



## Standard Bourdon tube pressure gauges Process Gauges Type D1



### Benefits

- Extremely robust pressure gauge for offshore and onshore applications
- Glass-fibre reinforced safety housing with solid baffle wall and blow-out
- Integrated pressure compensation diaphragm
- Tightness-tested with helium
- GOSSTANDART-certified

### Application

For corrosive gaseous and liquid media which are not highly viscous and do not crystallise. Specially suitable for the oil and chemical industries.

### Technical specifications

**Type**  
D1

**Nominal size**  
4.5

**Accuracy class (ASME B 40.100)**  
Grade 2A (correspond to an accuracy of 0.5 %)

**Ranges (EN 837-1/5)**  
See ordering table

**Application area**  
Static load: Full scale value  
Dynamic load: 0.9 x full scale value  
Short-term: 1.3 x full scale value

**Operating temperature range**  
Medium: Max. 100 °C  
Ambient: -40/+65 °C

**Temperature performance**  
Indication error when the temperature of the measuring system deviates from the normal temperature of 20 °C:  
at 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 67 (EN 60529)



## Standard version

### Connection

Brass: D101  
Brass: D111  
Stainless steel 316 L: D102  
Stainless steel 316 L: D112  
Bottom or bottom  
back

### Measuring element

Bourdon tube, stainless steel 316 Ti/316 L  
≤ 60 bar: "C" type tube  
> 60 bar: Helical tube  
Tightness-tested with helium

### Movement

Stainless steel

### Dial

Aluminium, white  
Scaling black

### Pointer

Micro-adjustable pointer  
Brass, black

### Housing

PP-GF20, black  
With solid baffle wall and blow-out,  
Integrated back flange

### Screw type bezel

PP-GF20, black Internal

### Window

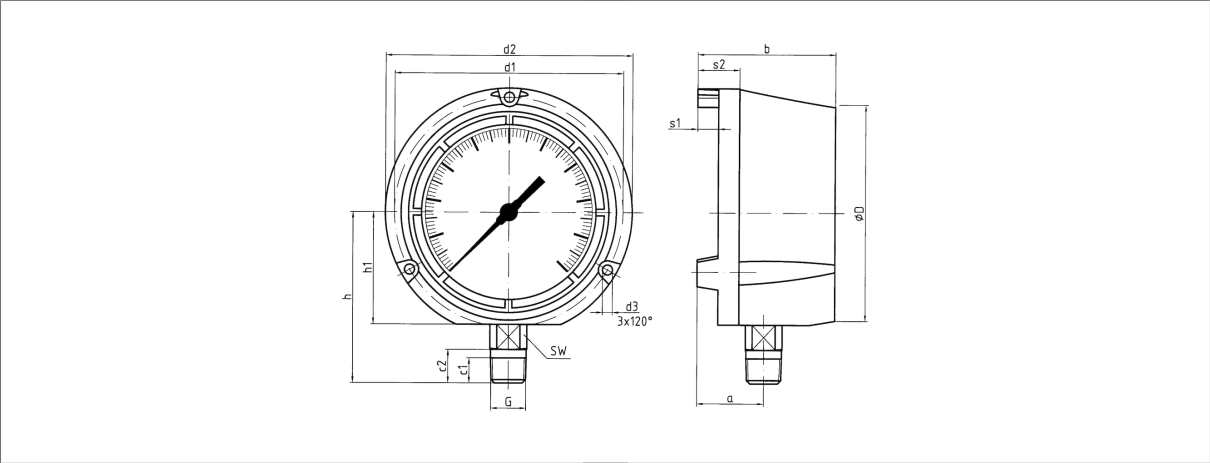
Plastic (PMMA)

## Options

- Glycerine filling (type D 6)
- Silicone oil filling (type D 6)
- Measuring system copper alloy (type 1x1)
- Measuring system Monel (type 1x3)
- Laminated safety glass window
- Reference pointer
- Maximum pointer
- Electrical contacts
- Special scales
- Other process connections

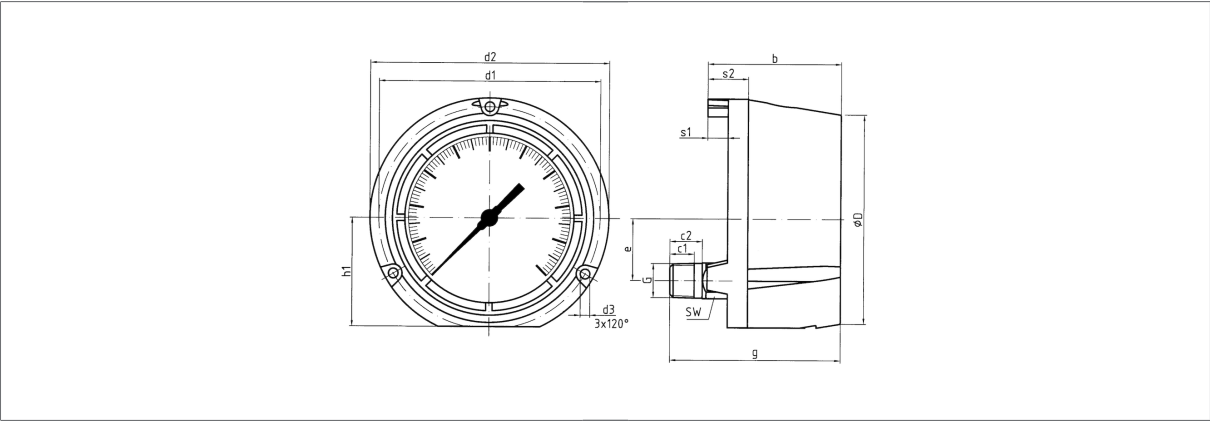
## Technical drawings

Bottom connection



| Dimensions (mm) |    |      |    |    |     |     |    |     |             |     |    |      |    |    |  |
|-----------------|----|------|----|----|-----|-----|----|-----|-------------|-----|----|------|----|----|--|
| NG              | a  | b    | c1 | c2 | d1  | d2  | d3 | ØD  | G           | h   | h1 | s1   | s2 | SW |  |
| 4½"             | 40 | 82,5 | 15 | 20 | 137 | 148 | 6  | 129 | ½-14<br>NPT | 102 | 67 | 12,5 | 25 | 22 |  |

Centre back connection



| Dimensions (mm) |      |    |    |     |     |    |     |    |             |       |    |      |    |    |
|-----------------|------|----|----|-----|-----|----|-----|----|-------------|-------|----|------|----|----|
| NG              | b    | c1 | c2 | d1  | d2  | d3 | ØD  | e  | G           | g     | h1 | s1   | s2 | SW |
| 4½"             | 82,5 | 15 | 20 | 137 | 148 | 6  | 129 | 38 | ½-14<br>NPT | 105,5 | 67 | 12,5 | 25 | 22 |

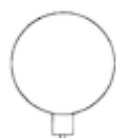


## Versions

### RF130PG D101

|  | Housing ∅ | Connection | Alignment | Housing        | Accuracy class | Range       | Type         | Part no. |
|--|-----------|------------|-----------|----------------|----------------|-------------|--------------|----------|
|  | 4.5 "     | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | -1/0 bar    | RF130PG D101 | 87901101 |
|  | 4.5 "     | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | -1/+0.6 bar | RF130PG D101 | 87902101 |
|  | 4.5 "     | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | -1/+1.5 bar | RF130PG D101 | 87903101 |
|  | 4.5 "     | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | -1/+3 bar   | RF130PG D101 | 87904101 |
|  | 4.5 "     | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | -1/+5 bar   | RF130PG D101 | 87905101 |
|  | 4.5 "     | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | -1/+9 bar   | RF130PG D101 | 87906101 |
|  | 4.5 "     | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | -1/+15 bar  | RF130PG D101 | 87907101 |
|  | 4.5 "     | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | 0/0.6 bar   | RF130PG D101 | 87909101 |
|  | 4.5 "     | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | 0/1 bar     | RF130PG D101 | 87910101 |
|  | 4.5 "     | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | 0/1.6 bar   | RF130PG D101 | 87911101 |
|  | 4.5 "     | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | 0/2.5 bar   | RF130PG D101 | 87912101 |
|  | 4.5 "     | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | 0/4 bar     | RF130PG D101 | 87913101 |
|  | 4.5 "     | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | 0/6 bar     | RF130PG D101 | 87914101 |
|  | 4.5 "     | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | 0/10 bar    | RF130PG D101 | 87915101 |
|  | 4.5 "     | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | 0/16 bar    | RF130PG D101 | 87916101 |
|  | 4.5 "     | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | 0/25 bar    | RF130PG D101 | 87917101 |
|  | 4.5 "     | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | 0/40 bar    | RF130PG D101 | 87918101 |
|  | 4.5 "     | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | 0/60 bar    | RF130PG D101 | 87919101 |
|  | 4.5 "     | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | 0/100 bar   | RF130PG D101 | 87920101 |
|  | 4.5 "     | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | 0/160 bar   | RF130PG D101 | 87921101 |
|  | 4.5 "     | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | 0/250 bar   | RF130PG D101 | 87922101 |
|  | 4.5 "     | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | 0/400 bar   | RF130PG D101 | 87923101 |
|  | 4.5 "     | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | 0/600 bar   | RF130PG D101 | 87924101 |

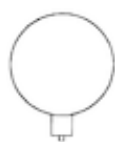
Blue part no. = in-stock items





## RF130PG D102

|  | Housing <sup>o</sup> | Connection | Alignment | Housing        | Accuracy class | Range       | Type         | Part no. |
|--|----------------------|------------|-----------|----------------|----------------|-------------|--------------|----------|
|  | 4.5 "                | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | -1/0 bar    | RF130PG D102 | 87901102 |
|  | 4.5 "                | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | -1/+0.6 bar | RF130PG D102 | 87902102 |
|  | 4.5 "                | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | -1/+1.5 bar | RF130PG D102 | 87903102 |
|  | 4.5 "                | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | -1/+3 bar   | RF130PG D102 | 87904102 |
|  | 4.5 "                | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | -1/+5 bar   | RF130PG D102 | 87905102 |
|  | 4.5 "                | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | -1/+9 bar   | RF130PG D102 | 87906102 |
|  | 4.5 "                | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | -1/+15 bar  | RF130PG D102 | 87907102 |
|  | 4.5 "                | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | 0/0.6 bar   | RF130PG D102 | 87909102 |
|  | 4.5 "                | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | 0/1 bar     | RF130PG D102 | 87910102 |
|  | 4.5 "                | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | 0/1.6 bar   | RF130PG D102 | 87911102 |
|  | 4.5 "                | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | 0/2.5 bar   | RF130PG D102 | 87912102 |
|  | 4.5 "                | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | 0/4 bar     | RF130PG D102 | 87913102 |
|  | 4.5 "                | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | 0/6 bar     | RF130PG D102 | 87914102 |
|  | 4.5 "                | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | 0/10 bar    | RF130PG D102 | 87915102 |
|  | 4.5 "                | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | 0/16 bar    | RF130PG D102 | 87916102 |
|  | 4.5 "                | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | 0/25 bar    | RF130PG D102 | 87917102 |
|  | 4.5 "                | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | 0/40 bar    | RF130PG D102 | 87918102 |
|  | 4.5 "                | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | 0/60 bar    | RF130PG D102 | 87919102 |
|  | 4.5 "                | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | 0/100 bar   | RF130PG D102 | 87920102 |
|  | 4.5 "                | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | 0/160 bar   | RF130PG D102 | 87921102 |
|  | 4.5 "                | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | 0/250 bar   | RF130PG D102 | 87922102 |
|  | 4.5 "                | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | 0/400 bar   | RF130PG D102 | 87923102 |
|  | 4.5 "                | ½-14 NPT   | Bottom    | PP-GF20, black | Grade 2A       | 0/600 bar   | RF130PG D102 | 87924102 |

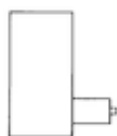


Blue part no. = in-stock items



## RF130PG D111

|  | Housing <sup>o</sup> | Connection | Alignment   | Housing        | Accuracy class | Range       | Type         | Part no. |
|--|----------------------|------------|-------------|----------------|----------------|-------------|--------------|----------|
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | -1/0 bar    | RF130PG D111 | 87901111 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | -1/+0.6 bar | RF130PG D111 | 87902111 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | -1/+1.5 bar | RF130PG D111 | 87903111 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | -1/+3 bar   | RF130PG D111 | 87904111 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | -1/+5 bar   | RF130PG D111 | 87905111 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | -1/+9 bar   | RF130PG D111 | 87906111 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | -1/+15 bar  | RF130PG D111 | 87907111 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | 0/0.6 bar   | RF130PG D111 | 87909111 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | 0/1 bar     | RF130PG D111 | 87910111 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | 0/1.6 bar   | RF130PG D111 | 87911111 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | 0/2.5 bar   | RF130PG D111 | 87912111 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | 0/4 bar     | RF130PG D111 | 87913111 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | 0/6 bar     | RF130PG D111 | 87914111 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | 0/10 bar    | RF130PG D111 | 87915111 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | 0/16 bar    | RF130PG D111 | 87916111 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | 0/25 bar    | RF130PG D111 | 87917111 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | 0/40 bar    | RF130PG D111 | 87918111 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | 0/60 bar    | RF130PG D111 | 87919111 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | 0/100 bar   | RF130PG D111 | 87920111 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | 0/160 bar   | RF130PG D111 | 87921111 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | 0/250 bar   | RF130PG D111 | 87922111 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | 0/400 bar   | RF130PG D111 | 87923111 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | 0/600 bar   | RF130PG D111 | 87924111 |

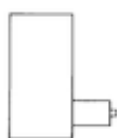


Blue part no. = in-stock items



## RF130PG D112

|  | Housing <sup>o</sup> | Connection | Alignment   | Housing        | Accuracy class | Range       | Type         | Part no. |
|--|----------------------|------------|-------------|----------------|----------------|-------------|--------------|----------|
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | -1/0 bar    | RF130PG D112 | 87901112 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | -1/+0.6 bar | RF130PG D112 | 87902112 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | -1/+1.5 bar | RF130PG D112 | 87903112 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | -1/+3 bar   | RF130PG D112 | 87904112 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | -1/+5 bar   | RF130PG D112 | 87905112 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | -1/+9 bar   | RF130PG D112 | 87906112 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | -1/+15 bar  | RF130PG D112 | 87907112 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | 0/0.6 bar   | RF130PG D112 | 87909112 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | 0/1 bar     | RF130PG D112 | 87910112 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | 0/1.6 bar   | RF130PG D112 | 87911112 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | 0/2.5 bar   | RF130PG D112 | 87912112 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | 0/4 bar     | RF130PG D112 | 87913112 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | 0/6 bar     | RF130PG D112 | 87914112 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | 0/10 bar    | RF130PG D112 | 87915112 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | 0/16 bar    | RF130PG D112 | 87916112 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | 0/25 bar    | RF130PG D112 | 87917112 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | 0/40 bar    | RF130PG D112 | 87918112 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | 0/60 bar    | RF130PG D112 | 87919112 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | 0/100 bar   | RF130PG D112 | 87920112 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | 0/160 bar   | RF130PG D112 | 87921112 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | 0/250 bar   | RF130PG D112 | 87922112 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | 0/400 bar   | RF130PG D112 | 87923112 |
|  | 4.5 "                | ½-14 NPT   | Bottom back | PP-GF20, black | Grade 2A       | 0/600 bar   | RF130PG D112 | 87924112 |



Blue part no. = in-stock items