

Datasheet

Version 1/2009

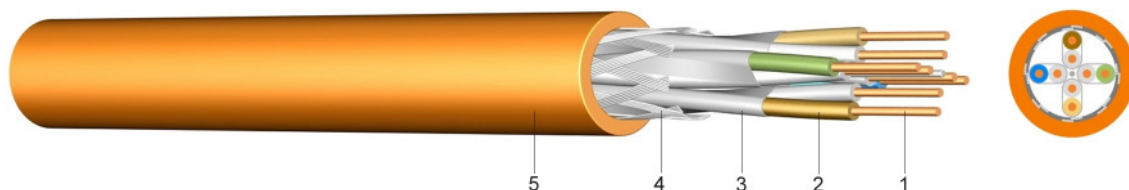
LAN 600

(S/STP Pimf)

Data Transmission Cable for Local Networks with Pair Wise Screening and Overall Shielding according to a Draft of Category 7

Application:

This installation cable is to be applied for horizontal laying in cable ducts and conduits in telecommunications and data transmission systems. Due to the construction with individually screened pairs, with an ACR of min. 15 dB at 600 MHz, the LAN 600 cables offer a transmission capacity up to the Gbit/s-range and therefore exceed all the requirements of the category 5, category 6 and category 7.



Construction:

- 1 solid bare copper, Ø 0,55mm or 0,64mm
- 2 core insulation of foam-skin polyethylene
- 3 pair wise shielding 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) grey or halogen-free polymer compound, orange

According to:

EN 50288-4-1
IEC 332-1 , IEC 54-2, 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]	1500			
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	85	80	83,1	78,1	80	78	24	-
4	3,4	3,6	85	80	81,6	76,4	80	78	24	23,1
10	5,5	5,7	85	80	79,5	74,3	76	74	26	25,0
16	7,0	7,2	85	80	78,0	72,8	72	70	26	25,0
20	7,8	8,1	85	80	77,2	71,9	70	68	26	25,0
100	18,2	18,5	77	72,4	58,8	53,9	56	54	21	20,1
155	22,8	23,4	75	69,6	52,2	46,2	53	51	20	18,8
200	26,0	26,8	74	67,9	48,0	41,4	50	48	19	17,3
300	32,0	33,3	70	65,3	38,0	32,0	46	44	19	17,3
600	47,0	48,9	65	60,8	18,0	11,9	40	38	19	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	7,5	0,17	110	68
4 x 2 x AWG 23 FRNC	44	7,5	0,17	110	68
2 x(4 x 2 x AWG 23) PVC	88	15,0x7,5	0,34	220	136
2 x(4 x 2 x AWG 23) FRNC	88	15,0x7,5	0,34	220	136