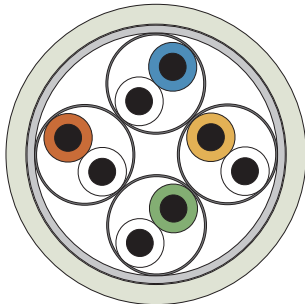


Datacable - Twisted Pair - Category 6+

SPEEDLAN® – up to 550 MHz

XLAN-550 C/STP 23-..P



550 MHz	Frequency range	DA 2-4	Number of double cores
Z 100Ω	Impedance	C	Overall screening
AWG 23	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-550 C/STP 23-2P	2	0,181 (0,116)	4,8 x 7,6	51 (46)
XLAN-550 C/STP 23-4P	4	0,243 (0,167)	7,6	68 (63)

Values in () are valid for FRNC-version

Specification

Application

Overall shielded data transmission cable for 550 MHz with individually shielded pairs.

high-screened data cable with very high system reserves (far better than Cat.6) and outstanding EMV characteristics. Usable for high quality requirements and highest data transmission rates.

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 0,55 mm
 Insulation: Skin-foam-skin PE
 Colour code: WT/BU; WT/OR; WT/GN; WT/BN (acc. to IEC 708)
 Cable make up: cores twisted together, aluminium laminated PET-foil – aluminium outside (STP), shielded pairs cabled together (2 pairs parallel)
 Screening: tinned copper braid (C),
 Sheath: PVC, grey (approx. RAL 7032)

Note

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

(XLAN-550 C/STP 23-4P FRNC); orange

Cable Marking

XLAN-550 C/STP 23-4P CAT.6 ISO/IEC 11801 550 MHz PMD P/N... <JT<> * SPEEDLAN * <00000m>

Electrical Details (at 20°C)

Standard	Category 6 acc. to prEN50288-5-1 Category 5E acc. to (TIA/EIA-568-A-5, ISO/IEC 11801, EN 50173)
Loop resistance	≤ 155 Ω/km
Insulation resistance	≥ 10 GΩkm
Mutual capacitance (at f=800Hz)	nom. 42 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 1–100 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	250	300	500	550
Attenuation	α	dB/100m	max. ¹⁾	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.	1,9	3,5	5,6	7,0	8,1	9,9	14,4	18,8	23,5	26,7	29,4	32,0	44,0	46,0
NEXT	α _{NN}	dB	min. ¹⁾	66	66	60	57	55,5	52,6	48,1	45	42,2	40,7	39,1	37,8	-	-
			typ.	>90	>90	>90	>90	>90	90	85	80	77	74	71	69	63	61
ACR		dB	min. ¹⁾	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.	>88	>86	>84	>83	>82	>80,1	70,6	61,2	53,5	47,3	41,6	37,0	19,0	15,0
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	18	17,5

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