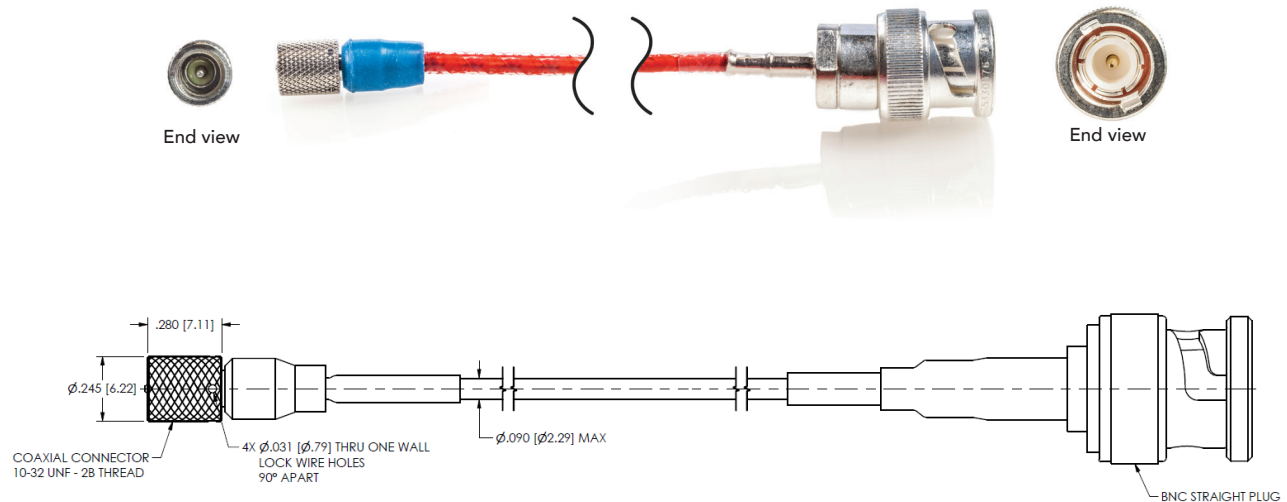


# Low noise coaxial cable assembly

## Model 3090CM12



### Key features

- Critical parameters 100% tested
- 10-32 plug to BNC plug cable assembly
- Designed for the shock and vibration environment
- Fused glass, stainless steel housing to center pin

### Description

The 3090CM12 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 spanning from laboratory use to flight-testing.

The raw cable, 10-32 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 10-32 connector employs a fused glass dielectric for maximum reliability and moisture protection and its stainless steel connector pin is welded to the cable's center conductor strands for maximum pull-strength and minimum noise. The BNC termination is compatible with most DAQs, and signal conditioners.

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

Specifications		
Dynamic characteristics	Units	3090CM12
<b>Connectors</b>		
Connector 1	in (mm)	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
Connector 2		BNC, bayonet, straight plug, male
Dielectric		PTFE
Pin material		Brass, gold plated
Connector material		Brass, nickel plated
<b>Cable</b>		
Color (3)		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	in (mm)	0.08 (2.032)
Shield material		Silver plated copper
Cable weight	gms/ft	3.3
Bend radius	in (mm)	0.850 (21.59)
Raw cable part number		EDV26108A (79246-01)
<b>Environmental characteristics</b>		
Minimum temperature, cable and 10-32 connector	°F (°C)	-452 (-269)
Maximum temperature, cable and 10-32 connector	°F (°C)	500 (260)
Minimum temperature, BNC plug	°F (°C)	-85 (-65)
Maximum temperature, BNC plug	°F (°C)	329 (165)
Pin pullout (10-32)	lbs (kg)	33 (15 )
Cable pull strength	lbs (kg)	20 (9) typical
Shock	g peak	10,000
Random vibration	g rms	20.7
Sinusoidal vibration (2)	g peak	1,000
<b>Electrical characteristics</b>		
Noise (1)	pC pk-pk	1.5
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. These parameters applicable to connector 1 only.
3. Small color variations may occur during normal batch processing, but have no impact on product performance.

### Ordering information

1. Specify as 3090CM12/XXX where XXX = cable length in inches.
2. Maintain high levels of precision and accuracy using Endeveco's factory calibration services. Call Endeveco'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.



10869 NC Highway 903, Halifax, NC 27839 USA

endeveco.com | sales@endeveco.com | 866 363 3826