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# Water level gauge W-352/353
## Mounting and Start-Up Instructions

## Safety Instructions

The precondition for flawless, safe operation of the water level gauge is appropriate transport, storage, assembly, professional installation and start-up, proper use and maintenance.

These activities may only be performed by persons, who have the necessary expertise and qualifications. If information contained in these instructions should prove to be inadequate in any way, please contact the manufacturer.

## Function

The water level gauge is attached to the side of the tank/container. The viewing tube fills to the same level as the medium in the container. The float situated in the viewing tube activates optional installed switching contacts.

## Use

Use only for media, which do not tend to become encrusted, sticky or crystallised. They must not contain any magnetic/magnetisable particles. Only use the matching float. Check operating and implementation conditions (temperature, pressure, resistance) (see technical data).

## Assembly

Do not tilt the viewing tube. Check centre distance/tube length prior to assembly (Figure 1). Observe the configuration of the gaskets/washers (Figure 2). "O" marking on the float must be facing upwards during assembly. With a glass float, the magnetic systems must be situated in the top half of the float. Please refer to separate operating instructions for the assembly and connection of switching contacts / changeover contacts (BK-390, MO or BI).

## Assembly procedure

**Step 1:** Attach elbow (W-352) or angle valve (W-353) at the top and bottom with an appropriate gasket to the container flange/screw fitting, but do not yet tighten it.

**Step 2:** Initially screw threaded fittings (Figure 2-2) loosely onto the top and bottom of the elbow/angle valves. Position the banjo screw (Figure 2-2s) and float (Figure 2-4) at the bottom end of the viewing tube and carefully insert it into the bottom threaded fitting. Loosely screw in the banjo screw. Position additional banjo screw at the top end of the viewing tube. Insert viewing tube into the top threaded fitting and connect. Loosely screw in the banjo screw.

**Step 3:** Now, firmly attached container flange/screw fitting and threaded fitting. Tighten banjo screw, prevent threaded fitting from turning. In case of leaking, loosen screw fittings again and correct until the appropriate tightness is reached.

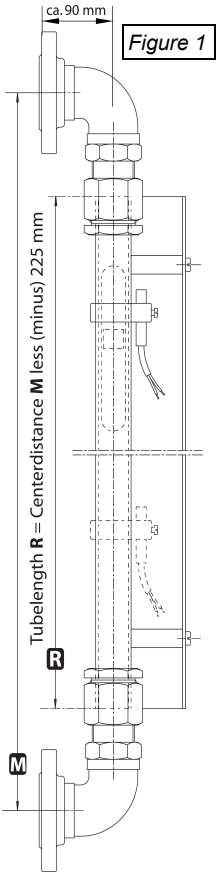



*Figure 1*

*E.g. W-352*

## Start-up

W-352 (container side) and W-353: First open the top valve slowly, then the bottom valve, so that the float is not exposed to any violent pressure surges.

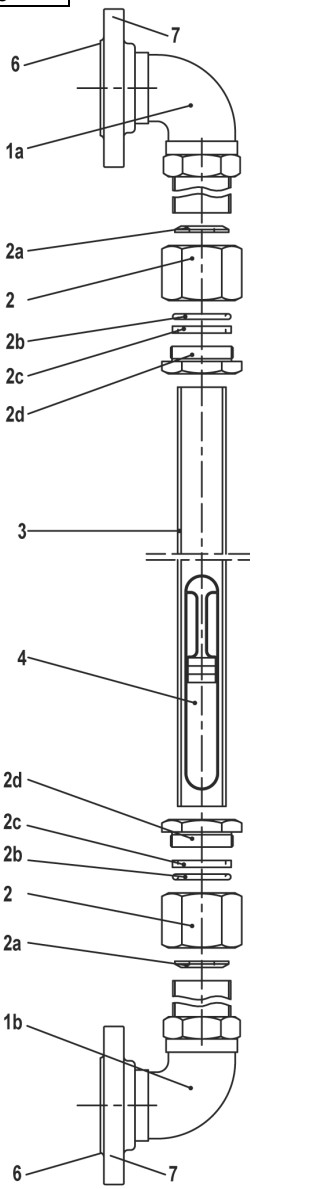
## Maintenance/servicing

The water level gauge does not require any special servicing, over and above the general inspection/functional check of the system. If incrustations should form, the water level gauge must be dismantled and cleaned at regular intervals. Check/renew gaskets during dismantling/assembly.

## Technical data

| | | |
|---|---|---|
| **Container connector** | | Flange from DN25 or screw fittings |
| **Material** | | |
| **Viewing tube** | **Hard glass** Ø 34x2.8 mm or **Plexiglas** Ø 40x5 mm | |
| **Angle valves / flange** | | Stainless steel V4 1.4571 |
| **Float / medium density** | | PPH = PPS-390-32 ρ ≥ 0.95 g/m³<br>Glass = GSB-390-205 ρ ≥ 0.95 g/m³<br>GSB-390-150 ρ ≥ 0.93 g/m³<br>GSB-390-190 ρ ≥ 0.83 g/m³ |
| **Gasket (Figure 2-2a/c)** | | PTFE |
| **O-Ring (Figure 2-2b)** | | Viton |
| **Operating pressure, media temperature** | | |
| **Viewing tube** | **Hard glass** max. 10 bar, 120°C, **Plexiglas** max. 2 bar, 70°C | |
| **Float** | **Glass** max. 10 bar, 120°C, **PPH** max. 2.5 bar, 90°C | |

*Figure 2*




*E.g. W-352*

- **1 a** Elbow (W-352) / angle valve (W-353) top
- **1 a** Elbow (W-352) / angle valve (W-353) top
- **2** Threaded fitting
- **2 a** Gasket PTFE
- **2 b** O-ring Viton
- **2 c** Support ring PTFE
- **2 d** Banjo screw
- **3** Viewing tube (hard glass or Plexiglas)
- **4** Float (hard glass or PPH)
- **5 a** Impact protection
- **5 b** Mounting clamps
- **5 c** Spacer bolts
- **5 d** Cylinder screws
- **6** Flange screw fitting
- **7** Blind flange