



Optical Light Mill Duty Solid Shaft Encoder, 2.5" flange mount

#### Magnetic Durability in a Compact Encoder

Shaft Sizes Include 1/4", 3/8", and 10mm

Simple Installation

Unbreakable Optical Disk

Up to 5000 PPR

Wide-Gap Technology: Up to 8X larger gap between sensor and rotor

Directly Replaces H25, HA525, HA625, HC525, HC625, HR525, HR625, H42 and Many Other Standard 2.5" Encoders

Industry Standard Face or Flange Mounting

IP65/Nema 4 Rating: Dust and Liquid Tight

Superior Bearings and Seals -40°C to +100°C Operation \*

2 Year No-Hassle Warranty

### AV25

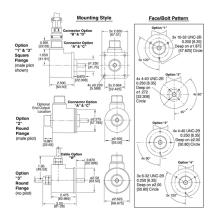
AV25 incremental quadrature rotary encoders fit a vast array of applications, from coupled AC and DC motor shafts, servos, conveyors, and most any machine. The solid aluminum housing, and stainless steel shaft offer increased durability in tough environments. Also available: AV20 encoders for 2.0" flanges and AV45 for 85mm flanges.

Avtron rotary encoders have superior shaft seals and bearings that stay sealed to keep contaminants out, through temperature cycling and liquid sprays. Our encoder seals are protected by mechanical barriers to prevent flexing or failure. Avtron's superior bearings permit much larger side and axial loads for pulley and belt applications, and feature synthetic lubricants for even longer life in all applications.

Many competitive optical encoder designs risk sensor damage from any vibration or shock: sensors ride less than four thousandths of an inch from the thin, often flexible, optical disk spinning at full motor speeds. Some designs even use thin glass disks in "industrial" products! Avtron uses only unbreakable disks and a sensor to disk gap over 8X larger than the competition.

Our optical AV25 encoders use superior sensor, disk, bearing, and seal technology to give top performance in industrial conditions. Select an Avtron AV25 today!

## **OUTLINE DRAWING**



### **MORE AV25 ADVANTAGES**

- All-digital design, no trim pots or adjustments for longer life
- Advanced sensor technology
- Superior bearings with synthetic lubricant for longer life
- No extra charge for signal complements and marker pulse
- More than 2X the axial and side load capability of the competition
- Superior line drivers withstand short circuits and reverse voltage wiring errors.

#### **MORE AV25 SPECIFICATIONS**

Operating Power: Volts: 5 - 28 VDC; Current: 50mA, no loadOutput Format: (A,/A, B,/B, Z,/Z available)Frequency Range: 0 to 125 KHzPPR: 1 - 5000 Standard Speed: 6000 RPM Max., (for higher speeds, consult factory)Temperature: -40° to 100°C \*Vibration: 5-2000HzShock: 50G, 11mS durationWeight: 0.95 lbs [431g]\* Please consult factory for temperature/speed derating

Check out our website for more detailed specifications, drawings, and installation instructions. www.avtronencoders.com



Nidec Industrial Solutions 243 Tuxedo Avenue - Cleveland, Ohio 44131 encoderhelpdesk@nidec-industrial.com +1 216-642-1230 - www.avtronencoders.com Features and specifications are subject to change without notice. EU-SMART™, SMARTSafe™, SMARTTach™, THIN-LINE™, WIDE-GAP™, SAFETach™, and BULLSEYE32™ are trademarks of Nidec Industrial Solution. All other trademarks and registered trademarks are the property of their respective owners. Nidec Industrial Solutions' standard warranty applies. All dimensions approximate.

# **SELECTION GUIDE**

MODEL	PPR	LINE DRIVER	SHAFT SIZE	CONNECTOR OPTIONS	WIRING EXIT	MOUNTING	FACE/BOLT PATTERN	SEALS	CHANNELS	MODIFICATIO NS
AV25	A - 1 PPR C - 25 PPR F - 60 PPR G - 100 PPR H - 120 PPR K - 200 PPR P - 300 PPR C - 360 PPR R - 512 PPR S - 600 PPR V - 500 PPR V - 500 PPR V - 500 PPR V - 1000 PPR V - 1	1 - 5-28/ In/Out (7272) 2 - 5-28/ In/Open Collector Out (7273) 3 - 5-15/ In/Out (7273) 4 - 5-28/ In/Sv Out (7272)	A - 1/4 in. diameter Shaft w/Flat B - 3/8 in. diameter Shaft w/Flat N - 1/4 in. diameter shaft w/o Flat P - 3/8 in. diameter Shaft w/o Flat C - 10mm diameter Shaft, w/Flat R - 10mm diameter Shaft w/o Flat	Reverse Phasing W - Cable (18" or special length) E - 6 pin MS style w/o Plug	A - Side (Radia) E - End (Axia)	1 - 2.625 Square Flange w1/25 in. Pilot 2 - 2.5 in. Servo Flange w1/25 in. groove 3 - 2.625 in. Servo 7 - 2.625 in. Servo Flange w1/25 in. Pilot	X - No Additional Face Drill Holes 1 - 3 x 10-32 tapped holes on a 1.875 in. B. C. 2 - 4 x 4-40 tapped holes on a 1.272 in. B. C. 3 - 4 x 4-40 tapped holes on a 2.00 in. B. C. 4 - 3 x 6-32 tapped holes on a 2.00 B.C.	B - Shielded Bearings (for female pilot	A - All Signals (A,A/B,B/Z,Z/) (NA wi6, 7 pin conns.) B - A,A/B,B/ (complements, no marker) D - A, IA (Single Phase with complements, no marker) F - A, B (no complements, no marker)	000 - No Special Features 00W - Connector 00 Cable (see conn list) 901 - 1'/0 3m Cable Built into Encoder 903 - 3'/0.9m Cable Built into Encoder 905 - 5'/1.5m Cable Built into Encoder 910 - 10'/3m Cable Built into Encoder 910 - 10'/3m Cable Built into Encoder 910 - 15'/4.5m Cable Built into Encoder 910 - 15'/4.5m Cable Built into Encoder 912 - 20'/6m Cable Built into Encoder 920 - 20'/6m Cable Built into Encoder 930 - 30'/9m Cable Built into Encoder 930 - 30'/9m Cable Built into Encoder 930 - 30'/9m Cable Built into Encoder 930 - 30'/9m Cable Built into Encoder



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MODEL	PPR	LINE DRIVER	SHAFT SIZE	CONNECTOR OPTIONS	WIRING EXIT	MOUNTING	FACE/BOLT PATTERN	SEALS	CHANNELS	MODIFICATIO NS
	5 - 2500 PPR 6 - 2540 PPR 7 - 3600 PPR D - 4096 PPR 9 - 5000 PPR									



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