

FEATURES

- ◆ Light Weight
- ◆ Range: 0.5 to 100 Bar (7.5 to 1500 psi)
- ◆ -40°C to +120°C Operating Temperature

APPLICATIONS

- ◆ Chemical processing
- ◆ Laboratory and Research
- ◆ Testing industry

XPR46

Miniature Pressure Transducer

SPECIFICATIONS

- ◆ Flush diaphragm, Titanium construction
- ◆ Full scale range from 0.5 to 100 bar
- ◆ Low profile with diameter 4.6 mm
- ◆ IP66 Ingress Protection
- ◆ High bandwidth

The **XPR46** series is an ultraminiature pressure transducer with integrated temperature compensation.

The all-titanium construction and flush diaphragm allow the **XPR46** to withstand most corrosive liquids.

The **XPR46**'s sensing element is fitted with a fully temperature compensated Wheatstone bridge equipped with high stability micro-machined silicon strain gauges which optimize performance, especially at low ranges and high frequencies.

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

STANDARD RANGES

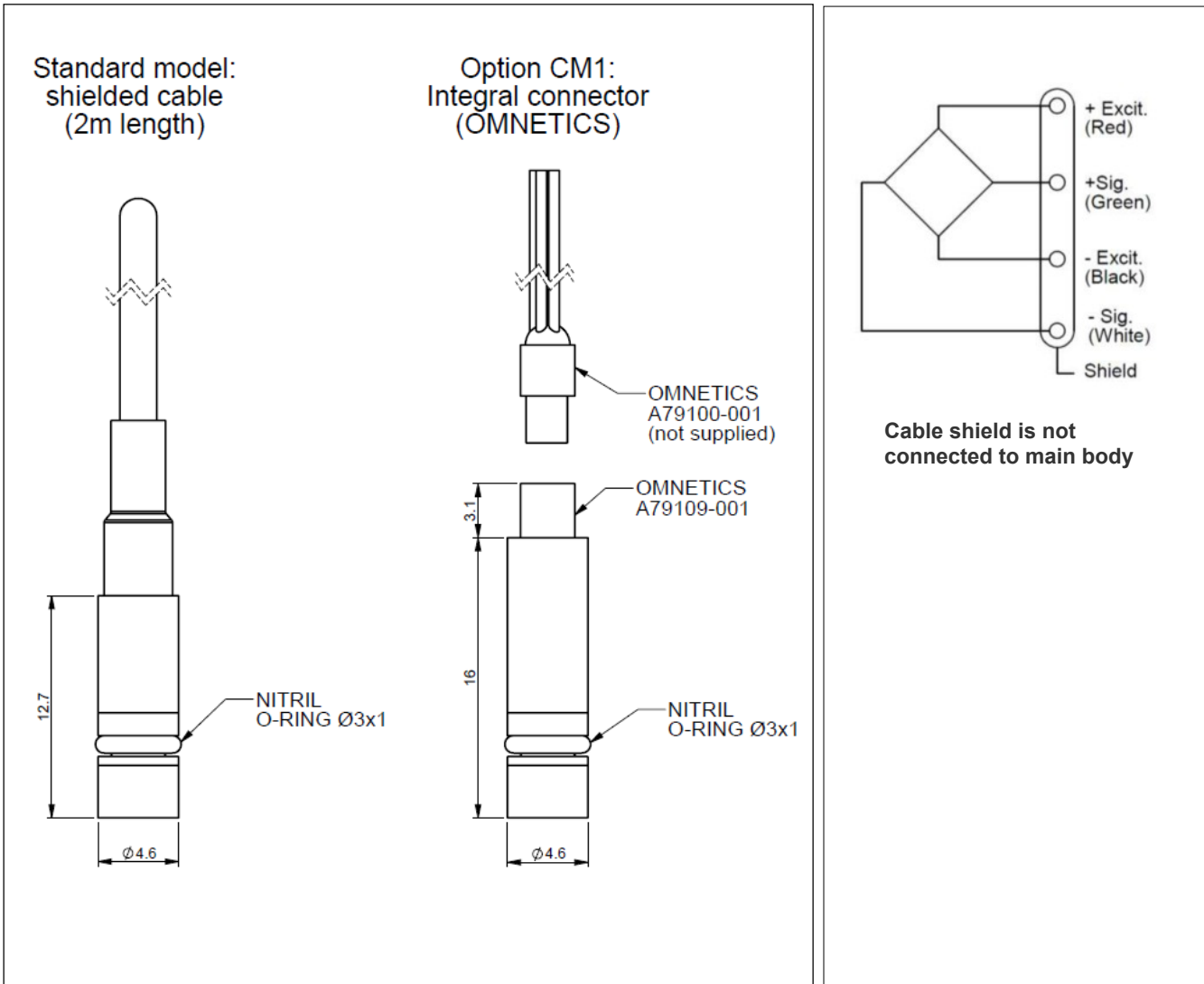
Pressure ranges		Pressure Ref.		Pressure Limit	Sensitivity "FSO" (nom.)	CNL&H (%FSO)	Thermal Zero Shift "TZS" (/50°C)
Bar	Psi	Abs.	Sealed				
0.5	7.5	*	*	8 x FS	2.5 mV/V	± 1%	± 5% FSO
1	15	*	*	4 x FS	5 mV/V	± 1%	± 2% FSO
2	30	*	*	2 x FS	10 mV/V	± 1%	± 2% FSO
5	75	*	*	2 x FS	12.5 mV/V	± 0.5%	± 1.5% FSO
10	150	*	*	2 x FS	12.5 mV/V	± 0.5%	± 1.5% FSO
20	300	*	*	2 x FS	12.5 mV/V	± 0.5%	± 1.5% FSO
50	750	*	*	2 x FS	12.5 mV/V	± 0.5%	± 1.5% FSO
100	1.5K	*	*	2 x FS	12.5 mV/V	± 0.5%	± 1.5% FSO

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

Parameters	Values	Notes
Supply Voltage	10Vdc	See option table for other Voltages
Input Resistance	1000Ω nom.	
Output Resistance	400Ω nom.	
Non-Repeatability	± 0.25 % FS	
Thermal Sensitivity Shift "TSS"	±2% of reading / 50°C [1/100 ° F]	
Operating Temperature Range (OTR)	-40°C to 120°C [-40 to 250 ° F]	
Compensated Temperature Range (CTR)	20°C to 80°C [70 to 170 ° F]	See option table for other temperatures
Zero Offset	± 1 mV/V	
Protection index	IP66	
CE conformance according to	EN 61010-1, EN 50081-1, EN 50082-1	

For custom configurations, consult factory.

DIMENSIONS & WIRING SCHEMATIC (IN METRIC)



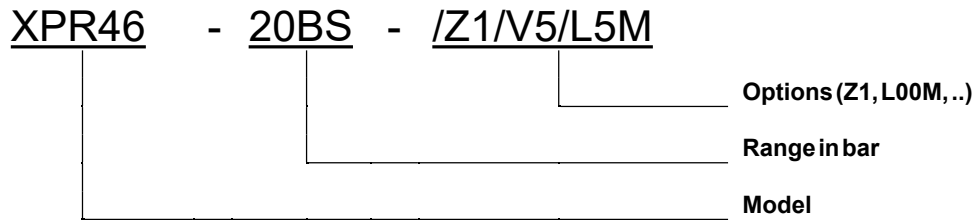
XPR46

Miniature Pressure Transducer

OPTIONS

Z1 : Compensation Temperature Range -20 to 40°C [0 to 100°F]
Z4 : Compensation Temperature Range 40 to 90°C [100 to 200°F]
V5 : Excitation 5 Vdc and signal 50% of the FSO range
CM1 : Integral OMNETICS receptacle (A79109-001) (Mating not supplied see accessories)
L00M : Special cable length, replace "00" with total length in meters

ORDERING INFORMATION



RECOMMENDED ACCESSORIES

Description	Model	Length	Part Description
Mating for CM1 option	OMNETICS A79100-001	4 wires 457 mm	TBA
Mating with shield cable	OMNETICS A79108-001	2 meter	TBA
Mating with shield cable	OMNETICS A79108-001	5 meter	TBA
Mating with shield cable	OMNETICS A79108-001	10 meter	TBA

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