

## UC<sup>FIBRE™</sup> I/O DI D LSHF-FR ES9

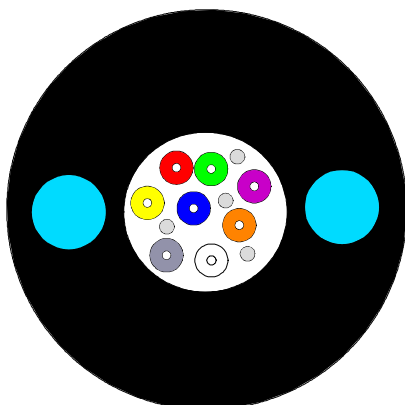
**Heavy duty trunk cable with 2 – 24 ES9 tightly buffered fibres, longitudinally water blocking, and FRP rods embedded in a LSHF-FR sheath**

DIN/VDE U-VQ(ZN)H

NO AXXI-I/O-W

FR

DK



### Application and Installation

This extremely robust distribution style trunk cable is very well suited for LAN and WAN backbones, where robustness and a wide temperature range is needed.

The cable may be used for both indoor and outdoor installation.

Special features for outdoor application includes a UV stabilised sheath, a longitudinal water blocked core, and the wide temperature range.

For indoor application the cable features passing IEC 60332-24 fire test.

The cable can be installed on trays, in ducts and outside in the open

This cable features Draka's ES9 easy strippable tight buffer

### Standards

EN 187 000  
IEC 60794-2  
IEC 60794-2-20  
ISO 11801 2<sup>nd</sup> edition  
EN 50 173-1

### Construction

Fibre	4 - 24 tightly buffered fibres 900 $\mu\text{m} \pm 50 \mu\text{m}$ .			
Fibre colour code	1	Red	13	Yellow w/mark per 70 mm
	2	Green	14	White w/mark per 70 mm
	3	Blue	15	Grey w/mark per 70 mm
	4	Yellow	16	Turquoise w/mark per 70 mm
	5	White	17	Orange w/mark per 70 mm
	6	Grey	18	Pink w/mark per 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

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



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	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	2 FRP strength elements			
Sheath	Black LSHF-FR fire retardant, UV stabilised, EN 50290-2-27			

### 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

4	2200 MJ/km	0.61 KWh/m
8	2350 MJ/km	0.65 KWh/m
12	2400 MJ/km	0.67 KWh/m
24	3000 MJ/km	0.83 KWh/m

### Physical properties

IEC 60974-1-2

Permanent tensile strength	E1	500 N
Short term tensile strength (some days)	E1	800 N
Impact	E4	20 J
Crush (compressive strength)	E3	3000 N/ 100 mm
Torsion	E7	5 cycles $\pm$ 1 turn
Temperature range	F1	Operation -40 °C to 70 °C Installation -10 °C to 60 °C Storage -40 °C to 70 °C
Water tightness	F5B	Pass

### Mechanical properties

Fibre count	Nominal diameter	Nominal cable weight	Minimum bending radius
4	9.6 mm	95 kg/km	75 mm
8	9.6 mm	97 kg/km	75 mm
12	9.9 mm	100 kg/km	75 mm
24	10.8 mm	134 kg/km	75 mm

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### Product codes – ordering information

Item No.	Fibre count	Product code	Fibre type	Fibre data sheet
1021101	4	UCFIBRE I/O DI D LSHF-FR ES9 4 MM51	OM2 50/125 multi mode 500/500	C23
1021107	8	UCFIBRE I/O DI D LSHF-FR ES9 8 MM51	OM2 50/125 multi mode 500/500	C23
1021113	12	UCFIBRE I/O DI D LSHF-FR ES9 12 MM51	OM2 50/125 multi mode 500/500	C23
1021119	24	UCFIBRE I/O DI D LSHF-FR ES9 24 MM51	OM2 50/125 multi mode 500/500	C23
1021099	4	UCFIBRE I/O DI D LSHF-FR ES9 4 MM52	OM2 50/125 multi mode	C01a
1021105	8	UCFIBRE I/O DI D LSHF-FR ES9 8 MM52	OM2 50/125 multi mode	C01a
1021111	12	UCFIBRE I/O DI D LSHF-FR ES9 12 MM52	OM2 50/125 multi mode	C01a
1021117	24	UCFIBRE I/O DI D LSHF-FR ES9 24 MM52	OM2 50/125 multi mode	C01a
1021100	4	UCFIBRE I/O DI D LSHF-FR ES9 4 MM53	OM3 MaxCap-OM3	C12
1021106	8	UCFIBRE I/O DI D LSHF-FR ES9 8 MM53	OM3 MaxCap-OM3	C12
1021112	12	UCFIBRE I/O DI D LSHF-FR ES9 12 MM53	OM3 MaxCap-OM3	C12
1021118	24	UCFIBRE I/O DI D LSHF-FR ES9 24 MM53	OM3 MaxCap-OM3	C12
1021102	4	UCFIBRE I/O DI D LSHF-FR ES9 4 MM61	OM1 62.5/125 multi mode	C02
1021108	8	UCFIBRE I/O DI D LSHF-FR ES9 8 MM61	OM1 62.5/125 multi mode	C02
1021114	12	UCFIBRE I/O DI D LSHF-FR ES9 12 MM61	OM1 62.5/125 multi mode	C02
1021120	24	UCFIBRE I/O DI D LSHF-FR ES9 24 MM61	OM1 62.5/125 multi mode	C02
1021103	4	UCFIBRE I/O DI D LSHF-FR ES9 4 SM2D	OS2 Single mode	C03e
1021109	8	UCFIBRE I/O DI D LSHF-FR ES9 8 SM2D	OS2 Single mode	C03e
1021115	12	UCFIBRE I/O DI D LSHF-FR ES9 12 SM2D	OS2 Single mode	C03e
1021121	24	UCFIBRE I/O DI D LSHF-FR ES9 24 SM2D	OS2 Single mode	C03e
1021104	4	UCFIBRE I/O DI D LSHF-FR ES9 4 SM7B	BendBright <sup>XS</sup> G.657.A2	C24
1021110	8	UCFIBRE I/O DI D LSHF-FR ES9 8 SM7B	BendBright <sup>XS</sup> G.657.A2	C24
1021116	12	UCFIBRE I/O DI D LSHF-FR ES9 12 SM7B	BendBright <sup>XS</sup> G.657.A2	C24
1021122	24	UCFIBRE I/O DI D LSHF-FR ES9 24 SM7B	BendBright <sup>XS</sup> G.657.A2	C24

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