

Fiber optic products

Fiber Optic Cables

BKT optical cables

BKT Elektronik has been operating on Polish market for many years, offering optical cables with fibers from renowned fiber manufacturers: Draka and Sumitomo. The cables are produced in cable factories strictly according to our designs and technical requirements regarding cable's structure, type of sheath, mechanical properties (including durability) etc. Such guidelines given to the cable factories are our property. BKT optical fiber cables comply with international and Polish standards related to product, production process and environment. The production process is subject to continuous control of BKT engineers.

We especially recommend the following products from our rich offer of optical cables:

Universal optical tube cables – indoor/outdoor cables with central tube or multi-tube structure and various tensile strengths. The cables have rodent protection made of glass fiber or corrugated steel strip. Cable sheaths made of non-halogenated LSOH material, flame retardant LSOH FR or materials with increased fire resistance. We also provide tight buffered cables at the request of customers

Outdoor optical tube cables with central tube or multi - tube structure and various tensile strengths. They may be laid in telecom ducts or directly in the ground. The cables may have rodent protection made of glass fiber, corrugated steel strip or polyamide sheath. They may have one or two polyethylene sheaths.

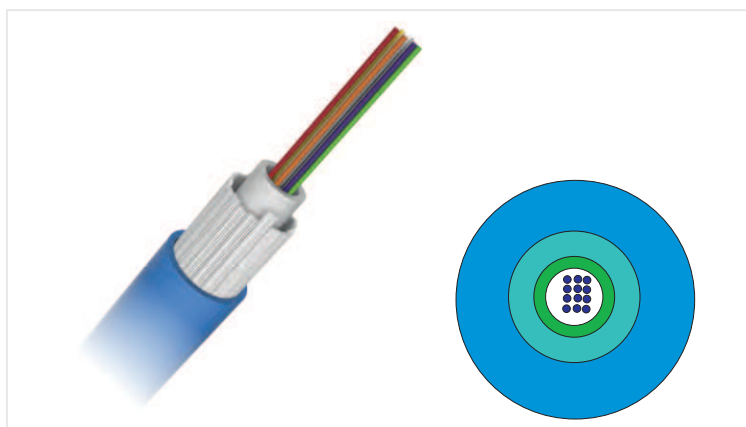
Indoor tight buffered optical cables. We have pigtail cables, patch cords and multi-fiber cables on offer.

The internal cables include: cables with various tensile strengths and outer diameters (mini breakout, full breakout). The latest product among internal Draka cables are cables designed for data centers, which are characterized by light structure, small diameters and big number of fibers.

Micro cables – for blowing cable into micro ducts for backbone network and subscriber connections. They have central tube and multi-tube structure. Wide range of outer diameters allows blowing cables into micro tubes with inner diameter of even 4 mm.

Optical ground wires, ADSS cables, figure-eight optical cables.

For installation on utility poles, street lighting poles or poles in overhead contact systems. Offered as all-dielectric self-supporting cables or with supporting steel wire. They are mounted on poles with 50-250 m intervals.



UC^{FIBRE} I/O CT D DA LSHF 1.0 kN E14

Applications:

- Universal, indoor and outdoor
- LAN backbones
- Telecom access lines
- Computer network, campus network

Standards:

- ISO 11801 2-nd edition
- EN 50173-1:2002
- IEC 60794-1

Flame resistance:

- IEC 60332-1-2 Single vertical wire test
- IEC 60754-1 No halogens
- IEC 60754-2 No acid matters
- IEC 61034-2 No dense smoke

Construction

Loose tube	Central tube, jelly filled; \varnothing 2.8 mm with 2–16 fibres, \varnothing 3.5 mm with 24 fibres	
Colour sequence	1 Red	13 Yellow + marking every 70 mm
	2 Green	14 White + marking every 70 mm
	3 Blue	15 Grey + marking every 70 mm
	4 Yellow	16 Turquoise + marking every 70 mm
	5 White	17 Orange + marking every 70 mm
	6 Grey	18 Pink + marking every 70 mm
	7 Brown	19 Yellow + marking every 35 mm
	8 Violet	20 White + marking every 35 mm
	9 Turquoise	21 Grey + marking every 35 mm
	10 Black	22 Turquoise + marking every 35 mm
	11 Orange	23 Orange + marking every 35 mm
	12 Pink	24 Pink + marking every 35 mm
Reinforcement	Reinforced with glass fibre	
Sheath	1.0 mm, FireBur [®] blue, UV-resistant, IEC 50290-2-27	

Structure

Loose tube	Loose tube \varnothing 2.8/3.5 mm filled with hydrophobic gel with 2-16/24 fibres
Strength member	Hydrophobic glass fibre insulation
Sheath	1.0 mm blue FireBur [®] , UV-resistant, IEC 50290-2-27

Designation

DIN/VDE	I/A- DQ (ZN) BHn, n-number of fibres
Draka Denmark	UTnnmm-79-xxx; nnn - ilość włókien, mm - type of fibre

Heat of combustion

2÷16 fibres:	660 MJ/km	0.18 KWh/km
24 fibres:	800 MJ/km	0.22 KWh/km

Physical properties

Property	Testing methodology	Value
Outer diameter		2 ÷ 16 fibres: 6.0 mm 18 ÷ 24 fibres: 6.5 mm
Weight		2 ÷ 16 fibres: 40 kg/km 18 ÷ 24 fibres: 45 kg/km
Maximum tensile strength	E1	1000 N (less than 1/2 of fibre strength)
Tensile strength (dynamic)	E1	750 N (less than 1/3 of fibre strength)
Tensile strength (static)	E1	500 N (no attenuation; less than 1/4 fibre strength)
Breaking force	E3	1500N/dm
Impact	E7	15 Nm (no attenuation; no broken cable elements)
Torsion	E7	5 cycles ± 1 turn
Kink	E10	Cables do not form a kink when a loop's diameter is more than 100 mm
Minimum bending radius (dynamic)	E11	R=60 mm
Minimum bending radius (static)		R=100 mm
Temperature range	F1	Storage: from -40°C to +60°C Installation: from -15°C to +40°C Operation: from -40°C to ca. ± +60°C
Water penetration	F5B	Resistant to longitudinal water penetration

Ordering information

Number of fibres	Product code	Type of fibre	Fibre specification number	Index BKT
4	UCFIBRE I/O CT D DA LSHF 1.0 kN 4 MM51	OM2 50/125 multimode 500/500	C23	10250302
6	UCFIBRE I/O CT D DA LSHF 1.0 kN 8 MM51	OM2 50/125 multimode 500/500	C23	10250303
8	UCFIBRE I/O CT D DA LSHF 1.0 kN 8 MM51	OM2 50/125 multimode 500/500	C23	10250304
12	UCFIBRE I/O CT D DA LSHF 1.0 kN 12 MM51	OM2 50/125 multimode 500/500	C23	10250306
16	UCFIBRE I/O CT D DA LSHF 1.0 kN 16 MM51	OM2 50/125 multimode 500/500	C23	10250307
24	UCFIBRE I/O CT D DA LSHF 1.0 kN 24 MM51	OM2 50/125 multimode 500/500	C23	10250308
4	UCFIBRE I/O CT D DA LSHF 1.0 kN 4 OM3 B	OM3 MaxCap® BB 300 50/125 multimode	C31	10250402
6	UCFIBRE I/O CT D DA LSHF 1.0 kN 6 OM3 B	OM3 MaxCap® BB 300 50/125 multimode	C31	10250403
8	UCFIBRE I/O CT D DA LSHF 1.0 kN 8 OM3 B	OM3 MaxCap® BB 300 50/125 multimode	C31	10250404
12	UCFIBRE I/O CT D DA LSHF 1.0 kN 12 OM3 B	OM3 MaxCap® BB 300 50/125 multimode	C31	10250906
16	UCFIBRE I/O CT D DA LSHF 1.0 kN 16 OM3 B	OM3 MaxCap® BB 300 50/125 multimode	C31	10250407
24	UCFIBRE I/O CT D DA LSHF 1.0 kN 24 OM3 B	OM3 MaxCap® BB 300 50/125 multimode	C31	10250408
4	UCFIBRE I/O CT D DA LSHF 1.0 kN 4 MM61	OM1 62.5/125 multimode	C02	10250202
6	UCFIBRE I/O CT D DA LSHF 1.0 kN 6 MM61	OM1 62.5/125 multimode	C02	10250203
8	UCFIBRE I/O CT D DA LSHF 1.0 kN 8 MM61	OM1 62.5/125 multimode	C02	10250204
12	UCFIBRE I/O CT D DA LSHF 1.0 kN 12 MM61	OM1 62.5/125 multimode	C02	10250206
16	UCFIBRE I/O CT D DA LSHF 1.0 kN 16 MM61	OM1 62.5/125 multimode	C02	10250207
24	UCFIBRE I/O CT D DA LSHF 1.0 kN 24 MM61	OM1 62.5/125 multimode	C02	10250208
4	UCFIBRE I/O CT D DA LSHF 1.0 kN 4 SM2D	OS2 singlemode G652.D	C03e	10250102
6	UCFIBRE I/O CT D DA LSHF 1.0 kN 6 SM2D	OS2 singlemode G652.D	C03e	10250103
8	UCFIBRE I/O CT D DA LSHF 1.0 kN 8 SM2D	OS2 singlemode G652.D	C03e	10250104
12	UCFIBRE I/O CT D DA LSHF 1.0 kN 12 SM2D	OS2 singlemode G652.D	C03e	10250106
16	UCFIBRE I/O CT D DA LSHF 1.0 kN 16 SM2D	OS2 singlemode G652.D	C03e	10250107
24	UCFIBRE I/O CT D DA LSHF 1.0 kN 24 SM2D	OS2 singlemode G652.D	C03e	10250108
4	UCFIBRE I/O CT D DA LSHF 1.0 kN 4 OM4B	OM4 MaxCap® BB 50/125 multi mode	C32	10250502
6	UCFIBRE I/O CT D DA LSHF 1.0 kN 6 OM4B	OM4 MaxCap® BB 50/125 multi mode	C32	10250503
8	UCFIBRE I/O CT D DA LSHF 1.0 kN 8 OM4B	OM4 MaxCap® BB 50/125 multi mode	C32	10250504
12	UCFIBRE I/O CT D DA LSHF 1.0 kN 12 OM4B	OM4 MaxCap® BB 50/125 multi mode	C32	10250506
16	UCFIBRE I/O CT D DA LSHF 1.0 kN 16 OM4B	OM4 MaxCap® BB 50/125 multi mode	C32	10250507
24	UCFIBRE I/O CT D DA LSHF 1.0 kN 24 OM4B	OM4 MaxCap® BB 50/125 multi mode	C32	10250508