

PRODUCT SPECIFICATION AJ99XXX12NAIALR

Issued By: Fiberoptic Engineering
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Issue No.: 1

1.0 SCOPE

This document establishes the specification requirements for an indoor/outdoor distribution fiberoptic cable. This cable construction consists of multimode OM3 fibers in a distribution tight-buffered design with an interlocking armor and a plenum rated jacket.

2.0 APPLICABLE DOCUMENTS

Reference Documents: TIA/EIA FOTP Standards 455

Color Coding of Fiber Optic Cables TIA/EIA-598

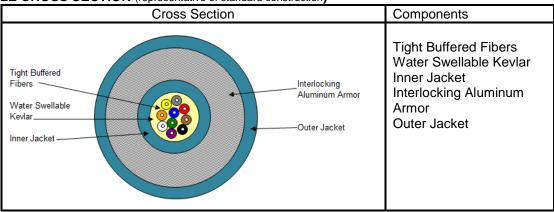
GR-409-CORE

UL 910

3.0 REQUIREMENTS

This document contains test values for all-important mechanical, optical, and environmental parameters and as such, is the basis for all-incoming inspection and acceptance.

4.0 CABLE CROSS SECTION (representative of standard construction)



5.0 OVERALL CABLE CONSTRUCTION

5.1 Tight Buffered Fiber

Dimension: 900µm, nominal.

Tight buffered fiber color code: 1-blue, 2-orange, 3-green, 4-brown, 5-slate, 6-white, 7-red, 8-black, 9-vellow, 10-purple, 11-pink and 12-agua

5.2 Cable strength

Water swellable aramid yarns are pulled in with the tight-buffered fibers under the inner sheath.

5.3 Inner Sheath

UV Resistant agua plenum rated jacket (or color per customer request)

5.4 Cable Markings

CCT GROUP 99, FIBER OPTIC CABLE, XX(No. of fibers)-50/125 OM3 10GIG, CONVERGENT CONNECTIVITY TECHNOLOGY, MM/YY (Month & Year of Manufacture), OFNP C(ETL)US SEQUENTIAL METER MARKINGS

5.5 Armor

Aluminum Interlocking Armor Tape

5.6 Outer Sheath

Agua plenum rated jacket (or color per customer request)

5.7 Cable Markings

GROUP AJ99, FIBER OPTIC CABLE, XX(No. of Fibers)-50/125 OM3 10GIG, CONVERGENT CONNECTIVITY TECHNOLOGY., MM/YY (month & year of manufacture), Made in the USA, OFCP C(ETL)US, Sequentially meter marked.

Special print as required by customer.

1751 State Rte. 17A Florida, New York 10921

866 905 6744 * 845 651-5250

Fax 845 651-3564

Email sales@cctcable.com

5.8 Nominal Cable Dimensions without the armor:

CCT	No. of	Cable	Cable	Weight	Weight
Part Number	Fibers	OD (mm)	OD (in.)	KG/KM	LB/1000ft
9900212NRANOOP	2	4.3	.170	18	12
9900412NRANOOP	4	4.4	.185	21	14
9900612NRANOOP	6	4.6	.200	27	18
9900812NRANOOP	8	5.0	.215	31	20
9901212NRANOOP	12	5.8	.250	39	26

Dimensions and weights including the armored jacket

ССТ	No. of	Cable	Cable	Weight	Weight
Part Number	Fibers	OD (mm)	OD (in.)	KG/KM	LB/1000ft
AJ9900212NAIALR	2	15.4	0.605	185	124
AJ9900412NAIALR	4	15.4	0.605	188	126
AJ9900612NAIALR	6	15.4	0.605	193	130
AJ9900812NAIALR	8	15.4	0.605	196	132
AJ9901212NAIALR	12	15.4	0.605	205	138

5.0 FIBER CHARACTERISTICS

5.1 Physical Parameters (nominal)

Fiber Type: Multimode*
Maximum Attenuation @ 850/1300nm: 3.0/1.0 dB/km**

LED Performance (Overfilled Launch Bandwidth): 1500/500MHz-km@850/1300 Laser EMB Performance: 2000/500MHz-km@850/1300

Core Diameter, nominal: $50 \pm 2.5 \mu m$ Cladding Diameter: $125.0 \pm 1.0 \mu m$ Primary Coating Diameter: $242 \pm 5 \mu m$ Cladding Non-circularity: < 0.7% Core-Clad Concentricity: <1.0um Zero Dispersion Wavelength: 1295-1340 Maximum Zero Dispersion Slope: $0.105 \text{ ps/nm}^2 - \text{km}$ Numerical Aperture: $0.20 \pm .015$ Group Refractive Index @ 850/1300nm: 1.483/1.478 **Proof Test:** 100 kpsi

CONVERGENT CONNECTIVITY TECHNOLOGY 866 905-6744 * 845 651-5250 Fax 845 651-3564 Email TECHSUPPORT@CCTCABLE.COM

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^{*}Guaranteed Gigabit Ethernet Distance of 300mtr at 850nm for 10 Gb/s per IEEE802.3ae and 1000mtr at 850nm for 1 Gb/s per IEEE802.3z.

^{**} Measured attenuations on shipping reels will not exceed the nominal values by .75dB/km (Tight Buffered Cables Only)

6.0 MECHANICAL & ENVIRONMENTAL PERFORMANCE

Cable only without armor: Maximum Tensile Load for:

Installation: 4-fiber 1405N/315lbf, 6&8-fiber 1610N/362lbf

12-fiber 2700N/600lbf

Long Term: 4-fiber 455N/102lbf, 6&8-fiber 535N/120lbf

12-fiber 600N/135lbf

Minimum bending radius:

Loaded: 20 x diameter Unloaded: 10 x diameter Impact Resistance: 25 Impacts (min.)

Flexing, ±90°: 25 Cycles (min.) Crush Resistance: 100N/cm

Temperature rating:

Operation, -20°C to +85°C Installation, 0°C to +75°C Storage, -40°C to +85°C

Overall over armor:

Maximum Tensile Load for the Interlock Armored Jacket: Temperature rating:

600N / 150lbf

Crush Resistance (Over Armor): 1000N/cm

7.0 PREPARATION FOR DELIVERY

The cable shall be packaged to preclude the inducement of damage due to handling and transportation, and shall be in accordance with the best commercial practices available.

Customer Signature of Approval for Acceptance of this Custom Cable Design				
Your signature constitutes that you have read and agreed to this specification sheet and upon confirmation of your order; this item may be non-cancelable and non-returnable.				
Signature:				
Company:				
Date:				

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