MP SENSOR

ELECTRONIC PRESSURE & VACUUM SWITCH *Product category*

F08-K *Type*

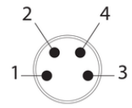
STANDARD

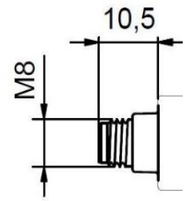
DATA SHEET | *ENGLISH*

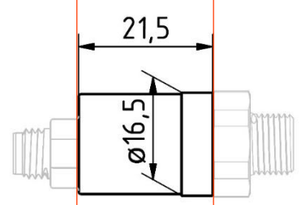
c UL US LISTED E511277 | CE | IO-Link

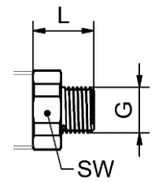
ELECTRICAL CONNECTION | **BODY** | **PROCESS CONNECTION**

Pin	Assignment
1	Ub+
3	0 V
4	OUT 1 / IO-Link
2	PROG

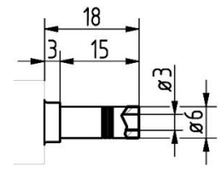








G	L	SW
G1/8“	13	16
NPT1/8“	13	16



Tube connection (6 mm)**

General data

Setting options	Switch points; NO/NC; Hysteresis / window mode; On/Off Delay; Programming lock ex works
Operating medium	Filtered, dry or oiled air and non-corrosive gases
Protection class	IP65
MTTF (40°C)	820 years

Ordering information

1 - 02 - XX XX - XX 3 X XX

Process connection

G1/8“	02
NPT1/8“	04
Tube 6mm	05

Firmware

Standard	00
Customized	>00

Electrical connection

M8 4-pole	01
M12 4-pole	02

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

Output signal

1x PNP	01
2x NPN	on request

Electrical data

Electrical connection	M8x1, 4-pole
Operating voltage	9…30 VDC (UL: class 2 source only)
Current consumption	< 20 mA
Short-circuit / reverse polarity protection	yes / yes

Output

Output signal	1x PNP (IO-Link is optionally available); 1x NPN (only without IO-Link)
Output voltage	approx. Ub -1.5 V
Max. output current	max. 200 mA each output
Output function	NO / NC (programmable)
Operating frequency	200 Hz
Capacitive load	200 nF
Response time	< 2.5 ms
Accuracy (23°C)	± 0.5% FS
max. temperature error	± 1.5% FS (-25°…+85°C)
Repeatability	± 0.2% FS
Long term drift	≤ 0.1% / a

IO-Link

IO-Link specification	Version 1.1
Transmission rate	COM 2 / 38.4 Kbit/s
Process data width	24 bit
Measurement information	16 bit
Switch point information	1 bit
Max. cycle time	5 msec

Mechanical data

Material housing	Plastic PC
Process connection	G1/8“; NPT1/8“; Tube connection 6 mm**
Material process connection	Brass nickel-plated
Mounting position	Any (port downwards when using oiled air)
Weight	18 g

Pressure range

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

Operating conditions

Operating temperature	Operation: -25°…+85°C (UL: 0°…+60°C)
EMC / interference immunity	EN61000-6-2
EMC / interference emission	EN61000-6-4
UL approval	E511277

*overpressure not continuously allowed | **only for pressure ranges -1…0 and -1…1 bar (-14.5…0 and -14.5…14.5 psi)