R11W-2F10/10 Specification Sheet

**DESCRIPTION**

Designed for reliable operation, the two-speed R11W-2F10/10 can be used in a wide range of space critical applications where environmental sealing is not needed. The electrical outputs of the R11W-2F10/10 complete two sinusoidal cycles for every turn of the input shaft. Therefore, this resolver gives an absolute position output every 180°, not every 360° as a standard one-speed resolver does. The resolver is still ratiometric, and being so, any changes in the resolver's characteristics, such as those caused by aging, as well as frequency, voltage or temperature changes are ignored. Due to the small shaft size a flexible coupler must be used when connecting this resolver to your machinery. Note that this resolver is a Control Transformer, not a Transmitter, and will not work with AMCI's standard controllers or interface modules.

**DIMENSIONAL DRAWING**

![Dimensional Drawing](image-url)

**Specifications**

**Electrical:**
- Input Voltage: 12.0 V
- Input Freq: 2500 Hz
- Primary: Stator
- Input Current: 15.0 mA max.
- Input Power: 80 mW max.
- Output Voltage: 6.0 V nom.
- Trans. Ratio: 0.50 ± 5%
- Zro (Ω): 720 + j1130
- Zrs (Ω): 530 + j820
- Zso (Ω): 540 + j1400
- Zss (Ω): 400 + j1020
- DC Rotor Res.: 84 Ω
- DC Stator Res.: 125 Ω
- Phase Shift: -4° leading max.
- Null Voltage: 15 mV total max.
- Accuracy: ±10 minutes max.

**Mechanical:**
- Shaft Load: 6 lbs. radial†
  3 lbs. axial†
- Starting Torque: 0.08 oz-in @ 25°C
- Rotor Moment: 0.51X10⁶ oz-in-sec²
- Weight: 115g (4.04 oz)
- NEMA Rating: IP40 / NEMA 1

† At the recommended maximum loads, average bearing life is 2X10⁶ revolutions. (L10 rating)

**Environmental:**
- Operating
  - Temperature: −40°C to +125°C
  - −40°F to +257°F
- Shock: 50 g’s for 11 ms
- Vibration: 15 g’s to 2000 HZ

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**Wire Designations**

- R1: Red with White Stripe
- R2: Black with White Stripe
- S1: Red
- S3: Black
- S2: Yellow
- S4: Blue

R1-R2: Reference Winding
S1-S3: Sine Winding
S2-S4: Cosine Winding

( ) = Dimensions in millimeters