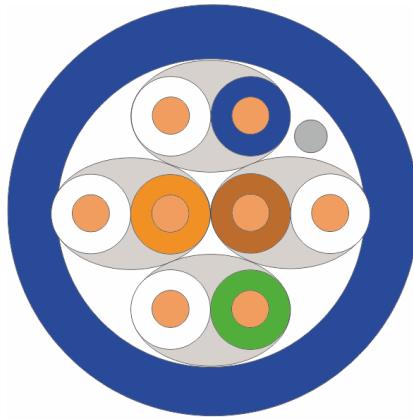


## Product Information

Cat.6 cable, U/FTP, BKT 455, LSHF-FR, solid wire, blue, B2ca -s1a,d1,a1

Card No.: PI\_10151G105\_01.23



## 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-FR (LSOH-FR): IEC 60332-1-2, IEC 60332-3-24, IEC 61034-2, IEC 60754-2

CPR: Class B2ca -s1a,d1,a1

EN 50399, EN 50575

## Product Information

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## Construction

<b>Conductor</b>	Bare copper wire 23AWG
<b>Insulation</b>	Foam-Skin-PE $\varnothing$ 1,4 mm
<b>Twisting</b>	2 cores to the pair
<b>Cable lay up</b>	4 pairs to the core
<b>Screen</b>	Al-laminated foil around each pair, drain wire $\varnothing$ 0,4 mm tinned
<b>Sheath</b>	LSHF-FR (LSOH-FR, 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		$\leq 150 \Omega/\text{km}$
Resistance unbalance		$\leq 2 \%$
Insulation resistance	[500 V]	$\geq 5000 \text{ M}\Omega\text{km}$
Mutual capacitance	[800 Hz]	$\leq 56 \text{ nF}/\text{km}$
Capacitance unbalance	[pair/ground]	$\leq 3300 \text{ pF}/\text{km}$
Characteristic impedance	[100 MHz]	$100 \pm 15 \Omega$
Nominal Velocity of Propagation	NVP	75 %
Propagation Delay		$\leq 570 \text{ ns}/100\text{m}$
Delay Skew		$\leq 45 \text{ ns}/100\text{m}$
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	595 MJ/km	0,165 kWh/m
Tensile force	100 N	

**Product Information**

Cat.6 cable, U/FTP, BKT 455, LSHF-FR, solid wire, blue, B2ca -s1a,d1,a1

Card No.: PI\_10151G105\_01.23

**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	-	99	97	97	95	105	105
4	3,4	27	99	97	96	94	105	102
10	5,4	30	98	96	94	92	97	94
16	6,8	30	98	96	92	90	93	90
20	7,7	30	97	96	91	89	91	88
31,2	9,6	30	97	95	90	87	87	84
62,5	13,7	30	96	95	86	83	81	78
100	17,4	30	96	94	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
450	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)
10151G105.500	J-02YS(St)H 4x2x0.57	Cat.6 cable, U/FTP, BKT 455, LSHF-FR, solid wire, blue, B2ca -s1a,d1,a1 (500m)	19333355	7,6	58