

Datasheet

Version 1/2009

LAN 900

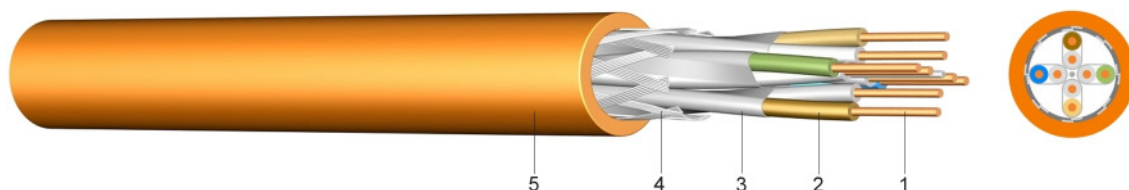
(S/STP Pimf)

Data Transmission Cable for Local Networks with Pair Wise Screening and Overall Shielding Category 7

Application:

In the horizontal wiring as an installation cable for the transfer in cable canals as well as in pipes within telecommunication installations and data systems.

Area of application: ISDA, B-ISDA, IEEE 802.3 10 Base T Ethernet, IEEE 802.3 100 Base T Ethernet, IEEE 802.5 Token Ring CCDI (FDDI at Cu), Gigabit-Ethernet, ATM, DQDB, Video



Construction:

- 1 solid bare copper, Ø 0,57mm
- 2 core insulation of foam-skin polyethylene
- 3 pair wise screen of plastic laminated aluminium foil with a tinned drain wire Ø 0,4
- 4 braid of tinned copper wires
- 5 outer sheath of polyvinylchloride (PVC) yellow or halogen-free polymer compound orange

According to:

EN 50288-4-1
IEC 332-1, IEC 754-2, IEC 1034-2
IEC 708-1 (core identification)

Technical data:

Temperature range	moved		0 °C bis +60 °C	Bending radius	under tension	8,0 x Ø
Loop impedance		[Ohm/100m]	14,5	Bending radius	no tension	4,0 x Ø
Capacity	max.	[nF/100m]	50			
Nom. Velocity of propagation	NVP nom.		77,0			
Attenuation	1-100 MHz	[Ohm]	100,0 +/- 25			
Coupling resistance	1-100 MHz	[mOhm/m]	10			
Capacity coupling (f=800 Hz)	K<100	[pF/100m]	150			
Insulation resistance		[GOhm/m]	>5			
Test voltage at 50 Hz		[V _{AC}]	700			

Frequenz [MHz]	Leitungs­dämpfung α [dB/100m]		Next [dB] α_{NN}		ACR [dB]		ELFEXT [dB] α_{ELFEXT}		Return Loss R_L [dB]	
	nom.*	max. CAT 7	nom.*	min. CAT 7	nom.*	min. CAT 7	nom.*	min. CAT 7	nom.*	min. CAT 7
1	1,9	2,0	90	80,0	88,1	78,1	85	78	24,0	-
4	3,4	3,6	90	80,0	86,6	76,4	85	78	24,0	23,1
10	5,5	5,7	90	80,0	84,5	74,3	80	74	26,0	25,0
20	7,8	8,1	90	80,0	82,2	71,9	75	68	26,0	25,0
31,25	9,6	10,1	90	80,0	80,4	69,9	72	64	25,0	23,6
62,5	14,0	14,5	80	75,1	61,1	60,6	66	58	22,5	21,5
100	18,2	18,5	78	72,4	59,8	53,9	60	54	21,0	20,1
155	22,8	23,4	77	69,9	54,2	46,2	58	51	20,0	18,8
200	26,0	26,8	75	69,9	49,0	41,4	55	48	19,0	17,3
300	32,0	33,3	72	65,3	40,0	32,0	50	44	19,0	17,3
600	47,0	48,9	67	60,8	20,0	11,9	45	38	19,0	17,3
900	56,0	-	61	-	5,0	-	35	-	17,3	-

* Category 7 - Werte gemäß ISO / IEC 11801, EN 50173

Number of pairs and nominal dimensions AWG Nr.	Copper figure kg/km	Overall diameter appr.mm	Calorific potential kWh / m	Tensile force N	Weight appr. kg / km
4 x 2 x AWG 23 PVC	44	8,0	0,17	190	74
4 x 2 x AWG 23 FRNC	44	8,0	0,16	190	74
2 x(4 x 2 x AWG 23) PVC	88	16,0x8,0	0,35	380	148
2 x(4 x 2 x AWG 23) FRNC	88	16,0x8,0	0,32	380	148