

# SERIES AI25 DeviceNet **HENGSTLER**

## Absolute Encoder

### Key Features

- Up to 14 Bit of Singleturn and 12 Bits of True Multiturn Absolute Positioning
- Onboard Diagnostics
- DeviceNet Interface
- Available with Multiple Shaft Configurations
- Enclosure ratings of IP64 or IP67



## SPECIFICATIONS

### STANDARD OPERATING CHARACTERISTICS:

**Code:** Absolute, Optical  
**Resolution Single-turn:** 10-14 Bit  
**Resolution Multi-turn:** 12 Bit  
**Linearity:** ± 1/2 LSB  
**Absolute Accuracy:** ± 0.01° mechanical (36 arc-sec.)  
**Repeatability:** ± 0.002° mechanical (7.2 arc-sec.)

### ELECTRICAL:

**Protocol:** According to DeviceNet V2.0  
**Interface:** CAN Highspeed according to ISO/ DIS 11898, CAN Specification 2.0 B (11 and 29 bit identifier)  
**Output Code:** Binary  
**Input Power:** 10-30 VDC  
**Intrinsic Current Consumption:** 220 mA (ST), 250 mA (MT)  
**Transfer Mode:**  
 Poll mode  
 Bit strobe (time-synchronous for all devices)  
 Change of State (automatic after change of values)  
 Cyclic, with adjustable cycle timer  
**Frequency Response (Baud Rate):** 125, 250, 500 kbaud  
**Noise Immunity:** Tested to EN 61326-1  
**Electrical Immunity:** Tested to EN 61326-1  
**Termination:** Bus Cover with spring terminal clamps

### MECHANICAL:

**Shaft Diameter:** 6 mm (Servo Mount), 10 mm (Clamping Mount), 3/8" (Square Flange Mount),  
**Hubshaft:** 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  
**Weight (approx.):** 350 g ST, 400 g MT  
**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 ...+85 °C  
**Storage Temperature:** -40 °C ...+100 °C  
**Shock:** 1,000 m/s<sup>2</sup> for 6 msec  
**Vibration:** 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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### Ordering Information

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

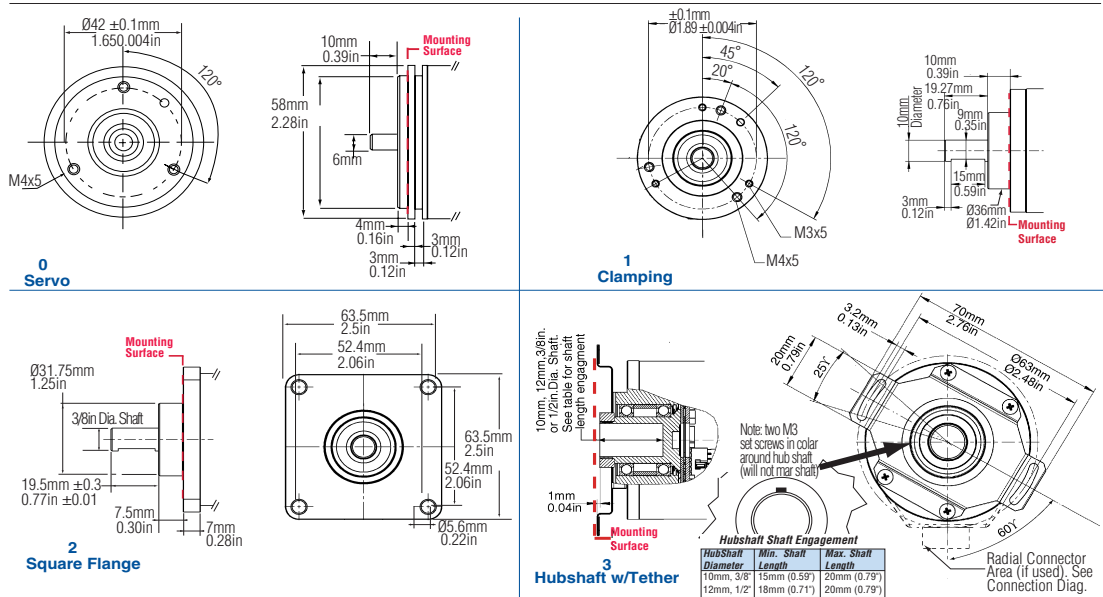
Code 1: Model	Code 2: Resolution	Code 3 :Mounting	Code 4: Shaft Size	Code 5: Interface	Code 6: Output	Code 7: Termination
<b>AI25</b>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>AI25</b> Size25 Absolute Encoder	<b>0010</b> 10 Bit ST	Available when Code 4 is 0 or A	<b>w/o shaft seal (IP64)</b> 0 6 mm 1 3/8" 2 10 mm 3 3/8" Hubshaft 4 12 mm Hubshaft 5 1/2" Hubshaft 6 10mm Hubshaft	<b>9</b> Devicenet	<b>2</b> 10-30 VDC	<b>F</b> Bus Cover 1 M12, 5-Pole Connector
	<b>0012</b> 12 Bit ST					
	<b>0013</b> 13 Bit ST					
	<b>0014</b> 14 Bit ST					
	<b>1212</b> 12 Bit MT 12 Bit ST	Available when Code 4 is 1, 2 or B, C				
<b>1213</b> 12 Bit MT 13 Bit ST						
<b>1214</b> 12 Bit MT 14 Bit ST	Available when Code 4 is 3, 4, 5 or 6	<b>w/ shaft seal (IP67)</b> A 6 mm B 3/8" C 10 mm				
	<b>3</b> Hubshaft w/ Tether†					
		* 58mm Dia. ** 2.5" Square † 63mm BC				<b>L</b> Bus Cover 2 Strain Relief Exits. Internal T-coupler included

**ACCESSORY**

Part Number: 3 280 220 + length: TPE cable, 12-core + screen Price: CF

## DIMENSIONS

Code 3: Mounting



Code 7: Connector

