

bourdon tube "solid-front" pressure gauges NACE MR0175/ISO 15156-3 version turret case - DS 4.5" (125mm)



PED 2014/68/UE

In case of leaks or break of the elastic element the operator is protected by a stainless steel safety cell solid front 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 and by the environment and for those fluids. The TIG welding between the safety cell and the process socket strengthens the instrument. 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.

1.61.2 - Fillable Model

Design: ASME B40.1

Ranges: from -30...0 INHG to 0...6000 *psi* (from -1...0 to 0...400 bar or equivalent units).

Accuracy: Grade 1A as per ASME B40.1 ($\pm 1,0\%$ of span).

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

Process fluid temperature: -40...+212 °F (-40...+100 °C).

Working pressure:

100% of FSV for static pressure;

90% of FSV for pulsating pressure.

Over pressure limit:

30% of FSV, max 6500 *psi* - 450 bar (max 12 hours).

Special overpressure (upon request):

1000 *psi* (60 bar) for pressure > 15 *psi* (1 bar) ... \leq 150 *psi* (10 bar);

3500 *psi* (250 bar) for pressure > 150 *psi* (10 bar) ... \leq 1500 *psi* (100 bar);

6500 *psi* (450 bar) for pressure > 1500 *psi* (10 bar) ... \leq 6000 *psi* (400 bar).

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

Bourdon tube: AISI 316L st.st.

Diaphragm seal filling fluid: silicone oil.

Wetted parts: Hastelloy C276.

Leak test: Helium Test leak Search (max 1×10^{-6} mbar x l x s⁻¹)

Case and blow out disk: strengthened polyamide with fiber glass , UV rays stabilized.

Ring: strengthened polypropylene, fiber glass.

Safety cell: stainless steel.

Window: tempered glass.

Movement: stainless steel with internal limit stops for minimum and maximum pressure.

Dial: aluminium, white with black markings.

Pointer: adjustable, aluminium, black.

1.61.3 - Filled Model

Pressure gauges damping liquid:

glycerine 98%, silicon oil or fluorinated fluid.

Ambient temperature:

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

-40...+149 °F (-40...+65 °C) with silicon oil filling;

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

Process fluid temperature: max +212°F (+100 °C).

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

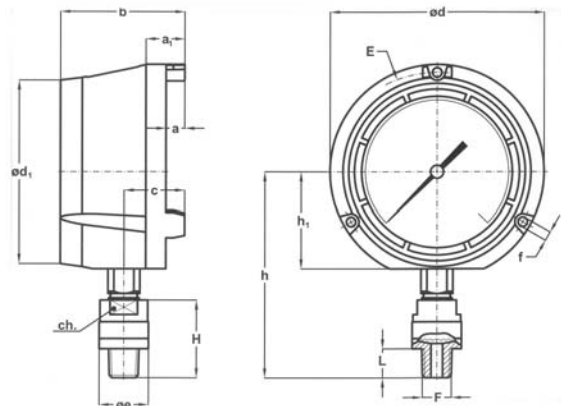
Compensating device: gum.

Other features: as Fillable Model.

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NACE MR0175/ISO 15156-3 version,
turret case DS 4.5" (125mm)

MGS61

RC5 - 05/14



A - LOWER CONNECTION

Ranges	F	a	a ₁	b	c	ø d	ø d ₁	ø e	E	f	h	h ₁	H	L	ch	Weight (1)
≤ 160 psi (10 bar)	43M 1/2-14 NPT	0.51" (13)	1.06" (27)	3.38" (86)	1.65" (42)	5.82" (148)	4.96" (126)	2.24" (57)	5.39" (137)	0.25" (6,5)	5.57" (141,5)	2.61" (66,5)	2.12" (54)	0.78" (20)	1.06" (27)	2.44 lbs (1,11 kg)
> 160 psi (10 bar)								1.33" (34)								

dimensions : inches (mm)

(1) add 1.10 lbs (0,5 kg), when filled

OPTIONS

Model	fillable	filled
E75 - NACE MR0175/ISO 15156-3 certificate	◆	◆
P02 - Oxygen service	◆ (1)	◆ (2)
P01 - Suitable for filling with silicone / fluorinated fluid	◆	
S10 - Silicone filling		◆
F30 - Fluorinated fluid filling		◆
SPS - Special overpressure	◆	◆
T01 - Tropicalization	◆	◆
T32 - Safety glass window	◆	◆

(1) to be ordered with instruments suitable for fluorinated fluid filling

(2) to be ordered with fluorinated fluid filled instruments

“HOW TO ORDER” SEQUENCE

Section / Model / Case / Mounting / Diameter /Range / Process connection / Options
1 61 2 A F 43M E75...T32
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