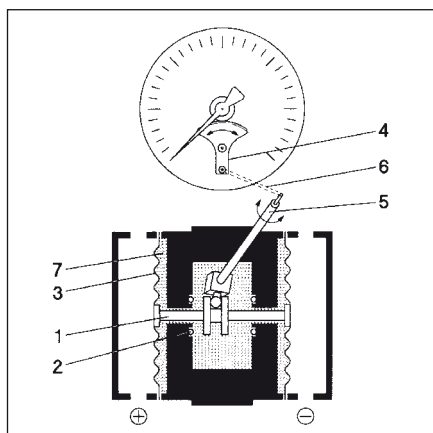


Diaphragm pressure gauges for differential pressure for chemical applications – high overload protection



Function overview

1. Connection rod
2. O ring, overpressure-proof
3. Diaphragm
4. Movement
5. Measuring shaft
6. Transmission lever
7. Pressure transmission liquid



Application

For differential pressure measurement with low differential pressure and very high static pressure.

For corrosive, gaseous and liquid media, also for use in corrosive atmospheres. Since the pressure chambers can be flushed, the units are also suitable for polluted media.

! When measuring gas or vapour, the instruments must be used in accordance with the safety recommendations of EN 837-2 (see appendix).

Type

PF 100/160 Dif H D402

Nominal size

100 – 160

Function

Each of the pressures acts on a diaphragm. The diaphragms are connected via a rod. To compensate for the static pressure, the chamber between the diaphragms is filled with pressure transmission liquid. At identical pressures, both diaphragms are in „rest“ position. If the pressures are different, the diaphragms change their shape in the direction of the lower 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

Ranges (EN 837-3/5)

NG 100 0/0.6 to 0/25 bar

NG 160 0/40 mbar to 0/25 bar

Maximum static pressure

40 bar/100 bar

Overpressure safety

Up to the maximum static pressure on one side

Operating temperature range

Medium: $T_{max} = +100\text{ °C}$

Ambient: $T_{min} = -20\text{ °C}$

$T_{max} = +80\text{ °C}$

Protection

IP 54 (EN 60529)

Standard version

Connection

Stainless steel, bottom

Flange connection based on DIN 19213

2 x G $1/2$ female thread

Measuring element

Diaphragm,

≤ 400 mbar stainless steel 316 Ti or 316 L

> 400 mbar Duratherm

Intermediate block

AlMgSiPb – hard coated

Pressure transmission liquid

Acid free oil

Zero correction

through top housing opening
±25 % of full scale value

Seals

FPM (Viton)

Movement

Stainless steel

Dial

Aluminium, white

Dial marking black

Pointer

Aluminium, black

Housing

Stainless steel 304

Bayonet type bezel

Stainless steel 304

Front glass

Laminated safety glass

Mounting

Wall mounting via a back mounting plate (optional) or pipe mounting by a combination of a back mounting plate and fixing clamp (optional) for 2“ pipe

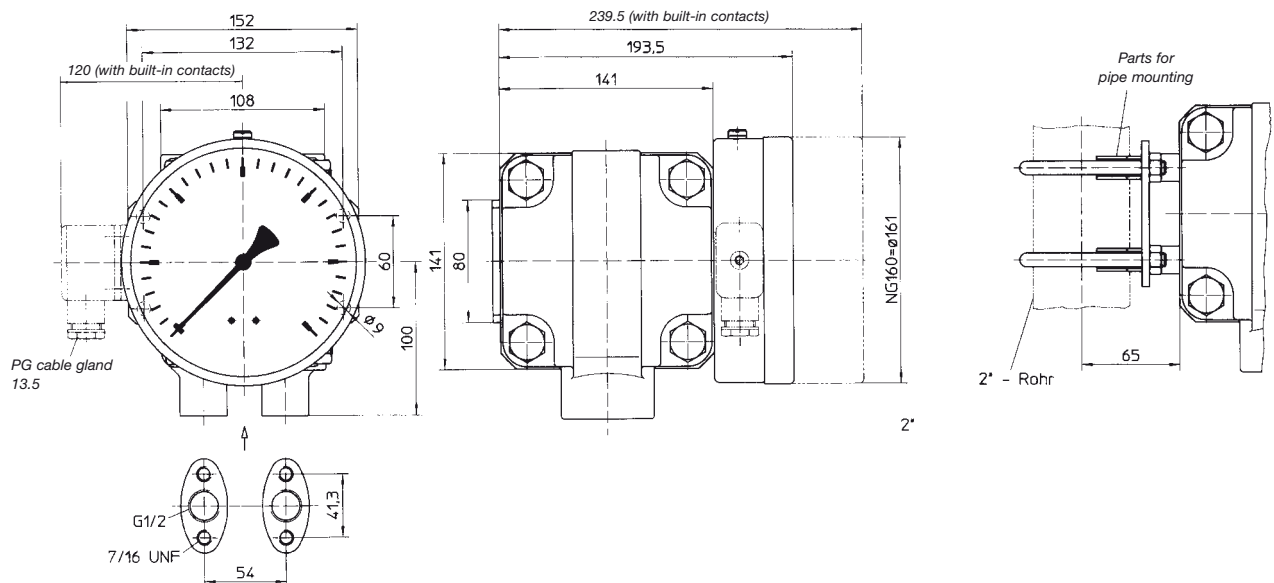
Options

- Fixing clamp for 2“ pipe
- Glycerine filling (type D 802)
- Electrical contacts (> 100 mbar)

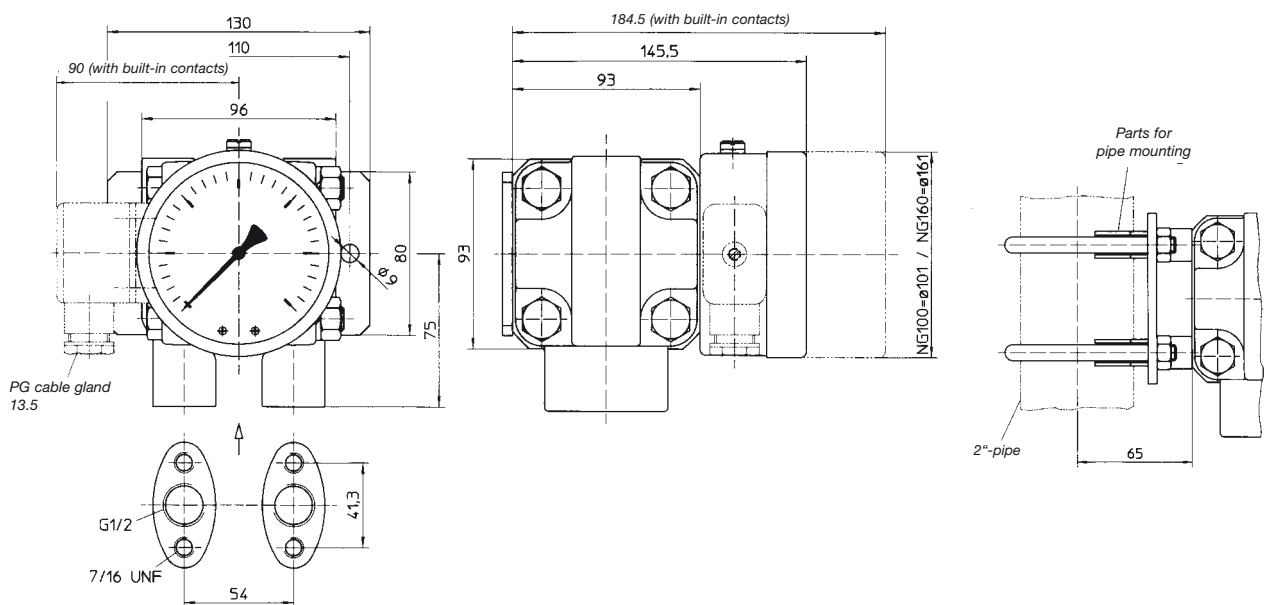
Diaphragm pressure gauges for differential pressure for chemical applications – high overload protection

Type D 4 – NG 100/160 Housing types and dimensions (in mm)

Ranges 0/40 to 0/400 mbar NG 160

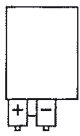

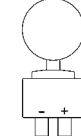
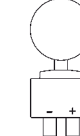
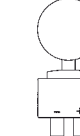




Ranges 0/0.6 to 0/25 bar NG 100/160



Spring-diaphragm pressure gauges/diaphragm pressure gauges for differential pressure

DG: H

Type	MF 100 Dif, D401	MF 100 Ch Dif, D402	MFW 100 Ch Dif, D402	MFW 100 Ch Dif, MK1 D402	MFW 100 Ch Dif, IK1 D402	PF 100 Ch Dif H, D402	PF 160 Ch Dif H, D402
Version							
Housing-Ø	100	100	100	100	100	100	160
Housing	Stainless steel 304, bayonet type bezel stainless steel 304						
Meas. elem.	refer to data sheet					Stainless steel/Duratherm	
Accuracy class	2.5	2.5	2.5	2.5	2.5	1.6	1.6
Connection	2 x G ¹ / ₂ B	2 x G ¹ / ₂ B	2 x G ¹ / ₂ B	2 x G ¹ / ₂ B	2 x G ¹ / ₂ B	Flange connection based on DIN 19213, 2 x G ¹ / ₂ female thread	
Max. static pressure	25 bar	25 bar	25 bar	25 bar	25 bar	40 bar	
Range	Part no.	Part no.	Part no.	Part no.	Part no.	Part no.	Part no.
Price €							
0/40 mbar	---	---	---	---	---	---	88022402
0/60 mbar	---	---	---	---	---	---	88023402
0/100 mbar	---	---	---	---	---	---	88024402
0/160 mbar	---	---	---	---	---	---	88025402
0/250 mbar	88086401	88086402	88106402	88126402	88146402	---	88026402
0/400 mbar	88087401	88087402	88107402	88127402	88147402	---	88027402
0/600 mbar	88088401	88088402	88108402	88128402	88148402	88008402	88028402
Price €							
0/1 bar	88089401	88089402	88109402	88129402	88149402	88009402	88029402
0/1.6 bar	88090401	88090402	88110402	88130402	88150402	88010402	88030402
0/2.5 bar	88091401	88091402	88111402	88131402	88151402	88011402	88031402
0/4 bar	88092401	88092402	88112402	88132402	88152402	88012402	88032402
0/6 bar	88093401	88093402	88113402	88133402	88153402	88013402	88033402
0/10 bar	---	---	88114402	88134402	88154402	88014402	88034402
0/16 bar	---	---	88115402	88135402	88155402	88015402	88035402
0/25 bar	---	---	88116402	88136402	88156402	88016402	88036402
Add. costs	Price €						
Max. static pressure PN 100	---	---	---	---	---		
Glycerine filling							
Wall mounting	Back flange		Connection piece for instrument bracket is standard. Refer to page 409 for instrument brackets.			Standard	
Pipe mounting (2")	---	---	---	---	---		