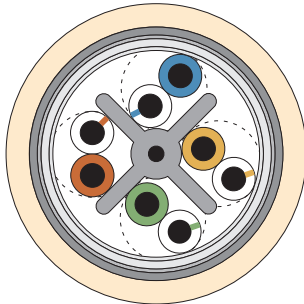


# Datacable - Twisted Pair - Category 6

**SPEEDLAN® – up to 350 MHz**

**XLAN-350 SC/UTP 24-4P**



350 MHz	Frequency range	DA 4	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-350 SC/UTP 24-4P Values in ( ) are valid for FRNC-version	4	0,221 (0,164)	7,1	54 (50)

## Specification

### Application

Overall shielded data transmission cable for 350 MHz.

Shielded data cable with rather good system reserves (far better than Cat.6) and excellent EMV characteristics. 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, Cable-Sharing

### 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  
 Stat. shield: aluminium laminated PETP-foil (**S**), aluminium outside  
 Screening: tinned copper braid (**C**),  
 Sheath: PVC, atge (approx. RAL 1015)

### Note

Also available with halogenfree (LSOH, FRNC) sheath according to EN 50167  
**(XLAN-350 SC/UTP 24-4P FRNC)**; orange

### Cable Marking

XLAN-350 SC/UTP 24-4P CAT.6 ISO/IEC 11801 350 MHz PMD P/N... <JT<TT> \* 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 <sub>K</sub> at 10 MHz	≤ 10 mΩ/m
Impedance Z 1≤f≤100MHz 100<f≤200MHz	100±15 % Ω 100±18% 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	250	300	350
Attenuation	α	dB/100m	max. <sup>*)</sup>	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 <sub>NN</sub>	dB	min. <sup>*)</sup>	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. <sup>*)</sup>	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 <sub>NN</sub>	dB	min. <sup>*)</sup>	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 <sub>NN</sub>	dB	min. <sup>*)</sup>	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 <sub>L</sub>	dB	min. <sup>*)</sup>	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

<sup>\*)</sup> Category 6 – values according to EN50288-5-1