# Avtron M3 Large-Bore Encoders (M3-6/9, M3-G/J)



# **Durable Optical Large-Bore** Encoder

#### The Most Durable Optical **M3** Large-Bore Encoder Available!

#### I Mill Duty

Wide-Gap Technology: Up to 8X larger gap between sensor and rotor Up to 2500 PPR No couplings required Heavy duty bearings and seals Rugged cast housing Dust and liquid tight Available in thru shaft and end of shaft models Fits large motor and load shafts directly

Avtron M3 large bore hollow shaft mill duty optical hollow shaft encoders fit motor or load shaft from 1 1/2" to 2 3/8" [48mm-60mm].

Looking for solid shaft M3-1 and M3-2 models or small-bore M3 models? Use our cross reference page to replace these models with the latest Avtron models.

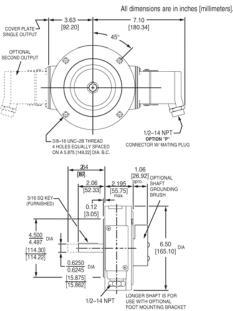
Forget tiny hollow shaft encoders that require shaft reduction and special protection! M3 mill duty encoders can accommodate up to a 2 3/8" shaft directly and are designed for use in rougher applications than ordinary optical encoders.

M3 has bigger bearings than light duty and commercial grade encoders to withstand more shaft vibration and stress. M3 encoders are designed with bigger, heavy-duty seals to keep contamination 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!

Also available: Heavy mill duty HS45 and severe duty AV685 encoders.

#### **OUTLINE DRAWING**



## **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 L.
- Marker Pulse Standard 1
- Available C-Face tether kits (4.5" to 16") L
- Available threaded rod torque arm I
- Optional OSHA finger guard T
- Optional shaft grounding brush 1
- Optional dual output for backup, complete isolation between outputs Т
- 1 Year No-Hassle Warranty

#### **M3 SPECIFICATIONS**

Operating Power: 5-24 VDC, 5-18V, 12-24V; Current 120mA, no load Output Format: A,A-, B,B-, C,C-; Marker Z,Z-Frequency Range: 0 to 150 KHz

PPR: 240-2500 Speed:

5000 RPM Max. Std., shafts 1 1/2" to 1 5/8"

3600 RPM Max. Std., shafts 2" to 2 3/8"

(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.

All dimensions are in inches [millimeters].

Check out our website for more detailed specifications, drawings, and Specifications and features are subject to change without notice. installation instructions. www.avtronencoders.com

\* See instruction sheet for full list.

## **SELECTION GUIDE**

M3 PAF	RT NUMBERS A	ND AVAILAB	LE OPTIONS						
Model	Bore Size	Mounting Style	Line Driver	Output Location	PPR	Connector	Modifications		
M3-	7-2 3/8° G-48mm 8-1 1/2″ D-52mm 9-1 5/8″ E-58mm 6-2″ H-60mm J- 2 1/8″	T- Thru Shaft G- End of 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	right side D- Dual output	240         600           256         1024           360         1200           480         2048           500         2500           512		00540° 008- 4.5" 009- Nort 015- Stair	ue Arm Mount	28- 12.5" C-Face Mount
				Co	nnector				
10 Pin Connector					6 Pin M	6 Pin MS 5 P		Conduit Box	3 ft. Flex. Cable
MS MS mini				EPIC	M940 replacer			N- with color	W- Sealed, Pigtail
A- without Plug <sup>6</sup> K- with Flex. Conduit       B- with Flex. Conduit     Adapter <sup>0</sup> Adapter <sup>6</sup> L- with Plug <sup>6</sup> C- with Plug <sup>5</sup> M- without Plug <sup>6</sup>			S- Baldor Twis Lock on 3 ft. Pigtail	t P- with Plug V- without Plug	D- with Plug⁵	E- witho F- with I M727A r H- witho J- with I	Plug <sup>e</sup> eplacement out Plug <sup>e</sup>	T- with Terminal	<ul> <li>X- Sealed, Industrial Connector without Plug</li> <li>Z- Sealed, Industrial Connector with Plug</li> </ul>

<sup>5</sup> side exit <sup>b</sup> bottom exit





Nideo-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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