

SERIES X25

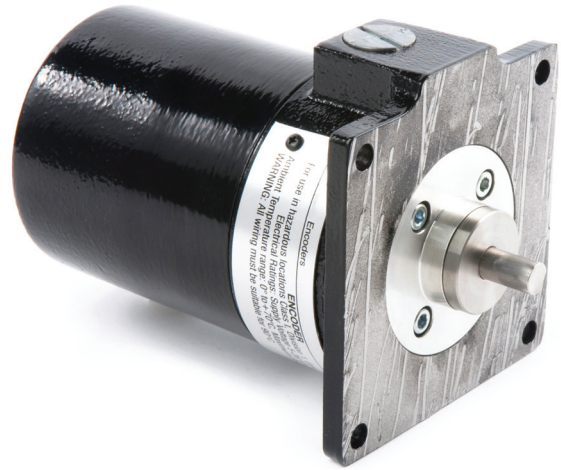
Dynapar™ brand

For Hazardous Location Application

HAZ
Hazardous Duty

Key Features

- Approved for NEC Class 1 Div 1&2 Groups C & D
- Approved for NEC Class 2, Div 1&2, Groups E, F, & G
- Rugged Enclosure with 1/2" Conduit Entry
- 5000 PPR Capability
- Environmentally Sealed and Corrosion Resistant



CE
EN 61326-1

UL US
File No. E116133,
Control No. 11X6

SPECIFICATIONS

STANDARD OPERATING CHARACTERISTICS

Code: Incremental, Optical

Resolution: 1 to 5000 PPR (pulses/revolution)

Accuracy: (Worst case any edge to any other edge) ≤ 1024 PPR (metal disk): ± 7.5 arc-min.

> 1024 PPR (glass disk): ± 2.5 arc-min.

Format: Two channel quadrature (AB) with optional Index (Z) and complementary outputs

Phase Sense: A leads B for CCW shaft rotation as viewed from the shaft end of the encoder

Quadrature Phasing: $90^\circ \pm 25^\circ$ electrical

Symmetry: $90^\circ \pm 25^\circ$ electrical

Index: 2540 PPR and below: $180^\circ \pm 25^\circ$ electrical; Greater than 2540 PPR: $90^\circ \pm 25^\circ$ electrical

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

ELECTRICAL

Input Power:

5 to 26 VDC at 80 mA max., not including output loads

Outputs:

7273 Open Collector: 30 VDC max., 40 mA sink max.

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

Frequency Response: 100 kHz min. (index 75 kHz min. for extended temperature range)

Noise Immunity: Tested to EN61326-1

Electrical Immunity: Reverse polarity and short circuit protected

Termination: Cable Exit

MECHANICAL

Shaft Sizes: 1/4" or 3/8"

Shaft Loading: 40 lbs. radial, 40 lbs. axial

Shaft Speed: 5,000 RPM max.

Shaft Runout: 0.001" max. TIR

Starting Torque: (max at 25 °C) 2.0 oz.-in

Moment of Inertia: 9.0×10^{-4} oz.-in-sec²

Housing and Cover: Cast Aluminum

Shaft Material: Stainless Steel

Disc Material: Glass or Mylar (PPR Dependant)

Weight: 4.5 lbs. (2.0 kg)

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 2 G's

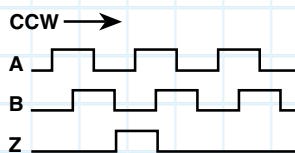
Humidity: Up to 98% (non-condensing)

Enclosure Rating: NEMA4X/IP66 (Dust Proof, Washdown)

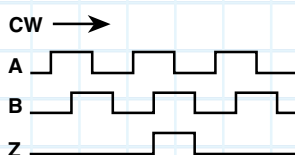
OUTPUT FORMAT

Below 2540PPR

Format A

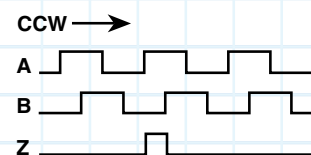


Format C



2540PPR and Above

Format A



Format C

