

NKGUxxMA

Fiber Optic - Loose Tube – Armored/Single PE Jacket

 	<p style="text-align: center;">For more information please call 1-800-Belden1</p> <p style="text-align: center;"><u>See Put-ups and Colors</u></p> <p style="text-align: center;">Related Documents: No.10 for Fiber Optic Cables .pdf</p>
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Cable Characteristics:

DESCRIPTION:

6 to 36 optical fibers, Gel filling loose tubes (6f/T), FRP central strength member, Gel filling cable core, CSTA armor, Single PE jacket (black).

PHYSICAL CHARACTERISTICS:

Fiber Type	125/250 µm
Number of Fibers	6 to 36
Number of Fibers per Tube	6
Fiber Color Code Chart:	
Number	Color
1	Blue
2	Orange
3	Green
4	Brown
5	Grey
6	White
Buffer Tube Diameter	2.0 mm
Buffer Tube Material	PBT – Polybutylene Terephthalate
Buffer Tube Filling Material	Synthetic Thixotropic Gel
Buffer Tube Color Code Chart:	
Number	Color
1	Blue
2	Orange
3	Green
4	Brown
5	Grey
6	White
STRENGTH MEMBER:	
Central Strength Member Material	Fiberglass Epoxy Rod

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OVERALL CABLING:

Overall Cabling Fillers	Polypropylene
Cable Core Filling Material	Synthetic Thixotropic Gel

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	1.6 mm
Outer Jacket Color	Black

OVERALL DIAMETER:

Overall Nominal Diameter	12.0 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	132 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
Water Penetration	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

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Suitability - Aerial (Y/N)	Y
Suitability – Duct (Y/N)	Y
Suitability – Direct Burial (Y/N)	Y
Sunlight Resistance (Y/N)	Y

Optical Characteristics:

SINGLE MODE FIBERS	G652.D (OS2)
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 ² 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 ± 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

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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-EthernetTransmissionDistance@1300nm	550 m	550 m	600 m

PUT-UPS AND COLORS:

Item	# Fibers	Fiber Type	Cable Description	Put-up* (metre)	Jacket Color
NKGU12MA006BKAA	6	G652.D	LOOSE TUBE CSTA SINGLE PE JACKET	2000	BLACK
NKGU12MA012BKAA	12	G652.D	LOOSE TUBE CSTA SINGLE PE JACKET	2000	BLACK
NKGU12MA018BKAA	18	G652.D	LOOSE TUBE CSTA SINGLE PE JACKET	2000	BLACK
NKGU12MA024BKAA	24	G652.D	LOOSE TUBE CSTA SINGLE PE JACKET	2000	BLACK
NKGU12MA030BKAA	30	G652.D	LOOSE TUBE CSTA SINGLE PE JACKET	2000	BLACK
NKGU12MA036BKAA	36	G652.D	LOOSE TUBE CSTA SINGLE PE JACKET	2000	BLACK
NKGU62MA006BKAA	6	62.5µm OM1	LOOSE TUBE CSTA SINGLE PE JACKET	2000	BLACK
NKGU62MA012BKAA	12	62.5µm OM1	LOOSE TUBE CSTA SINGLE PE JACKET	2000	BLACK
NKGU62MA018BKAA	18	62.5µm OM1	LOOSE TUBE CSTA SINGLE PE JACKET	2000	BLACK
NKGU62MA024BKAA	24	62.5µm OM1	LOOSE TUBE CSTA SINGLE PE JACKET	2000	BLACK
NKGU62MA030BKAA	30	62.5µm OM1	LOOSE TUBE CSTA SINGLE PE JACKET	2000	BLACK
NKGU62MA036BKAA	36	62.5µm OM1	LOOSE TUBE CSTA SINGLE PE JACKET	2000	BLACK
NKGU50MA006BKAA	6	50µm OM2	LOOSE TUBE CSTA SINGLE PE JACKET	2000	BLACK
NKGU50MA012BKAA	12	50µm OM2	LOOSE TUBE CSTA SINGLE PE JACKET	2000	BLACK
NKGU50MA018BKAA	18	50µm OM2	LOOSE TUBE CSTA SINGLE PE JACKET	2000	BLACK
NKGU50MA024BKAA	24	50µm OM2	LOOSE TUBE CSTA SINGLE PE JACKET	2000	BLACK
NKGU50MA030BKAA	30	50µm OM2	LOOSE TUBE CSTA SINGLE PE JACKET	2000	BLACK
NKGU50MA036BKAA	36	50µm OM2	LOOSE TUBE CSTA SINGLE PE JACKET	2000	BLACK
NKGU53MA006BKAA	6	50µm OM3	LOOSE TUBE CSTA SINGLE PE JACKET	2000	BLACK
NKGU53MA012BKAA	12	50µm OM3	LOOSE TUBE CSTA SINGLE PE JACKET	2000	BLACK
NKGU53MA018BKAA	18	50µm OM3	LOOSE TUBE CSTA SINGLE PE JACKET	2000	BLACK
NKGU53MA024BKAA	24	50µm OM3	LOOSE TUBE CSTA SINGLE PE JACKET	2000	BLACK
NKGU53MA030BKAA	30	50µm OM3	LOOSE TUBE CSTA SINGLE PE JACKET	2000	BLACK

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NKGU53MA036BKAA	36	50µm OM3	LOOSE TUBE CSTA SINGLE PE JACKET	2000	BLACK
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* Other put-ups available upon request.

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