

Avtron THIN-LINE™ M56/M56S

Magnetic, Modular Encoder, 4.5" C-Face Mount



GET THE THIN-LINE EDGE!

- Heavy Mill Duty
- Simple Installation
- Wide-Gap Technology, No Air Gap Adjustment Required
- Mounts Securely to Motor
- No Couplings or Bearings
- Thin Profile
- Sealed Electronics
- Dual C-Face Standard
- Marker Pulse Standard
- Dual Output Option
- -40°C to +100°C Operation
- 3 Year No-Hassle Warranty
- Excellent for Gear Motors and Brake Applications

M56 & M56S THIN-LINE™ heavy mill duty modular magnetic encoders (also known as digital tachometers and pulse generators) fit standard 4.5" C-Face motors; the M56S, made of stainless steel, is specially made for washdown, food, and marine applications. Other THIN-LINE models, ranging from 115mm to 8.5", are available to fit other motor sizes as needed.

End the Encoder Grind with THIN-LINE Wide-Gap Sensor Technology! Modular

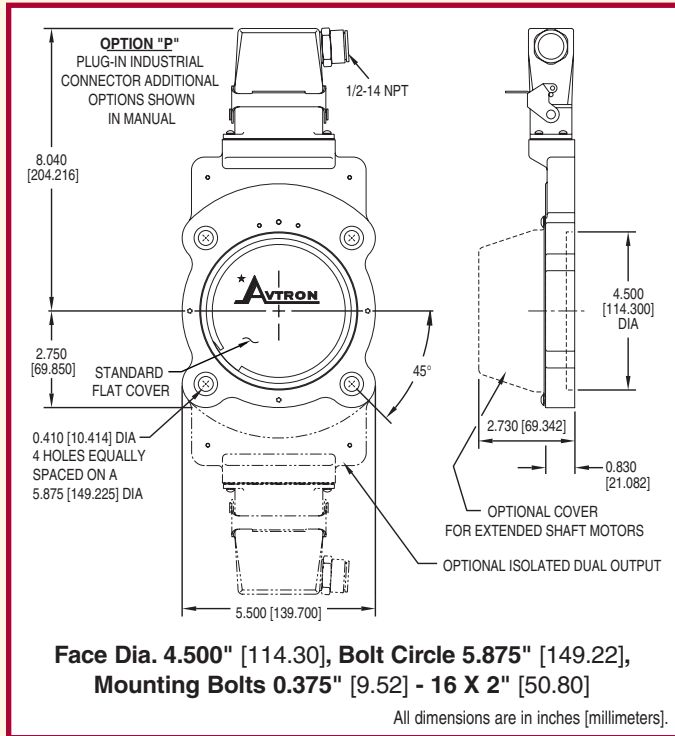
magnetic encoders from competitors have a tiny space, less than 1/64 of an inch, between the rotor, sensor, and housing! This leads to rotor damage and encoder failure with the slightest misalignment, shaft deflection, or axial movement. THIN-LINE encoders have a sensor air gap over 2.5 times larger than the competition, so installation and replacement don't require shimming or adjustment; this prevents the rotor from grinding against the sensor or the housing if the tachometer is installed

imperfectly or there is shaft runout. The Wide-Gap Sensor also permits replacement and reinstallation of electronics and stator of the THIN-LINE encoder without removing the rotor. This slashes installation time and problems; no more rotor grinding!

Why settle for unreliable, fragile optical encoders or magnetic encoders that can't handle your demanding applications? Upgrade to THIN-LINE Today!

M56/M56S Magnetic, Modular Encoder, 4.5" C-Face Mount

OUTLINE DRAWING



Check out our web site for more detailed specifications, drawings, and installation instructions.

www.avtronencoders.com

MORE THIN-LINE ADVANTAGES

- Resists failures from dirt, oil, and water contamination
- Highly resistant to electrical and magnetic motor and brake noise
- If damaged, electronics can be replaced without removing rotor
- Highest rotor holding force available for crane/hoist/brake applications
- No air gap adjustment required
- Corrosion-resistant coating on all metal surfaces
- M56S features stainless steel for washdown and marine applications
- Available through-shaft option with shaft seal
- Fits shafts 0.500" – 3.375" [12.700 – 85.725mm]
- 100,000+ hour MTBF design

M56/M56S SPECIFICATIONS

Operating Power: Volts: 5 - 24 VDC; Current: 80mA, no load

Output Format: A, \bar{A} , B, \bar{B} , Z, \bar{Z}

Second Isolated Output: Optional

Frequency Range: 0 to 150 KHZ

PPR: 120 - 2048

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

Electronics: Fully Encapsulated

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

Vibration: 18 g's

Shock: 1 meter drop test

Chemical: Polyurethane enamel paint protects against salt spray, mild acids, and bases.

Wash Down: Stainless Steel M56S option

CE Rated

SELECTION GUIDE

Model	Housing Type	Shaft Size (Thru Shaft Rotor)	Cover Style	Line Driver	Single/Left Output	Right Output	Connector	Modifications
M56 M56S~	1- Single Output, 4.500 Pilot 2- Dual Output, 4.500 Pilot**	0- None 1- Non-Standard Shaft Size 2- 10mm L- 1.875 3- 12mm M- 2.000 A- 0.500 N- 2.125 B- 0.625 Q- 2.250 C- 0.875 P- 2.375 D- 0.938 R- 2.500 E- 1.000 S- 2.625 F- 1.125 T- 70mm* G- 1.250 U- 2.875 H- 1.375 V- 3.000* I- 1.500 4- 3.125* J- 1.625 7- 3.188* K- 1.750 6- 85mm*	X- None E- Extended Shaft Cover F- Flat Cover T- Flat Thru-Hole Cover with Shaft Seal	1- 5 to 24 VDC 2- 5 to 15 VDC 4- 5 to 24 VDC, 5v out	A- 128 PPR B- 256 PPR C- 512 PPR D- 1024 PPR E- 2048 PPR F- 120 PPR G- 240 PPR H- 480 PPR I- 960 PPR L- 600 PPR M- 1200 PPR	X- None A- 128 PPR B- 256 PPR C- 512 PPR D- 1024 PPR E- 2048 PPR F- 120 PPR G- 240 PPR H- 480 PPR I- 960 PPR L- 600 PPR M- 1200 PPR	P- 10 Pin EPIC Industrial w/ Plug Q- 18" Flex. Cable w/ Ind. Connector w/ Plug & w/ Adapter Block W- 3 Ft. Flexible Cable, Sealed Z- 3 Ft. Flexible Cable w/ EPIC Industrial	000- No Modification 004- Drain Hole (single output only) 006- Right Angle Cable Bushing 009- No Paint 010- Cam Screw Rotor 013- Cam Screw 150°C Rotor* 9xx- Special Cable Length, xx=length in feet

~ Stainless Steel
** Not Available on M56S

* Cam Screw Rotors US sizes only, 2.875" max., N/A M56S



THIN-LINE™ and Wide-Gap™ are trademarks of Avtron.
All dimensions are in inches [millimeters].
Specifications and features are subject to change without notice.