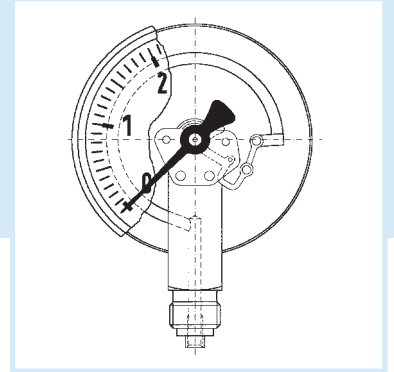
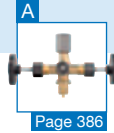


Bourdon tube pressure gauges for industrial applications

EN 837-1



- For machine and plant engineering
- Robust, stainless steel housing with bayonet bezel
- Optionally available up to nominal size 250 mm
- Can be equipped with electrical contact
- DNV type approval GOSSTANDART-certified



Application For gaseous and liquid media which are not highly viscous, do not crystallise and do not attack copper alloys. For high accuracy and rough application conditions.
! For measuring gas or vapour, these gauges must be used in accordance with the table "Selection Criteria as per EN 837-2" (see appendix)!

Technical specifications

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 = ¾ x full scale value
Dynamic load:
≤ 600 bar = 0.9 x full scale value
> 600 bar = ⅔ x full scale value

Standard version

Connection
Brass, bottom or lower back
G½B – spanner size SW 22 (EN 837-1/7.3)

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, dial marking black

Options

- Nominal size 250 (bottom connection)
- Back flange
- Panel mounting bezel for clamp fixing
- 3-hole fixing, panel mounting bezel
- Safety glass window

Short-term:

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

Operating temperature range

Medium: $T_{max} = +60\text{ °C}$
Ambient: $T_{min} = -20\text{ °C}$
 $T_{max} = +60\text{ °C}$

Temperature performance

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

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)

Pointer

Aluminium, black

Housing

Stainless steel 304 with blow-out

Bayonet bezel

Stainless steel 304

Window

Instrument glass

- Damping screw
- Reference pointer
- Electrical contacts
- Special scales
- Other process connections

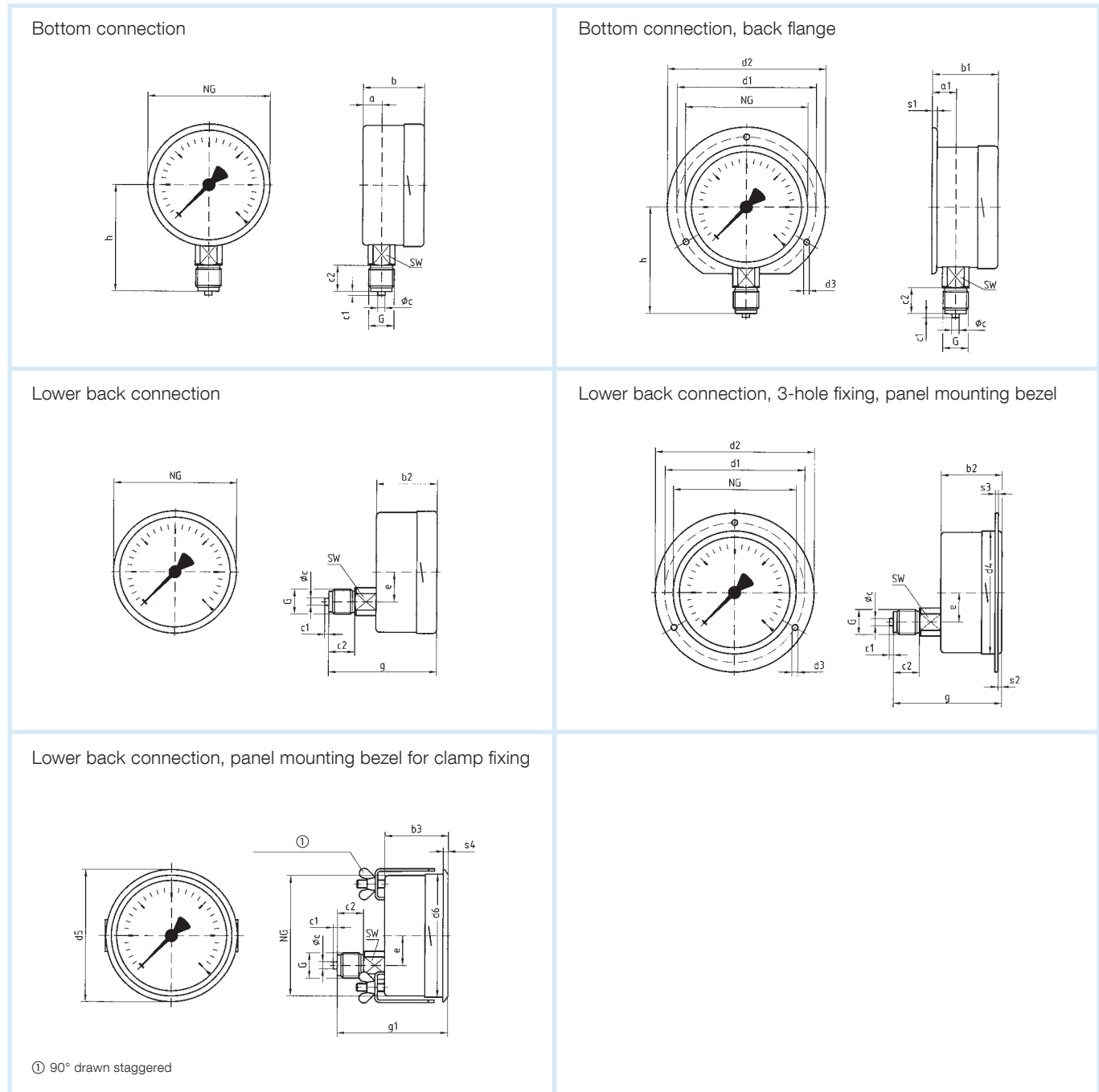


See page 271 for prices.

Bourdon tube pressure gauges for industrial applications

Type D 4 – NG 100/160

Housing types and dimensions



Dimensions (mm)

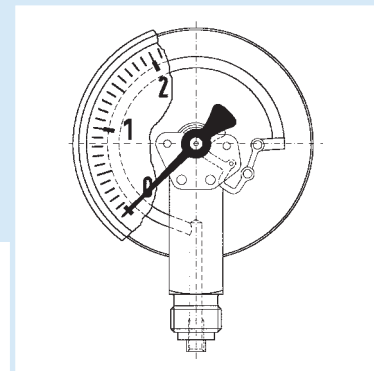
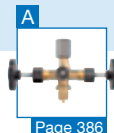
Nominal size (NG)	a	a1	b	b1	b2	b3	ϕc	c1	c2	d1*	d2	d3*	d4	d5	d6	e	G	g	g1	h	s1
100	15.6	19.1	49	52.5	49	49	6	3	20	116	132	4.8	104	107	101	26.5	G $\frac{1}{2}$ B	81	81	86	5.5
160	17.5	20.5	50	53	50	52	6	3	20	178	196	5.8	164	167	161	26.5	G $\frac{1}{2}$ B	82	84	116	6
250	16	-	57	59	-	-	6	3	20	270	285	5.8	-	-	-	-	G $\frac{1}{2}$ B	-	-	165	2
Nominal size (NG)	s2	s3	s4	SW																	
100	4	2	4	22																	
160	4	2	4.5	22																	
250	-	-	-	22																	

* Dimensions for NG 100 according to DIN 16064

Glycerine filled Bourdon tube pressure gauges EN 837-1



- Robust stainless steel housing
- Can be used in case of heavy vibrations and high, dynamic pressure loads
- Longer service life due to less wear and corrosion protection of the measuring system
- No steaming up of the inside of the window in case of outdoor applications
- DNV-certified



Application For gaseous and liquid media which are not highly viscous, do not crystallise and do not attack copper alloys. For measurements in areas with high vibration levels and high, dynamic pressure loads. ! For measuring gas or vapour, these gauges must be used in accordance with the table "Selection Criteria as per EN 837-2" (see appendix)!

Technical specifications

Type

D 7

Nominal size

50 – 63

Accuracy class (EN 837-1/6)

1.6

Ranges (EN 837-1/5)

-1/0 to -1/+15 bar
0/0.6 to 0/400 bar
NG 63 to 0/600 bar

Application area

Static load: $\frac{3}{4}$ x full scale value
Dynamic load: $\frac{2}{3}$ x full scale value
Short-term: 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 system deviates from the normal temperature of 20 °C:
Rising temperature approx. $\pm 0.4\%$ /10 K
Falling temperature approx. $\pm 0.4\%$ /10 K
of full scale value

Degree of protection

IP 65 (EN 60529)
with housing vent (≤ 25 bar)
IP 54

Standard version

Connection

Brass, bottom or centre back
G $\frac{1}{4}$ B – spanner size SW 14 (EN 837-1/7.3)

Measuring element

Bourdon tube, copper alloy
 ≤ 60 bar "C" type tube
> 60 bar helical tube

Movement

Brass

Dial

Aluminium, white
Dial marking black

Pointer

Aluminium, black

Housing

Stainless steel 304
with pressure relief port

Crimped bezel

Stainless steel 304

Window

Plastic

Filling liquid

Glycerine (99.5 %)

Options

- Filling liquid silicone oil
- Back flange (NG 63)
- Clamp fixing
- 3-hole fixing, panel mounting bezel (NG 63)
- Crimped bezel polished
- Special scales
- Damping screw
- Other process connections

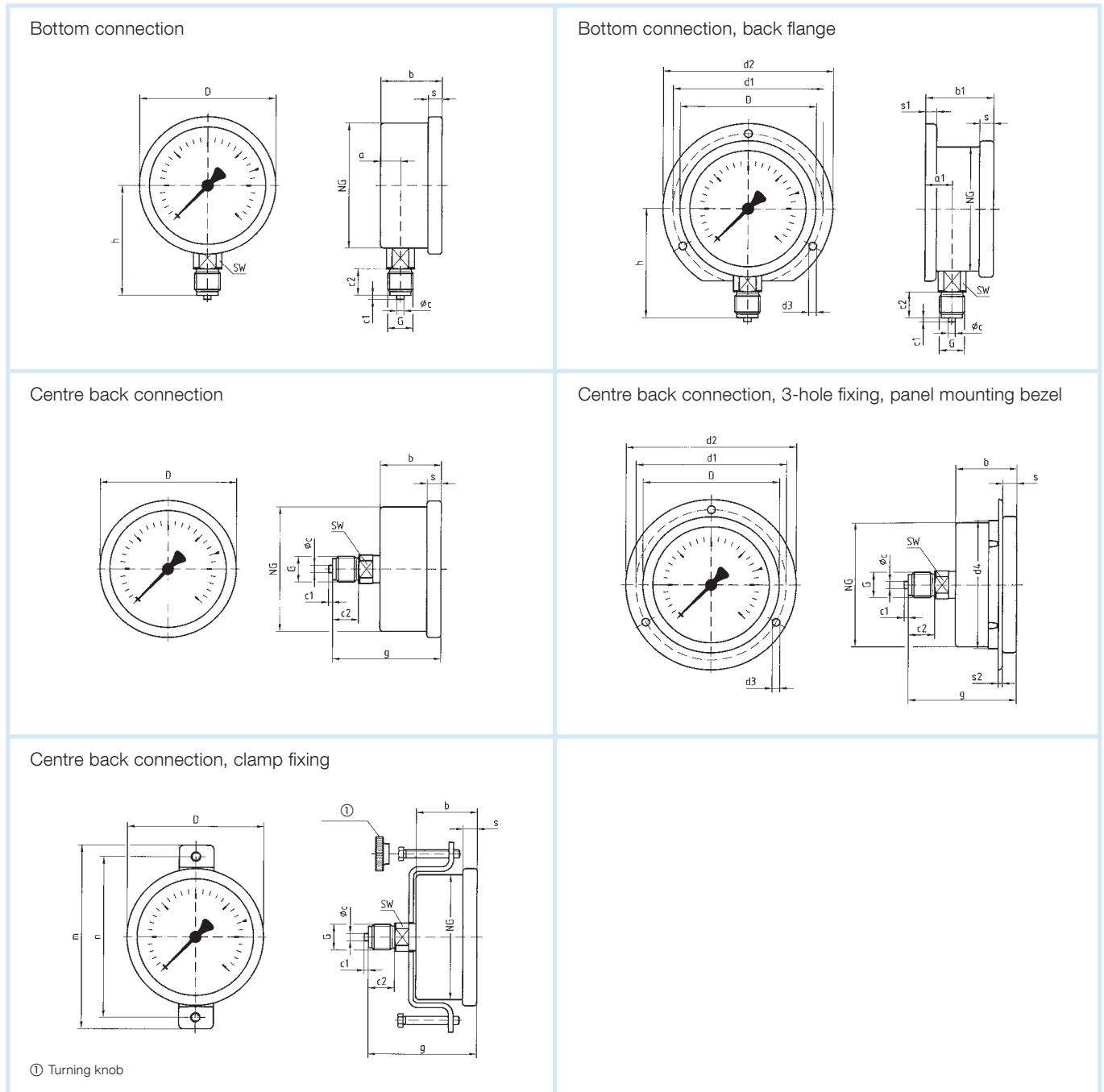


See page 278 for prices.

Glycerine filled Bourdon tube pressure gauges

Type D 7 -NG 50/63

Housing types and dimensions



Dimensions (mm)

Nominal size (NG)	a	a1	b	b1	∅c	c1	c2	d1*	d2	d3*	d4	D	G	g	h	m	n	s	s1	s2	SW
50	11	-	28	-	5	2	13	-	-	-	-	53	G¼B	51	45.5	82	73	4.5	-	-	14
63	9.5	13	30.5	34	5	2	13	75	85	3.6	64	68	G¼B	53.3	53	94	82	7	5.5	2	14

* Dimensions as per DIN 16063