

**SHEET # 940-2T052**

Designed for reliable operation, the R11X-J12/7 resolver can be used in a wide range of space critical applications where environmental sealing is not needed. The resolver is a ratiometric absolute position sensor that reliably operates in harsh environments. Due to the small shaft size, a flexible coupler must be used when connecting the resolver to your machinery. If your single turn applications requires an environmentally sealed package, consider using the HT-6 transducer. AMCI's smallest NEMA13 transducer.

Technical drawing of the R11X-J12/7 component, showing dimensions and lead specifications.

Dimensions (all diameters unless specified):

- Overall length: 1.062" dia.  $\pm .0005$
- Lead length: 1.000" dia.  $\pm .0005$
- Lead diameter: .625" dia.  $\pm .0005$
- Lead diameter: .1875" dia.  $\pm .0005$
- Lead diameter: .500"  $\pm .010$
- Lead diameter: .980" dia.
- Overall diameter: 1.062" dia.
- Lead length: 1.590" max.
- Lead diameter: .062"  $\pm .003$
- Lead diameter: .062"  $\pm .003$
- Lead diameter: .093"  $\pm .003$
- Lead diameter: .060"  $\pm .003$

Lead specifications:

- Six Leads
- 28 AWG Teflon Insulated
- 9" Length Min.

**Schematic**

COS Winding

$V_C = V_R \cos \theta$

S1 (Red)

S3 (Blk)

R1 (Red/Wht)\*

$V_R$

R2 (Blk/Wht)

Rotary Transformer

SIN Winding

S2 (Yel)

$V_S = V_R \sin \theta$

S4 (Blu)

$\theta$

\*(Wire Color)

Input Voltage: 7.0 V  
Input Freq: 5000 Hz  
Primary: Rotor  
Input Current: 17.0 mA Max.  
Output Voltage: 6.65 V Nom.  
Trans. Ratio:  $0.95 \pm 5\%$   
Accuracy: 7 min. (max. error)  
NEMA Rating: NEMA 1

The picture below shows how to connect a R11X-J12/7 to AMCI's standard cable. Connection to the AMCI Controller follow published cable prints.

