

CU SPE 1P flex Industrial FRNC UL

Industrial data cable, S/FTP, AWG22/7, Euroclass E_{ca}

600 MHz



- 1 Inner conductor: AWG22/7, stranded copper wires
- 2 PE insulated conductor: Ø 1.7 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).

Construction

Outer sheath material	FRNC/LSZH
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General properties

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

Electrical properties

Category	Single pair Ethernet
Loop resistance at 20 °C	110 Ω/km
Operating capacity	43 pF/m
Impedance at 100 MHz, ±5Ω	100 Ω
NVP %	78
Shielding	shielded
Coupling attenuation	85 dB
Segregation class	d

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	Stranded wire (flexible)
AWG	22
Minimum bending radius (permanently installed)	22 mm
Maximum tensile strength	25 N

Standards

Reaction to fire	EN 13501-6
Euroclass	E _{ca}
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
UL certification	UL 444, CMG

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]	Packing unit	GTIN / EAN
19471300EK	CU SPE 1P AWG 22/7	Eca	1 x 2 x 0.35 (AWG22/7)	grey	5.1	16.1	34	1000 m drum	40393910231427
19471300EZ		Eca				16	33.8		40393910231410