



XPM4

Miniature Pressure Transducer

SPECIFICATIONS

- Ranges 5 to 200 bars [75 psi to 3 000 psi]
- Absolute, sealed and gauge pressure reference
- Titanium device
- Cable or connector output
- Linearity up to $\pm 0.35\%$ F.S.

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** incorporates TE CONNECTIVITY's cutting-edge SanShift™ technology, which 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, especially at low ranges and high frequencies.

All models come with a cable output strengthened by a strain relief spring or with an electrical connector (optional).

On request, Instruction documents can be provided to ease the selection and use of our sensors and provide helpful tips.

FEATURES

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

APPLICATIONS

- Glue dispensing systems
- Explosion test benches
- Onboard equipment monitoring
- Robotics and effectors

STANDARD RANGES

Ranges (FS)		Pressure Reference			Resonant Frequency	Sensitivity "FSO"	Overpressure	Burst Pressure
bar	psi	Gauge	Abso.	Sealed		(non amplified)	(rated pressure)	(rated pressure)
5	75	•	•	•	249 kHz	3 mV/V	2 x FS	5 x FS
10	150	•	•	•	249 kHz	6 mV/V	2 x FS	5 x FS
20	300	•	•	•	299 kHz	10 mV/V	2 x FS	5 x FS
35	500	•	•	•	299 kHz	10 mV/V	2 x FS	5 x FS
50	750	•	•	•	374 kHz	10 mV/V	2 x FS	5 x FS
100	1.5K			•	474 kHz	10 mV/V	2 x FS	5 x FS
200	3K			•	673 kHz	10 mV/V	2 x FS	5 x FS

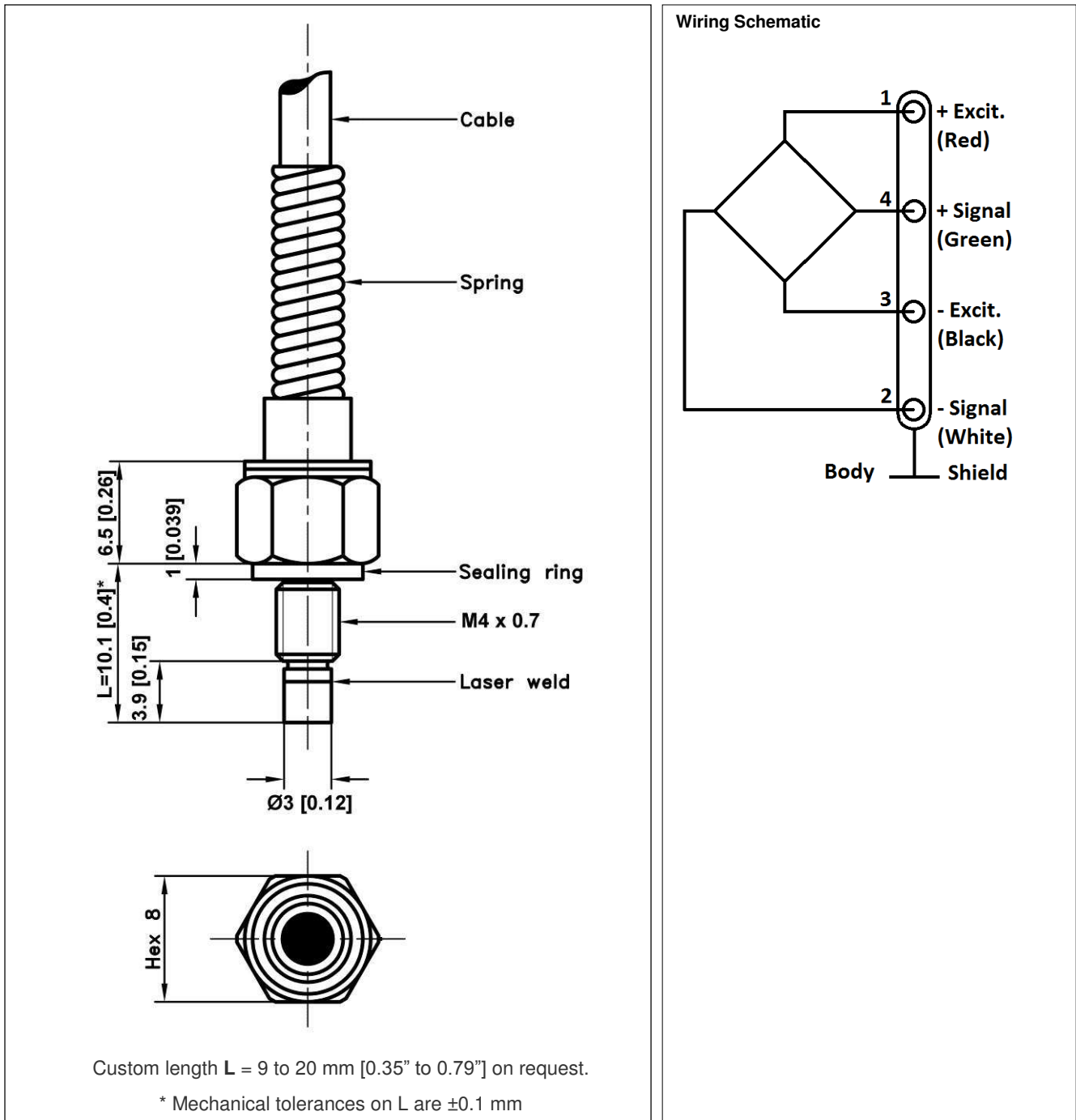
PERFORMANCE SPECIFICATIONS (typical values at temperature 23±3°C)

Parameters	Non amplified	Notes
Power supply	10 Vdc regulated	
Zero Offset	±1 mV/V	
Non Linearity	±0.5%FS ±0.25%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	±2%FS/50°C	
Thermal Sensitivity Shift in CTR	<±2% of reading /50°C	
Input Impedance or consumption	1500 Ω nom.	
Output Impedance	800 Ω nom.	
Ingress Protection	IP50	Standard or SC option
Media – Pressure Port	Liquids and Gases compatible with Titanium	

Insulation under 50Vdc ≥100MΩ

CE certification according to EN 61010-1, EN 50081-1, EN 50082-1.

DIMENSIONS & WIRING SCHEMATIC (IN METRIC AND IMPERIAL)



Dimensions in mm [inch]

Notes:

1. Recommended Tightening Torque: 1.8 N.m [15 Lbf.in] to 3 N.m [25 Lbf.in]
2. Sealing: One FKM sealing ring is supplied with the sensor (operating temperature -30 to 150°C)
3. Electrical connection: Standard = 2m shielded Ø3 mm cable with 4 wires (AWG30) with strain relief spring
 SC option = Integral connector ref. OMNETICS 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

HA : Accuracy (CNL&H) $\leq \pm 0.35\%$ F.S. ($\leq \pm 0.5\%$ for 5 bar [75 psi] model)
SI : Sensitivity shift in CTR $\leq 1\%$ of reading / 60 ° C [90 ° F] (except 5 bar [75 psi] model)
ZI : Zero shift in CTR $\leq 1.5\%$ F.S. / 60 ° C [140 ° F] (except 5 bar [75 psi] model)
ET1 : CTR -20 to 100 ° C [-4 to 212 ° F]
ET3 : CTR -40 to 150 ° C [-40 to 302 ° F] OTR=CTR
SC : Connector output, prewired, cable length 2 m [6.6 ft]
P5 : IP65 protection (available only for Absolute and Sealed Gauge versions)
P7 : IP67 protection (available only for Absolute and Sealed Gauge versions)
L00M : special cable length, replace "00" with total length in meters

ORDERING INFO

XPM4	-	20B	G	-	/L5M
Model	-	Pressure Range	Pressure reference	-	Options
XPM4		5B 10B 20B 35B 50B 70B 100B 200B	A : absolute G : gauge S : sealed		/HA /SI /ZI /ET1 /ET3 /SC /P5 /P7 /L00M

The sensor ordering codes uses only bar as units because **XPM4** uses metric threads. Psi value correspondence is noted as information

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