# FUTEK/EFE MODEL P980 SERIES *MINIATURE FLUSH DIAPHRAGM PRESSURE SENSOR*

**Drawing Number: F2878**

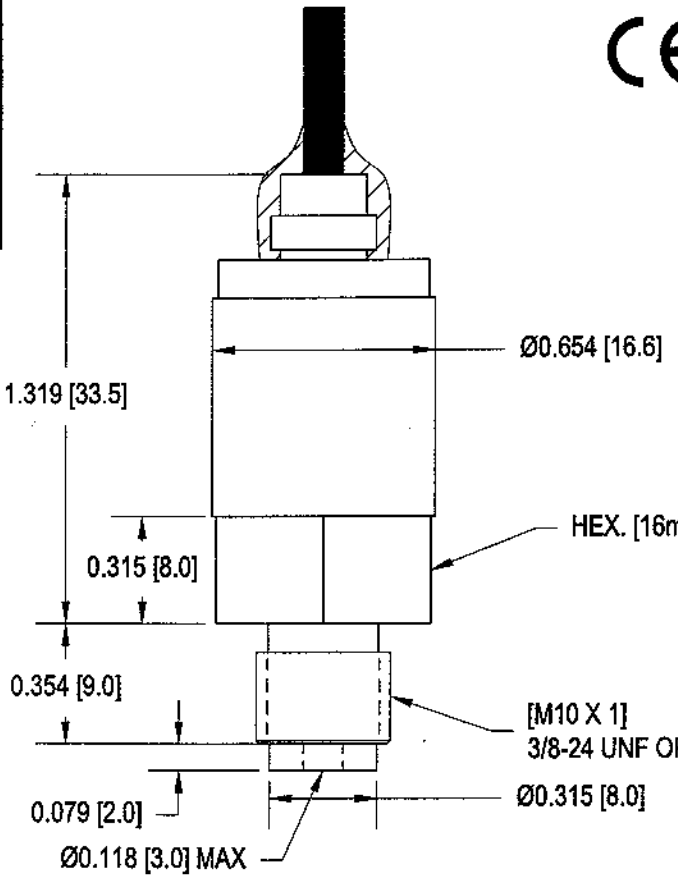
INCH [mm] | R.O.= Rated Output

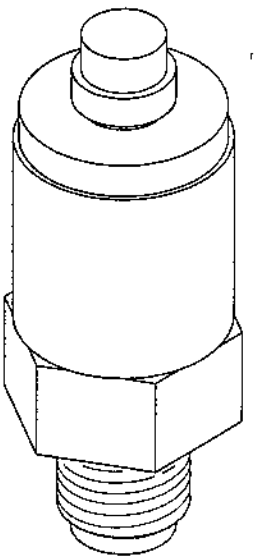
| P983 & P984 WIRING CODE (WC5) | | |
|---|---|---|
| +Excitation | +Signal | COMMON |
| RED | GREEN OR YELLOW | BLUE OR BLACK |

| P985 WIRING CODE (WC6) | |
|---|---|
| +Excitation | +Signal |
| RED | GREEN OR YELLOW |

CE COMPLIANT

- THIN FILM TECHNOLOGY
- STAINLESS STEEL CONSTRUCTION
- COMPATIBLE WITH MOST FLUIDS
- AVAILABLE IN ABSOLUTE



CABLE AND SHRINK NOT SHOWN

| SPECIFICATIONS | MODEL P983 | MODEL P984 | MODEL P985 |
|---|---|---|---|
| *RATED OUTPUT* | *4.5 VDC ±0.025* | *4.5 VDC ±0.025* | *20 mA ±0.2* |
| *ZERO BALANCE* | *0.5 VDC ±0.025* | *0.5 VDC ±0.025* | *4 mA ±0.1* |
| *EXCITATION* | *5 VDC ±0.05* | *12 to 30 VDC* | *12 to 30 VDC* |

## TECHNICAL SPECIFICATIONS:

(REFERENCE CONDITION:20°C)

$$\text{CAPACITY: } \left(\frac{\text{PSI}}{\text{BAR}}\right) \quad \left(\frac{145}{10}\right)\left(\frac{232}{16}\right)\left(\frac{363}{25}\right)\left(\frac{580}{40}\right) \quad \left(\frac{1450}{100}\right)\left(\frac{3626}{250}\right)\left(\frac{5801}{400}\right)$$

### PERFORMANCE:

| | |
|---|---|
| RATED OUTPUT: | SEE CHART |
| SAFE OVERLOAD: | 150% of R.O. |
| BURST PRESSURE: | 400% of R.O. TO A MAXIMUM OF 20,000 psi WHICH IS LESS |
| ZERO BALANCE: | SEE CHART |
| EXCITATION(VDC) | SEE CHART |
| COMBINED NONLIN. & HYSTERESIS | ±0.5% of R.O. |
| NONREPEATABILITY | ±0.1% of R.O. |
| LIFE, CYCLING | 10 MILLION CYCLES |
| RESPONSE TIME | 1 msec MAX |
| INSULATION RESISTANCE | 1000 Mohms @ 50Vcc |

### MECHANICAL SPECIFICATION:

| | |
|---|---|
| WEIGHT: | 50 g MAX |
| WETTED MATERIAL: | 17-4PH S.S. |
| BODY MATERIAL: | 316 S.S. |
| CAVITY VOLUME: | - |
| ENCLOSURE PROTECTION: | NEMA 4 (IP 65) |
| ELECTRICAL CONNECTION: | 26 AWG, 4 CONDUCTOR, SHIELDED TEFLON CABLE, 3 ft. [1 m] LONG |

### ENVIRONMENTAL :

| | |
|---|---|
| RESIDUAL NOISE | ±25 mVcc MAX |
| BRIDGE RESISTANCE: | - |
| OPERATING TEMPERATURE | -4 to 257°F[-20 to 125°C] |
| COMPENSATED TEMPERATURE | 68 to 176°F[20 to 80°C] |
| | - |
| SHOCK: | 20 G'S 1/2 SINEWAVE-11msec |
| VIBRATION: | 10 G'S PEAK TO PEAK SINUSOIDAL (2-2000Hz) |
| TEMP. SHIFT ZERO / TEMP. SHIFT SPAN | ±0.015% of LOAD/°F [0.03% of LOAD/°C] MAX |
| EMI/RFI | PER EN 55022 CLASS B & EN 50082-2 CONFORM CEM/89/336 |
| REVERSE POLARITY PROTECTION: | YES |


FUTEK
ADVANCED SENSOR TECHNOLOGY, INC.



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