

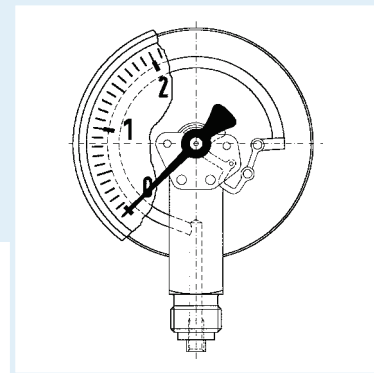
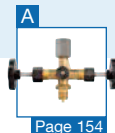
Glycerine filled Bourdon tube pressure gauges

EN 837-1

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- 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



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

Degree of protection

IP 65 (EN 60529)
with housing vent ($\leq 25\text{ bar}$): 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
 $\leq 60\text{ bar}$ "C" type tube
 $> 60\text{ bar}$ helical tube

Movement

Brass

Dial

Aluminium, white
Dial marking black

Pointer

Aluminium, black

Housing

Stainless steel 304
with blow-out

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
- Clip reference pointer, red, adjustable (NG 63)
- Damping screw
- Other process connections

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See page 44 for prices.

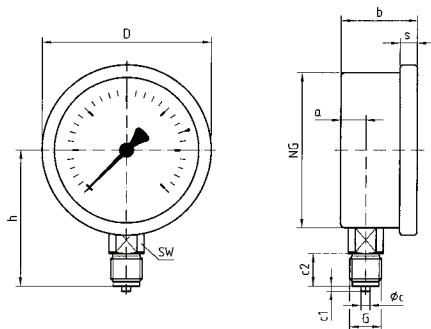
Glycerine filled Bourdon tube pressure gauges

Type D 7 – NG 50/63

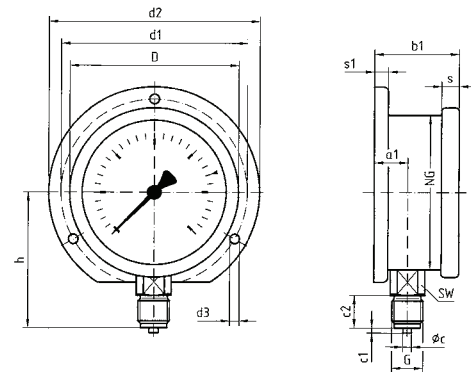
Housing types and dimensions

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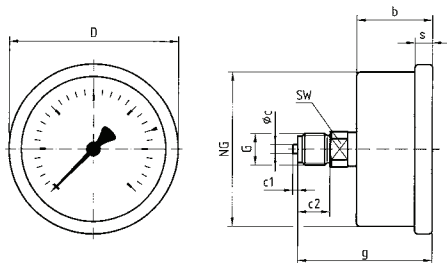
Bottom connection



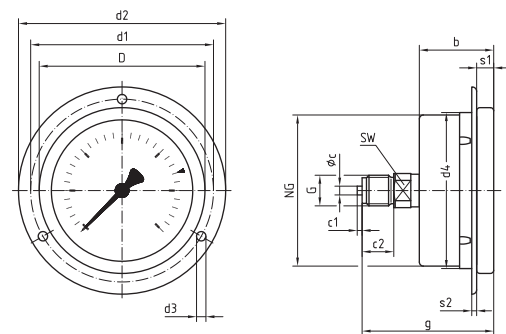
Bottom connection, back flange (NG 63)



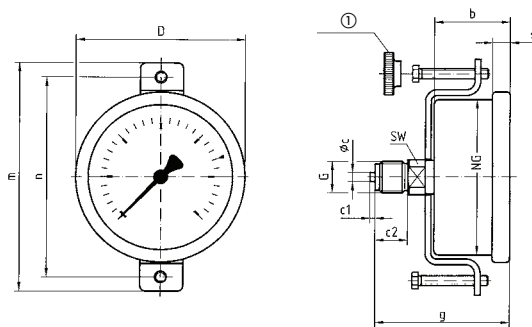
Centre back connection



Centre back connection, 3-hole fixing, panel mounting bezel



Centre back connection, with clamp fixing



① Rotary knob

Dimensions (mm)

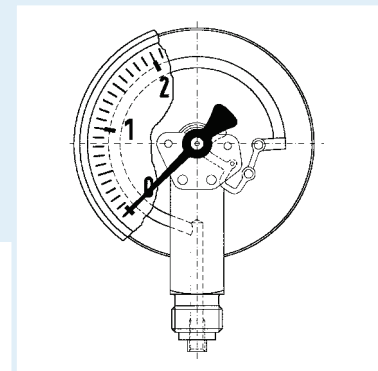
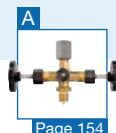
Nominal size (NG)	a	a1	b	b1	øc	c1	c2	d1*	d2	d3*	d4	D	G	g	h	m	n	s	s1	s2	SW
50	11	-	28	-	5	2	13	-	-	-	-	53	G1/4B	51	45.5	82	73	4.5	-	-	14
63	9.5	13	30.5	34	5	2	13	75	85	3.6	64	68	G1/4B	53.3	53	94	82	7	5.5	2	14

* Dimensions as per DIN 16063.

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Technical specifications

Type
D 7

Nominal size
80 – 100

Accuracy class (EN 837-1/6)
1.6

Ranges (EN 837-1/5)
-1/0 to -1/+15 bar
0/1 to 0/400 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: $T_{min} = -20\text{ }^{\circ}\text{C}$
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Temperature performance

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

Degree of protection

IP 65 (EN 60529)
with housing vent ($\leq 25\text{ bar}$): IP 54

Standard version

Connection
Brass, bottom NG 80-100 G $\frac{1}{2}$ B –
spanner size SW 22
Brass, centre back NG 80 G $\frac{1}{4}$ B –
spanner size SW 14
NG 100 G $\frac{1}{2}$ B – spanner size SW 22
(EN 837-1/7.3)

Measuring element
Bourdon tube, copper alloy
 $\leq 60\text{ bar}$ "C" type tube
 $> 60\text{ bar}$ helical tube

Movement
Brass

Dial
Aluminium, white
Dial marking, black

Pointer

Aluminium, black

Housing

Stainless steel 304 with blow-out

Crimped bezel

Stainless steel 304

Window

Plastic (Makrolon)

Filling liquid

Glycerine (99.5 %)

Options

- Filling liquid silicone oil
- Clamp fixing
- 3-hole fixing, panel mounting bezel (NG 100)
- Crimped bezel polished
- Measuring system stainless steel (up to 1000 bar)
- Special scales
- Damping screw
- Other process connections



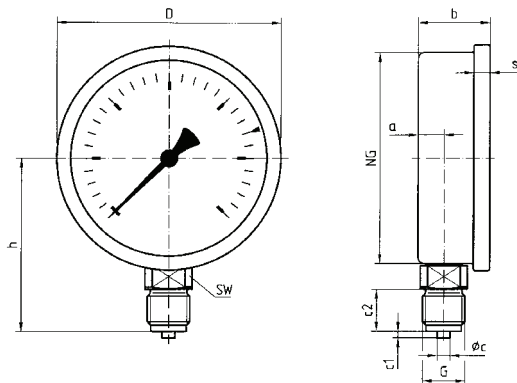
See page 47 for prices.

Glycerine filled Bourdon tube pressure gauges

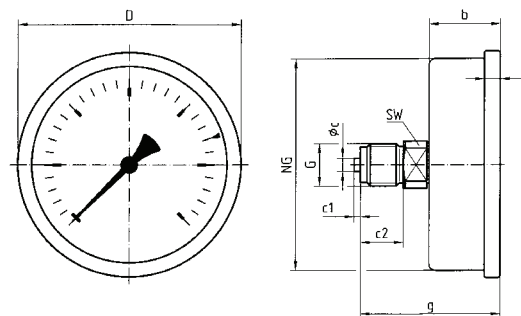
Type D 7 – NG 80/100

1 Housing types and dimensions

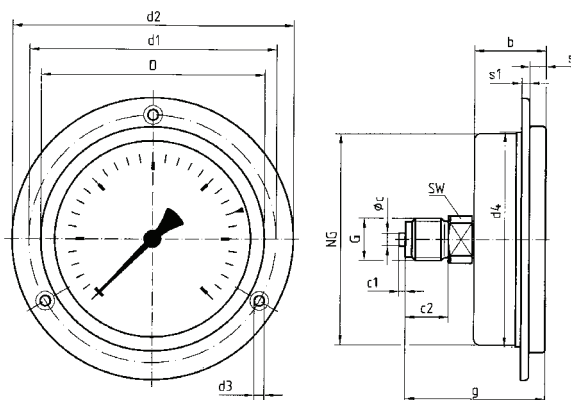
Bottom connection



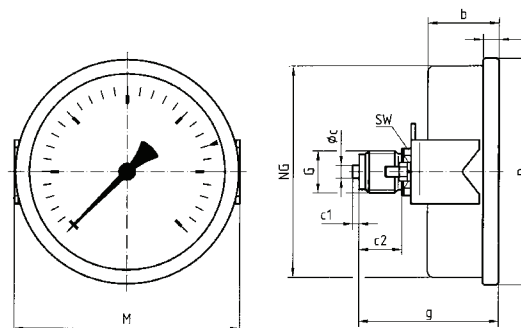
Centre back connection



Centre back connection, 3-hole fixing, panel mounting bezel (NG 100)



Centre back connection, clamp fixing



Dimensions (mm)

Nominal size (NG)	a	b	Øc	c1	c2	d1*	d2	d3*	d4	D	g	G	h	M	s	s1	SW
80 Ms ax	-	33.5	5	2	13	-	-	-	-	85	56.5	G¼B	-	82	7	-	14
80 VA ax	-	33.5	5	2	13	-	-	-	-	85	59	G¼B	-	82	7	-	14
80 Ms rad	12.2	33.5	6	3	20	-	-	-	-	85	-	G½B	71	-	7	-	22
80 VA rad	12.2	33.5	6	3	20	-	-	-	-	85	-	G½B	79.5	-	7	-	22
100 Ms	12.2	33.5	6	3	20	116	132	4.8	101	106	65.5	G½B	81	106	7	3.8	22
100 VA	11.8	33.5	6	3	20	116	132	4.8	101	106	76.5	G½B	90	106	7	3.8	22

* Dimensions as per DIN 16064.