

R02: UC^{FIBRE} I/O CT CST LSHF-FR CI B2_{ca} 3.0KN

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



B2_{ca}
CPR

GENERAL INFO

3000N, In/Out, Class B2ca-s1a-d1-a1, gel-filled, water-blocked central tube cable, up to 24 fibres, glass yarn, steel tape armoring and FireRes® sheath. DIN/VDE:U-D(ZN)(SR)H

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 B2ca 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 B2ca-s1a-d1-a1

ISO/IEC 11801

EN 50173

IEC 60332-1-2

EN 50200

IEC 60331-25

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

Common test methods for cables under fire conditions

Generic telecom cabling for customer premises

Information technology - Generic cabling systems

Single wire fire test

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

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

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

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	Corrugated Steel, galvanised tape + glass Yarns
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 B2ca-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	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.

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)	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 CST LSHF-FR CI B2 6 SM7A1 2003	6	OS2	C17		R02-6SM7A1
UCFIBRE IO CT CST LSHFFR CI B2 8 SM7A1	8	OS2	C17	1016035	60102065
UCFIBRE IO CT CST LSHFFR CI B2 12 SM7A1	12	OS2	C17	1016036	60102066
UCFIBRE I/O CT CST LSHF-FR CI B2 16 SM7A1 2003	16	OS2	C17		R02-16SM7A1
UCFIBRE IO CT CST LSHFFR CI B2 24 SM7A1	24	OS2	C17	1016033	60102000
UCFIBRE I/O CT CST LSHF-FR CI B2 4 OM2B 2003	4	OM2	C34		R02-4OM2B
UCFIBRE I/O CT CST LSHF-FR CI B2 12 OM2B 2003	12	OM2	C34		R02-12OM2B
UCFIBRE I/O CT CST LSHF-FR CI B2 24 OM2B 2003	24	OM2	C34		R02-24OM2B
UCFIBRE I/O CT CST LSHF-FR CI B2 4 OM3B 2003	4	OM3	C31		R02-4OM3B
UCFIBRE IO CT CST LSHFFR CI B2 8 OM3B OR	8	OM3	C31	1016032	60102029
UCFIBRE IO CT CST LSHFFR CI B2 12 OM3B	12	OM3	C31	1016031	60102010
UCFIBRE IO CT CST LSHFFR CI B2 24 OM3B	24	OM3	C31	1016034	60102036
UCFIBRE I/O CT CST LSHF-FR CI B2 4 OM4B 2003	4	OM4	C32		R02-4OM4B
UCFIBRE IO CT CST LSHFFR CI B2 12 OM4B	12	OM4	C32	1016315	60103718
UCFIBRE I/O CT CST LSHF-FR CI B2 24 OM4B 2003	24	OM4	C32		R02-24OM4B
UCFIBRE I/O CT CST LSHF-FR CI B2 4 OM5B 2003	4	OM5	C39		R02-4OM5B
UCFIBRE I/O CT CST LSHF-FR CI B2 12 OM5B 2003	12	OM5	C39		R02-12OM5B
UCFIBRE I/O CT CST LSHF-FR CI B2 24 OM5B 2003	24	OM5	C39		R02-24OM5B
UCFIBRE I/O CT CST LSHF-FR CI B2 4 MM61 2003	4	OM1	C02		R02-4MM61
UCFIBRE I/O CT CST LSHF-FR CI B2 12 MM61 2003	12	OM1	C02		R02-12MM61

ORDERING DETAILS

Product name	Number of fibres	Category (fibre)	Fibre datasheet	DOP number	SAP code
UCFIBRE I/O CT CST LSHF-FR CI B2 24 MM61 2003	24	OM1	C02		R02-24MM61

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