EPB-PW Miniature Pressure Transducer

- **Miniature design (body ø6.4 mm)**
- **Titanium Construction**
- **EMI Protected per CE Compliance**
- **IP68 Ingress Protection**
- **Sealed Gauge reference**

CE

DESCRIPTION

The **EPB-PW** pressure transducer is specifically designed for pore water applications in either centrifuges or laboratory equipment. Using either ceramic or bronze sintered filters, the sensor can be used on clay or sand-based materials.

Made of titanium, the **EPB-PW** provides a rugged construction and is not affected by external clamping forces when fitted. Having a miniature design of 6.4 x 11.4mm ensures it is backwards compatible with other older manufacturers' products. This miniature pressure transducer features an **IP68** rating, flexible cable and is available with options such as a **PT1000** temperature sensor upon request.

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.

FEATURES

- Miniature Design and Light Weight
- Pressure Range: 1 to 70 Bar (15 to 1000 psi)
- -40℃ to +80℃ Operating Temperature Range

APPLICATIONS

- Pore Water Measurement
- Centrifuge
- Laboratory

STANDARD RANGES

Pressure ranges (BAR)	Pressure ranges (PSI)	Pressure Reference Sealed	Pressure Limit	Output "FSO" (nom.)	CNL&H (%FSO)	Thermal Zero Shift "TZS" (/50°C)
1	15	•	4.5 x FS	30 mV	±1%	±4 % FSO
1.5	25	•	3 x FS	50 mV	±1%	±2 % FSO
3.5	50	•	2 x FS	75 mV	±1%	±2 % FSO
7	100	•	2 x FS	125 mV	±0.5 %	±1.5 % FSO
15	250	•	2 x FS	125 mV	±0.5 %	±1.5 % FSO
35	500	•	2 x FS	125 mV	±0.5 %	±1.5 % FSO
70	1K	•	2 x FS	125 mV	±0.5 %	±1.5 % FSO

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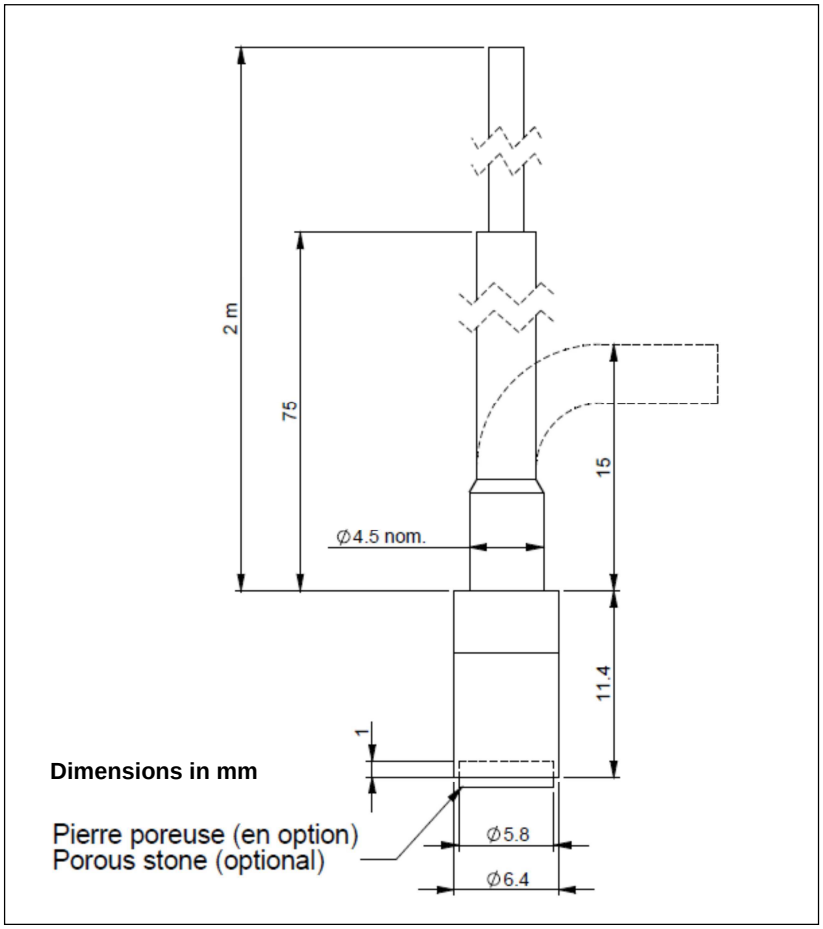
PERFORMANCE SPECIFICATIONS

All values are typical at temperature 20±1ºC (unless otherwise specified)

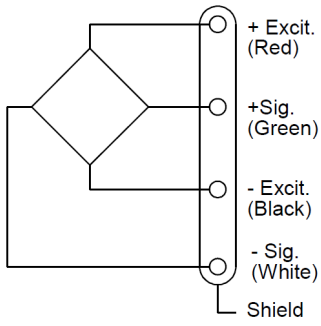
PARAMETERS	VALUES	NOTES
Supply Voltage	10VDC	See option table for other Voltages
Input Resistance	1000Ω nom.	
Output Resistance	400Ω nom.	
Non-Repeatability	±0.25% FSO	
Thermal Sensitivity Shift "TSS"	±2% / 50°C [/100 °F]	
Operating Temperature	-40°C to 80°C [-40 to 170 °F]	
Compensated temperature	0°C to 60°C [32 to 140 °F]	See option table for other temperatures
Zero Offset at 23℃	±10 mV	
Protection index	IP68 – 10 meters (1bar)	
CE conformance according to	EN 61010-1, EN 50081-1, EN 50082-1	

For custom configurations, consult factory.

DIMENSIONS & WIRING SCHEMATIC (IN METRIC)



Dimensions in mm



Cable shield is not connected to main body

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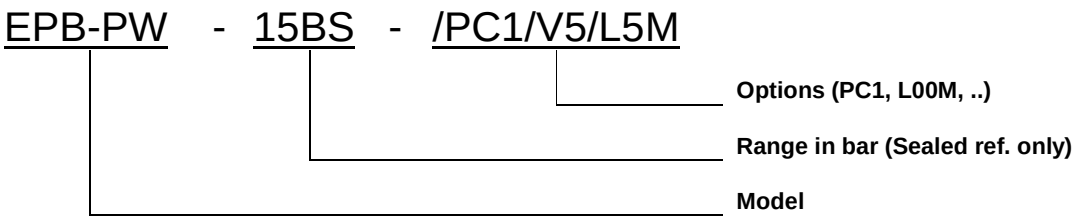
OPTIONS

Z0 : Compensation Temperature Range -40 to 20℃ [-40 to 70℉]
V5 : Excitation 5 Vdc and signal 50% of the FSO range
PCxx : Porous Ceramic installed. Replace “xx” by air entry value 0.5; 1; 3 or 5 bar
L00M : Special cable length, replace “00” with total length in meters

ORDERING INFORMATION



RECOMMENDED ACCESSORIES

Description	Air entry value	Maximum pore size	Part Number
PC: Porous Ceramic with air entry from 0.5 to 5 bar ordered separately	Porous Ceramic 0.5 bar	6.0 µm	ZPBS6220040.5
	Porous Ceramic 1 bar	2.5 µm	ZPBS6220041
	Porous Ceramic 3 bar	0.7 µm	ZPBS6220043
	Porous Ceramic 5 bar	0.5 µm	ZPBS6220045
BF: Bronze Filter	Consult factory	Consult factory	Consult factory

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