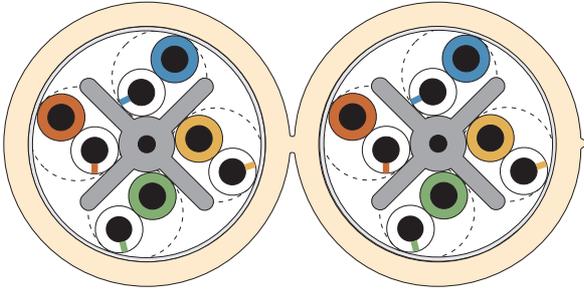


Datacable - Twisted Pair - Category 6

SPEEDLAN® – up to 350 MHz

XLAN-350 U/UTP 24-2x4P DUPLEX



350 MHz	Frequency range	DA 2x4	Number of double cores
Z 100Ω	Impedance		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-350 U/UTP 24-2x4P DUPLEX	8	0,401 (0,303)	6,1 x 12,5	81 (75)

Values in () are valid for FRNC-version

Specification

Application

Unshielded data transmission cable for 350 MHz.

Unshielded data cable with rather good system reserves (better than Cat.6). Usable for high quality requirements, all current data-services as well as Gigabit Ethernet. Installation friendly because of a central element (cross) no individual shield is required.

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: 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 2 elements parallel (**DUPLEX**)
 Sheath: PVC, beige (approx. RAL 1015)

Note

Also available with halogenfree (LSOH, FRNC) sheath according to EN 50167 (**XLAN-350 U/UTP 24-2x4P FRNC DUPLEX**); orange

Cable Marking

XLAN-350 U/UTP 24-2x4P DUPLEX CAT.6 ISO/IEC 11801 350 MHz PMD P/N... <JT<> * SPEEDLAN * <00000m>

Electrical Details (at 20°C)

Standard	Category 6 (ISO/IEC 11801, EN50173, prEN50288-5-1)
Loop resistance	≤ 186,6 Ω/km
Insulation resistance	≥ 10 GΩkm
Mutual capacitance (at f=800Hz)	nom. 48 nF/km
Capacitance unbalance k (at f=800Hz)	≤ 100 pF/500m
Capacitance unbalance e (at f=800Hz)	≤ 750 pF/500m
Propagation Delay (NVP)	nom. 71%
Impedance Z	100 ± 15 % Ω
1 ≤ f ≤ 100 MHz	100 ± 18 % Ω
100 < f ≤ 200 MHz	
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	250	300	350
Attenuation	α	dB/100m	max. ^{*)}	2,1	3,8	6,0	7,6	8,5	10,8	15,5	19,9	25,3	29,2	33,0	36,6	-
			typ.	2,0	3,7	5,9	7,5	8,4	10,6	15,1	19,3	24,3	28,1	32,0	34,6	38,2
NEXT	α _{NN}	dB	min. ^{*)}	66	66	60	57	55,5	52,6	48,1	45	42,2	40,5	39,1	37,8	-
			typ.	80	75	68	63	60	57	53	51	47	44	42	41	40
ACR		dB	min. ^{*)}	63,9	62,2	54,0	49,4	47,0	41,8	32,6	25,1	16,9	11,3	6,1	1,2	-
			typ.	78,0	71,3	62,1	55,5	51,6	46,4	37,9	31,7	22,7	15,9	10,0	6,4	1,8
PSNEXT	α _{NN}	dB	min. ^{*)}	63	63	57	54	52,5	59,6	45,1	42	39,2	37,5	36,1	34,8	-
			typ.	67	67	61	58	57	54	49	46	43	42	40	39	36
ELFEXT	α _{NN}	dB	min. ^{*)}	56	56	48	43,9	42,0	38,1	32,1	28,0	22,0	20,1	18,5	-	-
			typ.	70	70	62	58	56	52	46	42	38	36	34	33	32
Return Loss	R _L	dB	min. ^{*)}	23	23	23	23	23	23	23	23	21,1	20,0	-	-	-
			typ.	>25	>25	>25	>25	>25	>25	>25	>25	>25	23	22	21	20

*) Category 6 – values according to EN50288-5-1