

# CU SPE 1P

Data cable, S/FTP, AWG22, Euroclass D<sub>ca</sub>

600 MHz



- 1 Inner conductor: AWG22
- 2 PE insulated conductor: Ø 1.6 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

Data cable - suitable for use as a laying and installation cable 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.

## Construction

Outer sheath material	FRNC/LSZH
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## General properties

Field of application	Single pair Ethernet
Wire colour	white/blue
Installation temperature	0 °C - +50 °C
Operating temperature	-20 °C - +70 °C
Imprint	DATWYLER «cable type» «additional text» «batch number» «meter marks»

## Electrical properties

Category	Single pair Ethernet
Coupling attenuation	85 dB
Impedance at 100 MHz, $\pm 5\Omega$	100 $\Omega$
Loop resistance at 20 °C	120 $\Omega$ /km
NVP %	78
Operating capacity	43 pF/m
Segregation class	d
Shielding	shielded

Frequency [MHz]	Attenuation [dB]	Return Loss [dB]
1	1.7	26
4	3.4	32
10	5.3	35
100	16.9	30
250	27	27
500	40	24
600	42	23

The performance data given are typical measured values.

## Mechanical properties

Solid / Flex	Solid wire
AWG	22
Maximum tensile strength	25 N
Minimum bending radius permanently installed	22 mm

## Standards

Reaction to fire (Euroclasses)	EN 13501-6: D <sub>ca</sub>
Smoke density	IEC 61034-1/-2, EN 61034-1/-2
Zero halogen no corrosive gases	IEC 60754-1/-2, EN 60754-1/-2
Flame propagation	IEC 60332-1-2, EN 60332-1-2
Cables standard	ISO/IEC 61156-11
Cat./Class	Single pair Ethernet SPE and IEC 61156-11 guaranteed
PoDL (PoE)	IEEE 802.3bu

## Versions

Material number	Product	Reaction to fire	Dimensions n x p x [mm (AWG)]	Outer sheath colour	Outer sheath dimensions [mm]	CU rate [kg/km]	Weight [kg/km]	Packing unit	GTIN / EAN
19143100DK	CU SPE 1P AWG 22	D <sub>ca</sub> -s2,d1,a1	1 x 2 x 0.62 (AWG22)	grey	4.6	11.9	30	1000 m drum	40393910031072

Subject to technical modification

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