









# **FEATURES**

- Stainless steel construction
- Diaphragm size ø3.18 or ø3.56
- -40°C to +80°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 ±0.5% FS

The **EPB** series are miniature flush mount pressure sensors manufactured of stainless steel for general use applications.

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

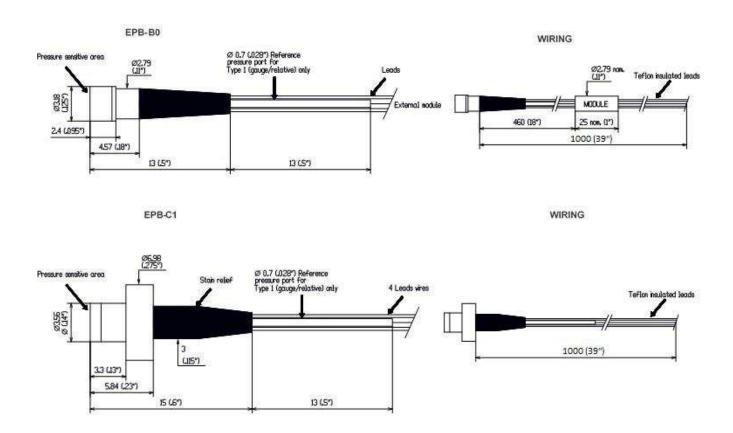
Range (FS)		Pressure Reference			Pressure	Resonant Frequency <sup>(1)</sup>	Sensitivity "FSO"	CNL&H	Thermal Zero Shift "TZS"
bar	psi	gage	sealed	abs.	Limit	(nom.)	(nom.)	(%FSO)	(/50°C)
0.35	5	•	•	•	10 x FS	55 kHz	10 mV	±1%	±1mV
0.7	10	•	•	•	5 x FS	55 kHz	20 mV	±1%	±1mV
1	15	•	•	•	3.5 x FS	55 kHz	30 mV	±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)

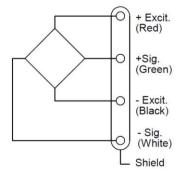
PARAMETERS	VALUES	NOTES			
Supply Voltage	10 Vdc	See option table for other Voltages			
Input Resistance	1200 Ωnom.				
Output Resistance	350 Ωnom.				
Non-Repeatability	±0.25% FS				
Thermal Sensitivity Shift in CTR	±2%/50°C				
Operating Temperature Range (OTR)	-40°C to 120°C				
Compensated temperature 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	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 factory		
Supply Voltage	V00	Replace "00" with Voltage between 1 and 10. If less than 10, Sensitivity "FSO" will decrease accordingly		
	V*	Custom Excitation with standard Sensitivity FSO non-standard TSS		
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		
	МООМ	Replace "00" with distance between sensor and module in meters		
Waterproofing Cable Exit	Х	Short Term Waterproofing (only for EPB-C1 sealed or absolute)		
Connector Wired to Leads or Cable C		Microtech type male or equivalent (w/o mate)		
	RS	RJ Telephone type male (w/o mate)		

# **ORDERING INFORMATION**

EPB	-	В0	1	-	7B		-	/Z1/V5/L3M/M2M
Model	-	Body	Pres. Ref.	-	Range & Unit(1)		-	/Options
ЕРВ	-	B0 C1	1 = Gauge 2 = Sealed 3 = Absolute	-	0.35B 0.7B 1B 1.5B 3.5B 7B 15B 35B 70B 150B 350B	5P 10P 15P 25P 50P 100P 250P 500P 1KP 2.5KP 5KP	-	/Z0, Z1, Z2, Z4 or Z* /V1 thru V10 or V* /L00F or L00M /M00F or M00M /X /C or RS

#### **NORTH AMERICA**

Measurement Specialties, Inc., a TE Connectivity Company Phone: +1 800 522 6752 Email: customercare.frmt@te.com

#### **EUROPE**

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

# ASIA

Measurement Specialties (China), Ltd., a TE Connectivity Company Phone +86 400 820 6015 Email: <u>customercare.shzn@te.com</u>

#### TE.com/sensorsolutions

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