

bourdon tube pressure gauges HEAVY WORK DS 4", 6" (100-150mm)

MGS19



PED 97/23/CE
ATEX 94/9/CE

These instruments are designed for use in food, beverage, pharmaceutical, cryogenics, chemical and petrochemical processing industries, and in conventional and nuclear 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...15000 psi (from 0...1 to 0...1000 bar or equivalent units).

Accuracy class: 1 according to EN 837-1.

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

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

Thermal drift: ±0,4 % / 10 K 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)

Protection degree: IP 55 according to IEC 529.

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 for minimum and maximum pressure.

Dial: aluminium, white with black markings.

Pointer: adjustable, aluminium, black.

1.19.2 - Fillable Model

Protection degree: IP 67 secondo 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%, silicon oil or fluorinated fluid.

Ambient temperature:

+59...+149°F (+15...+65 °C) with glycerine filling;

-49...+149°F (-45...+65 °C) with silicon oil filling;

-76...+149°F (-60...+65 °C) with fluorinated fluid filling.

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

Protection degree: IP 67 as per 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.

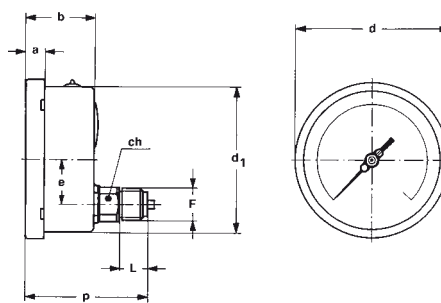
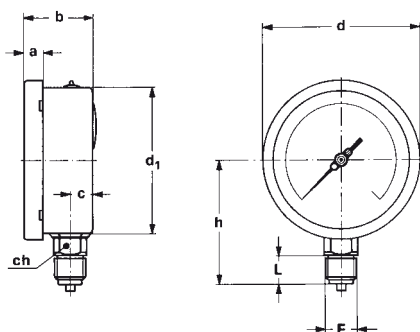


For use in potentially explosive atmosphere, instruments must be designed in conformity to ATEX 94/9/CE. This version is shown in separate data sheet available on request.

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A - LOWER CONNECTION

D - BACK CONNECTION

Mounting	DS	F	a	b	c	d	d ₁	e	h	p	L	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"	1.16 lbs
		43M - 1/2-14 NPT	(13)	(48,5)	(15)	(110,6)	(101)		(86)		(20)	(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"	2.24 lbs
		43M - 1/2-14 NPT	(15)	(50,5)	(15,5)	(161)	(149,6)		(117)		(20)	(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"	1.14 lbs
		43M - 1/2-14 NPT	(13)	(48,5)		(110,6)	(101)	(31)		(87)	(20)	(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"	2.09 lbs
		43M - 1/2-14 NPT	(15)	(50,5)		(161)	(149,6)	(31)		(85,5)	(20)	(0,95 kg)

dimensions : inches (mm)

(1) add 0.72 lbs (0,33 kg) for DS 4" (100) and 1.65 lbs (0,75 kg) for DS 6" (150), when filled

RANGES

bar	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	0...1000
	Overpressure		4	6	10	16	25	40	48	75	80	120	200	320	500	800	1200

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	0...15000
	Overpressure		60	120	240	400	480	600	900	1000	1200	2000	3000	4000	6000	8000	10000	15000

VACUUM AND COMPOUND

Ranges, bar	-1...0	-1...0,6	-1...1,5	-1...3	-1...5	-1...9	-1...15	-1...24
Overpressure, bar	3	5	9	15	23	39	47	75

Ranges, psi (1)	-30...0	-30...15	-30...30	-30...150
Overpressure, psi	45	100	125	450

(1) Vacuum measurement unit: InHg

OPTIONS

Model	standard	fillable	filled
B - "U"-clamp, for back connection pressure gauges	♦	♦	♦
C - Back flange, for lower connection pressure gauges	♦	♦	♦
E - Front flange, for back connection pressure gauges	♦	♦	♦
2G1 - ATEX II 2G c version	See the ATEX pressure gauges data-sheet for technical details		
2D1 - ATEX II 2GD c version			
C40 - AISI 316 st. st. case and ring	♦	♦	♦
P01 - Suitable for filling with silicone		♦	
S10 - Silicone filling			♦
F30 - Fluorinated fluid filling			♦
T01 - Tropicalization	♦	♦	♦

"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
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