

Preliminary





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

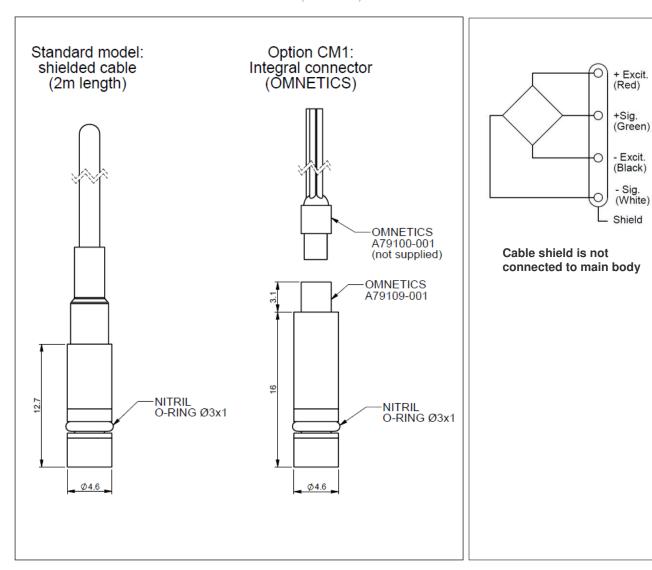
| Pressure Bar | e ranges Psi | Pressu Abs. | re Ref. Sealed | Pressure Limit | Sensitivity "FSO" (nom.) | CNL&H (%FSO) | Thermal Zero Shift "TZS" (/50°C) |
|------------------------|------------------------|----------------|-------------------|-------------------|-----------------------------|-----------------|-------------------------------------|
| 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]

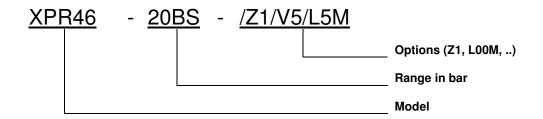
Z4: Compensation Temperature Range 40 to 90°C [100 to 200°F]

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 | 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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