

# Avtron Bullseye32™ Encoders



**Designed for OEMs - Easy Mounting - No Bearings - OEM Programmable**

## Never Buy Another Hollow Shaft 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 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.

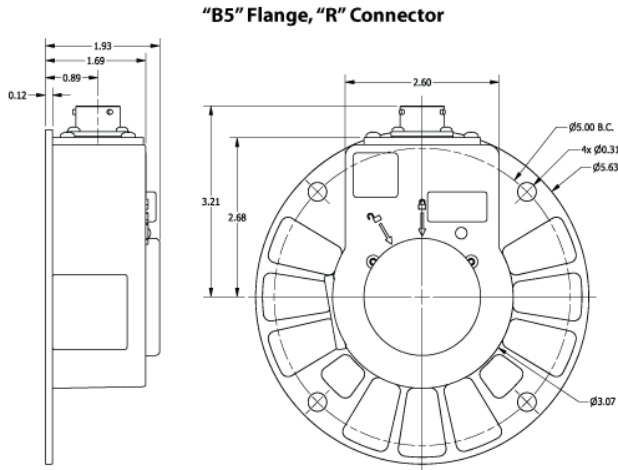
Bullseye32 is protected against dust, dirt and water. Why waste installation time protecting encoders with baskets? How about a Bullseye instead - it's tougher than most "protective baskets"! And Bullseye32 includes complete self-diagnostics, right down to the signal quality and wiring!

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

Slash your encoder inventory. No need to stock multiple models: Bullseye32 is fully programmable - set your PPR, direction, and marker pulse.

Bullseye32 is not available to end-users – this is an OEM encoder only. So if you are a motor, drive, or machine-builder OEM, switch to Bullseye32 and find out what a true revolution in encoding can do for you!

## 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

## AV32 SPECIFICATIONS

### Electrical:

**Operating Power:** Volts: 5 - 24 VDC; Current: 60mA, no load  
**Output Format:** A Quad B with gated marker (A,A-, B,B-, Z,Z-)  
**Frequency Range:** 0 to 250 KHz  
**PPR:** 32 - 5000 OEM Programmable

### 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]

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

All dimensions are in inches [millimeters].  
 Specifications and features are subject to change without notice.

## SELECTION GUIDE

AV32 Bullseye32™ PART NUMBERS AND AVAILABLE OPTIONS							
Model	Rotor Bore Options		PPR	Mounting Style	Connector Options	Channels	Special Features
<b>AV32 Bullseye32™</b>	SAE AC- 1/4" AE- 5/16" AF- 3/8" AH- 7/16" AK- 1/2" AL- 9/16" AN- 5/8" AP- 11/16" AR- 3/4" AT- 13/16" AV- 7/8" AY- 15/16" AZ- 1"	Metric MA- 4mm MB- 5mm MC- 6mm MD- 7mm ME- 8mm MF- 9mm MG- 10mm MH- 11mm MJ- 12mm MK- 13mm ML- 14mm MM- 15mm MN- 16mm MP- 17mm MQ- 18mm MR- 19mm MT- 20mm MU- 21mm MV- 22mm MW- 23mm MY- 24mm MZ- 25mm	AA- 32 PPR AK- 80 PPR AH- 120 PPR AC- 128 PPR AM- 200 PPR AL- 240 PPR AN- 256 PPR AE- 360 PPR AG- 400 PPR AB- 480 PPR AR- 512 PPR AS- 600 PPR AP- 720 PPR AJ- 960 PPR AW- 1000 PPR AY- 1024 PPR AZ- 1200 PPR AV- 1440 PPR AU- 1800 PPR A3- 2000 PPR A4- 2048 PPR AT- 3072 PPR A6- 3600 PPR AD- 4096 PPR A8- 4800 PPR A9- 5000 PPR AD- Special	B5- 4x 1/4-20 on 5.00 B.C. F1- Fan Cover - 10mm straight slots F2- Fan Cover - 10mm square grid F3- Fan Cover - 1/4" arced slots F5- Fan Cover - 5/16" straight slots P4- 4.5" NEMA 56C flange P6- 6.75" Recessed flange P8- 8.50" NEMA 180 FC flange	C- 10 pin MS style w/Plug, Avtron pinout D- 10 pin MS style w/plug, Reverse Phasing (Dynapar HS35) W- Side Exit Cable (18" or special length)* Y- Top Exit Cable (18" or special length) G- 6 pin MS style w/plug, Avtron pinout (BEI) H- 6 pin MS style on cable w/plug, Reverse Phasing M- 7 pin MS style w/plug, Avtron pinout N- 7 pin MS style w/plug, Reverse Phasing R- 10 pin Mini-MS style (Bayonet) w/plug S- 10 pin Mini-MS style (Bayonet) on 18" cable w/plug T- M12 8 pin, Turck pinout w/o plug 2- M23 12 pin w/o plug, L&L pinout 3- M23 12 pin w/o plug, pinout (Hubner)  * "W" N/A w/mounting F1,F2,F3,F5	AA- All Signals: A, $\bar{A}$ , B, $\bar{B}$ , Z, $\bar{Z}$ ; (Z - 1/2 pulse width) AD- All Signals: A, $\bar{A}$ , B, $\bar{B}$ , Z, $\bar{Z}$ ; (Z - 1/4 pulse width) BX- A, $\bar{A}$ , B, $\bar{B}$ (complements, no marker) EA- A, B, Z (no complements, marker)	000- No Special Features 9xx- Special cable length, xx- ft/0.3m

Nidec-Avtron Makes the Most Reliable Encoders in the World

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