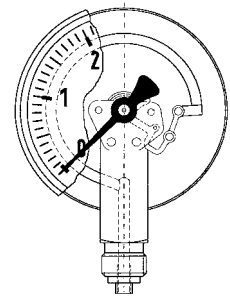


Standard Bourdon tube pressure gauges

EN 837-1



- For pneumatic and heating system applications
- Robust steel or stainless steel housing
- Accuracy class 1.6
- Many customised versions available



Application For gaseous and liquid media which are not highly viscous, do not crystallise and do not attack copper alloys.
! 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 2/D 3

Nominal size
40 – 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

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 $20\text{ }^{\circ}\text{C}$:
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 32 (EN 60529)

Standard version

Connection
Brass, bottom or centre back
NG 40 G $\frac{1}{8}$ B – spanner size SW 12
NG 50-63 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

Plastic, white
Dial marking black

Pointer

Plastic, black

Housing

D 2 – black sheet steel
D 3 – stainless steel 304

Window

Clip-in plastic

- Options**
- Panel mounting bezel
 - 3-hole fixing, panel mounting bezel
 - Damping screw

- Reference pointer
- Special scales
- Other process connections

i

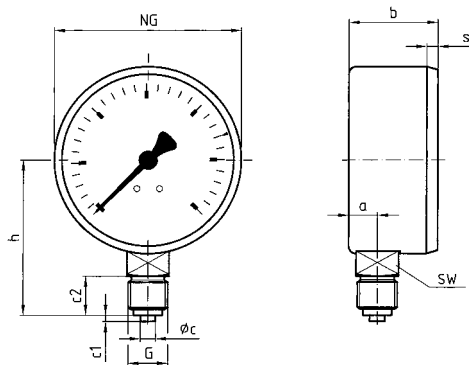
See the catalogue DOMESTIC TECHNOLOGY for special heating and sanitary versions.
See page 297 for prices.

Standard Bourdon tube pressure gauges

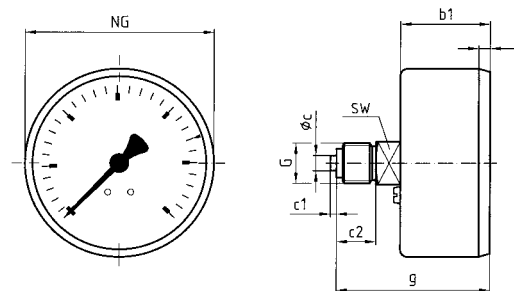
Type D 2/D 3 – NG 40/50/63

1 Housing types and dimensions

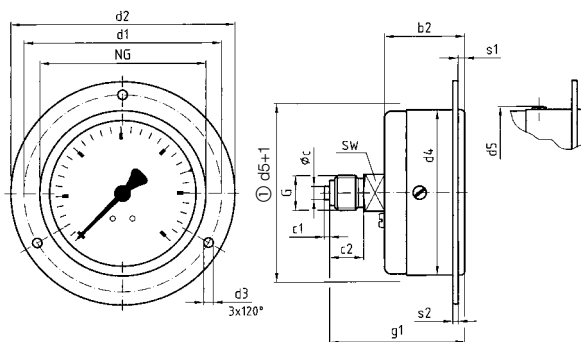
Bottom connection



Centre back connection

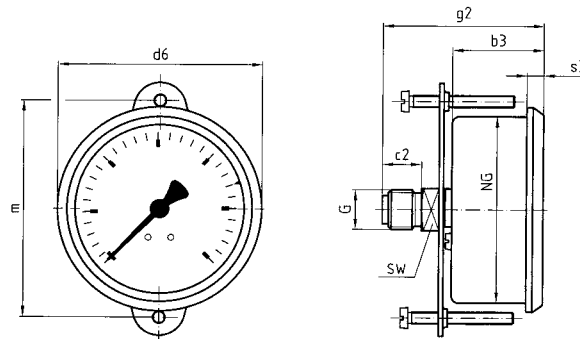


Centre back connection, 3-hole fixing, panel mounting bezel



① Panel cut-out

Centre back connection, panel mounting bezel with clamp fixing



Dimensions (mm)

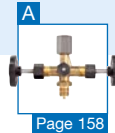
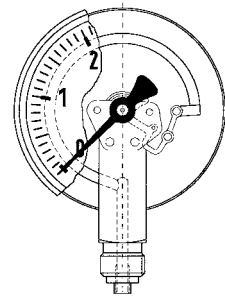
Nominal size (NG)	a	b	b1	b2	b3	Øc	c1	c2	d1	d2	d3	d4	d5	d6	g	g1	g2	G	h	m
40	8.5	23.5	25	26	28	4	2	10	51	61	3.6	41	45	44	41.5	42.5	46.6	G½B	36	50
50	10.5	26	26	27.5	30.3	5	2	13	60	71	3.6	50	54	54	47	49	51.3	G¼B	45	58
63	9.5	29.4	29.4	30.3	30.3	5	2	13	75	85	3.6	63	66.5	67.8	50.4	51.3	53.3	G¼B	51.5	72
Nominal size (NG)	s	s1	s2	s3	SW															
40	3	2.5	2	5.2	12															
50	3.8	2.5	2	5.4	14															
63	3.7	2.5	2	5.6	14															

Standard Bourdon tube pressure gauges

EN 837-1



- For domestic and mechanical engineering applications
- Robust steel housing
- Window with adjustable reference pointer
- Many customised versions available



Application For gaseous and liquid media which are not highly viscous, do not crystallise and do not attack copper alloys.
! 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 2

Nominal size
80 – 100

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

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: $T_{max} = +60\text{ °C}$
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. $\pm 0.4\text{ ‰}/10\text{ K}$
falling temperature approx. $\pm 0.4\text{ ‰}/10\text{ K}$
of full scale value

Degree of protection

IP 32 (EN 60529)

Standard version

Connection
Brass, bottom:
NG 80 – 100 G $\frac{1}{2}$ B – spanner size SW 22
Brass, centre back:
NG 80 – 100 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

Plastic, white
Dial marking black

Pointer

Plastic, black

Housing

Sheet steel, black

Window

Clip-in plastic, with adjustable red reference pointer

- Options**
- Stainless steel housing (NG 100)
 - Push on bezel
 - Instrument glass window

- Damping screw
- Special scales
- Other process connections

i

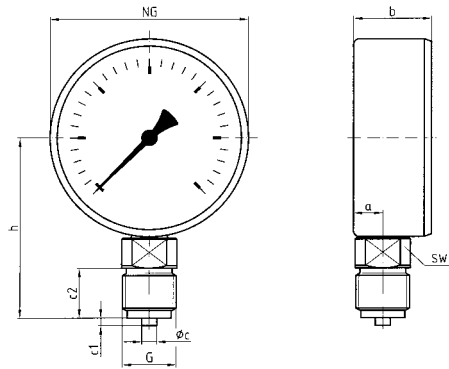
See the catalogue DOMESTIC TECHNOLOGY for special heating and sanitary versions.
See page 297 for prices.

Standard Bourdon tube pressure gauges

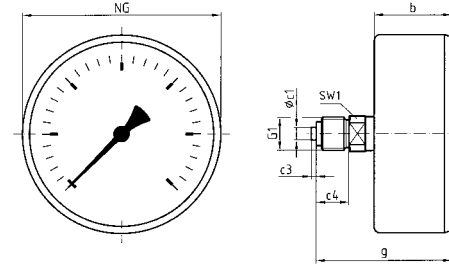
Type D 2 – NG 80/100

1 Housing types and dimensions

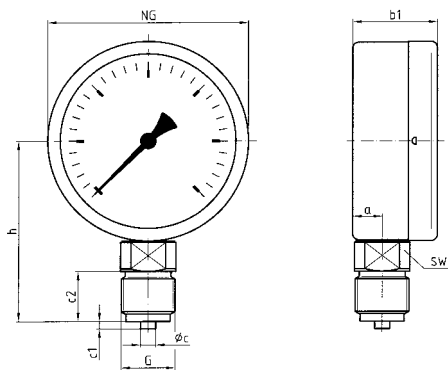
Bottom connection



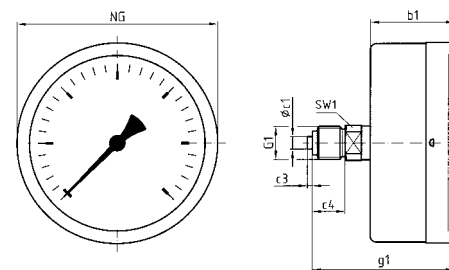
Centre back connection



Bottom connection, with push on bezel



Centre back connection, with push on bezel



Dimensions (mm)

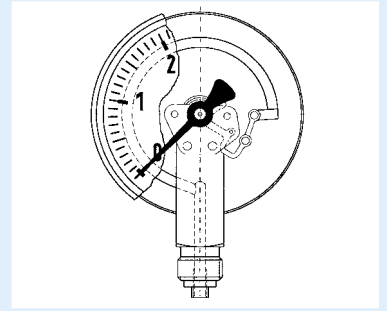
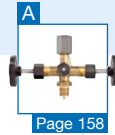
Nominal size (NG)	a	b	b ₁	Øc	c ₁	c ₂	Øc ₁	c ₃	c ₄	g	g ₁	G	G ₁	h	SW	Spanner size SW ₁
80	11.7	31	33.5	6	3	20	5	2	13	54	56.5	G $\frac{1}{2}$ B	G $\frac{1}{4}$ B	72	22	14
100	11	29.5	34	6	3	20	5	2	13	52.5	57	G $\frac{1}{2}$ B	G $\frac{1}{4}$ B	82	22	14

Standard Bourdon tube pressure gauges

EN 837-1



- For domestic and mechanical engineering applications
- With reference pointer on dial
- Robust steel housing
- Many customised versions available



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

! 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 2

Nominal size

160

Accuracy class (EN 837-1/6)

1.6

Ranges (EN 837-1/5)

-1/0 to -1/+15 bar
0/0.6 to 0/40 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 $20\text{ }^{\circ}\text{C}$:

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 32 (EN 60529)

Standard version

Connection

Brass, bottom: $G\frac{1}{2}B$ – spanner size SW 22

Measuring element

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

Movement

Brass

Dial

Aluminium, white
Dial marking black with adjustable reference pointer

Pointer

Aluminium, black

Housing

Sheet steel, black

Push on bezel

Sheet steel, black

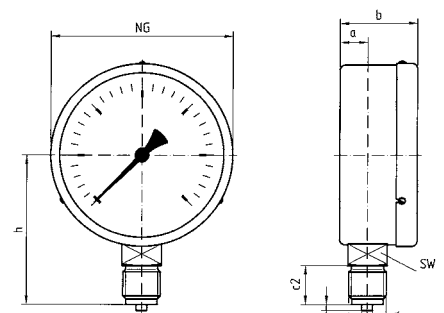
Options

- Damping screw
- Special scales
- Other process connections

Window

Instrument glass

Bottom connection



Dimensions (mm)

Nominal size (NG)	a	b	$\varnothing c$	c1
160	15.5	50	6	3
Nominal size (NG)	c2	G	h	SW
160	20	$G\frac{1}{2}B$	116	22

i









See the catalogue DOMESTIC TECHNOLOGY for special heating and sanitary versions. See page 297 for prices.

Standard Bourdon tube pressure gauges

EN 837-1

DG: M, PG: 2

1

Type	RF40, D201	RF40, D211	RF40, D231*	RF40, D251*	RF50, D201	RF50, D211	RF50, D231*	RF50, D251*
Version								
Housing Ø	40	40	40	40	50	50	50	50
Housing	Black sheet steel, plastic clip-in window							
Measuring element	Bourdon tube, copper alloy							
Accuracy class	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Connection	G $\frac{1}{8}$ B	G $\frac{1}{8}$ B	G $\frac{1}{8}$ B	G $\frac{1}{8}$ B	G $\frac{1}{4}$ B	G $\frac{1}{4}$ B	G $\frac{1}{4}$ B	G $\frac{1}{4}$ B
			3-hole fixing, panel mounting bezel, stainless steel	Panel mounting bezel stainless steel, polished, with clamp fixing			3-hole fixing, panel mounting bezel, stainless steel	Panel mounting bezel stainless steel, polished, with clamp fixing
Range (bar)	Part no.	Part no.	Part no.	Part no.	Part no.	Part no.	Part no.	Part no.
Price €								
-1/0	85001201	85001211	85001231	85001251	85051201	85051211	85051231	85051251
-1/+0.6	---	---	---	---	---	---	---	---
-1/+1.5	---	---	---	---	---	---	---	---
-1/+3	---	---	---	---	---	---	---	---
-1/+5	---	---	---	---	---	---	---	---
-1/+9	---	---	---	---	---	---	---	---
-1/+15	---	---	---	---	---	---	---	---
Price €								
0/1	85010201	85010211	85010231	85010251	85060201	85060211	85060231	85060251
0/1.6	85011201	85011211	85011231	85011251	85061201	85061211	85061231	85061251
0/2.5	85012201	85012211	85012231	85012251	85062201	85062211	85062231	85062251
0/4	85013201	85013211	85013231	85013251	85063201	85063211	85063231	85063251
0/6	85014201	85014211	85014231	85014251	85064201	85064211	85064231	85064251
0/10	85015201	85015211	85015231	85015251	85065201	85065211	85065231	85065251
0/16	85016201	85016211	85016231	85016251	85066201	85066211	85066231	85066251
0/25	85017201	85017211	85017231	85017251	85067201	85067211	85067231	85067251
0/40	85018201	85018211	85018231	85018251	85068201	85068211	85068231	85068251
Price €								
0/60	85019201	85019211	85019231	85019251	85069201	85069211	85069231	85069251
0/100	85020201	85020211	85020231	85020251	85070201	85070211	85070231	85070251
0/160	85021201	85021211	85021231	85021251	85071201	85071211	85071231	85071251
0/250	85022201	85022211	85022231	85022251	85072201	85072211	85072231	85072251
0/400	---	---	---	---	85073201	85073211	85073231	85073251

* Dual scale, bar outer, black – psi inner, red.
Minimum order quantity for non-stock items = 100 pieces.

Blue part no. = in-stock items











See page 31 for extra charges.

Standard Bourdon tube pressure gauges

EN 837-1

DG: M, PG: 2

1

Type	RF63, D201	RF63, D211	RF63, D231*	RF63, D251*	RF80, D201	RF100, D201	RF100, D211	RF160, D201	
Version									
Housing Ø	63	63	63	63	80	100	100	160	
Housing	Black sheet steel, plastic clip-in window							Push on bezel, instrument glass	
Measuring element	Bourdon tube, copper alloy								
Accuracy class	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	
Connection	G¼B	G¼B	G¼B	G¼B	G½B	G½B	G¼B	G½B	
			3-hole fixing, panel mounting bezel, stainless steel	Panel mounting bezel stainless steel, polished, with clamp fixing	With adjustable red reference pointer				
Range (bar)	Part no.	Part no.	Part no.	Part no.	Part no.	Part no.	Part no.	Part no.	
Price €									
-1/0	85101201	85101211	85101231	85101251	85151201	85201201	85201211	85251201	
-1/+0.6	85102201	85102211	85102231	85102251	85152201	85202201	85202211	85252201	
-1/+1.5	85103201	85103211	85103231	85103251	85153201	85203201	85203211	85253201	
-1/+3	85104201	85104211	85104231	85104251	85154201	85204201	85204211	85254201	
-1/+5	85105201	85105211	85105231	85105251	85155201	85205201	85205211	85255201	
-1/+9	85106201	85106211	85106231	85106251	85156201	85206201	85206211	85256201	
-1/+15	85107201	85107211	85107231	85107251	85157201	85207201	85207211	85257201	
Price €									
0/0.6	85109201	85109211	85109231	85109251	85159201	85209201	85209211	85259201	
0/1	85110201	85110211	85110231	85110251	85160201	85210201	85210211	85260201	
0/1.6	85111201	85111211	85111231	85111251	85161201	85211201	85211211	85261201	
0/2.5	85112201	85112211	85112231	85112251	85162201	85212201	85212211	85262201	
0/4	85113201	85113211	85113231	85113251	85163201	85213201	85213211	85263201	
0/6	85114201	85114211	85114231	85114251	85164201	85214201	85214211	85264201	
0/10	85115201	85115211	85115231	85115251	85165201	85215201	85215211	85265201	
0/16	85116201	85116211	85116231	85116251	85166201	85216201	85216211	85266201	
0/25	85117201	85117211	85117231	85117251	85167201	85217201	85217211	85267201	
0/40	85118201	85118211	85118231	85118251	85168201	85218201	85218211	85268201	
Price €									
0/60	85119201	85119211	85119231	85119251	85169201	85219201	85219211	---	
0/100	85120201	85120211	85120231	85120251	85170201	85220201	85220211	---	
0/160	85121201	85121211	85121231	85121251	85171201	85221201	85221211	---	
0/250	85122201	85122211	85122231	85122251	85172201	85222201	85222211	---	
0/400	85123201	85123211	85123231	85123251	85173201	85223201	85223211	---	

* Dual scale, bar outer, black – psi inner, red.

Minimum order quantity for non-stock items = 100 pieces (RF 160, D 201 = 10 pieces)

Blue part no. = in-stock items



See page 31 for extra charges.