

Avtron HS40 Absolute Encoder



**Severe Mill Duty Magnetic
Hollow Shaft Absolute
Encoder, 5/8"-1 1/8" [16-30mm]**

Severe Duty? Absolutely! **HS40**

- | Fits Shafts 5/8"-1 1/8" [16mm-30mm]
 - | Up to 27 Bit Resolution
- | Moisture-Proof, Shock Resistant Sensor
 - | Singleturn or Multiturn
 - | IP65 Rating
- | Massive Bearings, Severe Duty Seals
 - | No Batteries or Gears!
 - | -40° to 85°C Operation
 - | 3 Year No-Hassle Warranty

HS40 hollow shaft severe duty magnetic absolute rotary encoders offer unequalled durability. HS40 features massive bearings and the best shaft sealing system in the industry to keep your process running, through temperature cycling and liquid sprays. Moreover, the magnetic sensor can see through oil, dust and dirt that disable ordinary optical absolute encoders. Also available: solid shaft model (AV30), absolute+incremental combo units (AV45, HS45), as well as optical models (AV6A, HS6A) for ultra-precision applications.

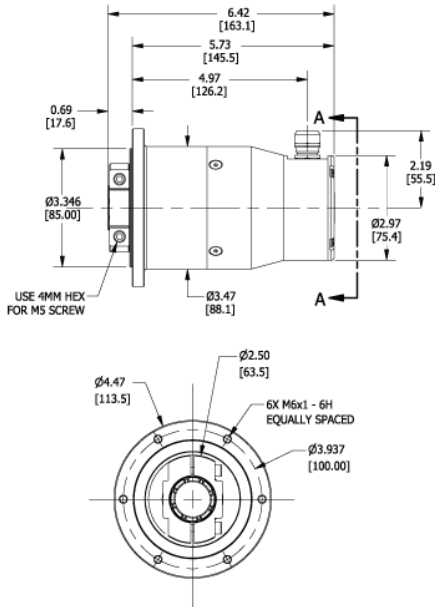
By utilizing Wiegand wire energy harvesting technology combined with magnetic sensors, Avtron has created an absolute encoder design which requires no batteries, long-term capacitors, glass disks, or gears!

Unlike other absolute encoders, HS40 allows a full size shaft fit; this allows it to easily fit on both NEMA and IEC frame motors with no special modification needed. Isolation from shaft currents is standard, and the interchangeable bore sizing inserts allow easy modification.

The HS40 features a broad range of industry standard communication protocols: from analog outputs to CANbus, DeviceNet, J1939 and SSI, you will find the communication protocol you need.

Get the absolutely best hollow shaft encoder available for your positioning application--pick HS40!

OUTLINE DRAWING



MORE HS40 ADVANTAGESHS40

- No internal gearbox to wear out
- No coupling needed-mounts directly on motor shaft
- Software settable zero point for SSI output
- Optional factory-programmable cam limits
- Optional 5V operation

SPECIFICATIONS

Operating Power:

SSI: 5-30VDC; 30mA @ 24VDC, 125mA @ 5VDC

Analog V Out: 12-30VDC; 15mA @ 24V

Analog I Out: 15-30VDC; 40mA @ 24V

Output Format: Analog, SSI (Future: CANOpen, DeviceNet, J1939, Profibus)

Accuracy: +/-0.35° (+/-21 arc-min)

Temperature: -30°C to +85°C

Environmental: IP65

Vibration: 10-1000Hz, 10G

Shock: 200G, 3mSec

Weight: 4.8 lb [2200g]

Certifications: CE

Check out our website for more detailed specifications, drawings, and installation instructions. www.avtronencoders.com

SELECTION GUIDE

Model	Bus	Future	Shaft Bore	MT Turns	ST Resol	Conn	Mounting	Coding	Tethers	Mods
HS40	A- Analog C- CANOpen D- DeviceNet P- Profibus DP S- SSI	X- Standard	C- 5/8" D- 3/4" E- 7/8" F- 1" G- 1 1/8" U- All USA Sizes "C, D, E, F, G" S- 16mm V- 19mm W- 20mm Y- 25mm 3- 30mm Z- ALL Metric Sizes "S, V, W, Y, 3"	X- 0/0 Single turn A- 16/4 (analog) 2- 4096/12 3- 8192/13 4- 1638/14 5- 32768/15	2- 4096/12 3- 8192/13	C- 3x M12 4/5/5 pin E- M12/8 pin F- M23/12 pin K- 3x cable entry W- Cable, 1m S- Single cable entry	E- EOS only	1- Binary 2- Gray 3- 0-5V 4- 0-10V 5- 4-20mA 6- 0-20mA 7- 0.5-4.5V 8- 0.5-9.5V	X- No Tether E- 4.5" NEMA C-Face Tether F- 8.5" NEMA C-Face Tether G- Threaded rod arm kit, adjustable 70-500mm (4.25"-12") H- Fan cover T-bolt and 8.5" NEMA C-face tethers M- Fan cover T-bolt and 4.5"/6.75" NEMA C-face tethers P- Threaded rod arm kit, fixed 70mm length T- Threaded rod arm kit, adjustable 70-500mm w/T-bolt for fan cover U- Universal Tether/Arm Kit (includes all)	000- none 9xx- special cable length xx-feet [0.3m]

Nidec-Avtron Makes the Most Reliable Encoders in the World

8901 E. PLEASANT VALLEY ROAD • INDEPENDENCE, OHIO 44131-5508

TELEPHONE: (1) 216-642-1230 • FAX: (1) 216-642-6037

E-MAIL: tachs@nidec-avtron.com • WEB: www.avtronencoders.com

All dimensions are in inches [millimeters]. Specifications and features are subject to change without notice. EU-SMART™, SMARTSafe™, SMARTach II™, THIN-LINE™, THIN-LINE II™, WIDE-GAP™, and BULLSEYE32™ are trademarks of Nidec Avtron Automation. All other trademarks and registered trademarks are the property of their respective owners.