

# **Reinforced low noise coaxial cable assembly** Model 3096



### **Key features**

- For use with high impedance, charge mode accelerometers
- Fused glass, stainless steel housing to center pin
- Aramid fiber reinforced jacket for high tensile strength
- Critical parameters 100% tested
- Welded center conductor to pin construction

### Description

The Endevco model 3096 cable assembly is a low noise, PTFE jacketed, coaxial cable with an aramid fiber reinforcement braid and stainless steel, hermetic connectors. It features a new improved backshell, strain relief design, silver plated stranded center conductor, and shield. This cable is specifically designed for piezoelectric accelerometers with high impedance outputs for use in severe environments.

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	3096
•		
Connector Connector 1 and 2		10-32 UNF
Dielectric material Pin material		Glass 304 stainless steel
Connector material Strain relief material		304 stainless steel Fluorosilicone rubber
Torque	in-lbs (Nm)	10 (1.13)
Weight	lbs (gms)	0.01 (4.5)
Lock wire holes		Yes
Cable		
Color (3)		Red
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)	0.105 (2.67) max
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		EDV30285A (79387-01)
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	<b>U</b> T	
	a Calvali	1 5
Noise (2)	pC pk - pk	1.5 35 max
Cable capacitance (2)	pF/ft G Ω	35 max 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 1. 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.
- Small color variations may occur during normal batch processing but will have no impact on product performance. 3.

### **Ordering information**

- Specify 3096/XXX where XXX = cable length, in inches 1.
- Maintain high levels of precision and accuracy using Endevco's factory calibration services. Call Endevco's inside sales force at 2. 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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