# Avtron AV25 Encoders

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

#### Tough and Compact!

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

1 2 Year No-Hassle Warranty

# AV25

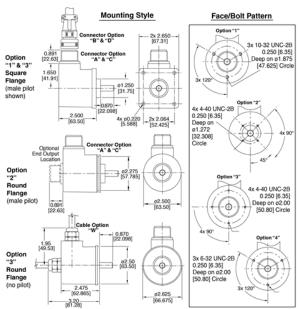
AV25 incremental quadrature rotary encoders fit a vast array of applications, from coupled AC and DC motor shafts, servos, conveyors, and most any machine. The solid aluminum housing, and stainless steel shaft offer increased durability in tough environments. Also available: <u>AV20</u> encoders for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

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- 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.

## **AV25 SPECIFICATIONS**

Operating Power: Volts: 5 - 28 VDC; Current: 50mA, no load Output Format: (A,A-, B,B-, Z,Z- available) Frequency Range: 0 to 125 KHz PPR: 1 - 5000 Standard Speed: 6000 RPM Max., (for higher speeds, consult factory) Temperature: -40° to 100°C Vibration: 5-2000Hz Shock: 50G, 11mS duration Weight: 0.95 lbs [431g]

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

#### **SELECTION GUIDE**

AV25 PART NUMBERS AND AVAILABLE OPTIONS											
AV25 PA											
Mount	PPR*	Line Driver		aft Connector ze Options	Wiring	Mounting Style	Face/Bolt Pattern	Seals	Channels	Special Features	
AV25		(7272) 2- 5-28V, open collector (7273) 3- 5-15V (4469) 4- 5-28V in, 5V out (7272)	0-Non-s With Fla A- 0.25 B- 0.37 C- 10m Without N- 0.25 P- 0.37 R- 10m	t (pigtail) 55" m Flat 55"	A- Side E- End	<ol> <li>Sq. Flange 2.625" w/ 1.25" male pilot</li> <li>Rnd. Flange 2.5" w/ 1.25" male pilot</li> <li>Rnd. Flange 2.62" no pilot</li> </ol>	1.875"	A- Shaft Sealed** B- Bearing Sealed X- None^^	With Comp.           A- A, Ā, B, B           Z, Z           B- A, Ā, B, B           D- A, Ā           Without Comp.           E- A, B, Z           F- A, B	000- None 00W- Con- nector on 18" cable: Use w/ Option "T"-U" 9xx- Specify cable length xx=feet (use w/ Option "W")	
	S- 600 9- 5000			Connector Options							
	T- 625 0- Special			Mounted on Encoder Mounted on 18" cable (00W)							
	up to 16,384 PPR available			10 Pin MS		6 Pin MS	7 Pin M	7 Pin MS		8 Pin M12	
	<ul> <li>recommended, N/A with N</li> <li>N/A with MS 6 or 7 Pin C</li> <li>Only available with Mountin</li> <li>not recommended for i</li> </ul>	connector. ng Style "3"	tions	A- w/o plug (std. phasing) B- w/o plug (reverse phasi C- w/ plug (std. phasing) D- w/ plug (reverse phasin	ing) F- w/o G- w/ p	plug (std. phasing) plug (reverse phasing) lug (std. phasing) lug (reverse phasing)	<ul> <li>J- w/o plug (std. phasing)</li> <li>K- w/o plug (reverse phasing)</li> <li>M- w/ plug (std. phasing)</li> <li>N- w/ plug (reverse phasing)</li> </ul>		<ul> <li>T- w/o plug (Turck Pinout)</li> <li>U- w/o plug (US Pinout)</li> </ul>		

All dimensions are in inches [millimeters].

Specifications and features are subject to change without notice.



Nidec-Avtron Makes the Most Reliable Encoders in the World

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EU-SMART<sup>™</sup>, SMARTsafe<sup>™</sup>, SMARTach II<sup>™</sup>, THIN-LINE<sup>™</sup>, THIN-LINE II<sup>™</sup>, WIDE-GAP<sup>™</sup>, and BULLSEYE32<sup>™</sup> are trademarks of Nidec Avtron Automation. All other trademarks and registered trademarks are the property of their respective owners.