Fiber Optic Cable Armored Direct Burial OM3 MDPE Fca

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Features and Advantages

Applications:
Outdoor data communication connections
CATV trunk lines
Telecom trunk lines
Telecom access net connections

Specifications

COMMERICAL STANDARDS

ISO 11801-1
EN 50173-1:2002
IEC 60794-1
IEC 60793-2-10:type A1a.2
ISO/IEC 11801 category OM3

ISO/IEC 24764
ITU G.651.1
EN 60793-2-10: type A1a.2
EN 50173-1 category OM3
TIA-492 AAAC
ANSI/TIA-568.C
IEEE 802.3

RoHS Compliant
EU Regulation 305/2011 (CPR)
EN 50575:2014+A:2016
EuroClass: Fca

MECHANICAL

Loose tube:	ø2.8 mm gel filled loose tube
Strength member:	E-Glass yarns
Armoring:	0.15 mm corrugated steel tape
Sheath:	1.5 mm black MDPE sheath, IEC 60811, IEC 60708

ELECTRICAL

Attenuation **IEC 60793-1-40**

Maximum value of cable at 850 nm: ≤ 3.0 dB/km

Maximum value of cable at 1300 nm: ≤ 1.0 dB/km

Inhomogeneity of OTDR trace for any two 1000 metre fiber lengths: Max. 0.1 dB/km

Bandwidth **IEC 60793-1-41**

OFL value at 850 nm: ≥ 1500 MHz • km

OFL value at 1300 nm: ≥ 500 MHz • km

Effective Modal Bandwidth (EMB) Effective Modal Bandwidth I assured by means of differential mode delay (DMD) measurement as specified in IEC 60793-1-49: ≥ 2000 MHz • km

Group Index of Refraction IEC 60793-1-22

Group index of refraction at 850 nm: 1.482

Group index of refraction at 1300 nm: 1.477

Order No. CFR-00551_6 USA/0k/RJ/2020.11

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PHYSICAL PROPERTIES

Order No.	IEC 60794-1/22 Test Method	Description
Nominal outer diameter	N/A	2-24 fibers: 8.5mm
Nominal weight	N/A	2-24 fibers: 75kg/km
Tensile strength (dynamic)	E1	3000 N
Tensile strength (permanent)	E1	1000 N
Compressive strength (crush)	E3	2200 N
Impact	E4	30 Nm
Torsion	E7	5 cycles ± 1 turn
Kink	E10	The cables do not form a kink when a loop is drawn together to a diameter of 100 mm
Min. Bending radius (permanent)	E11	R = 55 mm
Min. Bending radius (installation)	N/A	R = 170 mm
Temperature range	F1	Storage and installation: -40°C to +70°C Operation: -40°C to +60°C.

OTHER PROPERTIES

Attribute	Measurement Method	Units	Limits
Core diameter	IEC/EN 60793-1-20	µm	50 ± 2
Cladding diameter	IEC/EN 60793-1-20	µm	125.0 ± 1.0
Cladding non-circularity	IEC/EN 60793-1-20	%	≤ 0.7
Core non-circularity	IEC/EN 60793-1-20	%	≤ 5
Core-cladding concentricity error	IEC/EN 60793-1-20	µm	≤ 1
Primary coating diameter – uncolored	IEC/EN 60793-1-21	µm	242 ± 5
Primary coating diameter – colored	IEC/EN 60793-1-21	µm	250 ± 15
Primary coating non-circularity	IEC/EN 60793-1-21	%	≤ 5
Primary coating-cladding concentricity error	IEC/EN 60793-1-21	µm	≤ 6
Proof stress level	IEC/EN 60793-1-30	GPa	≥ 0.7 (≈ 1 %)
Typical average strip force	IEC/EN 60793-1-32	N	1.7
Strip force (peak)	IEC/EN 60793-1-32	N	1.3 ≤ Fpeak.strip ≤ 8.9
Numerical aperture	IEC/EN 60793-1-43	N	0.200 ± 0.015

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Ordering Information

Order No.	SAP No.	Description
CFR-00551	180570100	Fiber Optic Cable, Armored, Direct Burial OM3 MDPE 4 CORE Fca
CFR-00552	180570101	Fiber Optic Cable, Armored, Direct Burial OM3 MDPE 6 CORE Fca
CFR-00553	180570102	Fiber Optic Cable, Armored, Direct Burial OM3 MDPE 8 CORE Fca
CFR-00554	180570103	Fiber Optic Cable, Armored, Direct Burial OM3 MDPE 12 CORE Fca
CFR-00555	180570104	Fiber Optic Cable, Armored, Direct Burial OM3 MDPE 16 CORE Fca
CFR-00556	180570105	Fiber Optic Cable, Armored, Direct Burial OM3 MDPE 24 CORE Fca