

Bourdon Tube Pressure Gauges Stainless Steel Series Model MBS, without/with Liquid Filling



Applications

- With liquid-filled case for applications with high dynamic pressure pulsations or vibrations
- For gaseous and liquid aggressive media that are not highly viscous or crystallising, also in aggressive ambience
- Process industries: chemical/petro-chemical, power stations, mining, on and offshore, environmental technology, machine building and plant construction

Special Features

- Excellent load-cycle stability and shock resistance
- All stainless steel construction
- German Lloyd, Gosstandart and DVGW approval
- Scale ranges up to 0 ... 1600 bar



Bourdon Tube Pressure Gauge Model MBS

Description

Design
EN 837-1

Nominal size in mm
63, 100, 160

Accuracy class
NG 63: 1.6
NG 100, 160: 1.0

Scale ranges
NS 63: 0 ... 1 to 0 ... 1000 bar
NS 100: 0 ... 0.6 to 0 ... 1000 bar
NS 160: 0 ... 0.6 to 0 ... 1600 bar
or all other equivalent vacuum or combined pressure and vacuum ranges

Pressure limitation

NS 63:	Steady:	3/4 x full scale value
	Fluctuating:	2/3 x full scale value
	Short time:	full scale value
NS 100, 160:	Steady:	full scale value
	Fluctuating:	0.9 x full scale value
	Short time:	1.3 x full scale value

Operating temperature

Ambient:	-40 ... +60 °C without liquid filling
	-20 ... +60 °C gauges with glycerine filling
Medium:	+200 °C maximum without liquid filling
	+100 °C maximum with liquid filling

Temperature effect

When the temperature of the measuring system deviates from the reference temperature (+20 °C):
max. $\pm 0.4 \%$ / 10 K of full scale value

Ingress protection

IP 65 per EN 60 529 / IEC 529

Standard version

Process connection

Stainless steel 316L (NS 63: 1.4571),
lower mount (LM) or lower back mount (LBM)
NS 63: G ¼ B (male), 14 mm flats
NS 100, 160: G ½ B (male), 22 mm flats

Pressure element

Stainless steel 316L,
< 100 bar: C-type
≥ 100 bar: helical type

Movement

Stainless steel

Dial

Aluminium, white, black lettering,
NS 63 with pointer stop pin

Pointer

Aluminium, black

Case

Stainless steel, with pressure relief in case top (NS 63) or in case back (NS 100 and 160),
ranges ≤ 0 ... 16 bar with compensating valve to vent case

Window: Laminated safety glass (NS 63: Polycarbonate)

Bezel ring: Cam ring (bayonet type), stainless steel

Liquid filling : Glycerine 99.7 %

Special versions

Gauges for ammonia plants (NS 100 and 160)
With temperature scale for refrigerant R 717 (NH₃) in °C,
scale ranges: -1 ... 0 ... 15 bar or -1 ... 0 ... 26 bar

Dimensions in mm

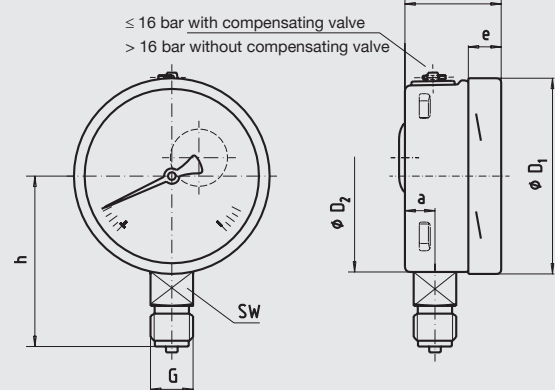
NS	Dimensions in mm										Weight in kg	
	a	b	b ₁	b ₂	D ₁	D ₂	e	f	G	h ± 1	SW	Model MBS
63	9.5	33	33	57	63	62	11.5	-	G ¼ B	54	14	0.20
100	15.5	49.5	49.5	83	101	99	17.5	30	G ½ B	87	22	0.90
160	15.5	49.5	49.5	83	161	159	17.5	50	G ½ B	118	22	2.00

Options

- Other process connection
- Assembly on diaphragm seals
- Monel pressure system
- Pressure system stainless steel 1.4571
- Surface or panel mounting flange, stainless steel
- Panel mounting flange, stainless steel, polished
- Triangular bezel, stainless steel, polished, with clamp
- Ambient temperature -40 °C: silicon oil filling
- Switch contacts (see data sheet EP310)
- Version per ATEX Ex II 2 GD c

Standard version

Lower mount (LM)



Lower back mount (LBM)

