

ceramic pressure transmitter

flush diaphragm

0,5% accuracy

Low-cost version with one single sealing



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



8.SMA/LC

Ranges: 0...0,1 / 0...600 bar, relative.

Output signals: 4...20 mA, 0...5 Vcc, 0...10 Vcc.

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 ⁽¹⁾.

Annual drift: ≤ 0,2 % of span.

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

Process fluid temperature: -22...+212 °F (-30...+100 °C); -22...+302°F (-30...+150 °C) for version with heat dissipator cod. **8.SMA...TA3**).

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

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

Sensor: ceramic.

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

Protection degree: IP 65 as per EN 60529 ⁽²⁾.

Process connection: AISI 316L st.st. as per DIN 3852.

Diaphragm: AISI 316L st.st.

Sealing: see the available sealings at page 2.

Filling liquid: silicon oil.

Weight: G 1/2: 0,2 kg; G 1: 0,3 kg.

Ranges bar, relative (1)	Thermal drift ≤ % span / °C (average)		Overpressure bar, relative
	G 3/4 B	G 1/2 B	
0...1	0,10		2,5
0...1,6	0,08		5
0...2,5	0,06		5
0...4	0,05		8
0...6	0,04		12
0...10		0,04	20
0...16		0,03	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 unit of measurement and intermediate ranges are available, as requested by customer.

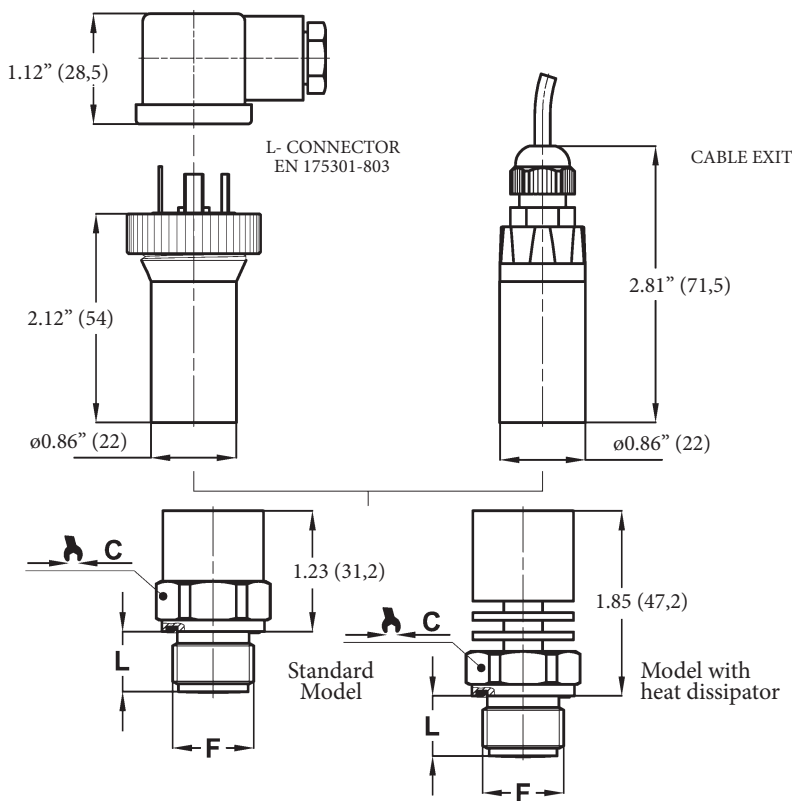
(1) Max error of measurement as per IEC61298-2, non-linearity and hysteresis included (extreme values calibration according to standard IEC 61298-1 when in vertical position)

(2) With properly assembled power connection.

ceramic pressure transmitter
flush diaphragm, 0,5% accuracy, low-cost version with one single sealing

ST MA/LC

RG-06/16



F	L	C
41M G 1/2 A	0.62" (16)	1.06" (27)
51M G 3/4 A	0.64" (16,5)	1.25" (32)

dimensions : inches (mm)

Output signals	4...20 mA 1	0...5 Vdc 4	0...10 Vdc 5
N. of wires	2	3	3
Load max (Ohm)	$R_L \leq (U_b - 8)/0,02$	$R_L \geq 5 \text{ K}\Omega$	$R_L \geq 10 \text{ K}\Omega$
Supply: +Ub (Vdc)	8...30	8...30	14...30
Absorbed current (mA)	< 25	< 10	< 10

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	3	2	3	2	3
Supply connector: Ub	1	1	1	1	brown	brown
Negative connector: 0V	2	2	3	3	white	white
Signal: S +	-	3	-	4	-	green
Ground	GND	GND	2	2	grey	grey

OPTIONS

FPM - Sealing FPM (-20...+150 °C)	C01 - Calibration report
NBR - Sealing NBR (-30...+100 °C)	PVC - Electrical connection with cable gland with PVC cable
EPD - Sealing EPDM (-30...+150 °C)	U68 - 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



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 (BFSI): ≤ 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 ⁽¹⁾.

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 ⁽²⁾.

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 bar, relative (1)	Thermal drift ≤ % span / °C (average)		Overpressure 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

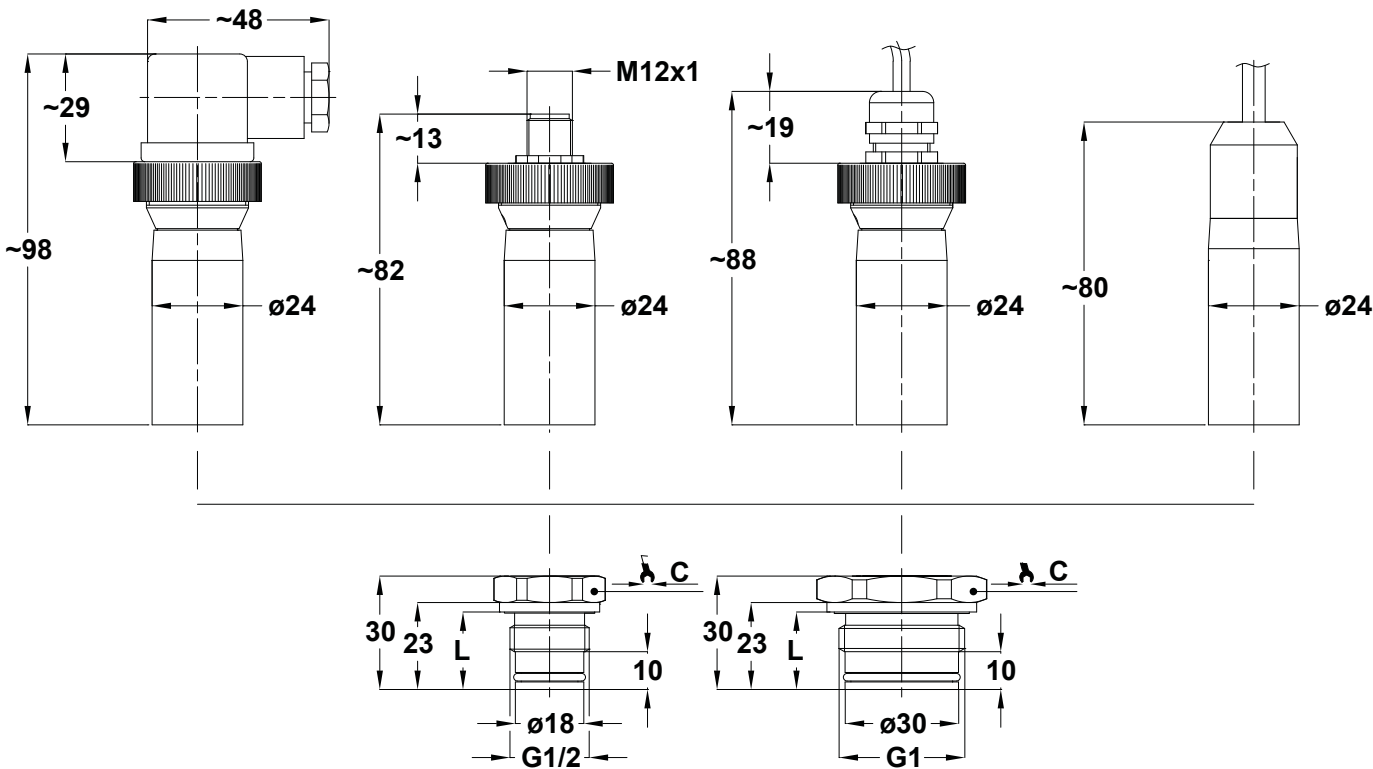
(1) Other ranges available on demand.

(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



Output signals	4...20 mA 4...20 mA
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
41M G 1/2 A	0.62" (20,5)	1.06" (27)
61M G 1 A	0.64" (20,5)	1.25" (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

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

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