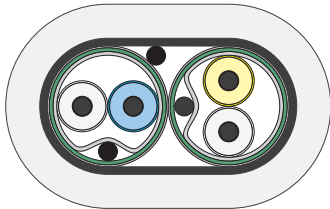


Datacable - Twisted Pair - Category 4

SPEEDLAN® – up to 20 MHz

LAN-20 C/STP 24-..P-120



20 MHz	Frequency range	DA 2-8	Number of double cores
Z 120Ω	Impedance	C	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
LAN-20 C/STP 24-2P	2	0,271 (0,200)	5,4 x 8,6	56 (54)
LAN-20 C/STP 24-4P	4	0,456 (0,329)	9,5	97 (91)
LAN-20 C/STP 24-8P	8	0,702 (0,541)	11,8	161 (151)

Values in () are valid for FRNC-version

Specification

Application

Overall shielded data transmission cable for 20 MHz with individually shielded pairs.

High-screened data cable with high system reserves (near to Cat.5), outstanding EMV characteristics and low attenuation due to 120 Ohm impedance. Multipurpose cable usable in telecommunication facilities. Because of the lower attenuation (compared with 100 Ohm-cables) longer distances are bridgeable.

Usable for:
xDSL, narrow-/broad band ISDN, analogue telephony, facsimile telegraphy.

Construction details

Conductor: solid, bare copper wire Ø 0,49 mm
 Insulation: Skin-foam-skin PE
 Colour code: naturell/BU, naturell/YE (2P) or naturell/RD (4P, 8P)
 Cable make up: cores twisted together wrapping with plastic tapes, tinned copper drain wire Ø 0,5 mm, aluminium laminated PET-foil (**STP**), wrapping with plastic tapes, identification with number-tapes (4P, 8P) shielded pairs cabled together (2 shielded pairs parallel),
 Drain wire: tinned copper wire Ø 0,5 mm
 Screening: tinned copper braid (**C**)
 Sheath: PVC, grey (approx. RAL 7035)

Note

Also available with halogenfree (LSOH, FRNC) sheath according to EN 50167 (**LAN-20 C/STP 24-..P FRNC**); orange

Cable Marking

LAN-20 C/STP 24-..P CAT.4 ISO/IEC 11801 20MHZ PMD P/N... <JT> * SPEEDLAN * <00000m>

Electrical Details (at 20°C)

Standard	Category 4 (ISO/IEC 11801)
Loop resistance	≤ 192 Ω/km
Insulation resistance	≥ 10 GΩkm
Mutual capacitance (at f=800Hz)	nom. 38 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	120±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
Attenuation	α	dB/100m	max. ¹⁾	2,0	4,0	6,7	8,1	9,2
			typ.	1,7	3,3	5,6	7,6	8,3
NEXT	α _{NN}	dB	min. ¹⁾	56	47	41	38	36
			typ.	>90	>90	77	72	68
ACR		dB	min.	53,9	42,7	33,8	29,1	25,8
			typ.	>88	>87	71,4	64,4	59,7

¹⁾ Category 4 – values according to ISO/IEC11801