

ANT-140-020 SMA/M-N/M Series

SMA Male to N Male Coax Cable Assemblies



Applications

- 4G/LTE & 5G Antennas
- Cellular Modems, Routers & Amplifiers
- Lightning Arresters
- ADS-B Receivers
- HAM Radio Equipment
- NOT for use with TV or WiFi Applications



Product Features

- SMA Male Connector
- N Male Connector
- 50 Ohm Solid Core
- Thin and Flexible
- Gold Plated Signal Pins
- PE Outer Jacket
- Heat Shrink Tubing on Connectors
- Low Signal Loss at Common Wireless Frequencies

Ordering Information

Part No.	Description
ANT-140-020-03	3 ft Low-Loss CFD195
ANT-140-220-03	3 ft Low-Loss CFD240
ANT-140-020-10	10 ft Low-Loss CFD195
ANT-140-020-15	15 ft Low-Loss CFD240
ANT-140-020-25	25 ft Low-Loss CFD240
ANT-140-420-25	25 ft Low-Loss CFD400
ANT-140-020-36	36 ft Low-Loss CFD400
ANT-140-020-50	50 ft Low-Loss CFD400
ANT-140-020-75	75 ft Low-Loss CFD400

General Description

Proxicast's ANT-140-020 SMA/M to N/M series coax cable assemblies are the perfect solution for connecting 4G/5G or other antennas with N-Female connectors to their radio source. It can also be used to connect to inline lightning arresters, amplifiers or other equipment with N-Female connectors.

All of Proxicast's coax extension cable assemblies are constructed with top quality extremely low-loss cable and gold-plated connectors. Each cable assembly is fully tested.

CFD195 coax is the same diameter as RG-58 and RG-316 but has far superior performance characteristics, matching or exceeding LMR195 cable. CFD240 coax is the same diameter as RG8X but matches or exceeds LMR240 cable. CFD400 coax is the same diameter as RG8 but has performance characteristics matching or exceeding LMR400 cable.

The cable's tough polyethylene jacket withstands abrasions and provides excellent moisture resistance. These cable assemblies can be used indoors or outdoors.

For cellular (600 – 6000 MHz) applications, Proxicast recommends 195-size coax for assemblies up to 10 ft, 240-size up to 25 ft and 400-size up to 75 ft. It is acceptable to use a thick cable for the long portion of a cable run and a short thin cable to connect to equipment or antennas, just minimize the total cable length and number of connectors.

All outdoor coax connections must be weather-proofed to prevent damage caused by moisture entering the connectors. Use our Pro-Grade Self-Bonding Silicone Tape ([ANT-900-002](#)) for fast & easy connection sealing.

NOTE: This cable assembly has a standard SMA connector, not the reverse polarity SMA connector typically found on WiFi equipment. Standard and reverse SMA connectors will not mate; nor will they mate with the "F" connectors found on most consumer video equipment (TV, cable boxes, etc.).

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Specifications

Parameter	Rating
Connector 1	SMA Male (Inline Plug)
Connector 2	N Male (Inline Plug)
Cable Lengths	3 ft (0.914 m) 10 ft (3.048 m) 15 ft (4.572 m) 25 ft (7.620 m) 36 ft (10.973 m) 50 ft (15.240 m) 75 ft (22.860 m)
Coax Types	Low-loss CFD195-E (0.195 inch / 5 mm diameter) Low-loss CFD240-E (0.240 inch / 6.1 mm diameter) Low-loss CFD400-E (0.400 inch / 10.3 mm diameter) Meets or exceeds Times Microwave® LMR ¹ equivalent diameter coax Not rated for direct burial or plenum applications
Jacket Material	Polyethylene (PE)
Color	Black
Impedance	50 Ohm
Capacitance	24.3 pF/ft
Velocity of Propagation	80%
Minimum Bend Radius	CFD195: 0.5 inch (12.7 mm) CFD240: 0.75 inch (19.1 mm) CFD400: 1.0 inch (25.4 mm)
Operating Temperature	-4°F to +140°F (-20°C to +60°C)

Signal Attenuation (dB) Including Connectors

Frequency (MHz)	CFD195		CFD240			CFD400			
Length	3'	10'	3'	15'	25'	25'	36'	50'	75'
700	0.4	1.1	0.3	1.1	1.9	1.0	1.4	1.9	2.9
900	0.4	1.3	0.3	1.3	2.1	1.1	1.6	2.2	3.3
1700	0.6	1.8	0.4	1.8	3.0	1.6	2.3	3.1	4.7
1900	0.6	1.9	0.5	1.9	3.2	1.7	2.4	3.3	4.9
2400	0.7	2.1	0.5	2.2	3.6	1.9	2.7	3.7	5.6
2700	0.8	2.3	0.6	2.3	3.8	2.0	2.9	4.0	6.0
5000	1.1	3.2	0.8	3.2	5.3	2.9	4.1	5.6	8.4
5800	1.1	3.4	0.8	3.5	5.7	3.1	4.4	6.1	9.2

Operation outside the parameter ranges given above may cause permanent damage.

¹LMR is a trademark of Times Microwave Corporation

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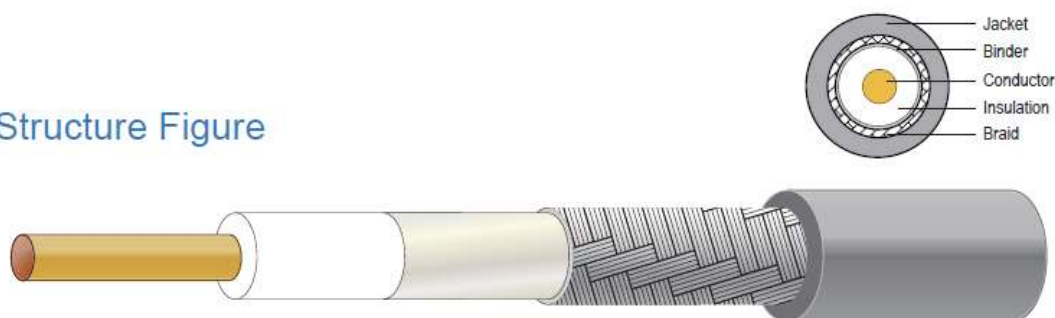
SMA Male to N Male Coax Cable Assemblies



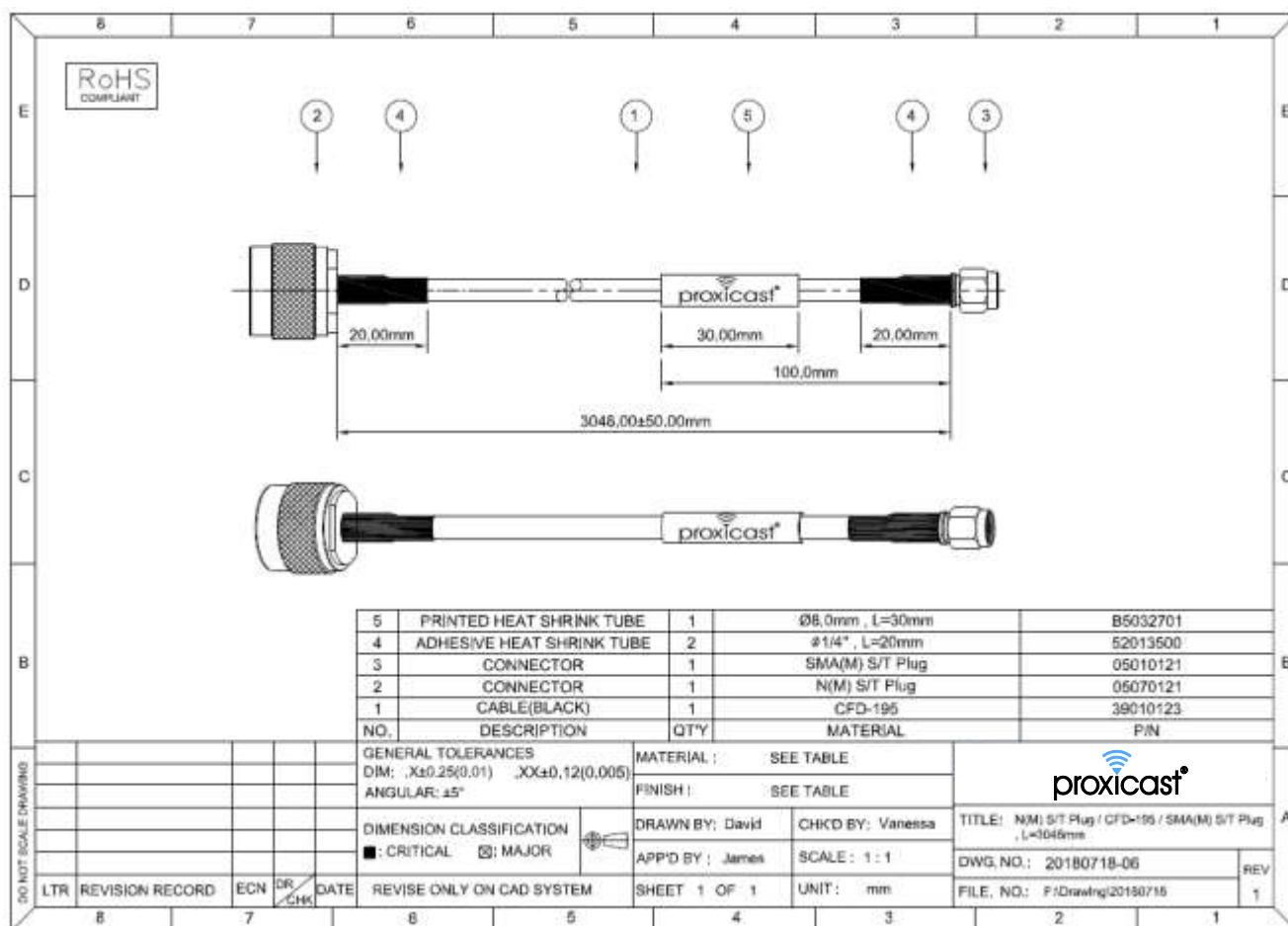
Mechanical Dimensions

CFD195 Coaxial Cable

Structure Figure



Conductor	Insulation	Binder	Single Braid	Jacket
Material Bare Copper Wire	Material PEF	Material Sealed Aluminum Mylar Aluminum Tape	Material Tinned copper wire	Material PVC (CFD195) PE (CFD195-E)
Diameter Approx. 0.94 mm	Diameter Approx. 2.79 mm		Coverage 88% ↑	Color Black
				Diameter Approx. 5.0 mm



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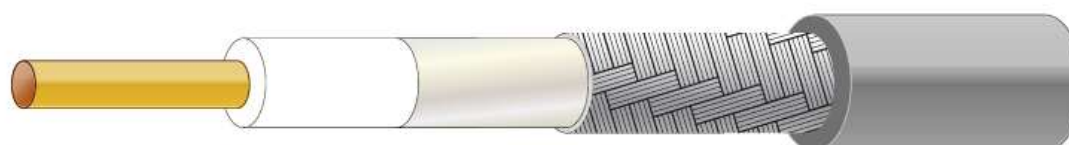
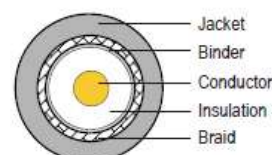
SMA Male to N Male Coax Cable Assemblies



Mechanical Dimensions

CFD240 Coaxial Cable

Structure Figure



Conductor

Material
Solid Copper Wire

Diameter
Approx. 1.42 mm

Insulation

Material
Foam polyethylene

Diameter
Approx. 3.81 mm

Binder

Material
Aluminum/PE Tape

Diameter
Approx. 3.92 mm

Single Braid

Material
Tinned copper wire

Coverage
84%

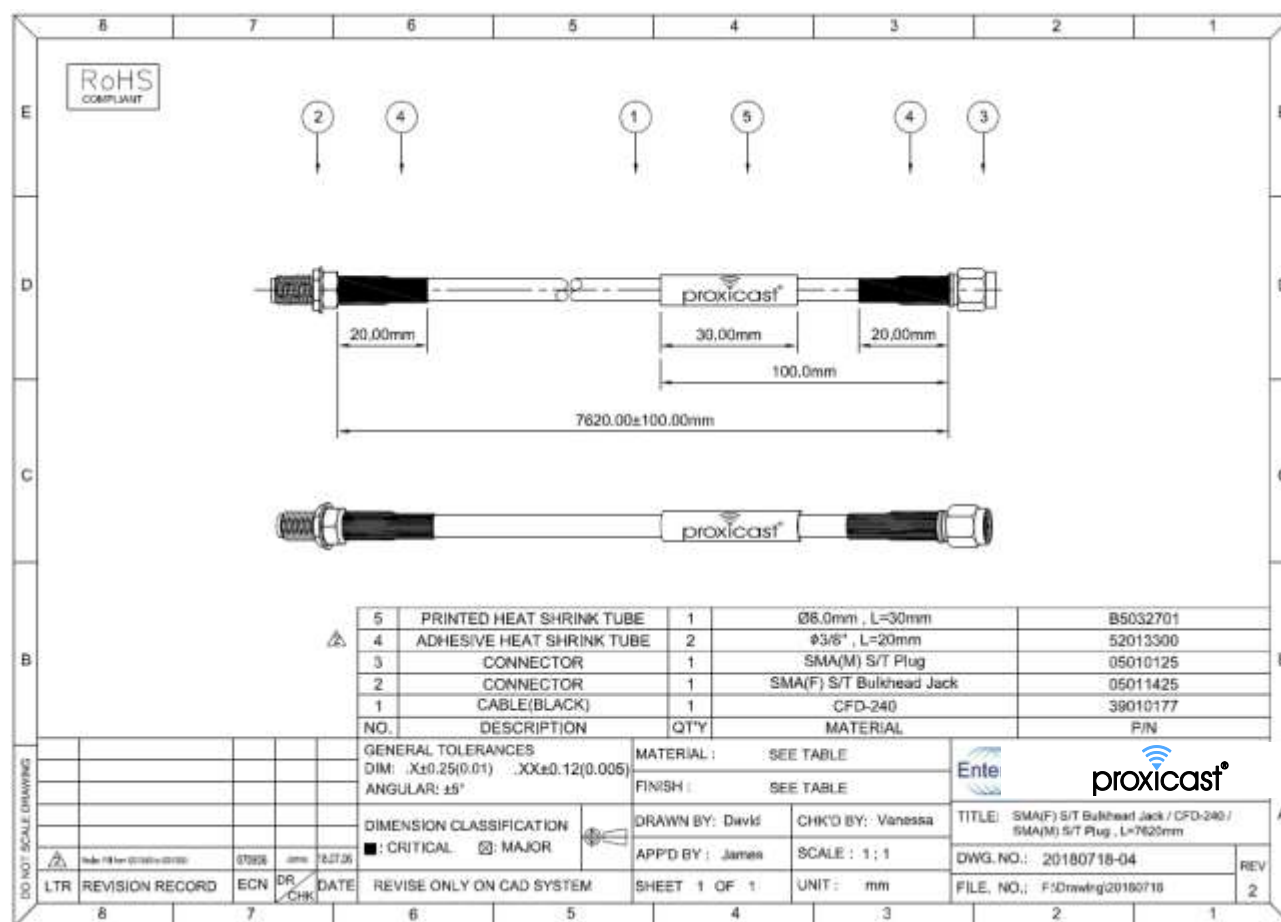
Diameter
Approx. 4.5 mm

Jacket

Material
PE or Non Lead PVC

Color
Black

Diameter
Approx. 6.1 mm



SMA Male to N Male Coax Cable Assemblies

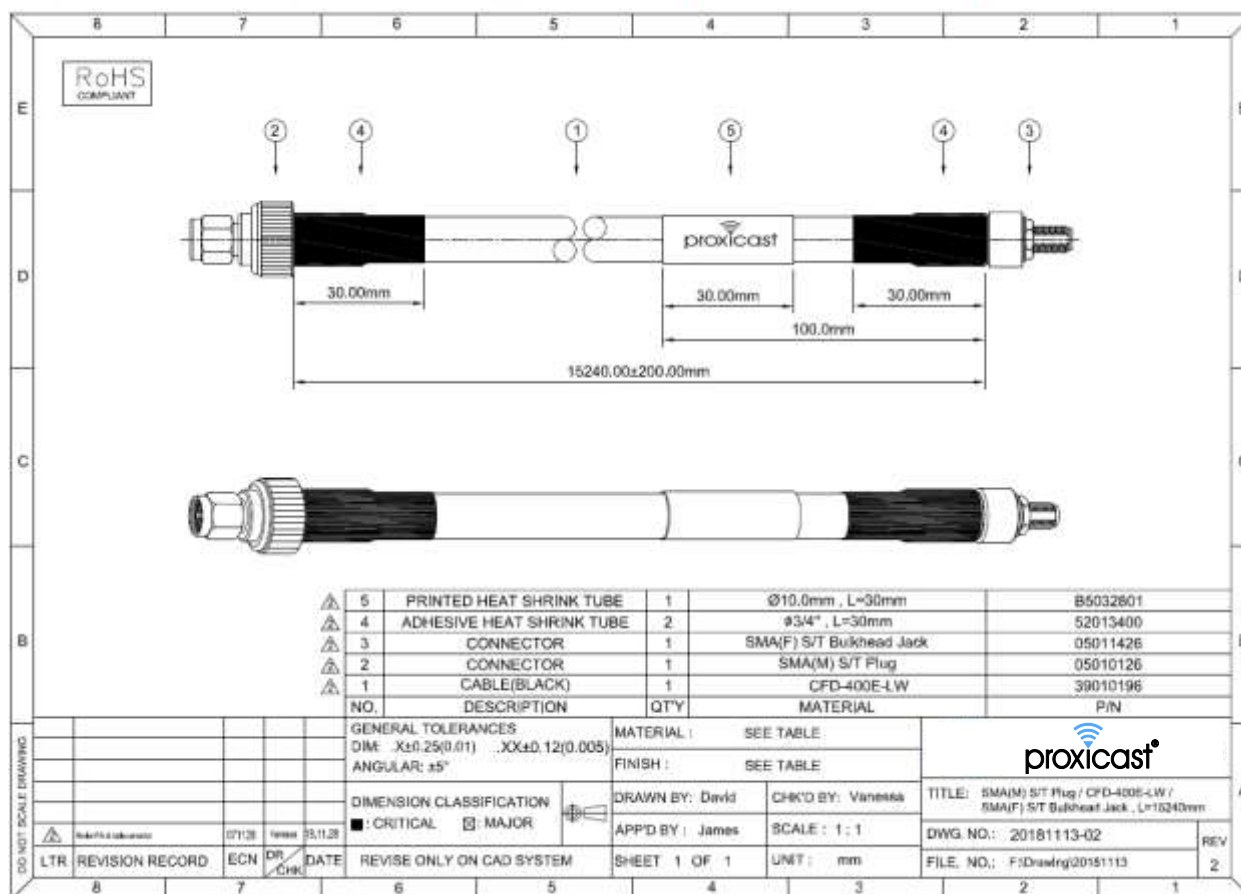


A cross-sectional diagram of a coaxial cable. It consists of a central yellow circle labeled 'Conductor', surrounded by a white ring labeled 'Insulation'. This is followed by a braided ring labeled 'Braid', then a thin grey ring labeled 'Binder', and finally an outer grey ring labeled 'Jacket'.

Structure Figure



Conductor	Insulation	Binder	Single Braid	Jacket
Material Solid Copper Clad Aluminum Wire	Material Foam polyethylene	Material Aluminum/PE Tape	Material Tinned copper wire	Material PE / PVC
Diameter Approx. 2.74 mm	Diameter Approx. 7.24 mm	Diameter Approx. 7.35 mm	Coverage 85%	Color Black
			Diameter Approx. 8.1 mm	Diameter Approx. 10.3 mm



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Additional Product Images



ANT-140-020 SMA/M-N/M Series

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Installation Instructions

- Observe minimum bend radius during installation and handling
- Do not cut or splice
- Minimize the number of connectors and total length of the cable run
- Fully tighten coax connectors to antenna connectors
- Weather seal outdoor coax connections
- Install in-line lightning protection if required by local building, fire, insurance or safety codes
- Not rated for direct burial or plenum applications

Contact Information

For the latest specifications, additional product information, worldwide sales and information about Proxicast:

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