



FEATURES

- ◆ M6x1 thread
- ◆ Flush Diaphragm
- ◆ For Static and Dynamic Applications
- ◆ High Level Tension Output Available
- ◆ Low Installation Torque Sensitivity

APPLICATIONS

- ◆ Explosion test benches
- ◆ Extreme Miniature Devices
- ◆ Robotics and actuators
- ◆ Breaking system pressure
- ◆ Laboratory and research

XPM6

Miniature pressure sensor

SPECIFICATIONS

- ◆ Ranges 100 to 1000 bars [1.5k to 15k psi]
- ◆ Sealed and gauge pressure reference
- ◆ Stainless steel housing
- ◆ Linearity $\pm 0.25\%$ F.S.

The **XPM6** is a miniature transducer made of stainless steel designed to measure static and dynamic pressure under a wide variety of conditions, including hostile environments.

The **XPM6**'s sensing element is a fully temperature compensated Wheatstone bridge made with high stability micro-machined silicon strain gauges. For protection against thermal flash/explosive testing up to 1000 ° C [1832 ° F] the option **MH** allows inserting extra protection into the "H" shape diaphragm.

The **XPM6** incorporates TE CONNECTIVITY's cutting edge SanShift™ technology, which virtually eliminates zero shifts caused by installation torque.

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

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STANDARD RANGES

Full Scale (FS)		Pressure Reference			Resonant Frequency	Sensitivity "FSO"	Overpressure	Burst Pressure
bar	psi	Gauge	Abso.	Sealed		(non amplified)	(rated pressure)	(rated pressure)
100	1.5k	*		*	415 kHz	10 mV/V	2 x FS	3 x FS
200	3k	*		*	415 kHz	10 mV/V	2 x FS	3 x FS
350	5k	*		*	575 kHz	10 mV/V	2 x FS	3 x FS
500	7.5k	*		*	750 kHz	10 mV/V	2 x FS	3 x FS
1000	15k	*		*	910 kHz	10 mV/V	2 x FS	3 x FS

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

Parameters	Non amplified	Amplified (A1 opt.)	Notes
Power supply	10 Vdc regulated	10 to 30 Vdc	
Sensitivity "FSO"	See previous table	4 V ±0.2 V	Signal 0.5 V - 4.5 V for A1 option
Zero Offset	±1 mV/V	0.5 V ±0.2 V	
Non Linearity	±0.25%FS		
Hysteresis	±0.25%FS		
Repeatability	±0.2%FS		
Operating Temperature (OTR)	-40 to 150°C (-40 to 302°F)	-40 to 120°C (-40 to 248°F)	
Compensated Temperature (CTR)	0 to 60°C (32 to 140°F)	0 to 60°C (32 to 140°F)	
Thermal Zero Shift in CTR (TZS)	<±2.5%FS/50°C		
Thermal Sensitivity Shift in CTR (TSS)	<±2% of reading /50°C		
Input Impedance or consumption	1500 Ω nom.	< 30 mA	
Output Impedance	800 Ω nom.	1000 Ω	
Ingress Protection	IP50		
Media – Pressure Port	Fluids compatible with stainless steel		

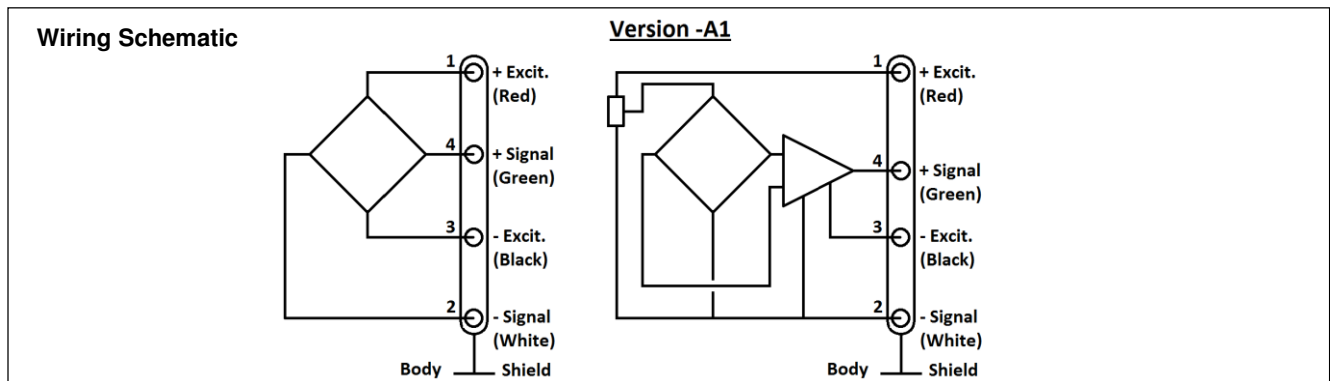
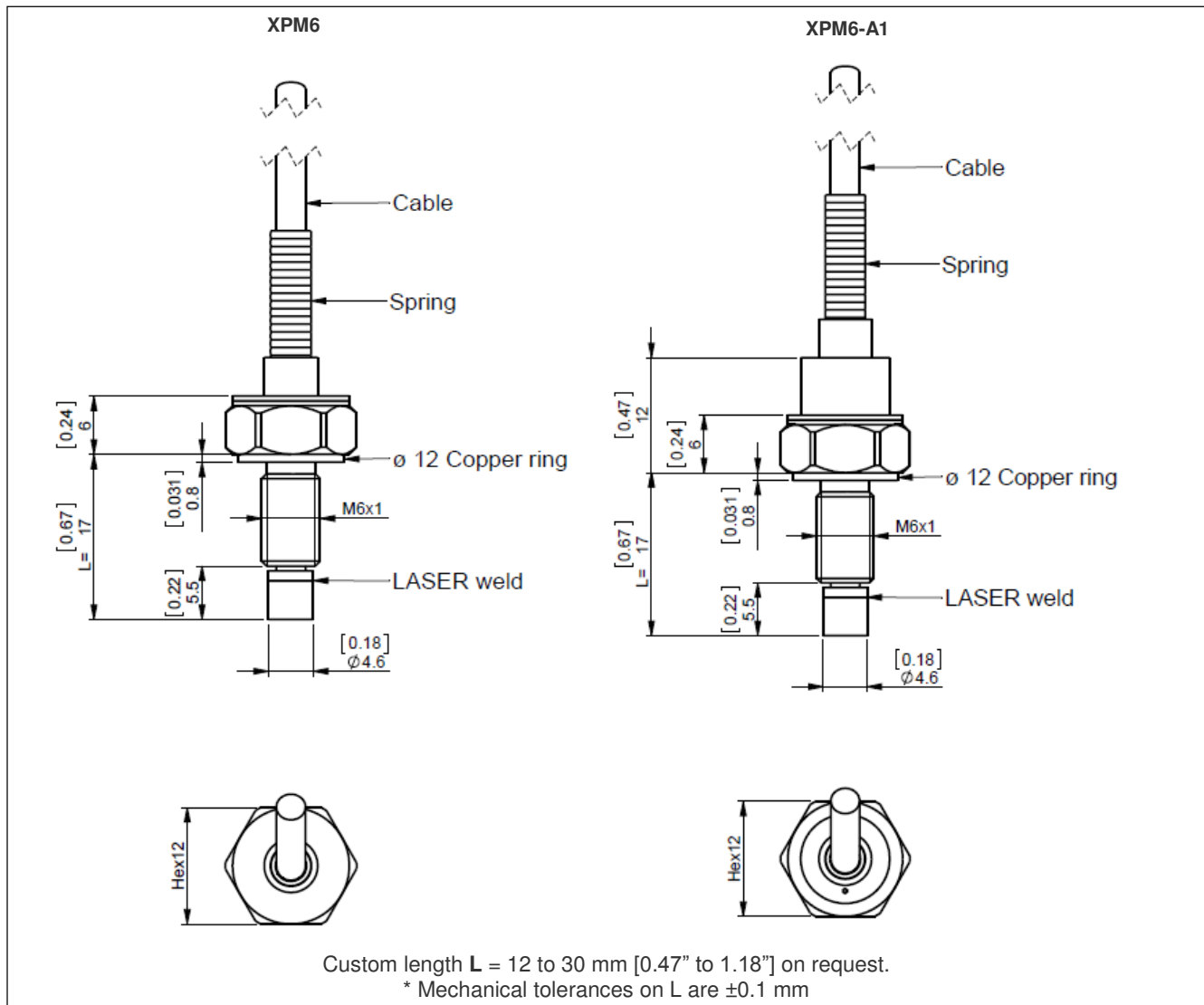
Insulation under 50Vdc ≥100MΩ

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

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DIMENSION & WIRING SCHEMATIC (IN METER AND IMPERIAL)



Notes:

1. Recommended Tightening Torque: 5 N.m [44 lbf.in] to 10 N.m [88 lbf.in]
2. Sealing: One FKM sealing ring is supplied with the sensor (operating temperature -30 to 150°C)
3. Electrical connection: Standard = 2 m of shielded cable $\phi 3$ mm with 4 wires AWG30, Silicon jacket

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OPTIONS

MH : "H" Diaphragm for thermal flash/explosive testing
HA : Accuracy (CNL&H) $\leq \pm 0.25\%$ F.S.
SI : Sensitivity shift in CTR $\leq 1\%$ of reading / 50 ° C [/ 100 ° F]
ZI : Zero shift in CTR $\leq 1.5\%$ F.S. / 50 ° C [/ 100 ° F]
ET1 : CTR -20 to 100 ° C [-4 to 212 ° F]
ET3 : CTR -40 to 150 ° C [-40 to 302 ° F] OTR=CTR (not available with A1 options)
L00M : special cable length, replace "00" with total length in meters

ORDERING INFORMATION

XPM6	-	-	1KB	G	-	/H//SI/L5M
Model	-	Output signal	Pressure Range	Pressure reference	-	Options
XPM6		(none) : bridge (mV/V) A1 : 0,5 to 4,5V	100B 200B 350B 500B 1KB	G : gauge S : sealed		/MH /HA /SI /ZI /ET1 /ET3 /SC /L00M

The sensor ordering codes uses only bar as units because **XPM6** uses metric threads. Psi value correspondence is noted as information.