

## 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 3072 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.

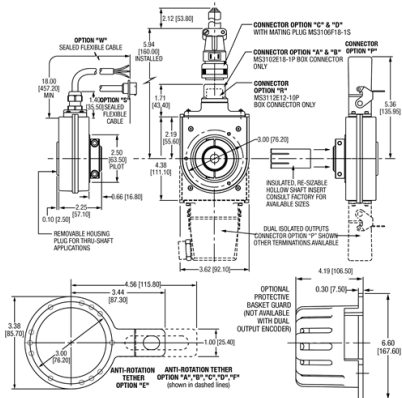
The HS35M offers high power outputs that can drive cables over 1000' [300m] with full short circuit and overvoltage protection!

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



# MORE HS35M ADVANTAGES

- 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

# MORE HS35M SPECIFICATIONS

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 - 3072 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

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](http://www.avtronencoders.com)

# SELECTION GUIDE

## HS35MSX6FGU0XF0W

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MODEL	LEFT OUTPUT PPR	RIGHT OUTPUT PPR	LINE DRIVER	HOLLOW SHAFT BORE SIZE	CONNECTOR OPTIONS	MOUNTING	PROTECTION	ANTI-ROTATIONAL TETHER	CHANNELS AND MODIFICATIONS
HS35M	S - 600 PPR	X - No Right Output	6 - 5-28v In/Out (7272)	F - 1 in. (Native Bore)	G - 6 Pin MS Style on 18 in. Cable, with Plug, Avtron/BEI Pin Out	U - Universal (Thru & End of Shaft)	0 - No Protective Basket	X - No Tether Hardware	F0W - Connector on Cable, channel (A, B) (no compliments, no marker pulse)



Nidec Industrial Solutions  
243 Tuxedo Avenue - Cleveland, Ohio 44131  
[encoderhelpdesk@nidec-industrial.com](mailto:encoderhelpdesk@nidec-industrial.com)  
+1 216-642-1230 - [www.avtronencoders.com](http://www.avtronencoders.com)



Features and specifications are subject to change without notice. EU-SMART™, SMARTSafe™, SMARTTach™, THIN-LINE™, WIDE-GAP™, SAFETach™, and BULLSEYE32™ are trademarks of Nidec Industrial Solution. All other trademarks and registered trademarks are the property of their respective owners. Nidec Industrial Solutions' standard warranty applies. All dimensions approximate.