



### **FEATURES**

CE

- 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

<b>Pressure</b> Bar	<b>e ranges</b> Psi	Pressure Ref. Sealed	Pressure Limit	Sensitivity "FSO" (nom.)	CNL&H (%FSO)	Thermal Zero Shift "TZS" (/50°C)
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 [/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)



### **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	Lentgh	Part Number
Mating for CM1 option	OMNETICS A79100-001	4 wires 457 mm	ТВА
Mating with shield cable	OMNETICS A79108-001	2 meter	ТВА
Mating with shield cable	OMNETICS A79108-001	5 meter	ТВА
Mating with shield cable	OMNETICS A79108-001	10 meter	ТВА

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