

## piezoresistive pressure transmitter flush diaphragm, double sealing, 0,5% accuracy



**CE** Compliance with requirements of directives:  
EMC 2014/30/CE - PED 2014/68/UE - RoHS 2011/65/UE



### 8.SMA/DG

**Ranges:** 0...0,1 / 0...600 bar, relative; -0,4...0/-1...+24 bar, relative;  
0...0,4/0...16 bar, absolute

**Output signals:** 4...20 mA.

**Non-linearity (BFSL):** ≤ 0,25% of span as per IEC 61298-2.

**Non-repeatability:** ≤ 0,1% of span as per IEC 61298-2.

**Accuracy :** ≤ ± 0,5 of span <sup>(1)</sup>.

**Annual drift:** ≤ 0,2 % of span.

**Zero calibration and span calibration:** ± 5 % span typical.

**Process fluid temperature:** -22...+212 °F (-30...+100 °C).

**Ambient temperature:** -13...+185 °F (-20...+85 °C).

**Storage temperature :** -40...+185 °F (-40...+100 °C).

**Response time:** < 10ms (adjustment); < 150ms (power on).

**Emission and immunity standard:** as per IEC61326, (group 1 - B class; industrial application).

**Vibration resistance:** 20g (10...2000 Hz, as per IEC m60068-2-6).

**Shock resistance:** 40g (6ms, as per IEC m60068-2-27).

**Sensor:** piezoresistive.

**Case:** stainless steel, vented for pressure ranges ≤ 230 psi (≤ 16 bar).

**Protection degree:** IP 65 as per EN 60529 <sup>(2)</sup>.

**Process connection and diaphragm:** AISI 316L st.st.

**Sealing:** double, for a safer tight (see the available sealings at page 2)

**Filling liquid:** silicon oil.

**Weight:** G 1/2: 0,2 kg; G 1: 0,33 kg.

| Ranges<br>bar, relative (1) | Thermal drift<br>≤ % span / °C (average) |      | Overpressure<br>bar, relative |
|-----------------------------|--|------|-------------------------------|
|                             |  |      |                               |
| 0...0,1                     | 0,04                                     |      | 0,3                           |
| 0...0,16                    | 0,04                                     |      | 0,5                           |
| 0...0,25                    | 0,04                                     |      | 0,8                           |
| 0...0,4                     | 0,03                                     |      | 1,2                           |
| 0...0,6                     | 0,03                                     |      | 1,8                           |
| 0...1                       | 0,03                                     |      | 2                             |
| 0...1,6                     | 0,03                                     |      | 3,2                           |
| 0...2,5                     |  | 0,03 | 5                             |
| 0...4                       |  | 0,03 | 8                             |
| 0...6                       |  | 0,03 | 12                            |
| 0...10                      |  | 0,02 | 20                            |
| 0...16                      |  | 0,02 | 32                            |
| 0...25                      |  | 0,02 | 50                            |
| 0...40                      |  | 0,02 | 80                            |
| 0...60                      |  | 0,02 | 120                           |
| 0...100                     |  | 0,02 | 200                           |
| 0...160                     |  | 0,02 | 320                           |
| 0...250                     |  | 0,02 | 500                           |
| 0...400                     |  | 0,02 | 600                           |
| 0...600                     |  | 0,02 | 600                           |

(1) Other ranges available on demand.

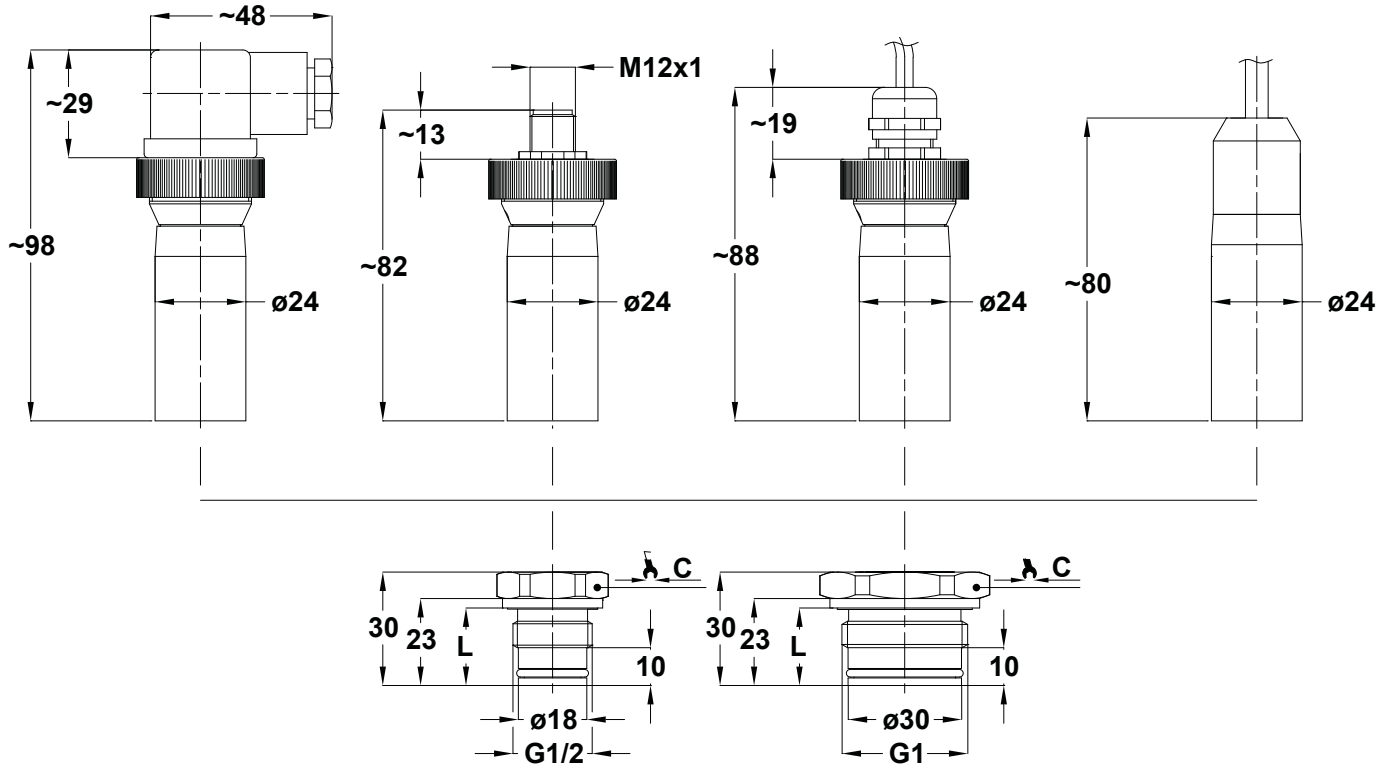
(1) Max error of measurement as per IEC61298-2, non-linearity and hysteresis included (extreme values calibration according to standard IEC 61298-1 when in vertical position)

(2) With properly assembled power connection.

**piezoresistive pressure transmitter**  
**flush diaphragm, double sealing, 0,5% accuracy**

**ST MA/DG**

Rg-09/16



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|                       |                                      |
|-----------------------|--------------------------------------|
| <b>Output signals</b> | <b>4...20 mA</b><br><b>4...20 mA</b> |
| N. of wires           | 2                                    |
| Load max (Ohm)        | $R_L \leq (U_b - 8)/0,02$            |
| Supply: +Ub (Vdc)     | 10...30                              |
| Absorbed current (mA) | < 25                                 |

| F                     | L               | C             |
|-----------------------|-----------------|---------------|
| <b>41M</b><br>G 1/2 A | 0.62"<br>(20,5) | 1.06"<br>(27) |
| <b>61M</b><br>G 1 A   | 0.64"<br>(20,5) | 1.25"<br>(41) |

dimensions : inches (mm)

All output signals are provided of protection against short circuit and polarity inversion. Insulation tension 500 Vdc.

**WIRING**

|                        | DIN 175301-803 A | M12 x 1 | Cable exit |
|------------------------|------------------|---------|------------|
| N. of wires            | 2                | 2       | 2          |
| Supply connector: Ub   | 1                | 1       | brown      |
| Negative connector: 0V | 2                | 3       | white      |
| Signal: S +            | -                | -       | -          |
| Ground                 | GND              | 2       | grey       |

**OPTIONS**

|  |     |  |
|--|-----|--|
| <b>FPM</b> -Sealing FPM (-20...+150 °C)  | (1) | <b>C01</b> - Calibration report  |
| <b>NBR</b> -Sealing NBR (-30...+100 °C)  |     | <b>PVC</b> - Electrical connection with cable gland with PVC cable     |
| <b>EPD</b> -Sealing EPDM (-30...+150 °C) | (2) | <b>U68</b> - Electrical connection with cable gland with PUR cable (3) |

(1) max 300 bar per T.p. > 100°C

(2) max 200 bar

(3) Zero adjustment not available

**“HOW TO ORDER” SEQUENCE**

Section / Model / Special versions / Range / Process connection / Output signal / Gasket / Options

**8 SMA --- 41M 1 FPM C01...U68**  
**TA3 51M 4**  
**5**

