Fire Resistant Tight Buffered Distribution Fiber Optic Cables

MTA-B-C-D-H-FR

APPLICATION

This cables are used for interconnection of distribution boxes and end devices, where continued functionality is required during a fire situation. The cables are very suitable for various indoor and outdoor applications, including routing between buildings within ducts and inside building up to riser shafts.

STANDARDS

Basic design to Telcordia GR409-CORE / TIA/EIA 568B.3 / ICEA-S-83-596

FIRE PERFORMANCE

<table>
<thead>
<tr>
<th>Feature</th>
<th>Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Circuit Integrity</td>
<td>IEC 60331-25; BS 6387 CWZ; DIN VDE 0472-814(FE180); CEI 20-36/2-1; SS229-1; NBN C 30-004 (cat. F3); NF C32-070-2.3(CR1)</td>
</tr>
<tr>
<td>System circuit integrity</td>
<td>DIN 4102-12, E30 depending on lay system</td>
</tr>
<tr>
<td>Flame Retardance (Single Vertical Wire Test)</td>
<td>EN 60332-1-2; IEC 60332-1-2; BS EN 60332-1-2; VDE 0482-332-1 ; NBN C 30-004 (cat. F1); NF C32-070-2.1(C2); CEI 20-35/1-2; EN 50265-2-1*; DIN VDE 0482-265-2-1*</td>
</tr>
<tr>
<td>Reduced Fire Propagation (Vertically-mounted bundled wires &amp; cable test)</td>
<td>EN 60332-3-24 (cat. C); IEC 60332-3-24; BS EN 60332-3-24; VDE 0482-332-3; NBN C 30-004 (cat. F2); NF C32-070-2.2(C1); CEI 20-22/3-4; EN 50266-2-4*; DIN VDE 0482-266-2-4</td>
</tr>
<tr>
<td>Halogen Free</td>
<td>IEC 60754-1; EN 50267-2-1; DIN VDE 0482-267-2-1; CEI 20-37/2-1 ; BS 6425-1*</td>
</tr>
<tr>
<td>No Corrosive Gas Emission</td>
<td>IEC 60754-2; EN 50267-2-2; DIN VDE 0482-267-2-2; CEI 20-37/2-2 ; BS 6425-2*</td>
</tr>
<tr>
<td>Minimum Smoke Emission</td>
<td>IEC 61034-1&amp;2; EN 61034 -1&amp;2; DIN VDE 0482-1034-1&amp;2; CEI 20-37/3-1&amp;2; EN 50268-1&amp;2*; BS 7622-1&amp;2*</td>
</tr>
<tr>
<td>No Toxic gases</td>
<td>NES 02-713; NF C 20-454</td>
</tr>
</tbody>
</table>

Note: Asterisk * denotes superseded standard.
CABLE CONSTRUCTION

Optical fibers: Singlemode and multimode tight fibers, with tight buffer coating.  
Fire Barrier: The tight buffered fibers are wrapped with fire blocking fiber glass yarns.  
Inner Sheath(optional): Thermoplastic LSZH compound type LTS3 as per BS 7655-6.1  
Ripcord(optional): An optional ripcord can be located under the outer sheath to facilitate jacket removal.  
Armouring(optional):  
STA: Corrugated steel tape armour  
SWB: Steel wire braid  
Outer Sheath: Thermoplastic LSZH compound type LTS3 as per BS 7655-6.1 (Thermosetting LSZH compound type SW2-SW4 as per BS 7655-2.6 can be offered.)

PHYSICAL AND THERMAL PROPERTIES

Temperature range during operation (fixed state): -20°C - +60°C  
Temperature range during installation (mobile state): 0°C - +50°C  
Minimum bending radius: 10 times the outer diameter for unarmoured cables  
20 times the outer diameter for armoured cables

CONSTRUCTION PARAMETERS

<table>
<thead>
<tr>
<th>Cable Code</th>
<th>N° of Fibers</th>
<th>Nominal Overall Diameter</th>
<th>Max Tensile Strength</th>
<th>Minimum Bending Radius</th>
<th>Approx. Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTA-B-2-0-H-FR</td>
<td>2</td>
<td>7,6</td>
<td>250</td>
<td>76</td>
<td>55</td>
</tr>
<tr>
<td>MTA-B-4-0-H-FR</td>
<td>4</td>
<td>7,8</td>
<td>250</td>
<td>78</td>
<td>67</td>
</tr>
<tr>
<td>MTA-B-6-0-H-FR</td>
<td>6</td>
<td>8,6</td>
<td>400</td>
<td>86</td>
<td>77</td>
</tr>
<tr>
<td>MTA-B-8-0-H-FR</td>
<td>8</td>
<td>8,8</td>
<td>400</td>
<td>88</td>
<td>81</td>
</tr>
<tr>
<td>MTA-B-12-0-H-FR</td>
<td>12</td>
<td>9,3</td>
<td>400</td>
<td>93</td>
<td>90</td>
</tr>
</tbody>
</table>
TYPE CODES
MTA-B-C-D-E-F-G-H-FR

FR: Fire Resisting
Outer Sheath
2Y: PE
Y: PVC
H: LSZH

Armour
Blank: No armour
STA: Corrugated steel tape armour
SWB: Steel wire braid

Inner Sheath
2Y: PE
Y: PVC
H: LSZH

Central strength member
Blank: No Central strength member
A: Aramid yarn
F: Fiber reinforced plastic (FRP)

Sub Unit
0: No Sub Unit
Y: PVC
H: LSZH

C No of Fibers

Fiber Type
4: 50/125 um (OM3)  7: NZDS SM fiber per ITU-T G.656
5: 50/125 um (OM2)  8: NZDS SM fiber per ITU-T G.655
6: 62.5/125um (OM1) 9: Standard SM fiber per ITU-T G.652.D

Sub Unit Diameter
A: 0.9mm (up to 12 fibers)
B: 3.6mm (12-36 fibers)
C: 4.2mm (24-72 fibers)

GR-20/RUS 7
CFR1755.900 (REA PE-90)

ICEA S 87-640

Circuit Integrity
IEC 60331/BS 6387
NF C32-070-2.3(CR1)

Reduced Fire Propagation
NF C32-070-2.2(C1)
IEC60332-3-24/EN50266-2-4
IEC60332-1-2/EN50265-2-1

Flame Retardancy
NF C32-070-2.1(C2)
IEC60332-1-2/EN50265-2-1

Low Corrosivity
IEC 60754-2
EN50267-2-2/3
NF C 32-074

Low Smoke Emission
IEC 61034-1&2
EN 50268-1&2/NF C32-073

Zero
IEC60754-1
EN50267-2-1

Halogen Free
DIN 4102-12

Functional Integrity
DIN 4102-12

Low Toxicity
NES 02-713/NF C 20-454

Low Corrosivity
IEC 60754-2
EN50267-2-2/3
NF C 32-074