

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

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### 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
<b>STRENGTH MEMBER:</b>	
Strength Member Material	Aramid yarn
<b>ARMORING:</b>	
Armor Type	Corrugated
Armor Material	Steel Tape

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Armor Thickness	0.15 mm
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### 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
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### MECHANICAL 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	IEC 60794-1, EIA/TIA-455
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

### Optical Characteristics:

SINGLE MODE FIBERS	G652.D
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Belden Fiber Code	U12
Typical Mode Field Diameter @ 1310nm	9.2 ± 0.4 μm
Typical Mode Field Diameter @ 1550nm	10.4 ± 0.5 μm
Cladding Diameter	125 ± 0.7 μm
Clad Non-Circularity	≤ 0.7 %
Core-Clad Concentricity Error	≤ 0.5 μm
Primary Coating Material	Acrylate
Primary Coating Diameter	245 ± 5 μm
Secondary Color Coating Diameter	250 ± 10 μm
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 ps/(nm <sup>2</sup> ·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

<b>MULTI-MODE FIBERS</b>	<b>62.5μm OM1</b>	<b>50μm OM2</b>	<b>50μm OM3</b>
Belden Fiber Code	U62	U50	U53
Typical Core Diameter	62.5 ± 2.5 μm	50.0 ± 2.5 μm	50.0 ± 2.5 μm
Cladding Diameter	125 ± 1.0 μm	125 ± 1.0 μm	125 ± 1.0 μm
Clad Non-Circularity	≤ 1 %	≤ 1 %	≤ 1 %
Core-Clad Concentricity Error	≤ 1.5 μm	≤ 1.5 μm	≤ 1.0 μm
Primary Coating Material	Acrylate	Acrylate	Acrylate
Primary Coating Diameter	245 ± 7 μm	245 ± 7 μm	245 ± 7 μm
Secondary Color Coating Diameter	250 ± 10 μm	250 ± 10 μm	250 ± 10 μm
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

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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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