

# FUTEK MODEL PFT510

## MINIATURE FLUSH MOUNT DIAPHRAGM PRESSURE SENSOR (Previously P511J)

CE COMPLIANT

Drawing Number: FI1159-F

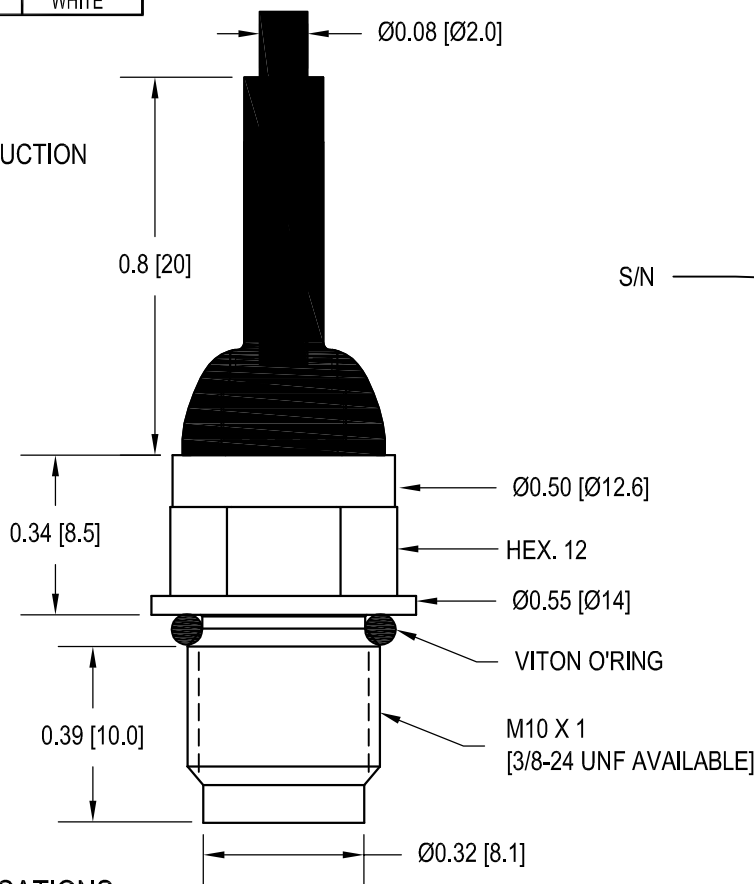
INCH [mm] | R.O.= Rated Output

WIRING CODE (WC1)

+Excitation	-Excitation	+Signal	-Signal
RED	BLACK	GREEN	WHITE

Shield
GROUNDED

- FLUSH MOUNT
- STAINLESS STEEL CONSTRUCTION
- NEMA 4 (IP 65)



### TECHNICAL SPECIFICATIONS:

(REFERENCE CONDITION: 20°C)

\* Numbers in BAR are not the exact conversion from PSI's

\*\* The provided Viton o-ring is not recommended for operation under -14°F.  
For operation under -14°F, within the rated sensor operating temperature, please consider the use of Buna-N or Silicone o-rings.

CAPACITY:  $\left( \frac{\text{PSI}}{\text{BAR}^*} \right) \left( \frac{225}{15} \right) \left( \frac{750}{50} \right) \left( \frac{3000}{200} \right) \left( \frac{7500}{500} \right) \left( \frac{10000}{700} \right)$

TYPE: SEALED GAGE

### PERFORMANCE:

RATED OUTPUT:	1-2 mV/V nom.
SAFE OVERLOAD:	150% of R.O.
BURST PRESSURE:	300% of R.O.
ZERO BALANCE:	±3% of R.O.
EXCITATION(VDC)	7 MAX
NONLINEARITY	±0.4% of R.O. B.F.S.L. ; ±0.8% of R.O. End Point
HYSTERESIS	±0.2% of R.O. B.F.S.L. ; ±0.4% of R.O. End Point
NONREPEATABILITY	±0.02% of R.O. typ.
NATURAL FREQUENCY	FROM 6 KHz (225 PSI) TO 100 KHz (10000 PSI)
INSULATION RESISTANCE	>1000 MΩ @ 50VDC and 20°C
BRIDGE RESISTANCE	350 Ω nom.
CALIBRATION	CERTIFICATE OF CONFORMANCE INCLUDED NIST TRACEABLE 5 pt. CALIBRATION AVAILABLE

### MECHANICAL SPECIFICATION:

WEIGHT:	< 10g WITHOUT CABLE
WETTED/ BODY MATERIAL:	17-4 PH Stainless Steel
ENCLOSURE PROTECTION:	NEMA 4 (IP 65)
ELECTRICAL CONNECTION:	#29 Awg 4 Conductor Spiral Shielded Silicone Cable , 5 ft Long
RECOMMENDED MOUNTING TORQUE:	5 Nm MAX

### ENVIRONMENTAL :

OPERATING TEMPERATURE**	-40 to +194°F [-40 to +90°C]
COMPENSATED TEMPERATURE	+32 to +140°F [0 to +60°C]
SHOCK:	100 G'S 1/2 SINUSOIDAL - 1 ms
VIBRATION:	±0.02 of R.O. / G (20-2000 Hz, 50 G MAX)
TEMP. SHIFT ZERO } TEMP. SHIFT SPAN }	±0.02% of R.O./°F [±0.036% of R.O./°C]
EMI/RFI:	EN61000

**FUTEK**  
ADVANCED SENSOR TECHNOLOGY, INC.

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