



### APPLICATIONS:

APPLIANCE | ELECTRICAL | HVAC/R | MARINE | POOL & SPA | RV



*The ICM387 pressure transducer provides proven performance at a competitive price.*

### APPLICATIONS

- ✓ Discharge and suction pressure monitoring
- ✓ Subcooling and superheat calculations
- ✓ Compressor oil pressure monitoring
- ✓ Condenser fan control
- ✓ Compressor staging and unloading
- ✓ Electronic expansion valve control
- ✓ Remote systems diagnostics and trending

### SPECIFICATIONS

#### Pressure Ranges

- 0-500 psi

#### Performance

**Accuracy:** +/- 1.2% span (linearity, hysteresis, repeatability, calibration)

**Temperature error:** +/- 0.013% °C

#### Operating Temperature:

-40°C to +135°C

#### Electrical

- **Supply Voltage (Vin):** 4.5 to 5.5 Vdc
- **Output Voltage (Vout):** 0.5 to 4.5 Vdc typical
- **Supply Current:** 8 mA (maximum @ 5.5 Vdc with no load)
- **Output Current:** 2.5 mA (maximum sink or source)
- **Output Load:** 10K ohms typical Output

- **Output Response Time:** 10 mS
- **Overvoltage Protection:** 16 Vdc
- **Reverse Voltage:** 14 Vdc
- **Short Circuit Protected:** Yes
- **EMC (512 MHz-1 GHz):** 25 V/m
- **EMC (10 MHz-512MHz):** 50 V/m
- **ESD (CDF-AEC-Q100-002):** 15k V

#### Physical

- **Proof Pressure:** (5X) 15-75 psi, (3X) 100-300 psi, (2X) 500 psi
- **Burst Pressure:** 2CP5 1500 psi/2500 psi minimum
- **Cycle Life:** 10M F.S. cycles
- **Random Vibration** (50-2000 Hz): 11g
- **Drop (any axis):** 1.5 m
- **Electrical Connection:** Nema 4X, IP65

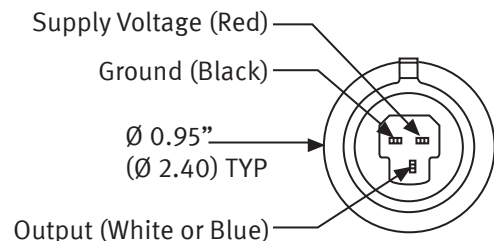
### FEATURES

- ✓ Ceramic capacitive sensor
- ✓ Durable, compact design
- ✓ Accurate performance over wide temperatures
- ✓ Overvoltage and short circuit protected
- ✓ Brass connector
- ✓ Sealed gauge (neoprene seal)

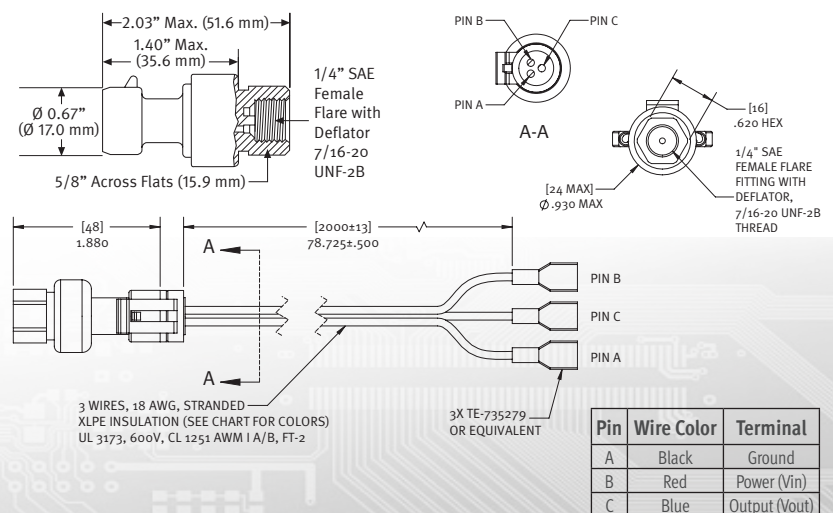
### MODE OF OPERATION

The standard design is ideal for demanding HVAC and refrigeration applications where long-term reliability is a must. The transducer is designed to operate with a 5Vdc supply, and to provide a robust 0 to 5Vdc output. The output is ratiometric to supply voltage, allowing the user to maintain accuracy with variation in the supply voltage. The electrical interface is a rugged industry accepted connector. The brass pressure connection has multiple threads. This device maintains accuracy through a wide temperature range.

### WIRING DIAGRAM



### DIMENSION DIAGRAM



Content and specifications on sell sheets subject to change without notice.