

# E22: UC<sup>FIBRE</sup> I/O CT LSHF-FR C<sub>ca</sub> 3.0kN

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



## GENERAL INFO

Fibre optic cable with central loose tube filled with gel and up to 24 fibres for structured cabling. It features 3000N tensile strength for indoor and outdoor applications and dielectric design with glass yarns armour, longitudinally water blocked, rodent-proof and FireRes® sheath with high flame retardant performance, ideal for indoor installations. 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. DIN/VDE: U-DQ(ZN)BH

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

Latest version of this data sheet is available for download: [ProductFamily239136](#)

## CERTIFICATIONS AND DESIGN STANDARDS



**IEC 60794-1-22**  
**IEC 60794-1-21**  
**IEC 60794-1-1**  
**EN 50575**  
**ISO/IEC 11801**  
**EN 50173**  
**IEC 60794-6-10**

Environmental Test Procedures  
Mechanical Test Methods  
Generic Specification Fibre Optic Cables  
Cables in construction works subject to reaction to fire  
Generic telecom cabling for customer premises  
Information technology - Generic cabling systems  
Family specification for universal indoor-outdoor cables

## 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 FI.

## CABLE CONSTRUCTION

Type of tube	Gel-filled loose tube Ø2.8mm for 2fo up to 24fo
Longitudinal water blocking construction	Yes
Rip cord	Yes
Armouring/reinforcement	E-glass yarns
Material outer sheath	Low smoke zero halogen, FireRes®
Cable marking example	UCFIBRE I/O CT LSHF-FR Cca-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	1 Red	13 Red w/mark every 70mm
<i>in accordance with IEC 60794-2 and VDE 0888 <a href="#">read more</a></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 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		1,213 MJ/km
Crush test (Imin, 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 F5B	No water on free end

## FIRE PROPERTIES

Flame retardant	acc. IEC/EN 60332-3-24
Halogen free	acc. IEC/EN 60754-2
Low smoke	acc. IEC/EN 61034-2
The reaction to fire according to the EN 50575	Cca - s1a, d1, a1

## ORDERING DETAILS

Product name	Number of fibres	Category (fibre)	Fibre datasheet	DOP number	SAP code
UCFIBRE I/O CT LSHF-FR C 3KN 4 SM7A1 YL	4	OS2	C17		E22-4SM7A1
UCFIBRE I/O CT LSHF-FR C 3KN 6 SM7A1 YL	6	OS2	C17		E22-6SM7A1
UCFIBRE I/O CT LSHF-FR C 3KN 8 SM7A1 YL	8	OS2	C17	1010577	60083169
UCFIBRE I/O CT LSHF-FR C 3KN 12 SM7A1	12	OS2	C17		E22-12SM7A1
UCFIBRE I/O CT LSHF-FR C 3KN 24 SM7A1	24	OS2	C17		E22-24SM7A1
UCFIBRE I/O CT LSHF-FR CCA 3KN 6 SM7B YL	6	OS2	C24	1013050	60093291
UCFIBRE I/O CT LSHF-FR C 12 SM7A1.P YL	12	OS2	C24	1010600	60083120
UCFIBRE I/O CT LSHF-FR C 3KN 8 OM2B OR	8	OM2	C34	1010651	60083173
UCFIBRE I/O CT LSHF-FR C 3KN 12 OM2B OR	12	OM2	C34	1010568	60083118
UCFIBRE I/O CT LSHF-FR C 3KN 24 OM2B OR	24	OM2	C34	1010621	60083129
UCFIBRE I/O CT LSHF-FR C 3.0KN 6 OM3B AQ	6	OM3	C31	1010623	60083133
UCFIBRE I/O CT LSHF-FR C 3KN 8 OM3B AQ	8	OM3	C31	1010579	60083171
UCFIBRE I/O CT LSHF-FR C 3KN 12 OM3B AQ	12	OM3	C31	1010571	60083163
UCFIBRE I/O CT LSHF-FR C 3KN 24 OM3B AQ	24	OM3	C31	1010573	60083165
UCFIBRE I/O CT LSHF-FR C 3KN 4 OM4B EV	4	OM4	C32	1010578	60083170
UCFIBRE I/O CT LSHF-FR C 3KN 8 OM4B EV	8	OM4	C32	1010650	60083172
UCFIBRE I/O CT LSHF-FR C 3KN 12 OM4B EV	12	OM4	C32	1010569	60083119
UCFIBRE I/O CT LSHF-FR C 24 OM4B EV	24	OM4	C32	1010622	60083130
UCFIBRE I/O CT LSHF-FR C 3KN 12 OM5	12	OM5	C39		E22-12OEM5
UCFIBRE I/O CT LSHF-FR C 3KN 8 MM61 SL	8	OM1	C02	1010697	60084238
UCFIBRE I/O CT LSHF-FR C 3KN 12 MM61 SL	12	OM1	C02	1010620	60083128
UCFIBRE I/O CT LSHF-FR C 3KN 24 MM61 SL	24	OM1	C02	1010698	60084239