

## Avtron HS35A Encoders



**Light Mill Duty Optical Hollow Shaft  
Encoder: 1/2"-1" [12mm-25mm]**

### **Magnetic Durability in a Compact Encoder**

Fits shafts 1/2" to 1"  
Simple Installation Up to 5000 PPR

Unbreakable Optical Disk

Wide-Gap Technology: Up to 8X  
larger gap between sensor and  
rotor

Replaces Competitive Models  
without Rewiring

Fits end of shaft and through shaft  
applications

IP65/Nema 4, 13 Rating: Dust and  
Liquid Tight

Superior Bearings and Seals

-20°C to +100°C Operation \*

2 Year No-Hassle Warranty

### **HS35A**

HS35A encoders fit shafts from 1/2" to 1" easily, using a durable shaft insert. Units may be resized by replacing or removing the insert, enabling our factory, distributors, and customer stockrooms to swiftly meet any need. The shaft insert and insulated bearings also provide isolation from motor shaft currents, while permitting case grounding to meet NEC requirements. Avtron encoders have superior shaft seals and bearings that stay sealed to keep out contamination caused by temperature cycling and liquid sprays. Our encoder seals are protected by mechanical barriers to prevent flexing or failure, and Avtron's superior bearings feature synthetic lubricants for even longer life.

Many competitive optical encoder designs risk sensor damage from any vibration or shock: sensors ride less than four thousandths of an inch from the thin, often flexible, optical disk spinning at full motor speeds. Some designs even use thin glass disks in "industrial" products! Avtron uses only unbreakable disks and a sensor to disk gap over 8X larger than the competition.

Our optical HS35A encoders use superior sensor, disk, bearing, and seal technology to give top performance in industrial conditions. Select an Avtron HS35A today!

OUTLINE DRAWING



MORE HS35A ADVANTAGES

- All digital, fully integrated design
- No mechanical adjustments or trim potentiometers
- Innovative shaft ring retains collar during installation
- Advanced sensor technology
- Superior bearings with synthetic lubricant for longer life
- No extra charge for signal complements and marker pulse (A,A-, B,B-, Z,Z-)
- Insulated from motor shaft currents
- Models can be resized by interchanging inserts
- Optional basket guard adds even more protection

MORE HS35A SPECIFICATIONS

Operating Power: Volts: 5 - 28 VDC; Current: 50mA, no load  
Output Format: A Quad B with marker (A, /A, B, /B, Z, /Z)  
Frequency Range: 0 to 125 kHz  
PPR: 100 - 5000 standard  
Speed: 6000 RPM Max., (for higher speeds, consult factory)  
Temperature: -20° to 100°C\*  
Environmental: IP65  
Vibration: 5-2000Hz  
Shock: 50G, 11ms duration  
Weight: 1.6 lbs [730g] All dimensions are in inches [millimeters]. Specifications and features are subject to change without notice.\* Please consult factory for temperature/speed derating

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

SELECTION GUIDE

HS35AS2FWU0XA903

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MODEL	PPR	LINE DRIVER	HOLLOW SHAFT BORE SIZE	CONNECTOR OPTIONS	MOUNTING	PROTECTION	ANTI-ROTATIONAL TETHER	CHANNELS	MODIFICATIONS
HS35A	S - 600 PPR	2 - 5-28v In/OC Out (7273)	F - 1 in. native bore	W - Cable (18 in. or special length)	U - Universal (Thru & End of Shaft)	0 - None	X - No Tether	A - All Channels (A, A/, B, B/, Z, Z/)	903 - 3 ft./0.9m Cable



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