

# ERMEC

Distribución de Componentes  
Eléctricos y Electrónicos

# Avtron Model HS25A

## Optical, Hollow Shaft Encoder

### Tough and Compact!

- Fits shafts 3/8" to 3/4"
- Simple Installation
- Unbreakable Optical Disk
- Up to 8192 PPR
- Wide-Gap Technology:  
Up to 8X larger gap between  
sensor and rotor
- Replaces Competitive  
Models without Rewiring
- Fits end of 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

**HS25A** encoders fit shafts from 3/8" to 3/4" 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 (3/8" to 5/8") [6 to 16mm] also provides 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 contaminants out, through 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 HS25A encoders use superior sensor, disk, bearing, and seal technology to give top performance in industrial conditions. Select an Avtron HS25A today!

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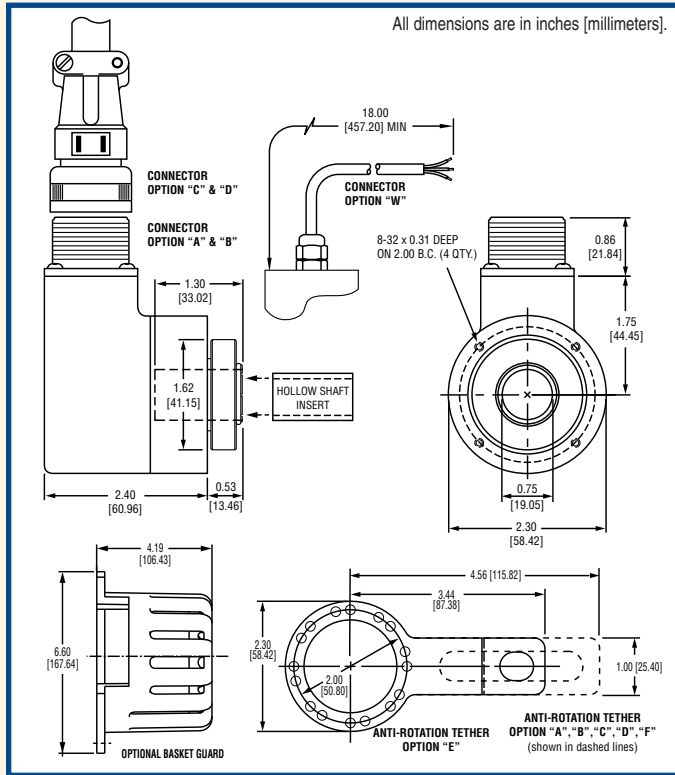
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**AVTRON**  
QUALITY SYSTEM CERTIFIED TO ISO 9001  
[www.avtronencoders.com](http://www.avtronencoders.com)

# HS25A Optical Hollow Shaft Encoder (3/8" to 3/4") [6mm to 19mm]

## OUTLINE DRAWING



Check out our web site for more detailed specifications, drawings, and installation instructions.

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

## MORE HS25A 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,  $\bar{A}$ , B,  $\bar{B}$ , Z,  $\bar{Z}$ )
- Insulated from motor shaft currents using shaft inserts
- Units can be resized by interchanging or removing shaft inserts
- Optional basket guard adds even more protection

## HS25A SPECIFICATIONS

**Operating Power:** Volts: 5 - 28 VDC; Current: 50mA, no load

**Output Format:** A Quad B with marker (A,  $\bar{A}$ , B,  $\bar{B}$ , Z,  $\bar{Z}$ )

**Frequency Range:** 0 to 125 KHz

**PPR:** 1 - 3600 standard (for other PPR needs up to 8192 consult factory)

**Speed:** 6000 RPM Max., (for higher speeds, consult factory)

**Temperature:** -20° to 100°C

**Environmental:** IP65; Nema 4, 13 Rating

**Vibration:** 5-2000Hz

**Shock:** 50G, 11mS duration

**Weight:** 0.95 lbs [431g]

CE Pending

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## SELECTION GUIDE

HS25A PART NUMBERS AND AVAILABLE OPTIONS										
Mount	PPR*		Line Driver	Bore Options	Connector Options	Mounting Style	Protection	Anti-Rotation Tether Options	Channels	Special Features
HS25A	A- 1 C- 25 F- 60 G- 100 H- 120 K- 200 L- 240 M- 250 N- 256 P- 300 E- 360 Q- 500 R- 512 S- 600	T- 625 U- 720 V- 900 W- 1000 Y- 1024 Z- 1200 1- 1250 2- 1440 3- 2000 4- 2048 5- 2500 6- 2540 7- 3600 0- Special	1- 5-28V (7272) 2- 5-28V, open collector (7273) 4- 5-28V in, 5V out (7272)	0- Non-std. L- 6mm A- 3/8" M- 8mm B- 1/2" N- 10mm C- 5/8" P- 12mm D- 3/4" Q- 14mm (no insert) S- 16mm U- Universal 3/8" to 3/4" (all inserts) Z- Metric 6mm to 16mm (all inserts)	A- 10 pin MS w/o plug (Std. phasing) B- 10 pin MS w/o plug (Dynapar HS35 phasing) C- 10 pin MS w/ plug (Std. phasing) D- 10 pin MS w/ plug (Dynapar HS35 phasing) W- 18" cable (pigtail)	E- End of 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 M- 4.5" C-Face or Fan Cover U- Universal (all tether options)	A- $\bar{A}$ , $\bar{\bar{A}}$ , $\bar{B}$ , $\bar{\bar{B}}$ , $\bar{Z}$ , $\bar{\bar{Z}}$	000- None 9xx- Specify cable length xx=feet (use w/ Option "W")

\* up to 8192 PPR available

All dimensions are in inches [millimeters].  
Specifications and features are subject to change without notice.

**AVTRON** MANUFACTURING, INC.

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