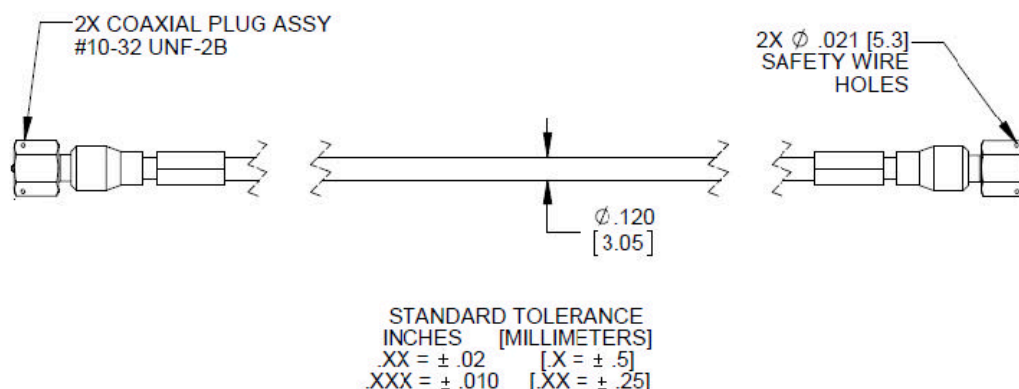


Ultra rugged low noise coaxial cable assembly

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.

Specifications		
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)	G Ω	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

- 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.
- These parameters are 100% tested.
- Small color variations may occur during normal batch processing but will have no impact on product performance.

Ordering information

- Specify 3090CM67/XXX where XXX = cable length, in inches
- 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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