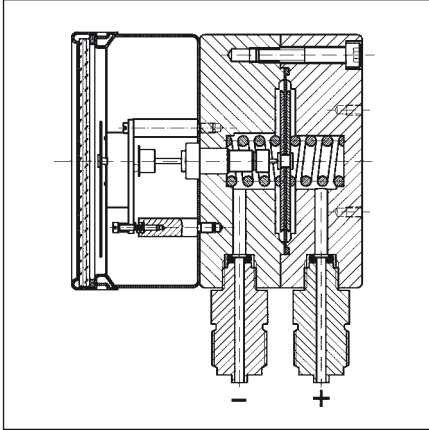


# Spring-diaphragm pressure gauges for differential pressure and chemical applications – overload protected



## 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.  $\pm 0.5\%$ /10 K  
falling temp. approx.  $\pm 0.5\%$ /10 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 G1/2B – 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

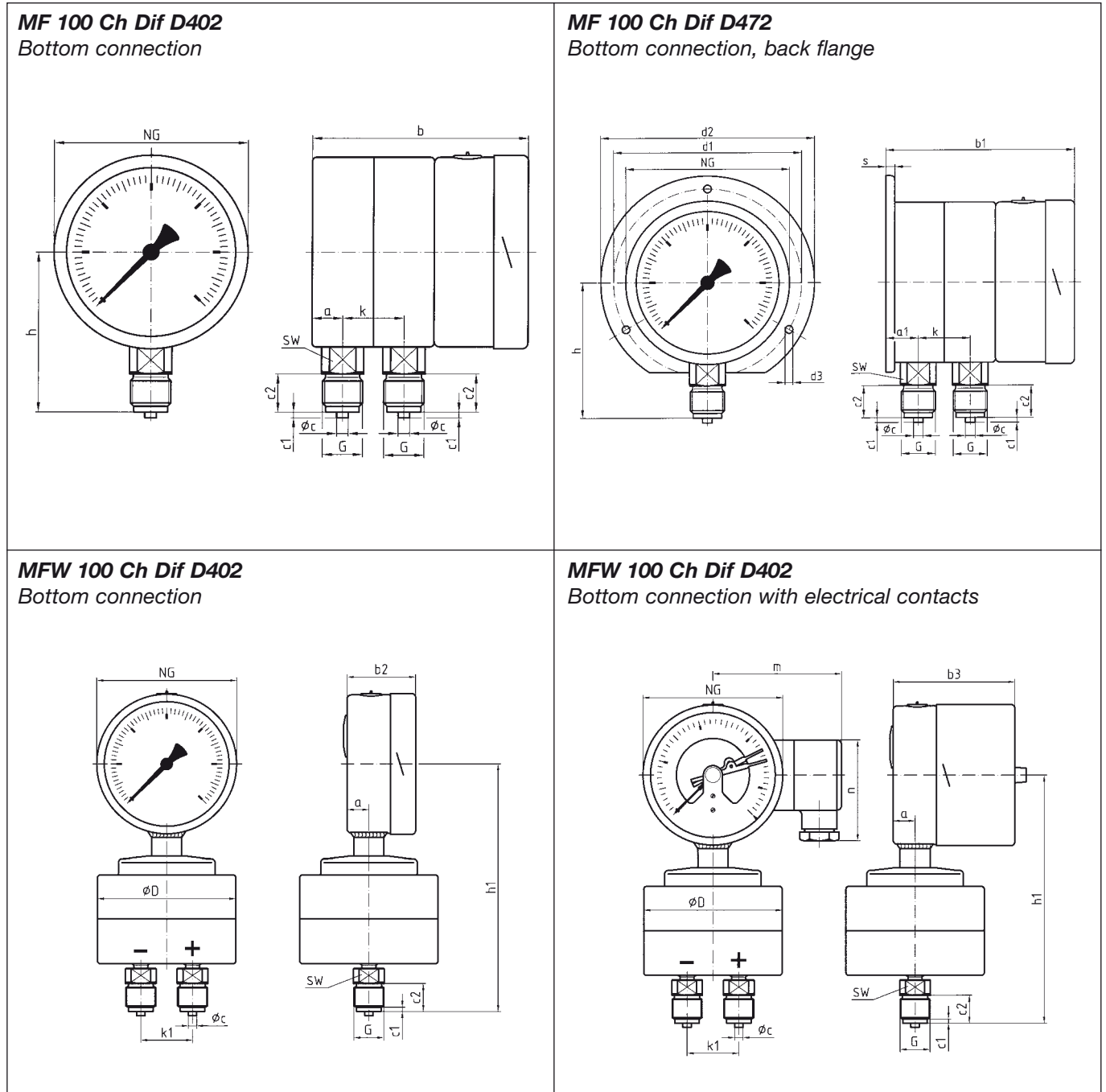
Laminated safety glass

## 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														