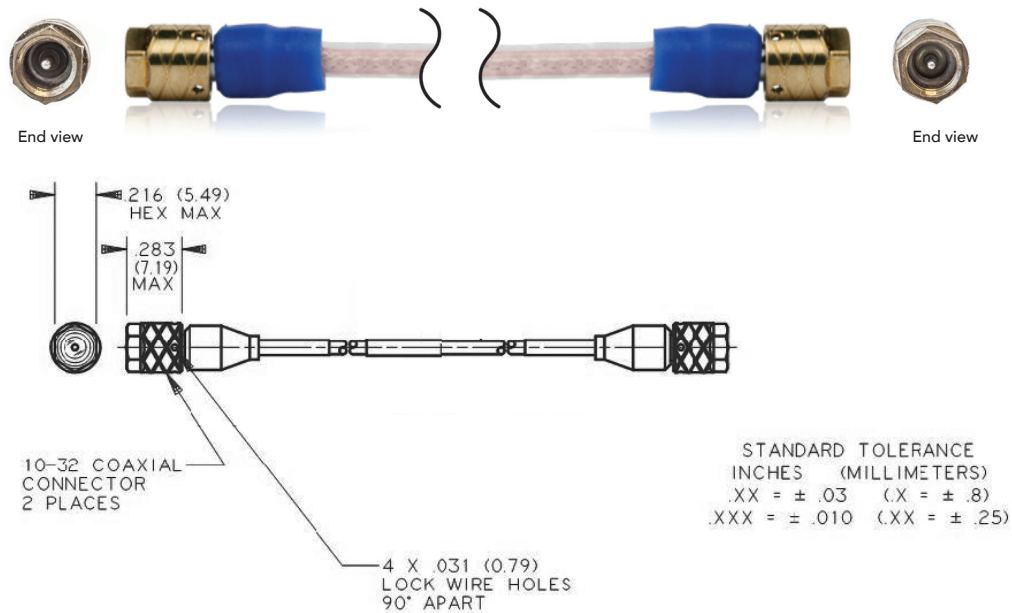


Premium low noise coaxial cable assembly

Model 3090DV



OUTLINE DRAWING

Key features

- Extruded outer jacket
- Critical parameters 100% tested
- Anti-galling coupling nut
- Lightweight
- Highest reliability for mission critical applications

Description

The 3090DV is a uniquely designed premium low-noise cable for use with charge mode piezoelectric accelerometers. The extruded cable jacket and hermetic connectors make this cable ideal for use in high humidity environments. Because of the rugged construction, this cable can be used in a wide range of applications including laboratory, space, launch vehicles and other severe environments.

The cable connectors are manufactured in-house using a glass-fused dielectric providing a hermetic seal and superior mechanical strength. The hermetic connector, along with the extruded cable, provides an outstanding device for use in humid environments. The center conductor pin is welded (not crimped) to the cable's center conductor providing maximum strength and low noise. All critical parameters are 100% tested and the cable capacitance is measured and recorded; an important parameter for long cable lengths.

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

Specifications		
Connector	Units	3090DV
Connector 1		10-32 UNF
Connector 2		10-32 UNF
Dielectric material		Glass
Pin material		304L stainless steel
Connector housing material		304 stainless steel
Coupling nut material		High strength bronze alloy (non-galling)
Strain relief material		Fluorosilicone rubber
Torque	In-lbs(Nm)	Finger tight to 1.5 (0.169)
Weight	gms	1.70
Lock wire holes		Yes
Cable		
Color (4)		Translucent red
Jacket		Extruded PFA
Center conductor		Stranded
Conductor material		Silver plated copper-clad steel
Conductor size	AWG	30
Primary insulation		PTFE
Cable type		Coaxial
Diameter	in(mm)	0.081 (2.06)
Shield material		Silver plated copper
Cable weight	gms/ft	2.67
Minimum bend radius	in (mm)	0.750 (19)
Raw cable part number		EDV40204A (79440-01)
Environmental		
Minimum temperature, cable and plug (2)	°F (°C)	-432 (-254)
Maximum temperature, cable and plug (2)	°F (°C)	500 (260)
Pin pullout	lbs (kg)	33 (15)
Cable pull strength (1)	lbs(kg)	20 (9) typical
Shock	g peak	10,000
Sinusoidal vibration (3)	g peak	1 000
Random vibration	g rms	20.7
Electrical		
Cable noise (1)	pC pk-pk	1.5
Cable capacitance (1)	pF/ft	32
Insulation resistance (at 100 VDC) (1)	GΩ	>50 up to 500 ft.
Accessories supplied		
End wrench		EDV34702

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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 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).
3. For high g level vibration, the hex should be well tightened (beyond finger tight) and the cable should be secured down close as possible to the connector to prevent whipping and resonance. This will significantly improve cable life.
4. Small color variations may occur during normal batch processing but will have no impact on product performance.

Ordering Information:

1. Specify as 3090DV/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.



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