DATA SHEET

Extreme Temperature, Flexible Cable Assembly

Model 3076A

01 Description

The Meggitt model 3076A 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 1200°F (650°C).

The 3076A 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 and ability to withstand a significant number of bends without damage.

The 3076A has a fiberglass sleeve and grounding at the end that would connect to the electronics. This will prevent inadvertent grounding.

Model number definition:
3076A-ZZZ
3076A= basic model number
ZZZ = cable length in inches

02 Key features and benefits

- Operating temperature to+1200°F (+650°C)
- 3X improvement in bend radius over rigid cables
- Full fiberglass sleeve to prevent inadvertent grounding
- RoHS compliant

03 Applications

- For use with high temperature piezoelectric accelerometers
- Ideal for installations that require flexibility for cable routing

04 Contact

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EXTREME TEMPERATURE, FLEXIBLE CABLE ASSEMBLY, Model 3076A

05 Specifications

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

Characteristics	Units	3076A
Connector 1		10-32 UNF 2B with hex coupling nut
Connector 2		10-32 UNF 2B with hex coupling nut
Lock wire holes		Yes
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
Minimum temperature, cable and plugs	°F (°C)	-65 (-54)
Maximum temperature cable and plugs	°F (°C)	+1200 (+650)
Sinusoidal vibration	g	100
Shock, max	g	1,000
Gamma Radiation, per IEEE STD 383-1974	RAD	$5X10^7$
Flame propagation		Will not propagate fire
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)

Design Features

The 3076A 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. 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. The temperature rating is marked on each end. The accelerometer should be mated at the end marked with 1200°F and the 1000°F end would mate to an extension cable or the electronics

Optional Accessory: Model 33268 In-line cable adaptor rated to 1000°F (537°C). Allows connecting coaxial cables to one another.

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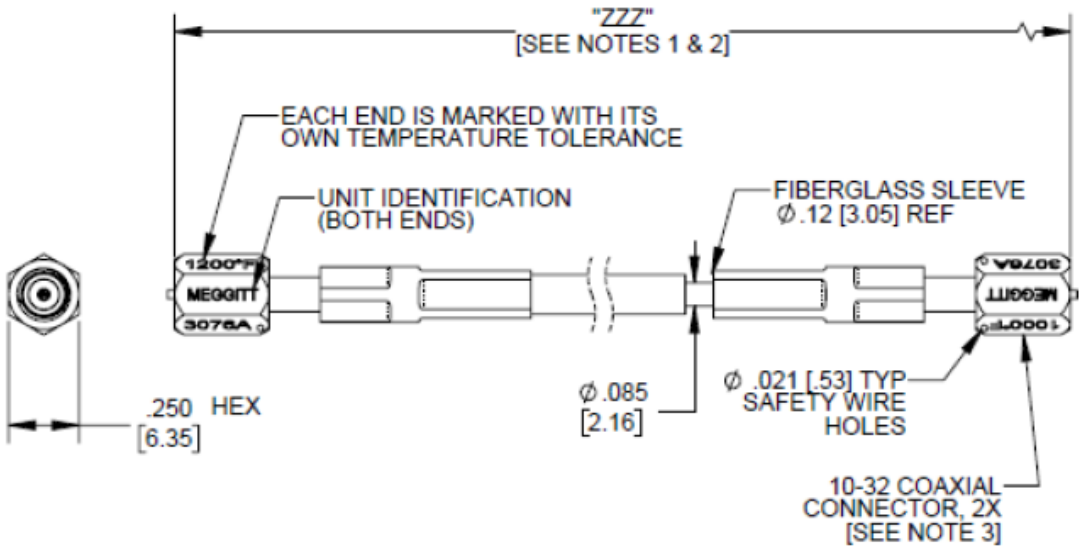
06 Outline details



TABULATION	
LENGTH	TOLERANCE
UP TO 12.00 [304.8]	+1.00 [25.4]
OVER 12.00 [304.8] TO 36.00 [914.4]	+2.00 [50.8]
OVER 36.00 [914.4] TO 120.00 [3.05M]	+4.00 [101.6]
OVER 120.00 [3.05M]	+4.00 [101.6] PER 120.00 [3.05M] OR PART THEREAFTER. +12.00 [304.8] = MAX TOL

Note:

APPLIES TO CALIFORNIA FACILITY

Note: Due to continous process improvement, specifications are subject to change without notice. TCO Review #319