

## FEATURES

- ◆ Built in stainless Steel
- ◆ M16 thread
- ◆ High Level Tension Output Available
- ◆ Accepts wide range of fluids

## APPLICATIONS

- ◆ Industrial pump discharge
- ◆ Corrosive fluid storage
- ◆ Onboard equipment monitoring
- ◆ Hydraulic regulation process
- ◆ Laboratory and research

## FP110

### Flush Diaphragm Pressure Transducer

#### SPECIFICATIONS

- ◆ Ranges from 10 to 500 bars (150 to 7500 psi)
- ◆ Gage pressure reference
- ◆ IP66 protection
- ◆ For static and dynamic applications

The **FP110** is designed to measure static and dynamic pressure with the output characteristics substantially kept up to about 20% of the resonant frequency.

The all stainless steel construction and flush diaphragm allow the sensor to be used under a wide variety of conditions and in temperatures up to 120 °C. For 200°C high temperature range model **FP120-/HT**.

Fitted with metallic strain gauges in a Wheatstone bridge circuit, the **FP110** provides excellent temperature stability. An on-board **A1** or **A2** amplifier for high level output is optionally available.

Consult TE CONNECTIVITY's Engineering Department if the standard options do not meet your needs or should your application require a more comprehensive measurement system.

On request, Instruction documents can be provided to ease the selection and use of our sensors and provide helpful tips.

**STANDARD RANGES**

<b>Range in bar (FS)</b>	10	20	50	100	200	350	500
<b>Range in psi</b>	150	300	750	1 500	3 000	5 000	7 500
<b>Accuracy %FS</b>	<±0.3	<±0.3	<±0.3	<±0.3	<±0.5	<±0.5	<±0.5
<b>Over-range</b>	X2	X2	X2	X2	X2	X2	X1.5
<b>Resonance Frequency (kHz)</b>	15	20	27	35	40	45	55

**PERFORMANCE SPECIFICATIONS (typical values at temperature 23±3°C)**

<b>Parameters</b>	
Operating Temperature Range (OTR)	-40 to 80 ° C [-40 to 176 ° F]
Compensated Temperature Range (CTR)	0 to 60 ° C [32 to 140 ° F]
Thermal Zero Shift in CTR	<1% F.S./50°C [100°F]
Thermal Sensitivity Shift in CTR	<1.5% of Reading / 50 °C [100° F]
Range (FS)	See standard ranges table
<b>Over-Range</b>	
Without Damage	1.5x to 2x FS
Without Destruction	3x FS
<b>Accuracy</b>	
Combined Non-Linearity & Hysteresis	±0.3 to ±0.5% F.S. (see table page 1)

**Electrical Characteristics**

<b>Model</b>	<b>FP110</b>	<b>FP110-A1</b>	<b>FP110-A2</b>
Supply Voltage	10 Vdc	10 to 30 Vdc	±15 Vdc (±12 to ±18 Vdc)
F.S. Output <sup>5</sup>	1.2 mV/V	4 V ±0.2V.	5 V ±0.2V
Zero Offset <sup>5</sup>	<± 5% F.S.	0.5 V ±0.2V	0 V ±0.2V
Input Impedance/Consumption	350 Ω	<25 mA	<25 mA
Output Impedance	350 Ω	1 kΩ <sup>6</sup>	1 kΩ <sup>6</sup>
Insulation under 50Vdc	≥100 MΩ	≥100 MΩ	≥100 MΩ

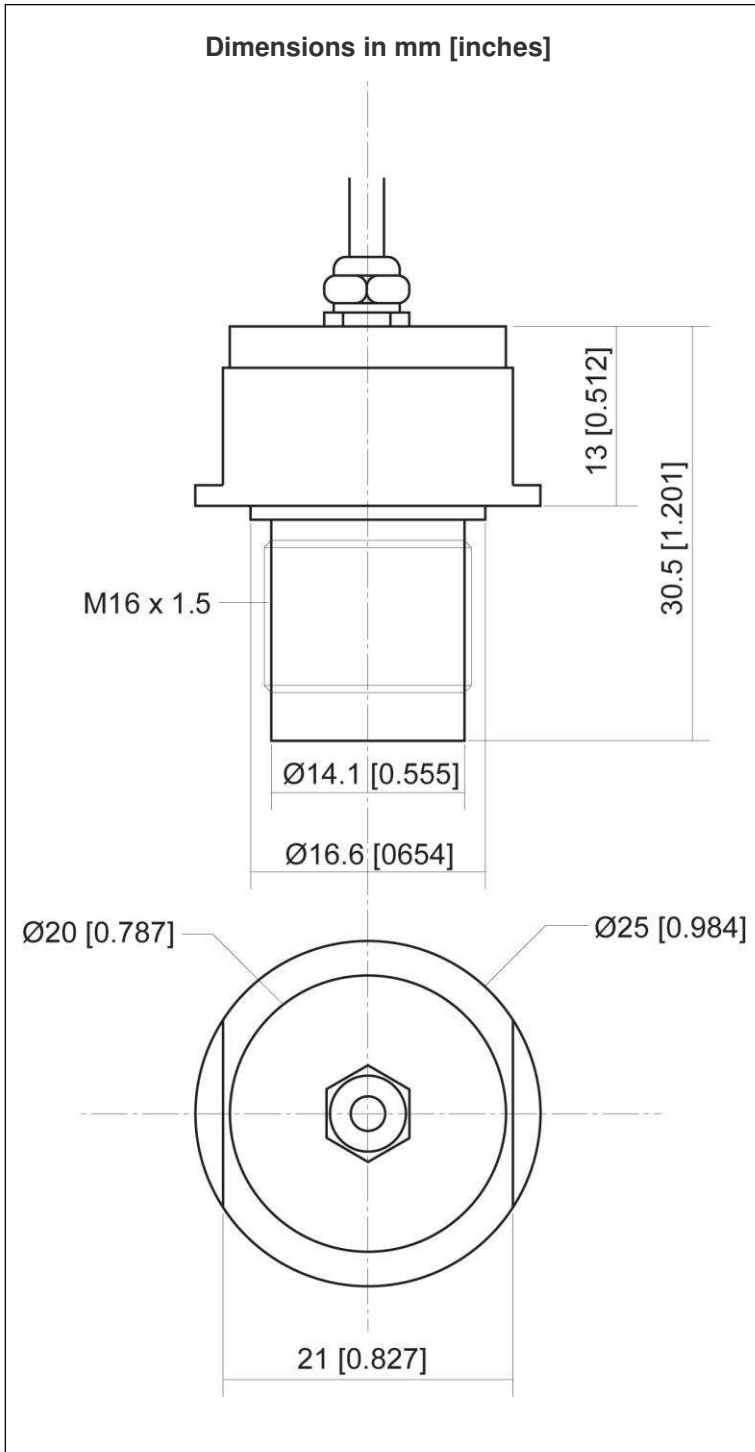
**Notes**

1. Electrical Termination: Shielded cable, 4 wires, standard length 2m [6.6ft]
2. Material: Body and flush diaphragm in stainless steel, laser welded
3. Protection Index: IP66
4. Self-centered, sealing ring supplied with the sensor.
5. Standard output signal, custom outputs available on request
6. Output impedance standard, available <100Ω on request.
7. CE conformance according to EN 61010-1, EN 50081-1, EN 50082-1

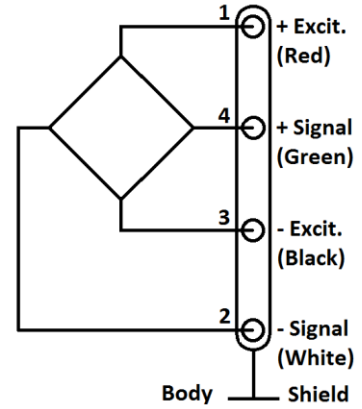
# FP110

Flush Diaphragm Pressure Transducer

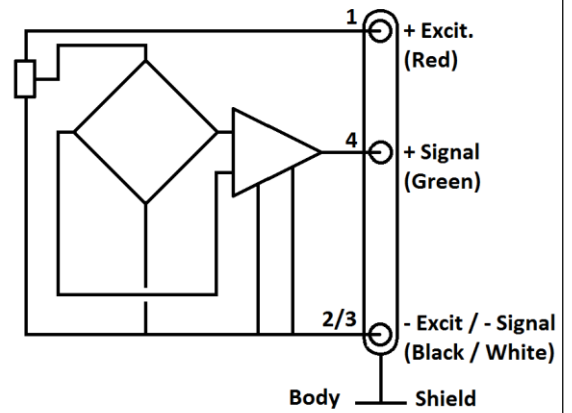
## DIMENSIONS & WIRING SCHEMATIC (IN METRIC AND IMPERIAL)



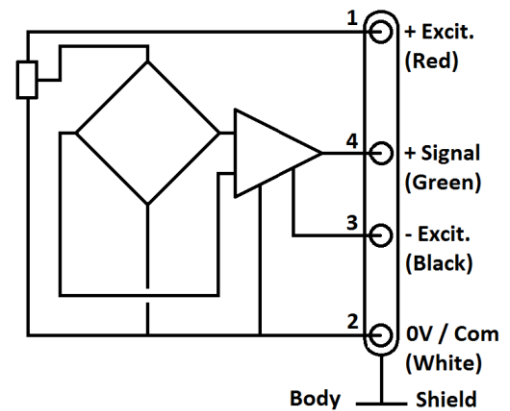
### Wiring Schematic



### Version -A1



### Version -A2



## FP110

Flush Diaphragm Pressure Transducer

### OPTIONS

<b>A1</b> : Amplified Tension output with unipolar power supply
<b>A2</b> : Amplified Tension output with bipolar power supply
<b>ET1</b> : CTR -20 to 100 °C [-4 to 212°F]
<b>L00M</b> : special cable length, replace "00" with total length in meters

### ORDERING INFO

<b>FP110</b>	-	<b>A1</b>	-	<b>20B</b>	<b>G</b>	-	<b>/Z1/ET1</b>
Modèle	-	Electrical interface	-	Etendue de mesure	Pression de référence	-	/Options
<b>FP110</b>	-	(empty) = bridge mV/V <b>A1</b> = 0.5 to 4.5V <b>A2</b> = 0 to 5V	-	<b>10B</b> <b>20B</b> <b>50B</b> <b>100B</b> <b>200B</b> <b>350B</b> <b>500B</b>	<b>G</b> = Gage	-	<b>/ET1</b> <b>/L00M</b>

The sensor ordering codes uses only bar as units because **FP110** uses metric threads. Psi value correspondence is noted as information.

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