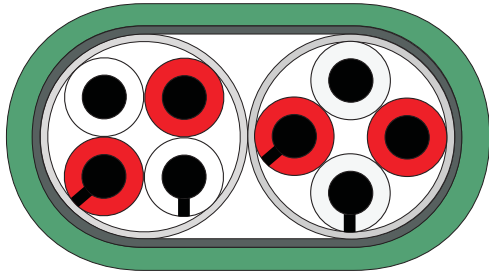


Datacable - Twisted Quad - Category 5

SPEEDLAN® – up to 550 MHz

VIERNET ..P



550 MHz	Frequency range	DA 2-4	Number of double cores
Z 100Ω	Impedance	C	Overall screening
AWG 22	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
VIERNET 2P	2	0,130 (0,091)	5,0	38 (35)
VIERNET 4P	4	0,244 (0,175)	5,0 x 8,6	70 (65)

Values in () are valid for FRNC-version

Specification

Application

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

High-protected and very compact designed data cable with high system reserves (far better than Cat.5) and outstanding EMV characteristics. Usable for high quality requirements and flexibility because of the possibility of mixed data applications (Cable-Sharing)

Usable for:
10BaseT, 100BaseT, 100Base-VG (≥ 2 quads), ATM 155 Mbit/s, TP-DDI, Token Ring 4/16 Mbit/s, ISDN, analogue telephony.

Construction details

Conductor: solid, bare copper wire Ø 0,64 mm
Insulation: Skin-foam-skin
Colour code: RD; WT; RD/BK; WT/BK
Cable make up: cores twisted to quads, aluminium laminated PET-foil – aluminium outside, 2 shielded quads parallel, identification with coloured tapes
Screening: tinned copper braid
Sheath: PVC, green

Note

Also available with halogenfree (LSOH, FRNC) sheath according to EN 50167 (**VIERNET ..P FRNC**).

Cable Marking

VIERNET ..P CAT.5 EN 50173 PMD P/N... <JTtT>
* SPEEDLAN * <00000m>

Electrical Details (at 20°C)

Standard	Category 5 acc. to ISO/IEC 11801, EN 50173
Loop resistance	≤ 114 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 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	300	550
Attenuation	α	dB/100m	max. ^{*)}	2,1	4,3	6,6	8,2	9,2	11,8	17,1	22,0	-	-	-
			typ.	1,8	3,2	5,1	6,5	7,4	9,2	13,2	17,2	22,3	31,0	44,0
NEXT	α _{NN}	dB (internal quads) (other quads)	min. ^{*)}	62	53	47	44	42	40	35	32	-	-	-
			typ.	66	57	51	50	49	45	42	40	38	35	26
			typ.	>85	>85	>85	>85	>85	85	83	78	73	65	54
ACR		dB	min. ^{*)}	59,9	48,7	40,4	35,8	32,8	28,2	17,9	10	-	-	-
			typ.	>83,2	>81,8	>79,9	>78,5	>77,6	75,8	69,8	60,8	50,7	34	10
Return Loss	R _L	dB	min	23	23	23	23	23	23	23	-	-	-	-
			typ.	27	27	27	27	27	27	27	27	26	25	25

^{*)} Category 5 – values according to ISO/IEC 11801, EN 50173