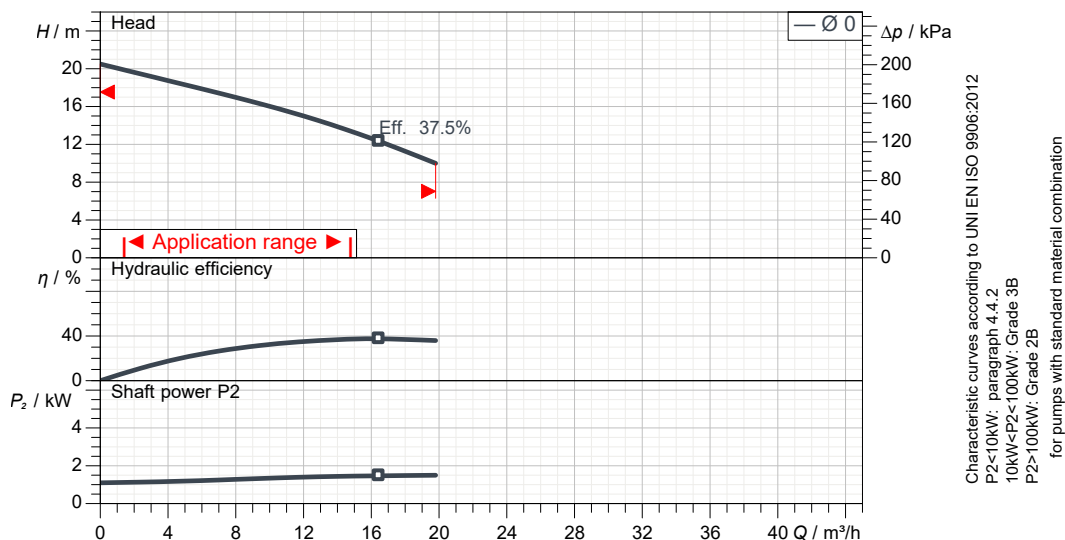


**50U21.5-54 380-415V**
**Technical specification**
**3~ 50 Hz**

**Pump**

|           |                     |
|-----------|---------------------|
| Series    | U                   |
| Pump name | 50U21.5-54 380-415V |
| Standard  |                     |

**Motor data**

|                   |                        |
|-------------------|------------------------|
| Motor             | JT1-2-1.5-SF 400V D UL |
| Rated voltage     | 380 V                  |
| Frequency         | 50 Hz                  |
| Motor phases      | 3~                     |
| Number of poles   | 2                      |
| Rated power $P_2$ | 1.50 kW                |
| Rated current     | 3.6 A                  |
| rpm               | 2912 1/min             |
| Rated torque      | 4.9 Nm                 |
| Start*            | Direct starting        |

|                      |                          |
|----------------------|--------------------------|
| Degree of protection | IP 68                    |
| Insulation class     | F                        |
| Protection device    | Circle thermal protector |
| Type of oil          | Turbine oil VG32         |
| Oil amount           | 0.84 l                   |

**Hydraulic**

|                           |                      |
|---------------------------|----------------------|
| Free passage              | 35 mm                |
| Impeller type             | Vortex impeller      |
| Max. hydraulic efficiency | 37.5 %               |
| Discharge                 | 50 mm                |
| Curve tolerance           | UNI EN ISO 9906:2012 |

**Operating limits (standard pumps)**

|                                           |                        |
|-------------------------------------------|------------------------|
| Max. ambient temperature                  | 40 °C                  |
| Max. density treated liquid               | 1030 kg/m <sup>3</sup> |
| pH treated liquid                         | 5-9                    |
| Max. start per hour (equally distributed) | 6                      |
| Wet/dry use                               | WET                    |
| Operating mode                            | S1                     |

**Construction materials**

|                 |                       |
|-----------------|-----------------------|
| Motor enclosure | Gray Iron Casting 150 |
| Shaft           | 420J2 Stainless Steel |
| Pump Casing     | Gray Iron Casting 200 |
| Impeller        | Gray Iron Casting 200 |
| Suction Cover   |                       |
| Painting        | Epoxy paint (Black)   |
| Screws          | 304 Stainless Steel   |
| Gaskets         | NBR                   |

**Construction features**

|                  |                        |
|------------------|------------------------|
| Power cable1     | 4C*1.25mm <sup>2</sup> |
| Power cable2     | N/A                    |
| Sheath           | VCT                    |
| Control cable    | N/A                    |
| Sheath           | N/A                    |
| Cable length     | 6 m                    |
| Mechanical seals | H-20A                  |
| Weight*          | 30 kg                  |

\* cable and fixing system excluded

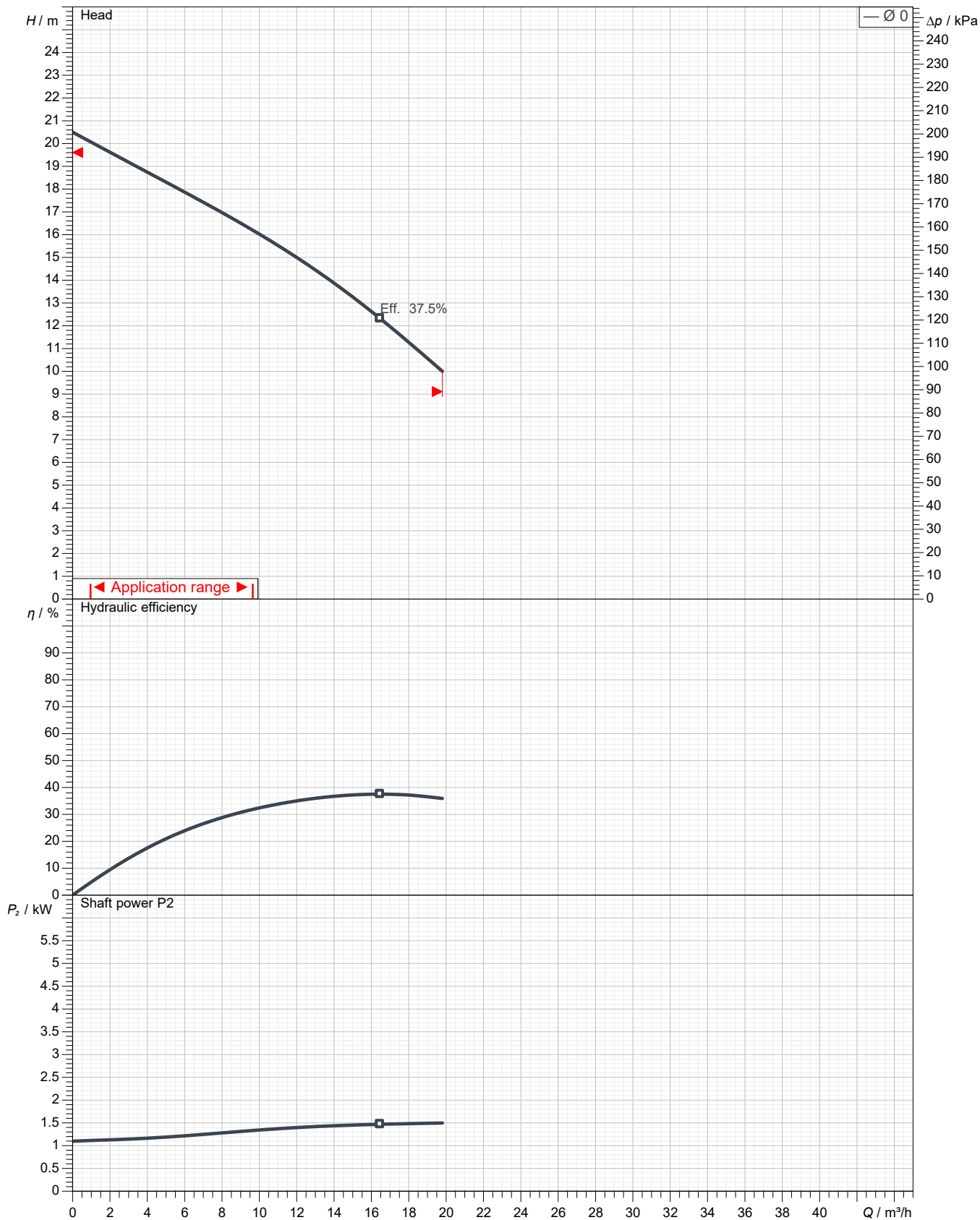
**Monitoring features**

|                            |  |
|----------------------------|--|
| Monitoring option          |  |
| leaking sensor - N/A       |  |
| monitoring equipment - N/A |  |

**Pump performance curves**

**3 ~ 50 Hz**

| Discharge<br>50 mm | Head | Capacity | Rated power<br>1.5 kW | Voltage<br>380 V | Current<br>3.6 A | rpm<br>2912 1/min |
|--------------------|------|----------|-----------------------|------------------|------------------|-------------------|
|--------------------|------|----------|-----------------------|------------------|------------------|-------------------|



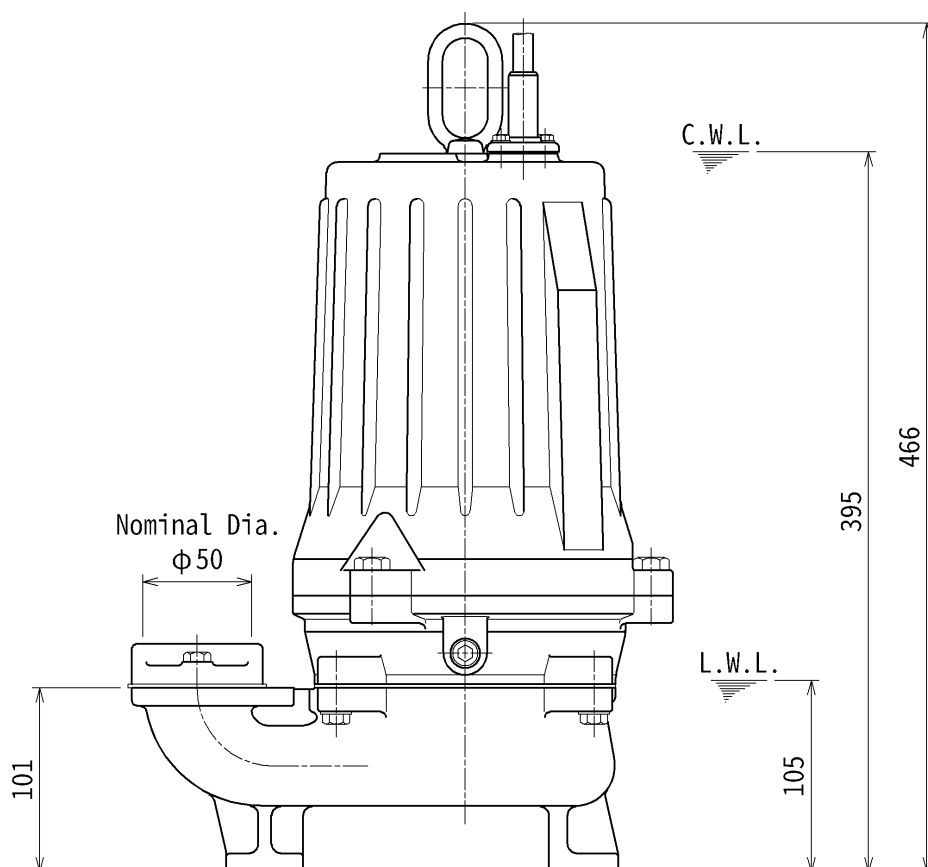
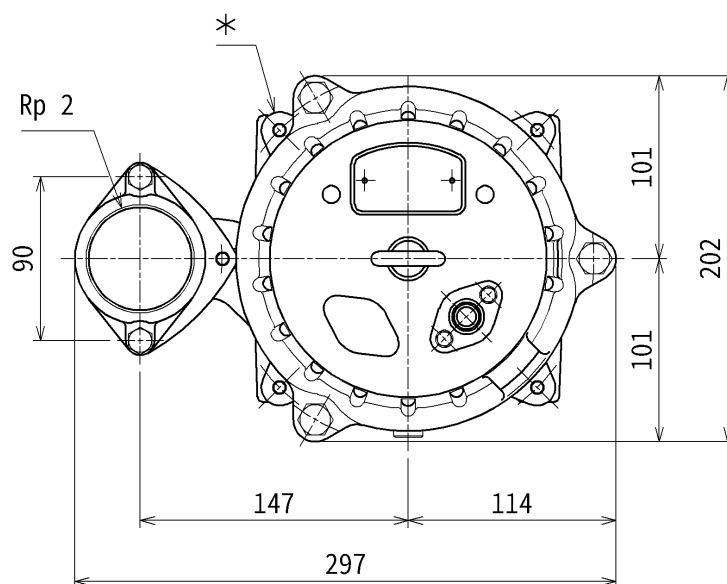
Characteristic curves according to UNI EN 9906:2012 for pumps with standard material combination  
P2<10kW: paragraph 4.4.2  
10kW<P2<100kW: Grade 3B  
P2>100kW: Grade 2B

| DIMENSION DRAWING |                                         | No.   | No.         | A-28748-35 |
|-------------------|-----------------------------------------|-------|-------------|------------|
| TYPE              | Submersible<br>Sewage & Wastewater Pump | MODEL | 50U21.5 -54 |            |

Approximate  
Weight(※)

30kg

※excluding cable



\*An air release hole to prevent airlock is provided on the top of the pump casing.

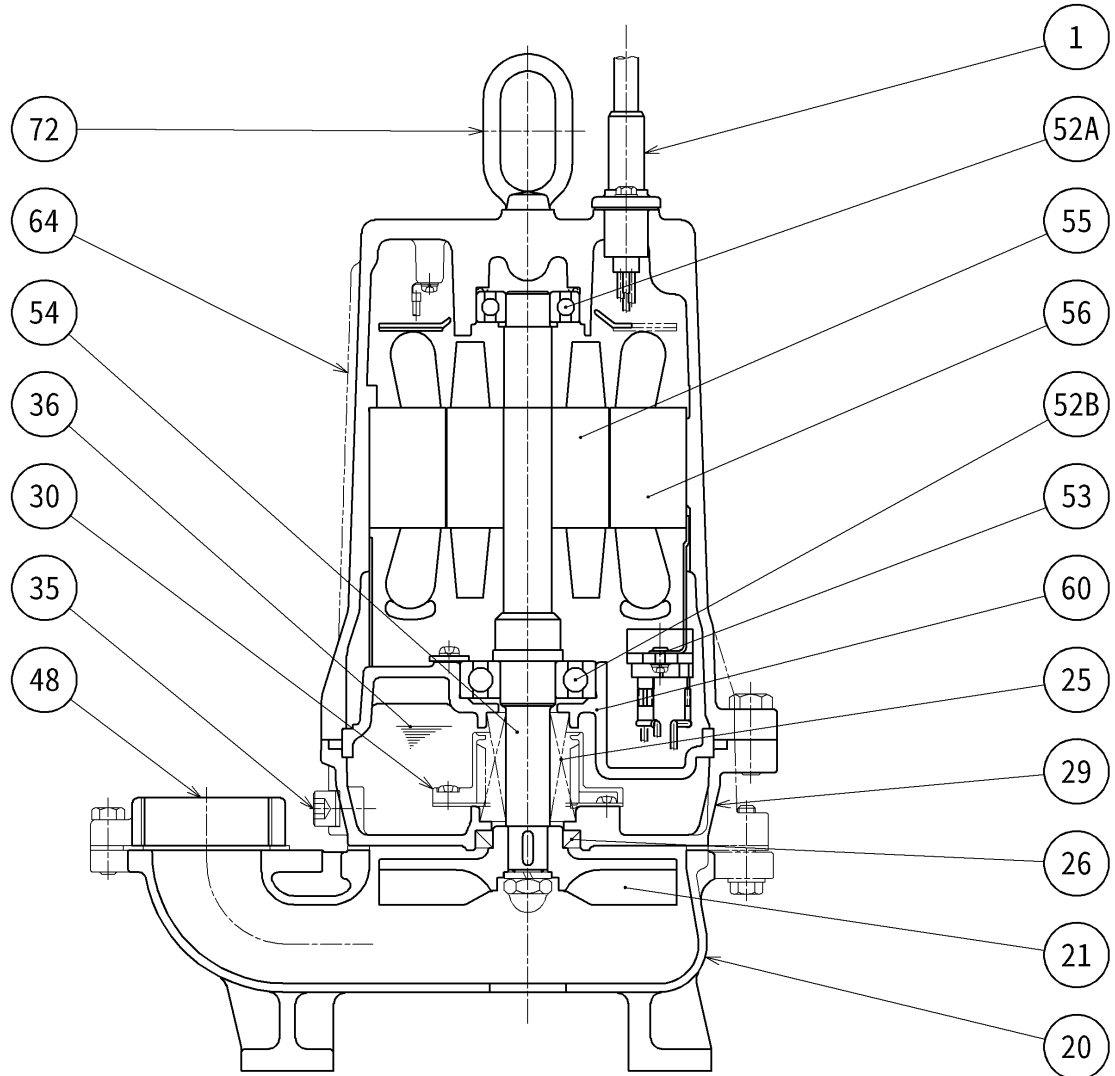
C.W.L.:Continuous running Water Level  
L.W.L.:Lowest running Water Level

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unit:mm

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|                   |                                         |  |     |       |             |            |
|-------------------|-----------------------------------------|--|-----|-------|-------------|------------|
| SECTIONAL DRAWING |                                         |  | No. |       | No.         | A-28756-25 |
| TYPE              | Submersible<br>Sewage & Wastewater Pump |  |     | MODEL | 50U21.5 -54 |            |



| REQ. SPECIFICATION |
|--------------------|
|                    |
|                    |
|                    |

| No. | DESCRIPTION     | Q'TY | MATERIAL / NOTE       | No. | DESCRIPTION     | Q'TY | MATERIAL / NOTE       |
|-----|-----------------|------|-----------------------|-----|-----------------|------|-----------------------|
| 1   | Cable           | 1    | PVC Sheath            | 52B | Lower Bearing   | 1    | 6305ZZC3              |
| 20  | Pump Casing     | 1    | Gray Iron Casting 200 | 53  | Motor Protector | 1    |                       |
| 21  | Impeller        | 1    | Gray Iron Casting 200 | 54  | Shaft           | 1    | 420J2 Stainless Steel |
| 25  | Mechanical Seal | 1    | H-20A                 | 55  | Rotor           | 1    |                       |
| 26  | Oil Seal        | 1    | TC32488               | 56  | Stator          | 1    |                       |
| 29  | Oil Casing      | 1    | Gray Iron Casting 200 | 60  | Bearing Housing | 1    | Gray Iron Casting 150 |
| 30  | Oil Lifter      | 1    | Plastic               | 64  | Motor Frame     | 1    | Gray Iron Casting 150 |
| 35  | Oil Plug        | 1    | 304 Stainless Steel   | 72  | Eyebolt         | 1    | 304 Stainless Steel   |
| 36  | Lubricant       |      | Turbine Oil(ISO VG32) |     |                 |      |                       |
| 48  | Screwed Flange  | 1    | Gray Iron Casting 200 |     |                 |      |                       |
| 52A | Upper Bearing   | 1    | 6204ZZC3              |     |                 |      |                       |

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All data shown are not binding. Tsurumi reserves the right to change data and dimensions without notice.