

UC^{FIBRE™} | DIN LSHF-FR ES9

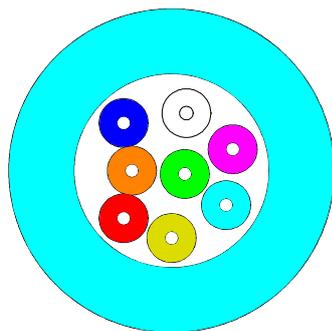
ES9 tight buffer, 2 – 24 fibre, aramid yarns, FireRes[®] sheath

DIN/VDE J-V(ZN)H

NO

FR COMTLK

DK D02



Application and Installation

This distribution or mini-break-out cable can be used for many indoor applications.

The cable features Draka's ES9 tight buffer.

Typical cable applications include: LAN and WAN backbones, central office interconnections, backbones in data centres, and many other.

The cable features aramid yarns for ease of installation.

The cable is suited for installation in ducts and on trays.

The cable features an UV stabilised, water and moisture resistant FireRes[®] sheathing, the cable is thus well suited for shorter outdoor runs.

Standards

EN 187 000
IEC 60794-2
IEC 60794-2-20
ISO 11801 2nd edition
EN 50 173-1

Construction

Fibre	2 - 24 tightly buffered fibres 900 µm ± 50 µm.		
Fibre colour code	1	Red	13 Yellow w/mark every 70 mm
	2	Green	14 White w/mark every 70 mm
	3	Blue	15 Grey w/mark every 70 mm
	4	Yellow	16 Turquoise w/mark every 70 mm
	5	White	17 Orange w/mark every 70 mm
	6	Grey	18 Pink w/mark every 70 mm
	7	Brown	19 Yellow w/mark every 35 mm
	8	Violet	20 White w/mark every 35 mm
	9	Turquoise	21 Grey w/mark every 35 mm
	10	Black	22 Turquoise w/mark every 35 mm
	11	Orange	23 Orange w/mark every 35 mm
	12	Pink	24 Pink w/mark every 35 mm
Strength member	Ultra high modulus aramid yarns		

Note: The Draka policy of continuous improvement may cause in changed specifications without prior notice

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Sheath colours	Cable with SM fibres	Yellow, RAL 1021
	Cable with MaxCap-BB-OM2	Orange, RAL 7037
	Cable with OM1 fibres	Grey, RAL 2003
	Cable with MaxCap-BB-OM3 and MaxCap-BB-OM4	Aqua, RAL 6027
Sheath	Halogen free, flame resistant thermoplastic sheathing compound acc. to EN 50290-2-27, UV stabilised	

Fire rating

IEC 60332-1-2	Single vertical wire test
IEC 60332-3-24 = IEC 332-3C	Vertically-mounted bunched wires and cables
IEC 60754-1	No halogens
IEC 60754-2	No acid matters
IEC 61034-2	No dense smoke

Heat of combustion

2	370 MJ/km	0.10 KWh/m
4	475 MJ/km	0.13 KWh/m
6	575 MJ/km	0.16 KWh/m
8	660 MJ/km	0.18 KWh/m
12	900 MJ/km	0.25 KWh/m
16	1000 MJ/km	0.28 KWh/m
24	1400 MJ/km	0.39 KWh/m

Physical properties

IEC 60974-1-2

Property	Test method	Value	
Permanent tensile strength	E1	2, 4, 6 and 8 fibres	280 N
		12 and 16 fibres	340 N
		24 fibres	400 N
Short term tensile strength (some days)	E1	2, 4, 6 and 8 fibres	560 N
		12 and 16 fibres	680 N
		24 fibres	800 N
Maximum installation load (a few hours)	-	2, 4, 6 and 8 fibres	1000 N
		12 and 16 fibres	1200 N
		24 fibres	1500 N
Impact	E4	20 J	
Crush (compressive strength)	E3	3000 N/ 100 mm	
Torsion	E7	5 cycles ± 1 turn	
Temperature range	F1	Operation and installation	-20 °C to 70 °C
		Storage	-40 °C to 70 °C

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Mechanical properties

Fibre count	Nominal diameter	Nominal cable weight	Minimum bending radius Long term/short term
2	4.5 mm	21 kg/km	100/50 mm
4	5 mm	26 kg/km	100/50 mm
6	5.5 mm	30 kg/km	100/50 mm
8	6 mm	35 kg/km	100/50 mm
12	6.5 mm	45 kg/km	130/75 mm
16	7 mm	50 kg/km	130/75 mm
24	8 mm	65 kg/km	230/115 mm

Sheath marking

Draka UC^{FIBRE} | DI N LSHF-FR ES9 <fibre count> <Fibre type><Fibre brand><Item No>05<Batch Number><Meter mark> J-V(ZN)H <fibre count> <Fibre family> <Mode field diameter> /125 <Transmission Class>

There is approximately 10cm space between the three blocks of text. Text string repeats every meter of the cable.

Product codes – ordering information

Item No.	Fibre count	Product code	Fibre type	Fibre data sheet
1020481	2	UC ^{FIBRE} DI LSHF-FR ES9 2 OM2B	MaxCap-BB-OM2 50/125	C34
1018952	4	UC ^{FIBRE} DI LSHF-FR ES9 4 OM2B	MaxCap-BB-OM2 50/125	C34
1020001	6	UC ^{FIBRE} DI LSHF-FR ES9 6 OM2B	MaxCap-BB-OM2 50/125	C34
1020002	8	UC ^{FIBRE} DI LSHF-FR ES9 8 OM2B	MaxCap-BB-OM2 50/125	C34
1019028	12	UC ^{FIBRE} DI LSHF-FR ES9 12 OM2B	MaxCap-BB-OM2 50/125	C34
1020003	24	UC ^{FIBRE} DI LSHF-FR ES9 24 OM2B	MaxCap-BB-OM2 50/125	C34
1020008	4	UC ^{FIBRE} DI LSHF-FR ES9 4 OM3B	MaxCap-BB-OM3	C31
1020009	12	UC ^{FIBRE} DI LSHF-FR ES9 12 OM3B	MaxCap-BB-OM3	C31
1020004	4	UC ^{FIBRE} DI LSHF-FR ES9 4 MM61	OM1 62.5/125 multi mode	C02
1020005	6	UC ^{FIBRE} DI LSHF-FR ES9 6 MM61	OM1 62.5/125 multi mode	C02
1020006	8	UC ^{FIBRE} DI LSHF-FR ES9 8 MM61	OM2 62.5/125 multi mode	C02
1020007	12	UC ^{FIBRE} DI LSHF-FR ES9 12 MM61	OM1 62.5/125 multi mode	C02
1020010	4	UC ^{FIBRE} DI LSHF-FR ES9 4 SM2D	OS2 single mode	C03e
1020011	6	UC ^{FIBRE} DI LSHF-FR ES9 6 SM2D	OS2 single mode	C03e
1020012	8	UC ^{FIBRE} DI LSHF-FR ES9 8 SM2D	OS2 single mode	C03e
1020013	12	UC ^{FIBRE} DI LSHF-FR ES9 12 SM2D	OS2 single mode	C03e
1020014	24	UC ^{FIBRE} DI LSHF-FR ES9 24 SM2D	OS2 single mode	C03e
1018987	12	UC ^{FIBRE} D LSHF-FR ES9 12 SM7B	BendBright [®] XS G.657.A2	C24

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