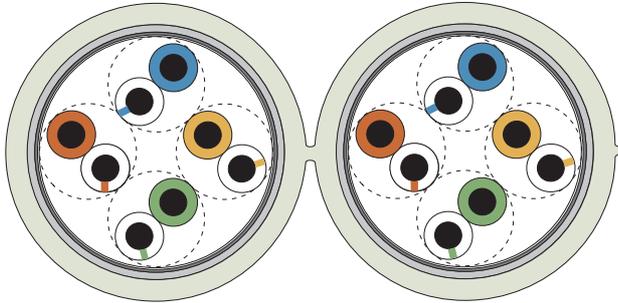


Datacable - Twisted Pair - Category 5E

SPEEDLAN® – up to 300 MHz

XLAN-200 SC/UTP 24-2x4P DUPLEX



300 MHz	Frequency range	DA 2x4	Number of double cores
Z 100Ω	Impedance	SC	Overall screening
AWG 24	Dimension of conductor		Cable make up
	Cable elements		

Type	Number of double cores	Fire load value kWh/m	Outer diameter approx. mm	Weight approx. kg/km
XLAN-200 SC/UTP 24-2x4P DUPLEX <small>Values in () are valid for FRNC-version</small>	8	0,307 (0,208)	5,9 x 12,8	90 (83)

Specification

Application

Overall shielded data transmission cable for 300 MHz. Very compact designed and approved shielded data cable with rather good system reserves (far better than Cat.5E) and good shielding effects. Usable for all current data services as well as Gigabit Ethernet.

Usable for: 10BaseT, 100BaseT, 1000BaseT, ATM 155 Mbit/s, TP-PMD 125 Mbit/s, CDDI/TPDDI, Token Ring 4/16 Mbit/s, ISDN, analogue telephony.

Construction details

Conductor: solid, bare copper wire Ø 0,51 mm
 Insulation: Skin-foam-skin PE
 Colour code: WT-BU/BU; WT-OR/OR; WT-GN/GN; WT-BN/BN (acc. to IEC 708)
 Cable make up: cores twisted to pairs (**UTP**), pairs cabled together to cable core
 Stat. screening: aluminium laminated PETP-foil (**S**) aluminium outside
 Screening: tinned copper braids (**C**), 2 shielded elements parallel (**DUPLEX**),
 Sheath: PVC, grey (approx. RAL 7035)

Note

Also available with halogenfree (LSOH, FRNC) sheath according to EN 50167 (**XLAN-200 SC/UTP 24-2x4P FRNC DUPLEX**); orange

Cable Marking

XLAN-200 SC/UTP 24-2x4P DUPLEX Kat.5E ISO/IEC 11801 PMD P/N... <JT<> * SPEEDLAN * <00000m>

Electrical Details (at 20°C)

Standard	Category 5e (TIA/EIA-568-A-5) Category 5 (EN50288-2-1, ISO/IEC 11801, EN50173)
Loop resistance	≤ 186,6 Ω/km
Insulation resistance	≥ 10 GΩkm
Mutual capacitance (at f=800Hz)	nom. 45 nF/km
Capacitance unbalance k (at f=800Hz)	≤ 100 pF/500m
Capacitance unbalance e (at f=800Hz)	≤ 750 pF/500m
Propagation Delay (NVP)	nom. 77 %
Transfer impedance R _k at 10 MHz	≤ 10 mΩ/m
Impedance Z ≥ 1 MHz	100±15 % Ω
Dielectric strength	1000V/50Hz conductor/conductor 1000V/50Hz conductor/shield
Temperature range during installation for stationary conditions	-5 up to +50 °C -30 up to +70 °C

Frequency	f	MHz		1	4	10	16	20	31,25	62,5	100	155	200	300
Attenuation	α	dB/100m	max. ^{*)}	2,1	4,3	6,6	8,2	9,2	11,8	17,1	22,0	-	-	-
			typ.	2,1	4,1	6,2	7,7	8,6	10,7	15,4	19,5	24,9	28,6	35,5
NEXT	α _{NN}	dB	min. ^{**)}	65,3	56,3	50,3	47,3	45,8	42,9	38,4	35,3	-	-	-
			typ.	70	61	55	52	51	48	45	43	40	38,0	36,5
ACR		dB	min.	63,2	52,0	43,7	39,1	36,6	31,1	21,3	13,3	-	-	-
			typ.	67,9	56,9	48,8	44,3	42,4	37,3	29,6	23,5	15,1	9,4	1,0
PSNEXT	α _{PSNEXT}	dB	min. ^{**)}	62,9	53,3	47,3	44,3	42,8	39,9	35,4	32,3	-	-	-
			typ.	70	61	55	51	49	46	41	37	34	32	30
ELFEXT	α _{ELFEXT}	dB	min. ^{**)}	63,8	51,7	43,8	39,7	37,7	33,9	27,8	23,8	-	-	-
			typ.	70	59	51	46	44	40	34	30	26	24	19
Return Loss	R _L	dB	min. ^{**)}	20	23	25	25	25	23,6	21,5	20,1	-	-	-
			typ.	22	25	27	27	27	25,5	23,5	22,0	20,8	20	18,7

^{*)} Category 5 – values according to ISO/IEC11801, EN 50173, EN50288-2-1 ^{**)} Category 5E – values according to TIA/EIA-568-A-5