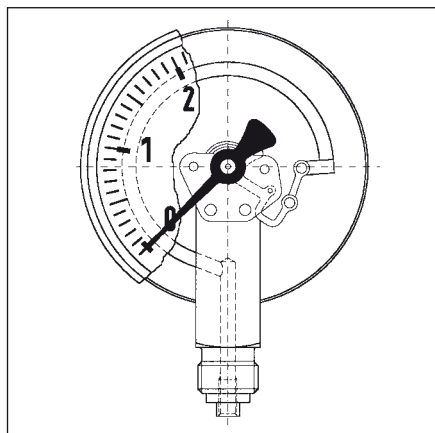


Bourdon tube pressure gauges for industrial applications EN 837-1



Application

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

For high accuracy measurement in arduous conditions.

! When measuring gas or vapour, the instruments must be used in accordance with the safety recommendations of EN 837-2 (see appendix).

Type

D 4

Nominal size

100 – 160

Accuracy class (EN 837-1/6)

1.0

Ranges (EN 837-1/5)

-1/0 to -1/+15 bar
0/0.6 to 0/1000 bar

Application area

Static load:

≤ 600 bar = full scale value
> 600 bar = $\frac{3}{4}$ x full scale value

Dynamic load:

≤ 600 bar = 0.9 x full scale value
> 600 bar = $\frac{2}{3}$ x full scale value

Short term:

≤ 600 bar = 1.3 x full scale value
> 600 bar = full scale value

Operating temperature range

Medium: $T_{max} = +60 \text{ }^\circ\text{C}$

Ambient: $T_{min} = -20 \text{ }^\circ\text{C}$

$T_{max} = +60 \text{ }^\circ\text{C}$

Temperature performance

Indication error when the temperature of the measuring element deviates from 20 °C:

rising temp. approx. $\pm 0.4 \text{ } \%/10 \text{ K}$

falling temp. approx. $\pm 0.4 \text{ } \%/10 \text{ K}$
percentage of full scale value

Protection

IP 54 (EN 60529)

Standard version

Connection

Brass, bottom or bottom back

G $\frac{1}{2}$ B – spanner size 22

(EN 837-1/7.3)

Measuring element

Bourdon tube element,

≤ 60 bar „C“ type bourdon tube, copper alloy

> 60 bar helical tube, stainless steel

316 Ti or 316 L

Movement

Brass

Dial

Aluminium, white

Dial marking black

Pointer

Aluminium, black

Housing

Stainless steel 304

with blow-out

Bayonet type bezel

Stainless steel 304

Front glass

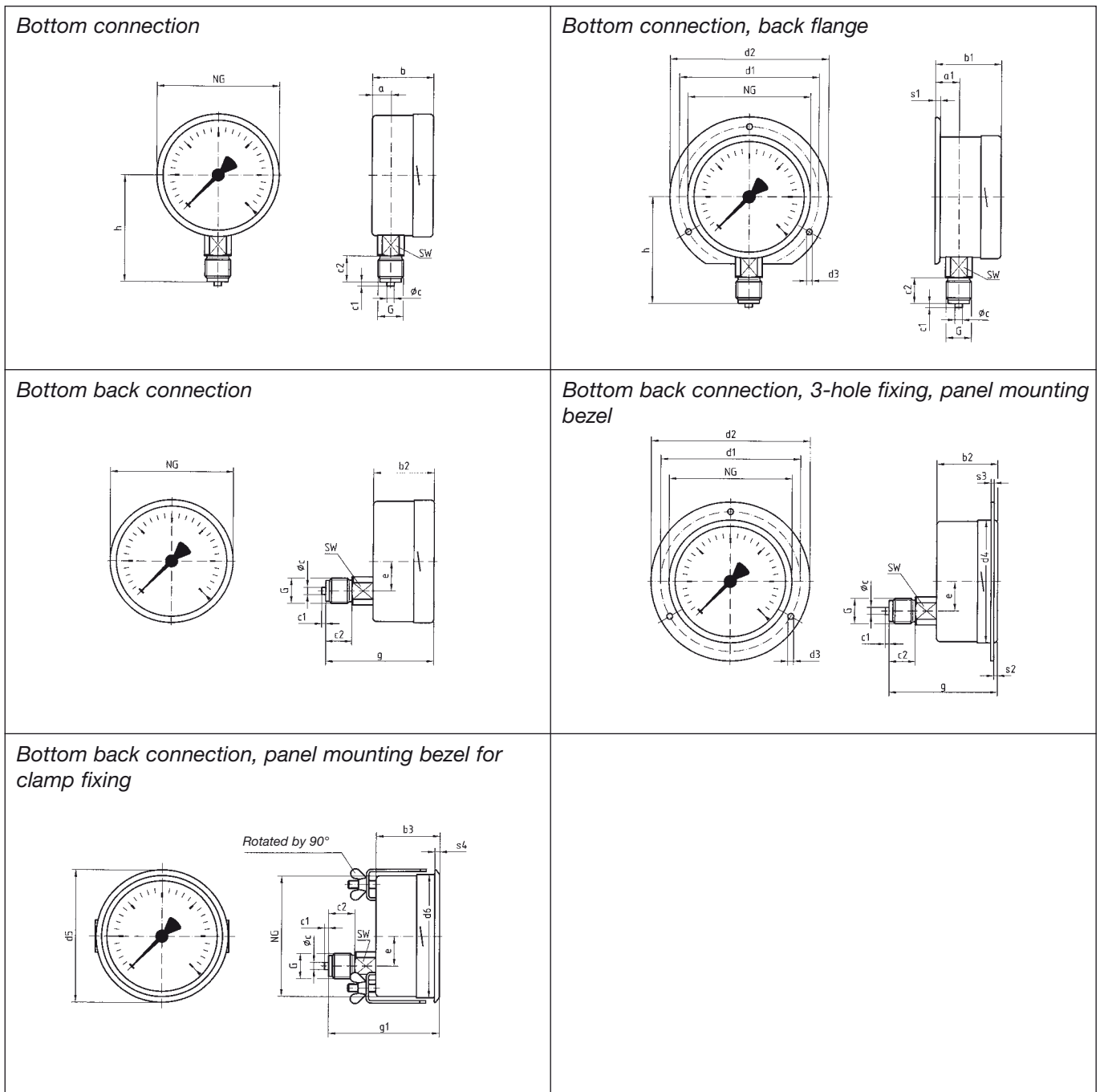
Instrument glass

Options

- Nominal size 250 (bottom connection)
- Back flange
- Panel mounting bezel for clamp fixing
- 3-hole fixing, panel mounting bezel
- Safety front glass
- Damping screw
- Reference pointer
- Electrical contacts

Bourdon tube pressure gauges for industrial applications Type D 4 – NG 100/160

Housing types and dimensions











Dimensions (mm)

Nominal size (NG)	a	a ₁	b	b ₁	b ₂	b ₃	Øc	c ₁	c ₂	d ₁ *	d ₂	d ₃ *	d ₄	d ₅	d ₆	e	G	g	g ₁	h	s ₁
100	15.6	19.1	49	52.5	49	49	6	3	20	116	132	4.8	104	107	101	26.5	G ¹ / ₂ B	81	81	86	5.5
160	17.5	20.5	50	53	50	52	6	3	20	178	196	5.8	164	167	161	26.5	G ¹ / ₂ B	82	84	116	6
250	16	-	57	59	-	-	6	3	20	270	285	5.8	-	-	-	-	G ¹ / ₂ B	-	-	165	2
Nominal size (NG)	s ₂	s ₃	s ₄	SW																	
100	4	2	4	22																	
160	4	2	4.5	22																	
250	-	-	-	22																	

* Dimensions according to DIN 16064

Bourdon tube pressure gauges for industrial applications EN 837-1

DG: M

Type	RF100 I,D401	RF100 I,D411	RF100 I,D431	RF100 I,D451	RF160 I,D401	RF160 I,D411	RF160 I,D431	RF160 I,D451
Version								
Housing-Ø	100	100	100	100	160	160	160	160
Housing	Stainless steel 304 with bayonet type bezel, Instrument grade front glass							
Meas. elem.	Bourdon tube, copper alloy (> 60 bar stainless steel 316 Ti or 316 L)							
Accuracy class	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Connection	G ¹ / ₂ B	G ¹ / ₂ B	G ¹ / ₂ B	G ¹ / ₂ B	G ¹ / ₂ B	G ¹ / ₂ B	G ¹ / ₂ B	G ¹ / ₂ B
			3-hole fixing, panel mounting bezel 304 polished	Panel mounting bezel 304, clamp fixing			3-hole fixing, panel mounting bezel 304 polished	Panel mounting bezel 304, clamp fixing
Range (bar)	Part no.	Part no.	Part no.	Part no.	Part no.	Part no.	Part no.	Part no.
Price €								
-1/0	85301401	85301411	85301431	85301451	85351401	85351411	85351431	85351451
-1/+0,6	85302401	85302411	85302431	85302451	85352401	85352411	85352431	85352451
-1/+1,5	85303401	85303411	85303431	85303451	85353401	85353411	85353431	85353451
-1/+3	85304401	85304411	85304431	85304451	85354401	85354411	85354431	85354451
-1/+5	85305401	85305411	85305431	85305451	85355401	85355411	85355431	85355451
-1/+9	85306401	85306411	85306431	85306451	85356401	85356411	85356431	85356451
-1/+15	85307401	85307411	85307431	85307451	85357401	85357411	85357431	85357451
Price €								
0/0,6	85309401	85309411	85309431	85309451	85359401	85359411	85359431	85359451
0/1	85310401	85310411	85310431	85310451	85360401	85360411	85360431	85360451
0/1,6	85311401	85311411	85311431	85311451	85361401	85361411	85361431	85361451
0/2,5	85312401	85312411	85312431	85312451	85362401	85362411	85362431	85362451
0/4	85313401	85313411	85313431	85313451	85363401	85363411	85363431	85363451
0/6	85314401	85314411	85314431	85314451	85364401	85364411	85364431	85364451
0/10	85315401	85315411	85315431	85315451	85365401	85365411	85365431	85365451
0/16	85316401	85316411	85316431	85316451	85366401	85366411	85366431	85366451
0/25	85317401	85317411	85317431	85317451	85367401	85367411	85367431	85367451
0/40	85318401	85318411	85318431	85318451	85368401	85368411	85368431	85368451
Price €								
0/60	85319401	85319411	85319431	85319451	85369401	85369411	85369431	85369451
0/100	85320401	85320411	85320431	85320451	85370401	85370411	85370431	85370451
0/160	85321401	85321411	85321431	85321451	85371401	85371411	85371431	85371451
0/250	85322401	85322411	85322431	85322451	85372401	85372411	85372431	85372451
0/400	85323401	85323411	85323431	85323451	85373401	85373411	85373431	85373451
Price €								
0/600	85324401	85324411	85324431	85324451	85374401	85374411	85374431	85374451
0/1000	85325401	85325411	85325431	85325451	85375401	85375411	85375431	85375451
Add. costs					Price €			
Nominal size 250	---	---	---	---		---	---	---