

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

# MN12/18



The sensing element is an elastic diaphragm, with concentric corrugations that drives the amplifying movement through a ball-joint. They are designed to measure pressure or vacuum of viscous, sedimentous, crystallisable or corrosive fluids. Compared to the bourdon tube system they are most robust and are better able to withstand overpressure or aggressive fluids.

## 2.42.1 - MN12/18

**Designation:** EN 837-3.

**Ranges:** from 0...10 IN WC to 0...360 psi (from 0...25 mbar to 0...25 bar), or other equivalent units.

**Accuracy class:** 1,6 as per EN 837-3.

**Ambient temperature:** -13...+149°F (-25...+65 °C.)

**Process fluid temperature:** +212°F (max. +100 °C).

**Working pressure:** max 75% of FSV.

**Overpressure limit:** 25% of FSV.

**Thermal drift:** ± 0,6% every ± 50°F (± 10° C) of ambient temperature

**Protection degree:** IP 55 as per IEC 529.

**Socket material:** AISI 316L st.st.

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

**Gasket:** PTFE.

**Case:** stainless steel.

**Ring:** stainless steel, bayonet lock.

**Window:** tempered glass.

**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).

## 2.45.1 - MN12/18/T

**Socket material:** AISI 316 st.st., PTFE coated.

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

**Other features as model MN12/18/F.**

## OPTIONS

Model		MN12/18	MN12/18/T
Electric contacts for pressure ranges ≥ 25 INWC (60 mbar) (1)	(1)	♦	♦
Case and ring AISI316 st.st.		♦	♦
Protection degree IP 65 as per IEC 529	(4)	♦	♦
Maximum pointer Wiebrock	(4)	♦	♦
Monel 400 protection diaphragm		♦	♦
Hastelloy C protection diaphragm		♦	♦
Tantalium protection diaphragm		♦	♦
PTFE diaphragm protection		♦	♦
Degreasing for oxygen use		♦	♦
Glycerine filling	(2) (3) (4)	♦	♦
Silicon oil filling	(2) (3) (4)	♦	♦
Tropicalization		♦	
Safety glass window	(4)	♦	♦

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

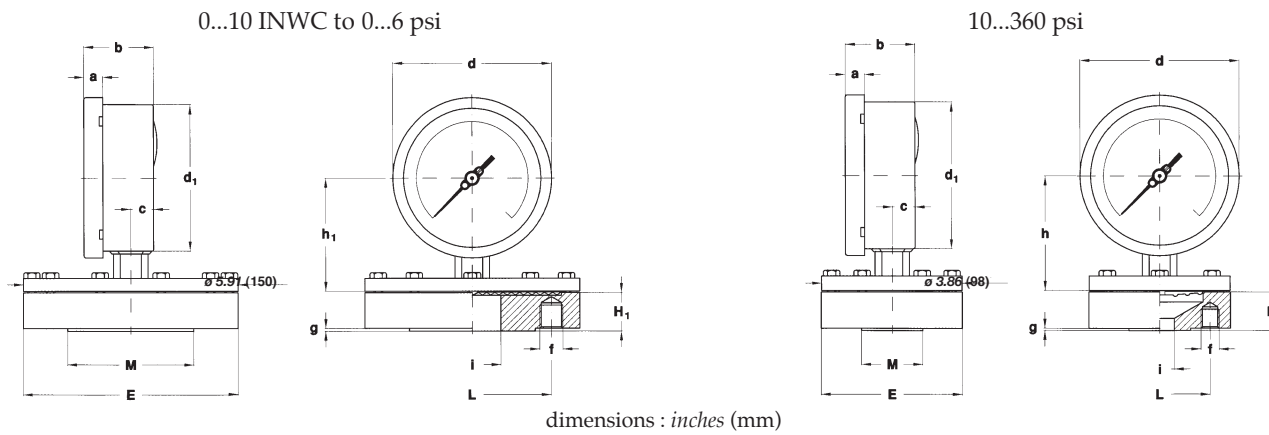
(2) For pressure ranges ≥ 10 psi (600 mbar) only.

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

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

MN12/18

RB2 - 11/07



A - LOWER CONNECTION

UNI - DIN STANDARDS

dimensions : mm

DN (1)	PN	H	H <sub>1</sub>	E	M	I	g	L	f	N (2)
15	6	34	27	80	40	15	2	55	M10	4
15	10...16	27	27	95	45	15	2	65	M12	4
15	25...400	27	27	95	45	15	2	65	M12	4
20	6	34	27	90	50	20	2	65	M10	4
20	10...16	27	27	105	58	20	2	75	M12	4
20	25...400	27	27	105	58	20	2	75	M12	4
25	6	27	27	100	60	25	2	75	M10	4
25	10...16	27	27	115	68	25	2	85	M12	4
25	25...400	27	27	115	68	25	2	85	M12	4

(1) DN 40, 50 also available

(2) N° threaded holes.

ANSI STANDARDS

dimensions : inches

DN (1)	Classe	H	H <sub>1</sub>	E	M	I	g	L	f	N (2)
1/2"	150	1.33	1.06	3.50	1.37	0.59	0.06	2.37	1/2" 13UNC	4
1/2"	300	1.06	1.06	3.74	1.37	0.59	0.06	2.62	1/2" 13UNC	4
1/2"	600	1.90	1.06	3.74	1.37	0.59	0.24	2.62	1/2" 13UNC	4
3/4"	150	1.06	1.06	3.87	1.68	0.78	0.06	2.74	1/2" 13UNC	4
3/4"	300	1.49	1.06	4.62	1.68	0.78	0.06	3.24	5/8" 11UNC	4
3/4"	600	1.90	1.06	4.62	1.68	0.78	0.24	3.24	5/8" 11UNC	4
1"	150	1.06	1.06	4.25	2	0.98	0.06	3.12	1/2" 13UNC	4
1"	300	1.49	1.10	4.88	2	0.98	0.06	3.50	5/8" 11UNC	4
1"	600	1.90	1.10	4.88	2	0.98	0.24	3.50	5/8" 11UNC	4

(1) 1" 1/2, 2" also available

(2) N° threaded holes.

"HOW TO ORDER" SEQUENCE

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

2 42 1 A E  
45 45 G



**NUOVA FIMA** -2-

NUOVA FIMA S.p.A. - www.nuovafima.com  
P.O. BOX 58 - VIA C. BATTISTI 59 - 28045 INVORIO (NO) ITALY  
TEL. +39 0322 253200 - FAX +39 0322 253232

IN ORDER TO IMPROVE THEIR PRODUCTION, MESSRS. NUOVA FIMA RESERVE THE RIGHT TO THEMSELVES TO MAKE ALL THE MODIFICATIONS THAT THEY DEEM INDISPENSABLE AT ANY TIME. UPDATED DATA-SHEET ARE AVAILABLE ON SITE: www.nuovafima.com