

## bourdon tube pressure gauges NACE MR0103/MR0175 - ISO 15156-3 version DS 4", 6" (100-150mm)



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

These instruments are designed for use in the petrochemical industry. They are built to withstand the most severe conditions caused by H<sub>2</sub>S, harsh environments, and highly viscous fluids that do not crystallize. The high quality of the materials used for the sensing element makes them suitable for operating under high-frequency pulsating pressure conditions. The TIG welding between the case and the process socket reinforces the instrument and ensures better sealing, especially when the instrument is filled with damping liquid. Filling the case with damping liquid helps to reduce pointer fluctuation and minimizes wear of the movement's rotating components in the presence of vibrations and pulsations. Additionally, it prevents condensation and the formation of corrosive atmospheres, thereby protecting the internal parts of the instrument.

### 1.36.1 - Standard Model

**Design:** EN 837-1, ISO 15156-3.

**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 as per 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 pressure;

90% of FSV for pulsating pressure.

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

**Socket material:** AISI 316L st.st. or Monel 400.

**Bourdon tube:** Monel 400 seamless tube.

**Leak test:** Helium Test for leak Search (max 1x10<sup>-6</sup> mbar x l x s<sup>-1</sup>)

**Case:** stainless steel.

**Ring:** stainless steel, bayonet lock.

**Window:** tempered glass (with external zero adjustment on request).

**Movement:** stainless steel with internal limit stops.

**Dial:** aluminium, white with black markings.

**Pointer:** adjustable, aluminium, black.

### 1.36.2 - Fillable Model

**Ambient temperature:** -4...+149 °F (-20...+65 °C), IP 65/67 housing (EN 60529/IEC 529).

**Other features:** as Standard Model.

### 1.36.3 - Filled Model

**Damping liquid:** glycerine 98% or silicon oil.

**Ambient temperature:**

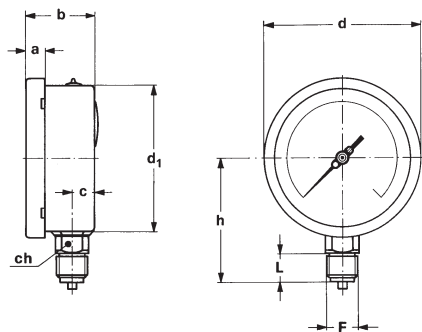
+32...+149 °F (0...+65 °C) with glycerine filling;

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

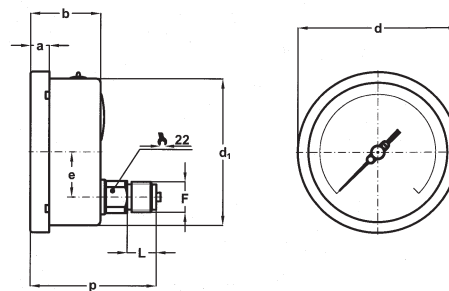
**Process fluid temperature:** max +149°F (+65 °C).

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

**Other features:** as Standard Model.



A - LOWER CONNECTION



D - BACK CONNECTION

Mounting	DS	F	a	b	c	d	d <sub>1</sub>	e	h	p	L	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"	1.16 lbs
		43M - 1/2-14 NPT	(13)	(48,5)	(15)	(110,6)	(101)		(86)		(20)	(0,53 kg)
	F 6" (150)	41M - G 1/2 A	0.59"	1.96"	0.61"	6.33"	5.88"		4.60		0.78"	2.09 lbs
Back	E 4" (100)	41M - G 1/2 A	0.51"	1.90"		4.35"	3.97"	1.22"		3.21"	0.78"	1.17 lbs
		43M - 1/2-14 NPT	(13)	(48,5)		(110,6)	(101)	(31)		(81,5)	(20)	(0,53 kg)
	G 6" (150)	41M - G 1/2 A	0.59"	1.96"		6.33"	5.88"	1.22"		3.19"	0.78"	1.87 lbs
		43M - 1/2-14 NPT	(15)	(50,5)		(161)	(149,6)	(31)		(81)	(20)	(0,85 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

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)	◆ (4)
2D0 - ATEX II 2GD h - T.a. 0...+60 °C (1)			◆
2D5 - ATEX II 2GD h - T.a. -53...+60 °C (1)	◆ (2) (3)		
C40 - AISI 316L st. st. case and ring	◆	◆	◆
E07 - Socket material MONEL 400	◆	◆	◆
E30 - NACE MR0103/MR0175 -ISO15156-3 certificate	◆	◆	◆
S10 - Silicone filling			◆
ECV -Vented housing version - T.a. -53...+65 °C (2) (5)	◆		
E67- Protection degree IP65 (3)	◆		

(1) See catalogue sheet concerning ATEX execution

(2) to be ordered with E67 option

(3) to be ordered with ECV option

(4) to be ordered with S10 option

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

"HOW TO ORDER" SEQUENCE

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

1 36 1 A E --- 41M B...E  
2 D G E07 43M 2G2...E67  
3

