





For more information please call 1-800-Belden1

See Put-ups and Colors

Related Documents: No.10 for Fiber Optic Cables .pdf

Cable Characteristics:

DESCRIPTION:

Fiber Type

2 to 12 optical fibers, Central gel filling loose tubes, Flexible non-metallic strength member - aramid yarn, CSTA armor, Single PE jacket (black).

125/250 μm

PHYSICAL CHARACTERISTICS:

Number of Fibers	2 to 12
Fiber Color Code Chart:	
Number	Color
1	Blue
2	Orange
3	Green
4	Brown
5	Grey
6	White
7	Red
8	Black
9	Yellow
10	Violet
11	Pink
12	Aqua
Buffer Tube Diameter	3.0 mm

Buffer Tube Filling Material **STRENGTH MEMBER:**

Buffer Tube Material

Strength Member Material Aramid yarn

ARMORING:

Armor Type	Corrugated
Armor Material	Steel Tape

PBT – Polybutylene Terephthalate

Synthetic Thixotropic Gel



Armor Thickness	0.15 mm		
OUTER JACKET:			
Outer Jacket Material	PE – Polyethylene		
Outer Jacket Nom. Wall Thickness	1.1 mm		
Outer Jacket Color	Black		
OVERALL DIAMETER:			
Overall Nominal Diameter	7.3 mm		
MECHNICAL CHARACTERISTICS:			
Operating Temperature Range	- 40°C To + 70°C		
Storage Temperature Range	- 40°C To + 70°C		
Bulk Cable Weight	35 kg/km		
Max. Load for Installation	1000 N, Passes IEC794-1		
Max. Load for Long Term Application	400 N, Passes IEC794-1		
Min Bend Radius for Installation	20 × Cable OD, Passes IEC794-1		
Min Bend Radius for Long Term Application	10 × Cable OD, Passes IEC794-1		
Crush Resistance	1000 N/100mm, Passes IEC794-1		
Impact Resistance	Passes IEC794-1		
Solar Radiation Resistance	Passes IEC794-1		
Compound Flow	Passes IEC794-1		
Cyclic Flexing	Passes IEC794-1		
ADDITION E SDECIFICATION ACENCY COMDITANCE.			

APPLICABLE SPECIFICATION AGENCY COMPLIANCE:

APPLICABLE STANDARDS:

Specification

EU RoHS Compliant (Y/N)	Y
EU RoHS Compliance Date	Aug 2007
SUITABILITY:	
Suitability – Indoor (Y/N)	Y
Suitability - Outdoor (Y/N)	Y (where waterproof is not strictly required.)
Suitability - Aerial (Y/N)	Y
Suitability – Duct (Y/N)	Y
Suitability – Direct Burial (Y/N)	N
Sunlight Resistance (Y/N)	Y

IEC 60794-1, EIA/TIA-455

Optical Characteristics:

SINGLE MODE FIBERS	G652.D (OS2)
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Belden Fiber Code	U12
Typical Mode Field Diameter @ 1310nm	$9.2~\pm0.4~\mu m$
Typical Mode Field Diameter @ 1550nm	$10.4 \pm 0.5 \ \mu m$
Cladding Diameter	$125 \pm 0.7 \ \mu m$
Clad Non-Circularity	≤ 0.7 %
Core-Clad Concentricity Error	\leq 0.5 μm
Primary Coating Material	Acrylate
Primary Coating Diameter	$245~\pm 5~\mu m$
Secondary Color Coating Diameter	$250 \pm 10 \; \mu m$
Max. Attenuation @ 1310nm	0.36 dB/km
Max. Attenuation @ 1550nm	0.22 dB/km
Point Loss @ 1310nm & 1550nm	0.05 dB
Zero Dispersion Wavelength	1302 – 1322 nm
Max. Slope @ Zero Dispersion Wavelength	$0.090 \text{ ps/(nm}^2 \text{ km)}$
Max. PMD @ Link Design Value	0.1 ps/√km
Cable Cutoff Wavelength	≤ 1260 nm
Refractive Index @1310nm	1.466
Refractive Index @1550nm	1.467

MULTI-MODE FIBERS	62.5μm OM1	50μm OM2	50μm OM3	
Belden Fiber Code	U62	U50	U53	
Typical Core Diameter	62.5 ±2.5 μm	$50.0 \pm 2.5 \ \mu m$	$50.0 \pm 2.5 \ \mu m$	
Cladding Diameter	$125 \pm 1.0 \ \mu m$	$125 \pm 1.0 \mu m$	$125\pm1.0~\mu m$	
Clad Non-Circularity	≤ 1 %	≤ 1 %	≤ 1 %	
Core-Clad Concentricity Error	≤ 1.5 μm	$\leq 1.5 \ \mu m$	$\leq 1.0~\mu m$	
Primary Coating Material	Acrylate	Acrylate	Acrylate	
Primary Coating Diameter	$245 \pm 7 \ \mu m$	$245 \pm 7 \mu m$	$245 \pm 7 \ \mu m$	
Secondary Color Coating Diameter	$250\pm10~\mu m$	$250\pm10~\mu m$	$250\pm10~\mu m$	
Max. Attenuation @ 850nm	3.5 dB/km	3.0 dB/km	3.0 dB/km	
Max. Attenuation @ 1300nm	1.0 dB/km	1.0 dB/km	1.0 dB/km	
Min. Overfilled Bandwidth @ 850nm	200 MHz.km	500 MHz.km	1500 MHz.km	
Min. Overfilled Bandwidth @ 1300nm	600 MHz.km	500 MHz.km	500 MHz.km	
Point Loss @ 850nm & 1300nm	0.10 dB	0.10 dB	0.10 dB	
Numerical Aperture	0.275 ± 0.015	0.200 ± 0.015	0.200 ± 0.015	
Refractive Index @ 850nm	1.496	1.482	1.482	



Refractive Index @ 1300nm	1.491	1.477	1.477
Min. G-Ethernet Transmission Distance@850nm	300 m	550 m	1000 m
Min.G-Ethernet TransmissionDistance@1300nm	550 m	550 m	600 m

PUT-UPS AND COLORS:

Item	# Fibers	Fiber Type	Cable Description	Put-up * (metre)	Jacket Color
NYGU12BA002BKAA	2	G652.D	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU12BA004BKAA	4	G652.D	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU12BA006BKAA	6	G652.D	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU12BA008BKAA	8	G652.D	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU12BA010BKAA	10	G652.D	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU12BA012BKAA	12	G652.D	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU62BA002BKAA	2	62.5μm OM1	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU62BA004BKAA	4	62.5μm OM1	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU62BA006BKAA	6	62.5μm OM1	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU62BA008BKAA	8	62.5μm OM1	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU62BA010BKAA	10	62.5μm OM1	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU62BA012BKAA	12	62.5μm OM1	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU50BA002BKAA	2	50μm OM2	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU50BA004BKAA	4	50μm OM2	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU50BA006BKAA	6	50μm OM2	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU50BA008BKAA	8	50μm OM2	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU50BA010BKAA	10	50μm OM2	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU50BA012BKAA	12	50μm OM2	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU53BA002BKAA	2	50μm OM3	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU53BA004BKAA	4	50μm OM3	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU53BA006BKAA	6	50μm OM3	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU53BA008BKAA	8	50μm OM3	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU53BA010BKAA	10	50μm OM3	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU53BA012BKAA	12	50μm OM3	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK

^{*} Other put-ups available upon request.

Revision Number: 7 Revision Date: 6/3/2014

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Detailed Specifications & Technical Data



NYGUxxBA Fiber Optic-Central Tube- Aramid Yarn - Armored/Single PE Jacket

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