

bourdon tube pressure gauges

HEAVY WORK

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



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

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

They are built to resist the most severe operating conditions created by the environment and the process medium, Furthermore they are suitable for use with fluids that have a low viscosity or do not crystallize. The use of high-quality materials in building the sensing element and filling the case with dampening liquid allows to employ them when highly dynamic pulsating pressures are involved. The unique construction technology enables these instruments to withstand high overpressure up to 4 times the full scale value without compromising accuracy and repeatability. The TIG welding between the case and process connection enhances the instrument's resistance and prevents any leakage of the damping liquid.

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:

-4...+149 °F (-20...+65 °C), IP55 housing (EN 60529/IEC 529);

-63...+149 °F (-53...+65 °C), vented IP65/67 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: -4...+149 °F (-20...+65 °C), IP 65/67 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;

-4...+149°F (-20...+65 °C) with silicon oil filling.

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

Protection degree: IP 65/67 as per EN 60529/IEC 529.

Other features: as Standard Model.

OXYGEN INSTRUMENTS

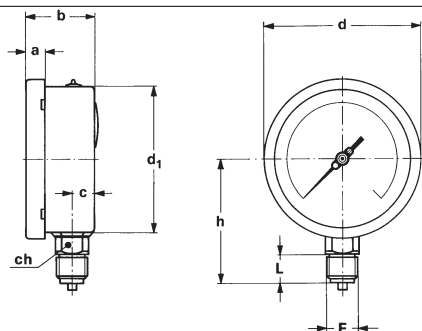
To suit criteria of standard EN837-1/2, the pressure gauges for oxygen service must be solid- front type (with baffle wall and safety bursting back).

The most suitable instrument for this service is the MGS21 model.

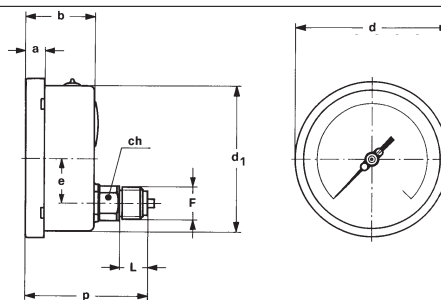
bourdon tube pressure gauges

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

MGS19



A - LOWER CONNECTION



D - BACK CONNECTION

Mounting	DS	F	a	b	c	d	d ₁	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"		3.21"	0.78"	0.87"	1.14 lbs
		43M - 1/2-14 NPT	(13)	(48,5)		(110,6)	(101)	(31)		(81,5)	(20)	(22)	(0,52 kg)
Back	G 6" (150)	41M - G 1/2 A	0.59"	1.98"		6.33"	5.88"	1.22"		3.19"	0.78"	0.87"	2.09 lbs
		43M - 1/2-14 NPT	(15)	(50,5)		(161)	(149,6)	(31)		(81)	(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	-0...1	0...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/cm²

(2) 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	◆	◆	◆
2G2 - ATEX II 2G h - T.a. -20...+60 °C (1)	◆	◆ (2)	
2D2 - ATEX II 2GD h - T.a. -20...+60 °C (1)		◆ (2)	◆ (3)
2D0 - ATEX II 2GD h - T.a. 0...+60 °C (1)			◆
2D5 - ATEX II 2GD h - T.a. -53...+60 °C (1)	◆ (2) (4)		
C40 - AISI 316L st. st. case, ring and blow out disk	◆	◆	◆
S10 - Silicone filling			◆
ECV - Vented housing version, Ambient temperature -53...+65 °C (2) (5)	◆		
E67 - Protection degree IP65/67 (4)	◆		

(1) See catalogue sheet concerning ATEX execution

(2) to be ordered with E67 option

(3) to be ordered with S10 option

(4) to be ordered with ECV option

(5) in case of corrosive atmosphere the filled type should be chosen

"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** **2G2...E67**
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