Differential pressure gauges with diaphragm

with or without damping

with or without electrical alarm contacts

Nominal sizes ND 100, 160

Description

Differential pressure gauges in steel version are ideal for the hard operation conditions and the resulting high demands on pressure measurement in production facilities in industry and other comparable branches.

Depending on the application, the gauges can be delivered with filling liquid. The filling liquid provides wear-protection for the measuring system through dampening, should pulsating pressures and mechanical vibrations occur.
The measuring devices are suitable for non-aggressive, liquid or gaseous media as far as they are not cristallysing or highyly viscous.

Differential pressure gauges with electrical alarm contacts or electrical output are suitable for controlling or regulating process sequences with the aid of the process pressure.

Function

The measuring chamber (+) and (-) are separated by the plate spring measuring element. The pressure difference (+) and (-) measuring chamber causes a movement of the plate spring.

Features

- o Measuring flange aluminium alloy
- o Case and bayonet ring of corrosion resistant materials, stainless steel
- o Electric alarm contacts or electrical output
- o Vibration-free display and long life term stability through liquid damping

Ranges

0 ... 25 mbar to 0 ... 25 bar

Applications

Level measurements in pressurised vesselser,

Filter monitoring,

Air condition technology,

Flow measurement.

Models: P2606, P2616

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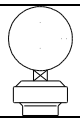
Technical data

Model	P2606	P2616	Options
Nominal size	100	160	
Type			
Contact type	none Magnetic snap action Inductive		Electrical output 4 ... 20 mA
Number of contacts	none 1 - 3		Magnetic snap 4
Electrical connection	none Cable connector right hand side. 6 screw terminals + PE, cross section of the conducting wire 2.5 mm^2. Screw type conduit fitting M20x1.5, outgoing downwards		Plug [1]
Accuracy class	1.6 nach EN 837-3		1.0 (≥100 mbar)
Ranges	0 ... 25 mbar to 0 ... 250 mbar (Measuring chamber DN 149) 0 ... 0.4 bar to 0 ... 25 bar (Measuring chamber DN 85) negative or positive and negative/positive gauge pressure		0 ... 16 mbar Scale ranges approx. 180°<
Type	for max. gauge pressure (static.pressure) *siehe Tabelle* 1		
Overlaod protection	⊕ resp. ⊖ side max. siehe Tabelle 1		
Applications	Constand load: end scale value Alternating load: 0.9 x end of scale value		
Case	Stainless steel, 1.4301 with blow out back		Filling liquid
Bezel	Stainless steel, 1.4301 bayonet ring		Mounting flange front
Window	Glass lens		
Dial	Aluminium, white, black imprint		Special scale
Pointer	Aluminium,black micro -adjustable pointer		
Movement	CuZn alloy		Zero-point adjustment
Measuring element	≤ 2.5 bar, Stainless steel, 1.4571 ≥ 4 bar, NiCrCo-alloy (Duratherm 600)		Special material
Sealing	NBR Perbunan (medium wetted)		FPM (Viton) ® [2]
Pressure connection - position	Aluminium-alloy radial, bottom		 rear
- thread	2 x G 1/4 female thread pressure connection		outside, bottom
Measuring flange	Aluminium-alloy		Venting of the pressure chambers
Temperatures - Media - Ambient	 Tmin. -20°C, Tmax. 60°C Tmin. -20°C, Tmax. 60°C		max. 130°C
Temperature behaviour	0.3%/10K if deviation from normal temperature 20°C		
Protection	IP 54 to EN 60 529 / EC 529		IP 65

[1] Similar to DIN 43 651

[2] Viton ® fluoroelastomer, a product of DuPont Dow Elastomers

Special accessories:

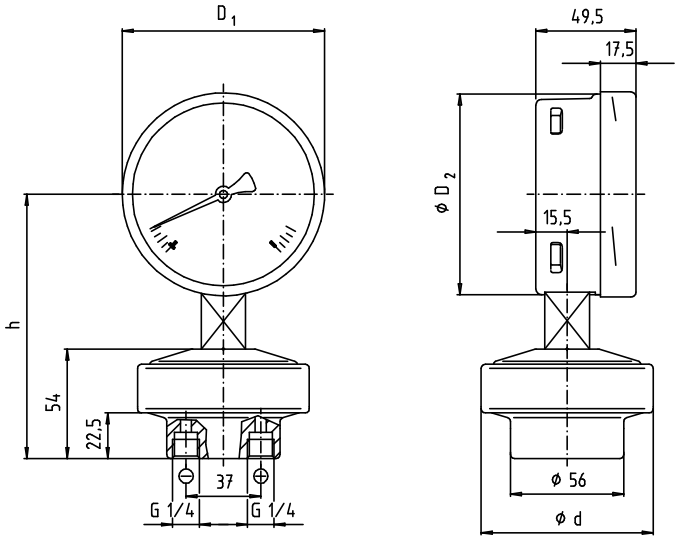
Shut-off valve block (one - five spindle) see AE 1215
Electrical data and switching functions see leaflet DE 1231 and DE 728
Electrical accessories see leaflet DE 1230

Table 1

Scale-ranges	mbar	bar				
	0 ... 16 to 0 ... 250	0 ... 0.4 to 0 ... 0.6	0 ... 1	0...1.6	0 ... 2.5 to 0 ... 10	0 ... 16 to 0 ... 25
max. total static pressure	2.5 bar	10 bar				25 bar
overload limit	**bar**					
⊕ and ⊖ Seite	2.5 bar	3	5	8	10	25

Dimensions

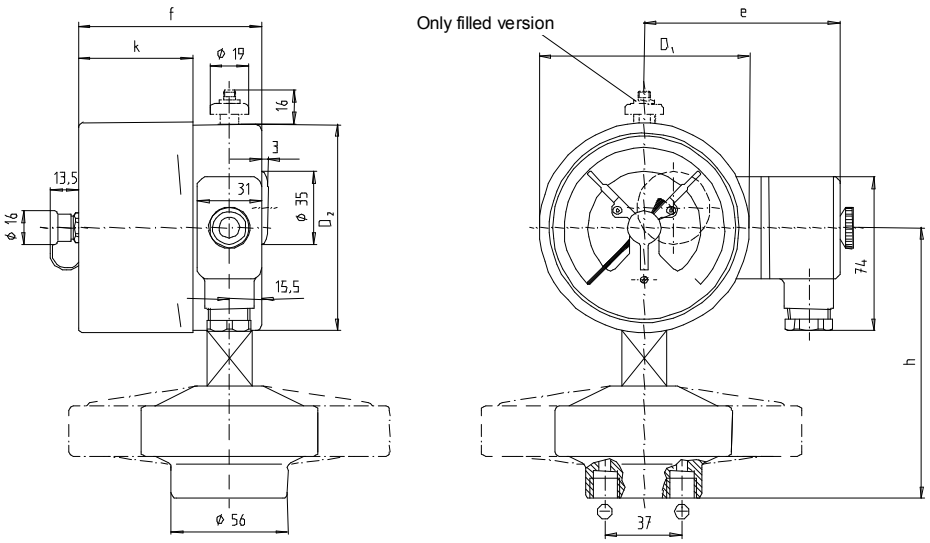
Standard version



Nominal size ND	Ranges [bar]	Dimensions [mm]					Weight [kg] 1)
		D_1	D_2	d	G	h ± 1	
100	≤ 0.25	101	99	149	G 1/4	130	1.85
	≥ 0.40	101	99	85	G 1/4	130	1.00
160	≤ 0.25	161	159	149	G 1/4	160	2.25
	≥ 0.40	161	159	85	G 1/4	160	1.40

1) Weight for filled Gaues on request

Version with limit alarm contacts



NG	Dimensions [mm]					
	D_1	D_2	e	f ± 1	h ± 1	k
100	101	99	94	88	130	55
160	161	159	124	101	160	17.5

Modifications reserved