



Bourdon tube pressure gauge with electrical contacts for chemical applications type D4

benefits

- measuring system fully welded to housing
- robust mechatronical pressure gauge
- Up to four switching contacts
- tightness-tested with helium
- GOSSTANDART-certified

Application

For corrosive gaseous and liquid media which are not highly viscous and do not crystallise; suitable for corrosive environments.

Technical Specifications

Type

D4

Nominal size

100

accuracy class (EN 837-1/6)

1.0

ranges (EN 837-1/5)

see ordering table

application area

≤ 600 bar: Full scale value
 > 600 bar: $\frac{3}{4}$ x full scale value
 ≤ 600 bar: 0.9 x full scale value
 > 600 bar: $\frac{2}{3}$ x full scale value
 ≤ 600 bar: 1.3 x full scale value
 > 600 bar: Full scale value

contact types

inductive contact (IK)

minimum range

IK Single
 1 bar

Operating temperature range

Medium: max. 150 °C
 Ambient: -20/+60 °C

Temperature performance

Indication error when the temperature of the measuring system deviates from the normal temperature of 20 °C:
 at rising temperature approx. $\pm 0.4 \text{ } \%$ /10 K
 falling temperature approx. $\pm 0.4 \text{ } \%$ /10 K
 of full scale value

Degree of protection

IP 54 (EN 60529)

Connection

stainless steel 316 Ti/316 L, bottom
 G $\frac{1}{2}$ B, SW22 (EN 837-1/7.3)

Electrical connection

Junction box

Measuring element

Bourdon tube, stainless steel 316 Ti/316 L
 ≤ 60 bar: "C" type tube
 > 60 bar: helical tube

movement

Stainless steel

Dial

Aluminium, white

Scaling: black

Pointer

Aluminium, black

Inductive contact (IK)**Supply voltage**

DC 5 – 25 V

Current input

≥ 2.1 mA

Switching accuracy

approx. 0.5 % of full scale value

Options

- Liquid filling (silicone oil)
- back flange
- 3-hole fixing, panel mounting bezel
- throttle screw
- Connector
- special scales
- other process connections

Housing

Stainless steel 304, with blow-out

bayonet bezel

Stainless steel 304

window

Plastic (Makrolon), with contact adjustment lock

Operating temperature range

-20/+70 °C or corresponding to the respective measuring instruments

Adjustment range

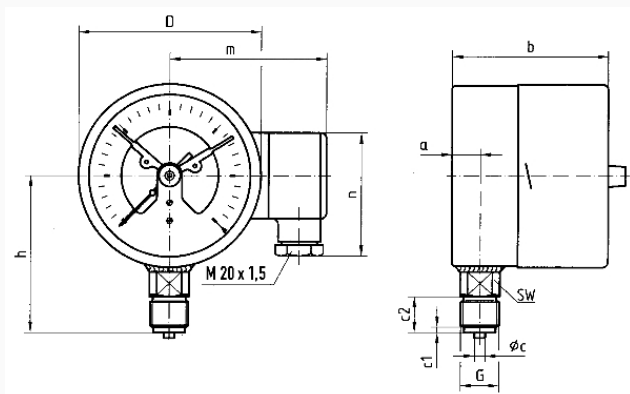
5–95 % measuring range of gauge

Options

- contact systems with safety integrity level SIL 2

Technical Drawings

Bottom connection



Dimensions (mm)

NG	a	b	b1	Øc	c1	c2	D	G	h	m	n	SW
100	15,6	87	90,5	6	3	20	101,5G½B	86	92	72	22	
160	17,5	97	100	6	3	20	161,5G½B	116	122	72	22	

Versions

Range	Mounting type	Type		Part number
-1/+0 bar	direct	RF100Ch IK1 D402	●	87701402
-1/+0.6 bar	direct	RF100Ch IK1 D402	●	87702402
-1/+1.5 bar	direct	RF100Ch IK1 D402	●	87703402
-1/+3 bar	direct	RF100Ch IK1 D402	●	87704402
-1/+5 bar	direct	RF100Ch IK1 D402	●	87705402
-1/+9 bar	direct	RF100Ch IK1 D402	●	87706402
-1/+15 bar	direct	RF100Ch IK1 D402	●	87707402
0/0.6 bar	direct	RF100Ch IK1 D402	●	87709402
0/1 bar	direct	RF100Ch IK1 D402	●	87710402
0/1.6 bar	direct	RF100Ch IK1 D402	●	87711402
0/2.5 bar	direct	RF100Ch IK1 D402	●	87712402
0/4 bar	direct	RF100Ch IK1 D402	●	87713402
0/6 bar	direct	RF100Ch IK1 D402	●	87714402
0/10 bar	direct	RF100Ch IK1 D402	●	87715402
0/16 bar	direct	RF100Ch IK1 D402	●	87716402
0/25 bar	direct	RF100Ch IK1 D402	●	87717402
0/40 bar	direct	RF100Ch IK1 D402	●	87718402
0/60 bar	direct	RF100Ch IK1 D402	●	87719402
0/100 bar	direct	RF100Ch IK1 D402	●	87720402
0/160 bar	direct	RF100Ch IK1 D402	●	87721402
D402				
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0/400 bar	direct	RF100Ch IK1 D402	●	87723402