

EPXO Series



- **Stainless Steel Pressure Sensor**
- **Flush diaphragm**
- **High frequency response**
- **Amplified or unamplified output**
- **High operating temperatures**

DESCRIPTION

The EPXO is a high performance, stainless steel flush diaphragm. It is designed for high temperature, high stability, and high sensitivity applications. The EPXO is offered in pressure ranges from 10 to 500 bar in gage (vented), sealed gage, and absolute pressure. Various compensated temperature ranges are available from -40°C up to 200°C. The sensor is offered with an amplified or unamplified output.

FEATURES

- Thread M10 or 3/8-24 UNF
- Ranges from 10 to 500 bar (150 to 7500 psi)
- Rugged Stainless Steel Construction
- CE approved

APPLICATIONS

- Chemical processing
- Automotive test benches
- Marine and Flight testing

STANDARD RANGES

Pressure ranges		Pressure Reference			Pressure Limit	Resonant Frequency ⁽¹⁾ (nom.)	Output "FSO" ⁽²⁾ (nom.)	CNL&H (%FSO)	Thermal Zero Shift "TZS" (/50°C)
(BAR)	(PSI)	gage (type1)	sealed (type2)	abs. (type3)					
10	150	•	•	•	1.5 x FS	30 KHz	9 mV or 5V	±0.75%	± 1 % FSO
15	200	•	•	•	1.5 x FS	45 KHz	9 mV or 5V	±0.75%	± 1 % FSO
20	300	•	•	•	1.5 x FS	50 KHz	9 mV or 5V	±0.75%	± 1 % FSO
35	500	•	•	•	1.5 x FS	65 KHz	9 mV or 5V	±0.75%	± 1 % FSO
70	1K		•	•	1.5 x FS	95 KHz	9 mV or 5V	±0.75%	± 1 % FSO
100	1.5K		•	•	1.5 x FS	110 KHz	9 mV or 5V	±0.75%	± 1 % FSO
150	2K		•	•	1.5 x FS	130 KHz	9 mV or 5V	±0.75%	± 1 % FSO
200	3K		•	•	1.5 x FS	150 KHz	9 mV or 5V	±0.75%	± 1 % FSO
350	5K		•	•	1.5 x FS	190 KHz	9 mV or 5V	±0.75%	± 1 % FSO
500	7.5K		•	•	1.5 x FS	230 KHz	9 mV or 5V	±0.75%	± 1 % FSO

Note 1 : useful frequency is 20% of Resonant Frequency for types P0, P4, X0 and X4; 3 KHz at 1dB for P2, P6, X2, X6 and 1 KHz at 1dB for P3, P7, X3 and X7.

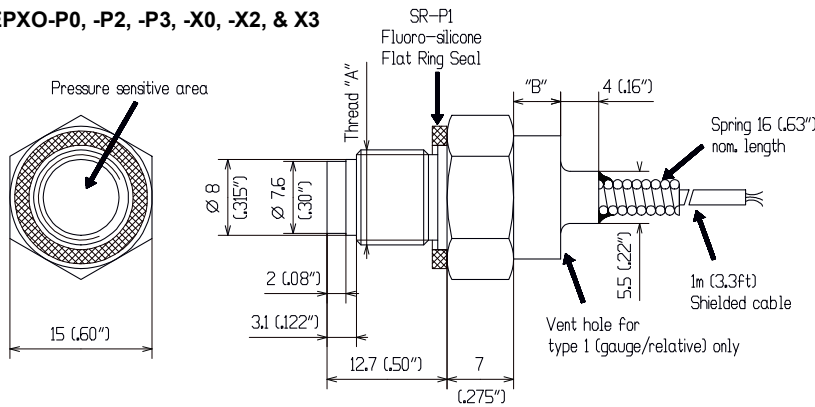
Note 2 : FSO is 9 mV nom. for types P0, P4, X0 and X4; 5V nom. on all others.

PERFORMANCE SPECIFICATIONS

PARAMETERS	VALUES	NOTES
Supply Voltage	P0, P4, X0 & X4 = 5VDC P2, P6, X2 & X6 = ±15VDC P3, P7, X3 & X7 = 28 VDC (24-32VDC)	See option table for other Voltage
Input Resistance	P0, P4, X0 & X4 = 1KΩ nom. P2, P3, P6, P7, X2, X3, X6 & X7 =15 mA max.	
Output Resistance	P0, P3, P4, P7, X0, X3, X4, & X7 =1KΩ nom. P2, P6, X2 & X6 ≤1Ω	
Non-Repeatability	± 0.25% FSO	
Thermal Sensitivity Shift "TSS"	± 1%/50°C	
Operating Temperature	-40°C to 125°C or 220°C on P0 & X0 with option Z36 or Z38	
Compensated temperature	0°C to 60°C	See option table for other temperature
Zero Offset at 23°C	± 5% FSO	
CE conformance according to	EN 61010-1, EN 50081-1, EN 50082-1	

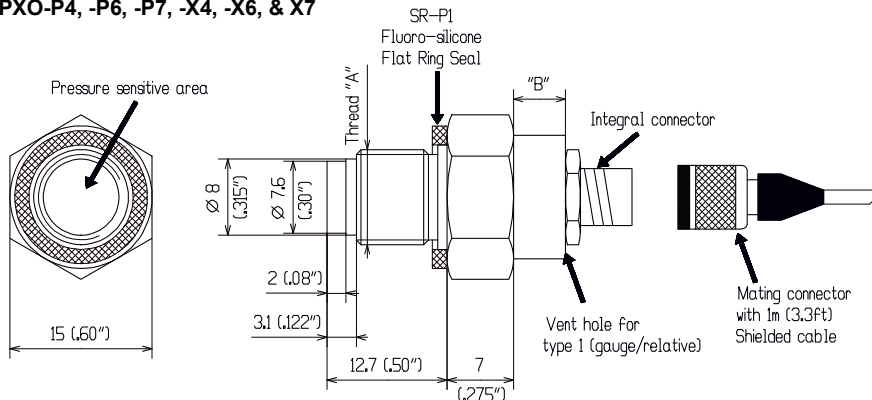
DIMENSIONS

EPXO-P0, -P2, -P3, -X0, -X2, & X3



Model	Thread "A"	"B"
EPXO-P0	M10x1-6g	0
EPXO-P2, -P3	M10x1-6g	5 (.20")
EPXO-X0	3/8-24UNF-2A	0
EPXO-X2, -X3	3/8-24UNF-2A	5 (.20")

EPXO-P4, -P6, -P7, -X4, -X6, & X7



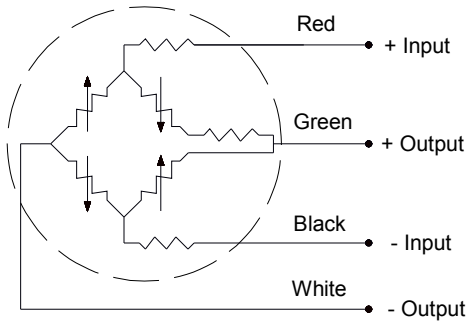
Model	Thread "A"	"B"
EPXO-P4	M10x1-6g	5.5 (.22")
EPXO-P6, -P7	M10x1-6g	9.5 (.375")
EPXO-X4	3/8-24UNF-2A	5.5 (.22")
EPXO-X6, -X7	3/8-24UNF-2A	9.5 (.375")

Dim : mm (inches)

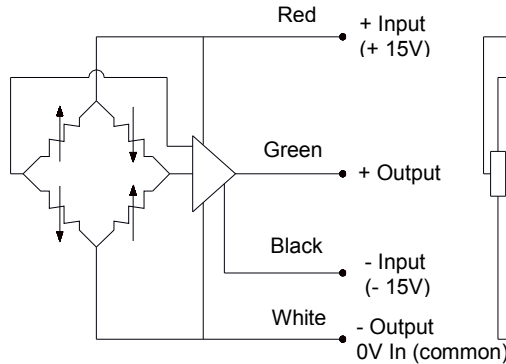
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CONNECTIONS & INSTALLATION

EPXO-P0, -P4, -X0 & -X4

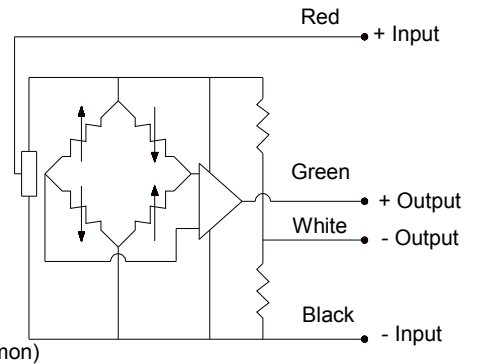


EPXO-P2, -P6, -X2 & -X6



It is recommended that "0V COMMON" of the power supply be grounded if consistent with proper operation of the instrumentation system.

EPXO-P3, -P7, -X3 & -X7



Common mode output voltage of + 2V nom. referred to - Input

Recommended installation torque : FS ≤ 100 bar (1500 psi) : 1 m.N (8 In.Lbs)
FS > 100 bar (1500 psi) : 2 m.N (16 In.Lbs)

OPTIONS AND ACCESSORIES

OPTIONS	CODES	DESCRIPTIONS
Compensated Temperature Ranges	Z02	-40°C to 60°C
	Z35	20°C to 120°C
	Z36	20°C to 150°C on type P0 & X0 and SR-P2 seal only (In/out of 350Ω)
	Z38	20°C to 200°C on type P0 & X0 and SR-P2 seal only (In/out of 350Ω)
	Z*	Non-standard, contact MEAS
Supply Voltage (12U: only for model P3, P7, X3, X7)	12U	8 to 16 VDC, FSO = 2.5 V with VCM = 1 V from -Output to Ground
	V*	Non-standard Excitation contact MEAS
Special Cable Length	L00F	Replace "00" with total length in feet
	L00M	Replace "00" with total length in meters
Waterproofing Cable Exit (only for models P0, P2, P3, X0, X2 and X3, sealed or absolute)	X	Short Term Waterproofing (limited to 125°C)
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 EPXO	SR-P1	Fluoro-silicone
	SR-P2	Viton

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ORDERING INFORMATION

Model	-	Body	Pres. Ref.	-	Range & Unit ⁽¹⁾		-	/Options
EPX0	-	P0, P2, P3 P4, P6, P7 X0, X2, X3 X4, X6, X7	1 = Gauge 2 = Sealed 3 = Absolute	-	10B 15B 20B 35B 70B 100B 150B 200B 350B 500B	150P 200P 300P 500P 1KP 1.5KP 2KP 3KP 5KP 7.5KP	-	/Z02, Z35, Z36, Z38 or Z* /12U or V* /L00F or L00M /X /C or RS

Note 1: select ranges in BAR with body P and ranges in PSI with body X.

Examples of model construction: EPXO-P22-200B-/Z02/L3M or EPXO-X31-500P-/L6F/C

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