bourdon tube pressure gauges all stainless steel construction DS 4'', 6'' (100-150mm)





ME 48 Gost R Pattern Approval



Chinese Pattern Approval



MGS18



These instruments are designed for food, processing, pharmaceutical, petrochemical industries and for conventional and nuclear power plants. They are built to resist to the most severe conditions created by the process medium and by the environment and for those fluids, which have high viscosity and do not crystallize. The quality of the materials used to build the sensible element allows their use with high frequency pulsating pressures.

The TIG welding between the case and the process socket, strengthens the instrument and assures better containment of dampening fluid. The advantages of filling the case of the instrument with a dampening fluid are: reduced pointer fluctuation, reduced wear of rotating parts of the movement when pulsant vibrations and pulsations occur. Moreover condensation and corrosive atmospheres which could damage the internal parts are prevented.

Standard Model

Design: EN837-1.

Safety designation: S1 as per EN 837-2.

Ranges: from 0...15 to 0...30000 psi (from 0...0,6 to 0...1600 bar or

equivalent units).

Accuracy class: 1 as per EN 837-1.

Ambient temperature: -13...+149 °*F* (-25...+65 °*C*). **Process fluid temperature:** -40...+302 °*F* (-40...+150 °*C*).

Thermal drift: $\pm 0.4 \% / 10 \text{ K}$ of range (starting from $68^{\circ}F - 20^{\circ}\text{C}$).

Working pressure:

100% of FSV for static pressure; 90% of FSV for pulsating pressure.

Over pressure limit: 30% of FSV (max 12 hours).

Protection degree: IP 55 as per IEC 529. **Socket material:** AISI 316L st.st.

Bourdon tube: AISI 316L st.st. seamless tube.

Case and ring: stainless steel. 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.

Fillable Model

Protection degree: IP 67 as per IEC 529. **Pointer:** not adjustable, aluminium, black. **Other features:** as Standard Model.

Filled Model

Ranges: from 0...15 to 0...30000 psi (from 0...1 to 0...1600 bar or equivalent units).

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: *max* +149°*F* (+65 °C).

Protection degree: IP 67 as per IEC 529. **Pointer:** not adjustable, aluminium, black. **Other features:** as Standard Model.

INSTRUMENTS FOR OXYGEN

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

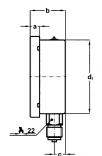
Pressure gauges suitable for this service are detailed on MGS20 DS 4'', 6'' (100-150 mm) sheet.

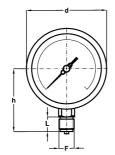


For use in potentially explosive atmospheres, instruments must be designed in conformity to ATEX 94/9/CE. This version is shown on separete data sheet available on request.

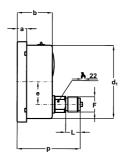








CONNECTION MOUNTING





BACK CONNECTION MOUNTING

Mounting	DS	F	a	b	с	d	d ₁	e	h	p	L	Weight (1)
Lower	4" (100)	1/2-14 NPT - (G 1/2 A)	0.51"	1.90"	0.59"	4.35"	3.97"		3.38"		0.78"	1.16 lbs
			(13)	(48,5)	(15)	(110,6)	(101)		(86)		(20)	(0,53 kg)
	6" (150)	1/2-14 NPT - (G 1/2 A)	0.59"	1.96"	0.61"	6.33"	5.88"		4.60		0.78"	2.24 lbs
			(15)	(50,5)	(15,5)	(161)	(149,6)		(117)		(20)	(1,02 kg)
Back	4" (100)	1/2-14 NPT - (G 1/2 A)	0.51"	1.90"		4.35"	3.97"	1.22"		3.42"	0.78"	1.54 lbs
			(13)	(48,5)		(110,6)	(101)	(31)		(87)	(20)	(1,14 kg)
	6" (150)	1/2-14 NPT - (G 1/2 A)	0.59"	1.96"		6.33"	5.88"	1.88"		3.36"	0.78"	2.09 lbs
			(15)	(50,5)		(161)	(149,6)	(48)		(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

OPTIONS

DESCRIPTION	standard	fillable	filled					
"U"-clamp, for back connection pressure gauges	+	+	+					
Back flange, for lower connection pressure gauges	+	+	+					
Front flange, for back connection pressure gauges	+	+	+					
ATEX II 2G c version	Se	See the ATEX pressure gauges						
ATEX II 2GD c version	da	See the ATEX pressure gauges datasheet for technical details						
Accuracy class 0.6 (1)	+	+						
Maximum pointer IP 44 on plexiglas window (2)	*							
Maximum pointer IP 65 on plexiglas window (2)	*	+	+					
Suitable for filling with silicone		+						
Silicone filling			+					
Fluorinated fluid filling			+					
Tropicalization	*	+	+					
Safety glass	+	+	+					

(1) For pressure ranges up to 6000 psi - 400 bar. Not available for receivers.

(2) Accuracy refers to the area free from the maximum pointer action.

"HOW TO ORDER" SEQUENCE

Section / Model/Case / Mounting / Diameter / Special version / Range / Process connection / Variables