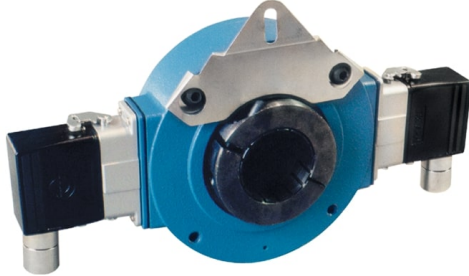


Avtron M4 Large-Bore Encoders



**Magnetic Hollow Shaft Mount Heavy
Mill Duty Encoder, 1 1/2" to 2 3/8" [48-
60mm]**

Magnetic Durability in a Compact Encoder

Heavy Mill Duty

Immune to water, oil, dust & dirt

Up to 1200 PPR

No couplings required

Heavy duty seals

Rugged cast housing

Available in thru and end of shaft
models

Fits large shafts directly

1 Year No-Hassle Warranty

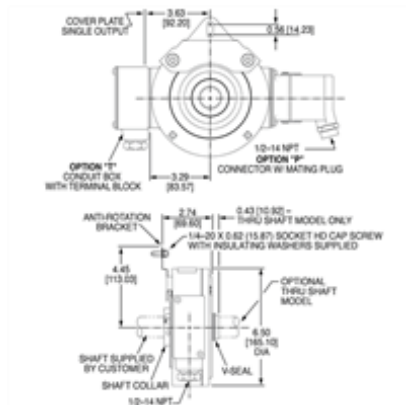
M4

Avtron M4 large bore heavy mill duty magnetic hollow shaft encoders fit motor or load shafts from 1 1/2" to 2 3/8" [48-60mm]. Looking for M4-1 or M4-2 or small-bore M4 models--these have been replaced by AV485 and HS45 upgrade models respectively. Use our [cross reference](#) page for these models

Forget tiny hollow shaft optical units that require shaft reduction and special protection! M4 magnetic heavy duty encoders can accommodate up to a 2 3/8" shaft directly and are designed for use in mill environments with water, oil, moisture, dust, and dirt.

The M4 magnetic sensor system is far more durable than optical sensors. M4 encoders offer a large variety of connector and mounting options to replace virtually any existing encoder or tachometer. Upgrade to an M4 encoder for maximum uptime!

OUTLINE DRAWING



MORE M4 ADVANTAGES

- Available C-Face tether kits (4.5" to 16")
- Available threaded rod torque arm
- Optional OSHA finger guard
- Highly resistant to electrical and magnetic motor and brake noise
- Optional second output can be alternate PPR
- Available shaft grounding kit
- Replaces Lakeshore/Northstar HS56, HS85
- 1 Year No-Hassle Warranty

MORE M4 SPECIFICATIONS

Operating Power:

5-24 VDC, 5-18V, 12-24V; Current 120mA, no load

Output Format: A,A-, B,B-; Optional Marker Z,Z-

Frequency Range: 0 to 100 KHz

PPR: 240-1200

Speed:

5000 RPM Max. Std., shafts 1 1/2" to 1 5/8" [38mm-41mm]

3600 RPM Max. Std., shafts 2" to 2 3/8" [48mm-60mm]

(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].

Specifications and features are subject to change without notice.

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



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SELECTION GUIDE

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MODEL	HOLLOW SHAFT BORE SIZE	MOUNTING	LINE DRIVER	LEFT OUTPUT	RIGHT OUTPUT	BASE PPR	MARKER PULSE	CONNECTOR OPTIONS	MODIFICATIONS



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M4-	8 - 1-1/2 inch Hollow Shaft 9 - 1-5/8 inch Hollow Shaft 6 - 2 inch Hollow Shaft J - 2-1/8 inch Hollow Shaft 7 - 2-3/8 inch Hollow Shaft G - 48mm Hollow Shaft D - 52mm Hollow Shaft E - 58mm Hollow Shaft H - 60mm Hollow Shaft	S - Standard End-of-Shaft Mounting G - Shaft Grounding with Standard End-of-Shaft Mounting T - Through Shaft Mounting w/ Seal	1 - 5-24V In/Out (7272) 2 - 5-18V In/Out (Hi-Power Outputs) 3 - 12-24V In/Out (Hi-Power Outputs) 4 - 5-24V In, 5V Out (7272)	X - No Left Output L - Low Res. M - Medium Res. H - High Res.	X - No Right Output L - Low Res. M - Medium Res. H - High Res.	48 - Base PPR (used for 240/480/960) 51 - Base PPR (used for 256/512/1024) 60 - Base PPR (used for 300/600/1200)	-- No Marker Pulse Z - Marker Pulse	A - 10 Pin MS Connector w/o Plug B - 10 Pin MS Connector w/ Flex Conduit Adapter C - 10 Pin MS Connector w/ Plug E - 5 Pin MS Connector w/o Plug on Box (M737 Equivalent) F - 5 Pin MS Connector w/ Plug on Box (M737 Equivalent) K - 10 Pin MS Connector w/ Flex Conduit Adapter on Box L - 10 Pin MS Connector w/ Plug on Box M - 10 Pin MS Connector w/o Plug on Box R - 10 Pin Mini MS Connector w/o Plug S - 10 Pin Mini MS Connector on 3' Cable P - 10 Pin EPIC w/ Plug Q - 18" Flex Cable, 10 Pin EPIC w/ Plug and Adapter Block V - 10 Pin EPIC w/o Plug H - 5 Pin MS Connector w/o Plug on Box (M727 Equivalent) J - 5 Pin MS Connector w/ Plug on Box (M727 Equivalent) N - Conduit Box w/ Bare Wires T - Conduit Box w/ Terminal Block W - 3' Flexible Cable, Sealed X - 3' Flexible Cable, EPIC w/o Plug Z - 3' Flexible Cable, EPIC w/ Plug	000 - Include A25954 Tether w/standard bolt 003 - 12" Threaded Rod Torque Arm (P/N B27239) 004 - Insulated Conduit Adapter (P/N 431023) & 12" Threaded Rod Torque Arm Mount (P/N B27239) 005 - -40°C/F Operating Temperature Modifications, 1-2 pieces 006 - NEMA 56C Face Tether Bracket Kit (P/N A24492) 011 - 4-1/2" Tether Kit for Gainesville / Flowery Branch Motors (P/N A25681) 013 - 320-449 frame XSD Installation Kit w/15" Tether and Stub Shaft 014 - 5-18V DC and 5-24V DC Line Drivers on a Dual Output M3/M4 015 - Stainless Steel Hollow Shaft & Clamping Collar, English Sizes 016 - 8.5" C-Face Mount 017 - 4.5" tether bracket and 18" cable with Y Connector (P/N A24492) 018 - 5-18V DC Line Driver with 8' Cable Assembly 020 - XSD 140 Frame Installation Kit (P/N A25052-12 + P/N A29209) 021 - XSD 180 Frame Installation Kit (P/N A25052-12 + P/N A29210) 022 - XSD 210-280 Frame Installation Kit (P/N A25052-13 + P/N A29210) 023 - XSD 140 Frame Tether Kit (P/N A29209) 024 - XSD 180-280 Frame Tether Kit (P/N A29210) 025 - XSD 320-449 Frame 15" Tether and T-Bolt (P/N A29331) 026 - 'A' Connector w/ 5' Flexible Conduit W/ pigtail leads (P/N A29352) 027 - 12.5" Flange Tether Bracket (P/N A27410) + -40°C/F Operating Temperature Modifications, 1-2 pieces 028 - 12.5" Flange Tether Bracket (P/N A27410) 029 - 8.5" C-Face Mount + -40°C/F Operating Temperature Modifications, 1-2 pieces 030 - Dynapar Small Encoder (H23, HS20, etc.) Connector Pinout for A, B, C, K, L and M Connector Options 031 - Viton Seal in place of Nylil Seal on through shaft option 034 - Delete breather for vertical mount 036 - Delete breather for vertical mount & add NEMA 56C Face Tether Bracket Kit for Marathon Vertical Mount 037 - Special Anti-Rotation Arm and Shaft Grounding Assembly (request special quote) 038 - 15" Fan Cover Tether Bracket and Insulated Conduit Adapter (P/N A29331) + T-bolt mount 039 - Tether Bracket and Insulated Conduit Adapter (P/N A24492) 041 - 15" Fan Cover Tether Bracket
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