

Bourdon tube pressure gauge, Copper alloy, Welding gauge, Designed in accordance with ISO5171 Model: P105



Applications

- For welding, cutting and related process equipment and installations
- Suitable for measuring oxygen and acetylene gas applications

Features

- Designed in accordance with ISO5171 standard
- Blow-out device in the back
- Scale ranges to 0 ... 400 bar or 0 ... 6,000 psi

Specifications

Design

Comply with ISO5171 or for acetylene per ISO 7291

Permissible temperature

Ambient: -20... +60C
Medium: Up to +60C

Dial size(mm)

40,50,63mm

Storage temperature

-20... +60C

Accuracy class

- 2.5(En837-1)
- ±3-2-3%(ASME B40.100 Grade B)

Temperature effect

When deviating from the reference conditions of the measurement system:
≤ ±0.04% of full scale per °C (reference temperature: 20 °C)
≤ ±0.4% of full scale per °F (reference temperature: 68 °F)

Scale Range

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



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Specifications

Process connection

Copper alloy, with buffer damping at the bottom

Pointer

Aluminum alloy,black

Pressure element

Copper alloy
C-type or helical type

Case

- Steel, brass-coloured
- Steel, black painted(optional)

Movement

Copper alloy

Window

Polycarbonate, snap-in window

Dial

Aluminum alloy, with stop pins, white

Case filling liquid

Dry

Ingress protection

IP 54, in accordance with EN 60529 / IEC 529 standard

Options

- Customized dial and LOGO
- The acetylene gauge used in the regulating valve group system complies with the standard ISO 7291
- Black bottom case (only applicable to 50mm radial)
- Black bottom case and electroplated upper cover (only applicable to 63mm radial)
- Process connection gasket (located at the bottom)
- " "

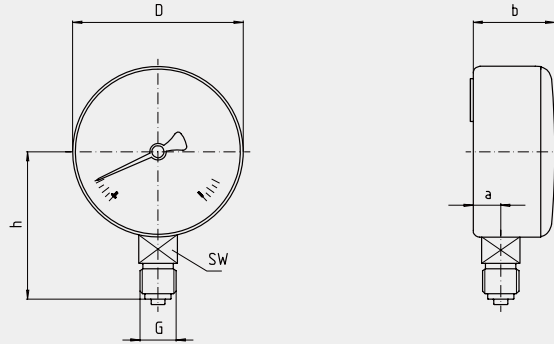


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Dimensions in mm

Bottom mount(radial)

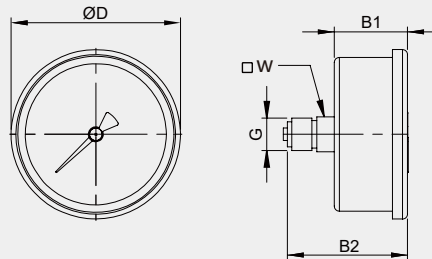
Dial size: 40, 50, 63



Dial size	Dimensions in mm						Weight(kg)
	a	b	D	G	h±1	SW	
40	9.5	26	39	G1/8 B	36	14	0.09
50	9.5	28	49	G1/4 B	45	14	0.11
63	9.5	28	62	G1/4 B	53.5	14	0.15

Back mount(axial)

Dial size: 40, 50, 63



Dial size	Dimensions in mm					Weight(kg)
	B1±0.5	D	G	B2±1	SW	
40	25.5	41	G1/8 B	41	11	0.06
50	28.5	52	G1/4 B	47.5	14	0.07
63	28.5	63	G1/2 B	47.5	14	0.09

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Model

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Dial size(mm)

(40)-40mm

(50)-50mm

(63)-63mm

Process connection location

(L)-Bottom mount(radial)

(B)-Back mount(axial)

Case filling

(D)-Dry

Process connection sizes

(03)-G1/4B,male thread (17)- M10x1,male thread

(06)-1/4NPT,male thread (21)- M20x1.5,male thread

(10)-R1/4,male thread

Option

(CM)- Customized dial and LOGO

(AG)- The acetylene gauge used in the regulating valve group system complies with the standard ISO 7291

(DY)- Black bottom case (only applicable to 50mm radial)

(XC)- Black bottom case and electroplated upper cover(only applicable to 63mm radial)

(TD) -Process connection gasket (located at the bottom)

(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



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Pressure range selection table

Scale ranges				
Bar	Kg/cm ²	Psi	kPa	MPa
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