Rev: 06-24-15



Avtron HS6M Absolute Encoder



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

Tough and Compact!

HS6M

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

Resistant Magnetic Sensor

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

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.

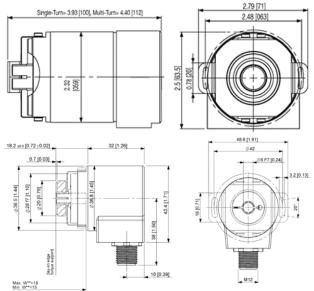
HS6M encoders have superior shaft seals and bearings that stay sealed to keep contaminants out, through temperature cycling and liquid sprays. Moreover, the magnetic sensor can see through oil, dust and dirt that disable ordinary optical absolute encoders.

The HS6M 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.

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

OUTLINE DRAWING

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



MORE HS6M ADVANTAGESHS6M

- No internal gearbox to wear out
- Optional factory-programmable cam limits
- Optional 5V operation
- Software settable zero point for SSI output

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, CANOpen,

DeviceNet, J1939, SSI

Accuracy: +/-0.35° (+/-21 arc-min) Temperature: -30°C to +85°C

Environmental: IP65 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 PA	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		1- 58mm 3- 36.5mm 7- 42mm	P- 12mm	X- 0/0- single turn A- 16/4 (analog) 2- 4096/12 3- 8192/13 5- 32768/15	2- 4096/12* 3- 8192/13 *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	X- no shaft seal, IP54, aluminum + steel housing A- IP65 seals, aluminum + steel housing 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, K				
3	L	X, A				
7	M, N, P	А				

STANDA	RD CONNECT	ORS & OUTPUT I	FORMATS	
Bus	Code	Connectors	Output	
Analog	А	A, W	3, 4, 5, 6	
CANOpen	С	A, W	1	
DeviceNet	D	A, W	1	
J1939	J	A, W	1	
SSI	s	E, F, W	1. 2	



Nidec-Avtron Makes the Most Reliable Encoders in the World

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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.