Rev: 08-29-16





# Tough and Compact! AV25

- Shaft Sizes Include 1/4", 3/8", and
  - 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
- I IP65/Nema 4 Rating: Dust and Liquid
  - Superior Bearings and Seals
  - -40°C to +100°C Operation
  - 2 Year No-Hassle Warranty

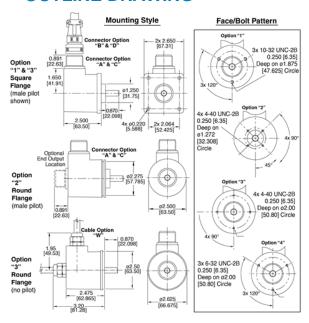
AV25 incremental quadrature rotary encoders fit a vast array of applications, from coupled AC and DC motor shafts, servos, conveyors, and most any machine. The solid aluminum housing, and stainless steel shaft offer increased durability in tough environments. Also available: AV20 encoders for 2.0" flanges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

## **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**

AVOE PART NUMBERS AND AVAILABLE ORTIONS											
AV25 PART NUMBERS AND AVAILABLE OPTIONS											
Mount	PPR*			aft ze	Connector Options	Wiring	Mounting Style	Face/Bolt Pattern	Seals	Channels	Special Features
AV25	A- 1 U- 720 C- 25 V- 900 F- 60 W- 1000 G- 100 Y- 1024 H- 120 Z- 1200 K- 200 1- 1250 L- 240 2- 1440 M- 250 3- 2000 N- 256 4- 2048 P- 300 5- 2500 E- 360 6- 2540 Q- 500 7- 3600 R- 512 D- 4096	1- 5-28V (7272) 2- 5-28V, open collector (7273) 3- 5-15V (4469) 4- 5-28V in, 5V out (7272)	0-Non- With FI A- 0.2 B- 0.3 C- 10r Withou N- 0.2 P- 0.3 R- 10r	at 5" 75" mm t Flat 5"	W- 18" cable (pigtail)	A- Side E- End	Sq. Flange 2.625" w/ 1.25" male pilot     Rnd. Flange 2.5" w/ 1.25" male pilot     Rnd. Flange 2.62" no pilot	1.875"	A- Shaft Sealed** B- Bearing Sealed X- None^^	With Comp. A- A,Ā,B,B Z,Z̄ *** 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			Mounted on Encoder Mounted on 18" cable (00W)							
	<ul> <li>up to 16,384 PPR available</li> <li>recommended, N/A with Mounting Styles "3".</li> <li>N/A with MS 6 or 7 Pin Connector.</li> <li>Only available with Mounting Style "3"</li> <li>not recommended for industrial applications</li> </ul>				10 Pin MS		6 Pin MS	7 Pin MS		8 Pin M12	
					plug (std. phasing) plug (reverse phasi plug (std. phasing) plug (reverse phasin	ing) F- w/o G- w/ p	plug (std. phasing) plug (reverse phasing) lug (std. phasing) lug (reverse phasing)	J- w/o plug (std. phasing) K- w/o plug (reverse phasing) M- w/ plug (std. phasing) N- w/ plug (reverse phasing)		T- w/o plug (Turck Pinout) U- w/o plug (US Pinout)	

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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