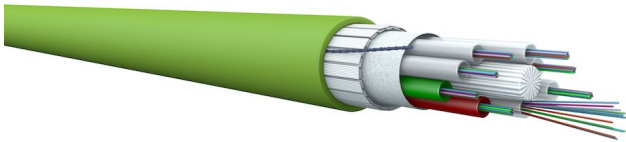


N14a: UC^{FIBRE} I/O ST LSHF-FR C_{ca} 5.0KN

5000N, universal, ST, up to 432f, LWB, FireRes® sheath



GENERAL INFO

Universal indoor/outdoor cable metal-free for LAN, MAN and WAN backbones. With its FireRes® LSHF-FR sheathing this cable is ideal for mixed indoor and limited outdoor installation. It is equally suited for installation in ducts and on trays. With a degree of rodent protection, effective in many cases, this innovative cable is Class-Cca approved, highly flame retardant with gel-filled tubes and water-blocked characteristics, for use in public buildings with a high personal risk.

Latest version of this data sheet is available for download: [ProductFamily405154](#)

CERTIFICATIONS AND DESIGN STANDARDS



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

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

APPLICATION PROPERTIES

Resistant to UV
 Outdoor installation With rodent protection
 Operation temperature (min) [°C]
 Installation temperature (min) [°C]
 Storage temperature (min) [°C]
 Bending radius (rule)

UV stabilised
 Yes
 -40 and (max) [°C] 70
 -20 and (max) [°C] 60
 -30 and (max) [°C] 60
 During installation (loaded) = 20xOD, Permanent (unloaded) = 10xOD

MECHANICAL PROPERTIES

Crush	IEC 60794-1-21 E3	2,500 N/10cm
Max. tensile strength during installation	IEC 60794-1-21 E1	5,000 N
Permanent tensile strength	IEC 60794-1-21 E1	1,800 N
Impact test	IEC 60794-1-21 E4	20 N·m
Torsion test	IEC 60794-1-21 E7	5 cycles ±1turn
Kink	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.

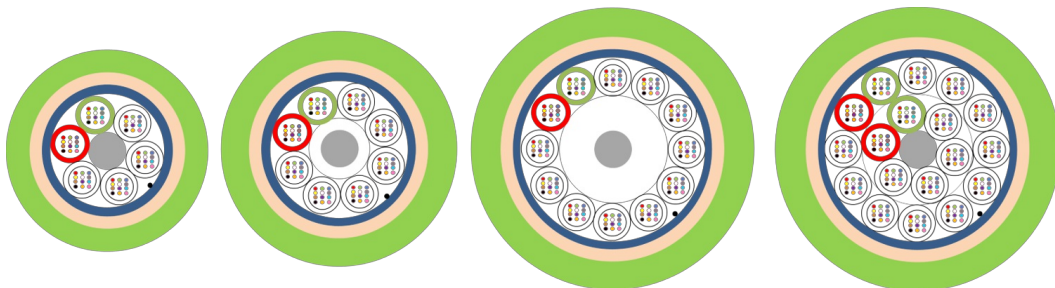
FIRE PROPERTIES

Flame retardant	acc. IEC/EN 60332-1-2, EN 50399
Halogen free	acc. IEC/EN 60754-2
Low smoke	acc. IEC/EN 61034-2
The reaction to fire according to the EN 50575	Cca - s1, d1, a1

* The measurement of smoke density of cables burning under defined conditions according to the IEC 61034-2 applies only to the 12fo up to 192fo counts.

CABLE CONSTRUCTION

Type of tube	Stranded construction with Ø2.3 mm gel-filled loose tubes with 12 fibres each for up 144fo and Ø2.8 mm gel-filled loose tubes with 24 fibres each for over 144fo cables.
Longitudinal water blocking cable	Yes
Rip cord	Yes
Material outer sheath	1.5mm, Low smoke zero halogen, FireRes®
Cable shape	Round
Cable marking example	PRYSMIAN UCFIBRE I/O ST LSHF-FR Cca-s1-d1-a1 5.0 kN 'Fibre count' 'Fibre type' 'Fibre brand' 'Item No' 'Factory No' 'Batch Number' 'Meter mark' U-DQ(ZN)BH 'Number of Elements' x 'Fibre count per element' '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 read more</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
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CABLE DETAILS

Number of fibres	Number of fibres per tube	Nominal outer diameter [mm]	Min. bending radius, fixed [mm]	Min. permitted bending radius, during cable laying [mm]	Cable weight [kg/km]	Fire load [MJ/km]
12	12	11.2	112	224	117	1,925
24	12	11.2	112	224	120	1,804
48	12	11.2	112	224	127	1,934
72	12	11.2	112	224	137	2,064
96	12	12.7	128	256	167	2,522
144	12	15.6	156	312	257	3,191
288	24	19	185	370	362	4,832
432	24	19	185	370	330	6,939

ORDERING DETAILS

Product name	Number of fibres	Category (fibre)	Fibre datasheet	Colour outer sheath	DOP number	SAP code
UCFIBRE I/O ST LSHF-FR C 5.0KN 24 SM7A1	24	OS2	C17	Yellow	1016155	60102762
UCFIBRE I/O ST LSHF-FR C 5kN 48 SM7A1 YL	48	OS2	C17	Yellow	1016347	60103731
UCFIBRE I/O ST LSHF-FR C 5.0KN 72 SM7A1	72	OS2	C17	Yellow	1016203	60102802
UCFIBRE I/O ST LSHF-FR C 5kN 288 SM7A1 YL	288	OS2	C17	Yellow	1016261	60103810
UCFIBRE I/O ST LSHF-FR 5kN 432 SM7A1 YL	432	OS2	C17	Yellow	1016317	60104094
UCFIBRE I/O ST LSHF-FR C 5kN 12 SM7A2	12	OS2	C24	Yellow	-	N14a-12SM7A2
UCFIBRE I/O ST LSHF-FR C 5kN 24 SM7A2	24	OS2	C24	Yellow	-	N14a-24SM7A2
UCFIBRE I/O ST LSHF-FR C 5kN 48 SM7A2	48	OS2	C24	Yellow	-	N14a-48SM7A2
UCFIBRE I/O ST LSHF-FR C 5kN 96 SM7A2	96	OS2	C24	Yellow	-	N14a-96SM7A2
UCFIBRE I/O ST LSHF-FR C 5kN 144 SM7A2	144	OS2	C24	Yellow	-	N14a-144SM7A2
UCFIBRE I/O ST LSHF-FR C 5kN 288 SM7A2	288	OS2	C24	Yellow	-	N14a-288SM7A2
UCFIBRE I/O ST LSHF-FR C 5kN 432 SM7A2	432	OS2	C24	Yellow	-	N14a-432SM7A2
UCFIBRE I/O ST LSHF-FR C 5kN 96 SM7A1	96	OS2	C53	Yellow	-	N14a-96SM7A1
UCFIBRE I/O ST LSHF-FR C 5kN 432 SM7A1	432	OS2	C53	Yellow	-	N14a-432SM7A1
UCFIBRE I/O ST LSHF-FR C 5kN 24 OM3B	24	OM3	C31	Turquoise	-	N14a-24OM3B
UCFIBRE I/O ST LSHF-FR C 5kN 48 OM3B	48	OM3	C31	Turquoise	-	N14a-48OM3B
UCFIBRE I/O ST LSHF-FR C 5kN 96 OM3B	96	OM3	C31	Turquoise	-	N14a-96OM3B
UCFIBRE I/O ST LSHF-FR C 5kN 144 OM3B	144	OM3	C31	Turquoise	-	N14a-144OM3B
UCFIBRE I/O ST LSHF-FR C 5kN 288 OM3	288	OM3	C31	Turquoise	-	N14a-288OM3B
UCFIBRE I/O ST LSHF-FR C 5kN 12 OM4B	12	OM4	C32	Erika-violet	-	N14a-12OM4B

ORDERING DETAILS

Product name	Number of fibres	Category (fibre)	Fibre datasheet	Colour outer sheath	DOP number	SAP code
UCFIBRE I/O ST LSHF-FR C 5kN 24 OM4B	24	OM4	C32	Erika-violet	-	N14a-24OM4B
UCFIBRE I/O ST LSHF-FR C 5kN 96 OM4B	96	OM4	C32	Erika-violet	-	N14a-96OM4B
UCFIBRE I/O ST LSHF-FR C 5kN 144 OM4B	144	OM4	C32	Erika-violet	-	N14a-144OM4B
UCFIBRE I/O ST LSHF-FR C 5kN 24 OM5B	24	OM5	C39	Lime green	-	N14a-24OM5B
UCFIBRE I/O ST LSHF-FR C 5kN 96 OM5B	96	OM5	C39	Lime green	-	N14a-96OM5B
UCFIBRE I/O ST LSHF-FR C 5kN 144 OM5B	144	OM5	C39	Lime green	-	N14a-144OM5B

*DoP Numbers are per product code and any DoP number proves CPR approval for the cable. DoP files can be downloaded from the website: [DoP](#)

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