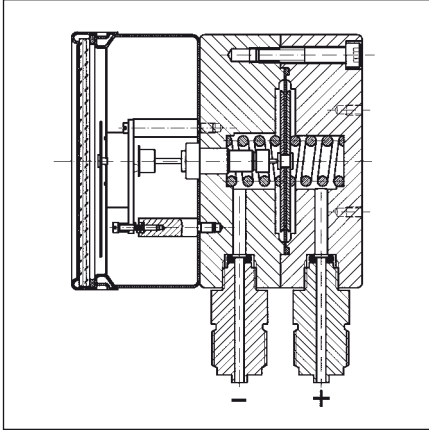


# Spring-diaphragm pressure gauges for differential pressure and chemical applications – overload protected



## Application

For differential pressure measurement with low differential pressure and high static pressure. For corrosive, gaseous and liquid media which are not highly viscous, also for use in corrosive atmospheres. Particularly suitable for monitoring filters, pumps and pipe systems.

## Types

MF 100 Ch Dif D402  
MFW 100 Ch Dif D402

## Nominal size

100

## Function

The pressures act on two pressure chambers separated by an elastic diaphragm. Different pressures in the chambers cause an axial deflection of the diaphragm against a pressure spring which is proportional to the pressure. This is transmitted to the movement via a rod. The differential pressure is directly indicated by a pointer. The diaphragm is held by metallic supports at both sides which provides for an overpressure safety of up to 25 bar.

## Accuracy class (EN 837-3/6)

2.5

## Ranges (EN 837-3/5)

MF 100: 0/250 mbar to 0/6 bar  
MFW 100: 0/250 mbar to 0/25 bar

## Maximum static pressure

25 bar

## Overpressure safety

up to 25 bar on both sides

## 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 element deviates from 20 °C:  
rising temp. approx.  $\pm 0.5\text{ %}/10\text{ K}$   
falling temp. approx.  $\pm 0.5\text{ %}/10\text{ K}$   
percentage of full scale value

## Protection

IP 54 (EN 60529)

## Standard version

### Connection

Stainless steel 316 Ti or 316 L,  
bottom, parallel in line  
2 x G $\frac{1}{2}$ B – spanner size 22  
(EN 837-3/7.3)  
with locked damping screw  
inner diameter 0.5 mm

## Measuring element

Pressure spring  
stainless steel 1.4310

## Diaphragm

Viton

## Measuring flange

Stainless steel 316 Ti or 316 L

## Movement

Stainless steel

## Dial

Aluminium, white  
Dial marking black

## Pointer

Aluminium, black

## Housing

Stainless steel 304

## Bayonet type bezel

Stainless steel 304

## Front glass

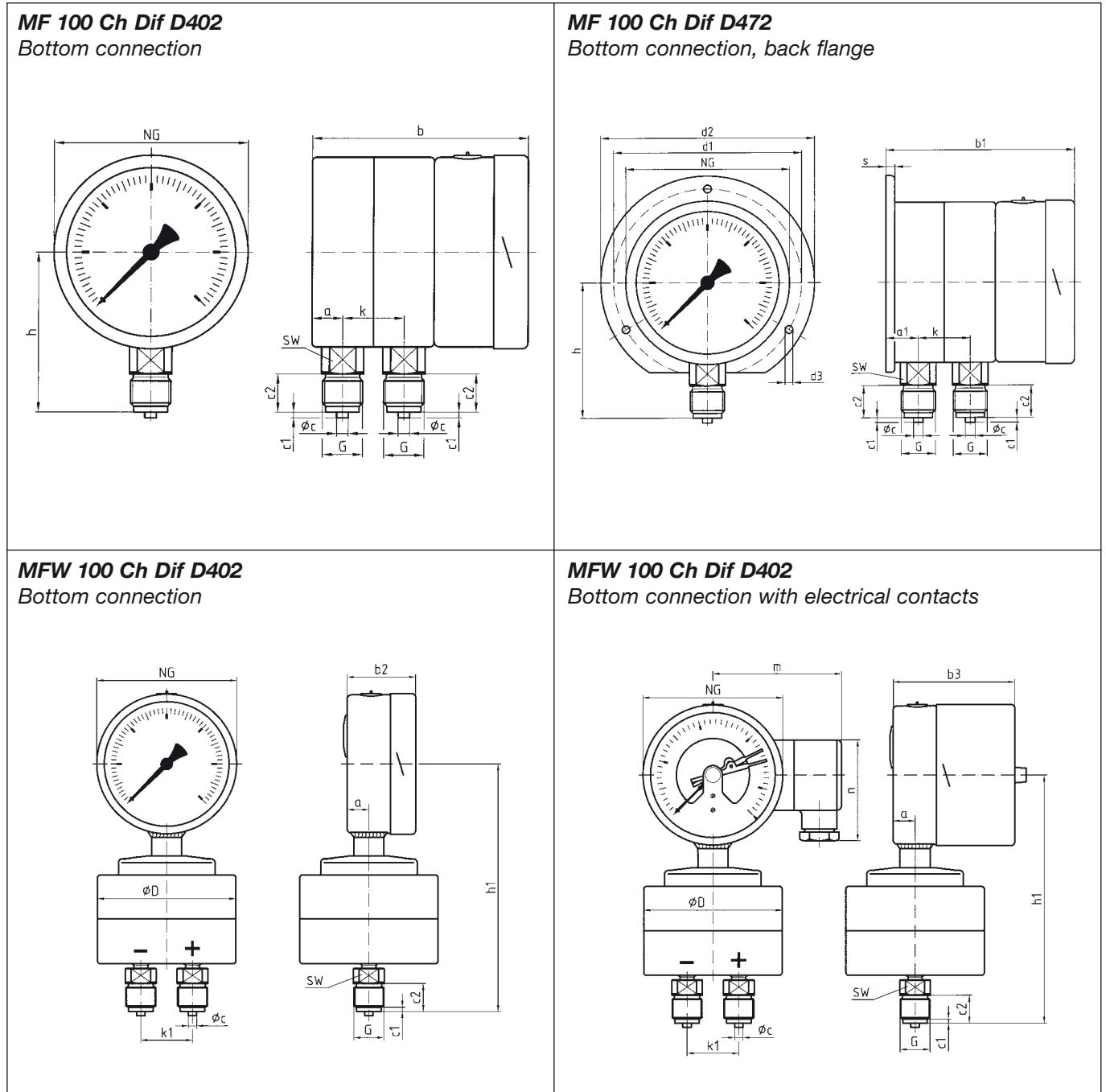
Laminated safety glass

## Options

- Back flange (MF 100)
- Other connections
- Electrical contacts (MFW 100)

# Spring-diaphragm pressure gauges for differential pressure and chemical applications

## type D 4 – NG 100 Housing types and dimensions

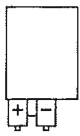

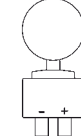
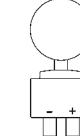
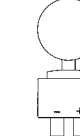




### Dimensions (mm)

Nominal size (NG)	a	a1	b	b1	b2	b3	Øc	c1	c2	d1	d2	d3	ØD	G	h	h1	k	k1	m
100	16	19	84	87.5	49	87	6	3	20	116	132	4.8	99	G1/2B	86	177	32	37	92
Nominal size (NG)	n	s	s1	s2	SW														
100	72	2	5.5	3	22														

# 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 <sup>1</sup> / <sub>2</sub> B	2 x G <sup>1</sup> / <sub>2</sub> B	2 x G <sup>1</sup> / <sub>2</sub> B	2 x G <sup>1</sup> / <sub>2</sub> B	2 x G <sup>1</sup> / <sub>2</sub> B	Flange connection based on DIN 19213, 2 x G <sup>1</sup> / <sub>2</sub> 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.
<b>Price €</b>							
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
<b>Price €</b>							
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
<b>Add. costs</b>	<b>Price €</b>						
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")	---	---	---	---	---		