



## Bourdon tube pressure gauge with screw bezel housing type D1



### Benefits

- For machine and plant engineering
- Extremely robust plastic housing (PA 6.6 GB30)
- Laminated safety glass window
- Higher accuracy class optional

### 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, observe the table "Selection Criteria as per EN 837-2"

### Technical specifications

**Type**  
D1

**Nominal size**  
100

**Accuracy class (EN 837-1/6)**  
1,0

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

#### 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: ¾ x full scale value

Short-term

≤ 600 bar: 1.3 x full scale value  
> 600 bar: Full scale value

#### Operating temperature range

Medium: Max. 60 °C

Ambient: -20/+60 °C

#### Temperature performance

Indication error when the temperature of the measuring system deviates from the normal temperature of 20 °C:  
at 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) with housing vent (≤ 25 bar)

IP 65 (EN 60529)



## Standard version

### Connection

Brass, bottom or bottom back

### 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  
 Scaling black

### Pointer

Aluminium, black

### Housing

Plastic (PA 6.6 GB30), with blow-out

### Screw type bezel

Plastic (PA 6.6 GB30)

### Window

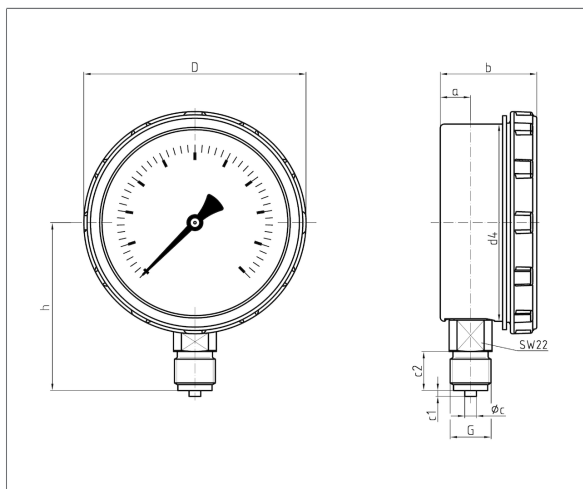
Laminated safety glass

## Options

- Glycerine filling (type D 6)
- Higher accuracy class
- Damping screw
- Special scales
- Other process connections
- Micro-adjustable pointer

## Technical drawings

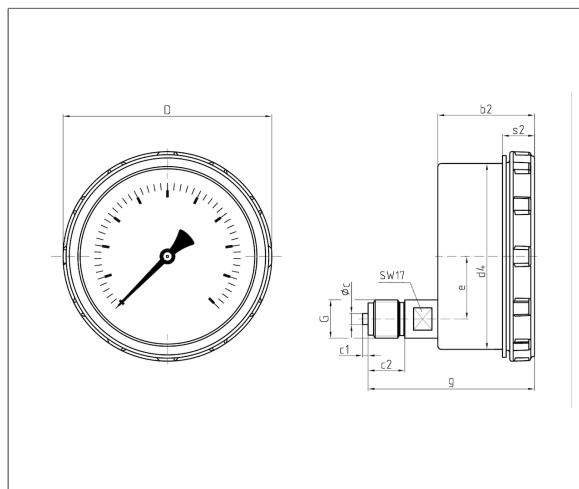
### Bottom connection



#### Dimensions (mm)

NG	a	b	∅c	c1	c2	d4	D	G	h
100	15,5	50	6	3	20	101	114	G½B 86	

### bottom back connection

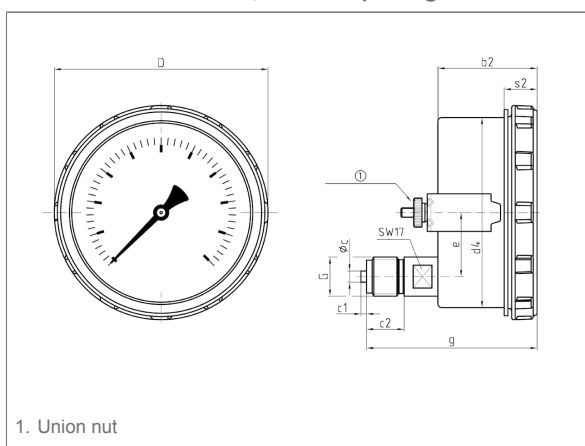


#### Dimensions (mm)

NG	b2	∅c	c1	c2	d4	D	e	G	g	s2
100	52,5	6	3	20	101	114	34	G½B	91	17,5



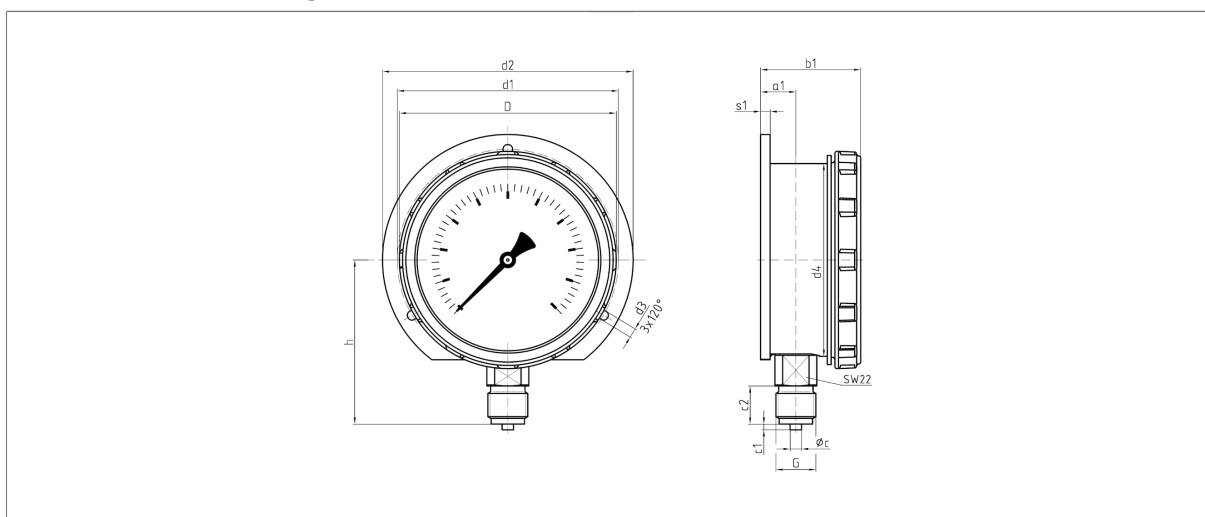
**bottom back connection, with clamp fixing**



**Dimensions (mm)**

NG	b2	∅c	c1	c2	d4	D	e	G	g	s2
100	52,5	6	3	20	101	114	34	G½B	91	17,5

**Bottom connection, back flange**



**Dimensions (mm)**

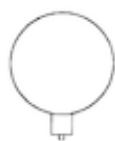
NG	a1	b1	∅c	c1	c2	d1	d2	d3	d4	D	G	h	s1
100	18,5	52,5	6	3	20	116	131,5	5	101	114	G½B	86	5



## Versions

### RF100ISR D101

Housing $\varnothing$	Connection	Alignment	Housing	Accuracy class	Range	Type	Part no.
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	-1/0 bar	RF100ISR D101	85301101
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	-1/+0.6 bar	RF100ISR D101	85302101
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	-1/+1.5 bar	RF100ISR D101	85303101
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	-1/+3 bar	RF100ISR D101	85304101
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	-1/+5 bar	RF100ISR D101	85305101
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	-1/+9 bar	RF100ISR D101	85306101
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	-1/+15 bar	RF100ISR D101	85307101
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	0/0.6 bar	RF100ISR D101	85309101
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	0/1 bar	RF100ISR D101	85310101
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	0/1.6 bar	RF100ISR D101	85311101
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	0/2.5 bar	RF100ISR D101	85312101
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	0/4 bar	RF100ISR D101	85313101
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	0/6 bar	RF100ISR D101	85314101
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	0/10 bar	RF100ISR D101	85315101
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	0/16 bar	RF100ISR D101	85316101
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	0/25 bar	RF100ISR D101	85317101
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	0/40 bar	RF100ISR D101	85318101
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	0/60 bar	RF100ISR D101	85319101
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	0/100 bar	RF100ISR D101	85320101
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	0/160 bar	RF100ISR D101	85321101
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	0/250 bar	RF100ISR D101	85322101
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	0/400 bar	RF100ISR D101	85323101
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	0/600 bar	RF100ISR D101	85324101
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	0/1,000 bar	RF100ISR D101	85325101

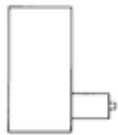


Blue part no. = in-stock items



**RF100ISR D111**

Housing $\varnothing$	Connection	Alignment	Housing	Accuracy class	Range	Type	Part no.
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	-1/0 bar	RF100ISR D111	85301111
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	-1/+0.6 bar	RF100ISR D111	85302111
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	-1/+1.5 bar	RF100ISR D111	85303111
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	-1/+3 bar	RF100ISR D111	85304111
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	-1/+5 bar	RF100ISR D111	85305111
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	-1/+9 bar	RF100ISR D111	85306111
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	-1/+15 bar	RF100ISR D111	85307111
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	0/0.6 bar	RF100ISR D111	85309111
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	0/1 bar	RF100ISR D111	85310111
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	0/1.6 bar	RF100ISR D111	85311111
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	0/2.5 bar	RF100ISR D111	85312111
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	0/4 bar	RF100ISR D111	85313111
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	0/6 bar	RF100ISR D111	85314111
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	0/10 bar	RF100ISR D111	85315111
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	0/16 bar	RF100ISR D111	85316111
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	0/25 bar	RF100ISR D111	85317111
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	0/40 bar	RF100ISR D111	85318111
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	0/60 bar	RF100ISR D111	85319111
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	0/100 bar	RF100ISR D111	85320111
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	0/160 bar	RF100ISR D111	85321111
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	0/250 bar	RF100ISR D111	85322111
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	0/400 bar	RF100ISR D111	85323111
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	0/600 bar	RF100ISR D111	85324111
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	0/1,000 bar	RF100ISR D111	85325111

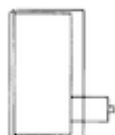


Blue part no. = in-stock items



**RF100ISR D141**

Housing $\varnothing$	Connection	Alignment	Housing	Accuracy class	Range	Type	Part no.
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	-1/0 bar	RF100ISR D141	85301141
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	-1/+0.6 bar	RF100ISR D141	85302141
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	-1/+1.5 bar	RF100ISR D141	85303141
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	-1/+3 bar	RF100ISR D141	85304141
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	-1/+5 bar	RF100ISR D141	85305141
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	-1/+9 bar	RF100ISR D141	85306141
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	-1/+15 bar	RF100ISR D141	85307141
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	0/0.6 bar	RF100ISR D141	85309141
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	0/1 bar	RF100ISR D141	85310141
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	0/1.6 bar	RF100ISR D141	85311141
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	0/2.5 bar	RF100ISR D141	85312141
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	0/4 bar	RF100ISR D141	85313141
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	0/6 bar	RF100ISR D141	85314141
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	0/10 bar	RF100ISR D141	85315141
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	0/16 bar	RF100ISR D141	85316141
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	0/25 bar	RF100ISR D141	85317141
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	0/40 bar	RF100ISR D141	85318141
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	0/60 bar	RF100ISR D141	85319141
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	0/100 bar	RF100ISR D141	85320141
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	0/160 bar	RF100ISR D141	85321141
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	0/250 bar	RF100ISR D141	85322141
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	0/400 bar	RF100ISR D141	85323141
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	0/600 bar	RF100ISR D141	85324141
100 mm	G½B	Bottom back	Plastic (PA 6.6 GB30)	1,0	0/1,000 bar	RF100ISR D141	85325141



Blue part no. = in-stock items



**RF100ISR D171**

Housing $\varnothing$	Connection	Alignment	Housing	Accuracy class	Range	Type	Part no.
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	-1/0 bar	RF100ISR D171	85301171
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	-1/+0.6 bar	RF100ISR D171	85302171
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	-1/+1.5 bar	RF100ISR D171	85303171
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	-1/+3 bar	RF100ISR D171	85304171
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	-1/+5 bar	RF100ISR D171	85305171
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	-1/+9 bar	RF100ISR D171	85306171
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	-1/+15 bar	RF100ISR D171	85307171
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	0/0.6 bar	RF100ISR D171	85309171
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	0/1 bar	RF100ISR D171	85310171
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	0/1.6 bar	RF100ISR D171	85311171
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	0/2.5 bar	RF100ISR D171	85312171
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	0/4 bar	RF100ISR D171	85313171
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	0/6 bar	RF100ISR D171	85314171
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	0/10 bar	RF100ISR D171	85315171
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	0/16 bar	RF100ISR D171	85316171
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	0/25 bar	RF100ISR D171	85317171
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	0/40 bar	RF100ISR D171	85318171
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	0/60 bar	RF100ISR D171	85319171
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	0/100 bar	RF100ISR D171	85320171
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	0/160 bar	RF100ISR D171	85321171
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	0/250 bar	RF100ISR D171	85322171
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	0/400 bar	RF100ISR D171	85323171
100 mm	G½B	Bottom	Plastic (PA 6.6 GB30)	1,0	0/600 bar	RF100ISR D171	85324171



Blue part no. = in-stock items