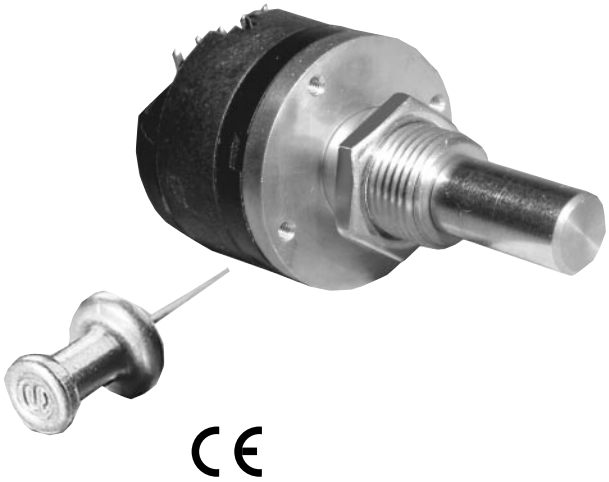
Dynapar brand Series PC9 Panelcoders™



- ***Provides digital control inputs from operator's panel***
- ***Bidirectional squarewave signal outputs***
- ***Continuous and reversible rotation***

Series PC9 Panelcoders directly convert an operator's manual rotary inputs into digital signals. These signals can be used by microprocessors and electronic counters with no A/D conversion required and no wipers or contacts to wear or create electrical noise.

Panelcoders give the operator a simple "analog-feel," while giving designers digital outputs and greater flexibility.

The PC9 is designed specifically for applications where a high resolution panel encoder is required (up to 512 PPR). The standard configuration corresponds to a typical 1.5" panel-mounted potentiometer. The PC9S version provides shorter overall length and a simplified output confuguration.

It utilizes a patent-pending ASIC that integrates all encoder electronics, including the optoelectronic sensors, which enhances reliability and accuracy. Its high performance, advanced features, and competitive pricing make it the ideal device for a broad range of applications.

SPECIFICATIONS

Electrical

Code: Incremental, Optical
Resolution: Incremental pulses per revolution; 100 to 512
Phasing: 90° ±18° electrical
Symmetry: 180° ±18° electrical
Index Pulse Width: 90° ±36° electrical
Supply Voltage: 5 VDC ±10%
Supply Current: 10 mA, typ.
Standby Current: 50 µA, max. (PC9 only)
Output Signals: 2.5 V min. high (V_{OH}); 0.5 V max. low (V_{OL}).
Output Current:
PC9: 3 mA sink/source (25°C), 2 mA (100°C);
PC9S: 6 mA sink/source (25°C), 4 mA (100°C)
Frequency Response: 200 kHz
Termination:
PC9: 10 pin header (accessory 12" ribbon cable w/connector, part no. CA0040012
PC9S: 5 pin header (accessory 12" wires w/connector, part no. CA0050012)
Recommended Mating Connector:
PC9: Thomas & Betts part number 622-1030
PC9S: AMP part number 103675-4

Mechanical

Shaft Loading: 1/8" Shaft: 1.0 lb axial, 6.0 lb radial; 1/4" Shaft: 1.0 lb axial, 14 0z radial
Moment of Inertia:
0.28×10^{-5} oz-in-sec^2 (0.20 gm-cm^2)

Environmental

Operating Temperature: -40° to 100°C
Storage Temperature: -50° to 125°C
Relative Humidity: 90% non-condensing

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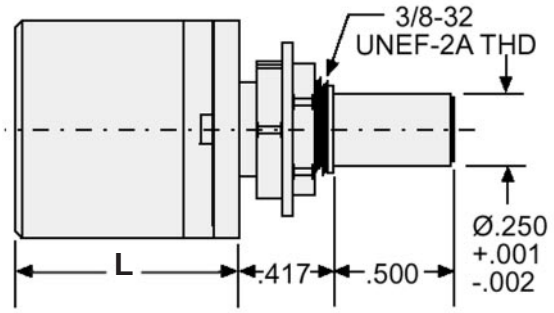
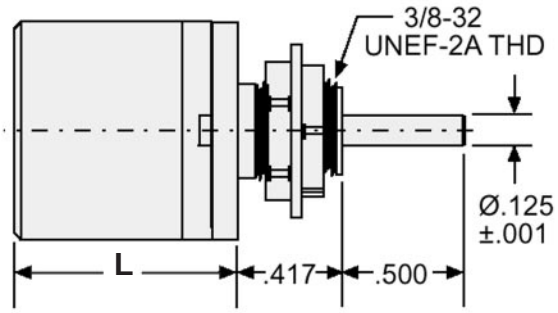
Call Toll-free 1.800.873.8731 for more information on this product or for our complete catalog

Dimensions/Installation

Code 3= M



Code 3= N



L, Body Length	
Code 1= PC9S	0.681"
Code 1= PC9	0.894"

Output Waveforms & Connections (Direction viewing encoder cover)

Code 2= 01

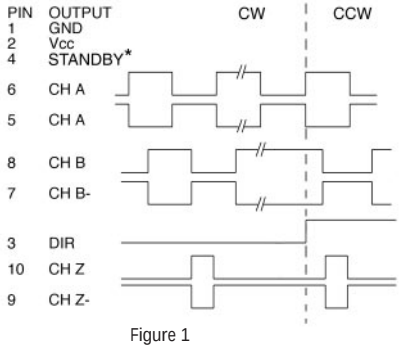


Figure 1

Code 2= 02

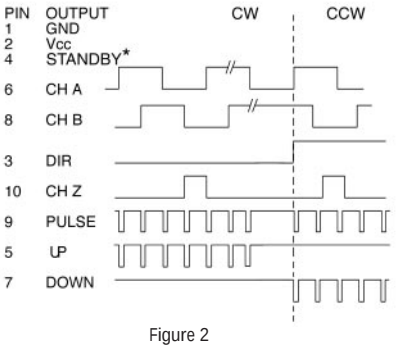
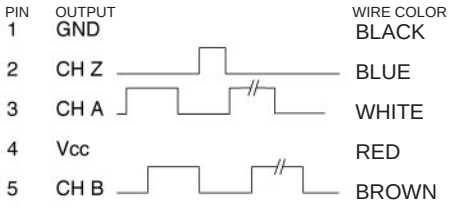


Figure 2

Code 2= 03 / 04



Note: No Index (CH Z) when Code 2 = 03

Figure 3

* For operation, connect **STANDBY (4)** to **Vcc (2)**

Ordering Information

To order, complete the model number with code numbers from the table below:

Code 1: Model		Code 2: PPR	Code 2: Output Description	Code 3: Mounting Description	
☐		☐☐☐☐	☐☐	☐	
Ordering Information					
PC9S	0.9" Dia. short depth Panelcoder™	**0100**	Available when Code 1 is PC9	**M**	1/4" Shaft, sleeve bearing
		0144	**01** See Figure 1	**N**	1/8" shaft, ball bearings
		0200	**02** See Figure 2		
		0256			
PC9	0.9" Dia. Panelcoder™	**0300**	Available when Code 1 is PC9S		
		0360	**03** See Figure 3		
		0500	**04** See Figure 3		
		0512			