

Ultra-high purity pressure gauge (Class BA) Model: PG520 (Class BA)



PG520 series, high purity pressure gauges for special gases. Suitable for semiconductor, display and solar cell manufacturers. The products are subjected to 100% helium leak detection in a clean room, with a leakage rate of $\leq 10^{-9}$ mbar·l/s.



Applications

- Used for measuring gases and liquids, also suitable for corrosive media and environments
- Suitable for all HP (high purity) applications
- Semiconductor and display industries, healthcare, biotechnology and pharmaceutical industries
- Gas distribution system
- Instrumentation and control system

Features

- Helium leak test
- Electrolytically polished housing

Specifications

Dial size(mm)

50,63mm

Permissible temperature

Ambient: -40 ... +60°C

Medium: Up to +100°C

Accuracy class

Grade A (ASME B40.1)

Temperature effect

When deviating from the reference conditions of the measurement system:

$\leq \pm 0.4\%$ per 10°C (reference temp 20°C)

$\leq \pm 0.4\%$ per 18°F (reference temp 68°F) full scale value

Scale Range

-0.1...0 to 0...400 bar

Or all other equivalent vacuum or compound pressure and vacuum ranges

Pressure limitation

Steady: 3/4X full scale range

Fluctuation: 2/3X full scale range

Short Time: 1.0X full scale range



Model: PG520

Specifications

Process connection

- SS316L stainless steel
- Radial or axial connection
- 1/4" NPT male thread connection

Pointer

Aluminum alloy, black

Pressure element

- Stainless steel 316L, C-type or helical type
- Sealing performance: leakage rate $\leq 10^{-9}$ mbar·l/s (Test method: helium spectrometry)

Case

Stainless steel 304, electrolytically polished

Movement

Stainless steel

Window

Polycarbonate, snap-in window

Dial

White aluminum alloy, black/red fonts, dual scale (bar/psi)

Case filling liquid

Dry

Ingress protection

IP 54, comply with EN 60529 / IEC 529 standard

Cleaness

The product is cleaned for oxygen service components in accordance with ISO standards

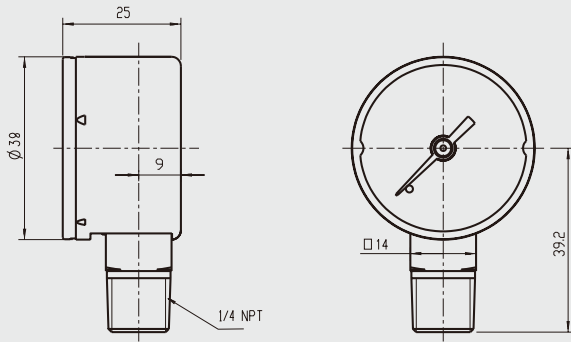


Model: PG520

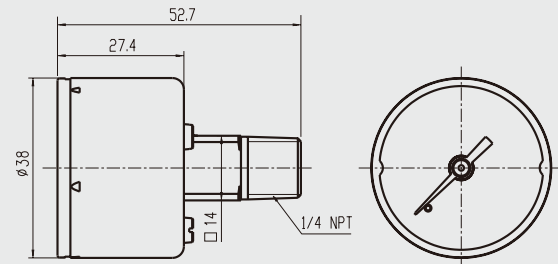
Dimensions in mm

Size: 40mm

40mm Bottom mount(radial)

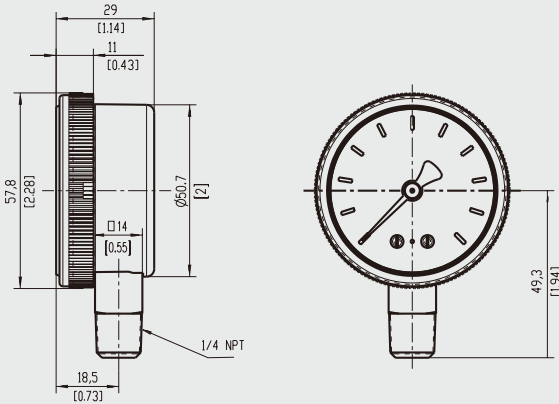


40mm Back mount(axial)

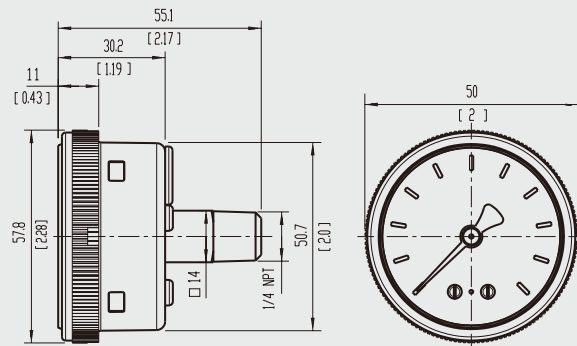


Size: 50mm

50mm Bottom mount(radial)



50mm Back mount(axial)



Model: PG520

ORDERING CODE

Model

PG520

Dial size(mm)

(50)-50mm

(63)-63mm

Process connection location

(L)-Bottom mount(radial)

(B)-Back mount(axial)

Purity grade

(HP)-High-purity applications

Process connection sizes

(01)-G1/8B,male thread

(09)-R1/8,male thread

(03)-G1/4B,male thread

(10)-R1/4,male thread

(05)-1/8NPT,male thread

(17)-M10x1,male thread

(06)-1/4 NPT,male thread

(18)-M14x1.5,male thread

For other threaded connections, please contact the factory

Option

(C1) -Factory's own calibration report

(N/A) -" "

Scale Range(coding examples only, see range table on page 5 for all standard ranges)

0.3BR=0...0.3bar

N=Vaccum range

0.3KG=0...0.3kg/cm²

N1/3BR="-1...3bar"

6KP=0...6kPa

0.6MP=0...0.6MPa

30#=0...30psi



Model: PG520

Pressure range selection table

Scale ranges				
Bar	Kg/cm ²	Psi	kPa	MPa
	N0.6KG	-	-	-
N1BR	N1KG	N30HG	N100KP	N0.1MP
N1/0.6BR	N1/0.6KG	-	N100/60KP	N0.1/0.06MP
		N30HG&15#		
N1/1.5BR	N1/1.5KG		N100/150KP	N0.1/0.15MP
		N30HG&30#		
N1/3BR	N1/3KG		N100/300KP	N0.1/0.3MP
		N30HG&60#		
N1/5BR	N1/5KG		N100/500KP	N0.1/0.5MP
		N30HG&100#		
N1/9BR	N1/9KG		N100/900KP	N0.1/0.9MP
N1/15BR	N1/15KG		N100/1500KP	N0.1/1.5MP
		N30HG&160#		
N1/24BR	N1/24KG		N100/2400KP	N0.1/2.4MP
		N30HG&300#		
0.6BR	0.6KG	10#	60KP	0.06MP
1BR	1KG	15#	100KP	0.1MP
1.6BR	1.6KG	-	160KP	0.16MP
-	-	30#	-	-
2.5BR	2.5KG	-	250KP	0.25MP
4BR	4KG	60#	400KP	0.4MP
6BR	6KG	-	600KP	0.6MP
-	-	100#	-	-
10BR	10KG	-	1000KP	1MP
-	-	160#	-	-
-	-	200#	-	-
16BR	16KG	-	1600KP	1.6MP
-	-	300#	-	-
25BR	25KG	-	2500KP	2.5MP
-	-	400#	-	-
40BR	40KG	600#	4000KP	4MP
-	-	800#	-	-
60BR	60KG	-	6000KP	6MP
-	-	1000#	-	-
100BR	100KG	1500#	10000KP	10MP
-	-	2000#	-	-
160BR	160KG	-	16000KP	16MP
-	-	3000#	-	-
250BR	250KG	-	25000KP	25MP
-	-	4000#	-	-
-	-	5000#	-	-
400BR	400KG	6000#	40000KP	40MP

