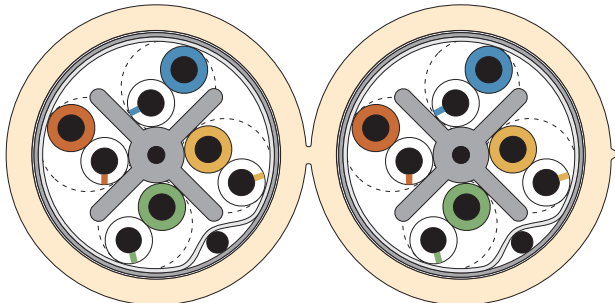




Datacable - Twisted Pair - Category 6

SPEEDLAN® – up to 350 MHz

XLAN-350 S/UTP 24-2x4P DUPLEX



350 MHz	Frequency range	DA 2x4	Number of double cores
Z 100Ω	Impedance	S	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 S/UTP 24-2x4P DUPLEX	8	0,465 (0,351)	7,0 x 14,1	98 (91)
Values in () are valid for FRNC-version				

Specification

Application

Overall shielded data transmission cable for 350 MHz.

Shielded data cable with rather good system reserves (better than Cat.6). Usable for high quality requirements, all current dataservices 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: 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
 Drain wire: tinned copper wire Ø 0,5 mm
 Stat. screening: aluminum laminated PETP-foil (S), 2 shieldet element parallel (DUPLEX)
 Sheath: PVC, beige (approx. RAL 1015)

Note

Also available with halogenfree (LSOH, FRNC) sheath according to EN 50167

(XLAN-350 S/UTP 24-2x4P FRNC DUPLEX); orange

Cable Marking

XLAN-350 S/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. 77 %
Transfer impedance R _K at 10 MHz	≤ 100 mΩ/m
Impedance Z	100±15 % Ω
1≤f≤100MHz	100±18 % Ω
100<f≤200MHz	
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	3,6	5,7	7,3	8,1	10,1	14,3	18,0	22,7	26,1	29,6	32,3	35,7
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	71,4	62,3	55,7	51,9	46,9	38,7	33,0	24,3	17,9	12,4	8,7	4,3
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	23	22	21	20	19

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