

# 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/s<sup>2</sup> for 6 msec

**Vibration:** 10G, 100 m/s<sup>2</sup> (10 to 2,000 Hz)

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

**Enclosure Rating:** IP64 or IP67



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# HENGSTLER SERIES AI25 Interbus

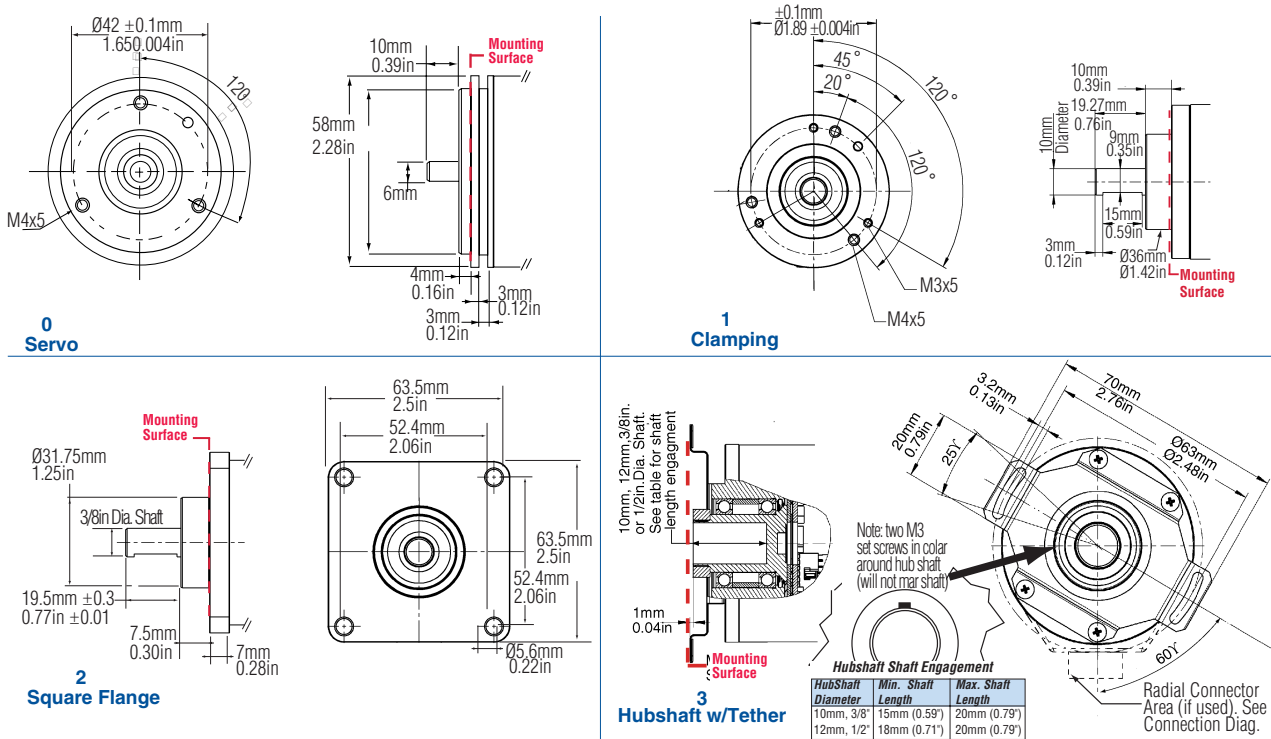
## Ordering Information

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

## DIMENSIONS

Code 3: Mounting



Code 7: Connector

