

# Pressure measurement

Model **7320**

## Differential pressure gauge

Female BSP I.457I stainless steel connection



### Specifications

**Connection:** complies with EN 837-1 female G 1/4" according to ISO 228-1

**Operating temperature:** -20°C to +60°C

**Max. fluid temperature:** +100°C

**Pressure range:** 0 to 16 bar

**Accuracy:** class 1.6 according to EN 837

**Material:** I.457I (316 Ti) and inconel for the parts that can come into contact with the transported fluid

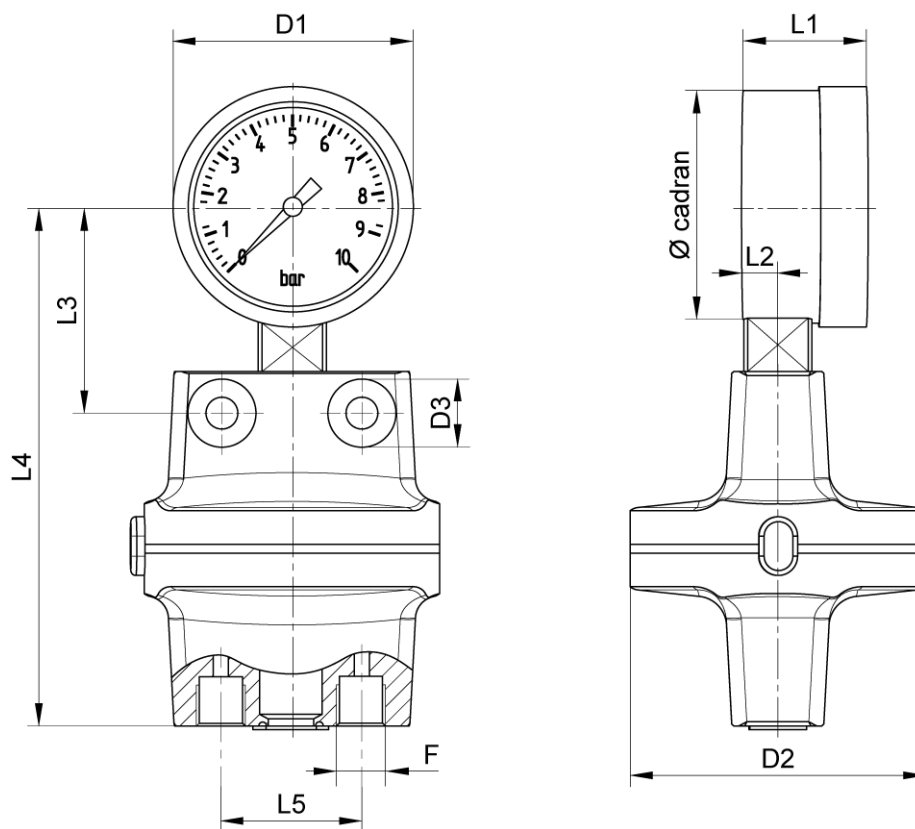
**Protection rating:** IP54



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7320-A V0521



Dial Ø (mm)	D1 (mm)	D2 (mm)	D3 (mm)	F (mm)	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	L5 (mm)
99 ( $\Delta P \leq 0.25$ bar)	101	140	8.4	G 1/4"	49.5	15.5	90	160	37
99 ( $\Delta P > 0.25$ bar)	101	78	8.4	G 1/4"	49.5	15.5	87	170	37

Pressure (bar)	Max. operating pressure (bar)	Part number Ø100
0 / 0.025	2.5	473201-02
0 / 0.04	2.5	473201-04
0 / 0.06	6	473201-06
0 / 0.1	6	473201-1
0 / 0.25	6	473201-2
0 / 0.4	25	473201-4
0 / 1	25	473201-10
0 / 1.6	25	473201-16
0 / 2.5	25	473201-25
0 / 4	25	473201-40
0 / 10	25	473201-100
0 / 16	25	473201-160

## Use

### Description

A differential pressure gauge measures the difference between two pressures through the movement of a measuring element. If the two pressures are the same then the element will not move and no differential pressure will be shown on the gauge.

The measurement chambers are separated by a diaphragm and isolated from atmospheric pressure by bellows.

The pressure difference between the lower pressure, referred to as the “negative pressure”, and the higher pressure, referred to as the “positive pressure”, causes an axial deformation of the measuring element, which in this case is a diaphragm.

A mechanical system converts the axial deformation of the diaphragm into a movement which rotates a needle.

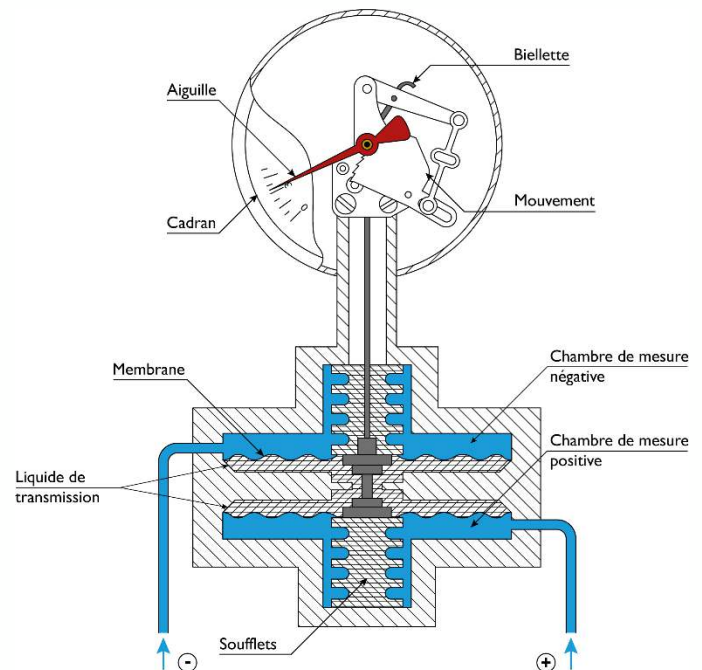
The pressure gauge includes a graduated dial so that the needle points to the measured differential pressure.

A venting outlet is also included for pressure ranges which are less than or equal to 0.25 bar.

### Fluids

Differential pressure gauges can be used with gaseous fluids and aggressive, non-viscous and non-crystallising liquids. They can also be used in an aggressive environment.

You must check that the fluids are compatible with stainless steel for all differential pressure gauges and that the fluids are also compatible with inconel for gauges that can measure differential pressures greater than 0.25 bar.



## 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 Ti stainless steel valve body and needle (including bleed screw)
  - Model **7389**: Pressure gauge valve - Brass
  - Model **7377**: Pressure gauge valve - 316 Ti stainless steel
- 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 Ti stainless steel
  - Model **7348**: High pressure straight siphon - 316 Ti stainless steel
  - 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 skirt (for assembly on a panel)
  - COFRAC calibration certificate
- Model **7305**: Pressure gauge gasket