

# SERIES H42

# Dynapar™ brand

## Shafted Encoder

### Key Features

- Simplified Economical Design
- Unbreakable Code Disc
- Rugged Cast Aluminum Housing

CE



## SPECIFICATIONS

### STANDARD OPERATING CHARACTERISTICS

Code: Incremental

Resolution: 1 to 600 PPR (pulses/revolution)

Accuracy: (Worst case any edge to any other edge)  $\pm 7.5$  arc-min.

Format: Two channel quadrature (AB) with complementary outputs

Phase Sense: A leads B for CW shaft rotation as viewed from the shaft end of the encoder; see Ordering Information

Quadrature Phasing:  $90^\circ \pm 20^\circ$  electrical

Symmetry:  $180^\circ \pm 18^\circ$  electrical

Waveforms: Squarewave with rise and fall times less than 1 microsecond into a load capacitance of 1000 pf

### ELECTRICAL

Input Power:

4.5 min. to 26 VDC max. at 90 mA max., not including output loads

Outputs:

7272 Push-Pull and Differential Line Driver: 40 mA sink or source

Frequency Response: 100 kHz min.

Electrical Protection: Overvoltage, reverse voltage and output short circuit protected

Noise Immunity: Tested to EN61326 (Industrial) for Electro Static Discharge, Radio Frequency Interference, Electrical Fast Transients, Conducted and Magnetic Interference

### ELECTRICAL CONNECTIONS

With Line Driver Output		
Pin	Function (If Used)	#14004310010* Cable Accessory Color Code
A	Signal A	RED
B	Signal B	BLUE
C	Signal $\bar{A}$	YELLOW
D	Power Source	WHITE
E	Signal $\bar{B}$	GREEN
F	Common	BLACK
G	Case	SHIELD

\*This is a mating connector/cable assembly described in the Encoder Accessories section of this catalog. Color-coding information is provided here for reference.

### CONNECTIONS

Connector Termination:

7 pin, style MS3102E-16S-1P

Mating Connector:

7 pin, style MS3106A-16S-1S (MCN-N5);

### MECHANICAL

Shaft Loading: (at 0.25" from encoder face) 80 lbs. radial, 80 lbs. axial

Shaft Speed: 7200 RPM max.

Shaft Runout: 0.001" max. TIR

Moment of Inertia:  $3.0 \times 10^{-4}$  oz-in-sec<sup>2</sup>

Weight: 13 oz.

### ENVIRONMENTAL

Operating Temperature: 0 to +70 °C

Storage Temperature: -40 to +90 °C

Shock: 50 G's for 11 milliseconds duration

Vibration: 5 to 2000 Hz at 20 G's

Humidity: to 98% without condensation

Enclosure Rating: NEMA12/IP54 (dirt tight, splashproof)

### Ordering Information

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

Code 1: Model	Code 2: Pulses/Rev
<b>H42</b>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
H42 Size 25, Economical	0001
	0012
	0060
	0100
	0120
	0500
	0600

**10 foot Cable Assembly with MS Connector**

**1400635-0010** 7 Pin MS, Cable Assy. For Use with Differential Line Driver Outputs

### DIMENSIONS

.218 DIA. 4 HOLES  
ON A 2.919 DIA.  
B.C. (REF.)

