

## *SLCAF6P-B*

### *UTP Cable Category 6 – FTP PVC*

#### General standards

- International standard: ISO/IEC 11801 2nd edition (2002) and ISO/IEC 11801 Amendment 2 (2010)
- European standard: EN 50173-1 (2002) and EN 50173-1 Amendment 1 (2009)
- U.S. Standards: ANSI/TIA/EIA 568-B.2-1 (2002)

#### Physical dimensions

##### 1- Conductor

Material: Solid bare copper ETP  
Diameter: AWG 23

##### 2- Insulation

Material: Polyethylene  
Nominal diameter over insulation: 1.35 mm

##### 3- Cable core

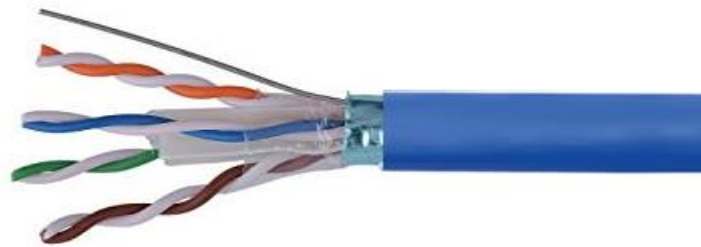
Pair: 2 twisted insulated conductors  
Cross Web: Polyolefin  
Number of pairs: 4, all twisted together  
Color code pair 1: White / Blue & Blue  
Color code pair 2: White / Orange & Orange  
Color code pair 3: White / Green & Green  
Color code pair 4: White / Brown & Brown  
Foil: Overlapping polyester foil over cable core

##### 4- Foil shielding

Material: Laminated Aluminum / Polyester  
Position aluminum: Facing outside, in contact with drain wire  
Drain wire material: Solid tinned copper  
Drain wire diameter: AWG 26

##### 5- Jacket

Material: PVC (CMR rated)  
Diameter: 7.1 ± 0.3 mm



## Electrical characteristics

Low frequency and D.C. (at 20°C)	Specifications
D.C. resistance conductor	< 9,5 Ω/100m
Resistance unbalance: within a pair / between pairs	< 2 / < 4 %
Insulation resistance	≥ 5000 MΩ.km
Dielectric strength conductor-conductor and conductor-screen (2 sec.)	2.5 kV DC
Mutual capacitance	< 56 nF/km
Capacitance unbalance pair to ground	< 1600 pF/km
Nominal velocity of propagation (for information only)	> 0.6 c
Delay skew (differential delay)	≤ 40 ns/100m
Transfer impedance according IEC 61156-5	Grade 2
Coupling attenuation according IEC 61156-5	Type II

## High frequency (at 20°), reference standard: ISO/IEC61156-5

TYPE	1*	4	10	16	20	31.2	62.5	100	155	200	250	MHz
Attenuation	2.1	3.8	6.0	7.6	8.5	10.7	15.5	19.9	25.3	29.1	33.0	dB/100m
NEXT	75.3	66.3	60.3	57.2	55.8	52.9	48.4	45.3	42.4	40.8	39.3	dB/100m
PS NEXT	72.3	63.3	57.3	54.2	52.8	49.9	45.4	42.3	39.4	37.8	36.3	dB/100m
ACR	73.2	62.4	54.3	49.6	47.3	42.1	32.9	25.4	17.1	11.6	6.3	dB/100m
PS ACR	70.2	59.4	51.3	46.6	44.3	39.1	29.9	22.4	14.1	8.6	3.3	dB/100m
ACR-F	70.0	58.0	50.0	45.9	44.0	40.1	34.1	30.0	26.2	24.0	22.0	dB/100m
PS ACR-F	67.0	55.0	47.0	42.9	41.0	37.1	31.1	27.0	23.2	21.0	19.0	dB/100m
Return Loss	20.0	23.0	25.0	25.0	25.0	23.6	21.5	20.1	18.8	18.0	17.3	dB/100m
Impedance upper limit	122.2	115.2	111.9	111.9	111.9	114.1	118.3	121.9	126.0	128.8	131.5	Ω
Impedance lower limit	81.8	86.8	89.4	89.4	89.4	87.7	84.5	82.0	79.3	77.6	76.0	Ω
Propagation delay	570	552	545	543	540	539	538	537	537	537	536	ns/100m

## Mechanical Characteristics

	Specifications
Elongation at break of the conductors	8%
Minimum elongation at break of the insulation	≥ 100 %
Minimum elongation at break of the sheath	≥ 100 %
Tensile strength of sheath	> 9 MPa

## Overall characteristics

	Specifications
Maximum operating voltage (for all temperatures cable is intended to be used)	72 V D.C.
Maximum continuous current per conductor (@25°C)	1.5 A
Temperature rating installation	0 / 50 °C



Temperature rating operation	- 30 / 60 °C
Total cable weight	48 kg/km
Minimum bending radius (during operation and installation)	29 / 58 mm
Maximum pulling strength	80 N
Burning load	745 kJ/m
Fire performance according CMR/FT4	Pass

## PRODUCT Family

SLCAF6P-B	Blue
SLCAF6P-GY	Gray
SLCAF6P-W	White
SLCAF6P-OW	Off White
SLCAF6P-GN	Green
SLCAF6P-Y	Yellow

