





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:

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

PHYSICAL CHARACTERISTICS:

Fiber Type	125/250 μm
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 Material	PBT – Polybutylene Terephthalate
Buffer Tube Filling Material	Synthetic Thixotropic Gel

STRENGTH MEMBER:

Strength Member Material	Aramid yarn
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ARMORING:

Armor Type	Corrugated
Armor Material	Steel Tape



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			

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
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Belden Fiber Code	U12
Typical Mode Field Diameter @ 1310nm	$9.2 \pm 0.4 \; \mu \text{m}$
Typical Mode Field Diameter @ 1550nm	$10.4\pm0.5~\mu m$
Cladding Diameter	$125 \pm 0.7~\mu m$
Clad Non-Circularity	≤ 0.7 %
Core-Clad Concentricity Error	$\leq 0.5 \ \mu m$
Primary Coating Material	Acrylate
Primary Coating Diameter	$245 \pm 5 \ \mu m$
Secondary Color Coating Diameter	$250\pm10~\mu m$
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	$0.090 \text{ ps/(nm}^2 \cdot \text{km)}$
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	$62.5 \pm 2.5 \ \mu m$	$50.0 \pm 2.5~\mu m$	$50.0\pm2.5~\mu m$
Cladding Diameter	$125\pm1.0~\mu m$	$125\pm1.0~\mu m$	$125 \pm 1.0 \ \mu m$
Clad Non-Circularity	≤ 1 %	≤ 1 %	≤ 1 %
Core-Clad Concentricity Error	≤ 1.5 μm	≤1.5 μm	$\leq 1.0 \ \mu m$
Primary Coating Material	Acrylate	Acrylate	Acrylate
Primary Coating Diameter	$245\pm7~\mu m$	$245\pm7~\mu m$	$245\pm7~\mu m$
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
NYGU12BA002BK	2	G652.D	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU12BA004BK	4	G652.D	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU12BA006BK	6	G652.D	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU12BA008BK	8	G652.D	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU12BA010BK	10	G652.D	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU12BA012BK	12	G652.D	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU62BA002BK	2	62.5μm OM1	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU62BA004BK	4	62.5μm OM1	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU62BA006BK	6	62.5μm OM1	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU62BA008BK	8	62.5μm OM1	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU62BA010BK	10	62.5μm OM1	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU62BA012BK	12	62.5μm OM1	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU50BA002BK	2	50μm OM2	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU50BA004BK	4	50μm OM2	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU50BA006BK	6	50μm OM2	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU50BA008BK	8	50μm OM2	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU50BA010BK	10	50μm OM2	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU50BA012BK	12	50μm OM2	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU53BA002BK	2	50μm OM3	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU53BA004BK	4	50μm OM3	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU53BA006BK	6	50μm OM3	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU53BA008BK	8	50μm OM3	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU53BA010BK	10	50μm OM3	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK
NYGU53BA012BK	12	50μm OM3	CENTRAL TUBE CSTA SINGLE PE JACKET	2000	BLACK

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

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Detailed Specifications & Technical Data



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

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