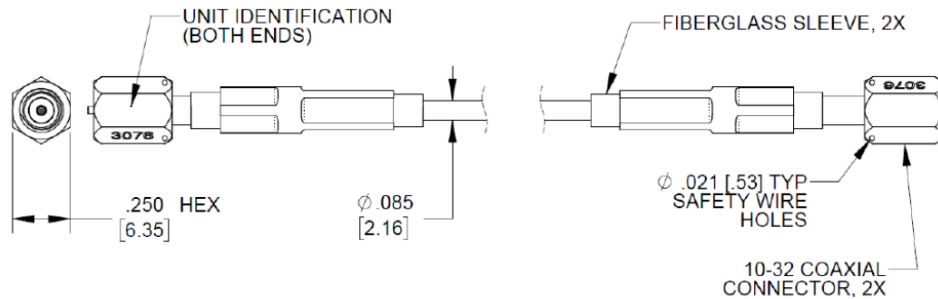


Extreme temperature, flexible cable assembly

Model 3076



Key features

- Operating temperature to +1000°F (+538°C)
- Ideal for installations that require flexibility for cable routing
- For use with high temperature piezoelectric accelerometers
- Welded center conductor to pin construction
- Fused glass stainless steel housing to center pin

Description

The Meggitt model 3076 is a low noise, flexible cable assembly designed for use in high temperature environments. It is unique in that it has the temperature capacity of a high temperature mineral insulated hardline cable yet is extremely flexible like a softline cable. It is ideal for installations that require flexibility for cable routing, low noise and temperatures up to 1000°F (538°C).

The 3076 cable assembly provides a number of advantages over the traditionally used mineral insulated hardline cable. It is highly flexible, with a 3x improvement in bend radius. Additionally, mineral insulated hardline cables are limited in the number of bends that can be made in one location before damage can start to occur. Because of its construction, this 3076 has no such limitation. Furthermore, because of its flexibility, the 3076 can potentially improve the dynamic response of the cable + sensor system when compared to a hardline cable. Depending on installation factors, a rigid hardline cable connected to a sensor can often induce strain onto the body of the sensor and affect its dynamic response. The 3076's flexibility minimizes this impact while still being able to withstand extreme temperatures.

The 3076 has rugged 10-32 hex connectors on both ends. The cable is removable and has lock wire holes for secondary retention when mated to the accelerometer. Additionally, it is insulated between the connector backshell and the stainless outer sheath. The connector and pin assemblies are made in-house to ensure the highest quality product available. The connector employs a fused glass dielectric for maximum reliability and moisture protection. The stainless steel connector pin is welded to the cable's center conductor for maximum pull-strength and minimum noise.

Extreme temperature, flexible cable assembly

Model 3076

Specifications

| Characteristics | Units | 3076 |
|--|--------------|------------------------------------|
| Connectors | | |
| Connector 1 | | 10-32 UNF 2B with hex coupling nut |
| Connector 2 | | 10-32 UNF 2B with hex coupling nut |
| Lock wire holes | | Yes |
| Cable | | |
| Outer jacket | | 304L stainless steel |
| Outer diameter | in (mm) | 0.085 (2.16) |
| Weight | grams/in | 0.4 |
| Bend radius, min | in (mm) | 0.25 (6.35) |
| Tensile strength | lbs | >10 |
| Environmental | | |
| Minimum temperature, cable and plugs | °F (°C) | -65 (-54) |
| Maximum temperature cable and plugs | °F (°C) | +1000 (+538) |
| Sinusoidal vibration | g | 100 |
| Shock, max | g | 1,000 |
| Gamma Radiation, per IEEE Std 383-1974 | RAD | 5 X 10 ⁷ |
| Flame propagation | | Will not propagate fire |
| Electrical | | |
| Insulation resistance, over temp range | MΩ , min | >1 |
| Cable capacitance, typical | pF/ft | 60 |
| Noise | pC pk-pk max | 1.5 |
| Center conductor resistance | Ω/ft (Ω/m) | 0.002 (0.007) |

Extreme temperature, flexible cable assembly

Model 3076

Length tolerance tabulation

| Length inches (millimeters) | Tolerance inches (millimeters) |
|----------------------------------|--|
| Up to 12 (304.8) | +1.00 (25.4) |
| 12 to 36 (304.8 to 914.4) | +2.00 (50.8) |
| 36 to 120 (914.4 to 3.05 meters) | +4.00 (101.6) |
| over 120 (3.05 meters) | +4.00 (101.6) per 120 (3.05 meters) or part thereafter |

Accessories

| Product | Description | 3076 |
|----------------|---|----------|
| Meggitt 32268 | High temperature 10-32 UNF-2A to 10-32 UNF-2A in-line adaptor, +900°F (+482°C) | Optional |
| Meggitt 2917M5 | High temperature 2 Pin 7/16-27 UNS-2A to 10-32 UNF-2A in-line adaptor, +900°F (+482°C) | Optional |
| Meggitt 2917M6 | High temperature 2 socket 7/16-27 UNS-2B to 10-32 UNF-2A in line adaptor, +900°F (+482°C) | Optional |
| Meggitt 2917M7 | 10-32 UNF-2A to Pigtail adaptor, +500°F (260°C) | Optional |

Ordering information

- Specify as 3076-XXX where XXX = cable length in inches. Standard length is 120 inches (10 feet)