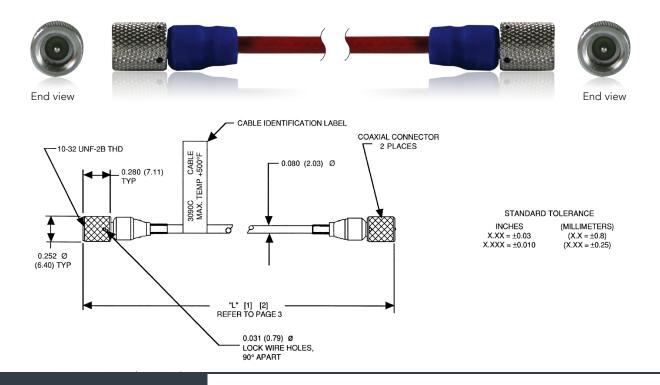


Low noise coaxial cable assembly Model 3090C



Key features

- Critical parameters 100% tested
- Welded center conductor to pin construction
- Highest reliability
- Wide temperature range
- Designed for the shock and vibration environment

Description

3090C coaxial cable assembly is a high reliability cable designed for use with charge-mode piezoelectric accelerometers. The cable enjoys a long history of reliable use in a wide variety of applications, spanning from laboratory use to low outgassing, long-term space applications.

The raw cable, connector and pin assemblies are made in-house to ensure the highest quality product available, making this cable assembly unique to the industry. All cables are 100% tested for noise thus making them "true low-noise" cables. The actual cable capacitance is measured and recorded on the package; an important parameter for long cable runs. The connector employs a fused glass dielectric for maximum reliability, moisture protection and low outgassing. The stainless steel connector pin is welded to the cable's center conductor strands for maximum pull-strength and minimum noise.



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All specifications are typical and taken at approximately $75^{\circ}F(24^{\circ}C)$ unless otherwise noted.

Specifications		
Connector	Units	3090C
Connector 1		10-32 UNF
Connector 2		10-32 UNF
Dielectric material		Glass
Pin material		304L stainless steel
Connector material		304 stainless steel
Strain relief material		Fluorosilicone rubber
Torque	in-lb (Nm)	Finger tight to 1.5 (0.17)
Weight	gms	1.65
Lock wire holes		Yes
Cable		
Color (5)		Red
Jacket		PTFE, wrapped and fused
Center conductor		Stranded
Conductor material		Silver plated copper-clad steel
Conductor size	AWG	30
Primary Insulation		PTFE
Cable type		Coaxial
Diameter	inches	0.105 max.
Shield material		Silver plated copper
Cable weight	gms/ft	3.3
Bend radius	inches (mm)	0.85 (21.6)
Raw cable		EDV26108A (79246-01)
Environmental characteristics		
Minimum temperature (3)	°F (°C)	-452(-269)
Maximum temperature (3)	°F (°C)	+500(+260)
Pin pullout (10-32)	lbs (kg)	33 (15)
Cable pull strength (1)	lbs (kg)	20 (9) typical
Shock	g peak	10,000
Random vibration	g rms	20.7
Sinusoidal vibration (2)	g peak	1,000
Electrical		
Noise (1)	pC pk-pk	1.5
Cable Capacitance (1)	pF/ft.	36
Insulation resistance (at 100 Vdc) (1)	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. These parameters are 100% tested.
- 2. For high g shock and vibration the knurled nut should be tightened beyond finger tight and the cable secured down as close to the connector as possible.
- 3. For operation below -300°F (-185°C), remove Fluorosilicone boots. Slide-on I.D. sleeves are rated from -58°F (-50°C) to 212°F (100°C).
- 4. For low outgassing applications, remove Fluorosilicone boots and bake per NASA specifications.
- 5. Small color variations may occur during normal batch processing, but have no impact on product performance.
- 6. Model 3090CM6 is available as an alternative that only incudes one 10-32 plug. The other end is terminated in pigtails.

Ordering information

- 1. Specify as 3090C/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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