



## FPEPXO series

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



The FPEPXO is a high performance, stainless steel flush diaphragm. It is designed for high temperature, high stability, and high sensitivity applications. The FPEPXO 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 <sup>(1)</sup> (nom.)	Output "FSO" <sup>(2)</sup> (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.

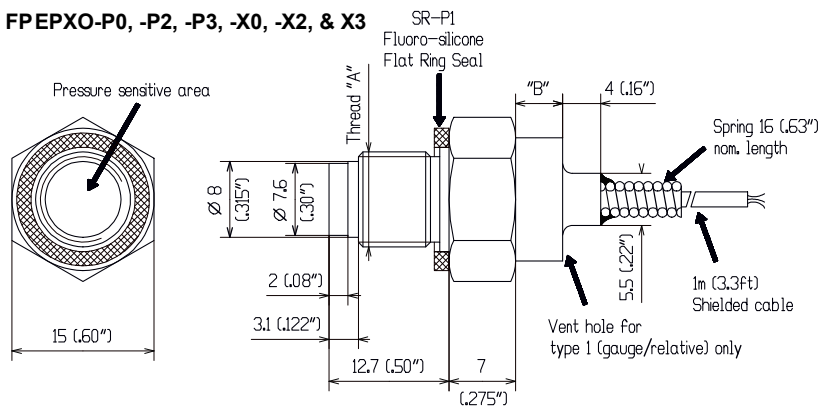
Note 2 : FSO is 9 mV nom. for types P0, P4, X0 and X4; 5V nom. on all others.

## ■ Performance specifications

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

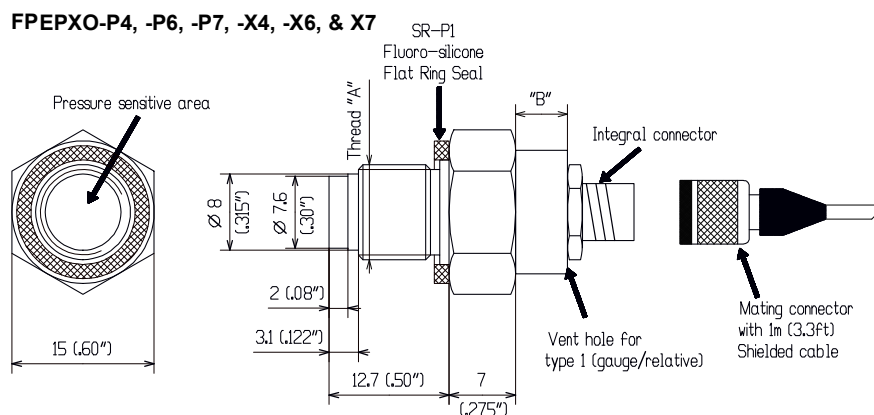
## ■ Dimensions

### FPEPXO-P0, -P2, -P3, -X0, -X2, & X3



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

### FPEPXO-P4, -P6, -P7, -X4, -X6, & X7

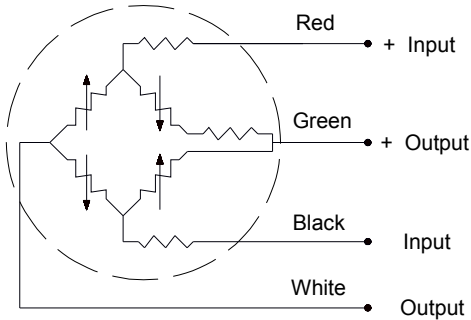


Model	Thread "A"	"B"
FPEPXO-P4	M10x1 6g	5.5 (.22")
FPEPXO-P6,-P7	M10x1 6g	9.5 (.375")
FPEPXO-X4	3/8 24UNF 2A	5.5 (.22")
FPEPXO-X6,-X7	3/8 24UNF 2A	9.5 (.375")

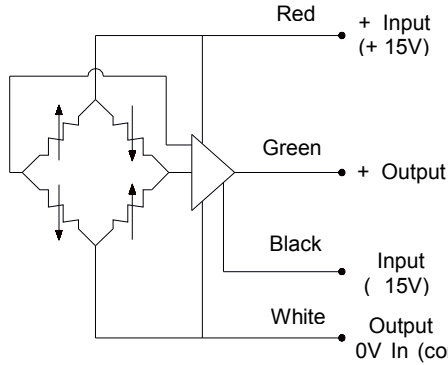
Dim : mm (inches)

## ■ Connections & Installation

### FPEPXO-P0, -P4, -X0 & -X4

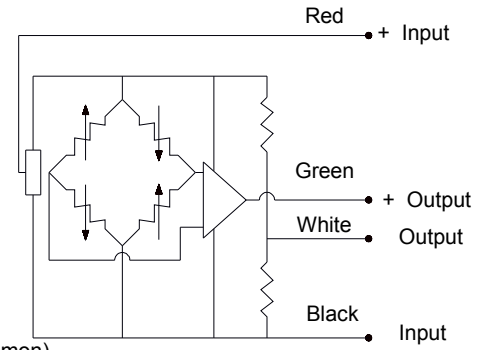


### FPEPXO-P2, -P6, -X2 & -X6



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

### FPEPXO-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 350 )
	Z38	20°C to 200°C on type P0 & X0 and SR P2 seal only (In/out of 350 )
	Z*	Non standard, contact Altheris
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 Altheris
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

■ Ordering information

Model	-	Body	Pres. Ref.	-	Range & Unit <sup>(1)</sup>		-	/Options
FPEPX0		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: FPEPX0 P22 200B /Z02/L3M or EPX0 X31 500P /L6F/C

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