

diaphragm pressure gauge DS 4", 6" (100-150mm) threaded connection



PED 2014/68/UE ATEX 2014/34/UE TP TC 012/2011

The sensing element consists of an elastic diaphragm with concentric corrugations, which amplifies the movement via a ball-joint system. These instruments are designed to measure both pressure and vacuum of viscous, sediment-laden, crystallisable, or corrosive fluids. Compared to the Bourdon tube system, they are more robust and can be more easily protected against overpressure and aggressive media.

2.42.1 - MN12/18 (MGS18/12)

Design: EN 837-3.

Ranges: from 0...10 INWC to 0...360 psi, (from 0...25 mbar to 0...25 bar), vacuum and combined vacuum/pressure (or equivalent units).

Accuracy class: 1,6 as per EN 837-3 (1,0 as per EN 837-3 on request).

Ambient temperature:

-4...+149 °F (-20...+65 °C), IP55 housing (IEC 529);

-63...+149 °F (-53...+65 °C), vented IP65/67 housing (IEC 529).

Process temperature: max. +212°F; +100 °C.

Working pressure: max 75% of the full scale value.

Overpressure limit: 25% of the full scale value.

Thermal drift: ±0,6% every ±10°C of ambient temperature.

Protection: IP 55 as per EN 60529/IEC 529.

Process connection: AISI 316L st.st.

Elastic element: AISI 316 Ti st.st. diaphragm.

Diaphragm gasket: VITON.

Case: acciaio inox st.st.

Ring: acciaio inox st.st., bayonet lock.

Window: tempered glass (with external zero adjustment on request).

Movement: stainless steel.

Dial: aluminium, white with black markings.

Pointer: aluminium, micrometric adjustable.

Special version:

- **high overpressure** : 10 time the FSV but not over 30 psi (2 bar) for pressure ranges from 0...10 INWC to 0...6 psi (25...400 mbar); 5 time the FSV but not over 600 psi (40 bar), for pressure ranges 10...360 psi (0,6...25 bar).

0...1 bar
0...1,6 bar
0...2,5 bar
0...4 bar
0...6 bar
0...10 bar
0...16 bar
0...25 bar
0...25 mbar
0...40 mbar
0...60 mbar
0...100 mbar
0...160 mbar
0...250 mbar
0...400 mbar
0...600 mbar

-0,6...1 bar
-1...0,6 bar
-1...1,5 bar
-1...3 bar
-1...5 bar
-1...9 bar
-1...15 bar
-1...24 bar
-10...15 mbar
-15...10 mbar
-15...25 mbar
-25...15 mbar
-20...40 mbar
-40...20 mbar
-40...60 mbar
-60...40 mbar
-60...100 mbar
-100...60 mbar
-100...150 mbar
-150...100 mbar
-150...250 mbar
-250...150 mbar
-200...400 mbar
-400...200 mbar
-400...600 mbar
-600...400 mbar

-25...0 mbar
-40...0 mbar
-60...0 mbar
-100...0 mbar
-160...0 mbar
-250...0 mbar
-400...0 mbar
-600...0 mbar
-1...0 bar

2.45.1 - MN12/18/T (MGS18/12/T)

Process connection: AISI 316L, PTFE coated.

Elastic element: AISI 316 Ti st.st. diaphragm, PTFE coated.

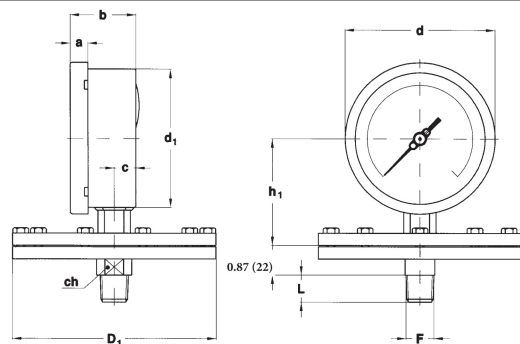
Other features as MN12/18.

diaphragm pressure gauge

DS 4", 6" (100-150mm), threaded connection

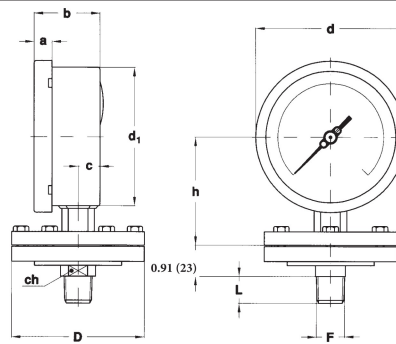
MN12/18

(MGS18/12)



0...10 INWC to 0...6 psi

A - LOWER CONNECTION



10...360 psi

Range	DS	F	a	b	c	d	d ₁	h	h ₁	D	D ₁	ch	L	Weight
0...10 INWC to 0...6 psi (25...400 mbar)	E 4"(100mm)	41M G 1/2 B	0.51 (13)	1.90 (48,5)	0.63 (16,1)	4.35 (110,6)	3.97 (101)		3.09 (78,5)		5.90 (150)	0.86 (22)	0.78 (20)	5.73 lbs 2,6 kg
	G 6"(150mm)		0.59 (15)	1.98 (50,5)	0.64 (16,5)	6.33 (161)	5.88 (149,6)		4.36 (110,8)		5.90 (150)	0.86 (22)	0.78 (20)	6.50 lbs 2,95 kg
	E 4"(100mm)		0.51 (13)	1.90 (48,5)	0.63 (16,1)	4.35 (110,6)	3.97 (101)	3.12 (79,5)		3.85 (98)		0.86 (22)	0.78 (20)	3.85 lbs 1,75 kg
10...360 psi (0,6...25 bar)	G 6"(150mm)	43M 1/2-14 NPT	0.59 (15)	1.98 (50,5)	0.64 (16,5)	6.33 (161)	5.88 (149,6)	4.40 (111,8)		3.85 (98)		0.86 (22)	0.78 (20)	4.62 lbs 2,1 kg

dimensions : inches (mm)

OPTIONS

Model	MN12/18	MN12/18/T
Electric contacts for pressure ranges ≥ 25 INWC (≥ 60 mbar)	(1) ◆	◆
C40 - Case and ring AISI316L st.st.	◆	◆
E67 - Protection degree IP 65/67 as per EN 60529/IEC 529	(4) (7) ◆	◆
L22 - Maximum pointer Wiebrock	(4) ◆	◆
M23 - Monel 400 protection diaphragm	◆	◆
M22 - Hastelloy C protection diaphragm	◆	◆
M29 - Tantalum protection diaphragm	◆	◆
M26 - PTFE diaphragm protection	◆	◆
P02 - Degreasing for oxygen use	◆	◆
R10 - Glycerine filling $+32...+149^{\circ}\text{F}$ ($0...+65^{\circ}\text{C}$)	(2) (3) (4) ◆	◆
R11 - Silicon oil filling $-40...+149^{\circ}\text{F}$ ($-40...+65^{\circ}\text{C}$)	(2) (3) (4) ◆	◆
T01 - Tropicalization	◆	◆
T32 - Safety glass window	(4) ◆	◆
ECV - Vented housing version - IP65/67 - T.a. $-53...+65^{\circ}\text{C}$	(5) ◆	◆
2G2 - EAC EX II 2G c - Dry - T.a. $-20...+60^{\circ}\text{C}$	(6) ◆	◆
2D2 - EAC EX II 2GD c - Dry/Silicon oil R11 - T.a. $-20...+60^{\circ}\text{C}$	(6) ◆	◆
2D0 - EAC EX II 2GD c - Glycerine filled R10 , T.a. $0...+60^{\circ}\text{C}$	(6) ◆	◆
2D5 - EAC EX II 2GD c - Vented housing version ECV , T.a. $-53...+60^{\circ}\text{C}$	(6) ◆	◆

(1) Codes, description and wiring on data sheet MN14.

(2) For pressure ranges ≥ 10 psi (600 mbar) only.

(3) Accuracy class 2,5 as per EN 837-3.

(4) Not available with electric contacts

(5) to be ordered with E67 option

(6) See the ATEX temperature gauges data-sheet for technical details.

(7) to be ordered with ECV option

"HOW TO ORDER" SEQUENCE

Section / Model /Case / Mounting / Diameter / Range / Process connection / Options

2 42 1 A E 41M C40...2D5
45 G 43M