### **INDUSTRIAL DUTY**

# **SERIES H42**

# **Shafted Encoder**

**Key Features** 

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

# **Dynapar**<sup>™</sup> brand





## SPECIFICATIONS

**STANDARD OPERATING CHARACTERISTICS** 

Code: Incremental

Resolution: 1 to 600 PPR (pulses/revolution) Accuracy: (Worst case any edge to any other edge) ±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° ± 20° electrical

Symmetry: 180° ± 18° 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: Overseltage, reverse volta

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)	#108596-0010* Cable Accessory Color Code
A	Signal A	RED
В	Signal B	BLUE
С	Signal Ā	YELLOW
D	Power Source	WHITE
E	Signal 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 x 10<sup>-4</sup> 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**

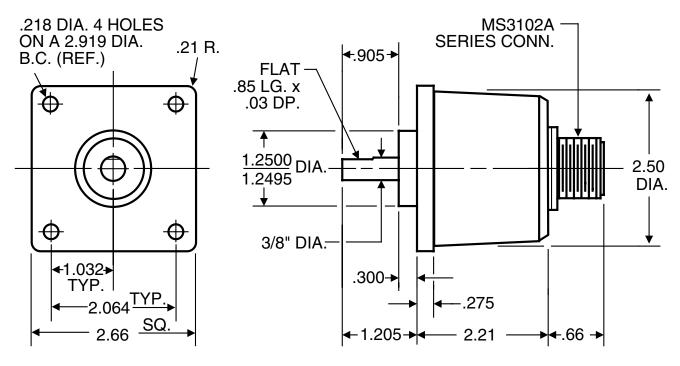
To order, complete the model number with code numbers from the table below:

Code 1: Model	Code 2: Pulses/Rev
H42	
H42 Size 25, Economical	0001 0012 0060 0100 0120 0500 0600

10 foot Cable Assembly with MS Connector

**108596-0010** 7 Pin MS, Cable Assy. For Use with Differential Line Driver Outputs

DIMENSIONS



Worldwide Brands: NorthStar™ • Acuro™ • Dynapar™ • Hengstler™ • Harowe™



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