

Cat 6 U/UTP 4Pair AWG 23

Data cables



Datacomm®

Technical information

- Temperature range; flexible 0°C up to +50°C, fixed -20°C up to +60°C
- Minimum bending radius; flexible 8x cable Ø, fixed 4x cable Ø
- Operating voltage; max.125 V
- Test voltage; 1,0 kV DC for 1 minute
- Conductor resistance @20°C; max. 78 Ohm/km
- Conductor resistance unbalance @20°C; max. 2%
- Velocity of propagation @250MHz; approx. 528 nsec/100m and NVP 69%
- Skew @100MHz; max. 30 nsec/100 mt
- Mutual capacitance; approx. 50 nF/km
- Characteristic impedance @250MHz; nom. 100±15 Ohm
- Insulation resistance; min. 5 G.Ohm x km

Cable according to ANSI/TIA 568-C.2

Cable construction

- Annealed solid copper conductor; Ø0,57mm (AWG 23)
- Core insulation solid HDPE; acc. to EN 50290 2-23
- Core and pair identification acc. to IEC 189 and IEC 708
- Cores twisted in pairs, pairs with a central cross separator, stranded together in layers with optimal lay-length
- Outer sheath, flame resistant PVC or LSZH compound;
PVC sheath: Grey RAL 7035, type YM1 acc. to DIN VDE 0207 part 5, type TM51 acc. to EN 50290 2-22
LSZH sheath: Yellow RAL 1021, Orange RAL 2003, Blue RAL 5015, type HM2 acc. to DIN VDE 0207 part 24, type 70°C acc. to EN 50290 2-27

Features

- Vertical flame propagation for PVC and LSZH acc. to DIN VDE 0482-332-1-2, EN 60332 1-2, IEC 60332 1-2
- Corrosive gas measurement only for LSZH acc. to DIN VDE 0482-267-2-2, EN 50267-2-2, IEC 60754
- Smoke density only for LSZH acc. to DIN VDE 0482-1034-2, EN 61034-2, IEC 61034-2

TSE	IEC 6116
ANSI	TIA 568-C.2
CE	Low Voltage Directive 2006/95/EC
	RoHS compliant

Application

Datacomm® Cat 6 U/UTP 100 Ω 4x2xAWG 23 premium grade Class E cable for building structured premises cabling, to support Ethernet protocol for installation in horizontal and backbone areas. They are characterized by large performance reserves and outstanding performance. Transmission of digital and analogue signals, voice, video and data applications. Especially suitable for services such as Ethernet 10 Base-T, Fast Ethernet 100 Base-T, Gigabit Ethernet 1000 Base-T, ATM155, FDDI, token ring 4/16 Mbit/s, or ISDN.

Category

Frekans [MHz]	1		4		16		31,25		62,50		100		155		250		350	
	Spec.	Typ.	Spec.	Typ.	Spec.	Typ.	Spec.	Typ.	Spec.	Typ.	Spec.	Typ.	Spec.	Typ.	Spec.	Typ.	Spec.	Typ.
Ins. Loss [dB/100m]	2,0	1,8	3,8	3,7	7,6	7,8	7,4	10,5	15,4	15	19,8	19,2	25,2	24,1	32,8	31,2	N/A	37,1
NEXT [dB]	74	84	65	80	56	71	73	74	47	64	44	66	41	58	38	54	N/A	43
PS NEXT [dB]	72	83	63	78	54	63	72	72	45	62	42	63	39	55	36	52	N/A	43
ACRF [dB/100m]	68	81	56	74	44	57	61	54	32	48	28	45	24	37	20	37	N/A	33
PS ACRF [dB/100m]	65	80	53	71	41	55	57	52	29	45	25	44	21	38	17	35	N/A	29
Pro. Del. [dB]	570	498	552	503	543	479	502	501	539	500	538	499	537	498	536	498	N/A	497
Ret. Loss [dB]	20,0	21,4	23,0	34,5	25,0	31,4	34,1	33	21,5	27,4	20,1	22,7	18,8	23,1	17,3	20,3	N/A	17,2

Part No.	Dim.	Sheath	Colour	Outer Ø app. [mm]	Cu weight [kg/km]	Cable weight [kg/km]	Fire load		Packing [m]
							[MJ/m]	[kWh/m]	
506311	4x2xAWG23	FR-PVC		6,2	18	42	0,51	0,14	305
506321	4x2xAWG23	LSZH/LSOH		6,2	18	43	0,46	0,13	305 / 1000
506321-1	4x2xAWG23	LSZH/LSOH		6,2	18	43	0,46	0,13	305 / 1000
506321-2	4x2xAWG23	LSZH/LSOH		6,2	18	43	0,46	0,13	305 / 1000

