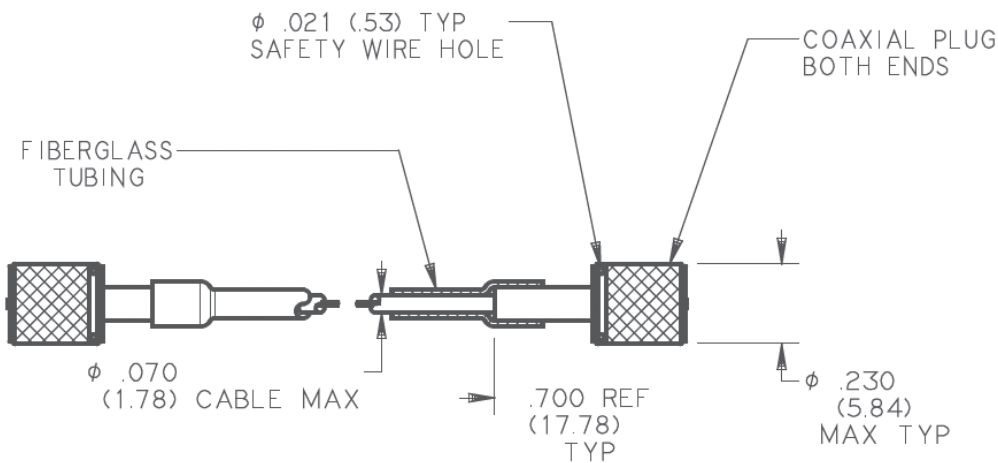


Hardline low noise coaxial cable assembly

Model 3075M6



Key features

- Operating temperature to 900°F (482°C)
- Hermetically sealed
- Rugged and bendable
- Cable center conductor welded to pin
- Fused glass stainless steel housing to center pin
- Radiation tested

Description

The Meggitt model 3075M6 is a low noise hardline cable assembly for use in high temperature environments. It is hermetically sealed for resistance to corrosion, humidity and other environmental contaminants. The outer jacket is constructed of 304L stainless steel and covered with a fiberglass sheath to prevent inadvertent grounding. This cable has a history of long-term reliability in both high temperature and nuclear reactor environments.

Both cable assembly ends are terminated into a glass fired 10-32 connector providing unparalleled strength and hermeticity. An optional 10-32 to 10-32 high temperature cable joiner is available (model 33268) for conjoining two 3075M6's into a single unit.

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Specifications

All electrical specifications based on a three-foot long cable.

	Units	3075M6
Connectors		
Connector 1	in (mm)	10-32 NF, 0.230 dia. (5.84)
Connector 2	in (mm)	10-32 NF, 0.230 dia. (5.84)
Dielectric material		Glass
Pin material		304L stainless steel
Housing material		304 stainless steel
Torque (1)	lb-in (Nm)	Finger tight to 1.5 (0.17)
Weight per connector	gms	1.65
Lock wire holes		Yes
Cable		
Color		N/A
Outer jacket and conductor		304L stainless steel
Center conductor material		Nickel
Dielectric		MgO
Outer sleeving		Fiberglass
Diameter	in (mm)	0.070 (1.76)
Weight	gm/ft	7.5
Bend radius (3)	in (mm)	0.75 (19)
Raw cable part number		N/A
Environmental		
Minimum temperature, cable and plugs	°F (°C)	-300 (-184)
Maximum temperature cable and plugs	°F (°C)	900 (482)
Humidity		Hermetic
Integrated Gama flux	rad.	6.2 X 10 ¹⁰
Integrated neutron flux	N/cm ²	3.7 X 10 ¹⁸
Electrical		
Insulation resistance, room temperature (2)	GΩ	200
Insulation resistance at 900°F (482°C)	MΩ	10
Cable capacitance (2)	pF/ft.(mtr)	63 (206)

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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)
120 (3.05 meters)	+4.00 (101.6) per 120 (3.05 meters) or part there of

Notes

1. For high g shock and vibration the knurled nut should be tightened beyond finger tight. Use of the lock wire holes is also recommended to prevent the threads from backing out.
2. These parameters are 100% tested
3. STEP file available on request
4. Compacted MgO surrounds the center conductor. The outer sheath is made of a stiff material. Both of these factors prevent stressing thus the hardline cable is inherently low noise by design.

Ordering information

5. Specify as 3075M6-XXX where XXX = cable length in inches
6. Standard lengths, in inches: 36, 60, 120