

Product Bulletin

2CP5/2CP50 Series

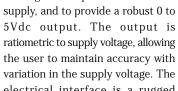
HVAC/Refrigeration Pressure Transducer

- UL Recognized
- Ceramic Capacitive Sensor
- Durable, compact design
- Low Cost
- Accurate performance over wide temperatures
- Overvoltage & short circuit protected

The 2CP5/2CP50 Series pressure transducer provides proven performance at a competitive price. 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 pressure connection is available in multiple threads in either plated steel or brass. This device maintains accuracy through a wide temperature range.

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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

Technical Specifications

Pressure Ranges

0-15 through 0-650 psi Standards listed on reverse For non-standard device contact TI

Performance

Accuracy. +/- 1.2% span (linearity, hysterisis, repeatability and calibration) Temperature error:+/- 0.013%/OC

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 Supply Current (Max @ 5.5 Vdc with no load) Output Current 2.5 mA (Max. sink or source) Output Load 10K ohms 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

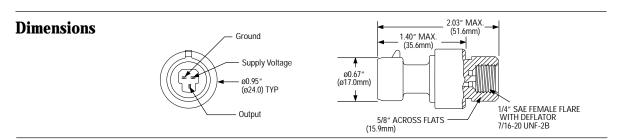
Proof Pressure 5X 15- 75psi 3X 100-300psi 2X 500psi Burst Pressure 2CP5 1500psi/2500psi min 2CP50 2500psi min Cycle Life 10M F.S. cycles Random Vibration 11g (50-2000 Hz) Drop (any axis)..... 1.5 m Electrical Connection ... Nema 4X, IP65

Agency

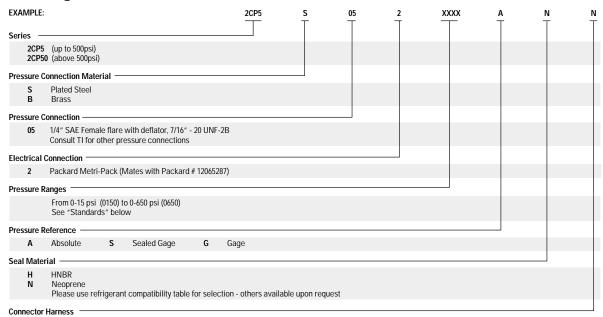
UL recognized File # SA995

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2CP5/2CP50 Series HVAC/Refrigeration Pressure Transducer



Ordering Information



Standards

none required

	Sample Order Number	Production Number	Comments
1	2CP5B0520150ANN	2CP5-46	brass, 0-150 psia
2	2CP5B0520200ANN	2CP5-49	brass, 0-200 psia
3	2CP5B0520300SNN	2CP5-50	brass. 0-300 psis
4	2CP5B0520400SNN	2CP5-51	brass, 0-400 psis
5	2CP5B0520500SNN	2CP5-47	brass, 0-500 psis
6	2CP5S0520500SNN	2CP5-48	steel, 0-500 psis

Packard Wire Harness 1-meter standard wire For other options please contact TI.

Туре	Seal Material	Refrigerant Compatibility	Maximum Seal Temperature Range
N	neoprene	R12 R22 R134a R404a R407c R410a R502 R507	-40°C to 120°C
Н	HNBR (Hydrogenated Nitrile)	R134a R404a R407c R410a R507	-20°C to 135°C

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