

# Absolute Pressure Gauges - Bourdon Type

**MODEL : APBR**

## Why Absolute Pressure Gauge?

The atmospheric pressure varies from place to place depending up on the altitude of the location and prevailing weather conditions. In such variable conditions, precise pressure measurement can be arrived only if a fixed (un-changing) reference point is established.

This is achieved by totally evacuating and sealing the Bourdon tube, which will act as the reference point for calibration i.e. Absolute Zero. The process pressure is applied inside the enclosure surrounding the Bourdon tube. Any pressure applied is compared to the sealed reference (Bourdon tube) to get an accurate measurement of absolute pressure, through a precision Movement mechanism.



## Features

- Compliance to latest EN-837 standard
- Range : As shown in the table
- Bourdon in SS316 as standard providing better mechanical properties guaranteeing repeatability and accuracy
- Accuracy  $\pm 1\%$  FSD

Note: Bourdon type Absolute Pressure Gauges are recommended for non-corrosive, clean, clear (colourless) & dry Gases / Air only

## Specifications

<b>Ref. Standard</b>	EN-837
<b>Dial</b>	100 mm/150 in Aluminium, white background, black markings
<b>Case</b>	SS304 / SS316 with bayonet bezel
<b>Protection</b>	IP-68 (IS:13947 part I / IEC:60529)
<b>Window</b>	Safety glass (Shatter proof / Toughened glass)
<b>Sensor</b>	Bourdon in SS316 / SS316L
<b>Socket</b>	22mm Square in SS316 / SS316L
<b>Movement</b>	SS304, SS316
<b>Connection</b>	1/2" NPT (M) as standard (other optional)
<b>Accuracy</b>	$\pm 1\%$ FSD
<b>Over range</b>	As per EN 837
<b>Zero adjustment</b>	Micrometer Pointer
<b>Temperature suitability</b>	Ambient (-)20°C to 60°C, Media 100°C
<b>Temperature Effect</b>	Within $\pm 0.4\%$ FSD/10°C, when temperature changes from reference temperature of 20°C (as per EN-837 standard)
<b>Optional</b>	NACE compliance CE Atex

## Ranges

0 to 1 kg/cm<sup>2</sup>(a)  
0 to 1.6 kg/cm<sup>2</sup>(a)  
0 to 2.5 kg/cm<sup>2</sup>(a)  
0 to 4 kg/cm<sup>2</sup>(a)  
Other on request

**Note:** Equivalent Reading in other pressure Units also can be provided on request

The parameters mentioned here are the standard specifications / values generally used for most of the process applications. Any other specification not appearing here also can be provided as per customer requirement.

Under Technical Collaboration with M/s. Gauges Bourdon, France

