

Pressure Transmitter

ATM

08.S19

Piezoresistive

Also available in Accuracy $\pm 0.1\%$ FSO

Also available in Intrinsically Safe version

Also available with flush membrane



Functional characteristics

Ranges: 0...0,1/0...1000 bar, relative;

-1...0/-1...+15 bar, relative;

0...1/0...16 bar, absolute.

Accuracy (% F.S.V. included linearity, hysteresys and repeatability):

- 0,5 for pressure ranges up to 600 bar (- 0,1 with option K01; - 0,25 with option K02);

- 1,0 for pressure ranges over 600 bar.

Calibration: zero-point as per DIN 16086.

Annual drift (1 year):

< 0,4 mbar, for pressure ranges up to 2 bar;

< 0,2% F.S.V.

Process fluid temperature: 0...+80 °C.

Ambient temperature: 0...+70 °C.

Constructive characteristics

Process connection: AISI 316L st.st.

Sensor: piezoresistive.

Gasket: VITON.

Case: AISI 316L st.st.

Electric connection: male, as per DIN 43650.

Protection: IP 65 as per IEC 529 (if equipped of female wiring box as per DIN 43650, optional cod. C11).

Electrical characteristics

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

Supply and max load: see on page 2.

Zero calibration: $\pm 10\%$ V.F.S. typical.

Range calibration: $\pm 10\%$ V.F.S. typical.

Compensated temperature range: 0...+70 °C.

Ranges bar, relative (1)	Overpressure (2) bar, relative	Thermal drift (3) bar, relative
0,1...0,5	3 (200)	0,06
> 0,5...2	3 x F.S. (200)	0,03
> 2...25	3 x F.S. (200)	0,015
> 25...600	3 x F.S. (850 max)	0,015
> 600...1000	1500 (1500)	0,015

(1) Unit of measurement: as requested.

(2) Burst pressure between brackets.

(3) Value shown is zero thermal drift. Span thermal drift is $\pm 0,015\%$ F.S.V./°C



Compliance to requirements of
EMC directives : 89/336/EEC.

EMISSION standards references

EN 50081-1 (1992) "Generic emission standard"

EN 55022 (1994) "Emission, class B"

IMMUNITY standards references

EN 50082-2 (1995) "Industrial env. immunity standard"

EN 61000-4-2 (1995) "Electrostatic discharge"

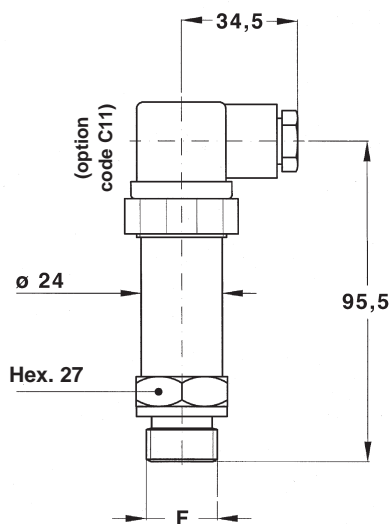
ENV 50140 (1993) "Radiated electromagnetic fields"

ENV 50204 (1995) "Radiated electromagnetic fields (GSM)"

EN 61000-4-4 (1995) "Electrical fast transient/burst"



DIMENSIONS (mm.)



Weight : kg. 0,23

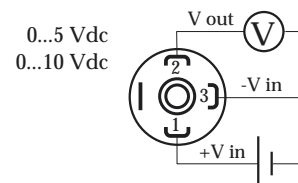
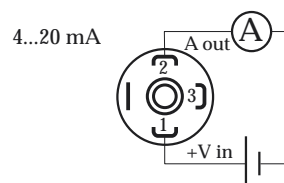
F	Code
1/2" BSP	41M
1/4" BSP	21M
1/4" NPT	23M

HOW TO ORDER

CODE & DESCRIPTION	
08	08 - electronic instruments
S19	S19 - pressure transmitter ATM, with piezoresistive sensor
000	
C	A : -1...0/-1...+15 bar, relative B : 0...0,1/<0...0,4 bar, relative C : 0...0,4/0...600 bar, relative D : 0...1000 bar, relative F : 0...1/0...16 bar, absolute
0/10 bar	See ranges table
41M	Process connection 41M - 1/2" BSP M 21M - 1/4" BSP M 23M - 1/4" NPT M
109	109 - 4...20 mA; +Vin:9...33 Vdc 405 - 0...5 Vdc; +Vin: 15...30 Vdc 505 - 0...10 Vdc; +Vin:15...30 Vdc
C01	See options table

WIRING

Output signals	4...20 mA	0...5 Vdc	0...10 Vdc
N. of wires	2	3	3
Load (Ohm)	$R_L - (V_{in}-9)/0,02$	10 K Ω min.	10 K Ω min.
Supply: +Vin	9...33	15...30	15...30
Ground	(pls. refer to Installation Manual)		



OPTIONS

OPTIONS	CODE
Calibration certificate	C01
Female wiring box as per DIN 43650	C11
Intrinsic safety version Eex ia IIC T6, for 4...20 mA only	EEX
Accuracy - 0,1 % F.S.V., for pressure ranges >0,5...600 bar	K01
Accuracy - 0,25 % F.S.V.	K02
Flush diaphragm, 1/2" BSP M only	MMA
Calibration 0...60 mbar	TA2

ACCESSORIES

Digital indicator: see datasheets 211 and 220.

Diaphragm seals: a complete range of diaphragm seals is available with a choice of construction materials. They suite especially for corrosive and difficult process fluids plus hygienic applications. For further details refer to data-sheets serie 04.

Valves: for construction details and for use limits refer to our data-sheet 05.



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