Pressure gauge per EN 837-1 with mounted diaphragm seal
With threaded connection, threaded design
Model DSS10M

Applications

- For aggressive, hot, corrosive, environmentally hazardous or toxic media
- Chemical and petrochemical industries
- Process industry

Special features

- Process connection with thread for direct threaded connection
- Version with internal diaphragm
- Diaphragm seal parts screwed together
- Universal application

Diaphragm seal system, model DSS10M

Description

Diaphragm seal systems are used to protect the pressure measuring instrument from aggressive, adhesive, crystallising, corrosive, highly viscous, environmentally hazardous or toxic media. The diaphragm made of stainless steel provides for the separation from the medium. The pressure is transmitted to the measuring instrument via the system fill fluid which is inside the Diaphragm seal system.

Due to its design, the DSS10M can be used universally.
A replacement of the lower body is possible (e.g. when changing the process connection) without having to carry out modifications on the diaphragm seal system.

Mounting of the diaphragm seal to the measuring instrument is made via direct mounting as standard.

The DSS10M is particularly well suited for aggressive or hot media. This instrument is mainly geared to applications in the process industry.

Data sheets showing similar products:
Pressure gauge per EN 837-1 with mounted diaphragm seal; with threaded connection, welded design; model DSS34M; see data sheet DS 95.15

Part of your business

Specifications

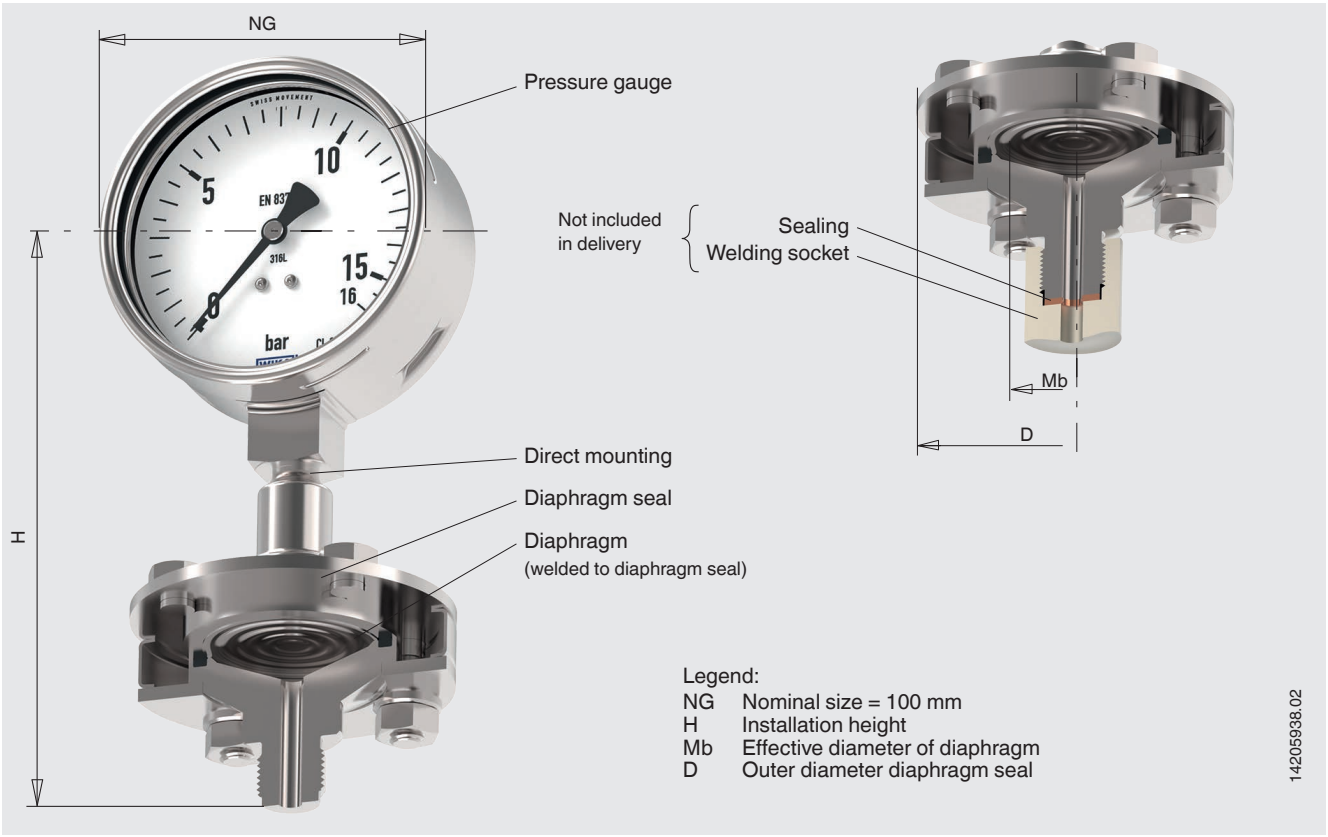
Model DSS10M	
Version	Pressure gauge with Bourdon tube per EN 837-1, screwed to diaphragm seal
Nominal size (NS)	100
Accuracy class	1.0
Scale range	0 ... 1 to 0 ... 60 bar [0 ... 15 to 0 ... 800 psi] or all other equivalent vacuum or combined pressure and vacuum ranges
Pressure limitation	Steady: Full scale value Fluctuating: 0.9 x full scale value Short time: 1.3 x full scale value
Permissible temperature range Medium Ambient Storage	 -10 ... 150 °C [14 ... 302 °F] 10 ... 40 °C [50 ... 104 °F] 10 ... 60 °C [50 ... 140 °F]
Ingress protection	IP65 per IEC/EN 60529
Material wetted non-wetted	 Diaphragm: Stainless steel CrNi-Stahl 1.4435 [316L] or Hastelloy C276 Diaphragm seal: CrNi-Stahl 1.4435 [316L] or Hastelloy C276 Dial, pointer: Aluminium Case: Stainless steel 1.4301 [304] Diaphragm seal, pressure element: Stainless steel Window: Laminated safety glass
Level of cleanliness of wetted parts	Oil and grease free per ASTM G93-03 level F and ISO 15001 (< 1,000 mg/m²)
System fill fluid	Silicone oil KN 2 for general applications

Scale ranges in bar [psi]

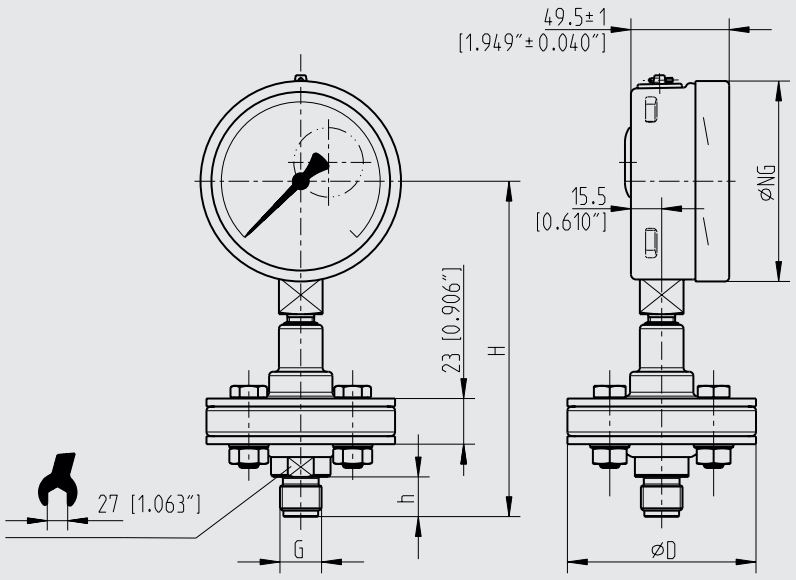
Gauge pressure				
0 ... 1 [0 ... 15]	0 ... 1.6 [0 ... 25]	0 ... 2.5 [0 ... 40]	0 ... 4 [0 ... 60]	0 ... 6 [0 ... 100]
0 ... 10 [0 ... 160]	0 ... 16 [0 ... 250]	0 ... 25 [0 ... 400]	0 ... 40 [0 ... 600]	0 ... 60 [0 ... 1,000]

Vacuum and +/- scale range		
-1 ... +5 [-30 inHg ... +70]	-1 ... +9 [-30 inHg ... +130]	-1 ... +10 [-30 inHg ... +145]

Model DSS10M illustrated on a pipe socket



Dimensions in mm [in]



Legend:
NG Nominal size = 100 mm
H Installation height
Mb Effective diameter of diaphragm
G Thread
D Outer diameter of diaphragm seal
h Thread length

Type of process connection: Threaded connection, threaded design

Wetted parts	G	Dimensions in mm [in]				
		NG	H	D	Mb	h
Stainless steel 1.4404/1.4435 [316L]	G ½	100 [3.937]	169 [6.654]	95 [3.740]	52 [2.047]	20 [0.787]
	½ NPT		168 [6.614]			19 [0.748]
Hastelloy C276	G ½		203 [7.992]			20 [0.787]
	½ NPT		202 [7.953]			19 [0.748]

Certificates (option)

3.1 inspection certificate per EN 10204 (e.g. material proof for wetted metallic parts, calibration certificate)

Approvals and certificates, see website

Ordering information

Scale range / Process connection (type of process connection, pipe standard, pipe dimension) / Parts / Certificates

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WIKA Alexander Wiegand SE & Co. KG
Alexander-Wiegand-Straße 30
63911 Klingenberg/Germany
Tel. +49 9372 132-0
Fax +49 9372 132-406
info@wika.de
www.wika.de