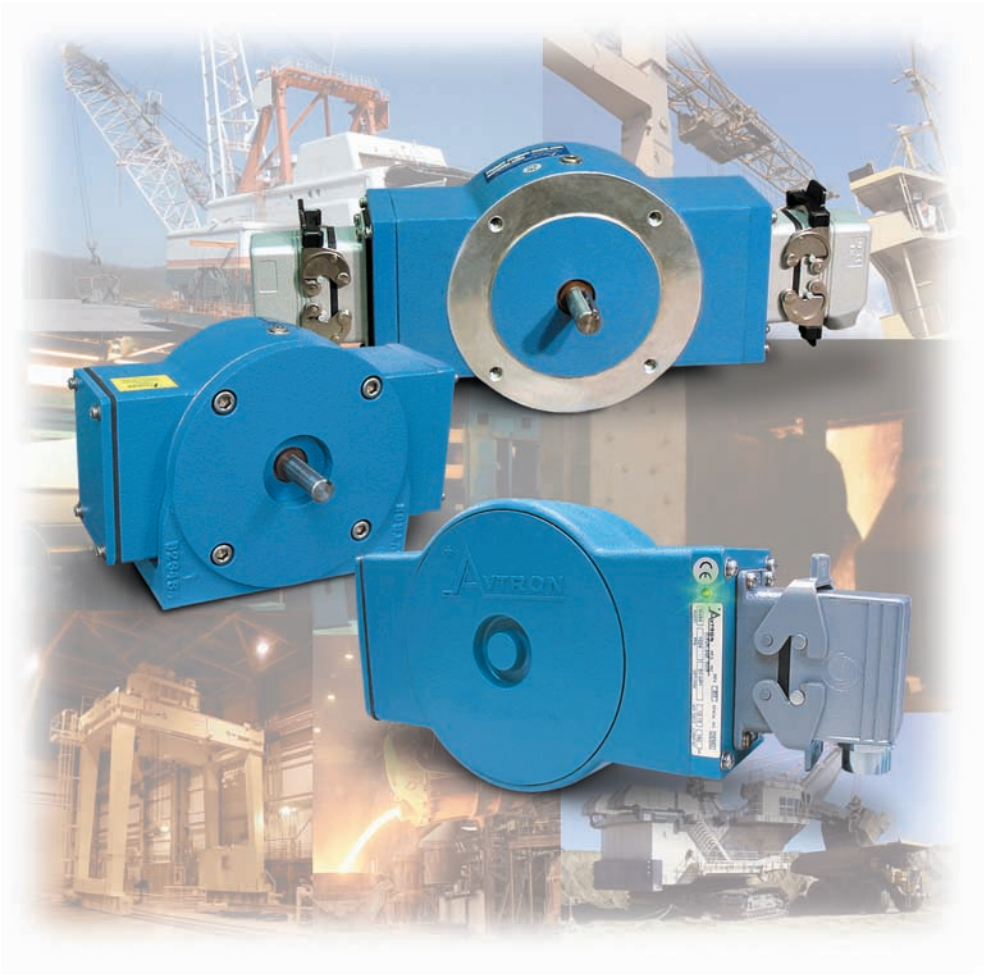


Avtron Model M485

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



The Toughest Solid Shaft Encoder Built!

- Severe Mill Duty
- Up to 1200 PPR
- Replaces Competitive Models Without Rewiring
- Self-Diagnostic LED & Alarm Output
- Foot or NEMA 56C Face Mount
- Removable Sensors
- IP66 Enclosure
- High-Power Output Standard
- Optional Dual Isolated Outputs
- 1 Year No-Hassle Warranty

M485 SMARTachs are magnetic, severe duty encoders that offer foot or NEMA 56C face/flange coupled (flowerpot) mounting. They feature huge bearings on an ultra-wide stance for pulley and other rough applications.

The M485 is designed for use in the worst environments with constant exposure to water, oil, dirt, and salt spray. The Viton™ seals protect the encoder bearings, and the fully encapsulated magnetic sensor technology shrugs off

liquids, dust, and dirt. Liquids and condensation kill ordinary encoders; the M485 ignores them and features a one-way breather to let excess liquids drain out.

What makes an M485 SMARTach so smart? The redundant, removable sensors ensure 100% uptime. SMARTach sensors feature a diagnostic system with LED output and optional alarm contact. The system monitors and adjusts the waveform of the encoder to compensate for real-world changes. If

the signal is not ideal, the alarm output and LED inform the machine operator that the sensor module should be checked, before a failure occurs!

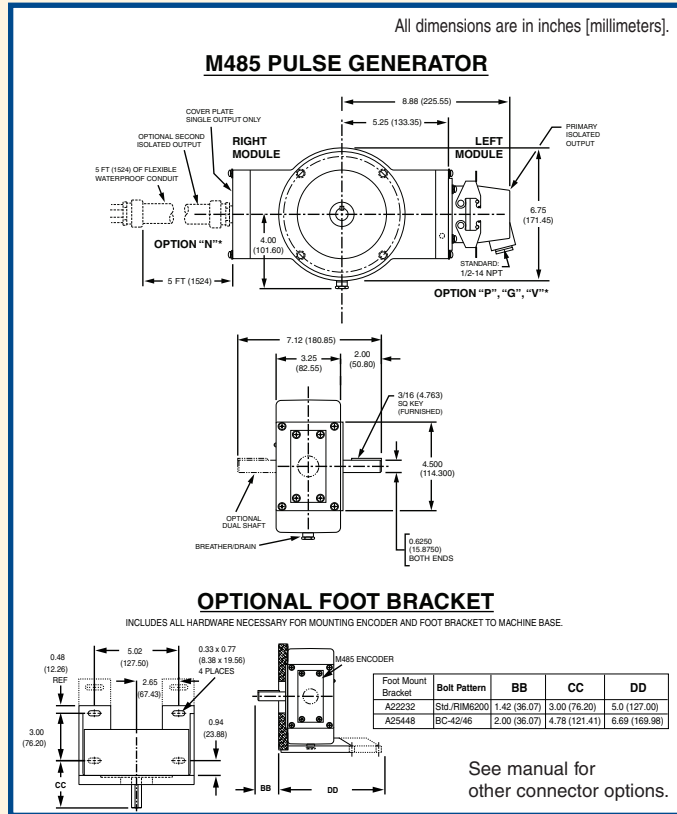
With a foot or face mount footprint that exactly matches older analog tachogenerators and competitors' lesser models, the M485 is the easy way to increase your mill's productive uptime!



QUALITY SYSTEM CERTIFIED TO ISO 9001
www.avtronencoders.com

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

OUTLINE DRAWING



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

SELECTION GUIDE

M485 PART NUMBERS AND AVAILABLE OPTIONS (including M484L sensors)																
Model	Shaft Options**	Base PPR	Left Module				Right Module									
			Marker	Range (PPR)	Connector	Volts	Marker	Range	Connector	Volts						
M485L M484L (Sensor Only)	-- Single D- Dual G- Single w/Shaft Ground	48- 480 51- 512 60- 600	Z- Marker - None	X- No left sensor, right sensor only L- Low Range (Base PPR x 1/2) M- Medium Range (Base PPR x 1) H- High Range (Base PPR x 2)	X- No left sensor N- Wire Leads Only M- Wire Leads w/ non-metallic adapter C- 10 Pin MS w/ plug L- 10 Pin MS Elbow w/ plug T- Terminal Box S- Terminal Box w/ non-conductive adapter K- Condulet P- Plug-in Industrial G- Plug-in Industrial (Northstar pinout) V- Plug-in Industrial w/ non-conductive adapter E- 5 Pin MS w/o Plug (M737 equiv.) F- 5 Pin MS w/ Plug (M737 equiv.) H- 5 Pin MS w/o Plug (M727 equiv.) J- 5 Pin MS w/ Plug (M727 equiv.)	X- No left sensor 1- 12-15V (4428) hi-power 3- 5-18V (4428) hi-power 5- 5-24V (7272)	M485L: Same Code Format as Left Module M484L: Not Applicable	<table border="1"> <thead> <tr> <th colspan="2">Foot Mount Brackets</th> </tr> </thead> <tbody> <tr> <td>A22232</td> <td>Standard/RIM 6200</td> </tr> <tr> <td>A25448</td> <td>BC42/46</td> </tr> </tbody> </table>		Foot Mount Brackets		A22232	Standard/RIM 6200	A25448	BC42/46	
Foot Mount Brackets																
A22232	Standard/RIM 6200															
A25448	BC42/46															
** Dual and Shaft Ground not applicable on M484L. Sensor Only.																

The removable sensor assemblies included with Model M485L Encoders are identified by model number MS484L. An M484L sensor assembly consists of a sensor module and a connector option.

MORE M485 ADVANTAGES

- Foot mount bolt pattern matches older analog models exactly
- Foot mount bracket eliminates realignment
- Adaptive electronics find problems before they cause failure
- Polyurethane 2-coat paint primer is fully corrosion resistant
- No sensor shimming required
- Dual oversize bearings, spaced farther apart
- Synthetic bearing lubricant for longer life
- Optional overspeed switch
- Optional shaft grounding

M485 SPECIFICATIONS

Operating Power

- (Each Sensor): Option 1: 12-15V, 80mA
Option 3: 5-18V, 300mA
Option 5: 5-24V, 300mA

Output Format: A Quad B (A, \bar{A} , B, \bar{B}) with optional marker Z, \bar{Z}

Frequency Range: 0 to 75 KHz

Maximum Cable Length: 2000' [600m]***

PPR: 240 - 1200

Speed: 300/600/1200 PPR: 3600 RPM Max.
256/512/1024 PPR: 4200 RPM Max.
240/480/960 PPR: 4500 RPM Max.

Temperature: -40* to 71°C

Environmental: IP66**, Nema 4, 13 Rating

Vibration: 5-2000Hz, 18Gs

Weight: 14 lbs. [6.4 kg]/16lbs [7.3kg] dual output

CE Rated



*-17C Standard
**Connector options may reduce IP rating.
***Hi-power outputs; see manual for details.
All dimensions are in inches [millimeters].
Specifications and features are subject to change without notice.