

# Pressure measurement

Model **7317** **Stainless steel pressure gauge (fillable)**  
Back mount male 316L stainless steel BSPP or NPT axial  
connection



## Specifications

**Connection:** complies with EN 837-1 male G 1/4" or G 1/2" according to ISO 228-1 and NPT 1/4" or NPT 1/2"

**Ambient temperature:** -40°C to +60°C when empty or -20°C to +60°C with glycerine

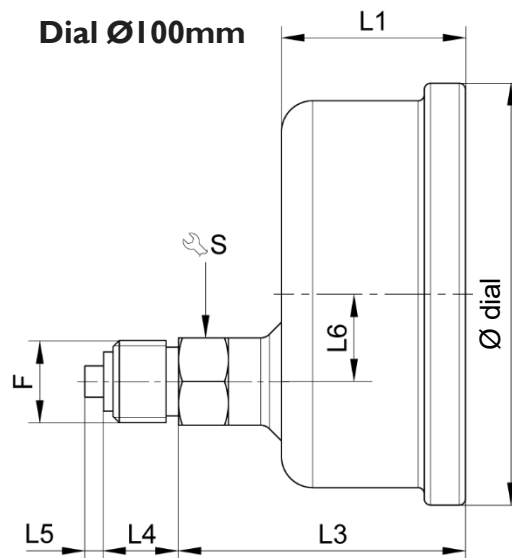
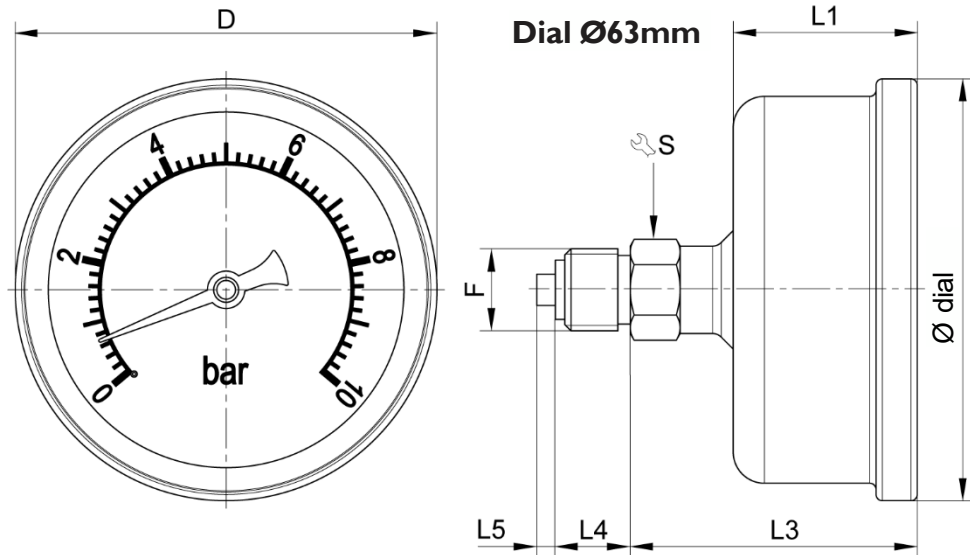
**Max. fluid temperature:** +200°C when empty or +100°C with glycerine

**Pressure range:** -1/0 to 0/1000 bar

**Accuracy:** class 1.6 for Ø63 and class I for Ø100 according to EN 837

**Material:** Tube and connection in 316L stainless steel  
Stainless steel case

**Protection rating:** IP65



Dial Ø (mm)	D (mm)	F (mm)	L1 (mm)	L3 (mm)	L4 (mm)	L5 (mm)	L6 (mm)	S (mm)
63	63	G 1/4"	33	57	13	2	-	14
100	101	G 1/2"	49.5	83	20	3	30	22

Pressure (bar)	Part number Ø63 (1/4" BSPP)	Part number Ø63 (1/4" NPT)	Part number Ø100 (1/2" BSPP)	Part number Ø100 (1/2" NPT)
-1 / 0	273172-0	273175-0	273173-0	273176-0
-1 / 0.6	273172-06	273175-06	273173-1	273176-1
-1 / 1.5	273172-1.5	273175-1.5	273173-1.5	273176-1.5
-1 / 3	273172-3	-	273173-3	273176-3
-1 / 5	273172-5	273175-5	273173-5	273176-5
-1 / 9	273172-9	-	273173-9	273176-9
0 / 0.6	-	-	273173-06	273176-06
0 / 1	273172-1	273175-1	-	-
0 / 2.5	273172-2*	273175-2.5	273173-2*	273176-2
0 / 4	273172-4*	273175-4	273173-4*	273176-4
0 / 6	273172-6*	273175-6	273173-6*	273176-6
0 / 10	273172-10*	273175-10	273173-10*	273176-10
0 / 16	273172-16*	273175-16	273173-16*	273176-16
0 / 25	273172-25*	273175-25	273173-25*	273176-25
0 / 40	273172-40	273175-40	273173-40	273176-40
0 / 60	273172-60	273175-60	273173-60	273176-60
0 / 100	273172-100	273175-100	273173-100	273176-100
0 / 160	273172-160	-	273173-160	273176-160
0 / 250	273172-250	-	273173-250	273176-250
0 / 400	273172-400	-	273173-400	273176-400
0 / 600	273172-600	-	273173-600	273176-600
0 / 1000	273172-1000	-	273173-1000	273176-1000

You can order from the Wika range for these models if you add a W to the end of the part number (e.g.: 273172-1W)

\*You can order from the low cost range for these models if you add an E to the end of the part number (e.g.: 273172-2E)

## Use

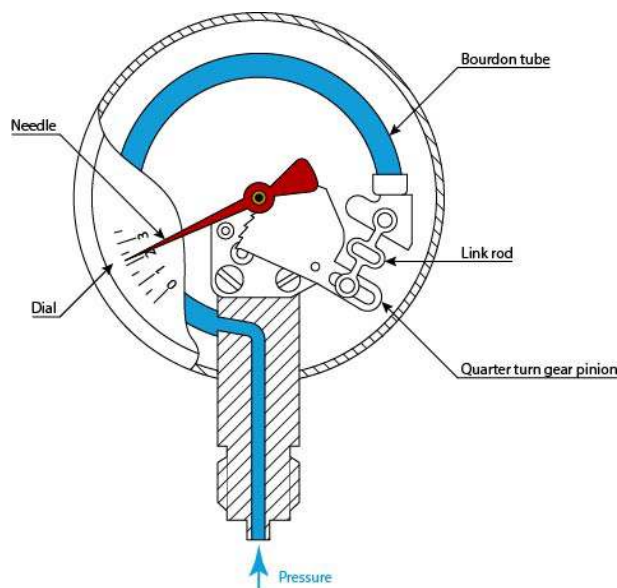
### Description

A Bourdon tube pressure gauge works through the movement of the free end of the tube in response to the measured pressure.

When the pressure increases, the tube unwinds and when the pressure decreases the tube winds up around itself.

The free end of the tube is linked to a needle through a mechanical system that converts the tube's movement into needle rotation.

The pressure gauge includes a graduated dial so that the needle points to the measured pressure.



## Fluids

Fully stainless steel Bourdon tube pressure gauges can be used for gaseous fluids and aggressive, non-viscous and non-crystallising liquids. They can also be used in an aggressive environment.

However, the fluid and the environment must be compatible with 316L stainless steel.

You can fill the case with glycerine to make sure the gauge is easy to read for applications with very dynamic pressure cycles or vibrations.

We have two types of liquid for filling the gauge (we can fill the gauge on request):

- Glycerine: for fluid temperatures up to +100°C
- Silicone: for fluid temperatures up to +180°C

## Accessories

Here is a list of all of our pressure gauge accessories.

- The pressure gauge can be isolated if you install it on a cock to facilitate maintenance and so that you do not need to purge the piping if you need to carry out maintenance on the measuring instrument.
  - Model **7388**: Pressure gauge cock - with 316 stainless steel Ti valve and body (including bleed screw)
  - Model **7389**: Pressure gauge valve - Brass
  - Model **7377**: Pressure gauge valve - 316 stainless steel Ti
- If you need to cool the fluid, when the fluid temperature is higher than the pressure gauge's temperature range:
  - Model **7346**: Trumpet form siphon - 316 stainless steel
  - Model **7347**: U-form siphon - 316 stainless steel Ti
  - Model **7348**: High pressure straight siphon - 316 stainless steel Ti
  - Model **7304**: Cooling fin - 316 stainless steel
- If you need to protect the pressure gauge from excess pressure:
  - Model **7349**: Pressure limiter - 316 stainless steel
  - Model **7350**: Pressure damper - 316 stainless steel
- Model **7312**: Pressure gauge options:
  - Front or back skirt (axial and vertical)
  - Back fixing bracket (axial) - Galvanised steel
  - COFRAC calibration certificate

The skirts and brackets cannot be used with the low cost or Wika range.
- Model **7305**: Pressure gauge gasket
- Model **7318**: Glycerine can