

RADIATION RESISTANT TWO CONDUCTOR CABLE ASSEMBLY

Model 2001M1



Product description

The Parker 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 Parker 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

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

Applications

- Test Cells/engine interface cable
- Nuclear reactors



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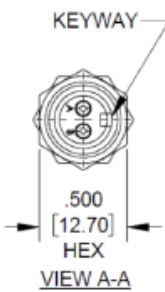
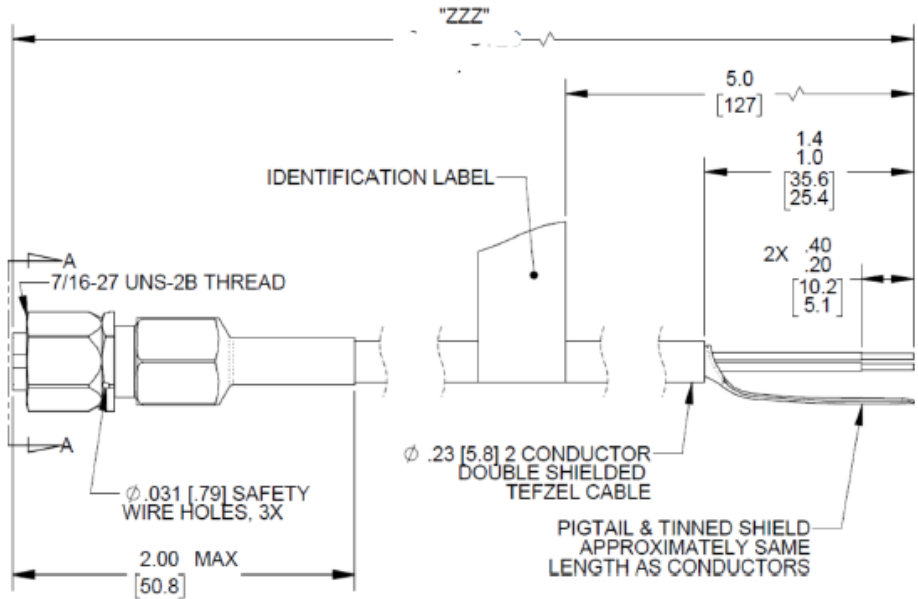
Specifications

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 | |

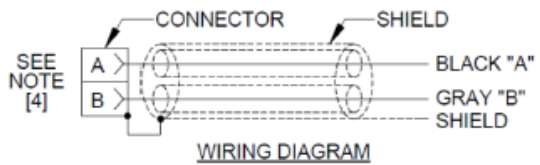
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SEE NOTES [1] [2]

| 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. |



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, the support of stringent Quality Control requirements, and compulsory corrective action procedures. 010121



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