DATA SHEET

High Temperature Two Conductor Hardline Cable Assembly

Model 6918M30

01 Description

The model 6918M30 is designed for use with high impedance differential piezoelectric accelerometers that utilize a 7/16-27 two-pin receptacle. The cable assembly is typically used in the turbo fan environment. The plug is hermetically sealed and features high force contact socketsthat are rhodium plated. The twisted pair, hardline cable is insulated with compacted MgO, sheathed with stainless steel and covered with a corrosion resistant steel over braid.

A hermetically sealed plug (connector 2) is designed to mate with the differential piezoelectric accelerometer such as the Meggitt 6233C and 6243M3/M4 while the threaded receptacle (connector 1) mates with a 2001 type cable assembly or equivalent.

Model number definition:
6918M30-XXX
XXX = cable length in inches
Standard lengths in inches: 24,60,120, 240

02 Key features and benefits

- For use with differential piezoelectric accelerometers
- Hardline cable operating temperature rated to 1200°F(649°C)
- Connector operating temperature rated to 900°F (482°C)
- Environmentally sealed
- Rugged and bendable
- Low noise
- RoHS compliant

03 Applications

- Test Cells/engine interface cable for differential accels
- General purpose Interface cable for differential accels

04 Contact

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HIGH TEMP 2 CONDUCTOR HARDLINE CABLE ASSEMBLY, Model 6918M30

05 Specifications

The following performance specifications are typical values, referenced at +75°F (+24°C) unless otherwise noted.

Characteristics	Units	6918M30
Connector		
Connector 1 (disconnect end) (3)		7/16-27UNS-2A, receptacle
Dielectric material		Glass
Shell and pin material		Inconel
Lock wire holes		Optional
Connector 2 (accelerometer end)		7/16-27UNS-2B, plug
Dielectric material		Glass
Pin material		Inconel, Rhodium plated
Housing and coupling nut material		Inconel
Torque	lb-in (Nm)	60 (6.8)
Weight	gms	22
Lock wire holes		No
Cable		
Outer jacket		304L stainless steel
Signal leads		Inconel 600 solid wire
Dielectric		Compacted MgO
Sheath		Stainless steel
Overbraid		Stainless steel
Diameter	In (mm)	0.25 (6.35)
Weight	lbs (gms)/ft	0.04 (18.1)
Bend radius (2)	In(mm)	0.8 (20.3) min
Environmental		
Temperature range		
Hardline section	°F (°C)	-65 (-54) to 1200 (649)
Connector 1 (cable end)	°F (°C)	-65 (-54) to 900 (482)
Connector 2 (accelerometer end)	°F (°C)	-65 (-54) to 900 (482)
Humidity		Sealed by metal to glass interface and threaded parts
Electrical		
Insulation resistance at room temperature, between leads (1)	MΩ	>50
Insulation resistance at 900°F (482°C), between leads	MΩ	>1
Insulation resistance at room temperature, either lead to shield (1)	MΩ	>50
Insulation resistance at 900°F (482°C) between either lead to shield	MΩ	>1
Cable capacitance, between signal leads (1)	pF/ft. (mtr)	80 (244)
Cable capacitance, either lead to shield (1)	pF/ft. (mtr)	110 (335)

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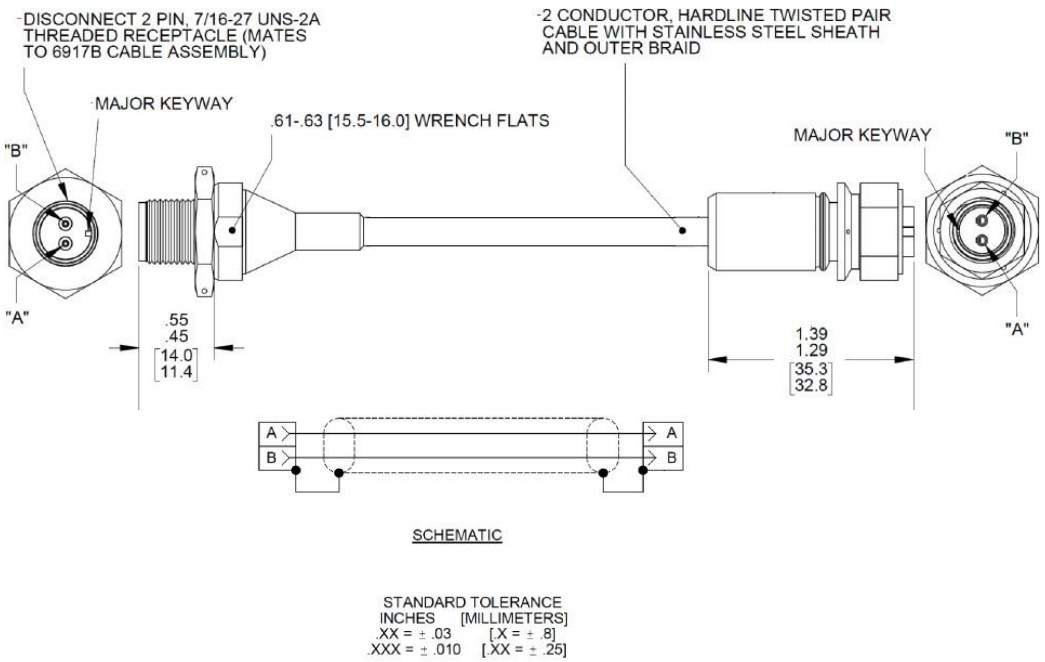
06 Outline details



Notes:

1. These parameters are 100% tested
2. One-time bend only
3. Mates with 2001 soft line cable assembly or equivalent
4. STEP file available on request
5. Specify as 6918M30-XXX where XXX = cable length in inches
6. The cable is inherently low noise by design. The signal leads are surrounded by tightly compacted MgO and the sheath is a stiff metal.

APPLIES TO CALIFORNIA FACILITY

Continued product improvement necessitates that MEGGITT reserve the right to modify these specifications without notice. MEGGITT maintains a program of constant surveillance over all products to ensure a high level of reliability. This program includes attention to reliability factors during product design, support of stringent Quality Control requirements, and compulsory corrective action procedures. 032624

Note: Due to continous process improvement, specifications are subject to change without notice. TCO Review #323