**R11W-B10/7-1 Specification Sheet**

**DESCRIPTION**

Designed for reliable operation, the R11W-B10/7-1 can be used in a wide range of space critical applications where environmental sealing is not needed. Resolvers are analog, ratiometric devices, so any changes in the resolver's 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 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**

[Diagram showing dimensions of R11W-B10/7-1 resolver]

**DETAIL A**

[Diagram showing detailed dimensions and tolerances]

---

**LEADERS IN ADVANCED CONTROL PRODUCTS**
**SPECIFICATIONS**

**Electrical:**
- Input Voltage: 12.0 V
- Input Freq: 400 Hz
- Primary: Stator
- Input Current: 17.0 mA max.
- Input Power: 70 mW max.
- Output Voltage: 21.0 V nom.
- Trans. Ratio: 1.75 ± 5%
  - $Z_{ro} (\Omega)$: $2130 + j3840$
  - $Z_{rs} (\Omega)$: $2666 + j1900$
  - $Z_{so} (\Omega)$: $460 + j770$
  - $Z_{ss} (\Omega)$: $555 + j370$
- DC Rotor Res.: 820 Ω
- DC Stator Res.: 200 Ω
- Phase Shift: 12° leading max.
- Null Voltage: 20 mV total max.
- Accuracy: ±7 min. max.

**Mechanical:**
- Shaft Load: 2 lbs. radial
  - 1 lbs. axial
- Starting Torque: 0.08 oz-in @ 25°C
- Rotor Moment: $0.51 \times 10^4$ oz-in-sec
- Weight: 115g (4.04 oz)
- Enviro. Rating: IP40 / NEMA 1
- **†** At the recommended maximum loads, average bearing life is $2 \times 10^7$ 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

**SAMPLE INSTALLATION**

The picture below shows how to connect a R11W-B10/7-1 to AMCI's standard cable.

Shields of the cable must not be connected to chassis ground except at the resolver decoder. Strip the shields back to inside the cable.

BELDEN 9873 or 9730 Cable To Resolver Decoder

Red / White Wire from R11W-B10/7-1 Resolver