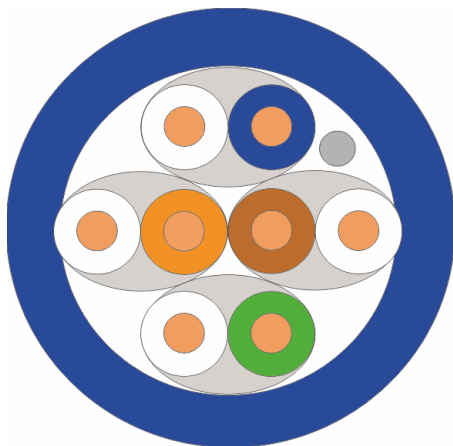


## Product Information

BKT 455 cat. 6 U/FTP installation cable LSHF

Card No.: PI\_BKT 455 UFTP cat.6 Eca\_02.20



## Application

Primary (Campus), Secondary (Riser), Tertiary (Horizontal)  
IEEE 802.3: 10BASE-T, 100BASE-T, 1000BASE-T, 2.5GBASE-T, 5GBASE-T  
IEEE 802.5: 16MB, ISDN, TPDDI, ATM  
Power over Ethernet (PoE) Type 1÷4

## Standards

- EN 50173-1
- EN 50288-5-1
- EN 50399
- EN 50575
- ISO/IEC 11801-1
- IEC 61156-5
- ANSI/TIA-568.2
- IEEE 802.3af/at/bt

## Flame Resistance

LSHF (LSOH, FRNC): IEC 60332-1, IEC 61034, IEC 60754-2

CPR: Class Eca

EN 50399, EN 50575

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## Construction

Conductor	Bare copper wire $\varnothing$ 0,56 mm (AWG23)
Insulation	Polyethylene $\varnothing$ 1,4 mm
Twisting	2 cores to the pair
Cable lay up	4 pairs to the core
Screen	Al-laminated foil around each pair, drain wire $\varnothing$ 0,4 mm tinned
Sheath	LSHF (LSOH, FRNC) blue RAL 5012

## Mechanical Properties

Bending radius	installation	4 x D
	installed	8 x D
Temperature range	during operation	-20°C to +60°C
	during installation	0°C to +50°C

## Electrical Properties

at 20°C

DC Loop Resistance		$\leq 145 \Omega/\text{km}$
Resistance unbalance		$\leq 2 \%$
Insulation resistance	[500 V]	$\geq 5000 \text{ M}\Omega\text{km}$
Mutual capacitance	[800 Hz]	nom. 45 nF/km
Capacitance unbalance	[pair/ground]	$\leq 800 \text{ pF}/\text{km}$
Characteristic impedance	[100 MHz]	$100 \pm 5 \Omega$
Nominal Velocity of Propagation	NVP	75 %
Propagation Delay		$\leq 500 \text{ ns}/100\text{m}$
Delay Skew		$\leq 20 \text{ ns}/100\text{m}$
Coupling attenuation		$\geq 55 \text{ dB}$
Transfer impedance	at 1 MHz	$\leq 50 \text{ m}\Omega/\text{m}$
	at 10 MHz	$\leq 100 \text{ m}\Omega/\text{m}$
	at 30 MHz	$\leq 200 \text{ m}\Omega/\text{m}$
Separation classification according to EN 50174-2		„C”

## Useful Properties

Fire Load	LSHF	565 MJ/km	0,156 kWh/m
	LSHF DUPLEX	1130 MJ/km	0,313 kWh/m
Tensile force		100 N / 200 N	

**Product Information**

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Card No.: PI\_BKT 455 UFTP cat.6 Eca\_02.20

**Transmission Characteristics**
**to cat. 6 at 20°C**

Frequency (MHz)	Attenuation (dB/100m)	RL (dB)	NEXT (dB)	PS NEXT (dB)	ACR-N (dB/100m)	PS ACR-N (dB/100m)	ACR-F (dB/100m)	PS ACR-F (dB/100m)
1	1,8	-	100	97	98	95	105	105
4	3,4	27	100	97	97	94	105	102
10	5,4	30	100	97	95	92	97	94
16	6,8	30	100	97	93	90	93	90
20	7,7	30	100	97	92	89	91	88
31,2	9,6	30	100	97	90	87	87	84
62,5	13,7	30	100	97	86	83	81	78
100	17,4	30	100	97	83	80	77	74
125	19,5	26	95	92	75	72	75	72
155,5	21,9	26	94	91	72	69	73	70
175	23,3	25	93	90	70	67	72	69
200	25,0	25	92	89	67	64	71	68
250	28,1	24	90	87	62	59	69	66
300	30,9	24	89	86	58	55	67	64
400	38,3	23	87	84	48	45	64	61
455	41,6	22	85	82	43	40	62	59

**Technical Data**

Product code	Cable type	Product name	Declaration of Performance (DoP)	Outer diameter (mm)	Weight (kg/km)
10151503.500	J-02YS(St)H 4x2x0.56	Cable U/FTP LSHF cat.6 BKT 455 wire blue 23AWG Eca (500m)	11233352	6,8	48