

DATA SHEET

Radiation Resistant Two Conductor Cable Assembly

Model 2001M1



01 Description

The MEGGITT Model 2001M1 is a Tefzel based jacketed, 2 conductor cable terminated with a two pin receptacle with 7/16-27 UNS-2A threads on both ends. It features rugged back shells and strain relief design for increased ruggedness and long term life.

The MEGGITT Model 2001M1 is an instrumentation cable assembly designed to carry sensitive signals in a vibration environment. The cable is designed to interface to differential accelerometers in environments with radiation- reactors with the 1772M2 remote charge converter on one end and the piezoelectric accelerometer on the other end.

Model number definition:
2001M1-XXX
XXX = cable length in inches

02 Key features and benefits

- Operation to +392°F (+200°C)
- Torqueable coupling nut
- For use with differential accelerometers
- RoHS compliant
- Mates to the 1772M2 remote charge converter

03 Applications

- Test Cells/engine interface cable
- Nuclear reactors

04 Contact

1-833-HITEMP1
TMCSR.MSSOC@meggitt.com

DATA SHEET

RADIATION RESISTANT 2 CONDUCTOR CABLE ASSEMBLY, Model 2001M1

05 Specifications

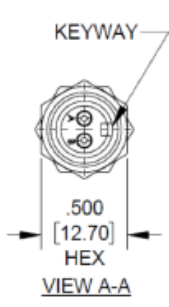
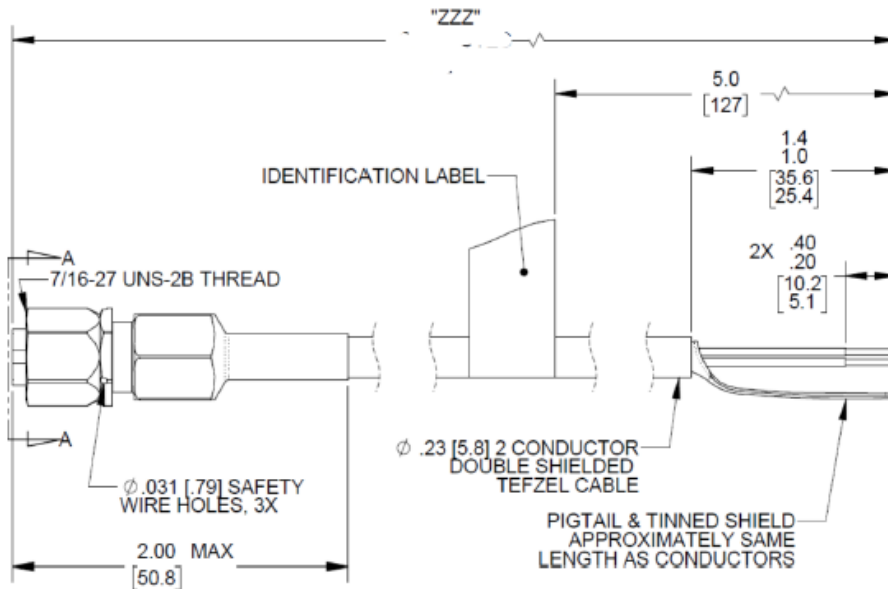
The following performance specifications are typical values, referenced at +75°F (+24°C) unless otherwise noted.

Characteristics	Units	2001M1
Capacitance, nominal Cable	pF/ft.	80
Resistance, minimum Signal leads	GΩ	1
Signal lead to shield	GΩ	1
Physical		
Conductor Size	AWG	20
Material		Nickel-plated annealed copper weld
Primary Insulation		Tefzel- black and white
Shield		38 AWG nickel-plated copper
Jacket	Material/Color	Tefzel/Grey
Overall diameter	inch (mm)	.23 (5.8)
Weight, nominal	pounds / ft.	.04
Bend radius, min.	inch (mm)	.60 (15.2)
Connector Coupling Nut	Nickel plated aluminum	
Insulators	Alumina Ceramic	
Sockets (#20)	Gold plated nickel alloy	
Clamp Hardware	Stainless Steel	
O-Ring & Grommet	High Temp Silicone Rubber	
Environmental		
Temperature	°F (°C)	-65 (-54) to +392 (+200)
Radiation Integrated Gamma Flux	Up to 6.2 x 10 ¹⁰ rad	
Integrated Neutron Flux	Up to 3.7 x 10 ¹⁸ neutrons/cm ²	
Contamination	O-ring sealed to exclude fuel, oil, humidity, sand or dust	

DATA SHEET

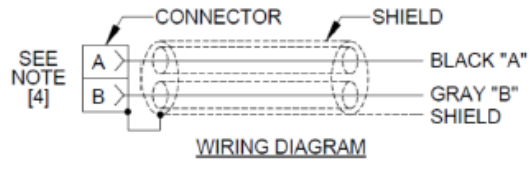
RADIATION RESISTANT 2 CONDUCTOR CABLE ASSEMBLY, Model 2001M1

06 Outline details



SEE NOTES [1] [2]

CABLE LENGTH TOLERANCE	
LENGTH	TOLERANCE
UP TO 24.00 [609.6]	+ 1.00 [25.4]
OVER 24.00 TO 72.00 [609.6 TO 1.83M]	+ 2.00 [50.8]
OVER 72.00 TO 144.00 [1.83M TO 3.66M]	+4.00 [101.6]
OVER 144.00 [3.66M]	+4.00 [101.6 PER EACH 144.00 [3.66M] OR PART THEREOF.



NOTE:



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 continuous process improvement, specifications are subject to change without notice. TCO Review #321