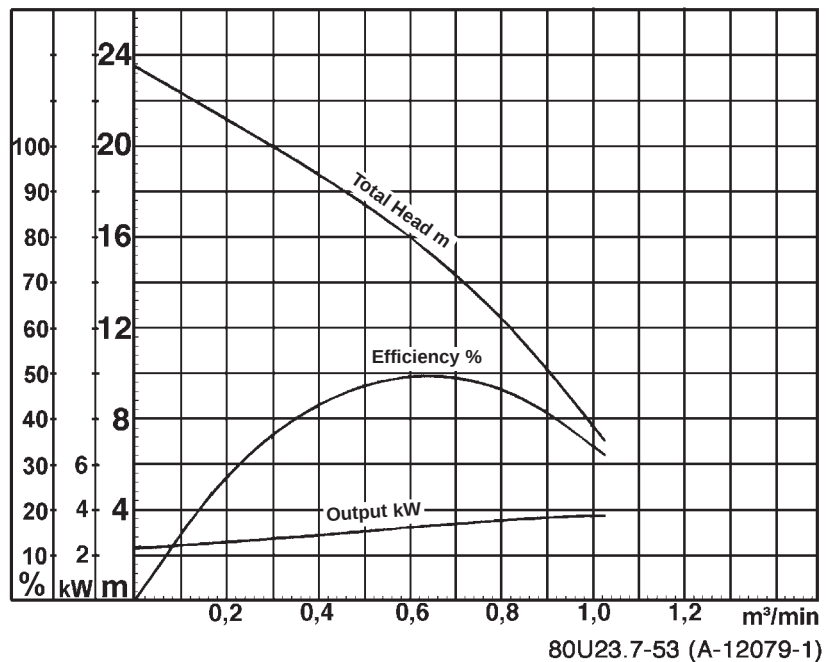


# Data Sheet 80U23.7-53



80U23.7-53 (A-12081-1)

C.W.L. = Continuous running water level  
L.W.L. = Lowest running water level



## Classification

Electric submersible pump  
Protection class IP68  
Depth of submersion max. 30m  
Vortex impeller  
Solid handling max. 56mm  
Suitable for waste water and liquid carrying waste and solid matters

## Electric Motor

Dry-type submersible induction motor,  
Insulation class F, 2 poles, 2850 r.p.m.  
Direct on line start  
Voltage: 400V, 50Hz, 3-phase  
Power input: 4,85kW  
Power output: 3,70kW  
Nominal current: 7,7A  
Start current: 58,0A

## Electric Cable

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

## Motor Protection

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

## Shaft Seal

Double mechanical seal in oil bath  
additional lubrication by oil lifting device  
Primary Seal:  
silicon carbide on silicon carbide  
Secondary Seal:  
ceramic on carbon

## Bearings

Shielded ball bearings, maintenance-free

## Materials

|              |                       |
|--------------|-----------------------|
| Impeller:    | FC200 (EN-GJL-200)    |
| Casing:      | FC200 (EN-GJL-200)    |
| Motor frame: | FC150 (EN-GJL-150)    |
| Shaft:       | SUS420J2 (EN-X30Cr13) |

## Discharge Connection

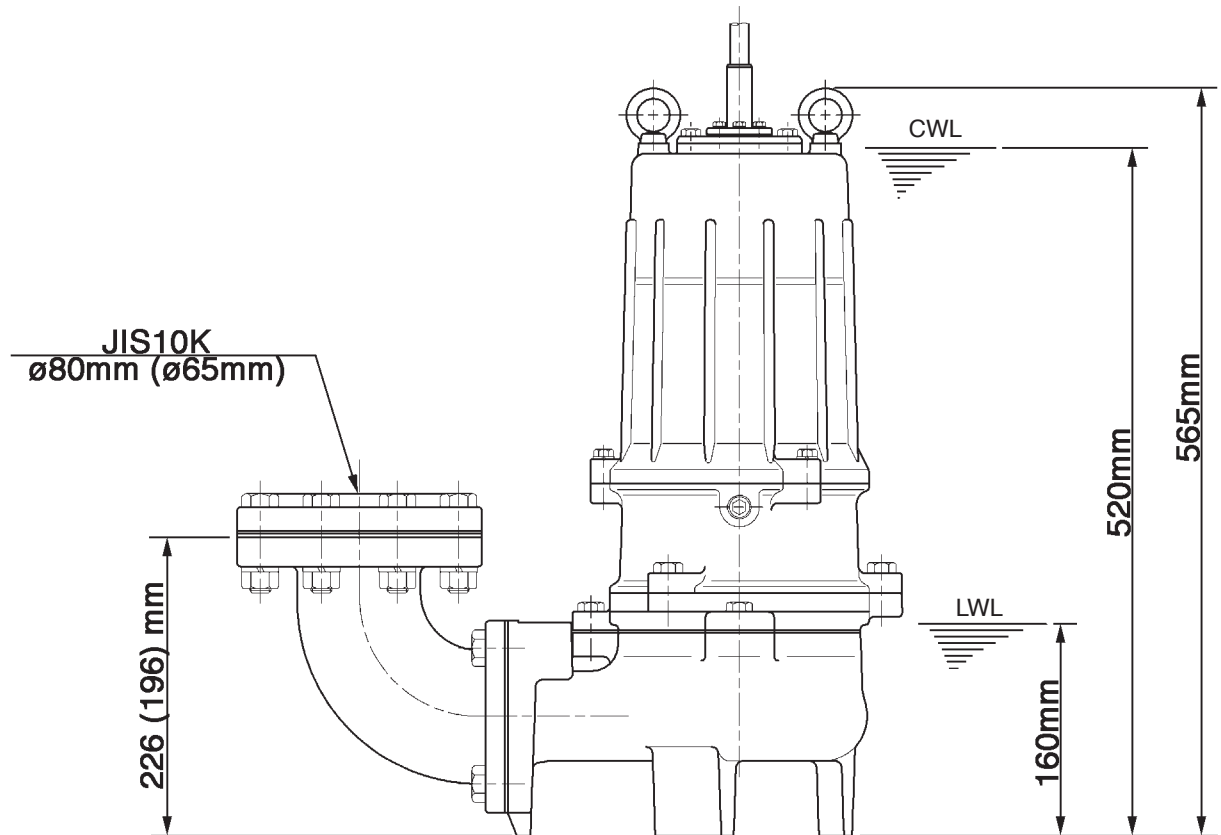
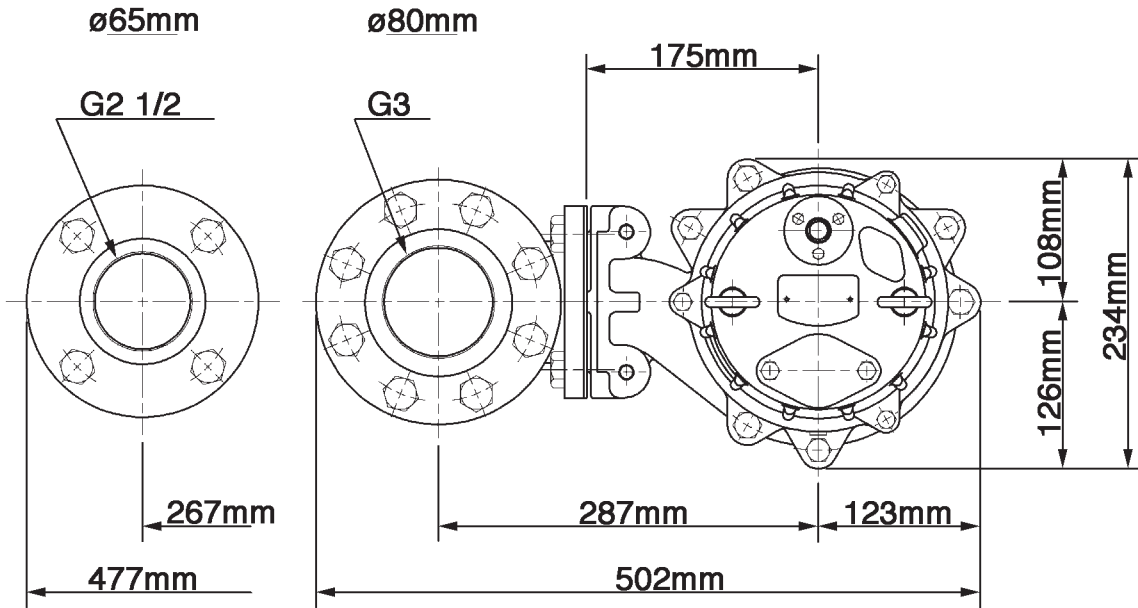
3" (80mm) JIS10K screwed-in mating flange  
Guide rail fitting optional

## Weight

75 kg (dry weight of the pump without cable)

# Dimensional Drawing

## 80U23.7-53



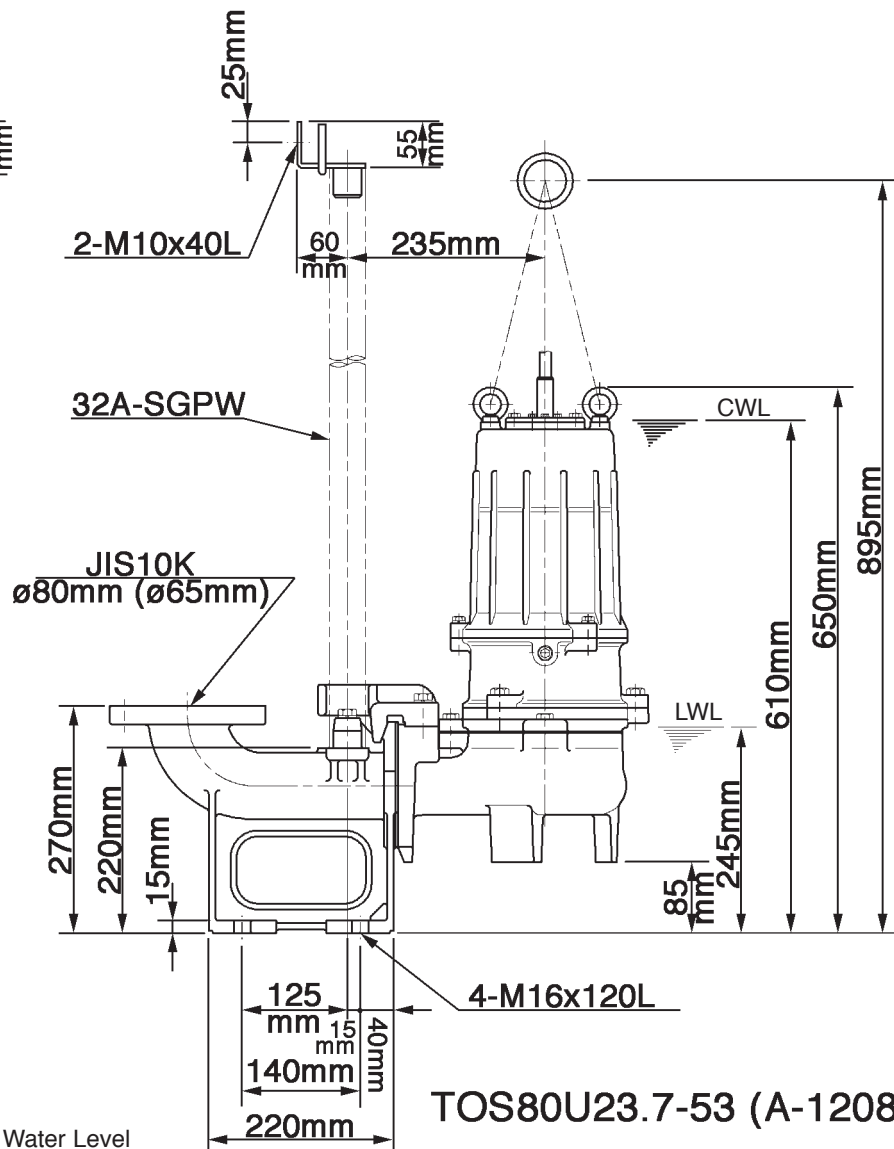
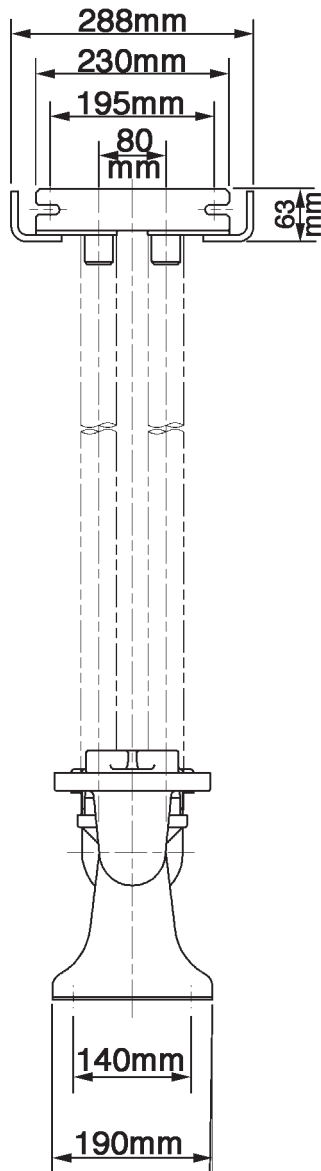
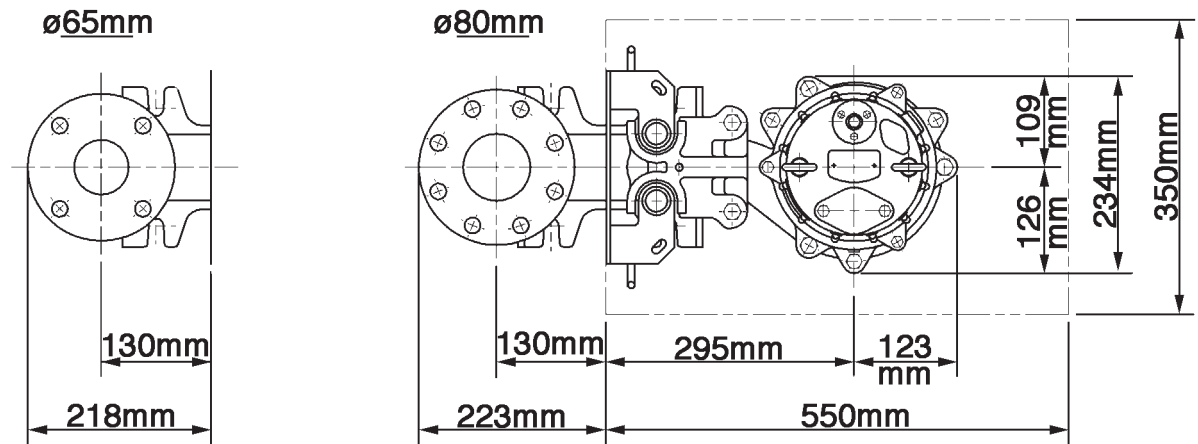
80U23.7-53 (A-12081-1)

CWL: Continuous Running Water Level

LWL: Lowest Running Water Level

# Dimensional Drawing

## TOS80U23.7-53

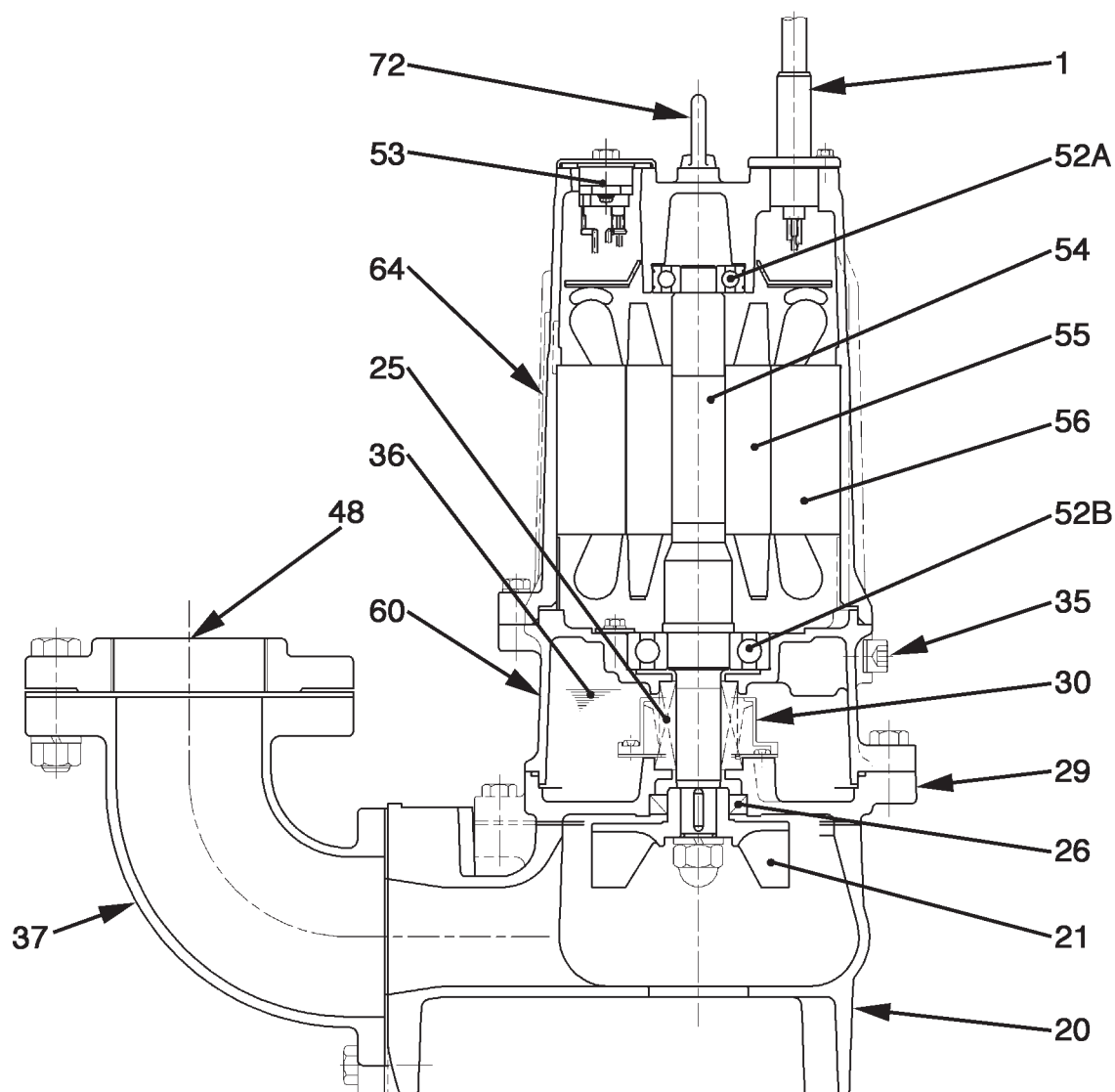


TOS80U23.7-53 (A-12087-1)

CWL: Continuous Running Water Level  
LWL: Lowest Running Water Level

# Sectional Drawing

## 80U23.7-53

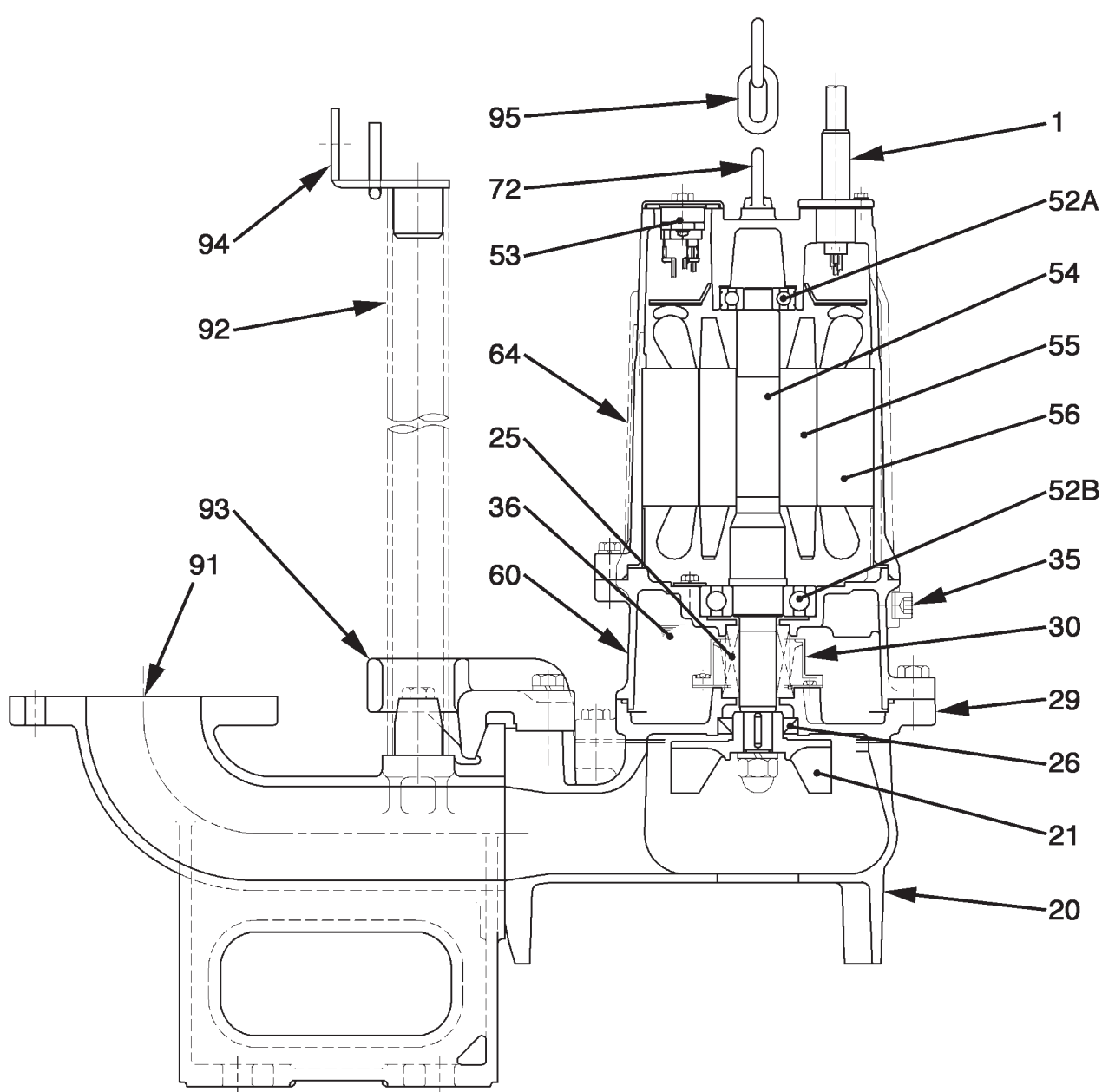


80U23.7-53 (A-12084-1)

| No. | Description     | Qty. | Remarks                 | No. | Description      | Qty. | Remarks                 |
|-----|-----------------|------|-------------------------|-----|------------------|------|-------------------------|
| 1   | Cabtyre Cable   | 1    | H07RN-F                 | 54  | Shaft            | 1    | SUS420J2 (EN-X30Cr13)   |
| 20  | Pump Casing     | 1    | FC200 (EN-GJL-200)      | 55  | Rotor            | 1    |                         |
| 21  | Impeller        | 1    | FC200 (EN-GJL-200)      | 56  | Stator Complete  | 1    |                         |
| 25  | Mechanical Seal | 1    | H-25A                   | 60  | Bearing Housing  | 1    | FC150 (EN-GJL-150)      |
| 26  | Oil Seal        | 1    | DD-355511               | 64  | Motor Frame      | 1    | FC150 (EN-GJL-150)      |
| 29  | Oil Casing      | 1    | FC200 (EN-GJL-200)      | 72  | Lifting Eye Bolt | 2    | SUS304 (EN-X5CrNi18-10) |
| 30  | Oil Lifter      | 1    | Plastic                 |     |                  |      |                         |
| 35  | Oil Plug        | 1    | SUS304 (EN-X5CrNi18-10) |     |                  |      |                         |
| 36  | Lubricant       |      | Turbine Oil (ISO VG32)  |     |                  |      |                         |
| 37  | Discharge Bend  | 1    | FC200 (EN-GJL-200)      |     |                  |      |                         |
| 48  | Screw Flange    | 1    | FC200 (EN-GJL-200)      |     |                  |      |                         |
| 52A | Upper Bearing   | 1    | 6304ZZC3                |     |                  |      |                         |
| 52B | Lower Bearing   | 1    | 6307ZZC3                |     |                  |      |                         |
| 53  | Motor Protector | 1    |                         |     |                  |      |                         |

# Sectional Drawing

## TOS80U23.7-53



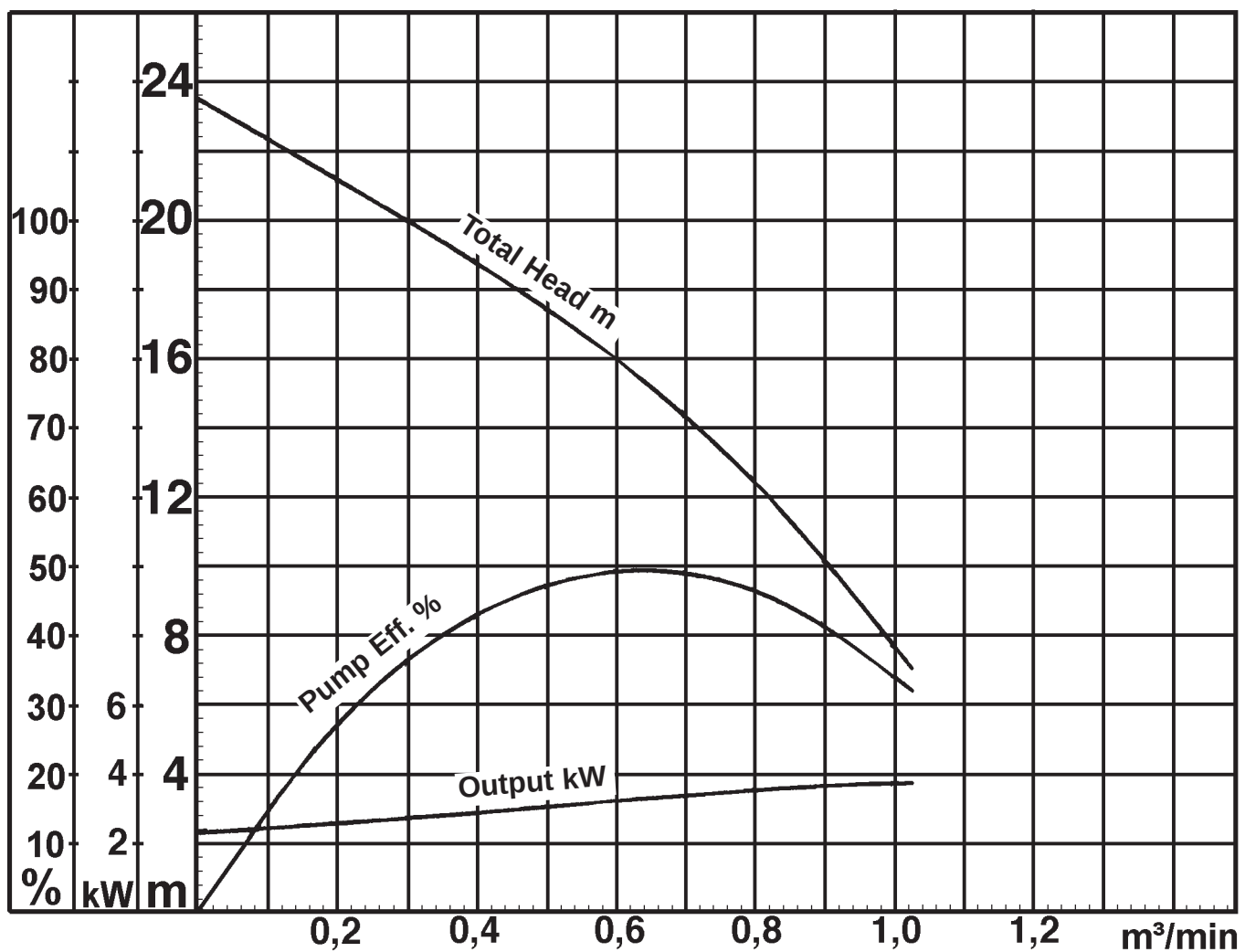
TOS80U23.7-53 (A-12090-1)

| No. | Description     | Qty. | Remarks                 | No. | Description         | Qty. | Remarks                    |
|-----|-----------------|------|-------------------------|-----|---------------------|------|----------------------------|
| 1   | Cabtyre Cable   | 1    | H07RN-F                 | 56  | Stator Complete     | 1    |                            |
| 20  | Pump Casing     | 1    | FC200 (EN-GJL-200)      | 60  | Bearing Housing     | 1    | FC150 (EN-GJL-150)         |
| 21  | Impeller        | 1    | FC200 (EN-GJL-200)      | 64  | Motor Frame         | 1    | FC150 (EN-GJL-150)         |
| 25  | Mechanical Seal | 1    | H-25A                   | 72  | Lifting Eye Bolt    | 2    | SUS304 (EN-X5CrNi18-10)    |
| 26  | Oil Seal        | 1    | DD355511                | 91  | Duck Foot Bend      | 1    | FC200 (EN-GJL-200)         |
| 29  | Oil Casing      | 1    | FC200 (EN-GJL-200)      | 92  | Guide Pipe (Option) | 2    | Galvanized Steel Pipe SGPW |
| 30  | Oil Lifter      | 1    | Plastic                 | 93  | Guide Hook          | 1    | FC200 (EN-GJL-200)         |
| 35  | Oil Plug        | 1    | SUS304 (EN-X5CrNi18-10) | 94  | Guide Support       | 1    | FCD450 (EN-GJL-450-10)     |
| 36  | Lubricant       |      | Turbine Oil (ISO VG32)  | 95  | Lifting Chain       | 1    | SS400 (DIN 1.0040)         |
| 52A | Upper Bearing   | 1    | 6304ZZC3                |     |                     |      |                            |
| 52B | Lower Bearing   | 1    | 6307ZZC3                |     |                     |      |                            |
| 53  | Motor Protector | 1    |                         |     |                     |      |                            |
| 54  | Shaft           | 1    | SUS420J2 (EN-X30Cr13)   |     |                     |      |                            |
| 55  | Rotor           | 1    |                         |     |                     |      |                            |

# Pump Performance Curve

## 80U23.7-53

|                  |                         |
|------------------|-------------------------|
| Discharge Bore   | 80 mm                   |
| Total Head       | 16 m                    |
| Capacity         | 0,6 m <sup>3</sup> /min |
| Motor Output     | 3,70 kW                 |
| Motor Input      | 4,85 kW                 |
| Phase            | 3                       |
| Voltage          | 400 V                   |
| Frequency        | 50 Hz                   |
| Rated Current    | 7,7 A                   |
| Starting Current | 58,0 A                  |
| Poles            | 2                       |
| Revolution       | S.S. 2850 r.p.m.        |
| Starting Method  | direct on line          |
| Insulation Class | F                       |



80U23.7-53 (A-12079-1)