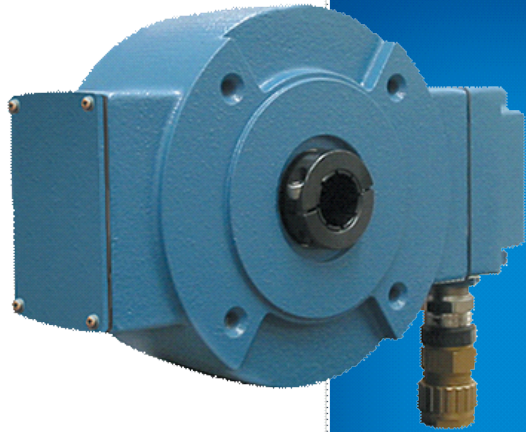


# Avtron M7 Ultra-Low Temperature Encoders



**Severe Duty Hollow Shaft Mount Ultra-Low Temperature Magnetic Encoder, 1" to 1 1/8"**

## Ready for the Coldest Locations

- Heavy, Mill Duty
- Up to 1200 PPR -45°C to +80°C Operation
- Immune to water, oil, dust, dirt, etc.
- Withstands extreme shock and vibration
  - Extra heavy-duty bearings
  - Optional dual isolated outputs
- Excellent for oil drilling and gas pipeline applications

## M7

Avtron M7 Hollow Shaft

Magnetic Hollow Shaft Mount Encoder, 1" to 1 1/8"

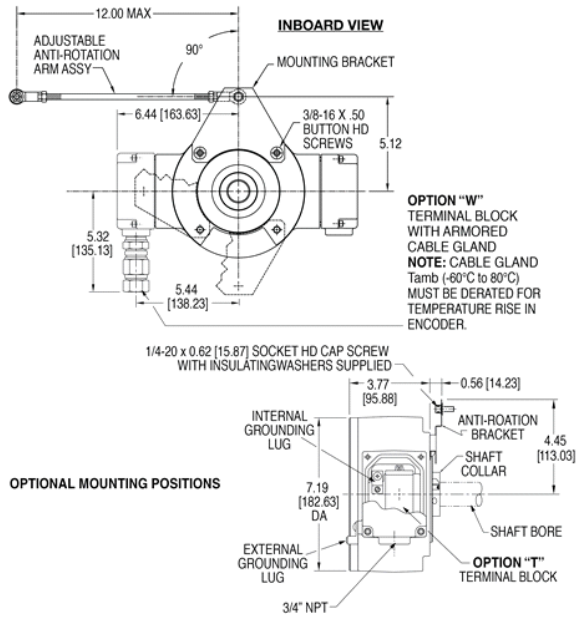
M7-4 and M7-5 heavy mill duty encoders are designed for direct mounting on motor or load shafts, from 1" to 1 1/8".

Forget fragile glass disk encoders! The M7 features Avtron's rugged magnetic sensor and solid metal rotor technology. Our shatterproof, moisture proof systems ensure your application has maximum uptime.

No more tiny stub shafts on big motors or load shafts! The hollow shaft (tethered) models offer direct mounting on big shafts, from 1" to 1 1/8", without flanges, reducers, couplings, or other hardware. No rework is needed; just mount the encoder directly on the shaft, and secure the tether arm. The heavy duty bearings withstand runout and vibration that destroy lesser encoders.

If you have a rough application in a cold location, select an M7 encoder!

## OUTLINE DRAWING



## MORE M7 ADVANTAGES

- Threated rod torque arm for easy tethered mounting
- Highly resistant to electrical and magnetic motor and brake noise
- Second isolated output may be different PPR
- Available armored wire gland
- IP66 Enclosure
- 1 Year No-Hassle Warranty

## M7 SPECIFICATIONS

**Operating Power:** 5-24 VDC; Current 120mA per output, no load 24VDC 770mA @24VDC heater current required for operation below -40°C

**Output Format:** A,A-, B,B-; Optional Marker Z,Z-

**Frequency Range:** 0 to 100 KHz

**PPR:** 240-1200

**Speed:** 5000 RPM Max. Std., 1" to 1 1/8" shaft

**Temperature:** 80°C to -45°C (internal heater operation required below -40°C)

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

**Weight:** 16 lbs./7kg.

All dimensions are in inches [millimeters].

Specifications and features are subject to change without notice.

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

## SELECTION GUIDE

M7 PART NUMBERS AND AVAILABLE OPTIONS								
Model	Bore Size	Mounting Style	Line Driver	Left & Right Output Range	Base PPR	Marker	Connector	Modifications
M7-	0- Non-Standard 4- 1" 5- 1 1/8"	S- End-of-shaft	3- 12 to 24 VDC*	X- None L- Low Range (Base PPR x 1/2) M- Medium Range (Base PPR x 1) H- High Range (Base PPR x 2)	48- 480 51- 512 60- 600	Z- Marker - - None	T- Conduit Box, Terminal Block, 3/4" NPT W- Conduit Box, Terminal Block and Wire Gland	000- None

\* Units shipped prior to 2009 were rated 18 to 24 volts. Refer to ID tag on the encoder for specific input voltage requirements.

**Nidec**

**AVTRON  
ENCODERS**

Nidec-Avtron Makes the Most Reliable Encoders in the World

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**CE**

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