

# Avtron XT45

## Magnetic Encoder Hollow Shaft Mount

### EXTREME DURABILITY

- Severe Duty
- Off Shore Applications—No Problem
- Ultra-Secure Shaft Gripping
- Withstands Extreme Shock & Vibration
- Up to 5000 PPR
- Magnetic Technology:  
No Glass Disks,  
No Sensor Failures
- Sealed Electronics
- Self-Diagnostic Alarm Output
- Universal 5-24V Operation
- Fully Protected From Wiring Problems & Surges
- 3 Year No-Hassle Warranty

**XT45** severe duty hollow shaft magnetic encoders fit shafts up to 1 1/8" [30mm]. For even larger shaft applications up to 2 3/8" [60mm], M6 models are available.

The XT45 is built to withstand extreme conditions: Cold, heat, shock, vibration, oil, salt water, and electrical overloads. XT45 is ideal for non-hazardous oil drilling applications such as top drives.

We started with our Wide-Gap™ magnetic sensor system, potted to protect against liquids and dirt. We added universal 5-24V operation and high power outputs protected against short circuits and wiring problems.

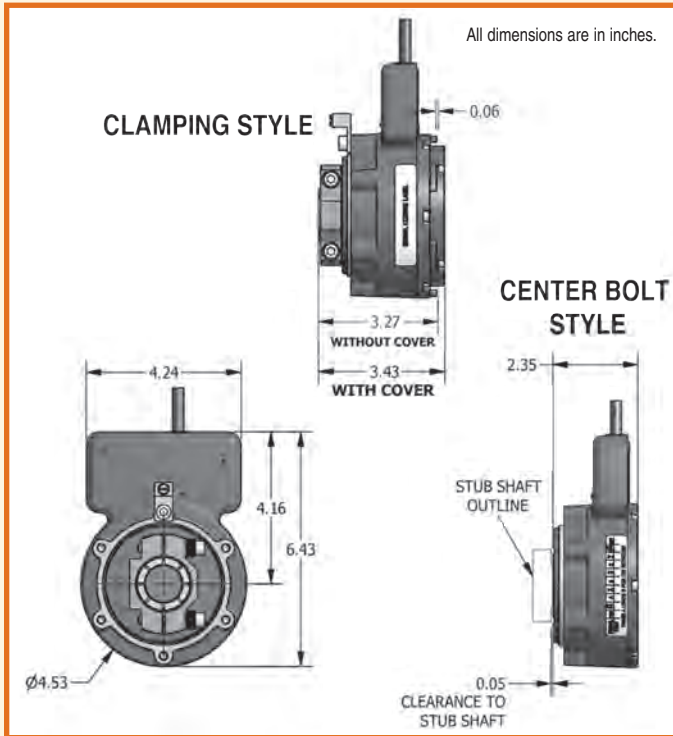
Then we built an ultra-rugged shaft assembly with huge bearings and 2000lb shaft clamping to hold tightly and keep turning smoothly, even under continuous shock and vibration.

This incredible mechanical and electronic engine is protected by a cast aluminum housing and non-contacting labyrinth seals that work in any orientation. Of course, the XT45 features diagnostics and a remote alarm contact so you are certain your XT45 is providing top-quality signals.

XT45 keeps your rigs drilling and your machines running!

# XT45 Magnetic, Hollow Shaft Encoder 3/4" - 1 1/8" [19-30mm]

## OUTLINE DRAWING



Check out our web site for more detailed specifications, drawings, and installation instructions.

[www.avtronencoders.com](http://www.avtronencoders.com)

## MORE XT45 ADVANTAGES

- Replaces BEI HS35, Dynapar EN42 & EN44
- Ideal for top drives and drilling applications
- Shrugs off dirt, oil, and water contamination
- Insulated from motor shaft currents
- Extreme clamping force to eliminate slipping
- Corrosion-resistant coating on all metal surfaces; stainless shaft
- Three Mounting Options: End of Shaft Clamp, Thru Shaft Clamp, and Rear Center Bolt.
- Fits shafts 0.750" – 1.125" [19-30mm]

## XT45 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,  $\bar{Z}$ )

**Frequency Range:** 0 to 165,000 KHz

**Max. Instantaneous Current Output:** 3000 mA<sup>c</sup>

**PPR:** 8 - 5000

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

**Electronics:** Fully encapsulated, IP67<sup><<</sup>

**Temperature:** -40°C to 100°C

**Vibration:** 20 G's (any orientation)

**Shock:** 300 G's

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

## SELECTION GUIDE

€ Pending

< Output Option 8, See manual for details.  
<< Connector options may reduce IP rating.

XT45 PART NUMBERS AND AVAILABLE OPTIONS INCLUDING AV5 SENSORS										
Model	Bore Size		Left Output PPR		Right Output <sup>a</sup> PPR	Line Driver	Connector Options	Tether	Channels	Modifications
XT45	Clamping Collar Mount U.S. D- 3/4" E- 7/8" F- 1" G- 1 1/8"  Clamping Collar Mount Metric L- 20mm M- 25mm N- 30mm	End of Shaft: Center Bolt Mount*  J- 30mm* (no stub) K- fits GE B20  * 30mm x 25mm stub shaft required for mounting + Dual output available 4Q2010	AF-60 AG-100 AH-120 AA-128 AL-240 AN-256 AE-360 AQ-500 AR-512 AS-600 AV-900	AJ-960 AW-1000 AY-1024 AZ-1200 A3-2000 A4-2048 A5-2500 AD-4096 A8-4800 A9-5000	XX-None	8- 5-24V in, 5-15 out hi-power	W- 18" flex cable Y- 10 pin MS with plug on 12" cable N- Condulet with leads	X- None G- Torque arm	A- All	000- None 001- Omit Rear Shaft Cover 9xx- Specify cable length xx=feet (use w/ Option "W")



Wide-Gap™ is a trademark of Avtron.  
All dimensions are in inches [millimeters].  
Specifications and features are subject to change without notice.