

## EPB Series



- **Stainless Steel Pressure Sensor**
- **Flush diaphragm**
- **General media**
- **Designed for static or dynamic measurements**
- **Small size**

### DESCRIPTION

EPB is a small pressure probe sensor, small profile, stainless steel, flush mount transducer designed for general media. EPB is offered in pressure ranges from 0-5 to 5000 psi (0-0.35 to 350 bar), vented, sealed, and absolute pressure. EPB's overall diameter can be as small as 3.2 mm (0.125") Resonant frequency 55 through 400 kHz makes it suitable for both static and dynamic measurements. Various compensated temperature ranges are available from -40°C up to 90°C.

### FEATURES

- Available ranges 0-5 to 5000 psi (0-0.35 to 350 bar)
- Stainless Steel Construction
- Resonant frequency 55 through 400 kHz
- Non repeatability : 0.25% FSO
- CE approved

### APPLICATIONS

- General lab. testing
- Robotics and machine control
- Marine and Flight testing
- Automotive testing

### STANDARD RANGES

| Pressure ranges |       | Pressure Reference |                   |                 | Pressure Limit | Resonant Frequency <sup>(1)</sup><br>(nom.) | Output "FSO"<br>(nom.) | CNL&H<br>(%FSO) | Thermal Zero Shift "TZS"<br>(/50°C) |
|-----------------|-------|--------------------|-------------------|-----------------|----------------|---|------------------------|-----------------|-------------------------------------|
| (BAR)           | (PSI) | gage<br>(type1)    | sealed<br>(type2) | abs.<br>(type3) |                |   |                        |                 |                                     |
| 0.35            | 5     | •                  | •                 | •               | 10 x FS        | 55 KHz                                      | 10 mV                  | ± 1%            | ± 1mV                               |
| 0.7             | 10    | •                  | •                 | •               | 5 x FS         | 55 KHz                                      | 20 mV                  | ± 1%            | ± 1mV                               |
| 1               | 15    | •                  | •                 | •               | 3.5 x FS       | 55 KHz                                      | 30 mV                  | ± 1%            | ± 1mV                               |
| 1.5             | 25    | •                  | •                 | •               | 2 x FS         | 55 KHz                                      | 50 mV                  | ± 1%            | ± 2% FSO                            |
| 3.5             | 50    | •                  | •                 | •               | 2 x FS         | 60 KHz                                      | 75 mV                  | ± 1%            | ± 2% FSO                            |
| 7               | 100   | •                  | •                 | •               | 2 x FS         | 70 KHz                                      | 125 mV                 | ± 0.75 %        | ± 1.5 % FSO                         |
| 15              | 250   | •                  | •                 | •               | 2 x FS         | 100 KHz                                     | 125 mV                 | ± 0.5 %         | ± 1.5 % FSO                         |
| 35              | 500   | •                  | •                 | •               | 2 x FS         | 150 KHz                                     | 125 mV                 | ± 0.5 %         | ± 1.5 % FSO                         |
| 70              | 1000  | •                  | •                 | •               | 2 x FS         | 200 KHz                                     | 125 mV                 | ± 0.5 %         | ± 1.5 % FSO                         |
| 150             | 2500  | •                  | •                 | •               | 2 x FS         | 300 KHz                                     | 125 mV                 | ± 0.5 %         | ± 1.5 % FSO                         |
| 350             | 5000  | •                  | •                 | •               | 2 x FS         | 450 KHz                                     | 125 mV                 | ± 0.5 %         | ± 1.5 % FSO                         |

Note 1: useful frequency is 20% of Resonant Frequency

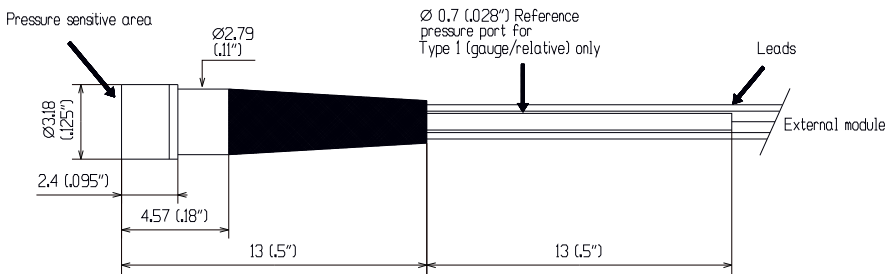
# EPB Series

## PERFORMANCE SPECIFICATIONS

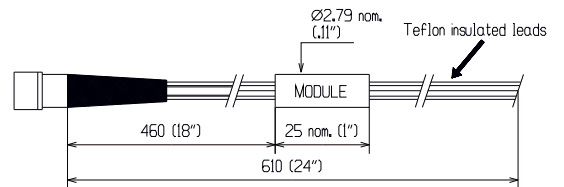
| PARAMETERS                      | VALUES                             | NOTES                                   |
|---------------------------------|------------------------------------|---|
| Supply Voltage                  | 10VDC                              | See option table for other Voltages     |
| Input Resistance                | 1200Ω nom.                         |   |
| Output Resistance               | 350Ω nom.                          |   |
| Non-Repeatability               | ± 0.25 % FSO                       |   |
| Thermal Sensitivity Shift "TSS" | ±2%/50°C                           |   |
| Operating Temperature           | -40°C to 120°C                     |   |
| Compensated temperature         | 20°C to 80°C                       | See option table for other Temperatures |
| Zero Offset at 23°C             | ± 10 mV                            |   |
| CE conformance according to     | EN 61010-1, EN 50081-1, EN 50082-1 |   |

## DIMENSIONS

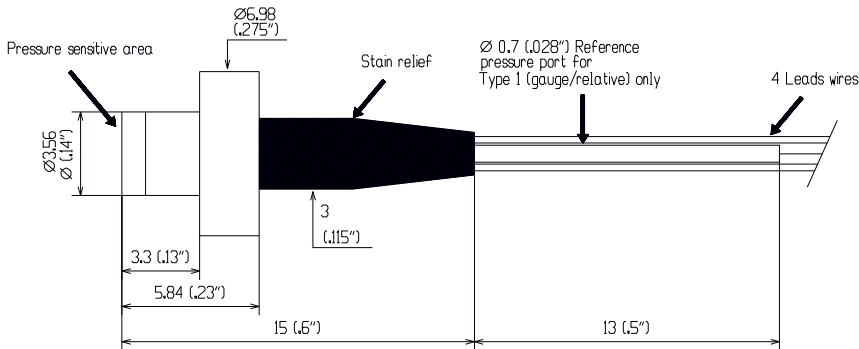
EPB-B0



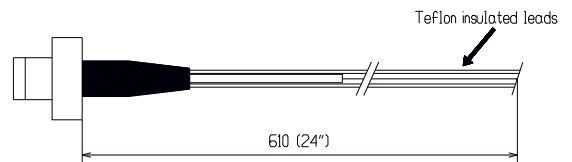
WIRING



EPB-C1



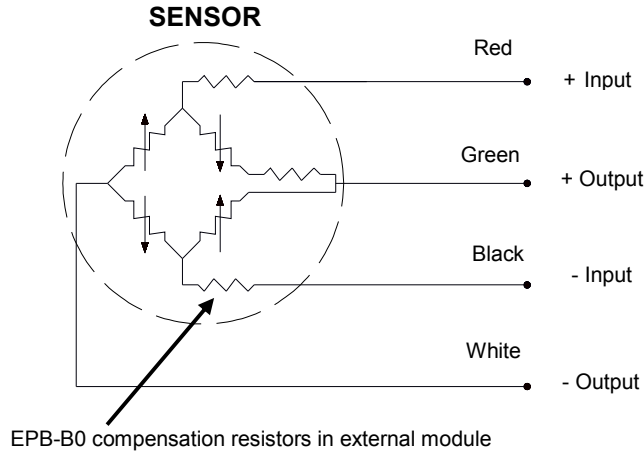
WIRING



Dim : mm (inches)

# EPB Series

## CONNECTIONS & INSTALLATION



## OPTIONS AND ACCESSORIES

| OPTIONS   | CODES | DESCRIPTIONS   |
|---|-------|--|
| Compensated Temperature Ranges                                      | Z0    | -40°C to 20°C  |
|   | Z1    | -20°C to 40°C  |
|   | Z2    | 0°C to 60°C  |
|   | Z4    | 40°C to 90°C   |
|   | Z*    | Non-standard, contact MEAS   |
| Supply Voltage  | V00   | Replace "00" with Voltage between 1 and 10. If less than 10, Sensitivity FSO will decrease accordingly |
|   | V*    | Non-standard Excitation with standard FSO and non-standard TSS, contact MEAS                           |
| Special Cable Length  | L00F  | Replace "00" with total length in feet   |
|   | L00M  | Replace "00" with total length in meters   |
| Special Module Location for EPB-B0                                  | M00F  | Replace "00" with distance between sensor and module in feet   |
|   | M00M  | Replace "00" with distance between sensor and module in meters   |
| Waterproofing Cable Exit (only for model EPB-C1 sealed or absolute) | X     | Short Term Waterproofing   |
| Connector Wired to Leads or Cable                                   | C     | Microtech type male or equivalent (w/o mate)   |
|   | RS    | RJ Telephone type male (w/o mate)  |

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## ORDERING INFORMATION

| Model | - | Body     | Pres. Ref.                              | - | Range & Unit <sup>(1)</sup>  |   | - | /Options  |
|-------|---|----------|---|---|--|---|---|---|
| EPB   | - | B0<br>C1 | 1 = Gauge<br>2 = Sealed<br>3 = Absolute | - | 0.35B<br>0.7B<br>1B<br>1.5B<br>3.5B<br>7B<br>15B<br>35B<br>70B<br>150B<br>350B | 5P<br>10P<br>15P<br>25P<br>50P<br>100P<br>250P<br>500P<br>1KP<br>2.5KP<br>5KP | - | /Z0, Z1, Z2, Z4 or Z*<br>/V1 thru V10 or V*<br>/L00F or L00M<br>/M00F or M00M<br>/X<br>/C or RS |

Examples of model construction: EPB-B01-7B-/Z1/V5/L3M/M2M

### NORTH AMERICA

Measurement Specialties  
45738 Northport Loop West  
Fremont, CA 94538  
Tel: 1-800-767-1888  
Fax: 1-510-498-1578  
Sales: [pfg.cs.amer@meas-spec.com](mailto:pfg.cs.amer@meas-spec.com)

### EUROPE

Measurement Specialties  
(Europe), Ltd.  
26 Rue des Dames  
78340 Les Clayes-sous-Bois, France  
Tel: +33 (0) 130 79 33 00  
Fax: +33 (0) 134 81 03 59  
Sales: [pfg.cs.emea@meas-spec.com](mailto:pfg.cs.emea@meas-spec.com)

### ASIA

Measurement Specialties  
(China), Ltd.  
No. 26 Langshan Road  
Shenzhen High-Tech Park (North)  
Nanshan District, Shenzhen 518107  
China  
Tel: +86 755 3330 5088  
Fax: +86 755 3330 5099  
Sales: [pfg.cs.asia@meas-spec.com](mailto:pfg.cs.asia@meas-spec.com)

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