Avtron AV30 Absolute Encoders

**AV30**

AV30 shafted magnetic absolute rotary encoders offer a completely new level of durability, never seen before in absolute encoders. Yet the AV30 encoder will fit existing flanges and mounts, enabling easy upgrades from low durability encoders. Also available: hollow shaft model (HS40), absolute+incremental combo units (HS45, AV45) as well as optical models (AV6A, HS6A) for ultra-precision applications.

The AV30 features massive bearings with over 10X the load rating of the competition. Industry-leading seal systems 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.

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!

The AV30 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.

Stop suffering costly downtime due to absolute encoder failures--upgrade to AV30 today!
### More AV30 Advantages

- More than 6X 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

### AV30 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

**Shaft Load:** 180N axial, 180N radial

**Vibration:** 5-2000Hz, 30G

**Shock:** 300G, 6mSec

**Weight:** 3lb [1350g]

**Certifications:** CE

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**Selection Guide**

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<th>Model</th>
<th>Bus</th>
<th>Flange</th>
<th>Shaft</th>
<th>Turns</th>
<th>CPR</th>
<th>Conn</th>
<th>Conn exit</th>
<th>Coding</th>
<th>Add'l Drill Pattern</th>
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<tr>
<td>AV30</td>
<td>A- Analog</td>
<td>C- CANopen</td>
<td>D- DeviceNet</td>
<td>P- Profibus DP</td>
<td>S- SSI</td>
<td>1- 50mm flange, 38mm male pilot, 3x M3, 2x M4 @ 45mm BC</td>
<td>2- 50mm flange, 50mm male pilot, 3x M3, 2x M4 @ 42mm BC</td>
<td>4- 2.65&quot; Square flange, 1.25 male pilot*</td>
<td>5- 815mm (1110) flange @ 68mm</td>
<td>X- No Additional Force Drill Holes</td>
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**Nidec**

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.

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