

## R11X-A10/7 Specification Sheet

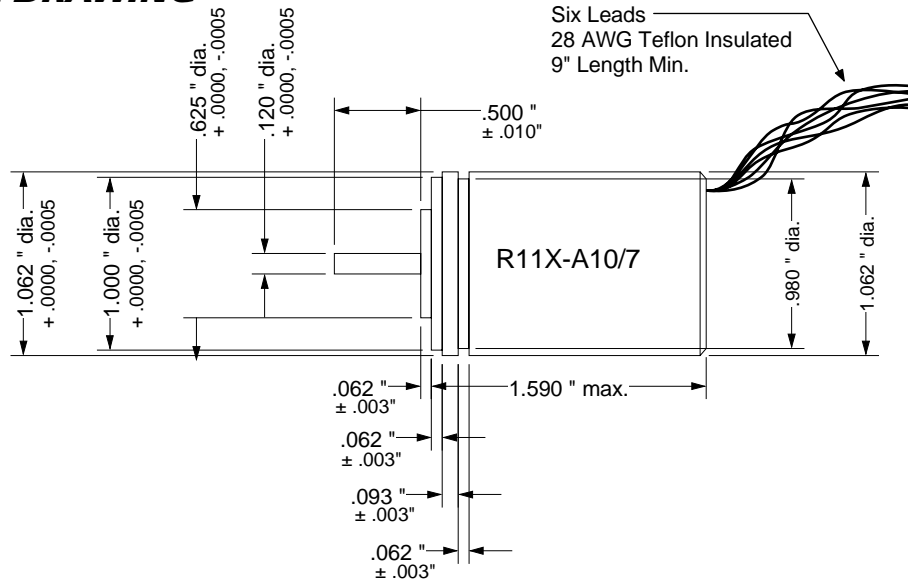
SHEET # 940-2T421

### DESCRIPTION

Designed for reliable operation, the R11X-A10/7 can be used in a wide range of applications. The brushless resolver is unsurpassed by any other type of rotary position transducer. Use this resolver for space critical applications where environmental sealing is not needed. The resolver provides absolute position of the input shaft and, being ratiometric, any changes in the resolvers characteristics such as those caused by aging, frequency, voltage or a change in temperature are ignored. Due to the small shaft size a flexible coupler must be used when connecting the resolver to your machinery.

Please note that due to its electrical characteristics, the R11X-A10/7 will not work with AMCI's standard controllers. The AMCI size 11 resolver that is compatible with all AMCI electronics is the R11X-J10/7.

### DIMENSIONAL DRAWING



### ELECTRICAL SPECIFICATIONS

Input Voltage: 7.5 V  
Input Freq: 4000 Hz  
Primary: Rotor  
Input Current: 16.0 mA max.  
Input Power: 87 mW max.  
Output Voltage: 4.00 V Nom.  
Trans. Ratio:  $0.54 \pm 5\%$   
Z<sub>RO</sub>: 220+j206 ohms  
Z<sub>RS</sub>: 134+j173 ohms  
Z<sub>SO</sub>: 197+j244 ohms  
Z<sub>SS</sub>: 114+j196 ohms  
Phase Shift: -2° Leading  
Rotor Resist: 16 ohms (DC)  
Stator Resist: 40 ohms (DC)  
Null Voltage: 15 mV total  
Accuracy: 7 min. (max. error)

### MECHANICAL SPECIFICATIONS

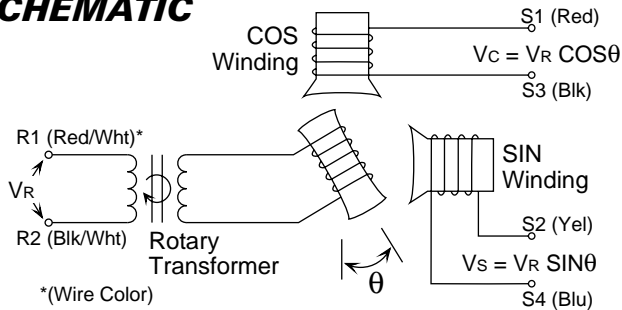
Shaft Loading: Radial: 2 lbs. max.  
Axial: 1 lb. max.  
*Bearing life rated at 2X10<sup>9</sup> revolutions minimum at maximum shaft load.*  
Starting Torque: 0.08 oz-in @ 25°C  
Moment of Inertia: 0.51X10<sup>-4</sup> oz-in-sec<sup>2</sup>  
Weight: 0.25 lbs.

### ENVIRONMENTAL SPECIFICATIONS

Operating Temp: -20°C to 125°C  
Shock: 50 G's for 11 mS  
Vibration: 15 G's to 2000 Hz

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## SCHEMATIC



## FOR MORE INFORMATION

If you need more information on the R11X-A10/7, use these three resources:

- \* If you have internet access, check our website at <http://www.amci.com>. We've worked hard to make our site the repository of information you need to specify and use AMCI products. New product news, product specifications, compatibility tables, application notes, and PDF manuals are all available 24 hours a day.
- \* You can also call AMCI for sales or technical support at (860) 585-1254 from 8AM to 5PM EST, Monday through Friday. An applications engineer will be available to assist you.
- \* Finally, you can e-mail us at [sales@amci.com](mailto:sales@amci.com) or [techsupport@amci.com](mailto:techsupport@amci.com).

## SAMPLE INSTALLATION

The picture below shows how to connect a R11X-A10/7 to AMCI's standard cable.

