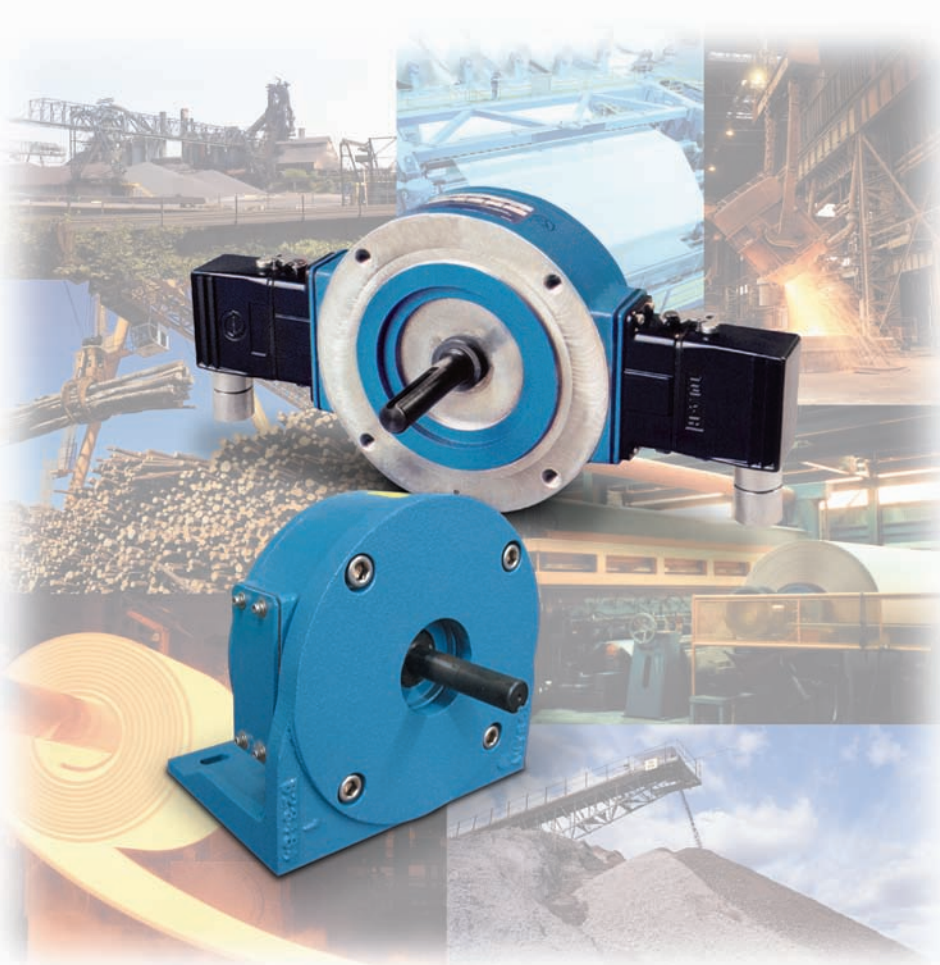


# Avtron M3 Solid Shaft

Optical Encoder, Foot or NEMA 56C Face Mount, 5/8" Coupled Shaft



## The Most Durable Optical Encoder Available!

- Mill Duty
- Wide-Gap Technology: Up to 8X larger gap between sensor and rotor
- Up to 2500 PPR
- Heavy Duty Bearings and Seals
- Rugged cast housing
- Dust and liquid tight
- Optional dual isolated outputs
- Replaces older optical units on DC motors
- Foot mounting available

**M3-1 and M3-2** mill duty optical solid shaft encoders are designed for NEMA 56C face mounting (M3-1) and foot mounting (M3-2) using coupled solid shaft. Other models are available for hollow shaft mounts, M3-3 thru -9.

Upgrade from tiny, fragile optical encoders. M3 mill duty encoders are

designed for use in rougher applications than ordinary optical encoders.

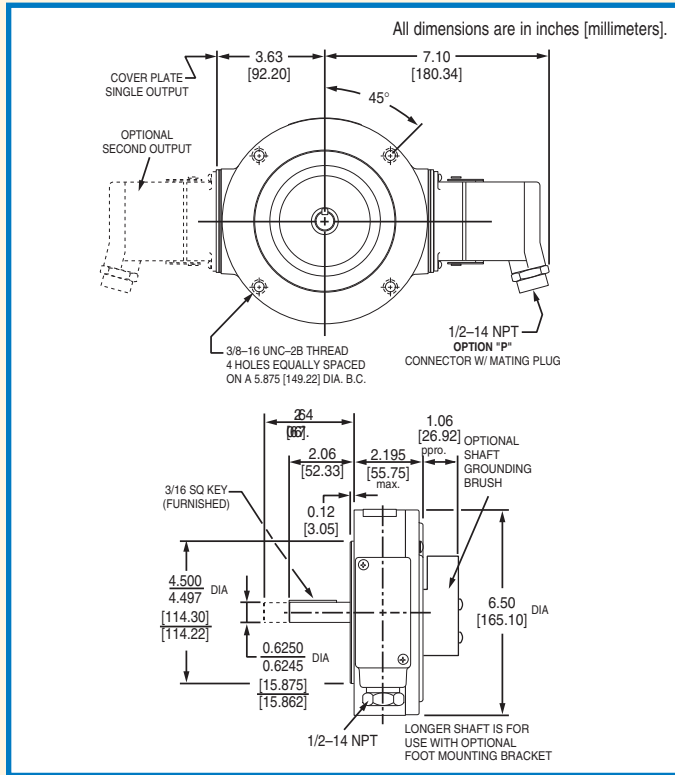
M3 has bigger bearings than light duty and commercial grade encoders to withstand more vibration and stress that come with less-than-perfect alignment and stub shaft coupling. M3 encoders are designed with bigger, heavy-duty seals to keep contamina-

tion out of the encoder and keep your machines working.

M3 encoders offer a large variety of connector and mounting options to replace virtually any existing encoder or tachometer. When you install an Avtron M3, you've upgraded to the most durable optical encoder available anywhere!

# M3 Optical, Solid Shaft Encoder (5/8")

## OUTLINE DRAWING



Check out our web site for more detailed specifications, drawings, and installation instructions. [www.avtronencoders.com](http://www.avtronencoders.com)

## SELECTION GUIDE

Model	Mounting Style	Shaft Style	Line Driver	Output Location	Base PPR	Connector	Modifications
M3-	0- Non-Standard 1- Face Mount 5/8" x 2" shaft 2- Foot Mount 5/8" x 2.64" (2" net) shaft	S- Single Ended Shaft	1- 5 to 24 VDC 2- 5 to 18 VDC 3- 18 to 24 VDC 4- 5 to 24 V in, 5 V out	L- Single output left side R- Single output right side D- Dual output	240 600 256 1024 360 1200 480 2048 500 2500 512		000- None 005- -40° C Rating 009- Northstar pinout
<b>Connector</b>							
<b>10 Pin Connector</b>				<b>6 Pin MS</b>		<b>5 Pin MS</b>	
<b>MS</b>		<b>MS mini</b>		<b>EPIC</b>		<b>Conduit Box</b>	
A- without Plug <sup>S</sup> B- with Flex. Conduit Adapter <sup>S</sup> C- with Plug <sup>S</sup>	K- with Flex. Conduit Adapter <sup>b</sup> L- with Plug <sup>b</sup> M- without Plug <sup>b</sup>	S- Baldor on 3 ft. Pigtail	P- with Plug V- without Plug	M940 replacement D- with Plug <sup>b</sup>	M737A replacement E- without Plug <sup>S</sup> F- with Plug <sup>S</sup> M727A replacement H- without Plug <sup>S</sup> J- with Plug <sup>S</sup>	N- with color coded leads T- with Terminal Block	W- Sealed, Pigtail X- Sealed, Industrial Connector without Plug Z- Sealed, Industrial Connector with Plug

<sup>S</sup> side exit <sup>b</sup> bottom exit

All dimensions are in inches [millimeters].  
Specifications and features are subject to change without notice.

## MORE M3 ADVANTAGES

- Highly resistant to electrical and magnetic motor and brake noise
- Auxiliary channel offers separate low frequency outputs (1/4) at no extra charge on each output.
- Marker Pulse Standard
- Available BC42, BC46, 5PY adapters to replace older DC tachogenerators
- Replaces Avtron M727A and M737A
- Optional -40° C operation

## M3 SPECIFICATIONS

**Operating Power:** 5-24 VDC; Current 120mA, no load

**Output Format:** A,  $\bar{A}$ , B,  $\bar{B}$ , C,  $\bar{C}$ ; Marker Z,  $\bar{Z}$

**Frequency Range:** 0 to 150 KHZ

**PPR:** 240-2500

**Speed:** 5000 RPM Max. Std., (for higher speeds, consult factory)

**Temperature:** -40°\* to 85°C (\*-20° standard)

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

**Weight:** 7 lbs.

### Foot Mount Kits

- A22232 - Standard Foot Mount  
A25448 - BC42/46 Foot Mount

