

The 65CP Series transducer delivers high performance at a low cost, suitable for a wide variety of high pressure industrial applications. This is a 0-5 Vdc high level output design that requires no end user amplification. Output is ratiometric to supply voltage. With a data conversion circuit referenced to supply voltage, accuracy can be maintained regardless of supply voltage variation. Packaged in a zinc-plated carbon steel housing with a rugged, weatherproof automotive-grade connector, this transducer is available in sealed gage from 750 psi up to 4000 psi with a variety of package options.



Features

High performance, Low cost *Lowest total cost solution*
 Zinc-plated carbon steel housing *Cost effective for general purpose use*
 Weathertight connector *Rugged and reliable*
 EMI protected to 100V/m. *High reliability in noisy environments*
 Wide operating temperature range *Wide range of applications*
 (-40°C to +135°C)
 Reverse polarity protection *Robust installation*

Benefits

Applications

- Hydraulic/Pneumatic Controls
- Pumps & Compressors
- Test & Measurement Instrumentation
- Medical Equipment
- HVAC/Refrigeration Equipment
- Transportation

Technical Specifications

Pressure Ranges

0-750, 1000, 1500, 2000, 3000, 4000 psis

Performance

Accuracy +/-1.0% span
(static error band @ 25°C, 5.0 Vdc)
(linearity, hysteresis, repeatability, calibration)
 Linearity +/-0.3% span
(component of accuracy)- BFSL
 Total Error Band:
 -20°C to +85°C +/-2.0% span
 -40°C to +135°C +/-3.0% span
 Operating Temperature* -40°C to +135°C
 Storage Temperature -40°C to +150°C

*refer to chart on reverse for seal material compatibility

Electrical

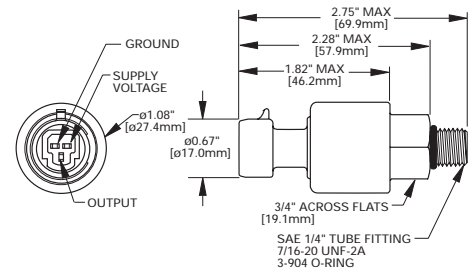
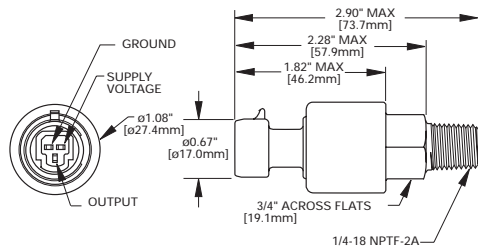
Supply Voltage 4.5 - 5.5 Vdc
 Output Voltage 0.5 - 4.5 Vdc
 Supply Current 7 mA
(Max @ 5.5 Vdc with no load)
 Output Current 2.5 mA
(Max, sink or source)
 Output Load Range 2K ohms-no load
 Output Response Time 10 mS
 Overvoltage Protection 16.5 Vdc
 Reverse Voltage Protection -14 Vdc
 EMC (512 MHz-1GHz) 50 V/m
 EMC (10 MHz-512 MHz) 100 V/m
 ESD (CDF-AEC-Q100-002) 15 kV
 Short Circuit Protected Yes

Physical

Proof Pressure 1.5X
 Burst Pressure
 0-750 psi through 0-2000 psi 5000 psi
 0-3000 psi through 0-4000 psi 8000 psi
 Cycle Life
 0-750 psi through 0-2000 psi 5M F.S. cycles
 0-3000 psi through 0-4000 psi consult factory
 Random Vibration 11 gs
(50-2000 Hz)
 Drop (any axis) 1.5 m
 Electrical Connection NEMA 4X,
 DIN IP65

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Dimensions



Ordering Information

EXAMPLE:

	65CP	03	2	1000	S	F	NAO
Series	65CP						
Pressure Connection	1/4" NPTF-2A Male						
Electrical Connection	Packard Metri-Pack™						
Pressure Range	0-1000 psi						
Pressure Reference	sealed gage						
Seal Material	Fluorosilicone						
Connector Harness	none required						

STANDARD OPTIONS

Series	65CP
Pressure Connection	(3/4" Hex – under body)
	03 1/4" NPTF-2A Male
	04 1/4" -SAE tube fitting, 7/16" -20UNF-2A Male thread
Electrical Connection	2 Packard Metri-Pack™

SPECIAL OPTIONS *(Contact factory for availability)*

				3 Mini-DIN style
Pressure Ranges	0750 (psis)	1000 (psis)	1500 (psis)	
	2000 (psis)	3000 (psis)	4000 (psis)	
	<i>psis = sealed gage</i>			
Pressure Reference	S Sealed Gage			
Seal Material	E Ethylene propylene	H HNBR	V Viton™	B Nitrile (BUNA-N, NBR)
	F Fluorosilicone	N Neoprene		
	<i>(use seal compatibility guide for temperature ranges)</i>			
Connector Harness	(Mating Connector)	(Wire Lead)	(Wire Length)	(Mating Connector) (Wire Lead) (Wire Length)
	N None required	A No wire	0 No length	Y Required A No wire 0 No length
	Y Required	B Standard wire ⁽¹⁾	1 1 meter	B Standard wire ⁽¹⁾ 1 1 meter
				C Twisted wire 2 2 meter
				D Shielded wire
				E High-temp wire
				F UL 1015, 105°C rated wire ⁽²⁾
				⁽¹⁾ Black, Red, Green ⁽²⁾ Black, Red, Blue

Seal Compatibility Guide

Type	Seal Material	Media Compatibility <i>(Contact TI for more information)</i>	Maximum Seal Temperature Range
B	Nitrile (BUNA-N, NBR)	petroleum oils, lubricants, detergent solutions, helium	-20°C to +100°C
H	HNBR (Hydrogenated Nitrile)	petroleum oils, lubricants, detergent solutions	-20°C to +135°C
E	Ethylene Propylene	steam, soaps, polar solvents, brake fluid, acetone, Skydrol™	-40°C to +135°C
F	Fluorosilicone	chlorinated solvents, oils, fuels, air	-45°C to +135°C
N	Neoprene	refrigerants (freons, ammonia)	-40°C to +120°C
V	Fluorocarbon (Viton™)	fertilizers, freons, butanes, oils, trichloroethylene	-26°C to +135°C

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