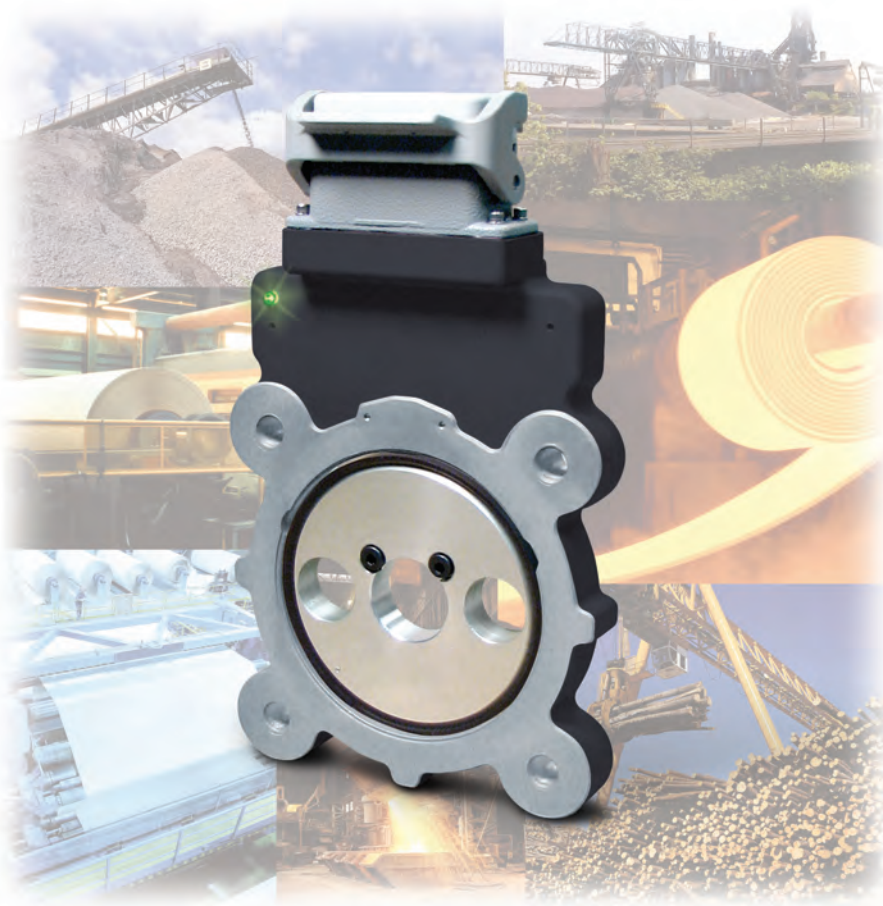


Avtron THIN-LINE II™ AV115

Magnetic, Modular Encoder, 115mm Flange Mount



STRONGER and SMARTER

- Heavy Mill Duty
- Simple, Secure Installation
- Wide-Gap Technology:
No Sensor Scraping or
Adjustment
- Up to 5000 PPR
- No Couplings or Bearings
- Sealed Electronics
- Self-Diagnostic LED and
Alarm Output
- Universal 5-24V Operation
- 3 Year No-Hassle Warranty

AV115 THIN-LINE II™ heavy mill duty modular magnetic encoders fit standard 115mm flange motors. Other THIN-LINE II models, ranging from 115mm to 8.5", are available to fit other motor sizes, as needed

THIN-LINE II encoders feature simple installation, durable construction, and clear diagnostics to eliminate encoder-related downtime:

First, the magnetic sensors are fully potted to withstand dirt and liquids. No

glass disks, no optics to clog. There are no moving, wearing parts!

The patented Wide-Gap™ Cam Screw Rotors™ put an end to sensor damage, are simpler to install, and stay securely mounted to the shaft.

The universal 5-24V design drives longer cables and is protected against wiring errors and surges.

When you power up an AV115, you know you installed it right: the green

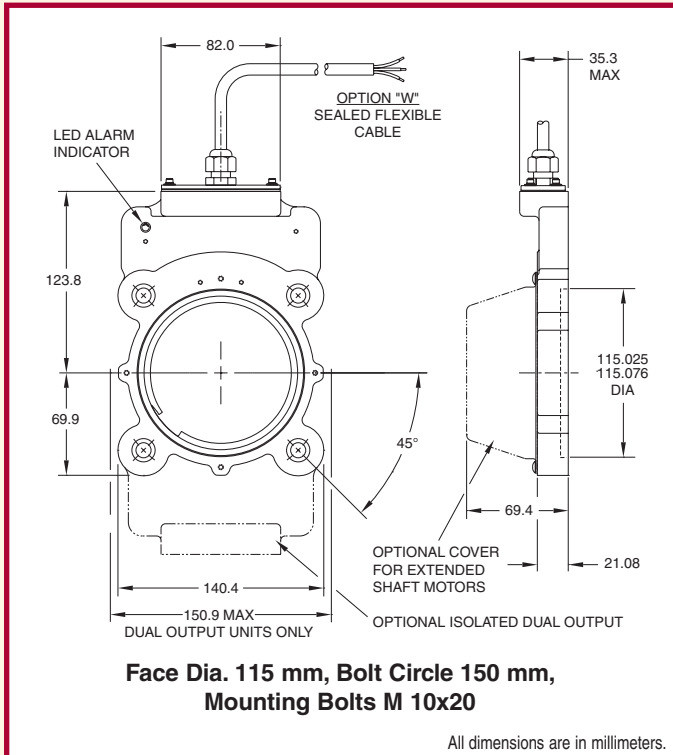
light tells you the digital self-tuning has set your AV115 optimally.

If at any time, the AV115 cannot produce ideal signals, the light changes to red and the remote alarm contact activates. However, the encoder keeps working to give you time to schedule service.

With a real-world installation history of over 4,500,000 hour MTBF, AV115 encoders will keep your machine running 24/7/365!

AV115 Magnetic, Modular Encoder, 115mm Flange Mount

OUTLINE DRAWING



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

MORE AV115 ADVANTAGES

- Resists failures from dirt, oil, and water contamination
- Highly resistant to electrical and magnetic motor and brake noise
- If damaged, electronics can be replaced without removing rotor
- Highest rotor holding force available for crane/hoist/brake applications
- No air gap adjustment required
- Tough coating on all surfaces
- Fits shafts 11mm - 85mm
- Fits Nidek FEK motors
- 100,000+ hour MTBF design
- Thin Profile
- Dual Flange Standard
- Marker Pulse Standard
- -40°C thru +100°C Operation Standard
- Excellent for gear motors and brake applications
- Patented Cam Screw Rotor™ eliminates rotor slipping
- Built-in rotor position guide and diagnostic check
- Corrosion-resistant coating on all metal surfaces

AV115 SPECIFICATIONS

Operating Power: Volts: 5 - 24 VDC; Current: 100mA, no load

Output Format: A Quad B with Marker (A, \bar{A} , B, \bar{B} , Z, \bar{Z})

Second Isolated Output: Optional

Frequency Range: 0 to 165 KHz

Max. Instantaneous Current Output: 3000 mA*

PPR: 8 - 5000

Speed: 5000 RPM Max. std., for higher speeds, consult factory

Electronics: Fully Encapsulated, IP67**

Temperature: -40° to 100°C (150°C rotor)

Vibration: 18 g's

Shock: 1 meter drop test

Chemical: Polyurethane enamel paint protects against salt spray, mild acids, and bases.

Ⓒ Pending

* Output Option 8, See manual for details.

** Connector options may reduce IP rating.

SELECTION GUIDE

Model	Housing Type	Rotor Bore Size (Thru Shaft Rotor)	Cover Style	Line Driver	Single/Left Output (PPR)	Right Output (PPR)	Connector	Modifications
AV115	1- Single Output, 2- Dual Output	0- None. Std. Shaft Size X- None Thru Shaft Rotor (Metric) D2- 10mm DK- 38mm DA- 11mm DL- 42mm D3- 12mm DM- 45mm DB- 14mm DN- 48mm DC- 15mm DP- 52mm DD- 16mm DR- 55mm D4- 18mm DS- 60mm DE- 19mm MU- 65mm* DF- 24mm MV- 70mm* DG- 28mm MW- 75mm* DH- 30mm MY- 80mm* DT- 32mm MZ- 85mm* DJ- 36mm	E- Extended Shaft Cover F- Flat Cover T- Flat Thru-Hole Cover with Shaft Seal (Seal not available on shafts larger than 75mm)	8- 5-24 V in, 5-15 V out high power	C [^] -50 J- 960 F- 60 Y- 1024 G- 100 Z- 1200 H- 120 A [^] -1270 A- 128 4- 2048 L [^] -150 5- 2500 L- 240 D- 4096 N- 256 8- 4800 P- 300 9- 5000 E- 360 0- Non-Std. B- 480 R- 512 X- None S- 600 V- 900	C [^] -50 J- 960 F- 60 Y- 1024 G- 100 Z- 1200 H- 120 A [^] -1270 A- 128 4- 2048 L [^] -150 5- 2500 L- 240 D- 4096 N- 256 8- 4800 P- 300 9- 5000 E- 360 0- Non-Std. B- 480 R- 512 X- None S- 600 V- 900	P- 10 Pin EPIC Industrial w/ Plug G- 10 Pin Industrial w/ Plug (Northstar pinout) W- 3 Ft. Cable, Sealed Z- 3 Ft. Cable w/ EPIC Industrial	000- No Modification 002 [^] -Select Alternate PPR assignment code 004- Add Housing Drain (single output only) 9xx- Special Cable Length, xx=length in feet

* Cam Screw Rotor only 10mm-60mm

[^] To specify this PPR, also specify modification code 002.

Cam Screw Rotor™, THIN-LINE II™, and Wide-Gap™ are trademarks of Avtron.
All dimensions are in millimeters.
Specifications and features are subject to change without notice.

AVTRON INDUSTRIAL AUTOMATION, INC.

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