

## Encoder Types

Model	PPR	Resolution
N256	1024	0.01171875
N500	2000	0.006
N1000	4000	0.003
N2000	8000	0.0015

## Sealed Bearing Unit Encoders

For use on lines with excessive lubrication.

Model	PPR	Accuracy
S1000	4000	+/- 2.7 arc min
S2000	8000	+/- 1.35 arc min

\* Other models available by special request. Lead time will vary.

# SPECIFICATIONS

### Mechanical

**Shaft Diameter:** 3/8"

**Shaft Loading:** 10 pounds radial recommended; 50 lbs max.; double bearings, 0.55" separation

**Shaft Runout:** 0.0005 T.I.R.

**Shaft Material:** 416 Stainless Steel

**Bearing Housing:** 6063 Aluminum

**Cover:** 0.050" thick, 1100-0 Aluminum

**Maximum RPM:** 4,000 RPM

**Weight:** 19 oz. Typical

**Starting Torque at 25° C:** 0.25 in-oz (max.)

**Mating Connector:** MS style connector

### Electrical

**Code:** Incremental

**Output Format:** 2 Channel Quadrature, RS422 Line Driver, 5VDC TTL Differential, Index Pulse Gated with A- and B-

**Supply Voltage:** 5 to 40VDC

**Current Requirements:** 200mA @ 5 to 40VDC, 1 Watt max.

**Frequency Response:** 500 KHz

### Environmental

**Enclosure Rating:** NEMA 4

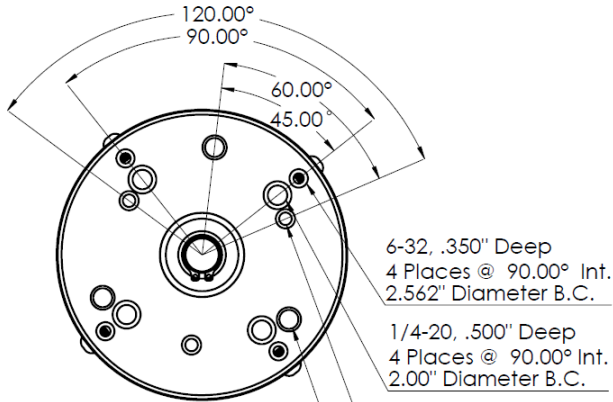
**Operating Temperature:** 0° - 57°C (32° - 135° F)

AMS Controls  
12180 Prichard Farm Road  
Maryland Heights, MO 63043  
314.344.3144 • 800.334.5213  
sales@amscontrols.com

www.amscontrols.com

AMS Controls GmbH  
Grafenbergstrasse 37  
8051 Graz, Austria  
+43 316 684 046  
globalsales@amscontrols.com

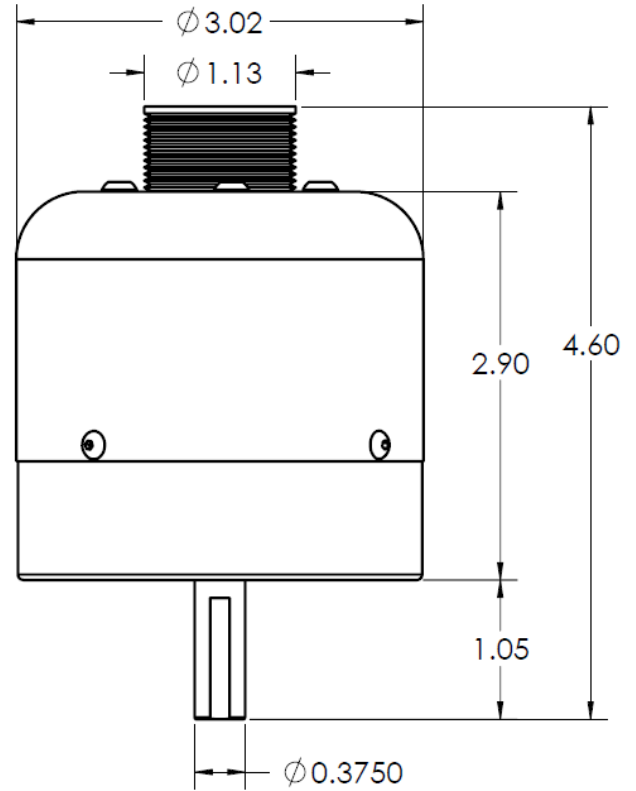
## DIMENSIONS



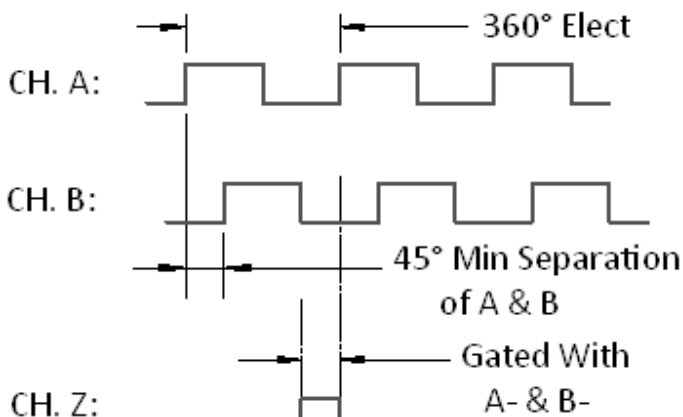
Pin	Channel
I	+5V
J	GND
A	A+
B	A-
C	B+
D	B-
E	Z+
F	Z-

UNLESS OTHERWISE SPECIFIED  
DIMENSIONS ARE IN INCHES  
TOLERANCES ARE:

DECIMALS	FRACTIONS
.X ± .030	± 0.10
.XX ± .010	
.XXX ± .005	ANGLES
.XXXX ± .001	± 0.50



## WAVEFORM



## ACCESSORIES AVAILABLE

AMS Controls offers a full line of encoder accessories including:

- Cables
- Brackets
- Phenolic wheels
- Knurled wheels

For a detailed listing of available products, visit [www.amscontrols.com](http://www.amscontrols.com).

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

AMS Controls GmbH  
Grafenbergstrasse 37  
8051 Graz, Austria  
+43 316 684 046  
[globalsales@amscontrols.com](mailto:globalsales@amscontrols.com)