



## Bourdon tube pressure gauges for industrial applications RF100I IK1

Part no. 87703401

Bourdon tube pressure gauges for industrial applications with electrical contact type D4

### benefits

- robust stainless steel housing
- excellent readability
- Up to four switching contacts
- available with MK, EK, IK

### Application

For gaseous and liquid media which are not highly viscous, do not crystallise and do not attack copper alloys.

### 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: ¾ x full scale value  
 ≤ 600 bar: 0.9 x full scale value  
 > 600 bar: ⅔ 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. 60 °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. ± 0.4 %/10 K  
falling temperature approx. ± 0.4 %/10 K  
of full scale value

**Degree of protection**  
IP 54 (EN 60529)

**Connection**  
Brass, bottom  
G½B, SW22 (EN 837-1/7.3)

**Electrical connection**

Cable gland M12 x 1.5  
Cable 1 m

**Measuring element**

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

**movement**

Brass

**Dial**

Aluminium, white  
Scaling: black

**Pointer**

Aluminium, black

**Housing**

Stainless steel 304, with blow-out

**bayonet bezel**

Stainless steel 304

**Options**

- back flange
- 3-hole fixing, panel mounting bezel
- throttle screw
- Junction box
- Connector
- special scales
- other process connections

**window**

Plastic (Makrolon), with contact adjustment lock

**Supply voltage**

DC 5 – 25 V

**Current input**

≥ 2.1 mA

**Switching accuracy**

approx. 0.5 % of full scale value

**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	∅C	c1	c2	D	G	h	r1	r2	SW
100	15,6	87	90,5	6	3	20	101,5G½B	86	14	14	34,5	22
160	17,5	97	100	6	3	20	161,5G½B	116	14	14	34,5	22

**Versions**

Range	Mounting type	Type	Part number
-1/+1.5 bar	direct	RF100I IK1 D401	87703401

- in-stock items
- Non-stock items