07/16/25





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

Magnetic Durability in a Programmable Encoder

Ships in 2 business days

2.06" Sq., 2.5" Rnd., 2.63" Sq., 58mm Rnd., 36.5mm Rnd. flange options

Any PPR 1-16,384

Many connector options via mating adapters

1/4", 3/8", 6mm, 10mm Shaft Sizes

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 five popular flange configurations:

2.06" Square, 2.50" Round, 2.63" Square, 58mm Round, and 36.5mm Round 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* these AV4 encoders out the door in 2 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. 07/16/25

OUTLINE DRAWING



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 (A, /A, B, /B, Z, /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) Shaft Load: Axial 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



Nidec Industrial Solutions 243 Tuxedo Avenue - Cleveland, Ohio 44131 encoderhelpdesk@nidec-industrial.com +1 216-642-1230 - www.avtronencoders.com



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SELECTION GUIDE

MODEL	PPR	LINE DRIVER	SHAFT SIZE	CONNECTOR OPTIONS	WIRING EXIT	FLANGE STYLE	HOUSING SIZE	SEALS	CHANNELS	MODIFICATIO NS
RUSH AV4	BB 1 PPR BH - 7 PPR BN - 8 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 BG - 40 PPR BG - 40 PPR AH - 120 PPR AH - 120 PPR AH - 200 PPR AH - 1200 PPR AH - 2040 PPR A	1 - 5-30V In/Out Line Driver (IC- HD2) 4 - 5-30V in, 5V Out Regulated Line Driver (IC- HD2) 9 - 5-30V in/SV Line Driver (7272) 9 - 5-30V in/SV Out Regulated Line Driver (7272)	A - 0.25 in.OD x 0.625 in. Shaft w/Flat (206 in. square flanges only) 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 w/Flat (2.50 & 2.63 0.875 in. Shaft w/Flat (2.50 & 2.63 0.875 in. Shaft w/Flat (2.50 & 2.55 0.275 in. Shaft w/	A - 10 pin MS No Plug Std/Avtron Phasing (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 Phasing (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 - Radial Side Exit 	A - 2.06 in. Square Flange, 1.25 in. Pilot, 4x 0.16 in. Corner Holdes on 1.75 in. BC 1 - 58mm Round Flange, 36mm Pilot, 3x M3 M4 on 4 - 2.63 in. Square Samm BC 4 - 2.63 in. Square Flange, 4.25 in. Pilot, 4x 0.22 in. Pilot, 3x 10-32 & 8-32 on 1.875 in. Pilot, 3x 10-32 & 8-32 on 1.875 in. Pilot, 3x 10-32 & 4x 4-40 on 2.00 in. BC	3 - 36mm 4 - 42mm 5 - 58mm	A - Shaft Seals, IP65, Aluminum Housing K - Shaft Seals, IP6K, Stainless Steel Housing	A - All Signais A, A /, B, B/, Z, Z/ (See mods for other adp. options)	000 - No Special Features CEE - Add 18" adapter 10 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) CJE - Add 18" adapter 10 pin MS to 7 pin MS. Differential, No Marker Pulse (A, A/, B, B/ only) CJE - Add 18" adapter 10 pin MS to 7 pin MS. Differential, No Marker Pulse (A, A/, B, B/ only) CSE - Add 18" adapter 10 pin MS to 7 pin MI1 Channels (A, A/, B, Z, Z) CSE - Add 18" adapter 10 pin MS to 5 pin M12, Single Ended, (A, B, Z only) CSE - Add 18" adapter 10 pin MS to 5 pin M12, Single Ended, (A, B, Z, Z) CSE - Add 18" adapter 10 pin MS to 8 pin M12, All Channels (A, A/, B, B/, Z, Z) CWA - Add 18" adapter 10 pin MS to 12 pin M23, All Channels (A, A/, B, B/, Z, Z) CWA - Add Maing 10 pin MS



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