

09/15/25



## Avtron HS35M Encoders



### Mill Duty Magnetic Hollow Shaft Encoder

#### Magnetic Durability in a Compact Encoder

- Fits shafts 1/2" to 1 1/8"
- Simple Installation Up to 5000 PPR
- Replaces Competitive Models without Rewiring
- No Solder Industrial EPIC Connector Available
- Fits end of shaft and through shaft applications
- High Power Outputs Available
- 20°C to +85°C Operation
- Optional Dual Isolated Outputs
- 2 Year No-Hassle Warranty
- Fully Insulated from Motor Shaft Currents

#### HS35M

HS35M encoders fit shafts from 1/2" to 1 1/8" [12mm to 30mm] easily, using a durable shaft insert. Models from 1/2" to 1" [12mm to 20mm] may be resized by replacing the insert, enabling our factory, distributors, and customer stockrooms to swiftly meet any need. The engineered resin housing is immune to most chemicals, and eliminates any possibility of shaft current or grounding problems.

Avtron encoders have superior shaft seals and bearings that stay sealed to keep out contamination caused by temperature cycling and liquid sprays. The HS35M offers high power outputs that can drive cables over 1000' [300m] with full short circuit and overvoltage protection!

The HS35M features two large bearings, one at each end of the enclosure for strength and resistance to damage. Many competitors use only a single bearing, or two tiny bearings side by side.

Often, optical encoders fail because of dust or water contamination that prevents the sensor from seeing the optical disk. The HS35M advanced magnetic technology sees through contamination and the fully sealed circuit design ensures your machine keeps working, even in mill environments.

The HS35M offers magnetic performance and moisture resistance, in a compact package, and for a great price. Select an Avtron HS35M and upgrade your machine today!

## OUTLINE DRAWING













- All digital design; no adjustments or potentiometers
- Innovative shaft ring retains collar during installation
- Advanced sensor technology
- Dual bearings, spaced farther apart, with synthetic lubricant for longer life
- No extra charge for signal complements and marker pulse (A,A-, B,B-, Z,Z-)
- Fully insulated from motor shaft currents
- Models 1/2" to 1" [12mm-20mm] can be resized by interchanging inserts
- Optional basket guard adds even more protection

Operating Power: Volts: 5 - 24 VDC; Current: 80mA, no load  
Output Format: A Quad B with marker (A, /A, B, /B, Z, /Z)  
Frequency Range: 0 to 165 kHz  
PPR: 1 - 5000 standard (for other PPR needs, consult factory)  
Speed: 4700 RPM Max., (for higher speeds, consult factory)  
Temperature: -20° to 85°C  
Environmental: IP65; NEMA 13 Rating  
Vibration: 5-2000Hz, 20Gs  
Shock: 50G, 11ms duration  
Weight: Single: 1.4 lbs. [635 g] Dual: 2.0 lbs. [905 g]  
Certifications: CE

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

HS35MGX9FGU0XF0W

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|---|---|---|---|---|---|---|--|---|---|
| MODEL   | LEFT OUTPUT<br>PPR  | RIGHT OUTPUT<br>PPR   | LINE DRIVER   | HOLLOW<br>SHAFT BORE<br>SIZE  | CONNECTOR<br>OPTIONS  | MOUNTING  | PROTECTION   | ANTI-<br>ROTATIONAL<br>TETHER   | CHANNELS AND<br>MODIFICATIONS   |
| HS35M   | G - 100 PPR   | X - No Right Output   | 9 - 5-24v In, 5v Out<br>(7272)  | F - 1 in. (Native<br>Bore)  | G - 6 Pin MS Style<br>on 18 in. Cable, with<br>Plug, Avtron/BEI<br>Phasing.         | U - Universal (Thru<br>& End of Shaft)  | 0 - No Protective<br>Basket  | X - No Tether<br>Hardware   | F0W - Connector on<br>Cable, channel (A,<br>B) (no compliments,<br>19 marker pulse)   |