

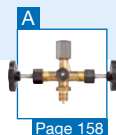
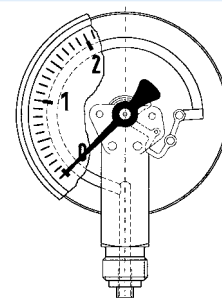
Bourdon tube pressure gauges for industrial applications

EN 837-1

1



- For machine and plant engineering
- Robust steel or stainless 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 high measuring accuracy.
! 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
100

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

Standard version Connection
Brass, bottom or bottom back
G $\frac{1}{2}$ B – 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

Options

- Damping screw
- Reference pointer
- Electrical contacts

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

Degree of protection
IP 32 (EN 60529)

Dial
Aluminium, white
Dial marking black

Pointer
Aluminium, black

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

Window
Clip-in plastic

- Special scales
- Other process connections



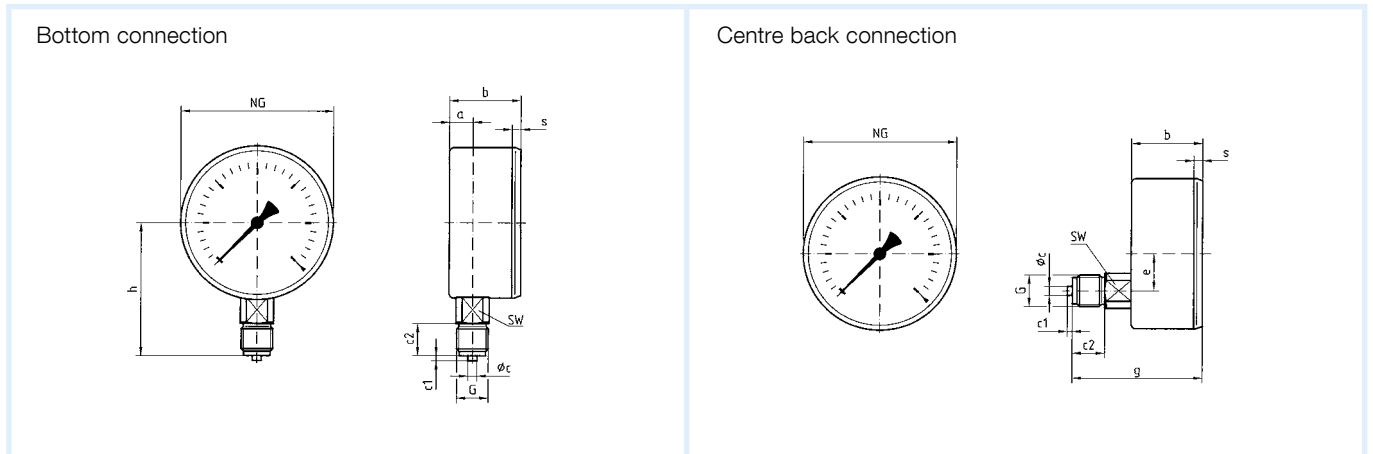
See page 34 for prices.

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Type D 2 / D 3 – NG 100

Housing types and dimensions

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Dimensions (mm)

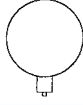

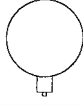

| Nominal size (NG) | a | b | ϕ_c | c1 | c2 | e | G | g | h | s | SW | | | |
|-------------------|------|----|----------|----|----|------|------|----|----|-----|----|--|--|--|
| 100 | 15.6 | 44 | 6 | 3 | 20 | 26.5 | G1½B | 76 | 86 | 3.5 | 22 | | | |

Bourdon tube pressure gauges for industrial applications

EN 837-1

DG: M, PG: 2

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| Type | RF100 I, D201 | RF100 I, D211 | RF100 I, D301 | RF100 I, D311 |
|-------------------|---|---|---|---|
| Version |  |  |  |  |
| Housing Ø | 100 | 100 | 100 | 100 |
| Housing | Black sheet steel, plastic, clip-in window | | Stainless steel 304, plastic clip-in window | |
| Measuring element | Bourdon tube, copper alloy (> 60 bar stainless steel 316 Ti/316 L) | | | |
| Accuracy class | 1.0 | 1.0 | 1.0 | 1.0 |
| Connection | G½B | G½B | G½B | G½B |
| Range (bar) | Part no. | Part no. | Part no. | Part no. |
| Price € | | | | |
| -1/0 | 85301201 | 85301211 | 85301301 | 85301311 |
| -1/+0.6 | 85302201 | 85302211 | 85302301 | 85302311 |
| -1/+1.5 | 85303201 | 85303211 | 85303301 | 85303311 |
| -1/+3 | 85304201 | 85304211 | 85304301 | 85304311 |
| -1/+5 | 85305201 | 85305211 | 85305301 | 85305311 |
| -1/+9 | 85306201 | 85306211 | 85306301 | 85306311 |
| -1/+15 | 85307201 | 85307211 | 85307301 | 85307311 |
| Price € | | | | |
| 0/0.6 | 85309201 | 85309211 | 85309301 | 85309311 |
| 0/1 | 85310201 | 85310211 | 85310301 | 85310311 |
| 0/1.6 | 85311201 | 85311211 | 85311301 | 85311311 |
| 0/2.5 | 85312201 | 85312211 | 85312301 | 85312311 |
| 0/4 | 85313201 | 85313211 | 85313301 | 85313311 |
| 0/6 | 85314201 | 85314211 | 85314301 | 85314311 |
| 0/10 | 85315201 | 85315211 | 85315301 | 85315311 |
| 0/16 | 85316201 | 85316211 | 85316301 | 85316311 |
| 0/25 | 85317201 | 85317211 | 85317301 | 85317311 |
| 0/40 | 85318201 | 85318211 | 85318301 | 85318311 |
| Price € | | | | |
| 0/60 | 85319201 | 85319211 | 85319301 | 85319311 |
| 0/100 | 85320201 | 85320211 | 85320301 | 85320311 |
| 0/160 | 85321201 | 85321211 | 85321301 | 85321311 |
| 0/250 | 85322201 | 85322211 | 85322301 | 85322311 |
| 0/400 | 85323201 | 85323211 | 85323301 | 85323311 |
| Price € | | | | |
| 0/600 | 85324201 | 85324211 | 85324301 | 85324311 |
| 0/1000 | 85325201 | --- | 85325301 | --- |

Minimum order quantity for non-stock items = 10 pieces.

Blue part no. = in-stock items

See page 72 for extra charges.