

Avtron HS35M Encoders



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

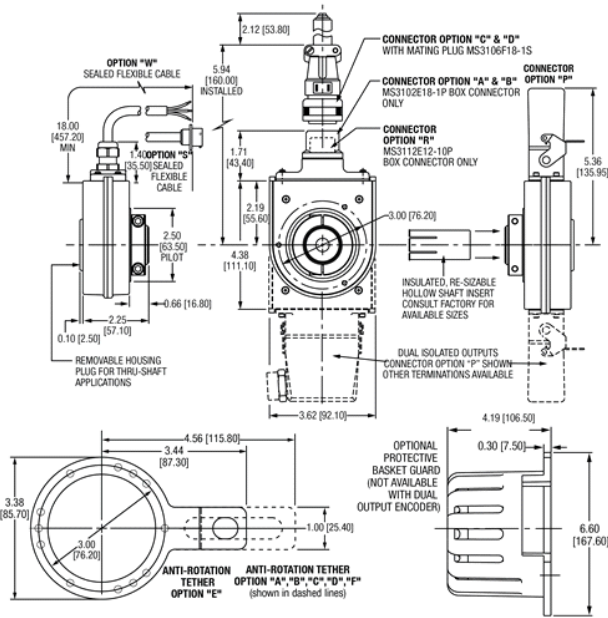
OUTLINE DRAWING

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, and 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 T- 80 G- 100 H- 120 K- 200 L- 240 M- 250 N- 256 P- 300 E- 360 R- 512 S- 600 U- 720 V- 900 W- 1000 Y- 1024	Z- 1200 1- 1250 2- 1440 B- 1500 3- 2000 4- 2048 5- 2500 C- 3072 X- None (NA for left output) Q- Special "S" Special Special PPR Table*	6- 5-24V (7272) 8- 5-15V (4125) 9- 5-24V in, 5V out (7272)	0- Non-Std. B- 1/2" C- 5/8" D- 3/4" E- 7/8" F- 1" G- 1 1/8" P- 12mm Q- 14mm R- 15mm V- 19mm W- 20mm Y- 25mm* U- U.S. Universal (all inserts, 1/2"-1") Z- Metric (all inserts, 12mm-20mm)	W- 18" flex. cable U- Universal End-of-Shaft & Thru Shaft	0- None 1- Basket**	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, A, B, B, Z, Z B- A, A, B, B D- A, A E- A, B, Z F- A, B 4- Special PPR Enter codes under special features 9- All. Enter specific cable length xxx-feet under Special Features. (Use w/ Connector Option "W").	00- None 0W- Connector on 18" cable: Use w/ options "E", "N", "S", "U", "Z"																														
<table border="1"> <thead> <tr> <th colspan="3">Mounted on Encoder</th> <th colspan="7">Connector Options</th> </tr> <tr> <th>10 Pin MS</th> <th>10 Pin EPIC</th> <th>10 Pin mini MS</th> <th>10 Pin MS*</th> <th>6 Pin MS*</th> <th>7 Pin MS*</th> <th>8 Pin M12*</th> <th>10 Pin EPIC*</th> <th>10 Pin mini MS*</th> <th>12 Pin M23</th> </tr> </thead> <tbody> <tr> <td>A- w/o plug (std. phasing) B- w/o plug (Dynapar HS35 phasing) C- "A" w/ plug D- "B" w/ plug</td> <td>P- w/ plug V- w/o plug</td> <td>R- w/ plug</td> <td>Y- w/o plug</td> <td>E- w/o plug (std. phasing) F- w/o plug (Dynapar HS35 phasing) G- "E" w/ plug H- "F" w/ plug</td> <td>J- w/o plug (std. phasing) K- w/o plug (Dynapar HS35 phasing) M- "J" w/ plug N- "K" w/ plug</td> <td>T- w/o plug (Turck Pinout) U- w/o plug (US Pinout)</td> <td>Z- w/ plug</td> <td>S- w/ plug</td> <td>2- w/o plug (L&L Hubner pinout)</td> </tr> </tbody> </table>										Mounted on Encoder			Connector Options							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. phasing) B- w/o plug (Dynapar HS35 phasing) C- "A" w/ plug D- "B" w/ plug	P- w/ plug V- w/o plug	R- w/ plug	Y- w/o plug	E- w/o plug (std. phasing) F- w/o plug (Dynapar HS35 phasing) G- "E" w/ plug H- "F" w/ 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)	Z- w/ plug	S- w/ plug	2- w/o plug (L&L Hubner pinout)
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SPECIAL PPR OPTION CODES		
OPTION CODE	LEFT PPR	RIGHT PPR
401	1270	None
402	150	None
403	50	None
404	512	16
405	16	None
406	6000	None
407	2800	None
408	1400	None
409	30	None



Nidec-Avtron Makes the Most Reliable Encoders in the World
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All dimensions are in inches [millimeters].
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