ST2

pressure transmitter with piezoresistive sensor, accuracy 0,35%

CE

Compliant to directives
EMC 2004/108/CE - PED 97/23/CE - RoHS 2002/95/CE

The ST2 model is a compact electronic transmitter with piezoresistive sensor with excellent linearity, for air, industrial and technical gases, water, oil and process media compatible with AISI 316.

8.ST2

Measuring ranges: 0...0,1/0...1000 bar, relative; -1...0/-1...+24 bar, relative; 0...1/0..25 bar, absolute.
Output signals: 4...20 mA, 0...5 Vcc, 0...10 Vcc, 1...5 Vcc, 0,5...4,5 Ratiometric Vcc.
Non-linearity (BFSL): ≤ ± 0,175 % of the range, according to IEC 61298-2.
Non-repeatability: ≤ 0,1 % of the range, according to IEC 61298-2.
Accuracy: ≤ ± 0,35% of the range (1).
Thermal drift: between 0 and 80°C, 1% of span; 2,5% of span, max (2).
Long term drift: ≤ 0,1 % of span.
Process fluid temperature: -25...+100 °C.
Ambient temperature: -25...+85 °C.
Stocking temperature: -30...+85 °C.
Response time: <4 ms (measuring); <150 ms (switching on).
Emission and immunity: according to EN 61326, (group 1 - class B; industrial applications).
Vibration resistance: 20g (10...2000 Hz, according to IEC 60068-2-6).
Shock resistance: 40g (6 ms, according to IEC 60068-2-27).
Sensor: piezoresistive, silicon oil.
Case: in AISI 316L, vented up to 16 bar.
Protection degree: IP 65 according to IEC 60529 (3).
Process connection: in AISI 316L, hole ø 2,5 mm (with restrictor ø 0,7 mm for measuring ranges ≥ 60 bar).
Weight: 0,14 kg

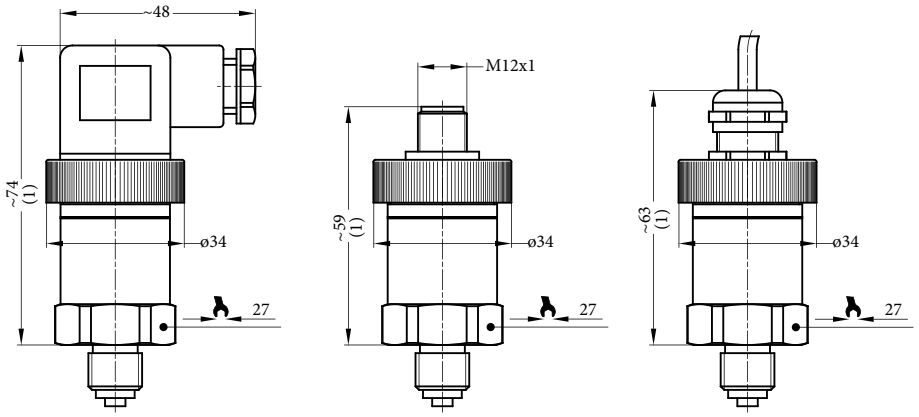
(1) max measuring error according to IEC 61298-2, including non-linearity and hysteresis (limit-point calibration and reference conditions according to IEC 61298-1).
(2) + 0,5% of span for measuring range ≤ 0,6 bar
(3) with properly assembled electric connection

Ranges bar, relative	**Overpressure** bar, relative
0...0,1	0,3
0...0,16	0,5
0...0,25	0,8
0...0,4	1,2
0...0,6	1,8
0...1	2
0...1,6	3,2
0...2,5	5
0...4	8
0...6	12
0...10	20
0...16	32
0...25	50
0...40	80
0...60	120
0...100	200
0...160	320
0...250	380
0...400	600
0...600	900
0...1000	1500

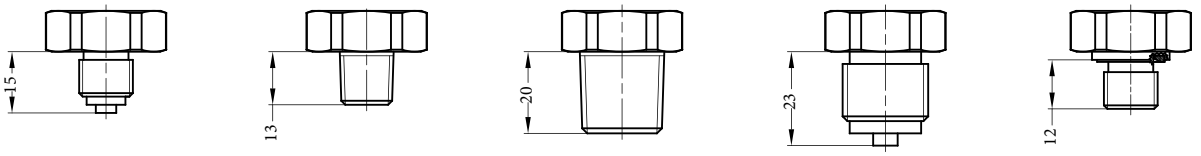
Other ranges available on demand. Units of measurement available in psi, MPa, kPa too.

ISO 9001 : 2008
Cert. nr. 0433/5 ICIM

RC5 - 01/15



Dimensions: mm; (1) for pressures ≥ 160 bar add 5 mm



Torque 20...30 Nm; (2) process connection DIN 3852-E for pressures ≤ 600 bar

Output signals	4...20 mA 1	0...5 Vdc 4	0...10 Vdc 5	1...5 Vdc 8	0,5...4,5 Vdc ratiometric - R
N. of wires	2	3	3	3	3
Load max (Ohm)	$R_L \leq$ (Ub-8)/0,02	$R_L \geq 5$ KΩ	$R_L \geq 10$ KΩ	$R_L \geq 5$ KΩ	$R_L \geq 4,5$ KΩ
Supply: +Ub (Vdc)	8…30	8…30	14…30	8…30	5 ±10%
Absorbed current (mA)	< 25	< 10	< 10	< 10	< 10

Other output signals available on demand. All output signals are provided of protection against short cicuit 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 connection: Ub+	1	1	1	1	brown	brown
Negative connection; 0V-	2	2	3	3	white	white
Output signal: S+	-	3	-	4	-	green
Ground	GND	GND	2	2	grey	grey

OPTIONS

M12 - Connector M12 x 1, 4 poles	**NBR** - NBR gasket for sensor (1)
PVC - Cable exit, with 1 mt PVC cable	**C01** - Calibration certificate
FPM - FPM gasket for sensor (1)	**A02** - Accuracy ≤ ± 0,25% of the range (2)
CRP - CR gasket for sensor	**VS3** - Restrictor ø 0,3 mm for pressure range 60 bar
EPD - EPDM gasket for sensor	

(1) Available for process connection DIN 3852-E.

(2) Non-Linearity (BFSL) ≤ ± 0,125% of span; for measuring ranges ≤ 60 bar

"HOW TO ORDER" SEQUENCE

Section / Model / Range / Process connection / Output signal / Electric connection / Gasket / Options

8	**ST2**	**21M**	**1**	**---**	**FPM**	**C01...VS3**
		2DM	**4**	**M12**	**CRP**	
		23M	**5**	**PVC**	**EPD**	
		41M	**8**		**NBR**	
		43M	**R**			

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