

## XPM4

### Miniature Pressure Transducer

#### SPECIFICATIONS

- Ranges 5 to 200 bar [75 psi to 3 000 psi]
- Sealed and gauge pressure reference
- Titanium device
- Cable or connector outlet
- Linearity down to  $\pm 0.35\%$  F.S.
- Customized product upon request

The **XPM4** is a miniature transducer designed to measure static and dynamic pressure under a wide variety of conditions, including hostile environments. The all-titanium construction and flush diaphragm protect the sensor against most corrosive environments.

The **XPM4** threaded construction virtually eliminates zero shifts caused by installation torque.

The **XPM4**'s sensing element is a fully temperature compensated Wheatstone bridge configuration made with high stability, micro-machined, silicon strain gauges which optimize performance.

As standard, the **XPM4** is supplied with a cable outlet, strengthened by a strain-relief spring. An electrical connector outlet can be provided (optional).

#### FEATURES

- Flush diaphragm design
- M4x0.7 thread
- Low Installation Torque Sensitivity
- Many options available

#### APPLICATIONS

- Glue dispensing systems
- Hydraulic circuits
- Explosion test benches
- Molding and forming profiles
- Robotics and effectors
- Laboratory

**STANDARD RANGES**

Ranges (FS)		Pressure Reference		Resonant Frequency <sup>1</sup>	Sensitivity "FSO" <sup>2</sup>	Overpressure	Burst Pressure
bar	psi	Gauge	Sealed		(for FS)	(rated pressure)	(rated pressure)
5	75	•	•	249 kHz	30 mV	2 x FS	5 x FS
10	150	•	•	249 kHz	60 mV	2 x FS	5 x FS
20	300	•	•	299 kHz	100 mV	2 x FS	5 x FS
50	750	•	•	374 kHz	100 mV	2 x FS	5 x FS
100	1.5K		•	474 kHz	100 mV	2 x FS	5 x FS
200	3K		•	673 kHz	100 mV	2 x FS	5 x FS

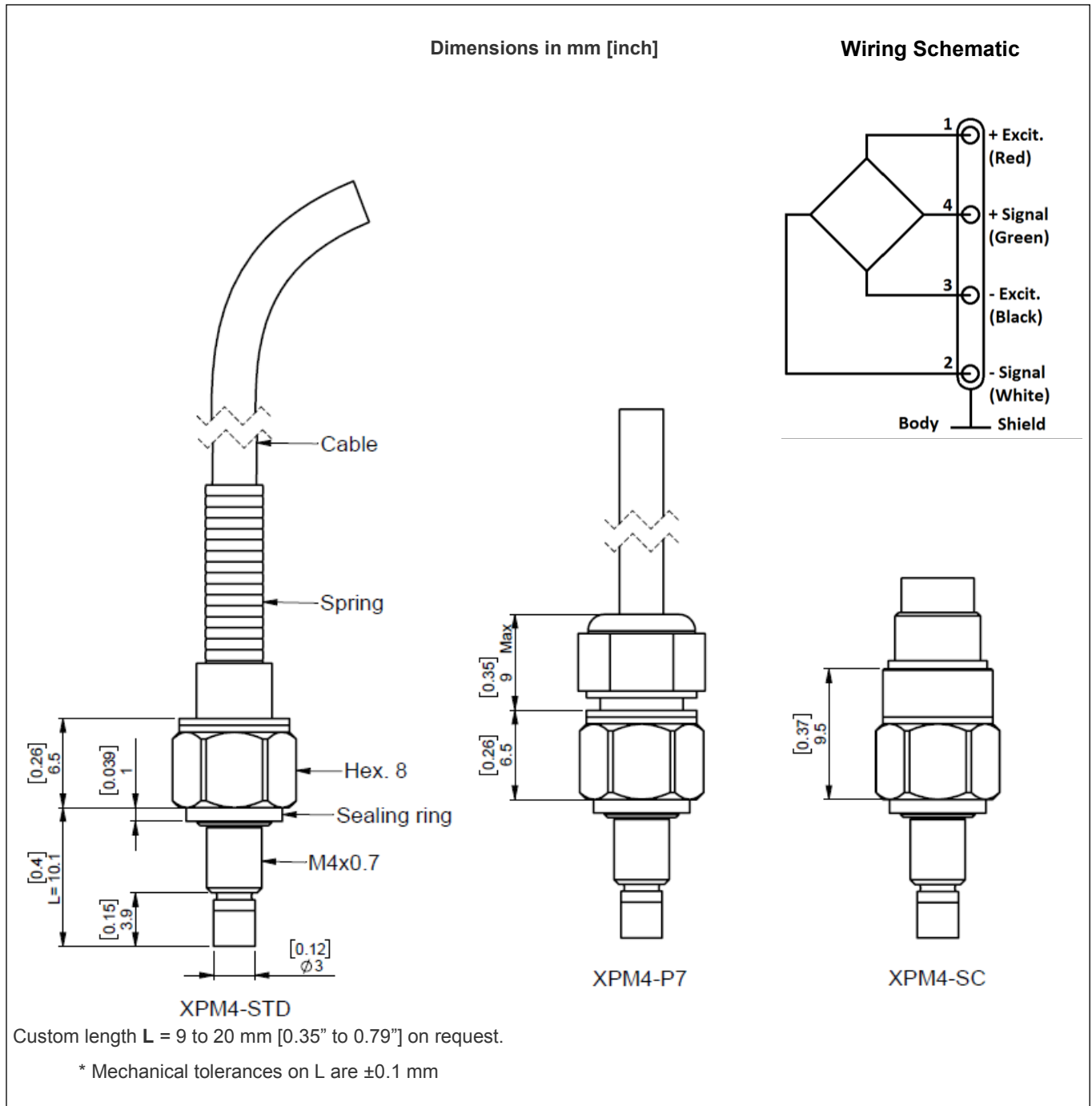
1: Useful frequency is 20% of Resonant Frequency.

2: Sensitivity "FSO" is indicated as nominal value with 10Vdc supply voltage

**PERFORMANCE SPECIFICATIONS (typical values at temperature 23°C)**

Parameters	Values	Notes
Power supply	10 V <sub>DC</sub> regulated	See V00 option for non standard
Zero Offset	±10 mV	
Non Linearity	±0.5%FS ±0.35%FS	FS = 5 bar or 75 psi FS > 5 bar or 75 psi
Hysteresis	±0.25%FS	
Repeatability	±0.2%FS	
Operating Temperature (OTR)	-40 to 120°C (-40 to 250°F)	
Compensated Temperature (CTR)	0 to 60°C (32 to 140°F)	
Thermal Zero Shift in CTR	±5%FS/50°C ±2.5%FS/50°C	FS = 5 bar or 75 psi FS > 5 bar or 75 psi
Thermal Sensitivity Shift in CTR	±2%/50°C	
Input Impedance	1200 Ω nom.	
Output Impedance	1200 Ω nom.	
Ingress Protection	IP50 IP67	Standard or SC option P7 option
Media – Pressure Port	Liquids and Gases compatible with Titanium	
Insulation resistance (at 50V dc)	100MΩ	

**DIMENSIONS & WIRING SCHEMATIC (IN METRIC AND IMPERIAL)**



**Notes:**

1. Recommended Tightening Torque: 1.8 N.m [15 Lbf.in] to 3 N.m [25 Lbf.in]
2. Sealing: sealing ring with FKM elastomer is supplied with the sensor (operating temperature -30 to 150°C)
3. Electrical connection: Standard = 2m shielded cable, Ø3 mm, with 4 wires (AWG30), silicone jacket  
 SC option = Integral connector ref. Comtronic CMR-02D-04P supplied with mating plug CMR-02-B-04S wired with 2m of cable (FMC-COM-4B-L2M)

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### OPTIONS

<b>Z02:</b> Compensation Temperature Range (CTR) = -40 to 60°C [-40 to 140°F]
<b>Z35:</b> Compensation Temperature Range = 20 to 120°C [70 to 250°F]
<b>P7:</b> IP67 protection (operating -20°C to 120°C [0°F to 250°F] – available only for Sealed Gauge versions)
<b>SC:</b> Connector output, mating plug supplied with 2 m [6.6 ft] of shielded cable, with 4 wires (AWG30), silicone jacket
<b>V00:</b> Non-standard power supply calibration, replace “00” with value in Volt (ex: V5 for 5Vdc supply voltage)
<b>L00M:</b> special cable length, replace “00” with total length in meters (ex: L5M ; L10M ;...)

### ORDERING INFO

