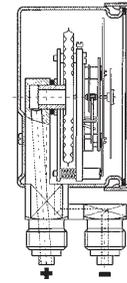


# Standard capsule pressure gauges for differential pressure

1



- Measurement of extremely small differential pressures
- Robust design
- Static pressures up to 400 mbar
- Direct indication of the differential pressure
- Many customised versions available



**Application** For differential pressure measurement of non-corrosive, gaseous, dry media. Especially suitable for filter loss measurement in air conditioning and ventilation applications.  
! 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 9/D 4

**Nominal size**  
63 – 100 – 160

**Function**  
The "plus" pressure (= high pressure) is applied to the inside of the diaphragm. The "minus" pressure (= low pressure) is applied to the inside of the pressure-tight housing. The pressure difference causes the diaphragm to change its shape, thus generating the movement required to measure the pressure. This displacement is picked up by the movement. The differential pressure is directly indicated by a pointer.

**Accuracy class (EN 837-3/6)**  
1.6 ( $\leq 10$  mbar: 2.5)

**Ranges (EN 837-3/5)**  
NG 63 0/16 to 0/400 mbar  
NG 100 0/6 to 0/400 mbar  
NG 160 0/4 to 0/400 mbar

**Standard version Connection (wetted part)**  
NG 63:  
2 x G $\frac{1}{4}$ B – spanner size SW 14 centre back (brass)  
NG 100, NG 160:  
2 x G $\frac{1}{2}$ B – spanner size SW 22 bottom (stainless steel)  
2 x G $\frac{1}{2}$ B – spanner size SW 22 centre back (brass) (EN 837-3/7.3)

**Measuring element (wetted part)**  
Capsule element, CuBe alloy

**Movement (wetted part)**  
Brass

**Seal (wetted part)**  
NBR (Perbunan)

**Options**

- Back flange
- 3-hole fixing, panel mounting bezel
- Hose connections

**Application area**  
Static load: full scale value  
Dynamic load: 0.9 x full scale value

**Overpressure safety**  
Full scale value

**Maximum static pressure**  
400 mbar

**Operating temperature range**  
Medium:  $T_{max} = +60$  °C  
Ambient:  $T_{min} = -20$  °C  
 $T_{max} = +60$  °C

**Temperature performance**  
Indication error when the temperature of the measuring system deviates from the normal temperature of 20 °C:  
rising temperature approx.  $\pm 0.6$  %/10 K  
falling temperature approx.  $\pm 0.6$  %/10 K  
of full scale value

**Degree of protection**  
IP 66 (EN 60529)

**Dial (wetted part)**  
Aluminium, white, dial marking black  
**Pointer (wetted)**  
Aluminium, black

**Housing (wetted part)**  
Stainless steel 304

**Bayonet type bezel/crimped bezel**  
Stainless steel 304

**Window (wetted part)**  
Plastic (PMMA)

**Mounting**  
Wall mounting by means of back flange or 3-hole fixing, panel mounting bezel (each as option).  
Direct mounting to rigid measuring line possible.

- Special scales
- Other process connections

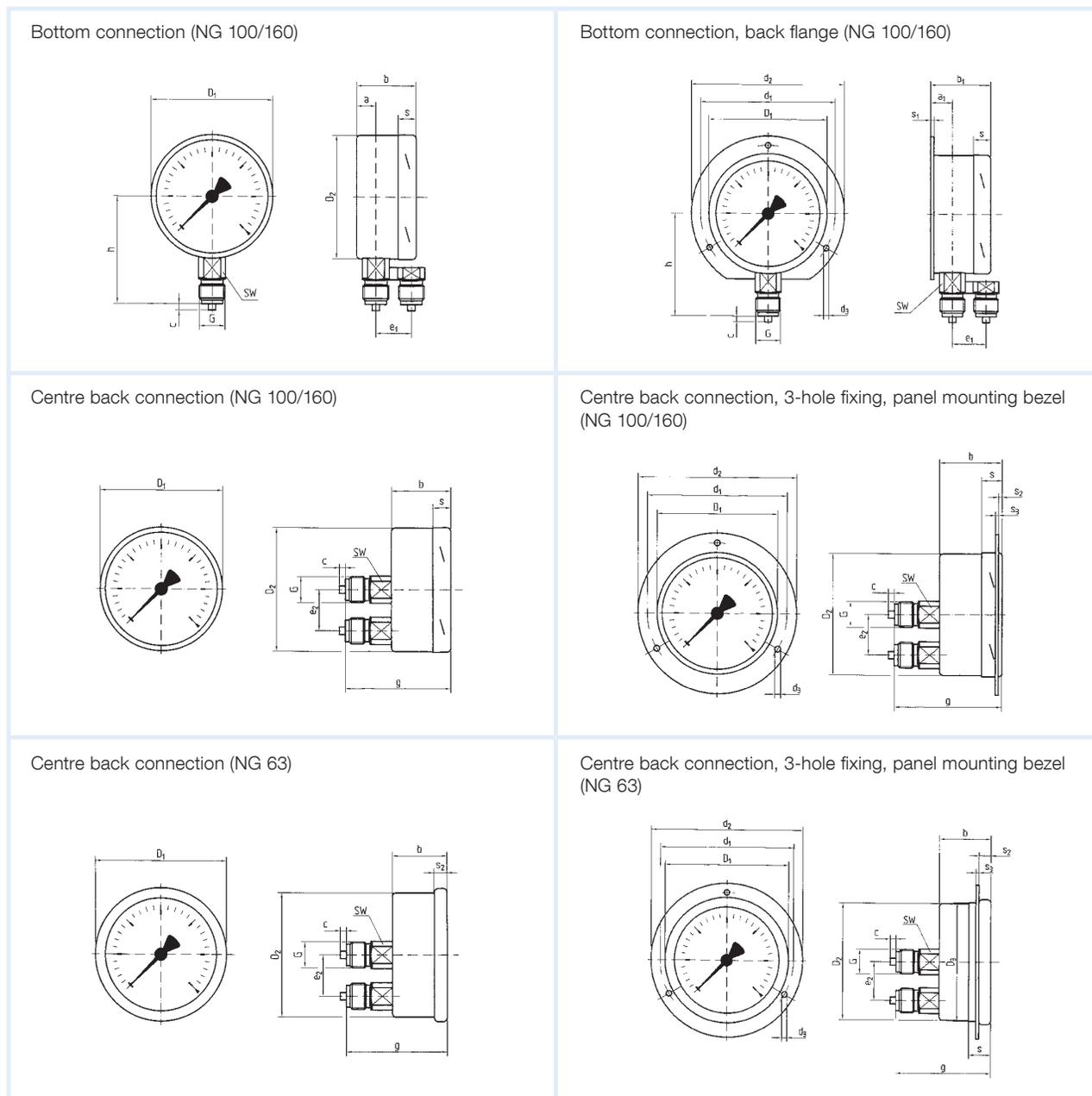
**i**  
See page 134 for prices.

# Standard capsule pressure gauges for differential pressure

Type D 9 – NG 63/type D 4 – NG 100/160

## Housing types and dimensions

1



### Dimensions (mm)

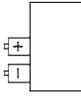
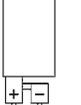
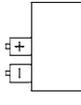
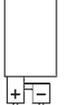
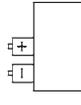
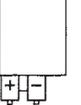
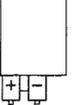
Nominal size (NG)	a	a1	b	b1	c	d1*	d2	d3*	D1	D2	D3	e1	e2	g	G	h	S	S1	S2	S3	SW
63	-	-	30.5	-	2	75	85	3.6	68	62	64.3	-	20	53	G $\frac{1}{4}$ B	-	14	-	6	2	14
100	16	18	49	51	3	116	133	4.5	101	99	-	32	34.5	79	G $\frac{1}{2}$ B	86	20	5	2.5	3	22
160	16	19	49	52	3	178	196	4.5	161	159	-	32	34.5	79	G $\frac{1}{2}$ B	118	20	6	4.5	2	22

\* Dimensions as per DIN 16063/16064.

# Standard capsule/Bourdon tube pressure gauges for differential pressure

1

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

i

See page 151 for extra charges for mounting accessories.