

E25: UC^{FIBRE} I/O CT LSHF-FR B2_{ca} 3.0kN

3000N, CT up to 24 fibres, glass yarns, FireRes® sheath



**B2_{ca}
CPR**

GENERAL INFO

This unitube cable can be used for LAN and WAN backbones, telecom access lines, fibre to business and fibre to the building drop connections; as well as fibre to the home drop and access connections.

Non-metallic rodent-proof unitube cable is with gel-filled tubes and water-blocked design making it well suited for installation in ducts and on trays indoor and limited outdoor use in ducts.

With its FireRes® sheathing with very high flame retardant performance, this cable is ideal for indoor installations.

CABLE FEATURES

- FO cable with central loose tube filled with gel for structured cabling.
- The cable is metal-free, longitudinally water blocked, rodent-proof with a tensile strength of 3.0kN.
- The jacket is made of halogen-free, flame-retardant material according to IEC60332-1 for use in public buildings with high personal risk and higher Euro fire class B2ca s1a d1 a1.
- Use outdoors in ducts and as a flame-retardant cable indoors.
- The fiber optic cable exceeds the requirements of EN50173-1, ISO/IEC11801 and EN/IEC60794-1.

More information on fiber optic cable applications: [read more](#)

Latest version of this data sheet is available for download: [ProductFamily239159](#)

CERTIFICATIONS AND DESIGN STANDARDS



EN 50399 Class B2ca-s1a-d1-a1

ISO/IEC 11801

EN 50173

IEC 60332-1-2

EN 50575

IEC 60794-1-1

IEC 60794-1-21

IEC 60794-1-22

IEC 60754-2

IEC 60794-6-10

IEC 61034-2

IEC 60332-3-24

Common test methods for cables under fire conditions

Generic telecom cabling for customer premises

Information technology - Generic cabling systems

Single wire fire test

Cables in construction works subject to reaction to fire

Generic Specification Fibre Optic Cables

Mechanical Test Methods

Environmental Test Procedures

Weighted Values of pH and Conductivity

Family specification for universal indoor-outdoor cables

Smoke Density

Bundled fire test

APPLICATION PROPERTIES

| | |
|---|--|
| Resistant to UV | UV stabilised |
| Outdoor installation With rodent protection | Yes |
| Operation temperature (min) [°C]* | -40 and (max) [°C] 70 |
| Installation temperature (min) [°C] | -15 and (max) [°C] 60 |
| Storage temperature (min) [°C] | -30 and (max) [°C] 60 |
| Bending radius (rule) | During installation (loaded) = 20xOD, Permanent (unloaded) = 10xOD |

*Temperature range recommended for cable installation, operation and storage tested according to the IEC 60794-1-22 F1.

CABLE CONSTRUCTION

| | |
|---|--|
| Type of tube | Gel-filled loose tube Ø2.8mm for 2fo up to 24fo |
| Longitudinal water blocking cable and Radial water blocking cable | Yes |
| Rip cord | Yes |
| Armouring/reinforcement | E-glass yarns |
| Material outer sheath | 1.5mm, Low smoke zero halogen, FireRes® |
| Cable shape | Round |
| Cable marking example | Draka UCFIBRE I/O CT LSHF-FR B2ca-s1a-d1-a1 3.0 kN 'Fibre count' 'Fibre type' 'Fibre brand' 'Item No' 'Factory Code' 'Batch Number' 'Meter mark' U-DQ(ZN)BH 'Fibre count' 'Fibre family' 'Mode field diameter' /125 'Transmission Class' |

IDENTIFICATION

| | | |
|---|-------------|--------------------------------|
| Fibre colour code <i>in accordance with IEC 60794-2 and VDE 0888 read more</i> | 1 Red | 13 Red w/mark every 70mm |
| | 2 Green | 14 Green w/mark every 70mm |
| | 3 Blue | 15 Blue w/mark every 70mm |
| | 4 Yellow | 16 Yellow w/mark every 70mm |
| | 5 White | 17 White w/mark every 70mm |
| | 6 Grey | 18 Grey w/mark every 70mm |
| | 7 Brown | 19 Brown w/mark every 70mm |
| | 8 Violet | 20 Violet w/mark every 70mm |
| | 9 Turquoise | 21 Turquoise w/mark every 70mm |
| | 10 Black | 22 White w/mark every 35mm |
| | 11 Orange | 23 Orange w/mark every 70mm |
| | 12 Pink | 24 Pink w/mark every 70mm |

| | |
|--|--|
| Sheath color | Cable with SM fibres: BendBrightXSG.657.A2, BendBright G.657.A1 Yellow, RAL 1018 |
| | Cable with mixed fibre types (hybrid) Blue, RAL 5015 |
| | Cable with OM1 Grey, RAL 7037 |
| | Cable with MaxCap-BendBright-OM2 Orange, RAL 2009 |
| | Cable with MaxCap-BendBright-OM3 Aqua, RAL 6027 |
| | Cable with MaxCap-BendBright-OM4 Erika-Violet, RAL 4003 |
| Cable with BendBright WideCap-OM5 Lime-Green, RAL 6039 | |

MECHANICAL PROPERTIES

| | | |
|---|--------------------|---|
| Nominal outer diameter | | 7.5 mm |
| Cable weight | | 73 kg/km |
| Fire load | | 1,220 MJ/km |
| Crush test (1min, reversible) | IEC 60794-1-21 E3 | 3,000 N/10cm |
| Torsion test | IEC 60794-1-21 E7 | 5 cycles ±1turn |
| Impact test | IEC 60794-1-21 E4 | 20 N·m |
| Max. tensile strength during installation | IEC 60794-1-21 E1 | 3,000 N |
| Permanent tensile strength | IEC 60794-1-21 E1 | 1,000 N |
| Kink test | IEC 60794-1-21 E10 | The cables do not form a kink when a loop is drawn together to a diameter 20 times the cable nominal diameter |
| Water penetration | IEC 60794-1-22 | No water on free end |

FIRE PROPERTIES

| | |
|---|--------------------------------------|
| Flame retardant | In accordance with EN/IEC 60332-3-24 |
| Reaction-to-fire class (acc. EN 13501-6) | B2ca |
| Smoke development class (acc. EN 13501-6) | s1a |
| Euro class flaming droplets/particles (acc. EN 13501-6) | d1 |
| Euro class acidity (acc. EN 13501-6) | a1 |

ORDERING DETAILS

| Product name | Number of fibres | Category (fibre) | Fibre datasheet | DOP number | SAP code |
|--|------------------|------------------|-----------------|------------|----------|
| UCFIBRE I/O CT LSHF-FR B2 3KN 6 SM7A1 YL | 6 | OS2 | C17 | 1015950 | 60101149 |
| UCFIBRE I/O CT LSHFFR B2 3KN 8 SM7A1 | 8 | OS2 | C17 | 1011991 | 60090925 |
| UCFIBRE I/O CT LSHFFR B2 3KN 12 SM7A1 YL | 12 | OS2 | C17 | 1010671 | 60083198 |
| UCFIBRE I/O CT LSHFFR B2 3KN 24 SM7A1 YL | 24 | OS2 | C17 | 1010672 | 60083199 |
| UCFIBRE I/O CT LSHFFR B2 3KN 8 OM2B OR | 8 | OM2 | C34 | 1011980 | 60090910 |
| UCFIBRE I/O CT LSHFFR B2 3KN 12 OM2B OR | 12 | OM2 | C34 | 1011990 | 60090911 |
| UCFIBRE I/O CT LSHFFR B2 3KN 24 OM2B OR | 24 | OM2 | C34 | 1011982 | 60090912 |
| UCFIBRE I/O CT LSHFFR B2 3KN 4 OM3B AQ | 4 | OM3 | C31 | 1010613 | 60083160 |
| UCFIBRE I/O CT LSHFFR B2 3KN 8 OM3B AQ | 8 | OM3 | C31 | 1011983 | 60090913 |
| UCFIBRE I/O CT LSHFFR B2 3KN 12 OM3B AQ | 12 | OM3 | C31 | 1011299 | 60087031 |
| UCFIBRE I/O CT LSHFFR B2 3KN 24 OM3B AQ | 24 | OM3 | C31 | 1010612 | 60083159 |
| UCFIBRE I/O CT LSHFFR B2 3KN 2 OM4B 4003 | 2 | OM4 | C32 | 1015104 | 60098236 |
| UCFIBRE I/O CT LSHFFR B2 3KN 4 OM4B 4003 | 4 | OM4 | C32 | 1015200 | 60098261 |
| UCFIBRE I/O CT LSHFFR B2 3KN 8 OM4B EV | 8 | OM4 | C32 | 1011984 | 60090914 |
| UCFIBRE I/O CT LSHFFR B2 3KN 12 OM4B EV | 12 | OM4 | C32 | 1011681 | 60083157 |
| UCFIBRE I/O CT LSHFFR B2 3KN 24 OM4B EV | 24 | OM4 | C32 | 1011090 | 60085428 |

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