

## pressure gauge with built-in pressure transmitter DS 4" (100mm)



**CE** Complying with standards:  
EMC 2014/30/EU - PED 2014/68/EU - RoHS 2011/65/EU



**Ranges:** from 0...15 to 0...10000 *psi* relative,  
(from 0...1 to 0...600 bar or equivalent units) <sup>(1)</sup>

**Accuracy (% FSV):**

local readout, ≤ 0,5;

transmitter, ≤ 0,25 typical; ≤ 0,5 max.

**Working pressure:**

100% of FSV for static pressure;

90% of FSV for pulsating pressure.

**Over pressure limit:** 30% of FSV.

**Process fluid temperature:** -13...+212 °F (-25...+100 °C);

14...+149 °F (-10...+65°C) when filled.

**Output signals:** for pressure ranges ≤ 8700 *psi* (600 bar) :

4...20 mA, 0...5 Vdc, 0...10 Vdc;

(1) Ranges > 600 bar available upon request.

**Calibration:** limit-point as per DIN 16086.

**Zero calibration:** ± 10 % span typical.

**Span calibration:** ± 10 % span typical.

**Compensated temperature range:** 14...+176 °F; (-10...+80 °C).

**Thermal drift:** ≤ 0.011 % span / °F.

**Annual drift:** ≤ 0,2 % of span.

**Supply and max load:** see on page 2.

**Response time (10...90%):** < 3 ms.

### 8.M28.1 - Standard Model

**Safety designation:** S1 as per EN 837-2.

**Electric connection:** junction box as per VDE with exit for cables  
ø 0.27"...0.51" (ø 7...13 mm).

**Protection degree:** IP 55 as per EN 60529/IEC 529.

**Socket material:** AISI 316L st.st.

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

**Case:** stainless steel.

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

**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.

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

**Special versions:**

**high overpressure:** 200% of FSV for pressure ranges ≤ 3000 *psi* (250 bar), accuracy of local readout ≤ 1,0% of FSV.

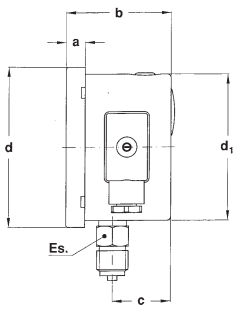
### 8.M28.3 - Filled Model

**Filling liquid:** dielectric oil.

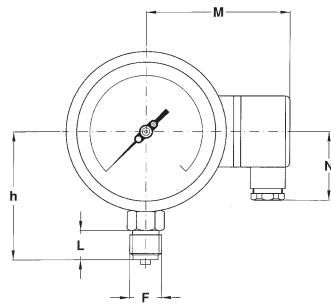
**Protection degree:** IP 67 as per  
EN 60529/IEC 529.

**Ambient temperature:** 14...+149 °F (-10...+65 °C).

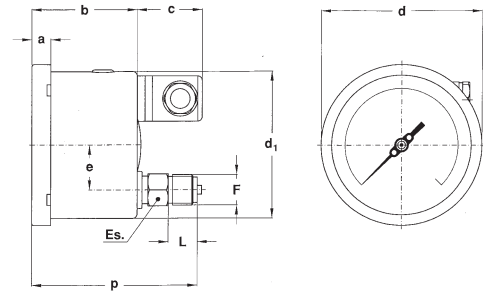
**Other features:** as Standard Model.



A - LOWER CONNECTION



D - BACK CONNECTION

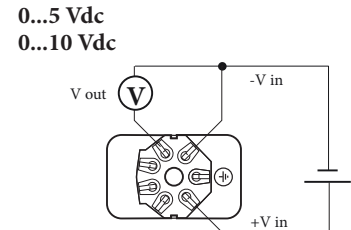
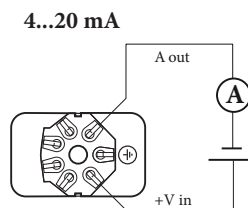


Mounting	F	a	b	c	d	d <sub>1</sub>	e	h	p	ES	L	N	M	Weight (1)
Lower	41M - G 1/2 A	0.51"	2.85"	1.57"	4.35"	3.97"		3.48"	4.47"	0.86"	0.78"	1.35"	3.55"	1.67 lbs
	43M - 1/2-14 NPT	(13)	(72,3)	(40,1)	(110,6)	(101)		(88,5)	(113,7)	(22)	(20)	(34,5)	(90,4)	(0,76 kg)
Back	41M - G 1/2 A	0.51"	2.85"	1.33"	4.35"	3.97"	1.22"	3.28"	4.20"	0.86"	0.51"			1.69 lbs
	43M - 1/2-14 NPT	(13)	(72,3)	(34)	(110,6)	(101)	(31)	(83,5)	(106,7)	(22)	(13)			(0,77 kg)

dimensions : inches (mm)

(1) add 0.85 lbs (0,339 kg), when filled

Output signal	4...20 mA	0...5 Vdc	0...10 Vdc
N. wires	2	3	3
Load (Ohm)	$R_L \leq (V_{in}-10)/0,02$	$R_L \geq 5 \text{ K}\Omega$	$R_L \geq 10 \text{ K}\Omega$
Supply: +Vin	10...30	8...30	14...30
Ground	(pls. refer to Installation Manual)		



OPTIONS

<b>CRP</b> - CR gasket, for pressure ranges $\leq 1500 \text{ psi}$ (100 bar); process fluid temperature: $-40...+176 \text{ }^\circ\text{F}$ ( $-40...+85^\circ\text{C}$ )
<b>EPD</b> - EPDM gasket, for pressure ranges $\leq 1500 \text{ psi}$ (100 bar); process fluid temperature: $-40...+212 \text{ }^\circ\text{F}$ ( $-40...+100^\circ\text{C}$ )
<b>NBR</b> - NBR gasket; process fluid temperature: $-13...+176 \text{ }^\circ\text{F}$ ( $-25...+85^\circ\text{C}$ )
<b>FPM</b> - VITON gasket; for pressure ranges $\leq 8500 \text{ psi}$ (600 bar); process fluid temperature: $-4...+212 \text{ }^\circ\text{F}$ ( $-20...+100^\circ\text{C}$ )
<b>C01</b> - Calibration certificate
<b>L22</b> - Maximum pointer IP 65 on plexiglas window (2)

(1) Zero calibration not available.

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

“HOW TO ORDER” SEQUENCE

Section / Model / Case / Mounting / Diameter / Range / Process connection / Output signal / Gasket / Options  
**8** **M28** **1** **A** **E** **41M** **1** **CRP** **C01, L22**  
**3** **D** **43M** **4** **EPD**  
**5** **NBR**