MP SENSOR

Product category	Type	Version
PRESSURE TRANSMITTER	**F09-T-M**	STANDARD

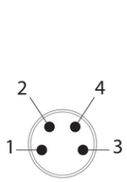
DATA SHEET | *ENGLISH*

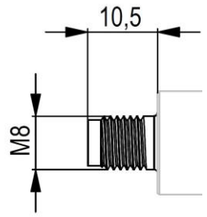


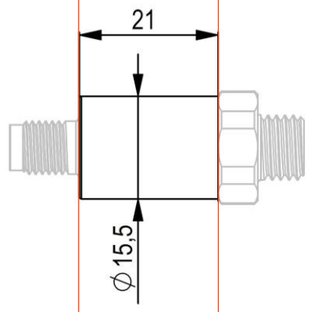
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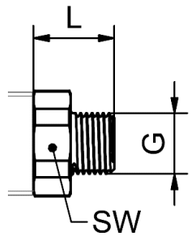
ELECTRICAL CONNECTION | BODY | PROCESS CONNECTION

Pin	Assignment
1	Ub+
3	0 V
4	OUT 1
2	NC









G	L	SW
G1/8“	13	16
G1/4“	18	17
G3/8“	16	19
NPT1/8“	13	16

General data

Operating medium	Filtered, dry or oiled air and non-corrosive gases
Protection class	IP67
MTTF (40°C)	2,176 years (4-20mA) 2,528 years (0-10V / 1-10V/1-5V)

Ordering information

2 - 02 - XX X1 - XX 0 X XX

Process connection

G1/8" a	01
NPT1/8" a	02
G1/4" a	04
G3/8" a	05

Protection class

IP54	4
IP67	7

Output signal

4…20 mA	01
1…10 V	02
0…10 V	03
1…5V	04

Version

Standard	00
Customer specific	>00

Pressure range

bar	psi	
-1…0	-14.5…0	1
-1…1	-14.5…14.5	2
-1…10	-14.5…145	3
0…10	0…145	4
0…12	0…174	5
-1…3	-14.5…43.5	6
0…0.25	0…3.62	8

Electrical data

Electrical connection	Connector M8, 4-pole After mounting, rotatable by 360°
Operating voltage	9…30 VDC (4…20 mA); 14…30 VDC (1…10 V; 0…10 V; 1…5 V) (UL: class 2 source only)
Short-circuit / reverse polarity protection	yes / yes
Output signal	4…20 mA; 1…10 V; 0…10 V; 1…5 V
Accuracy (23°C)	± 0.5% FS
max. temperature error	± 1.5% FS (-10°C…70°C)
Repeatability	± 0.2% FS
Long term drift	≤ 0.1% / a

ATEX Conditions

The pressure sensors may only be connected to suitably approved intrinsically safe equipment that provides device protection according to “ic” (EPL Gc/Dc).

Maximum intrinsically safe voltage: U_i = 30 V

The specified maximum output current of 200 mA per channel must never be exceeded.

Mechanical data

Material housing	Stainless steel
Process connection	G1/8“; G1/4“; G3/8“; NPT1/8“
Material process connection	Brass nickel-plated
Mounting position	Any (port downwards when using oiled air)
Weight	25 g

Pressure range

Measuring range							
(bar) .	0…0.25	-1…0	-1…1	-1…3	-1…10	0…10	0…12
(psi) .	0…3.26	-14.5…0	-14.5…14.5	-14.5…43.5	-14.5…145	0…145	0…174
max. overpressure							
(bar) .	0.5	2		6	15		
(psi) .	7.25	29		87	217.6		

Operating conditions

Operating temperature	Operation: -25°…85°C (UL: 0°…60°C) Fluid: 0°…+80°C (UL: 0°…60°C)
EMC / interference immunity	EN61000-6-2 DIN EN 50121-3-2:2017-11
EMC / interference emission	EN61000-6-4
Vibration resistance	DIN EN 60068-2-6: 20G, 10-2000 Hz, XYZ
Shock resistance	DIN EN 60068-2-27: 50G, 11ms, XYZ
UL approval	E511277
LABS conformity	VDMA 24364-B1/B2/C1-L/W
ATEX approval	Ex ic IIC T4 Gc Ex icD IIC T4 Dc

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