

## Avtron Bullseye32™ Encoders



Designed for OEMs - Self Centering -  
Easy Mounting - No Bearings

### Magnetic Durability in a Compact Encoder

Replaces Hollow Shaft Models  
Directly

No Moving Wearing Parts

Universal 5-24V Operation

LED & Remote Alarm Diagnostics

-40°C to +100°C Operation

2 Year No-Hassle Warranty

### AV32



Want a super-simple, ultra-reliable OEM encoder?  
**Bullseye!**

**Avtron Bullseye32™ (AV32) encoders eliminate the top culprits that cause encoder failures: there are no bearings, no seals, no optics, no glass disks!**

**And they don't require expensive mounting flanges like other no-bearing encoders.**

**Bullseye32 self-centers without a pilot and mounts in seconds: Tighten the rotor clamp on the shaft, bolt the housing in place, and unlock the patented centering mechanism by removing the red end cap. Top it off with the shaft cap. It's so simple, we've created a [visual instruction sheet](#) (in our documents tab) for installation.**

**Bullseye32 is protected against dust, dirt and water. Why waste installation time protecting encoders with baskets? How about a Bullseye instead - it's tougher than most "protective baskets"! And Bullseye32 includes complete self-diagnostics, right down to the signal quality and wiring!**

**Bullseye32 is also electrically tough: in addition to a built-in voltage regulator, Bullseye32 is fully protected from reverse voltage wiring and shorting.**

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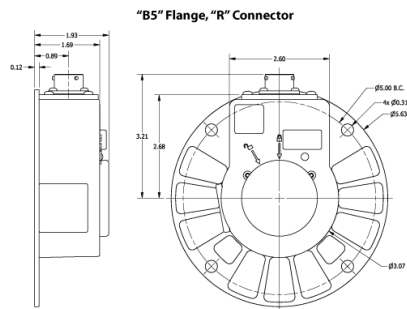


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## OUTLINE DRAWING



## MORE AV32 ADVANTAGES

- Replaces HS25, HS35, HOG and many other hollow shaft models
- Replaces H25® and many other shafted, flange-mounted encoders
- Shrugs off dirt, oil, and water contamination
- Wide-Gap™ technology
- No protective basket needed
- Includes wiring self-diagnostics and protection
- Slashes installation time
- Survives shaft runout errors

## MORE AV32 SPECIFICATIONS

### Electrical:

**Operating Power:** Volts: 5 - 24 VDC; Current: 60mA, no load

**Output Format:** A Quad B with gated marker (A<sub>v</sub>/A, B<sub>v</sub>/B, Z<sub>v</sub>/Z)

**Frequency Range:** 0 to 250 kHz

**PPR:** 32 - 5000

### Mechanical:

**Speed:** 6000 RPM Max., (for higher speeds, consult factory)

**Temperature:** -40° to 100°C

**Environmental:** IP65 Electronic Protection

**Vibration:** 5-2000Hz

**Shock:** 50G, 11mS duration








**Weight:** 0.7 lbs [350g]

All dimensions are in inches [millimeters].

Specifications and features are subject to change without notice.

Check out our website for more detailed specifications, drawings, and installation instructions. [www.avtronencoders.com](http://www.avtronencoders.com)

## SELECTION GUIDE

|  |    |    |    |   |   |   |
|---|---|---|---|--|--|--|
| MODEL   | ROTOR BORE SIZE   | PPR   | MOUNTING  | CONNECTOR OPTIONS  | CHANNELS   | SPECIAL OPTIONS  |
| AV32  | XX - No Rotor<br>AC - 1/4 in./0.250 in. Bore<br>AE - 5/16 in./0.3125 in. Bore<br>AF - 3/8 in./0.375 in. Bore<br>AH - 7/16 in./0.4375 in. Bore<br>AK - 1/2 in./0.500 in. Bore<br>AL - 9/16 in./0.5625 in. Bore<br>AN - 5/8 in./0.625 in. Bore<br>AP - 11/16 in./0.6875 in. Bore<br>AR - 3/4 in./0.750 in. Bore<br>AT - 13/16 in./0.8125 in. Bore<br>AV - 7/8 in./0.875 in. Bore<br>AY - 15/16 in./0.9375 in. Bore<br>AZ - 1 in./1.000 in. Bore<br>MA - 4mm Bore<br>MB - 5mm Bore<br>MC - 6mm Bore<br>MD - 7mm Bore<br>ME - 8mm Bore<br>MF - 9mm Bore<br>MG - 10mm Bore<br>MH - 11mm Bore<br>MJ - 12mm Bore<br>MK - 13mm Bore<br>ML - 14mm Bore<br>MM - 15mm Bore<br>MN - 16mm Bore<br>MP - 17mm Bore<br>MQ - 18mm Bore<br>MR - 19mm Bore<br>MT - 20mm Bore<br>MU - 21mm Bore<br>MV - 22mm Bore<br>MW - 23mm Bore<br>MY - 24mm Bore<br>MZ - 25mm Bore | AA - 32 PPR<br>AK - 80 PPR<br>AH - 120 PPR<br>AC - 128 PPR<br>AM - 200 PPR<br>AL - 240 PPR<br>AN - 256 PPR<br>AE - 360 PPR<br>AG - 400 PPR<br>AB - 480 PPR<br>AR - 512 PPR<br>AS - 600 PPR<br>AP - 720 PPR<br>AJ - 960 PPR<br>AW - 1000 PPR<br>AY - 1024 PPR<br>AZ - 1200 PPR<br>AV - 1440 PPR<br>AU - 1800 PPR<br>A3 - 2000 PPR<br>A4 - 2048 PPR<br>AT - 3072 PPR<br>A6 - 3600 PPR<br>AD - 4096 PPR<br>A8 - 4800 PPR<br>A9 - 5000 PPR<br>A0 - Special PPR - Must Be Divisible by 8 | B2 - 3x #5-40 on 3.75 in. Bolt Circle<br>B3 - 4xM6 on 140mm B.C. with stand-offs<br>B5 - Baldor/ABB 4 x 1/4-20 Bolts on 5.00 in. Bolt Circle<br>F1 - Fan Cover - 10mm Straight Slots<br>F2 - Fan Cover - 10mm Square Grid<br>F3 - Fan Cover - 1/4 in. Arched Slots<br>F5 - Fan Cover - 5/16 in. Straight Slots<br>F9 - Fan Cover - 8mm Square Grid<br>FA - Fan Cover - Universal for 5/16" (8mm) slots/squares<br>P4 - Nema 56 C Face 4.5 in. Pilot with 5.875 in. Bolt Circle 4 x 3/8-16 Bolts<br>P6 - Pilot/Fan Cover - 6.75 in. Face with 5.875 in. Bolt Circle 4 x 3/8-16 Bolts<br>P8 - Pilot - 8.5 in. FC Face with 7.25 in. Bolt Circle | C - 10 Pin MS with Plug, Avtron/BEI Pin Out<br>D - 10 Pin MS with Plug, Reverse Phasing Dynapar HS35 Pin Out<br>G - 6 Pin MS with Plug, Avtron/BEI Pin Out<br>H - 6 Pin MS with Plug, Reverse Phasing Dynapar HS35 Pin Out<br>M - 7 Pin MS with Plug, Avtron/BEI Pin Out<br>R - 10 Pin Mini-MS Twist Lock with Plug<br>S - 10 Pin Mini-MS Twist Lock with Plug on an 18 in. Cable<br>T - M12-8 Pin Euro without Plug<br>W - 18 in. Flex. Cable with Side Exit Cord Grip<br>Y - 18 in. Flex. Cable with End/Top Exit Cord Grip<br>2 - M23-12 Pin Euro without Plug<br>3 - M23-12 Pin Euro without Plug, Reverse Phasing | AA - All Channels, A, /A, B, /B, Z, /Z, Z Ch. 1/2 Pulse Width<br>AD - All Channels, A, /A, B, /B, Z, /Z, Z Ch. 1/4 Pulse Width<br>BX - All Channels, A, /A, B, /B, No Marker Pulse<br>EA - All Channels, A, B, Z, No Complements | 000 - No Special Options<br>901 - Custom Cable Length 1 ft/0.3M<br>902 - Custom Cable Length 2 ft/0.6M<br>903 - Custom Cable Length 3 ft/1M<br>905 - Custom Cable Length 5 ft/1.6M<br>910 - Custom Cable Length 10 ft/3.3M<br>915 - Custom Cable Length 15 ft/5M<br>920 - Custom Cable Length 20 ft/6.66M<br>925 - Custom Cable Length 25 ft/8.33M<br>930 - Custom Cable Length 30 ft/10M<br>933 - Custom Cable Length 33 ft/11M<br>H00 - 5-24v in, 5-24v out hi-power standard (HX) |