UC300 S24 Cat.5e F/UTP 4P PVC E_{ca}

Data horizontal cable Cat.5e F/UTP



Eca
CPR

CABLE FEATURES

Prysmian installation cable for indoor use UC300 S24 Cat.5e F/UTP 4P PVC Eca

- Copper data cable of Cat.5e for structured cabling with a bandwidth of 300 MHz.
- The cable is single-shielded with a high-quality foil shield.
- The 4-pair simplex installation cable with 8 copper wires AWG24 is suitable for connecting sockets, patch fields and modules, also with IDC technology, for laying in buildings, in ducts and flush-mounted
- the product exceeds the requirements of EN50173-1; EN50288-2-1, ISO/IEC11801; IEC61156-5 and IEEE802.3af/at/bt.
- The jacket is made of flame-retardant PVC according to IEC60332-1 and Euro fire class Eca.
- the product fulfills segregation class C according to EN50174 with a coupling attenuation of 55 dB.
- The cable is future-proof for all class C and D applications and suitable for operating PoE and PoE+ over a channel length of up to 100m. It is suitable for the following applications: Telephony, Ethernet, Fast Ethernet and Gigabit Ethernet, 10BaseT, 100BaseT, 1000BaseT, 1GBase-T or up to 1,000 Mbit/s.

Latest version of this data sheet is available for download: ProductFamily238952

GENERAL INFO

Primary (Campus), Secondary (Riser), Tertiary (Horizontal) IEEE 802.3: 10Base-T, 100Base-T, 1000Base-T; IEEE 802.5 ISDN, TPDDI, ATM, CATV, IP Cameras, Broadband Video, SOHO-Cabling; Power over Ethernet (PoE) / Type 1-4

CERTIFICATIONS AND DESIGN STANDARDS

IEC 61156-5	Datacom cables
EN 50288-2-1	Data communications cable shielded up to 100MHz

CABLE CONSTRUCTION

Conductor category	Class 1 = solid
Conductor material	Copper
Conductor surface	Bare
AWG size	24
Core insulation material	Polyethylene (PE)
Nominal diameter over insulation [mm]	1.1
Screen over stranding element	Foil
Number of stranding elements	4
Identification of stranding elements	Core colors: blue/white; orange/white; green/white; brown/white
Screen material	Aluminium
Screen over stranding	Foil
Material outer sheath	Polyvinyl chloride (PVC)
Cable shape	Round
Nominal outer diameter [mm]	5.9

APPLICATION PROPERTIES

Operation temperature (min) [°C]	-20	(max) [°C]	60
Installation temperature (min) [°C]	0	(max) [°C]	50
Bending radius (rule)	Installation: 8 x outer diameter; Installed: 4 x outer diameter		

FIRE PROPERTIES

Flame retardant	In accordance with EN/IEC 60332-1-2
Halogen free	No
Low smoke	No
Reaction-to-fire class (acc. EN 13501-6)	Eca
Smoke development class (acc. EN 13501-6)	Not applicable
Euro class flaming droplets/particles (acc. EN 13501-6)	Not applicable
Euro class acidity (acc. EN 13501-6)	Not applicable
Fire load [MJ/km]	430
DOP number	1001223

ELECTRICAL PROPERTIES

Test voltage [kV]	1
Category	5E
NVP value [%]	67
Propagation delay (max) [ns/100m]	535
Delay skew (max) [ns/100m]	20
Characteristic impedance [Ohm]	100
Nominal mutual capacitance [pF/m]	48
Loop resistance [Ohm]	190
Coupling attenuation [dB]	55
Insulation resistance [MΩ·km]	5,000
Transfer impedance at 10 MHz [mOhm/m]	100
Segregation classification (acc. EN 50174-2)	c

CAT 5E TRANSMISSION CHARACTERISTICS (AT 20°C)

Frequency (MHz)	Attenuation (dB/100 m)	NEXT (dB)	PS-NEXT (dB)	ACR (dB/100 m)	PS-ACR (dB/100 m)	ACRF (dB/100m)	PS-ACRF (dB)	Return Loss (dB)
1	1.9	71	68	69	66	64	61	-
4	3.7	62	59	58	55	52	49	20
10	5.8	56	53	50	47	44	41	20
16	7.4	53	50	46	43	40	37	25
20	8.3	52	49	44	41	38	35	25
31.2	10.5	49	46	38	35	34	31	24
62.5	15	44	41	29	26	28	25	22
100	19.2	41	38	22	19	24	21	20
125	21.7	40	37	18	15	22	19	19
155	24.3	38	35	14	11	20	17	
175	26	38	35	12	9	19	16	
200	27.9	37	34	9	6	18	15	
250	31.5	35	32	4	1	16	13	
300	34.9	34	31	-1	-4	14	11	

PRODUCT ORDER DATA

Product name	Nominal outer diameter [mm]	Max. tensile strength during installation [kN]	Copper weight [kg/km]	SAP code	Packaging type	Standard packaging quantity	Gross weight
UC300 S24 Cat.5e F/UTP 4P PVC Eca	5.9	0.1	19.8	60013161	Drum	1	40.1
UC300 S24 Cat.5e F/UTP 4P PVC Eca	5.9	0.1	19.8	60013162	Coil	100	4
UC300 S24 Cat.5e F/UTP 4P PVC Eca	5.9	0.1	19.8	60011026	Carton box	305	12.2
UC300 S24 Cat.5e F/UTP 4P PVC Eca	5.9	0.1	19.8	60011258	Drum	500	17.59
UC300 S24 Cat.5e F/UTP 4P PVC Eca	5.9	0.1	19.8	60011257	Drum	1,000	42.1
UC300 S24 Cat.5e F/UTP 4P PVC Eca	5.9	0.1	19.8	60027806	Drum	7,000	40.9

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