Pressure measurement

Model 7319 Stainless steel pressure gauge with diaphragm seal separator - 316L stainless steel

Clamp Fittings

Specifications

Connection: Clamp Fittings
Ambient temperature: +10°C to +40°C
Fluid temperature: +10°C to +80°C (for SIP and CIP max. +130°C)
Pressure range: Ø63: 0 to 40 bar
Ø100: -1/0 to 0/40 bar
Accuracy: class 1 according to EN 837
Material: AISI 304 case
Diaphragm seal and separator in AISI 316L
Protection rating: IP65

ISO 9001 BUREAU VERITAS Certification

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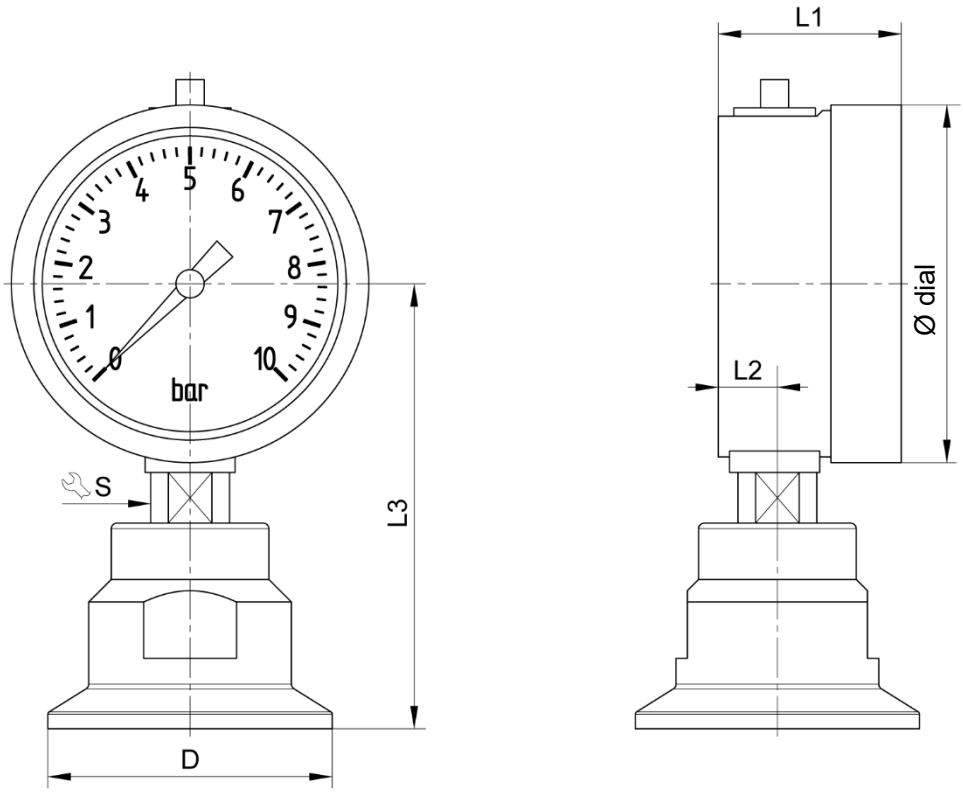


Dial Ø (mm)	D DN38 (mm)	D DN51 (mm)	L1 (mm)	L2 (mm)	L3 (mm)	S (mm)
63	50.5	64	33	9.5	115	14
100	50.5	64	49.5	15.5	118	22

Pressure (bar)	Part number Ø63 (DN38)	Part number Ø63 (DN51)	Part number Ø100 (DN38)	Part number Ø100 (DN51)
-1 / 0	-	-	**273193-0**	**273196-0**
-1 / 3	-	-	**273193-3**	**273196-3**
-1 / 5	-	-	**273193-5**	**273196-5**
-1 / 9	-	-	**273193-9**	**273196-9**
0 / 2.5	**273192-2**	**273195-2**	**273193-2**	**273196-2**
0 / 4	**273192-4**	**273195-4**	**273193-4**	**273196-4**
0 / 6	**273192-6**	**273195-6**	**273193-6**	**273196-6**
0 / 10	**273192-10**	**273195-10**	**273193-10**	**273196-10**
0 / 16	**273192-16**	**273195-16**	**273193-16**	**273196-16**
0 / 25	**273192-25**	**273195-25**	**273193-25**	**273196-25**
0 / 40	**273192-40**	**273195-40**	**273193-40**	**273196-40**

You can order from the Wika range for these models if you add a W to the end of the part number (e.g.: 273192-2W)

Use

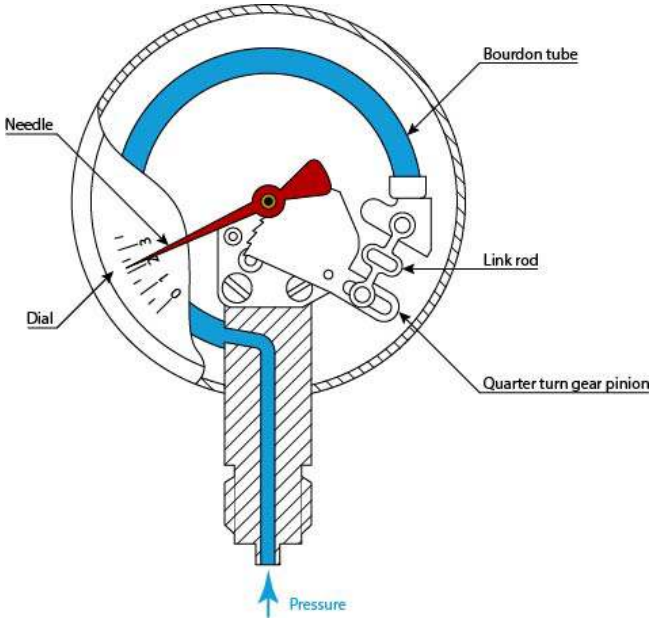
Description

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.



The diaphragm, assembled by direct welding, allows the measurement instrument to be kept separate from the fluid it is measuring. Pressure is transferred to the measurement instrument through the transmission liquid. The separator should be filled with KN 92 white medicinal mineral oil (FDA approved).

The clamp fitting means the instrument can be quickly and easily removed and that it is easy to clean it and replace its sealing gasket.

The surface roughness for the parts in contact with fluid is Ra ≤ 0.76 µm according to ASME BPE SF3.

Fluids

Bourdon tube pressure gauges assembled on a separator can be used for aggressive, adhesive, crystallising, corrosive, highly viscous or toxic fluids.

You must check the fluid is 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 can fill the gauge on request).

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)
  - COFRAC calibration certificate

  The skirts and brackets cannot be used with the Wika range.

- Model **7305**: Pressure gauge gasket