Rev: 03-18-22



Mill Duty Absolute Encoder, Single or Multiturn, Fits Shafts 0.24"-0.59 [6-15mm]

Tough and Compact!

- Fits 0.24"-0.59" [6-15mm] Shafts
 - Up to 27 Bit Resolution
 - Moisture-Proof, Shock

Resistant Magnetic Sensor

- Singleturn or Multiturn

 I IP65 Rating
- Superior Bearings and Seals
 - No Batteries or Gears!
 - -30° to 85°C Operation
- 1 2 Year No-Hassle Warranty

HS6M

HS6M hollow shaft magnetic absolute rotary encoders offer excellent performance and durability in a cost-effective package. 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! Also available: solid shaft model (AV6M), severe duty models (AV30, HS40), as well as optical models (AV6A, HS6A) for ultra-precision applications.

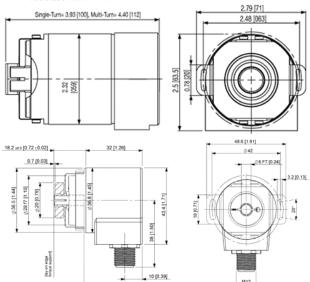
HS6M encoders have superior shaft seals and bearings that stay sealed to keep contaminants out, through temperature cycling and liquid sprays. Moreover, the magnetic sensor can see through oil, dust and dirt that disable ordinary optical absolute encoders. Optional coated circuit boards and GORE-TEX® weep/breather drain configurations are available for the roughest locations.

The HS6M features a broad range of industry standard communication protocols: from analog outputs to CANopen, J1939, Profinet IO, Profibus, and SSI, you will find the communication protocol you need.

Our HS6M encoders combine magnetic sensors and superior bearing and seal technology to give top performance in industrial applications. Select an HS6M today!

OUTLINE DRAWING

Bore Sizes 8-15 mm "M"-"R"



MORE HS6M ADVANTAGES

- No internal gearbox to wear out
- Optional factory-programmable cam limits
- Optional 5V operation
- Software settable zero point for SSI output
- Optional GORE-TEX® weep drains & coated circuit boards
- Profibus DP & ProfiNet Support for Class 1 & 2 & DPV2 Isochronous (ProfiDrive)

HS6M SPECIFICATIONS

Operating Power:

SSI: 5-30VDC; 30mA @ 24VDC, 125mA @ 5VDC Analog V Out: 12-30VDC; 15mA @ 24V Analog I Out: 15-30VDC; 40 mA @ 24V

Output Format: Analog, CANOpen, J1939, Profinet IO, Profibus, SSI

Accuracy: +/-0.35° (+/-21 arc-min)
Temperature: -30°C to +85°C
Vibration: 10-1000Hz, 10G
Shock: 200G, 3mSec
Weight: 0.33lb [150g]
Certifications: CE

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

SELECTION GUIDE

HS6M PART NUMBERS AND AVAILABLE OPTIONS										
Model	Bus	Housing	Bore Size	Turns/ bits	PPR/bits per turn	Connector	Mounting Style	Output	IP Rating	Special Option
HS6M	A- Analog C- CANOpen D- DeviceNet J- J1939 N - PROFINET IO S- SSI	1- 58mm 3- 36.5mm 7- 42mm	L- 6mm M- 8mm N- 10mm P- 12mm R- 15mm Z- All metric sizes	X- 0/0- single turn A- 16/4 (analog) 2- 4096/12 3- 8192/13 4- 16384/14 5- 32768/15	2- 4096/12* 3- 8192/13 6- 65536/16 *use '2' also for analog output	A- 1xM12/5 pin C- M12 x3 pin E- 1xM12/8 pin F- M23/12 pin K- 3x cable entry W- Cable, 1m	E- EOS only	Digital 1- Binary 2- Gray Analog 3- V output 0-5V 4- V output 0-10V 5- I Output 4-20mA 6- I Output 0-20mA 0-20mA	X- no shaft seal, IP54, aluminum + steel housing A- IP65 seals, aluminum + steel housing C - IP65 Seals, alumi num housing, coated circuit boards, Gore-Tex weep/breather drain K- IP69K stainless housing	000- none 9xx- special cable length xx=length *0.3m 001- pushbutton setpoints

HOUSING COMPATIBILITY						
Housing	Bore Size	IP/Sealing				
1	M, N, P, R, Z	A, C, K				
3	L	X, A				
7	M, N, P	Α				

STANDARD CONNECTORS & OUTPUT FORMATS							
Bus	Code	Connectors	Output				
Analog	A A, W		3, 4, 5, 6				
CANOpen	С	A, W	1				
DeviceNet	D	A, W	1				
J1939	J	A, W	1				
PROFINET IO	N	С	1				
SSI	s	E, F, W	1, 2				



Nidec Industrial Solutions 243 Tuxedo Avenue - Cleveland, Ohio 44131

encoderhelpdesk@nidec-industrial.com +1 216-642-1230 - www.avtronencoders.com



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All other trademarks and registered trademarks are the property of their respective owners. Nidec Industrial Solutions' standard warranty applies.
All dimensions approximate.