# Avtron AV44 Encoders



Heavy Mill Duty Magnetic Shafted Encoder, B10 and PY Flange Options

#### Upgrade your Industrial B10 and Legacy PY Tachs!

 Simple Installation
 Up to 10000 PPR
 Replaces Competitive Models without Rewiring

 High Power Outputs Standard
 -40°C to +100°C Operation\*
 Fully Insulated from Motor Shaft Currents\*
 2 Year No-Hassle Warranty
 No Fragile Optics, No Glass Disks

 All Electronics Fully Potted/Encapsulated
 Cast Aluminum Heavy Duty Housing
 UL Listed; CE Compliant

## AV44

The AV44 is a rugged heavy mill duty incremental solid shaft encoder that offers excellent signal quality with modern drives. AV44 carries forward Avtron Encoders' DNA of ensuring uptime with sturdy construction the durability of magnetic sensing and resistance to environmental contaminants.

Avtron AV44 encoders offer an 11mm shaft with a "B10 Euroflange" and a 5/16" shaft with "PY" flange, or the option to foot-mount for a wide range of industrial applications. The AV44 is a drop-in replacement for Baumer Hubner POG 9 & 10 models, as well as Leine & Linde 560 & 855 models. And it adds superior durability and diagnostics!

The AV44 includes high power outputs that can drive cables up to 1000' [300m] with full short circuit and over-voltage protection!

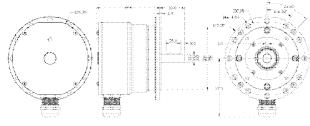
On-board diagnostics check all aspects of the encoder - from the sensor to the output line driver circuit - and provide a clear indicator that the encoder is working well. No more fumbling with a PC or oscilloscope to determine if your encoder is working properly!

Avtron AV44 encoders have superior shaft seals and bearings that stay sealed to keep out contamination caused by temperature cycling and liquid sprays. Often, competitors' optical encoders fail because of dust or water contamination that prevents the sensor from seeing the optical disk. The AV44 advanced magnetic technology sees through contamination. The fully encapsulated circuit board ignores water, oil, dust and dirt. This ensures your machine keeps working, even in the toughest application environments.

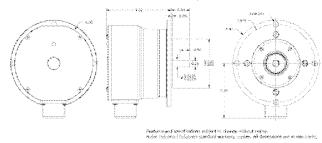
Select an Avtron AV44 and upgrade your machine today!

#### **OUTLINE DRAWING**

#### 11mm SHAFT with 4mm KEY | B10 EUROFLANGE | CABLE GLAND



5/16" SHAFT WITH FLAT | PY FLANGE | 10 PIN MS CONNECTOR

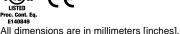


**MORE AV44 ADVANTAGES** 

- All digital design; no adjustments or potentiometers required
- Fits European and North American generators and motors B10 Euroflange faces and PY faces
- Diagnostic LED & alarm output contact option
- Grounding (earthing) strap and custom length Anti-Rotation Arms available

### **AV44 SPECIFICATIONS**

Operating Power: Volts: 6-30 VDC; Current: 80mA, no load Output Format: A Quad B with marker (A,/A, B,/B, Z,/Z) Frequency Range: 0 to 250 KHz @6V & 1m cable PPR: 1 - 10000 standard (for other PPR needs, consult factory) Speed: 6000 RPM Max., (for higher speeds, consult factory) Temperature: -30° to 85°C std, \*optional: -40° to 100°C Environmental: IP66 housing with fully encapsulated electronics Vibration: 10-2000Hz, 17Gs Shock: 275G, 6mS duration Axial Bearing Load: 500 N Radial Bearing Load: 1200 N Weight: 2.5 lbs. [635 g] approx Certifications: CE, UL



Check out our website for more detailed specifications, drawings, and Specifications and features are subject to change without notice.

installation instructions. www.avtronencoders.com

#### **SELECTION GUIDE**

AV44 PART NUMBERS AND AVAILABLE OPTIONS								
A V 4 4							xx	
AV44	Shaft	Flange	Connector	Marker Gating	Line Driver	PPR* (Single)	PPR* (Dual)	Mods
	1 - 11mm w/key; Standard Bearings 5 - 5/16 <sup>6</sup> w/Tat; Standard Bearings	B - B10 Euroflange (W/shaft *1" or *A") P - PY Flange (W/shaft *5" or *E")	<ul> <li>A - 10-pin MS, w/o Plug; Standard Phasing</li> <li>B - 10-pin MS, w/o Plug; Reverse Phasing</li> <li>2 - M23/12 pin (CW pin #s) Standard Phasing</li> <li>3 - M23/12 pin (CW pin #s) Reverse Phasing</li> <li>3 - M23/12 pin (CW pin #s)</li> <li>3 - M23/12 pin (CW Phasing</li> <li>3 - M23/12 pin (CW Phasing</li> <li>3 - M23/12 pin (CW pin #s)</li> <li>5 - M12-8 pin Turck Pinout</li> <li>U - M12-8 pin Turck Pinout</li> <li>W - M20 Cord Grip w/ 0.5M</li> <li>Y - M20 Cord Grip w/o Cable</li> </ul>	<ul> <li>K – ¼ AB Cycle, Sync w/A&amp;B High</li> <li>½ AB Cycle, Sync w/B Low</li> <li>M – 1 AB Cycle, Sync w/A</li> <li>U – Raw Wide Marker (Ungated)</li> </ul>	1 - 6-30V in/out (Hx-Hi Power) 2 - 6-30V in / 5V out 3 - 5V in/out	AN - 256 AR - 512 AY - 1024 A3 - 2000 A4 - 2048 AT - 3072 AD - 4096 A2 - 8192 K1 - 10000 "Contact Factory for Additional PPRs	XX - None	000 - No Special Mods 9XX - Custom Cable Length^ 068 - Remote Alarm Output 070 - Expanded Temp Range (-40 - +100C) 077 - 4500 - 6000 RPM ^ Custom Cable Length in meters; whole meter increments up to 99m



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