



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

### Magnetic Durability in a Compact Encoder

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

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!

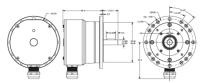
Avtron AV44 encoders have superior shaft seals and bearings that stay sealed to keep out contamination caused by temperature cycling and liquid sprays. Often, competitors optical encoders fail because of dust or water contamination that prevents the sensor from seeing the optical disk. The AV44 advanced magnetic technology sees through contamination ignoring 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!

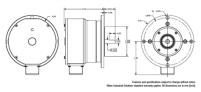
## **OUTLINE DRAWING**

#### OUTLINE DRAWINGS

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

## **MORE 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 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 Warranty: 2 Year No-Hassle

Check out our website for more detailed specifications, drawings, and installation instructions. www.avtronencoders.com



# **SELECTION GUIDE**

MODEL	SHAFT	FLANGE	CONNECTOR	MARKER GATING	LINE DRIVER	PPR (SINGLE)	PPR (DUAL)	MODIFICATIONS
AV44	1 - 11mm Solid Shaft - Standard Bearings 5 - 5/16" Solid Shaft - Standard Bearings	B - B10 Euroflange (112mm dia, 100mm BC 6x 7mm, 85mm pilot) P - PY Flange (4.41 in. dia, 3.978 in. BC, 4x 0.281 in., 2.5 in. pilot)	2 - Mz3 12 Pin (CW Pin #5) - Standard Phasing 2 - Mz3 17 Pin (CW Pin #5) - Standard Phasing 3 - Mz3 12 Pin (CW Pin #5) - Reverse Phasing T - Mt2 8 Pin - Turck Pinout U - Mt2 8 Pin U.S. Pinout U - Mt2 8 Pin U.S. Pinout W - Cable, 0.5m (or special length) Y - Cable Entry, M20 cord grip 4 - M20 Cable Gland (12.71-15.7mm) W/O Cable, W/ GND Block on Cover A - 10 Pin MS, without Plug - Standard Phasing C - 10 Pin MS, without Plug - Standard Phasing B - 10 Pin MS, without Plug - Reverse Phasing D - 10 Pin MS, without Plug - Reverse Phasing D - 10 Pin MS, without Plug - Reverse Phasing	K - 1/4 AB Cycle Sync with A & B High L - 1/2 AB Cycle Sync with B Low M - 1 AB Cycle Sync with A High U - Ungated Wide Marker T - 1/4 AB Cycle Sync with A & B High (Avtron Legacy)	1 - 6-30V In/Out (Hx- hi power) 2 - 6-30V In / 5V Out (Hx) 3 - 5V In/Out (Hx)	AL - 240 PPR AN - 256 PPR AR - 512 PPR A4 - 2048 PPR A4 - 2048 PPR A2 - 1200 PPR A3 - 2000 PPR A7 - 3072 PPR AD - 4096 PPR A2 - 8192 PPR K1 - 10000 PPR	XX - None	000 - No Special Modifications 068 - Remote Alarm Output 070 - Expanded Temp Range (-40C to +100C) 077 - High Speed (-4500 RPM) 081 - Expanded Temp Range (-40C to +100C) 1910 -