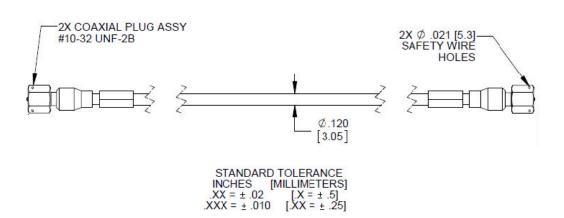


Ultra rugged low noise coaxial cable assembly

Model 3090CM67





Key features

- For use with high impedance, charge mode accelerometers
- Metallic overbraid for abrasion protection
- Aramid fiber reinforced jacket for high tensile strength
- Critical parameters 100% tested

Description

The model 3090CM67 cable assembly is a low noise coaxial cable designed for use with charge mode accelerometers in the most severe environments. The cable assembly derives its strength from the metallic braided jacket and an aramid fiber reinforcement braid. The hermetic connectors are made of stainless steel and a glass dielectric providing maximum reliability and moisture protection.

The raw cable and connectors are made in-house to ensure the highest quality product available, making this cable assembly unique to the industry. Critical parameters are 100% tested including triboelectric noise.



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The following specifications are typical and taken at approximately 75°F (24°C) unless otherwise noted.

| Dynamic characteristics | Units | 3090CM67 |
|-------------------------------|---------------|------------------------------------------|
| Connector | | |
| Connector 1 and 2 | | 10-32 UNF |
| Dielectric material | | Glass |
| Pin material | | 304 stainless steel |
| Connector material | | 304 stainless steel |
| Strain relief material | | Fluorosilicone rubber |
| Torque | in-lbs (Nm) | 10 (1.13) |
| Weight | lbs (gms) | 0.01 (4.5) |
| Lock wire holes | - | Yes |
| Cable | | |
| Color (3) | Red | |
| Outer jacket | | Metallic braid, nickel plated copper |
| Under jacket | | PTFE |
| Reinforcement | | Aramid fiber |
| Conductors | | 1 |
| Conductor material | | Silver plated annealed copper-clad steel |
| Conductor size | AWG | 30 |
| Primary insulation | | PTFE |
| Cable type | | Coaxial |
| Diameter | in (mm) | 0.120 (3.05) |
| Shield material | | Silver plated copper |
| Cable weight | lbs, gms/foot | 0.01 (4.5), minimum |
| Bend radius | in (mm) | 0.850 (21.6) |
| Raw cable part number | | EDV42549A (79441-01) |
| Environmental characteristics | | |
| Minimum temperature | °F (°C) | -67 (-55) |
| Maximum temperature | °F (°C) | 500 (260) |
| Pin pullout | lbs (kg) | 33 (15) |
| Cable pull strength | lbs (kg) | >100 (45) |
| Shock | g peak | 1000 |
| Random vibration (1) | g rms | 20.7 |
| Sinusoidal vibration (1) | g peak | 100 |
| Electrical characteristics | | |
| Noise (2) | pC pk - pk | 1.5 |
| Cable capacitance (2) | pF/ft | 35 max |
| Insulation resistance (2) | GΩ | 50, up to 500 ft |

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| Length tolerance tabulation | | |
|-----------------------------------|--------------------------------|--|
| Length inches (millimeters) | Tolerance inches (millimeters) | |
| Up to 12 (304.8) | + 1.0 (25.4) | |
| 13 to 60 (330.2 to 1524) | + 2.0 (50.8) | |
| 61 to 1200 (1524 to 30.48 meters) | + 6.0 (152.4) | |
| Over 1200 (30.48 meters) | + 1.0ft (304.8) | |

Notes

- 1. For high g level vibration, the hex nut should be well tightened beyond finger tight to a maximum of 10 in-lb. The cable should be secured down as close as possible to the connector to prevent whipping and resonance. This will significantly improve vibration life.
- 2. These parameters are 100% tested.
- 3. Small color variations may occur during normal batch processing but will have no impact on product performance.

Ordering information

- 1. Specify 3090CM67/XXX where XXX = cable length, in inches
- 2. Maintain high levels of precision and accuracy using Endevco's factory calibration services. Call Endevco's inside sales force at 866-ENDEVCO for recommended intervals, pricing and turn-around time for these services as well as for quotations on our standard products.



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