

bourdon tube "solid-front" pressure gauges NACE MR0175/ISO 15156-3 version DS 4", 6" (100-150mm)



PED 2014/68/UE ATEX 2014/34/UE

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 and by the environment. The TIG welding between the case and the process socket, strengthens the instrument and assures a better tightness in case of dampening fluid filling. 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, condensate and corrosive atmospheres which could damage the internal parts are prevented.

1.41.1 - Standard Model

Design: EN 837-1.

Safety designation: S1 as per EN 837-2.

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

Accuracy class: 1 as per EN 837-1.

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) ... ≤ 150 psi (10 bar);

3500 psi (250 bar) for pressure > 150 psi (10 bar) ... ≤ 1500 psi (100 bar);

6500 psi (450 bar) for pressure > 1500 psi (100 bar) ... ≤ 6000 psi (400 bar).

Protection degree: IP 55 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 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.

1.41.2 - Fillable Model

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

Other features: as Standard Model.

1.41.3 - Filled Model

Pressure gauges damping liquid:

glycerine 98%, silicon oil or fluorinated fluid.

Ambient temperature:

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

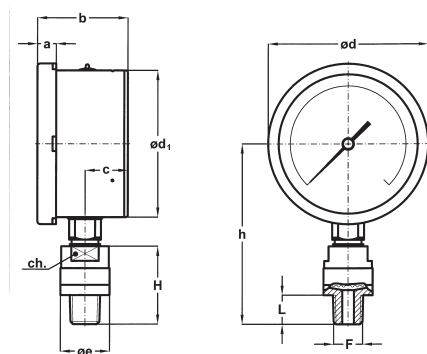
-40...+149 °F (-40...+65 °C) with silicon oil filling;

-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.

Other features: as Standard Model.



A - LOWER CONNECTION

DS	Ranges	F	a	b	c	od	od ₁	oe	h	H	L	ch	Weight (1)
E 4" (100)	≤ 160 psi (10 bar)	43M 1/2-14 NPT	0.51" (13)	2.46" (62,5)	1.16" (29,5)	4.35" (110,6)	3.97" (101)	2.24" (57)	4.86" (123,5)	2.12" (54)	0.78" (20)	1.06" (27)	2.44 lbs (1,11 kg)
	> 160 psi (10 bar)							1.33" (34)					
G 6" (150)	≤ 160 psi (10 bar)	43M 1/2-14 NPT	0.59" (15)	2.52" (64)	1.18" (30)	6.33" (161)	5.88" (149,6)	2.24" (57)	6.12" (155,5)	2.12" (54)	0.78" (20)	1.06" (27)	3.65 lbs (1,66 kg)
	> 160 psi (10 bar)							1.33" (34)					

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
2G1 - ATEX II 2G c version	<i>See the ATEX pressure gauges data-sheet for technical details</i>		
2D1 - ATEX II 2GD c version			
C40 - AISI 316L st. st. case and ring	◆	◆	◆
E75 - NACE MR0175/ISO 15156-3 certificate	◆	◆	◆
P02 - Oxygen service	◆	◆ (1)	◆ (2)
P01 - Suitable for filling with silicone and fluorinated fluid		◆	
S10 - Silicone filling			◆
F30 - Fluorinated fluid filling			◆
SPS - Special overpressure	◆	◆	◆
T01 - Tropicalization	◆	◆	◆

(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 41 1 A E 43M 2G1...2D1
2 G C40...T01
3

