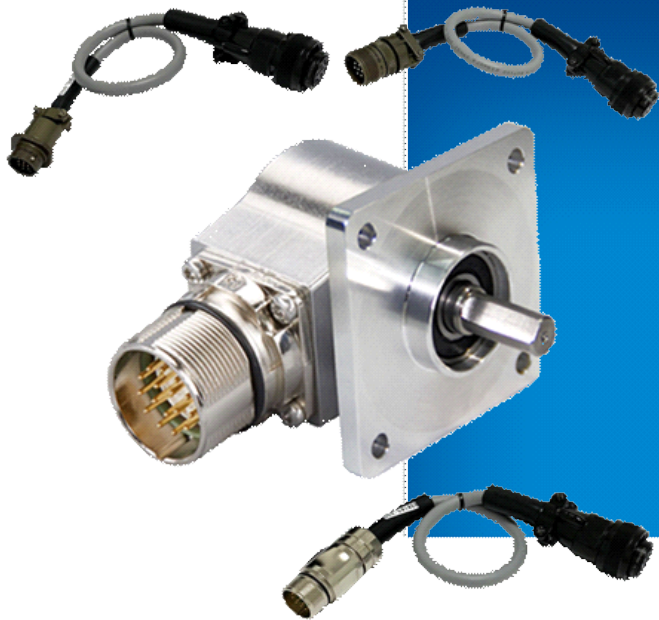


# Avtron Rush AV4 Encoders



**1 Day Lead Time - 2.06", 2.5",  
2.63" Flanges - 3/8" OD Solid  
Shaft - Any PPR**

## Quick Ship Now Available on Select Compact Encoders!

- | Ships in 1 day
- | 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 PROGRAM

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!

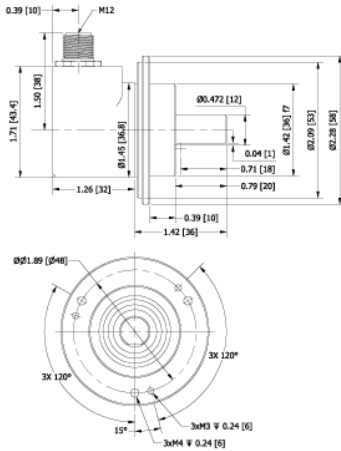
Many cable mating adapters and connectors available to get you the right connection: 7 & 10 pin MS, 12 pin M23, 10 pin Mini Twist Lock, and cable with flying leads.

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

Check out our website for more detailed specifications, drawings, and installation instructions. [www.avtronencoders.com](http://www.avtronencoders.com)

## SELECTION GUIDE

SHAFT	FLANGE	CONNECTOR	PPR			PART NUMBER
3/8" OD with Flat	2.06" Square	10 Pin MS	BB - 1	AJ - 960	CH - 12500	AV4□□1BARA3AA000
		7 Pin MS	BH - 7	AW - 1000	CF - 15000	AV4□□1BARA3AACJE
		12 Pin M23	BD - 10	AY - 1024		AV4□□1BARA3AAC2A
		10 Pin Mini TW	BF - 25	AZ - 1200		AV4□□1BARA3AACRA
		Cable	BA - 30	AV - 1440		AV4□□1BWRA3AA000
			AA - 32	BE - 1500		AV4□□1FAR93AA000
	2.5" Round	10 Pin MS	BG - 40	AU - 1800		AV4□□1FAR93AACJE
		7 Pin MS	BJ - 42	A3 - 2000		AV4□□1FAR93AAC2A
		12 Pin M23	AK - 80	A4 - 2048		AV4□□1FAR93AACRA
		10 Pin Mini TW	BC - 100	B4 - 2160		AV4□□1FWR93AA000
		Cable	AH - 120	B5 - 2500		AV4□□1FAR43AA000
			AC - 128	A5 - 2540		AV4□□1FAR43AACJE
	2.63" Square	10 Pin MS	AM - 200	CG - 3000		AV4□□1FAR43AAC2A
		7 Pin MS	AL - 240	AT - 3072		AV4□□1FAR43AACRA
		12 Pin M23	A2 - 250	A6 - 3600		AV4□□1FAR43AA000
		10 Pin Mini TW	AN - 256	AD - 4096		AV4□□1FAR43AACJE
		Cable	AG - 400	A9 - 5000		AV4□□1FAR43AAC2A
			AB - 480	CE - 6000		AV4□□1FAR43AACRA
		AQ - 500	CD - 8192		AV4□□1FWR43AA000	
		AR - 512	CB - 10000			
		AS - 600	CC - 10160			
	AP - 720	CA - 12700				

## MORE RUSH AV4 PROGRAM ADVANTAGES

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

## RUSH AV4 PROGRAM 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)

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]



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All dimensions approximate.