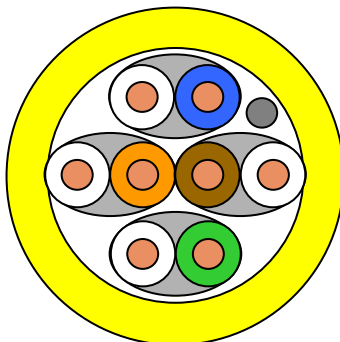


## Clarity Cat.6<sub>A</sub> 10G FTP-LSZH 100Ω-4P-23AWG

### U/FTP Installation Cable



### Application

Generic cabling systems  
Primary (Campus), Secondary (Riser), Tertiary (Horizontal)  
IEEE 802.3: 10Base-T; 100Base-T; 1000Base-T  
IEEE 802.5 16 MB; ISDN; TPDDI; ATM

### Standards

ISO/IEC 11801 2<sup>nd</sup> ed.  
EN 50173-1  
EN 50288-10 Draft  
IEC 61156-5 (46C/783/CDV)

### Fire rating

LSZH : IEC 60754-2; IEC 61034, IEC 60332-1

### Construction

Conductor	Bare copper wire Ø 0.55 mm (AWG23)
Insulation	PE, Ø 1.4 mm
Twisting	2 cores to the pair
Cable lay up	4 pairs
Pair screen	Al-laminated plastic foil around each pair.
Lay up diameter	Ø 6,1 mm
Drain wire	Drain wire AWG26 tinned
Sheath	Flame retardant and halogen free LSZH

### Mechanical Properties

Bending radius	With load	8 x D
	No load	4 x D
Temperature range	During operation	-20°C to + 60°C
	During installation	0°C to + 50°C
Maximum tensile load	During installation(4P/2x4P)	100N/200N
	Installed	No load

## Clarity Cat.6<sub>A</sub> 10G FTP-LSZH 100Ω-4P-23AWG

### Electrical Properties

at 20°C

Loop resistance		≤ 176 Ω /km
Resistance unbalance		≤ 2%
Insulation resistance	(500 V)	≥ 2000 MΩ *km
Mutual capacitance	at 800 Hz	Nom. 43 nF/km
Capacitance unbalance	(pair/ground)	≤ 1500 pF/km
Characteristic impedance	(1-100 MHz)	(100 ± 15)
	(100 - 250) MHz	(100 ± 18) Ω
Nominal velocity of propagation		Ca. 79 %
Propagation delay	Nominal	< 450 ns/100m
Delay skew	Nominal	< 15 ns/100m
Test voltage	(DC, 1 min) core/ core and core/screen	1000 V
Transfer impedance	at 1 MHz	≤ 50 mΩ /m
	at 10 MHz	≤ 100 mΩ /m
	at 30 MHz	≤ 200 mΩ /m
	at 100MHz	≤ 1000 mΩ /m
Coupling attenuation		≥ 55 dB

### Nominal Transmission Characteristics Cat.6<sub>A</sub> \*

at 20°C

f (MHz)	Attenuation (dB/100m)		NEXT (dB)		PS-NEXT (dB)		ACR (dB/100m)		PS-ACR (dB/100m)		ELFEXT (dB/100m)		PS-ELFEXT (dB/100m)		Return loss (dB)	
	max.	nom.	min.	nom.	min.	nom.	min.	nom.	min.	nom.	min.	nom.	min.	nom.	min.	nom.
1	2.1	1.9	75.3	90	72.3	87	73.2	88	70.2	85	67	85	64	82	-	-
10	5.9	5.3	60.3	90	57.3	87	54.4	86	51.4	83	47	79	44	76	25	30
100	19.1	17.9	45.3	90	42.3	87	26.2	71	23.2	68	27	59	23	56	19	30
200	27.6	26.6	40.8	88	37.8	85	13.2	61	10.2	58	21	53	18	50	16	25
250	31.1	30.1	39.3	86	36.3	83	8.3	55	5.3	52	19	51	16	48	15	25
300	34.3	32.1	38.1	86	35.1	83	-7.2	51	-10.2	48	18	48	15	45	14	23
500	45.3	41.3	34.8	86	31.8	83	-10.4	43	-13.4	40	13	44	10	41	13	23

\* EN 50288-10-1(draft)/EN50288-5-1(2004)/IEC 61156-5(2009)

### Technical data

Part number	Product name	Outer diameter mm	Fire load MJ/km	Weight kg/km
OR-100FC610L-EU-04	Clarity Cat.6 <sub>A</sub> 10G FTP-LSZH 100Ω-4P-23AWG, yellow	7,3	732	45