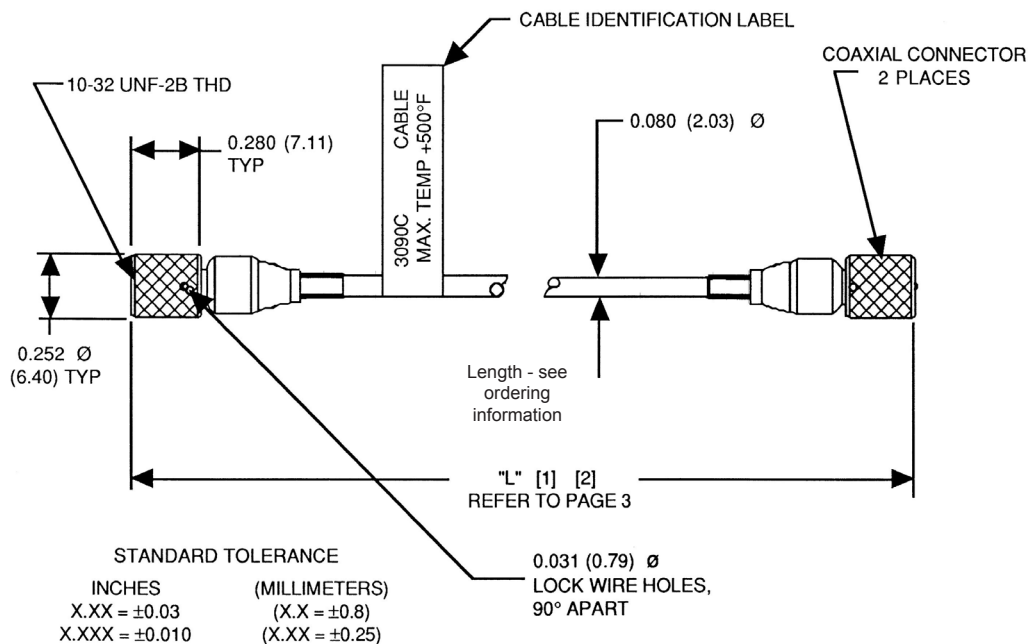
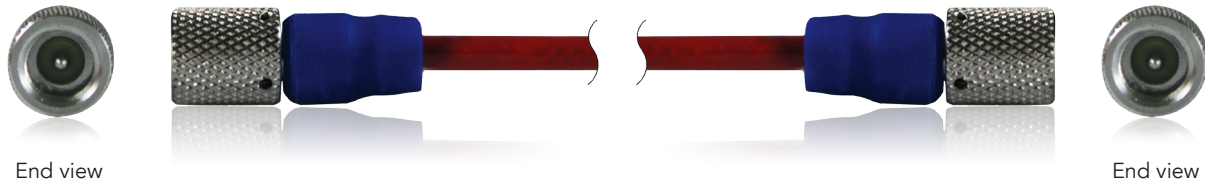


# Low noise coaxial cable assembly

## 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
- Fused glass stainless steel housing to center pin

### 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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### Specifications

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

Characteristics	Units	3090C
<b>Connector</b>		
Connector 1		10-32 NF, 0.252 in dia. (6.4 mm)
Connector 2		10-32 NF, 0.252 in dia. (6.4 mm)
Dielectric material		Glass
Pin material		304L stainless steel
Connector material		304 stainless steel
Strain relief material		Silicone rubber
Torque	in-lb (Nm)	Finger tight to 1.5 (0.17)
Weight	gms	1.65
Lock wire holes		Yes
<b>Cable</b>		
Color		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	inches	0.08
Shield material		Silver plated copper
Cable weight	gms/ft	3.3
Bend radius	inches (mm)	0.85 (21.6)
Raw cable		PN 26108
<b>Environmental Characteristics</b>		
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)
Shock	g peak	10,000
Random vibration	g rms	20.7
Sinusoidal vibration (2)	g peak	1,000
<b>Electrical</b>		
Noise (1)	pC pk-pk	1.5
Cable Capacitance (1)	pF/ft.	36
Insulation resistance (at 100 Vdc) (1)	GΩ	>50

# Low noise coaxial cable assembly

## Model 3090C

### 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)	+4.0 (101.6) per 120 (3.05 or part thereof) +12 (3.05) maximum tolerance)

### 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. STEP file available upon request.
6. Model 3090CM6 is available as an alternative that only includes one 10-32 connector. The other end is terminated in pigtails.

### Ordering information

1. Specify as 3090C-XXX where XXX = in inches  
Standard lengths, in inches, are: 12, 60, 120, 240, 360 and 600
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.