

CU SPE 1P

Data cable, S/FTP, 600MHz, AWG26/7, Euroclass E_{ca}
600 MHz



- 1 Inner conductor: AWG26/7, stranded copper wires
- 2 PE insulated conductor: Ø 1.15 mm
- 3 Screen (pair): Alu PETP foil
- 4 Overall screen: Tinned braided copper
- 5 Outer sheath: FRNC/LSZH



Description

Electrically and mechanically high-quality 1-pair cable for Single Pair Ethernet (SPE) application and for frequencies up to 600 MHz. Complies and exceeds the requirements of ISO/IEC 11801-1 Amd 1 "General Requirements", ISO/IEC 11801-3 Amd 1 "Industrial Premises", ISO/IEC 11801-6 Amd 1 "Distributed Building Services", TR 11801-9906 "one pair channel" and IEC 61156-11 "Symmetrical single pair cables with transmission characteristics up to 600 MHz".

Excellent shielding effectiveness due to individually screened pair and overall copper braid.

Compatible with all current Single Pair Ethernet connecting hardware in accordance with IEC 63171 series.

Application

Flexible data cable with stranded conductor suitable for patch cords and equipment cords in a Single Pair Ethernet environment.

For the transmission of digital and analogue data, voice and video signals.

Suitable for IP based 2-wire bus applications with conductor wire size of AWG 22.

Applicable for Power over Data Line (PoDL) and for 1-pair PoE.

General Properties

Field of application	Single pair Ethernet
Imprint	«batch number»
Wire colour	1P: white/blue
Installation temperature	0 °C - +50 °C
Operating temperature	-20 °C - +60 °C
Outer sheath material	FRNC/LSZH

Electrical properties

Category	Single pair Ethernet
Coupling attenuation	70 dB
Impedance at 100 MHz, $\pm 5\Omega$	100 Ω
Near end unbalance attenuation LCL at 1-600 MHz	40 dB
NVP %	78
operating capacity	42 pF/m
Segregation class	d
Shielding	shielded
Transfer impedance	10 m Ω /m

Frequency [MHz]	Attenuation [dB]	Return Loss [dB]
1	0.26	25
4	0.5	27
10	0.79	30
100	2.67	25
250	4.3	25
500	6.2	24
600	6.71	23

The performance data given are typical measured values.

Mechanical properties

AWG	26
Maximum tensile strength	14 N
Minimum bending radius permanently installed	28 mm
Repeated bending	56 mm
Solid / Flex	Stranded wire (flexible)

Standards

Cat./Class	Single pair Ethernet SPE and IEC 61156-11 guaranteed
PoDL (PoE)	IEEE 802.3bu
Reaction to fire (Euroclasses)	EN 13501-6: D _{ca}
Zero halogen no corrosive gases	IEC 60754-1/-2, EN 60754-1/-2
Flame Propagation	IEC 60332-1-2, EN 60332-1-2
Smoke Density	IEC 61034-1/-2, EN 61034-1/-2
Cables Standard	ISO/IEC 61156-11, EN 50288-12-1

Versions

Material number	Product	Reaction To Fire	Dimensions n x p x [mm ² (AWG)]	Outer sheath colour	Outer sheath dimensions [mm]	CU rate [kg/km]	Weight [kg/km]	Fire load [kWh/m]
19466300EK	CU SPE 1P flex	Eca	1 x 2 x 0.132 (AWG26)	grey	3.5	9.5	18	0.05