SERIES AI25 Profibus

HENGSTLER

Absolute Encoder

Key Features

- Up to 14 Bit of Singleturn and 12 Bits of **True Multiturn Absolute Positioning**
- **Onboard Diagnostics**
- **Profibus 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

Absolute Accuracy: ± 0.01° mechanical (36 arc-sec.) Repeatability: ± 0.002° mechanical (7.2 arc-sec.)

ELECTRICAL:

Interface: Profibus-DP, Encoder Profile

Output Code: Binary Input Power: 10-30 VDC

Intrinsic current Consumption: 220 mA (ST),

250 mA (MT)

Programmable: Resolution, Preset, Direction Special Functions: Speed, Acceleration, Operating

Frequency Response (Baud Rate): is automatically set within a range of 9.6 KBaud through 12 MBaud

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"

Maximum Shaft Load:

6 mm shaft: 13 lb axial, 24 lb radial 10 mm shaft: 9 lb axial, 13 lb radial

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/s² for 6 msec **Vibration:** 100 m/s² (10 to 2,000 Hz)

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

Enclosure Rating: IP64 or IP67

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



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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
Al25						
Al25 Size25 Absolute Encoder	Single-Turn 0010 10 Bit 0012 12 Bit 0013 13 Bit 0014 14 Bit Multi-Turn 1212 12 Bit Multi- Turn, 12 Bit Single-Turn 1213 12 Bit Multi- Turn, 13 Bit Single-Turn 1214 12 Bit Multi- Turn, 14 Bit Single-Turn	Available when Code 4 is 0 or A O Servo* Available when Code 4 is 1, 2 or B, C Clamping* Square Flange** Available when Code 4 is 3, 4, 5 or 6 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 10mm Hubshaft w/ shaft seal (IP67) A 6 mm B 3/8" C 10 mm	6 Profibus	2 10-30 VDC	Bus Cover 3 Strain Relief Exits. Internal T-coupler included Bus Cover 2 Strain Relief Exits and 1 M12, 5-Pole Connector (for Tico display). Internal T-coupler included Bus Cover Double Conin. Internal T-coupler included R Bus Cover with 3x M12

DIMENSIONS

