



## FEATURES

- Stainless steel construction
- Diaphragm size  $\varnothing 3.18$  or  $\varnothing 3.56$
- $-40^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$  Operating Temperature
- Wide ranges of temperature compensation

## APPLICATIONS

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

## EPB

### Miniature Pressure Sensor

#### SPECIFICATIONS

- Ranges from 0.35 to 350 bar (or 5 to 5000 psi)
- References absolute, sealed or vented
- Flush diaphragm
- Designed for static or dynamic measurements
- Accuracy up to  $\pm 0.5\%$  FS

**EPB** is a small pressure probe sensor, small profile, stainless steel, flush mount transducer designed for general media.

The **EPB**'s frequency resonance goes from 55 kHz up to 400 kHz and makes it suitable for both static and dynamic measurements.

The standard version is suitable for many applications, but the dedicated design team at our Transducer Engineering Centre stands ready to provide a custom design as required.

Another version, the **EPB-PW** has been designed for pore water monitoring.

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

## STANDARD RANGES

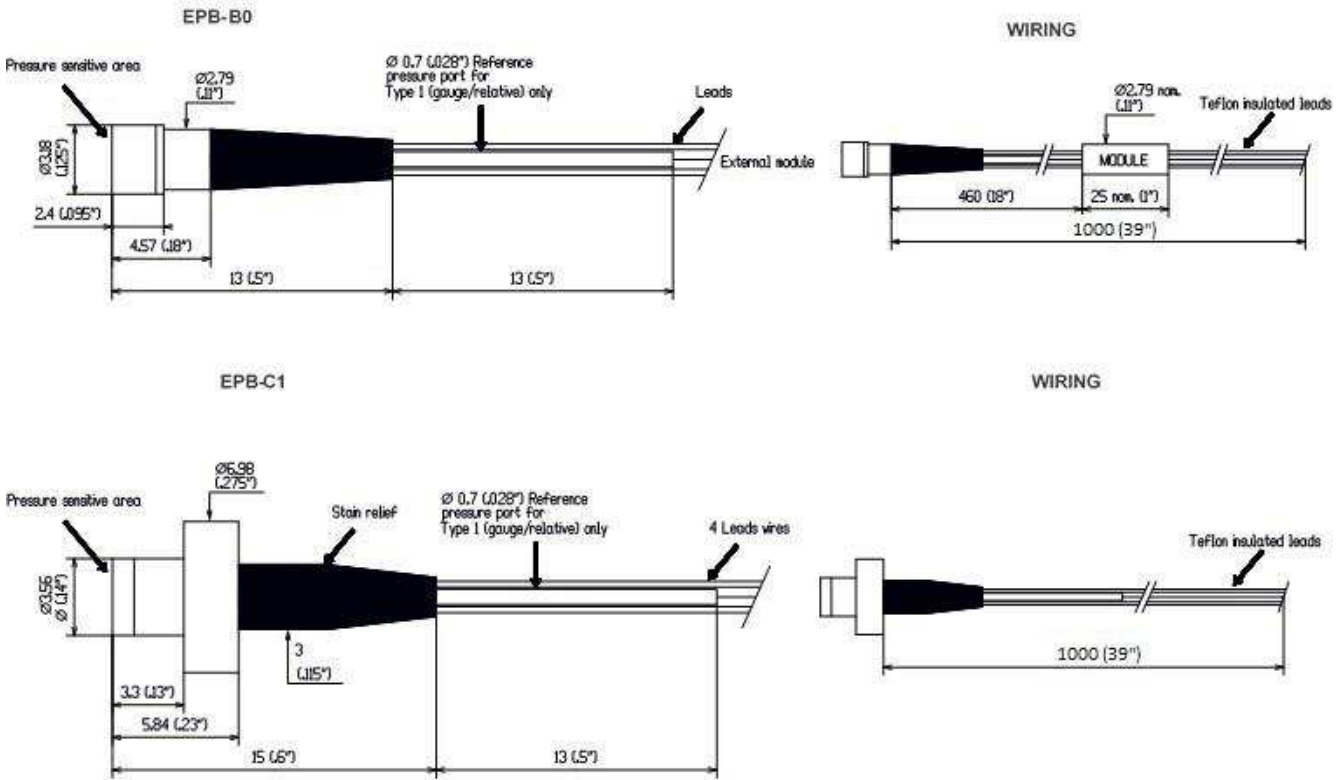
Range (FS)		Pressure Reference			Pressure Limit	Resonant Frequency <sup>(1)</sup> (nom.)	Sensitivity "FSO" (nom.)	CNL&H (%FSO)	Thermal Zero Shift "TZS" (/50°C)
bar	psi	gage	sealed	abs.					
0.35	5	•	•	•	10 x FS	55 kHz	10 mV	± 1%	± 1mV
0.7	10	•	•	•	5 x FS	55 kHz	20 mV	± 1%	± 1mV
1	15	•	•	•	3.5 x FS	55 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	± 1%	± 1.5% FSO

Note 1: useful frequency is 20% of Resonant Frequency

## PERFORMANCE SPECIFICATIONS (typical values at temperature 23±3°C)

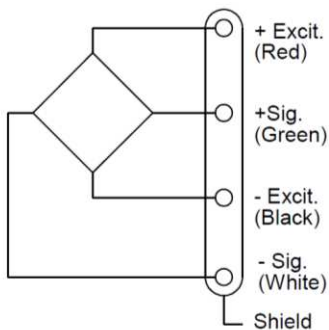
PARAMETERS	VALUES	NOTES
Supply Voltage	10 Vdc	See option table for other Voltages
Input Resistance	1200 Ωnom.	
Output Resistance	350 Ωnom.	
Non-Repeatability	± 0.25% FS	
Thermal Sensitivity Shift in CTR	± 2%/50°C	
Operating Temperature Range (OTR)	-40°C to 120°C	
Compensated temperature Range (CTR)	20°C to 80°C	See option table for other Temperatures
Zero Offset	± 10 mV	
CE conformance according to	EN 61010-1, EN 50081-1, EN 50082-1	

**DIMENSIONS (in metric and imperial)**



Dimension in mm (in inch)

**CONNECTIONS & INSTALLATION**



Note: for **EPB-B0** thermal compensation is made with an external module

**OPTIONS AND ACCESSORIES**

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

**ORDERING INFORMATION**

<b>EPB</b>	-	<b>B0</b>	<b>1</b>	-	<b>7B</b>		-	<b>/Z1/V5/L3M/M2M</b>
Model	-	Body	Pres. Ref.	-	Range & Unit <sup>(1)</sup>		-	/Options
<b>EPB</b>	-	<b>B0</b> <b>C1</b>	<b>1</b> = Gauge <b>2</b> = Sealed <b>3</b> = Absolute	-	<b>0.35B</b> <b>0.7B</b> <b>1B</b> <b>1.5B</b> <b>3.5B</b> <b>7B</b> <b>15B</b> <b>35B</b> <b>70B</b> <b>150B</b> <b>350B</b>	<b>5P</b> <b>10P</b> <b>15P</b> <b>25P</b> <b>50P</b> <b>100P</b> <b>250P</b> <b>500P</b> <b>1KP</b> <b>2.5KP</b> <b>5KP</b>	-	<b>/Z0, Z1, Z2, Z4 or Z*</b> <b>/V1 thru V10 or V*</b> <b>/L00F or L00M</b> <b>/M00F or M00M</b> <b>/X</b> <b>/C or RS</b>

**NORTH AMERICA**

Measurement Specialties, Inc.,  
a TE Connectivity Company  
Phone: +1 800 522 6752  
Email: [customercare.frm@te.com](mailto:customercare.frm@te.com)

**EUROPE**

Measurement Specialties (Europe), Ltd.  
a TE Connectivity Company  
Phone: +31 73 624 6999  
Email: [customercare.lcsb@te.com](mailto:customercare.lcsb@te.com)

**ASIA**

Measurement Specialties (China), Ltd.,  
a TE Connectivity Company  
Phone +86 400 820 6015  
Email: [customercare.shzn@te.com](mailto:customercare.shzn@te.com)

**TE.com/sensorsolutions**

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