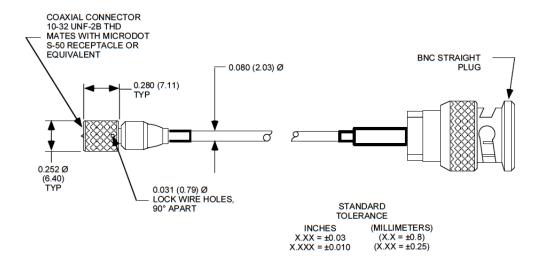


# Low noise coaxial cable assembly

## Model 3090CM12





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.

## **Key features**

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



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## **Specifications**

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

Characteristics	Units	3090CM12
Connectors	Offics	3070GW12
Connector 1	in (mm)	10-32 NF 0.250 dia. (6.35)
Dielectric material	111 (111111)	Glass
Pin material		304L stainless steel
Connector material		304 stainless steet
Strain relief material		Fluorosilicone rubber
	in-lb (Nm)	
Torque (10-32 connector)		Finger tight to 1.5 (0.17)
Weight Connector 2	gms	1.65
Dielectric		BNC, bayonet, straight plug, male
		PTFE Teflon
Pin material		Brass, gold plated
Connector material		Brass, silver finish
Cable		
Color (3)		Red
Outer Jacket		PTFE Teflon®, wrapped and fused
Center conductor		Stranded
Conductor material		Silver plated copper
Conductor size	AWG	30
Primary Insulation		Teflon®
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		26108
Environmental		
Minimum temperature, cable and 10-32 connector	°F (°C)	-432 (-254)
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)	320 (165)
Pin pullout (10-32)	lbs (kg)	33 (15)
Cable pull strength	lbs (kg)	>20 (9)
Shock	g peak	10,000
Random vibration	g rms	20.7
Sinusoidal vibration (2)	g peak	1,000
	g peak	
Electrical		
Noise (1)	pC pk-pk	1.5
Capacitance (1)	Pf/ft.	36
Insulation resistance (at 100 Vdc) (1)	GΩ	>50
Bend radius	in (mm)	0.85 (21.6)
Raw cable PN		26108



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#### Length tolerance tabulation

Length inches (millimeters)	Tolerance inches (millimeters)
Up to 12 (304.8)	+ 1.0 (25.4)
13 to 36 (330.2 to 914)	+ 2.0 (50.8)
37 to 120 (939.8 to 3.05 meters)	+ 4.0 (101.6)
Over 120 (3.05 meters)	+4 (101.6) per 120 (3.05) or part thereof (+12 (3.05) = maximum tolerance)

### Contact

#### **ENDEVCO**

www.endevco.com Tel: +1 (866) ENDEVCO [+1 (866) 363-3826]

- 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 = in inches
- 2. Standard lengths, in inches, are: 12, 60, 120, 240, 360 and 600
- 3. 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.



