

Avtron AV56S THIN-LINE II Encoders



Stainless Steel Heavy Mill Duty Magnetic Modular Encoder 4.5" C-Face Mount

STRONGER and SMARTER

- | Heavy Mill Duty
- | Simple, Secure Installation
- | Wide-Gap Technology: No Sensor Scraping or Adjustment
 - | Up to 5000 PPR
 - | No Couplings or Bearings
 - | Sealed Electronics
- | Self-Diagnostic LED and Alarm Output
 - | Universal 5-24V Operation
 - | 3 Year No-Hassle Warranty

AV56S

AV56S THIN-LINE II™ heavy mill duty modular magnetic encoders are designed for washdown and marine duty and fit a standard 4.5" motor flange. Other THIN-LINE II models, ranging from 115mm to 8.5", are available to fit other motor sizes.

THIN-LINE II encoders feature simple installation, durable construction, and clear diagnostics to eliminate encoder-related downtime:

First, the magnetic sensors are fully potted, to withstand dirt and liquids. No glass disks, no optics to clog. There are no moving, wearing parts!

The patented Wide-Gap™ rotors put an end to sensor damage, are simpler to install, and stay securely mounted to the shaft.

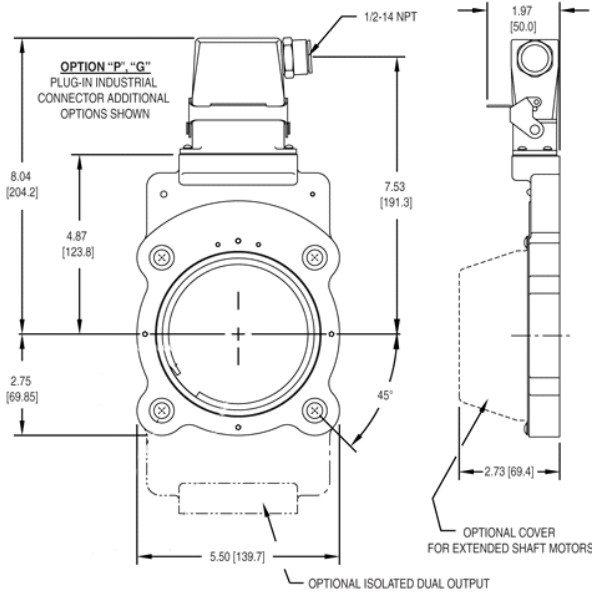
The universal 5-24V design drives longer cables and is protected against wiring errors and surges.

When you power up an AV56S, you know you installed it right: the green light tells you the digital self-tuning has set your AV56S optimally.

If at any time, the AV56S cannot produce ideal signals, the light changes to red and the remote alarm contact activates. However, the encoder keeps working to give you time to schedule service.

With a real-world installation history of over 4,500,000 hour MTBF, AV56S encoders will keep your machine running 24/7/365!

OUTLINE DRAWING



MORE AV56S ADVANTAGES

- Replaces Avtron M56S, Northstar/Dynapar™ D5, D560, SL56; online cross reference guide available
- Shrugs off dirt, oil, and water contamination
- Highly resistant to electrical and magnetic motor and brake noise
- If damaged, electronics can be replaced without removing rotor
- Built-in motor position guide and diagnostic check
- No air gap adjustment required
- AV56S features stainless steel for washdown and marine applications
- Sealed thru-shaft option
- Fits shafts 0.500" - 3.188" [10 - 85 mm]
- 4,500,000+ hour MTBF design

AV56S SPECIFICATIONS

Operating Power: Volts: 5 - 24 VDC; Current: 100mA, no load

Output Format: A Quad B with Marker (A,A-, B,B-, Z,Z-)

Second Isolated Output: Optional

Frequency Range: 0 to 165 KHz

Max. Instantaneous Current Output: 3000 mA*

PPR: 8 - 5000

Speed: 5000 RPM Max. std., for higher speeds, consult factory

Electronics: Fully Encapsulated, IP67**

Temperature: -40° to 100°C (150°C rotor)

Vibration: 18 g's

Shock: 1 meter drop test

Chemical: Resists salt, acids and bases

Wash Down: Stainless Steel

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

Cam Screw Rotor™, THIN-LINE II™, and Wide-Gap™ are trademarks of Avtron.

All dimensions are in inches [millimeters].

Specifications and features are subject to change without notice.

* Output Option 8, See manual for details.

** Connector options may reduce IP rating.

SELECTION GUIDE

AV56S PART NUMBERS AND AVAILABLE OPTIONS								
Model	Housing Type	Shaft Size (Thru Shaft Rotor)	Cover Style	Line Driver	Single/Left Output (PPR)	Right Output (PPR)	Connector	Modifications
AV56S	1- Single Output	T0- Non-std. Shaft Size XX- None Thru Shaft Rotor (Metric) US Metric TA- 0.500 M2- 10mm TB- 0.625 MA- 11mm TC- 0.875 M3- 12mm TD- 0.938 MB- 14mm TE- 1.000 MC- 15mm TF- 1.125 MD- 16mm TG- 1.250 M4- 18mm TH- 1.375 ME- 19mm TI- 1.500 MF- 24mm TJ- 1.625 MG- 28mm TK- 1.750 MH- 30mm TL- 1.875 MT- 32mm TM- 2.000 MJ- 36mm TN- 2.125 MK- 38mm TO- 2.250 ML- 42mm TP- 2.375 MM- 45mm TR- 2.500 MN- 48mm TS- 2.625 MP- 52mm TU- 2.875 MR- 55mm TV- 3.000 MS- 60mm T4- 3.125 MU- 65mm T7- 3.188 MV- 70mm MW- 75mm MY- 80mm MZ- 85mm	E- Extended Shaft Cover F- Flat Cover T- Flat Thru-Hole Cover with Shaft Seal.	6- 5-24V in/out 8- 5-24 V in, 5-15 V out 9- 5-24V in, 5V out	0- Non-std. S- 600 V- 900 C^A-50 F- 60 Y- 1024 G- 100 Z- 1200 H- 120 A^A-1270 B^A-150 L- 240 N- 256 D- 4096 E- 360 P- 300 8- 4800 Q- 500 X- None R- 512 S- 600 V- 900 J- 960	C^A-50 Y- 1024 F- 60 Z- 1200 G- 100 A^A-1270 H- 120 3- 2000 B^A-150 D- 4096 N- 256 8- 4800 E- 360 0- Non-Std. B- 480 Q- 500 X- None R- 512 S- 600 V- 900 J- 960	P- 10 Pin EPIC Industrial w/ Plug G- 10 Pin Industrial w/ Plug (Northstar pinout) Q- 10 Pin Industrial w/Plug on Remote Mount Base, 18" Cable. 1- 10 Pin Stainless Steel Epic w/Plug W- 3 Ft. Cable, Sealed L- 3 ft. Cable, Sealed, w/ 90° grommet. Z- 3 Ft. Cable w/ EPIC Industrial with Plug Y- 10 pin MS w/plug on 12" Cable R- Mini Twist Lock (Mini MS) w/ mating plug S- Mini Twist Lock (Mini MS) on 3' cable w/mating plug	000- No Modification 002^select alternate PPR assignment code 004- Add Housing Drain (single output only) 9xx- Special Cable Length, xx=length in feet

^ To specify this PPR, also specify modification code 002.



Nidec-Avtron Makes the Most Reliable Encoders in the World

8901 E. PLEASANT VALLEY ROAD • INDEPENDENCE, OHIO 44131-5508
TELEPHONE: (1) 216-642-1230 • FAX: (1) 216-642-6037
E-MAIL: tachs@nidec-avtron.com • WEB: www.avtronencoders.com

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