

# Bourdon Tube Laboratory Test Pressure Gauge

Accuracy  $\pm 0.1\%$  FS

Type 01.27 - DS 250

# 01.27



These instruments have been designed for use as in laboratories, instrument testing or recalibration facilities or in applications where accuracy and repeatability are of prime importance. They can be used with gaseous or liquid media which do not corrode copper alloy and which do not have high viscosity nor cristalize. Each instruments is delivered with a LEITENBERGER certificate of accuracy, who guarantee traceability to the national and international primary master of pressure measurements. On request we can supply the calibration certificate issued by a recognised laboratory of DKD (Deutscher Kalibrier-Dienst).

## Functional and constructive characteristics

01.27

**Accuracy** (as per EN 837-1):  $\pm 0.1\%$  of F.S.V. for pressure ranges - 600 bar;  $\pm 0.2\%$  of F.S.V. for pressure ranges > 600 bar;.

**Ambient temperature** : +10...+60 °C.

**Calibration temperature** : +20 °C.

**Process fluid temperature**: +20 °C.

**Working pressure** : max 75% of the full scale value.

**Thermal drift** :  $\pm 0.04$  of F.S.V. taking 20 °C as the datum temperature, will be within 0,04 of F.S.V. of the full scale value for a temperature change of  $\pm 10$  °C.

**Overpressure** : not suitable.

**Protection** : IP 44 as per IEC 529.

**Socket material** : AISI 316L st.st.

**Elastic element**:

beryllium copper C-shaped for pressure ranges - 60 bar; beryllium copper spiral for pressure range > 60 bar.

**Welding** : silver alloy.

**Case and ring** : aluminium, black painted.

**Window** : plexiglas.

**Movement** : high precision type, roller bearing mounted.

**Dial** : aluminium, green with black markings and anti-parallax mirror.

**Scale amplitude** : 310°

**Zero calibration** : external, manual.

**Pointer** : balanced, anti-parallax knife-edge micrometer adjustable.

**Window gasket** : synthetic rubber.

**Blow out vent** : polychloroprene.

## RANGES - "E" = DS100; "G" = DS150.

### PRESSURE

RANGES	Figure interval	Minor graduation	bar	kPa	MPa	PSI	bar est.* kg/cm <sup>2</sup> psi int.
0...1	0,002	0,02	◆		◆		
0...1,6	0,005	0,05	◆		◆		
0...2,5	0,005	0,05	◆		◆		◆
0...4	0,01	0,1	◆		◆		◆
0...6	0,02	0,2	◆		◆		◆
0...10	0,02	0,2	◆		◆		◆
0...16	0,05	0,5	◆		◆	◆	◆
0...25	0,05	0,5	◆		◆	◆	◆
0...40	0,1	1	◆		◆	◆	◆
0...60	0,2	2	◆		◆	◆	◆
0...100	0,2	2	◆	◆	◆	◆	◆
0...160	0,5	5	◆	◆	◆	◆	◆
0...250	0,5	5	◆	◆		◆	◆
0...400	1	10	◆	◆		◆	◆
0...600	2	20	◆	◆		◆	◆
0...1000	2	20	◆	◆		◆	◆
0...1600	5	50	◆	◆		◆	

\* accuracy refers to the bar outer scale.

### VACUUM

RANGES	Figure interval	Minor graduation	bar est.* mm Hg inch Hg int.
-1÷0	0,002	0,02	◆

\* accuracy refers to the mm Hg outer scale.



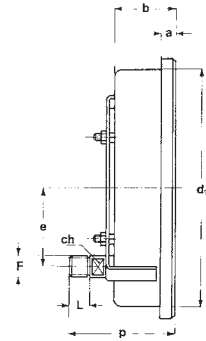
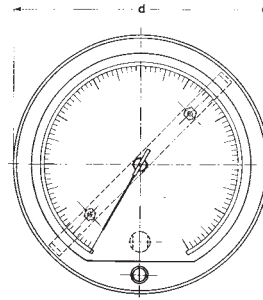
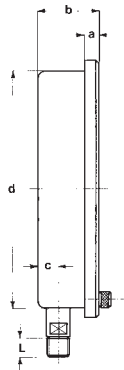
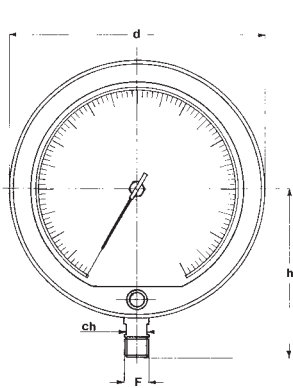
## Test Pressure Gauge

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REV. 01 E 03/00

## TYPES, DIMENSIONS AND WEIGHTS

**TYPE A**stem mounting;  
lower connection.**TYPE B**flush mounting, "U"-Clamp;  
back connection.

Type	F	a	b	c	d	d	e	h	L	ch	p	Weight
A	1/2" BSP-NPT	15	63	20	270	247		170	20	17		3,1 Kg.
B	1/2" BSP-NPT	15	63		270	247	80		20	17	113	3,25 Kg.

## HOW TO ORDER

	CODE & DESCRIPTION
<b>01</b>	01- Bourdon Tube Pressure Gauge
<b>27</b>	27 - Test Pressure Gauge $\pm 0.1\%$ FS
<b>1</b>	1 - standard
<b>A</b>	A - lower connection - stem mounting B - back connection - flush mounting, "U" clamp
<b>I</b>	I - DS 250
<b>2</b>	1 - up to 2,5 bar 2 - from 4 to 40 bar 3 - over 40 bar
<b>0/10 bar</b>	see ranges table
<b>41M</b>	23M - 1/4" NPT 41M - 1/2" BSP 43M - 1/2" NPT
<b>A40</b>	see options table

## OPTIONS

DESCRIPTION	CODE
Protective case	<b>A40</b>
DKD calibration certificate for pressure	<b>CE1</b>
DKD calibration certificate for vacuum	<b>CE3</b>
Accuracy $\pm 0.25\%$ FS	<b>K02</b>

## ACCESSORIES

**Adjustable over-load protector:** this is useful for installations which may generate high overpressures, the pressure gauge is automatically excluded at the pre-set pressure returns to normal. For further details refer to our data-sheet 05.48A-49A.

**Valves:** for construction details and for use limits refer to our data-sheet 05.

**Pressure snubbers:** for further details refer to our data-sheet 05.450-470.



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