

# **Two conductor, shielded low noise cable assembly** Model 6917B



# Key features

- For use with differential high impedance output piezoelectric accelerometers
- Critical parameters 100% tested
- High temperature to 500°F (260°C)
- Ideal for use in engine test cells
- Rugged 7/16-27 UNS-2B Plug

## Description

The 6917B is a low noise cable assembly consisting of a twisted pair of low noise treated PTFE jacketed wires with a nickel-plated copper outer shield. The rugged field replaceable plug features a specially designed assembly with high force contacts and alumina inserts for high temperature operation. The removable backshell provides for ease of field replacement.

The opposite end of the cable is terminated in pigtails. The stranded wire is tinned and the low noise treatment is removed at the cable's end for user convenience.

This cable is typically used in turbofan environments at temperatures up to 500°F (260°C).



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The following performance specifications conform to ISA-RP-37.2 (1964) and are typical values, referenced at +75°F (+24°C) and 100 Hz, unless otherwise noted. Calibration data, traceable to National Institute of Standards and Technology (NIST), is supplied.

Specifications		
Connector	Units	6917B
Connector 1 (2)		7/16-27 UNS-2B, plug, female
Dielectric material		Alumina ceramic
Socket material		Gold plated nickel alloy
Coupling nut, shell and clamp		Nickel plated aluminum alloy
Retaining ring and clamp hardware		Stainless steel
O ring and grommet		High temperature silicone elastomer
Weight	gms	22
Torque	lb-in (Nm)	60 (9.04)
Safety wire holes		Yes
Connector 2		Pigtails
Cable		
Color (3)		Red
Jacket		PTFE
Cable diameter	in (mm)	0.210 (5.105)
Гуре		Twisted pair, shielded
Signal lead insulation material		Red and White low noise treated PTFE
Signal lead construction		Stranded
Signal lead material		Nickel plated annealed copper
Signal lead size	AWG	20
Shield material		Braided nickel plated annealed copper
Weight	lbs (gms)/ft	.03 (13.6 )
Bend Radius	in (mm)	0.60 (12.7)
Raw cable		EDV16833A (79239-01)
Environmental		
Vinimum temperature	°F (°C)	-65 (-54)
Maximum temperature	°F (°C)	500 (260)
Electrical		
Noise (1)	pC pk-pk	1.5
Capacitance, between signal leads (1)	pF/ft	80 max
Capacitance between either signal lead to shield (1)	pF/ft	150 max
Resistance between signal leads (1)	GΩ	1 min
Resistance between either signal lead shield (1)	GΩ	1 min
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. Replacement connector, part number 26574
- 3. Small color variations may occur during normal batch processing, but have no impact on product performance.

## Ordering Information

- 1. Specify as 6917B/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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