AV6M shafted 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: hollow shaft model (HS6M), severe duty models (AV30, HS40), as well as optical models (AV6A, HS6A) for ultra-precision applications.

AV6M 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 AV6M 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 AV6M encoders combine magnetic sensors and superior bearing and seal technology to give top performance in industrial applications. Select AV6M today!
Check out our website for more detailed specifications, drawings, and installation instructions. www.avtronencoders.com

**MORE AV6M ADVANTAGES**
- More than 2X the axial and side load capability of the competition
- No internal gearbox to wear out
- Software settable zero point for SSI output
- Optional factory-programmable cam limits
- Optional 5V operation
- Shock and vibration withstand upgrade available

**AV6M 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 (Profibus coming!)

**Accuracy:** +/-0.35° (+/-21 arc-min)

**Temperature:** -40°C to 85°C* (Std -30°C to +85°C)

**Environmental:** IP69K* (Std IP65)

**Shaft Load:** 180N axial, 180N radial* (std. 40N axial, 110N radial)

**Vibration:** 5-200Hz, 30G*; (Std 10G)

**Shock:** 300G, 6ms* (Std 200G, 3ms)

**Weight:** 0.33-0.40lb [150-180g]

**Certifications:** CE

*Extended temp. range, shaft load capability, shock and vibration rating require 30mm flange style "G"*

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**SELECTION GUIDE**

<table>
<thead>
<tr>
<th>Model</th>
<th>Bus</th>
<th>Flange</th>
<th>Shaft Size</th>
<th>Turns/bits</th>
<th>PPR/bits per turn</th>
<th>Connector</th>
<th>Connector Style</th>
<th>Output</th>
<th>IP Rating</th>
<th>Special Option</th>
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</thead>
<tbody>
<tr>
<td>AV6M</td>
<td>A</td>
<td>1-</td>
<td>-29.3mm, 3.29mm</td>
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<td>0/0</td>
<td>Digital</td>
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<td>G</td>
<td>0/0</td>
<td>10mm with flange</td>
<td>-X-0/0</td>
<td>0/0</td>
<td>1-8 pin</td>
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<td>P</td>
<td>1-</td>
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<td>S</td>
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**STANDARD CONNECTORS**

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<th>Analog</th>
<th>CAN</th>
<th>SSI</th>
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<tr>
<td>B</td>
<td>E</td>
<td>A</td>
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</tbody>
</table>

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Nidec-Avtron makes the most flexible encoders in the world.

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