

## R01: UC<sup>FIBRE</sup> I/O CT CST LSHF-FR CI C<sub>ca</sub> 3.0kN

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



### GENERAL INFO

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

With its FireRes® sheathing this cable is ideal for indoor installations.

It is CPR Class Cca cable with high flame retardant and high fire-resistant performances.

The cable with corrugated steel tape armoring is rodent proof.

The cable is well suited for installation in ducts and on trays indoor and shorter outdoor applications.

### CABLE FEATURES

- FO cable with central loose tube filled with gel for structured cabling.
- The cable is UV-resistant, with steel tape armoring, longitudinally water blocked and rodent-protected with a tensile strength of 3.0kN.
- The jacket is made of halogen-free, flame-retardant material according to IEC60332-1-2; IEC60754-1; IEC60754-2; IEC61034-2; EN50399 for use in public buildings with high personal risk and higher Euro fire class Cca s1a d1 a1.
- Fire resistant cable Circuit Integrity according to IEC 60331-25 and EN 50200 PH120.
- Use outdoors for duct installation 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: [ProductFamily377131](#)

### CERTIFICATIONS AND DESIGN STANDARDS



**EN 50399 Class Cca-s1a-d1-a1**

**ISO/IEC 11801**

**EN 50173**

**IEC 60332-1-2**

**IEC 60332-3-24**

**EN 50575**

**IEC 60794-1-1**

**IEC 60794-1-21**

**IEC 60794-1-22**

**IEC 60754-1**

**IEC 60754-2**

**IEC 61034-2**

**EN 50200**

**IEC 60331-25**

Common test methods for cables under fire conditions

Generic telecom cabling for customer premises

Information technology - Generic cabling systems

Single wire fire test

Bundled fire test

Cables in construction works subject to reaction to fire

Generic Specification Fibre Optic Cables

Mechanical Test Methods

Environmental Test Procedures

Toxicity

Weighted Values of pH and Conductivity

Smoke Density

Fire resistance at 830°C during 120min + mechanical impacts

Fire resistance at 750°C during 120min + 15min cooling down

## 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]	-20 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	Central tube cable with Ø2.8 mm gel-filled loose tube up to 24fo
Longitudinal water blocking cable	Yes*
Armouring/reinforcement	Steel, galvanised, Armouring tape
Material outer sheath	1.5mm, Low smoke zero halogen, FireRes®
Cable shape	Round
Cable marking example	Draka UCFIBRE I/O CT CST LSHF-FR CI Cca-s1a-d1-a1 3.0 kN "Fibre count" "Fibre type" "Fibre brand" "Item No" "Factory Code" "Batch Number" "Meter mark" U-D(ZN)(SR)H "Fibre count" "Fibre family" "Mode field diameter"/125 "Transmission Class"

\* Longitudinal water blocking test method according to IEC 60794-1-22 F5B and limited to the gel filled cable core.

## IDENTIFICATION

Fiber color code	1 Red	13 Red w/mark every 70mm
<i>in accordance with IEC 60794-3 and VDE 0888</i>	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 Rose	24 Rose w/mark every 70mm
Colour outer sheath	Orange, RAL 2003	

## MECHANICAL PROPERTIES

Nominal outer diameter		8.5 mm
Cable weight		100 kg/km
Fire load		1,182 MJ/km
Crush test	IEC 60794-1-21 E3	2,200 N/10cm
Torsion test *	IEC 60794-1-21 E7	5 cycles ±1turn
Impact test	IEC 60794-1-21 E4	30 N·m
Max. tensile strength during installation	IEC 60794-1-21 E1	3,000 N
Permanent tensile strength		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.

\* Standard torsion test uses 39N weight for real installation approach.

## FIRE PROPERTIES

Insulation integrity	PH 120
Insulation integrity (acc. IEC 60331)	Yes
Flame retardant	In accordance with EN/IEC 60332-3-24
Halogen free	acc. IEC/EN 60754-1/2
Low smoke	acc. IEC/EN 61034-2
Reaction-to-fire class (acc. EN 13501-6)	Cca
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 CST LSHF-FR CI 4 SM7A1 2003	4	OS2	C17		R01-4SM7A1
UCFIBRE I/O CT CST LSHF-FR CI 6 SM7A1 2003	6	OS2	C17		R01-6SM7A1
UCFIBRE I/O CT CST LSHF-FR CI 8 SM7A1 2003	8	OS2	C17		R01-8SM7A1
UCFIBRE I/O CT CST LSHF-FR CI 12 SM7A1 2003	12	OS2	C17	1014731	60095451
UCFIBRE I/O CT CST LSHF-FR CI 16 SM7A1 2003	16	OS2	C17		R01-16SM7A1
UCFIBRE I/O CT CST LSHF-FR CI 24 SM7A1 2003	24	OS2	C17		R01-24SM7A1
UCFIBRE I/O CT CST LSHF-FR CI 4 OM2B 2003	4	OM2	C34		R01-4OM2
UCFIBRE I/O CT CST LSHF-FR CI 12 OM2B 2003	12	OM2	C34		R01-12OM2
UCFIBRE I/O CT CST LSHF-FR CI 24 OM2B 2003	24	OM2	C34		R01-24OM2
UCFIBRE I/O CT CST LSHF-FR CI 4 OM3B 2003	4	OM3	C31		R01-4OM3
UCFIBRE I/O CT CST LSHF-FR CI 8 OM3B 2003	8	OM3	C31	1014728	60096406
UCFIBRE I/O CT CST LSHF-FR CI 12 OM3B 2003	12	OM3	C31		R01-12OM3
UCFIBRE I/O CT CST LSHF-FR CI 24 OM3B 2003	24	OM3	C31		R01-24OM3
UCFIBRE I/O CT CST LSHF-FR CI 4 OM4B 2003	4	OM4	C32		R01-4OM4
UCFIBRE I/O CT CST LSHF-FR CI 12 OM4B 2003	12	OM4	C32		R01-12OM4
UCFIBRE I/O CT CST LSHF-FR CI 24 OM4B 2003	24	OM4	C32		R01-24OM4
UCFIBRE I/O CT CST LSHF-FR CI 4 OM5B 2003	4	OM5	C39		R01-4OM5
UCFIBRE I/O CT CST LSHF-FR CI 12 OM5B 2003	12	OM5	C39		R01-12OM5
UCFIBRE I/O CT CST LSHF-FR CI 24 OM5B 2003	24	OM5	C39		R01-24OM5
UCFIBRE I/O CT CST LSHF-FR CI 4 MM61 2003	4	OM1	C02	1014720	60095236
UCFIBRE I/O CT CST LSHF-FR CI 12 MM61 2003	12	OM1	C02		R01-12OM1
UCFIBRE I/O CT CST LSHF-FR CI 24 MM61 2003	24	OM1	C02		R01-24OM1

\*Items with C17 fibre datasheet available also with SM2D G.652.D/SM7A1 BendBright printing.

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