



# MGS19

## bourdon tube pressure gauges

### HEAVY WORK

### DS 4", 6" (100-150mm)



PED 2014/68/UE ATEX 2014/34/UE

These instruments are designed for use in chemical and petrochemical processing industries, and in conventional power plants.

They are built to resist the most severe operating conditions created by the ambient environment and the process medium. The high strength of the sensing element makes these instrument suitable to withstand high overpressure up to 4 times the full scale value and together with the case filling, they are suitable to high dynamic pulsating pressure. An Argonarc welded case/socket strengthens the whole construction.

#### 1.19.1 - Standard Model

**Design:** EN837-1.

**Safety designation:** S1 as per EN 837-2.

**Ranges:** from 0...15 to 0...10000 psi (from 0...1 to 0...600 bar or equivalent units).

**Accuracy class:** 1 according to EN 837-1.

**Ambient temperature:**

-40...+149 °F (-40...+65 °C), IP55 housing (EN 60529/IEC 529);

-58...+149 °F (-50...+65 °C), vented IP67 housing (EN 60529/IEC 529).

**Process fluid temperature:** -40...+302°F (-40...+150 °C).

**Thermal drift:** ±0,4 %/10 °C of range (starting from 68°F- 20°C).

**Working pressure :**

100% of FSV for static pressures;

90% of FSV for pulsating pressures.

**Overpressures:** up to 400% of FSV (see tables at pag. 2)

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

**Bourdon tube:** in AISI 316L stainless tube.

**Case:** stainless steel.

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

**Window:** safety glass.

**Movement:** stainless steel with internal limit stops.

**Dial:** aluminium, white with black markings.

**Pointer:** adjustable, aluminium, black.

#### 1.19.2 - Fillable Model

**Ambient temperature:** -40...+149 °F (-40...+65 °C), IP 67 housing (EN 60529/IEC 529).

**Other features:** as Standard Model.

#### 1.19.3 - Filled Model

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

**Damping liquid:** glycerine 98% or silicon oil.

**Ambient temperature:**

+32...+149°F (0...+65 °C) with glycerine filling;

-40...+149°F (-40...+65 °C) with silicon oil filling or fluorinated fluid filling.

**Process fluid temperature:** +149°F (+65 °C).

**Protection degree:** IP 67 as per EN 60529/IEC 529.

**Other features:** as Standard Model.

#### OXYGEN INSTRUMENTS

To suit criteria of standard EN837-1/2, the pressure gauges for oxygen service must be solid- front type (with baffle wall and safety bursting back).

Pressure gauges suitable for this service are detailed on MGS21 sheet.

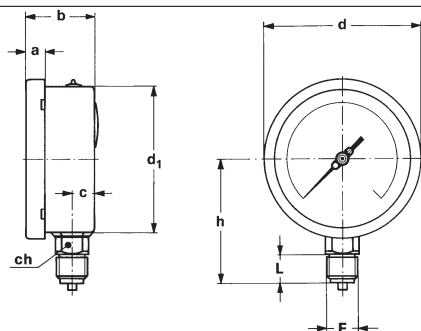


ISO 9001 : 2008  
Cert. nr. 0433/6

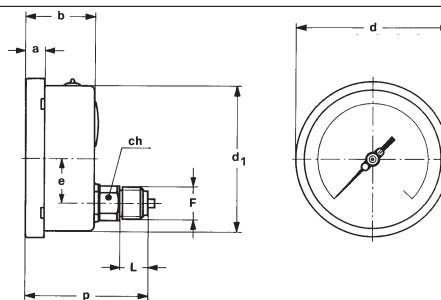
# bourdon tube pressure gauges

## HEAVY WORK, DS 4", 6" (100-150mm)

# MG519



**A - LOWER CONNECTION**



**D - BACK CONNECTION**

Mounting	DS	F	a	b	c	d	d <sub>1</sub>	e	h	p	L	ch	Weight (1)
Lower	E 4" (100)	41M - G 1/2 A	0.51"	1.90"	0.59"	4.35"	3.97"		3.38"		0.78"	0.87"	1.16 lbs
		43M - 1/2-14 NPT	(13)	(48,5)	(15)	(110,6)	(101)		(86)		(20)	(22)	(0,53 kg)
Lower	G 6" (150)	41M - G 1/2 A	0.59"	1.98"	0.61"	6.33"	5.88"		4.60"		0.78"	0.87"	2.24 lbs
		43M - 1/2-14 NPT	(15)	(50,5)	(15,5)	(161)	(149,6)		(117)		(20)	(22)	(1,02 kg)
Back	E 4" (100)	41M - G 1/2 A	0.51"	1.90"		4.35"	3.97"	1.22"		3.42"	0.78"	0.87"	1.14 lbs
		43M - 1/2-14 NPT	(13)	(48,5)		(110,6)	(101)	(31)		(87)	(20)	(22)	(0,52 kg)
Back	G 6" (150)	41M - G 1/2 A	0.59"	1.98"		6.33"	5.88"	1.22"		3.36"	0.78"	0.87"	2.09 lbs
		43M - 1/2-14 NPT	(15)	(50,5)		(161)	(149,6)	(31)		(85,5)	(20)	(22)	(0,95 kg)

dimensions : inches (mm)

(1) add 0.72 lbs (0,33 kg) for DS 4" (100) and 1.65 lbs (0,78 kg) for DS 6" (150), when filled

### RANGES

bar (1)	Ranges	0...1	0...1,6	0...2,5	0...4	0...6	0...10	0...16	0...25	0...40	0...60	0...100	0...160	0...250	0...400	0...600
	Overpressure		4	6	10	16	25	40	48	75	80	120	200	320	500	800

psi	Ranges	0...15	0...30	0...60	0...100	0...160	0...200	0...300	0...400	0...600	0...1000	0...1500	0...2000	0...3000	0...4000	0...6000	0...10000
	Overpressure		60	120	240	400	480	600	900	1000	1200	2000	3000	4000	6000	8000	10000

bar (1)	Ranges	-1...0	-1...0,6	-1...1,5	-1...3	-1...5	-1...9	-1...15	-1...24
	Overpressure		3	5	9	15	23	39	47

psi	Ranges (2)	-30...0	-30...15	-30...30	-30...150
	Overpressure		45	100	125

(1) Available measurement units kPa, MPa, kg/cm<sup>2</sup>

(2) Vacuum measurement unit: InHg

### OPTIONS

Model	standard	fillable	filled
<b>B</b> - "U"-clamp, for back connection pressure gauges	◆	◆	◆
<b>C</b> - Back flange, for lower connection pressure gauges	◆	◆	◆
<b>E</b> - Front flange, for back connection pressure gauges	◆	◆	◆
<b>2G1</b> - ATEX II 2G c version	See the ATEX pressure gauges data-sheet for technical details		
<b>2D1</b> - ATEX II 2GD c version			
<b>C40</b> - AISI 316L st. st. case, ring and blow out disk	◆	◆	◆
<b>P01</b> - Suitable for filling with silicone		◆	
<b>S10</b> - Silicone filling			◆
<b>ECV</b> - Vented housing version, Ambient temperature -50...+65 °C (1) (2)			
<b>E67</b> - Protection degree IP67 (3)	◆		
<b>T01</b> - Tropicalization	◆	◆	◆

(1) to be ordered with E67 option

(3) to be ordered with ECV option

(2) not adjustable pointer

### "HOW TO ORDER" SEQUENCE

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

1 19 1 A E 41M B, C, E  
2 D G 43M 2G1...T01  
3

Copyright © Nuova Fima srl. All rights reserved. Any part of this publication should not be reproduced without a written Nuova Fima's srl approval

NUOVA FIMA USA Inc.  
www.nuovafima.com - e-mail: infousa@nuovafima.com  
4123 Hollister, Suite G - TX 77080 Houston  
TEL. +1 713.690.9800 - FAX +1 713.690.9803

-2-

NUOVA FIMA srl  
www.nuovafima.com - e-mail: info@nuovafima.com  
P.O. BOX 58 - VIA C. BATTISTI 59 - 28045 INVORIO (NO) ITALY  
TEL. +39 0322 253200 - FAX +39 0322 253232



TEMPCO sa www.tempco.be tempco@tempco.eu tel: +32 4 2649458

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 SHEETS ARE AVAILABLE ON SITE: www.nuovafima.com

RC7 - 03/14