

# Standard Bourdon tube pressure gauges for differential pressure

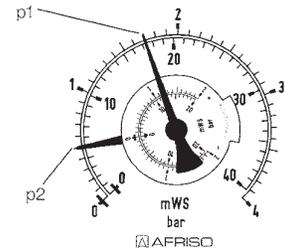
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- Indication of plus pressure, minus pressure and differential pressure
- Excellent price/performance ratio
- Two independent Bourdon tube systems
- Housing and wetted parts also available in stainless steel (option)



Reading example



p1 (+ connection) Δp (differential pressure)  
p2 (- connection)

**Application** For differential pressure measurement of gaseous and liquid media which are not highly viscous, do not crystallize and do not attack copper alloys. Specially suitable for heating systems (supply and return pipes). ! 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**  
100

**Function**  
The pressures are measured in two independent Bourdon tube systems ("plus" pressure = high pressure, "minus" pressure = low pressure). The pressure is indicated by means of a dial and a pointer. The differential pressure scale covers 50 % of the range of the "plus" pressure and 50 % of the range of the "minus" pressure. The black pointer ("plus" connection) and the red pointer ("minus" connection) at the differential pressure gauge scale allow you to read the pressures in both systems on the fixed scale.

**Accuracy class (EN 837-1/6)**  
1.6

**Ranges (EN 837-1/5)**  
0/0.6 to 0/60 bar

## Standard version

**Connection**  
Brass, bottom; parallel in line  
2 x G½B – spanner size SW 22 (EN 837-1/7.3)

**Measuring element**  
Bourdon tube, "C" type tube, copper alloy

**Movement**  
Brass

**Dial**  
Aluminium, white  
Dial marking black (bar/mWC)

- Options**
- Wetted parts stainless steel
  - Housing and push on bezel stainless steel
  - Push on bezel sheet steel, black
  - Nominal size 160 (type D1, housing plastic)
  - Back flange  
(with stainless steel housing only)

## Application area

The maximum pressure in the system must not exceed the full scale value. For good readability, the differential pressure to be measured should not be less than approx. 20 % of the 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)

## Pointer/dial

Aluminium

## Housing

Sheet steel, black

## Push on bezel

Sheet steel, black

## Window

Instrument glass

- 3-hole fixing, panel mounting bezel
- Damping screw
- Special scales
- Other process connections

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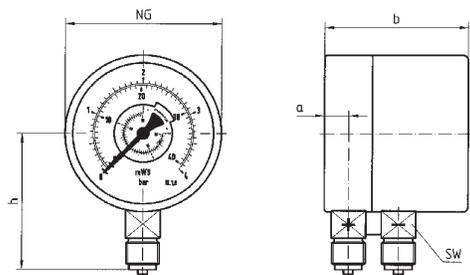
See page 134 for prices.

# Standard Bourdon tube pressure gauges for differential pressure type D 2 – NG 100

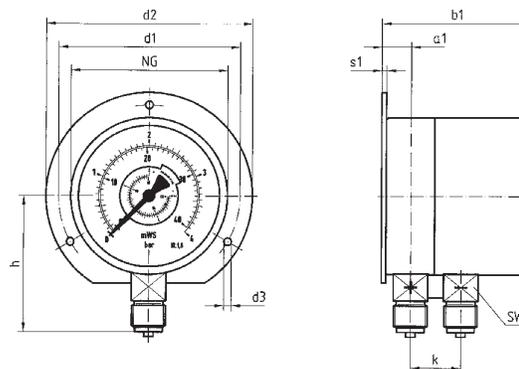
## Housing types and dimensions

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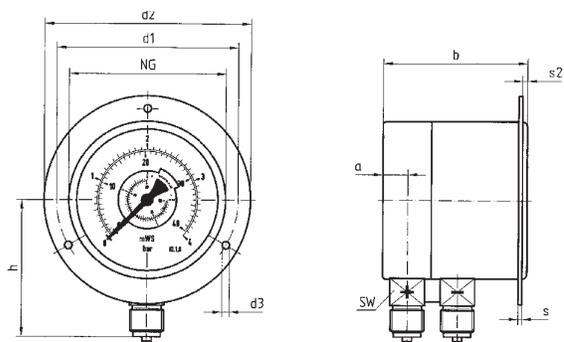
Bottom connection



Bottom connection, back flange (type D3)



Bottom connection, 3-hole fixing, panel mounting bezel



### Dimensions (mm)

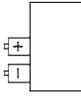
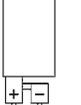
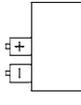
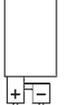
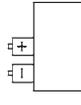
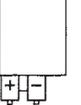
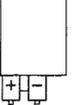
Nominal size (NG)	a	a1	b	b1	Øc	c1	c2	d1*	d2*	d3*	G	h	k	s	s1	s2	SW
100	15.6	19.1	84	87.5	6	3	20	116	132	4.8	G½B	86	32	2	5.5	3	22

\* Dimensions as per DIN 16064.

# Standard capsule/Bourdon tube pressure gauges for differential pressure

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DG: M, PG: 2

Type	KP63Dif, D 911	KP100Dif, D 401	KP100Dif, D 411	KP160Dif, D 401	KP160Dif, D 411	RF100Dif, D 201	RF100Dif, D 301
Version							
Housing Ø	63	100	100	160	160	100	100
Housing	Stainless steel 304, plastic window					Sheet steel	Stainless steel
Measuring element	Capsule element, CuBe alloy					Bourdon tube, copper alloy	
Accuracy class	1.6	1.6*	1.6*	1.6*	1.6*	1.6	1.6
Connection	G¼B	G½B	G½B	G½B	G½B	G½B	G½B
						Dual scale bar/mWC, black	
Range	Part no.	Part no.	Part no.				
<b>Price €</b>							
0/4 mbar	---	---	---	35612401	35612411	---	---
0/6 mbar	---	35563401	35563411	35613401	35613411	---	---
0/10 mbar	---	35564401	35564411	35614401	35614411	---	---
0/16 mbar	35515911	35565401	35565411	35615401	35615411	---	---
0/25 mbar	35516911	35566401	35566411	35616401	35616411	---	---
0/40 mbar	35517911	35567401	35567411	35617401	35617411	---	---
0/60 mbar	35518911	35568401	35568411	35618401	35618411	---	---
0/100 mbar	35519911	35569401	35569411	35619401	35619411	---	---
0/160 mbar	35520911	35570401	35570411	35620401	35620411	---	---
0/250 mbar	35521911	35571401	35571411	35621401	35621411	---	---
0/400 mbar	35522911	35572401	35572411	35622401	35622411	---	---
<b>Price €</b>							
0/0.6 bar	---	---	---	---	---	85609201	85609301
0/1 bar	---	---	---	---	---	<b>85610201</b>	85610301
0/1.6 bar	---	---	---	---	---	<b>85611201</b>	85611301
0/2.5 bar	---	---	---	---	---	<b>85612201</b>	85612301
0/4 bar	---	---	---	---	---	<b>85613201</b>	85613301
0/6 bar	---	---	---	---	---	<b>85614201</b>	85614301
0/10 bar	---	---	---	---	---	<b>85615201</b>	85615301
0/16 bar	---	---	---	---	---	<b>85616201</b>	85616301
0/25 bar	---	---	---	---	---	85617201	85617301
0/40 bar	---	---	---	---	---	85618201	85618301
<b>Price €</b>							
0/60 bar	---	---	---	---	---	85619201	85619301
0/100 bar	---	---	---	---	---	---	---
0/160 bar	---	---	---	---	---	---	---
0/250 bar	---	---	---	---	---	---	---
0/400 bar	---	---	---	---	---	---	---
<b>Extra charges (PG: 3)</b>						<b>Price €</b>	<b>Price €</b>
Wetted parts stainless steel	---	---	---	---	---		

\* ≤ 10 mbar = accuracy class 2.5

Blue part no. = in-stock items

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See page 151 for extra charges for mounting accessories.