

SERIES AI25 Interbus

HENGSTLER

Absolute Encoder

Key Features

- Up to 12 Bit of Singleturn and 12 Bits of True Multiturn Absolute Positioning
- Onboard Diagnostics
- Interbus Interface
- Available with multiple shaft configurations
- Enclosure ratings of IP64 or IP67



SPECIFICATIONS

STANDARD OPERATING CHARACTERISTICS:

Code: Absolute, Optical

Resolution Single-turn: 10 and 12 Bit

Resolution Multi-turn: 12 bit (only available with 12 bit ST resolution)

Linearity: +/- 1/2 LSB

Absolute Accuracy: ± 0.01° mechanical (36 arc-sec.)

Repeatability: ± 0.002° mechanical (7.2 arc-sec.)

ELECTRICAL:

Interface: Interbus, ENCOM Profile K3 (parameterizable)

Output Code: 32 Bit Binary

Input Power: 10-30 VDC

Intrinsic Current Consumption: 220 mA (ST), 250 mA (MT)

Programmable: Direction, scaling factor, preset, Offset

Frequency Response (Baud Rate): 500 kBaud according to ENCOM

Noise Immunity: Tested to EN 61326-1

Electrical Immunity: Tested to EN 61326-1

Termination: Bus Cover with spring terminal clamps; cable with connector

MECHANICAL:

Shaft Size: 6 mm (Servo Mount), 10 mm (Clamping Mount), 3/8" (Square Flange Mount)

Hubshaft Size: 10mm, 12 mm, 3/8", 1/2"

Shaft Load (axial/radial): 40N (9lb.) / 60N (13lb.)

Shaft Tolerance (hubshaft only): +/- 1.5 mm axial, +/- 0.2 mm radial

Maximum Shaft Speed: 10,000 RPM (continuous), 12,000 RPM (peak)

Starting Torque: < 1.4 in-oz

Housing Material: Aluminum

Shaft Material: Stainless Steel

Disc Material: Glass

Weight:

Single-Turn: approx. 12.3 oz (350 g)

Multi-Turn: approx. 14.1 oz. (400 g)

ENVIRONMENTAL:

Operating Temperature: -40 °C ...+70 °C

Storage Temperature: -40 °C ...+100 °C

Shock: 100G, 1,000 m/s² for 6 msec

Vibration: 10G, 100 m/s² (10 to 2,000 Hz)

Humidity: Up to 75%, (no condensation allowed)

Enclosure Rating: IP64 or IP67

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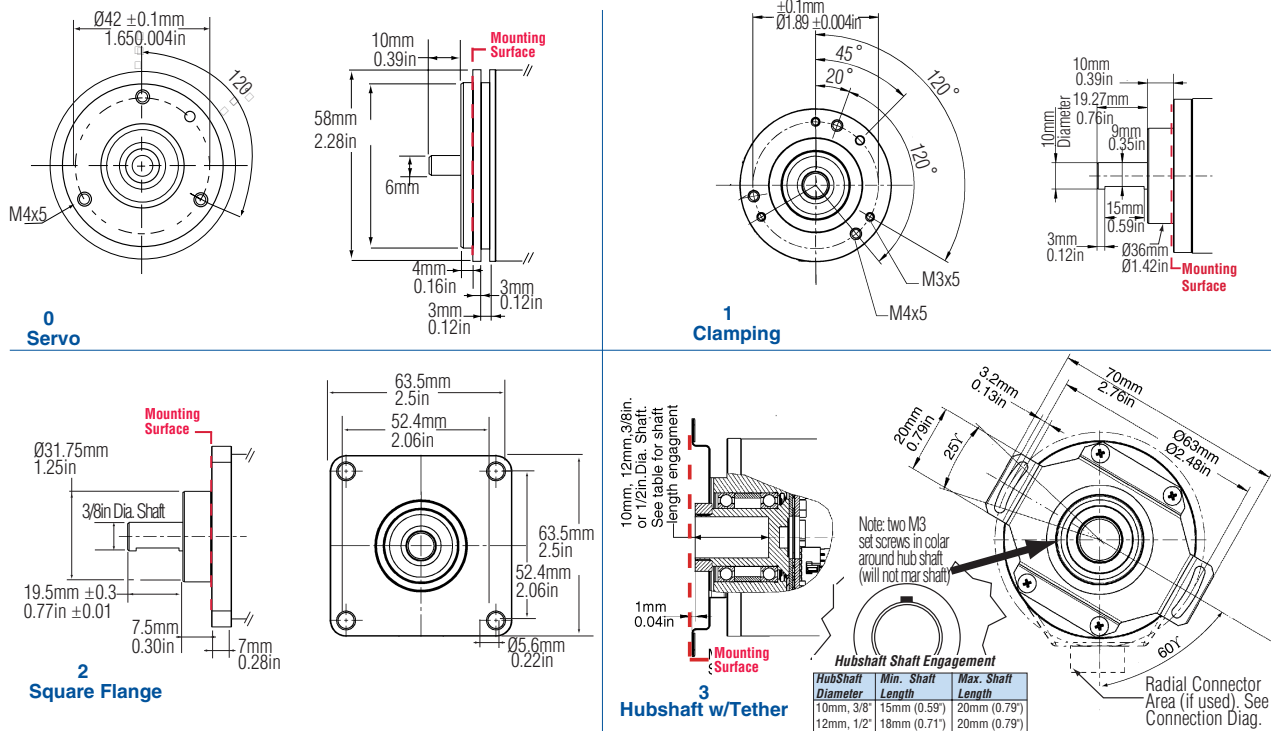
Ordering Information

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

Code 1: Model	Code 2: Bits	Code 3: Mounting	Code 4: Shaft Size	Code 5: Protocol	Code 6: Electrical	Code 7: Connector
AI25	☐ ☐ ☐ ☐	☐	☐	☐	☐	☐
AI25 Size25 Acuro Absolute Encoder	Single-Turn 0010 10 Bit 0012 12 Bit Multi-Turn 1212 12 Bit MT, 12 Bit ST	Available when Code 4 is 0 or A 0 Servo* Available when Code 4 is 1, 2 or B, C 1 Clamping* 2 Square Flange** Available when Code 4 is 3, 4, 5 or 6 3 Hubshaft w/ Tether† * 58mm Dia. ** 2.5" Square † 63mm BC	w/o shaft seal (IP64) 0 6 mm 1 3/8" 2 10 mm 3 3/8" Hubshaft 4 12 mm Hubshaft 5 1/2" Hubshaft 6 10 mm Hubshaft w/ shaft seal (IP67) A 6 mm B 3/8" C 10 mm	5 Interbus K3 U Interbus K2	2 10-30 VDC	E Bus Cover 3 Strain Relief Exits. Internal T-coupler included G Bus Cover 2 Strain Relief Exits and 1 M12, 5-Pole Connector (for Tico display). Internal T-coupler included H Double Conin. Internal T-coupler included

DIMENSIONS

Code 3: Mounting



Code 7: Connector

