

Avtron Rush AV4 Encoders



We will RUSH popular AV4 encoders to you for no additional cost!

Magnetic Durability in a Compact Encoder

Ships in 2-3 business days

2.06" Sq., 2.5" Rnd., 2.63" Sq. flange options

Any PPR 1-16,384

Many connector options via mating adapters

3/8" Shaft Size

2 Year No-Hassle Warranty

No optical glass disc

Rush AV4

In a pinch? Can't afford costly downtime? Need a compact encoder delivered fast? Good News! Select popular Avtron AV4's are now available for quick ship!

Choose from three popular flange configurations:

2.06" Square, 2.50" Round, and 2.63" Square flanges.

Any PPR 1 - 16384!

Many cable mating adapters and connectors available to get you the right connection: 7 & 10 pin MS, 12 pin M23, 10 pin Mini Twist Lock, and cable with flying leads.

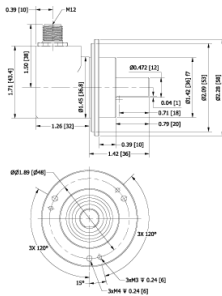
We will *RUSH* out the door these AV4 encoders in 2-3 business days at no extra cost! Use our configurator to see all the available options and pricing.

Avtron AV4 encoders are setting THE industry standard for incremental quadrature rotary encoders. This versatile lineup fits the same mounting patterns on all motors and machines as competitor units, but that's where the similarities end. We've incorporated Avtron magnetic sensing technology to this affordable set of encoders! This makes AV4 more resistant to dust, dirt, oil and other liquids that make ordinary optical encoders fail.

Our Wide-Gap technology provides for 10-20X larger air gap between sensor and rotor than ordinary optical encoder designs. Consider the resistance to vibration when you compare our 0.040" air gap to the typical 0.004" clearance from the thin, often flexible, optical disk spinning at full motor speeds. Our high-accuracy magnetic sensors provide high quality quadrature signals for precise velocity and position control with the durability of magnetic sensing technology.

OUTLINE DRAWING

Flange style 1 - 58mm w/36mm Pilot,
3x M3 & M4 on 48mm BC



FOR COMPLETE LIST OF FLANGE STYLES PLEASE REFER
TO INSTRUCTION SHEET

MORE Rush AV4 ADVANTAGES

- Resist dust, dirt, and liquids
- -40° C to +85° C Operation
- Drop-in mechanical replacement
- Pin-for-pin replacement

MORE Rush AV4 SPECIFICATIONS

Operating Power: Volts: 5 - 30 VDC; Current: 140 mA @ 5 V, 70 mA @ 10 VDC, 40 mA @ 24 VDC, no load

Output Format: A Quad B with marker (A₁/A, B₁/B, Z₁/Z) available

Frequency Range: 0 to 1 MHz

PPR: 1 - 16,384 Standard (for other PPR needs consult factory)

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

Axial Load: 9 lbs [40 N], Radial 25 lbs [110 N]

Max. Temperature: -40° to 85° C

Protection Rating: IP65

Vibration: 10g (10 Hz – 1000 Hz, EN 60068-2-6)

Shock: 100g (half sine 6 ms, EN 60068-2-27)

Weight: 0.44-1.76 lbs [200-800 g]

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

SELECTION GUIDE

MODEL	PPR	LINE DRIVER	SHAFT SIZE	CONNECTOR OPTIONS	WIRING EXIT	FLANGE STYLE	HOUSING SIZE	SEALS	CHANNELS	MODIFICATION NS
Rush AV4	BB - 1 PPR BH - 7 PPR BN - 8 PPR BD - 10 PPR BF - 25 PPR BA - 30 PPR AA - 32 PPR BG - 40 PPR BJ - 42 PPR AF - 60 PPR AK - 80 PPR BC - 100 PPR AH - 120 PPR AC - 128 PPR AM - 200 PPR AL - 240 PPR A2 - 250 PPR AN - 256 PPR AE - 360 PPR AG - 400 PPR AB - 480 PPR AO - 500 PPR AR - 512 PPR AS - 600 PPR AP - 720 PPR AJ - 960 PPR AW - 1000 PPR AY - 1024 PPR AZ - 1200 PPR CL - 1250 PPR BQ - 1270 PPR AV - 1440 PPR BE - 1500 PPR AU - 1800 PPR A3 - 2000 PPR A4 - 2048 PPR B4 - 2160 PPR B5 - 2500 PPR A5 - 2540 PPR CG - 3000 PPR AT - 3072 PPR A6 - 3600 PPR AD - 4096 PPR A8 - 4800 PPR A9 - 5000 PPR CE - 6000 PPR CD - 8192 PPR CB - 10000 PPR CC - 10160 PPR CH - 12500 PPR CA - 12700 PPR CF - 15000 PPR BL - 16384 PPR ZZ - Programmable PPR (1024PPR Default) Must purchase D52986 Programming Tool & Cable	1 - 5-30v In/out Line Driver (IC-HD2) 4 - 5-30v In, 5v Out Regulated Line Driver (IC-HD2)	B - 0.375 in.OD x 0.625 in. Shaft w/Flat (2.06 in. square flanges only) C - 10mm OD x 20mm Long Shaft with Flat F - 0.375 in.OD x 0.875 in. Shaft w/Flat (2.50 & 2.63 in. flanges only)	A - 10 pin MS No Plug Std/Avtron Pin Out (See mods: 7, 12, 10 TW pin adp.) B - 10 pin MS No Plug Reverse Phasing (See mods: 7, 12, 10 TW pin adp.) C - 10 pin MS w/ Plug Std/Avtron Pin out (See mods: 7, 12, 10 TW pin adp.) D - 10 pin MS w/ plug Reverse Phasing (See mods: 7, 12, 10 TW pin adp.) W - Cable 1m	A - Axial Side Exit R - Radial Side Exit	A - 2.06 in. Square Flange, 1.25 in. Pilot, 4x 0.16 in. Corner Holes on 1.75 in. BC 1 - 58mm Round Flange, 36mm Pilot, 3x M3 M4 on 48mm BC 4 - 2.63 in. Square Flange, 1.25 in. Pilot, 4x 0.22 in. Corner Holes spaced 2.06 in. apart 7 - 42mm Round HD Stainless Flange & Pilot, 4x M4 on 35mm BC 9 - 2.50 in. Round Flange, 1.25 in. Pilot, 3x 10-32 & 8-32 on 1.875 in. BC, 3x 6-32 & 4x 4-40 on 2.00 in. BC	3 - 36mm 4 - 42mm 5 - 58mm	A - Shaft Seals, IP65, Aluminum Housing K - Shaft Seals, IP69K, Stainless Steel Housing	A - All Signals A, A/, B, B/, Z, Z/ (See mods for other adp. options)	000 - No Special Features CEE - Add 18" adapter 10 pin MS to 6 pin MS, Single Ended, (A, B, Z only) CEB - Add 18" adapter 10 pin MS to 6 pin MS, Differential, No Marker Pulse (A, A/, B, B/ only) CJE - Add 18" adapter 10 pin MS to 7 pin MS, Single Ended, (A, B, Z only) CJB - Add 18" adapter 10 pin MS to 7 pin MS, Differential, No Marker Pulse (A, A/, B, B/ only) CRA - Add 18" adapter 10 pin MS to 10 pin Mini Twist Lock, All Channels (A, A/, B, B/, Z, Z) C5E - Add 18" adapter 10 pin MS to 5 pin M12, Single Ended, (A, B, Z only) CTA - Add 18" adapter 10 pin MS to 8 pin M12, All Channels (A, A/, B, B/, Z, Z) C2A - Add 18" adapter 10 pin MS to 12 pin M23, All Channels (A, A/, B, B/, Z, Z) CWA - Add Mating 10 pin MS connector with 18" [0.5m] flying leads, All Channels (A, A/, B, B/, Z, Z)



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