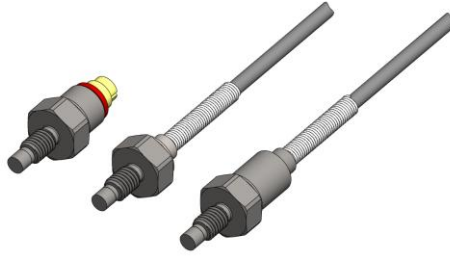


P-M5 Series

Miniature Pressure Sensor

Ref : 507

Rev : D



DESCRIPTION

These miniature pressure sensors are designed to make static measurements of pressure as well as dynamic in corrosive condition. Fully made of titanium, these levelling membrane sensors are compatible with a great number of corrosive or conductive fluids. Thanks to its integrated electronics, these sensors are able to deliver an amplified analog signal.

TECHNICAL DATA

All values are typical at 20°C ±1

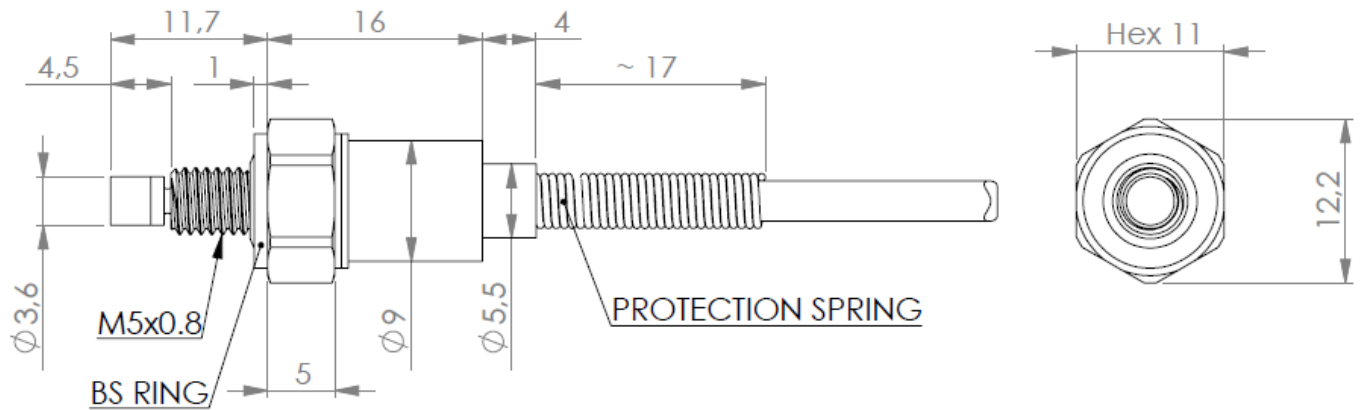
MODEL		Low level version – mV					Amplified version – 4V				
INPUT	BAR	0-2	0-5	0-10	0-20	0-35	0-50	0-100	0-200	0-350	
Pressure Range	PSI	0-30	0-75	0-150	0-300	0-500	0-750	0-1500	0-3000	0-5000	
Pressure Type		Absolute, Relative, Sealed									
Over Pressure		2 x Rated Pressure									
Burst Pressure		5 x Rated Pressure									
Electrical Input / Consumption		1500 Ω nominal					< 30 mA				
Supply voltage		10 VDC regulated					10 – 32 VDC				
OUTPUT											
Full Scale Output (FS)		30 mV (2 bar) / 100 mV (> 2 bar)					4 V ± 200 mV				
Output Impedance		500 to 800 Ω					1000 Ω				
Zero Offset at 20°C		± 10 mV					0.5 V ± 200 mV				
Linearity		± 0.25% FS / ± 0.5% FS for 2 bar (30 psi) model									
Hysteresis		± 0.25% FS / ± 0.5% FS for 2 bar (30 psi) model									
Repeatability		± 0.2% FS									
Insulation		> 100 MΩ @ 50 VDC									
ENVIRONMENTAL											
Operating Temperatures		-40 °C to 120 °C									
Compensated Temperatures		0 °C to 60 °C (see Options for other ranges)									
Thermal Zero Shift		< ± 2.5% FS / 60 °C / < ± 5% for 2 bar (30 psi) model									
Thermal Sensitivity Shift		< ± 2.5% FS / 60 °C / < ± 5% for 2 bar (30 psi) model									
Resonance Frequency		100-800 kHz depending on range					/				
Bandwidth (-3dB)		/					3 kHz				
PHYSICAL											
Electrical Connection		4 x 28AWG Shielded Cable 2m long (see Options for other Cable Length)									
Connector output (P-M5M only)		COMTRONIC CMR-O2-E-04P (sold with counter-part mounted on 2m long 4 x 28AWG shielded cable)									
Mechanical Connection		M5x0.8									
Index of Protection		IP50 (see Options for other Index of Protection)									
Sealing		BS Ring, OD: 10 mm, thickness: 1 mm									
Material		Body: Titanium Connector output option: Brass									
Mounting Torque		5 Nm nominal									

10 Nm max.

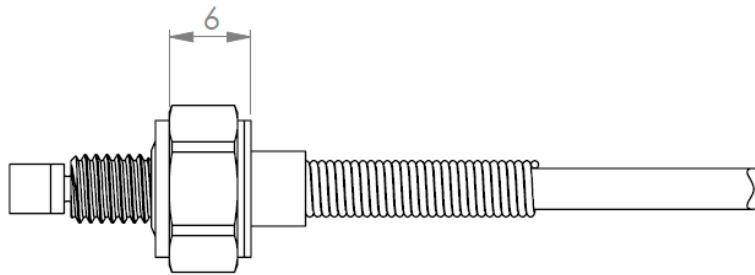
DIMENSIONAL DRAWINGS

Unless specified, all dimensions are in millimeters

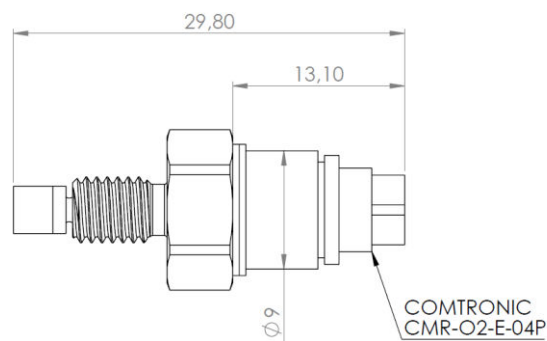
P-M5C----4V (amplified version, cable output)



P-M5C----mV (low level version, cable output)

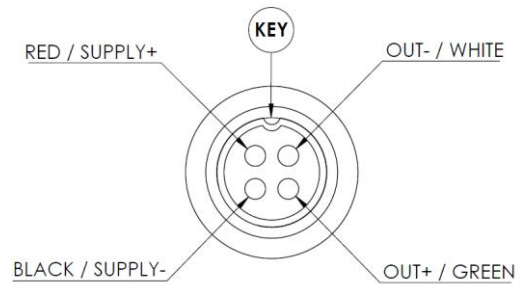
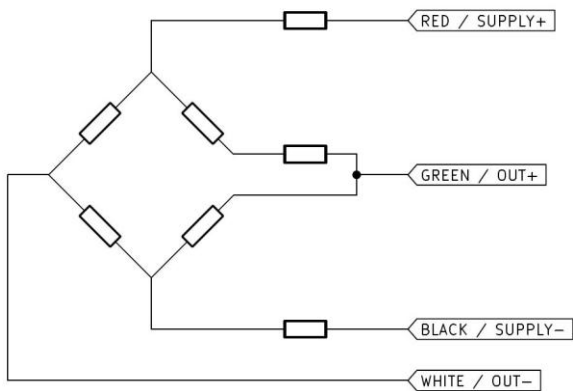


P-M5M----mV (low level version, connector output)



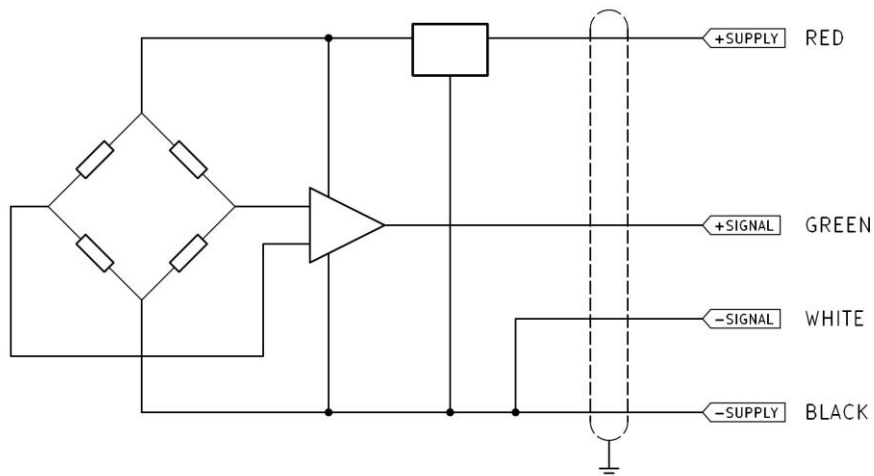
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WIRING

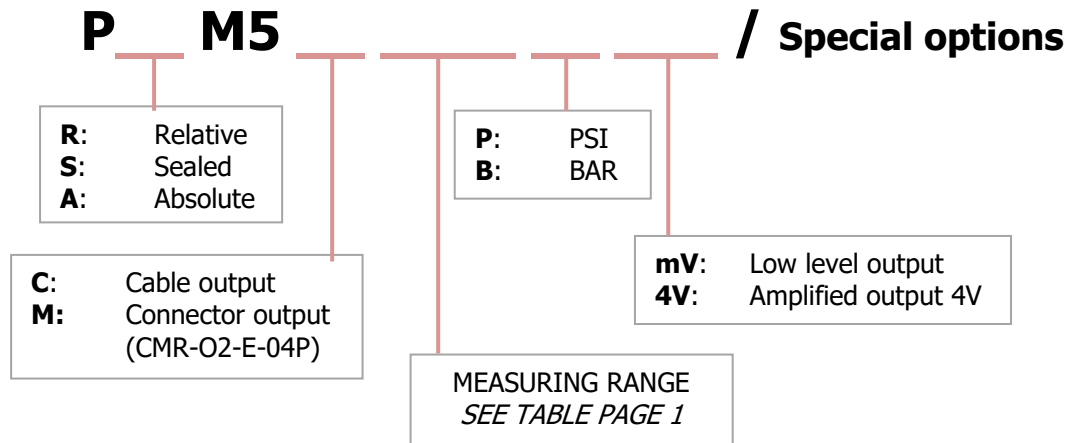
P-M5-----mV (low level version, cable or connector output)

VIEW FROM SENSOR'S SIDE

ONLY FOR P-M5M (connector version)
(colors are used on the extension cable provided)

P-M5C----4V (amplified version, cable output)

ORDERING INFORMATION



- Special options

OPTION	REFERENCE	FEATURES
Cable length	None	2m (standard)
	xM	x = length in meters
	xF	x = length in feet
Compensated temperature	None	0°C to +60°C (standard)
	C1	-40°C to +60°C
	C2	-40°C to +120°C
Index of Protection	None	IP50 (standard)
	P65	IP65
	P67	IP67
Other options	Consult Mesurex at mesurex@mesurex.fr	

Example: **PSM5C5KP4V / 5MC1P67**

- Sealed
- Metric M5 Thread
- Cable output
- 5 000 PSI
- 4V FS amplified output
- 5 meters cable length
- Compensated temperature: -40°C to 60°C
- Index of protection: IP67

REVISION HISTORY

REVISION	DATE	DESCRIPTION
D	04/12/2024	Datasheet converted to 2024 template Added connector output option (P-M5M) with COMTRONIC CMR-O2-E-04P

CONTACT

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