Rev: 05-12-17





# Mill Duty Magnetic Hollow Shaft Encoder

#### Magnetic Durability at a Great Price!

- 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
    - ı -20°C to +85°C Operation
  - Optional Dual Isolated Outputs
  - Fully Insulated from Motor Shaft

    Currents
    - 1 2 Year No-Hassle Warranty

## 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.

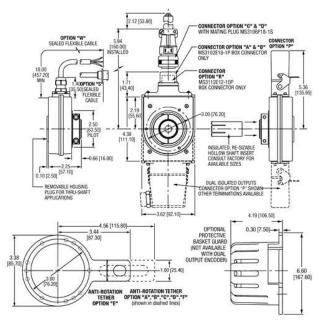
Avtron encoders have superior shaft seals and bearings that stay sealed to keep out contamination caused by temperature cycling and liquid sprays. The HS35M offers high power outputs that can drive cables over 1000' [300m] with full short circuit and overvoltage protection!

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

#### **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

Check out our website for more detailed specifications, drawings, andAll dimensions are in inches [millimeters]. installation instructions. www.avtronencoders.com

Specifications and features are subject to change without notice.

#### **SELECTION GUIDE**

HS35M PART NUMBERS AND AVAILABLE OPTIONS												
Model	Left & Right Output PPR	Line Driver	Bore Size	Connector Options	Mounting Style	Protection	Anti-Rotation Tether Options	Channels	Special Features			
HS35M	F- 60 Z- 1200 T- 80 1- 1250 G- 100 2- 1440 H- 120 3- 2000 L- 240 4- 2048 M- 250 5- 2500 N- 256 C- 3072 P- 300 X- None E- 360 Q- 500 (NA for left output) S- 600 U- 720 V- 900 Special W- 1000 Y- 1024 Y- 1024  Z- 1200 H- 1200 G- 300 G- 3072 F- 300 (NA for left output) Special Y- 900 F- 500 F- 720 F	6- 5-24V (7272) 8- 5-15V (4125) 9- 5-24V in, 5V out (7272)	0- Non- Std. Q- 14mm B- 1/2" R- 15mm C- 5/8" P- 12mm D- 3/4" S- 16mm E- 7/8" V- 19mm F- 1"* W-20mm G- 1 1/8"* Y- 25mm* 3- 30mm* U- U.S. Universal (all inserts, 1/2"-1") Z- Metric (all inserts, 12mm-20mm)	* No inser	U- Universal End-of-Shaft & Thru Shaft  icable on dual output. t used for Options "F allable with 0W species	al feature.	X- None A- Fan cover, 1/4-20 B- Fan cover, 5/16-18 C- Fan cover, 3/8-16 D- Fan cover, all E- 4.5" or 6.75" C-Face F- 8.5" C-Face G- 12" [300mm] Threaded Rod Tether M-4.5" C-Face or Fan Cover U- Universal (all tether options, excluding "G") P- 4.5" [115mm] Threaded Rod Tether, replaces Northstar HS35M, HSD35	A- A,Ā,B,Ā,Z,Ā B- A,Ā,B,° D- A,° E- A,B,Z° F- A,B° 4- Special PPR Enter codes under special features 9- All. Enter spe- cific cable length xx=feet under Special Features (Use w/ Connector Option "W").	00- None 0W- Connector on 18" cable: See Below			

Connector Options											
Mounted or	n Encoder		Mounted on 18" cable (0W)								
10 Pin MS	10 Pin EPIC	10 Pin mini MS	10 Pin MS«	6 Pin MS«	7 Pin MS«	8 Pin M12«	10 Pin EPIC«	10 Pin mini MS«	12 Pin M23		
A- w/o plug (std. phas- ing) B- w/o plug (Dynapar HS35 phasing) C- "A" w/ plug D- "B" w/ plug	P- w/ plug V- w/o plug		plug		J- w/o plug (std. phasing) K- w/o plug (Dynapar HS35 phasing) M- "J" w/ plug N- "K" w/ plug	T- w/o plug (Turck Pinout) U- w/o plug (US Pinout)		S- w/ plug	2- w/o plug (L&L Hubner pinout)		





Nidec-Avtron Makes the Most Reliable Encoders in the World

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All dimensions are in inches [millimeters].

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