

Water level gauge W-351

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 switching contacts installed on the outside.

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).

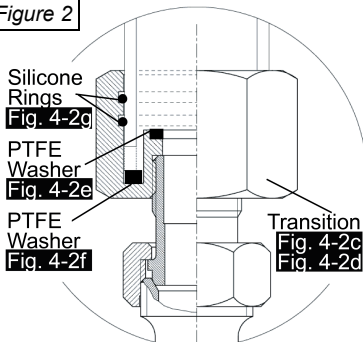
Mounting

Do not tilt the viewing tube. Check centre distance 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 system must be situated in the top half of the float. Please refer to separate operating instructions for the assembly and connection of switching contacts (BK-390, MO or BI).

Mounting procedure

Step 1: Attach angle valve at the top (Figure 4-1a) and bottom (Figure 4-1b) with an appropriate gasket to the container flange/screw fitting.

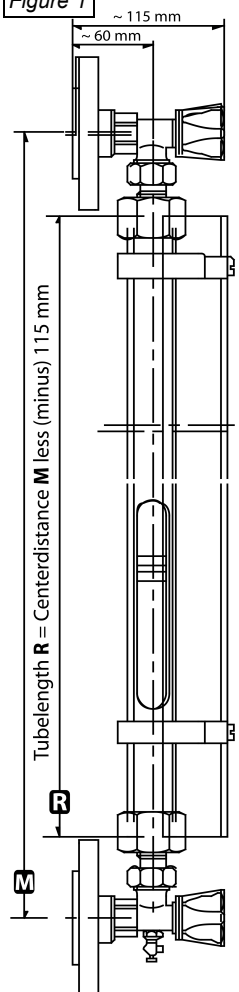
Figure 2



Arrangement of silicone O-rings and PTFE washers in transition

Step 2: Check the seating of the gasket rings in the adapters (Figure 2). Moisten the silicone O-rings situated in the adapters (Figure 4-2g) and the relevant spaces on the outsides of the viewing tube with lubricant. Slide the first adapter (Figure 4-2c) onto the top end of the viewing tube (rotate) until it is flush with the PTFE disk (Figure 4-2f). Slide float (Figure 4-4) in at the bottom end of the viewing tube ("O" marking at the top). Now slide the second adapter (Figure 4-2d) onto the bottom end of the viewing tube (rotate).

Figure 1



Step 3: Slide the viewing tube in between the flanged angle valves and connect/adjust (Figure 3), tighten union nuts (Figure 4-2b). **Do not use the adapters (Figure 4-2..) with key width SW 41 for installation/dismantling.** Check sealing. In case of leaking, loosen screw fittings again and correct until the appropriate tightness is reached.

Start-up

Close drain valve (Figure 4-8). First open the top angle valve slowly, then the bottom angle 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 the fluid should contain dirt particles, which may settled in the bottom angle valve, open the drain valve to flush out these deposits. 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 DN 25 or screw fitting
Material	
Viewing tube	Hard glass Ø 34x2.8 mm or Plexiglas Ø 40x5 mm
Angle valves / flange	Red cast iron
Float / medium density	PPH = PPS-390-32 $\rho \geq 0.95 \text{ g/m}^3$ Glass = GSB-390-205 $\rho \geq 0.95 \text{ g/m}^3$ GSB-390-150 $\rho \geq 0.93 \text{ g/m}^3$ GSB-390-190 $\rho \geq 0.83 \text{ g/m}^3$
O-sealing washers in adapter	Silicone
Sealing washers	PTFE
Operating pressure, media temperature	
Viewing tube	Hard glass max. 10 bar, 120°C, Plexiglas max. 2 bar, 70°C
Float	Hard glass max. 10 bar, 120°C, PPH max. 2.5 bar, 90°C

Figure 3

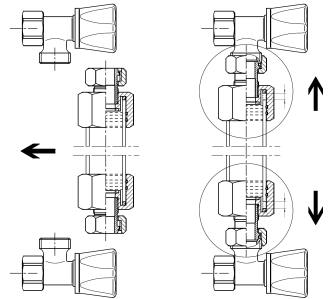
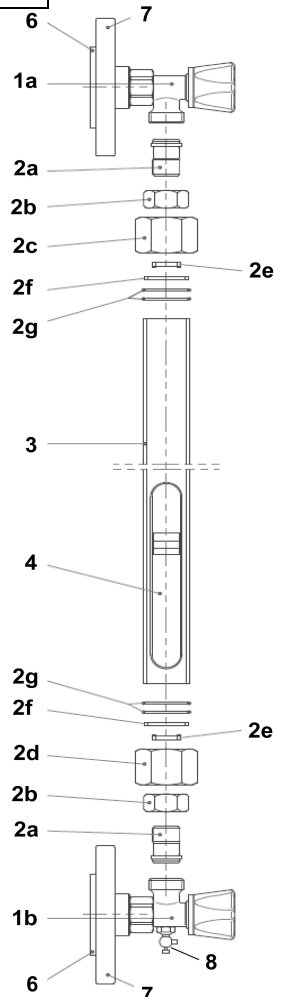


Figure 4



- 1 a Top angle valve
- 1 b Bottom angle valve with drain valve
- 2 a Screw nipple
- 2 b Union nut
- 2 c Top adapter
- 2 d Bottom adapter
- 2 e PTFE washer
- 2 e PTFE washer
- 2 g Silicone O-rings
- 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
- 8 Drain valve

