

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

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

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

Parameters	
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
Over-Range	
Without Damage	1.5x to 2x FS
Without Destruction	3x FS
Accuracy	
Combined Non-Linearity & Hysteresis	±0.3 to ±0.5% F.S. (see table page 1)

Electrical Characteristics

Model	FP110	FP110-A1	FP110-A2
Supply Voltage	10 Vdc	10 to 30 Vdc	±15 Vdc (±12 to ±18 Vdc)
F.S. Output ⁵	1.2 mV/V	4 V ±0.2V.	5 V ±0.2V
Zero Offset ⁵	<± 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 ⁶	1 kΩ ⁶
Insulation under 50Vdc	≥100 MΩ	≥100 MΩ	≥100 MΩ

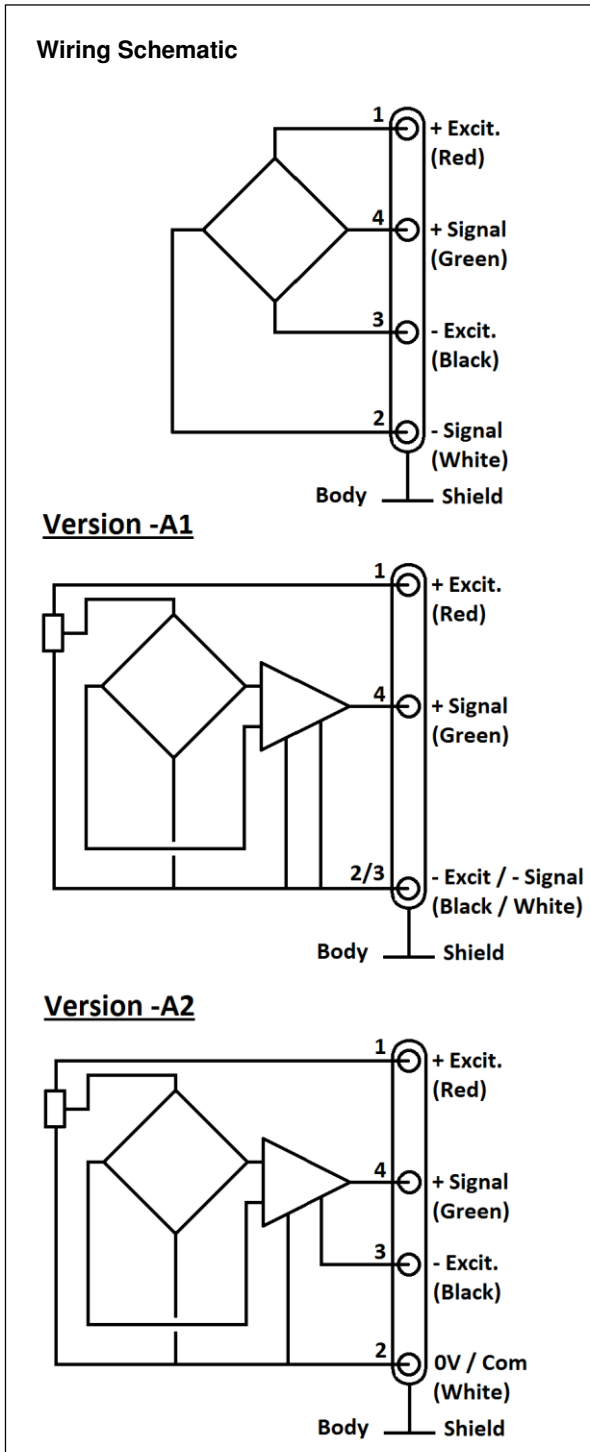
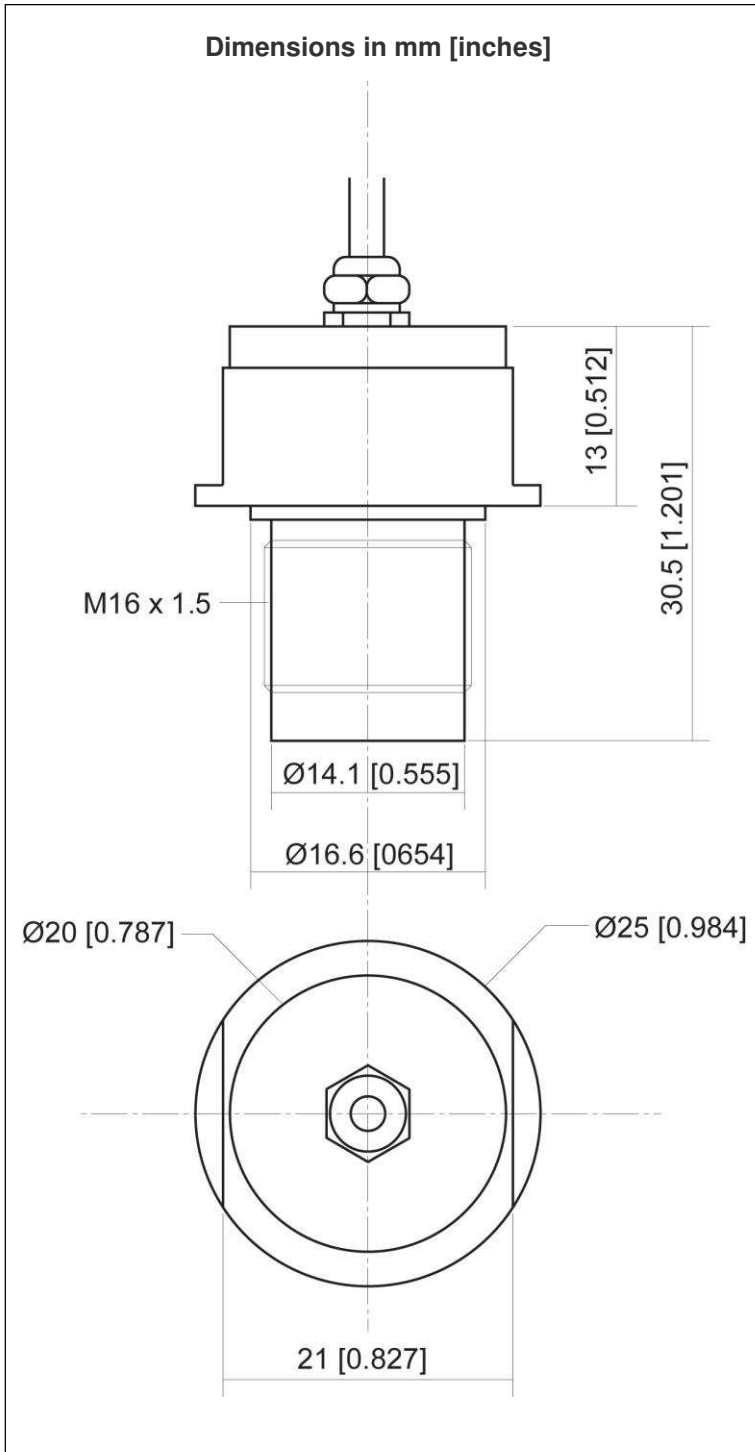
Notes

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)



FP110

Flush Diaphragm Pressure Transducer

OPTIONS

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

ORDERING INFO

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

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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