



- **Stainless Steel Pressure Sensor**
- **Flush Diaphragm**
- **Small threads**
- **Suitable for general applications**
- **Broad frequency range**

## DESCRIPTION

The EPX is a miniature threaded pressure sensor with stainless steel flush diaphragm compatible with general media. Threads M5x0.8 or 10-32 UNF are available with built-in O-ring seal for an easy installation. The EPX is offered in many pressure ranges from 0.35 to 350 bar (5 to 5000 psi) with gage, sealed gage, or absolute pressure reference. Non standard excitation, compensated temperatures, cable and thread lengths are available as options.

## FEATURES

- Small Threads M5x0.8 or 10-32 UNF
- Ranges from 0.35 to 350 bar (5 to 5,000 psi)
- Stainless Steel Construction
- Useful frequency up to 90kHz
- CE approved

## APPLICATIONS

- General testing
- Automotive, marine and flight testing
- Space flight and experimentation

## STANDARD RANGES

Pressure ranges		Pressure Reference			Pressure Limit	Resonant Frequency <sup>(1)</sup> (nom.)	Output "FSO" (nom.)	CNL&H (%FSO)	Thermal Zero Shift "TZS" (/50°C)
(BAR)	(PSI)	gage (type1)	sealed (type2)	abs. (type3)					
0.35	5	•	•	•	10 x FS	45 KHz	15 mV	±1%	±1mV
0.7	10	•	•	•	5 x FS	50 KHz	25 mV	±1%	±1mV
1	15	•	•	•	3.5 x FS	65 KHz	30 mV	±1%	±1mV
1.5	25	•	•	•	2 x FS	65 KHz	50 mV	±1%	±2% FSO
3.5	50	•	•	•	2 x FS	75 KHz	75 mV	±1%	±2% FSO
7	100	•	•	•	2 x FS	80 KHz	125 mV	±0.5%	±1.5% FSO
15	250	•	•	•	2 x FS	120 KHz	125 mV	±0.5%	±1.5% FSO
35	500	•	•	•	2 x FS	150 KHz	125 mV	±0.5%	±1.5% FSO
70	1K	•	•	•	2 x FS	200 KHz	125 mV	±0.5%	±1.5% FSO
150	2.5K	•	•	•	1.6 x FS	300 KHz	125 mV	±0.5%	±1.5% FSO
350	5K	•	•	•	1.2 x FS	450 KHz	125 mV	±0.5%	±1.5% FSO

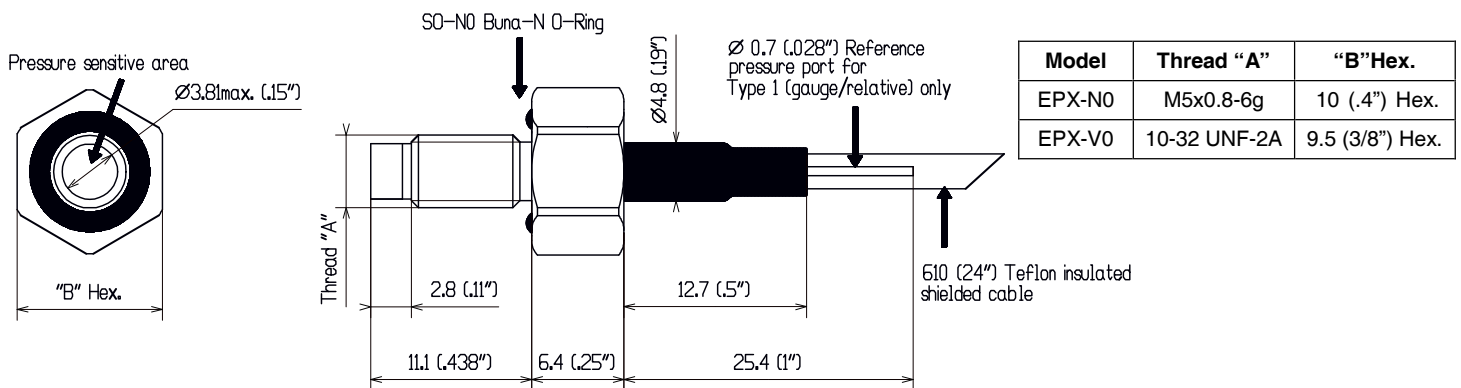
Note 1: useful frequency is 20% of Resonant Frequency

## PERFORMANCE SPECIFICATIONS

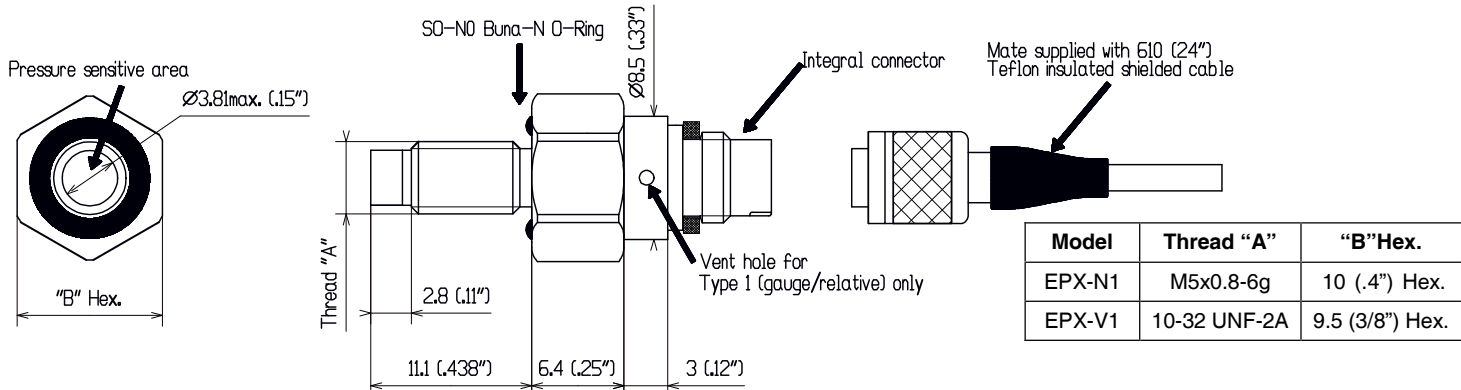
PARAMETERS	VALUES	NOTES
Supply Voltage	10VDC	See option table for other Voltages
Input Resistance	1200Ω nom.	
Output Resistance	350Ω nom.	
Non-Repeatability	± 0.25 % FSO	
Thermal Sensitivity Shift "TSS"	±2%/50°C	
Operating Temperature	-40°C to 120°C	
Compensated temperature	20°C to 80°C	See option table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

## DIMENSIONS

### EPX-N0 & EPX-V0



### EPX-N1 & EPX-V1



Dim : mm ( inches)

## INSTALLATION

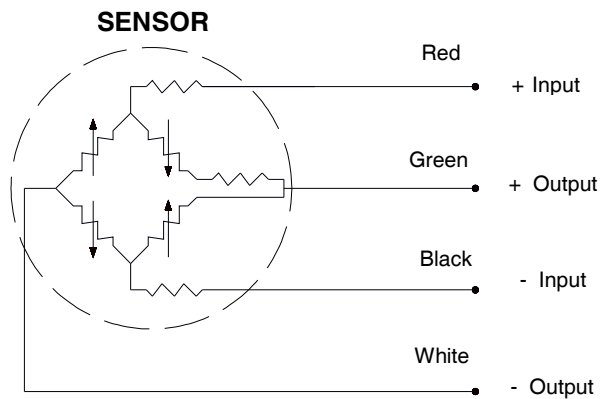
### Recommended installation torque :

FS ≤ 3.5 bar (50 psi) : 0.6 m.N (5 In.Lbs)

FS > 3.5 to 35 bar (50 to 500 psi) : 1.2 m.N (10 In.Lbs)

FS > 35 bar (500 psi) : 1.8 m.N (15 In.Lbs)

## CONNECTIONS



## 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
	Z*	Non-standard, contact ALTHEN
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 ALTHEN
Special Cable Length	L00F	Replace "00" with total length in feet
	L00M	Replace "00" with total length in meters
Custom Length Hex to Tip	0000I	Replace "0000" with thread length in inches between 0.25" to 1.5"
	0000M	Replace "0000" with thread length in millimeters between 6.3 to 38mm
Waterproofing Cable Exit (only for models N0 or V0 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)
Extra O-Rings for EPX	SO-N0	BUNA-N
	SO-N2	Viton
	SO-N3	Teflon

## ORDERING INFORMATION

Model	-	Body	Pres. Ref.	-	Range & Unit <sup>(1)</sup>		-	/Options
EPX	-	N0 N1 V0 V1	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, or Z* /V1 thru V10 or V* /L00F or L00M /0000I or 0000M /X /C or RS

Note 1: select ranges in BAR with body N and ranges in PSI with body V.

Examples of model construction: EPX-N13-7B-/Z1/V5/L3M/38M or EPX-V01-15P-/Z0/L6F/1.5I/C

We reserve the right to vary the foregoing details without prior notice.



**ALTHEN GmbH Mess- und Sensortechnik**

Frankfurter Strasse 150-152  
65779 Kelkheim / Germany

phone: +49 (0)6195 70060  
fax: + 49 (0)6195 700666

sales@althensensors.com  
www.althensensors.com