bourdon tube "solid-front" pressure gauges
NACE MR0103/MR0175 (ISO 15156) version
DS 4", 6" (100-150mm)

MGS40

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

These instruments are built in conformity with the construction and safety specifications of EN 837-1/S3 e ASME B40.1. In case of leaks or break of the elastic element, the operator is protected by a solid separating wall placed on the front of the instrument and by the blow out back. They are usually used in the petrochemical industry; they are built to resist to the most severe conditions created by H2S, by the environment and for those fluids, which have high viscosity and do not crystallize. The TIG welding between the case and the process socket, strengthens the instrument and assures a better tight in case 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.

1.40.1 - Standard Model

Design: EN 837-1, ISO 15156.
Safety designation: S3 as per EN 837-2.
Ranges: *from 0...15 to 0...10000 psi* ; (from 0...1 to 0...600 bar or other 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: ±0,4 %/10 K of range (starting from *68°F* - 20°C).
Working pressure:
100% of FSV for static pressure;
90% of FSV for pulsating pressure.
Overpressure: 30% of FSV (max 12 h).
Protection degree: IP 55 as per IEC 529.
Socket material: AISI 316L or MONEL 400.
Bourdon tube: MONEL 400 seamless tube
Leak test: Helium Test leak search, (max $1x10^{-6}$ mbar x l x s^{-1}).
Case: stainless steel
Ring: stainless steel, bayonet lock.
Blow out disk: 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

1.40.2 - Fillable Model - Lower connection only

Protection degree: IP 67 as per IEC 529.
Other features: as Standard Model.

1.40.3 - Filled Model - Lower connection only

Filling liquid: glycerina 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

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

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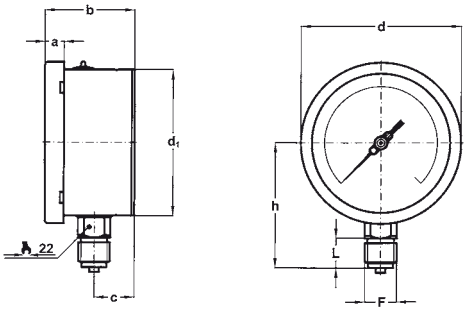
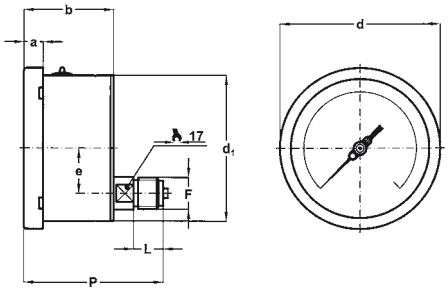


A - LOWER CONNECTION



D - BACK CONNECTION,
Standard model only

Mounting	DS	F	a	b	c	d	d_1	e	h	p	L	Weight (1)
Lower	**E** 4" (100)	**41M** - G 1/2 A **43M** - 1/2-14 NPT	*0.51"* (13)	*2.46"* (62,5)	*1.16"* (29,5)	*4.35"* (110,6)	*3.97"* (101)		*3.38"* (86)		*0.78"* (20)	*1.43 lbs (1)* (0,65 kg)
	G 6" (150)	**41M** - G 1/2 A **43M** - 1/2-14 NPT	*0.59"* (15)	*2.51"* (64)	*1.18"* (30)	*6.33"* (161)	*5.92"* (150,5)		*4.60"* (117)		*0.78"* (20)	*2.64 lbs (1)* (1,2 kg)
Back	**E** 4" (100)	**41M** - G 1/2 A **43M** - 1/2-14 NPT	*0.51"* (13)	*2.46"* (62,5)		*4.35"* (110,6)	*3.97"* (101)	*1.22"* (31)		*3.75"* (95,5)	*0.78"* (20)	*1.54 lbs* (0,70 kg)
	G 6" (150)	**41M** - G 1/2 A **43M** - 1/2-14 NPT	*0.59"* (13)	*2.51"* (64)		*6.33"* (161)	*5.92"* (150,5)	*1.22"* (31)		*3.77"* (96)	*0.78"* (20)	*2.53 lbs* (1,15 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

Model	standard	fillable	filled
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	✦	✦	✦
E07 - Socket material MONEL 400	✦	✦	✦
E30 - NACE MR0103/MR0175 (ISO 15156) certificate	✦	✦	✦
F30 - Fluorinated fluid filling			✦
P01 - Suitable for filling with silicone/Fluorinated fluid		✦	
P03 - Compensating device, for DS 4" (100mm) only	✦	✦	✦
S10 - Silicone filling			✦
T01 - Tropicalization	✦	✦	✦

"HOW TO ORDER" SEQUENCE

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

1	40	1 2 3	A D	E G	-- E07		41M 43M	C...E 2G1...T01

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