**Aufbau**

Blanke, eindrähtige Kupferleiter AWG 22, Aderisolation aus Foam-Skin PE, Aderfarben rot – grün; 2 Adern + 2 Beiläufe gemeinsam versiekt, Abschirmung aus Al-PETP Verbundfolie längseinlaufend und verzinntem Cu-Geflecht mit ca.80% Bedeckungsgrad., Außenmantel aus PVC, violett (RAL 4001).

**Verwendung**

Zur Verlegung auf und unter Putz in trockenen, feuchten und nassen Räumen sowie im Freien (bei geschützter Verlegung). Wird als Anschluss- und Verbindungsleitung im Maschinenbau z.B. als Verbindungsleitung zwischen Bussegmenten verwendet.

**Temperature range**

Operating temperature - 40°C bis + 70°C

**Properties at 20°C**

Conductor resistance		max.	57,1 Ohm / km
Isulation resistance		mind.	1 GOhm x km
Capacity nom.			30 nF/km
Wawe resistance			150 ± 10%
Atenuation	9,6 kHz	max.	2,5 dB / km
	38,4 kHz	max.	4,0 dB / km
	4,0 MHz	max.	22,0 dB / km
	16,0 MHz	max.	42,0 dB / km
Test voltage			3600 V, 3 min.
Bending radius			125mm.

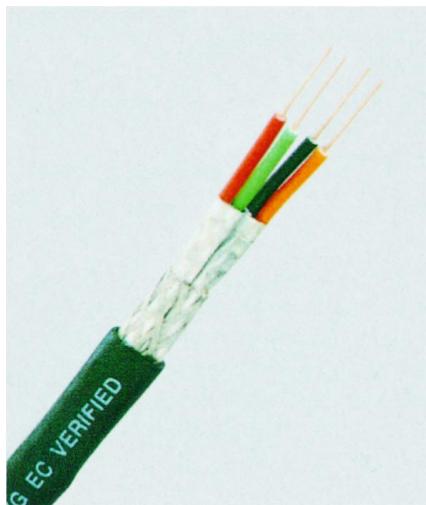
Number of pairs and nominal conductor cross section mm <sup>2</sup>	Price EUR / km	Copper figure kg / km	Overall diameter ca. mm	Weight ca. kg / km
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**O2YS(ST)CY 250/250**

1 x 2 x 0,64/2,45	<b>2130,00</b>	27	7,7	54
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**IBM TYP 1A****Installation Cable for IBM Cabling Systems**

IBM Part.-Nr. 33G2772

**Construction**

Solid bare copper conductor AWG 22, (0.64 mm diameter), foam-polyethylene insulation, core diameter 2.3 mm, cores are stranded to pairs, colour sequence 1. pair rd/gn, 2. pair or/bla, pairs are screened individually with a plastic-laminated aluminium foil, overall screen of tinned copper braiding with an optical coverage of ca. 70 %, outer sheath of PVC, black, flame-retardant with a white marking.

**Application**

It is to be applied indoors on the wall or in the floor as well as in cable ducts as a data transmission cable for IBM-LAN systems and EC-approved "non plenum type".

**Temperature range**

In motion	- 5°C till + 50°C
For fixed installation	- 30°C till + 70°C

**Properties at 20°C****ISDN**

Conductor resistance		max.	57,1 Ohm / km
Insulation resistance		min.	16,0 GOhm x km
Wave resistance		ca.	150 Ohm
Wave attenuation at		4 MHz	max. 22 dB / km
		16 MHz	max. 44 dB / km
		20 MHz	max. 49 dB / km
		62,5 MHz	max. 97,5 dB / km
		100 MHz	max. 123 dB / km
		300 MHz	max. 214 dB / km
Capacity		ca.	28 nF / km
Capacitance unbalance		max.	1,0 nF / km
Near-end crosstalk attenuation at 9,6 KHz -		5 MHz	min. 58 dB
		16 MHz	min. 50 dB
		100 MHz	min. 39 dB
		300 MHz	min. 31 dB

Number of pairs and nominal diameter mm	Price EUR / km	Copper figure kg / km	Overall measures ca. mm	Weight ca. kg / km
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**IBM TYP 1A**

2 x 2 x 0,64	<b>1.382,00</b>	38	7,6 x 11,9	102
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**Construction**

Stranded tinned copper conductor (1), AWG 20, (7 x 0.32 mm diameter), stranded bare copper conductor (2), AWG 20, (7 x 0.32 mm diameter), core insulation of polyethylene (PE), cores are stranded, inner sheath of polyethylene (PE), screen of tinned copper braiding with an optical coverage of ca. 95 %, outer sheath of polyvinylchloride (PVC), black.

**Application**

It is to be applied indoors as a BUS-installation cable in the data transmission engineering.

**Temperature range**

In motion	- 5°C till + 50°C
For fixed installation	- 30°C till + 70°C

**Properties at 20°C****ISDN**

Conductor loop resistance	ca.	63 Ohm / km
Insulation resistance	min.	10 GOhm x km
Capacity	ca.	50 nF / km
Wave resistance at 10 MHz	ca.	105 Ohm
Wave attenuation at 10 MHz	max.	23 dB / km

Number of pairs and nominal dimensions	Price	Copper figure	Overall measures	Weight
mm	EUR / km	kg / km	ca. mm	ca. kg / km

**2Y2YCY**

1 x 2 x AWG 20/7	<b>1.804,58</b>	51	8	98
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## J-2Y(St)Y St III ... Bd



## ISDN Cable

adapted to DIN VDE 0816/0815

### Construction

Solid bare copper conductor, 0.6 mm diameter, core insulation of solid PE, plastic foil, colour sequence adapted to VDE 0815, cores are stranded to star quads, overall screen of plastic laminated aluminium foil, with a tinned drain wire (0.6 mm diameter), PVC outer sheath, grey, flame retardant according to DIN VDE 0472 part 804 test B and IEC 332-1.

### Application

This ISDN cable is to be used as a termination and connection cable for the transmission of analogue to digital signals up to 16 MHz. It is suitable for ISDN applications in this frequency range such as BTX or fax. Peculiarity of this cable is the cores, which are stranded to star quads.

Please, consider our laying instructions in the technical part of this catalogue!

### Temperature range

In motion	- 5°C	till + 70°C
For fixed installation	- 20°C	till + 70°C

### Properties at 20°C

### ISDN

Loop resistance in Ohm / 100m	max.	13,0
Insulation resistance in GOhm x km	min.	5,0
Operating capacity in nF / km		48,0
Rel. velocity of propagation ca.		0,66
Wave resistance (1-100 MHz) in Ohm $\pm$ 15 %		100,0
Test AC voltage in V		800,0
Wave attenuation in dB / 100m at		
1,0 MHz		2,8
4,0 MHz		4,7
10,0 MHz		6,5
16,0 MHz		7,8
Min. near-end crosstalk attenuation in dB at		
1,0 MHz		30,0
10,0 MHz		30,0
Coupling resistance at 10,0 MHz in mOhm / m	<	200,0
Bending radius in n x cable diameter		15,0

Number of pairs and nominal dimensions mm	Price EUR / km	Copper figure kg / km	Overall diameter ca. mm	Fire intensity MJ / km	Tensile force da N	Weight ca. kg / km
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### J-2Y(St)Y St III ... Bd

2 x 2 x 0,6	<b>440,60</b>	15	4,9	680	7	42
4 x 2 x 0,6	779,20	26	6,9	880	13	79
6 x 2 x 0,6	1.280,60	39	7,0	1110	18	85
10 x 2 x 0,6	1.730,10	61	9,2	1350	30	103
20 x 2 x 0,6	2.751,80	121	11,9	2600	58	111
30 x 2 x 0,6	4.749,10	179	14,5	3460	85	217
40 x 2 x 0,6	5.915,60	239	16,2	4250	115	300
50 x 2 x 0,6	6.733,70	298	18,2	5340	140	378
60 x 2 x 0,6	8.710,30	356	19,6	6120	170	476
80 x 2 x 0,6	11.667,10	474	22,1	8020	230	555
100 x 2 x 0,6	12.491,90	592	24,7	9520	280	740

**LAN 200U flex**

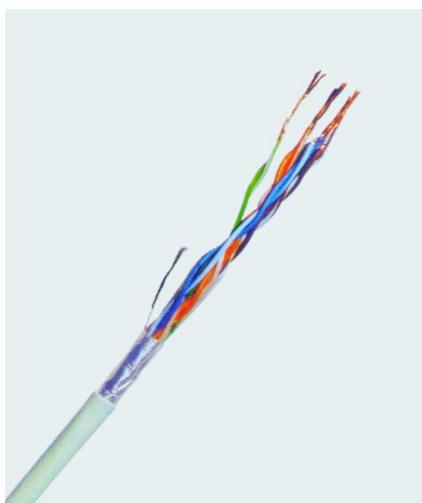
UTP

**LAN 200 flex**

UTP-S / FTP / S-UTP

**Patch Cable for Local Networks, Unscreened**  
**Patch Cable for Local Networks, Foil-Tape Shielded**  
**Category 5e**

according to ISO/IEC 11801, EN 50173, EN 50288-3-2 und EN 50288-2-2

**Construction**

Stranded bare copper conductor, solid PE insulation, coloured cores, colour sequence according to IEC 708, cores are stranded to pairs, pairs are stranded to bundles, LAN 100 U flex is unshielded, LAN 100 flex is shielded with a plastic-laminated aluminium foil, outer sheath of PVC, grey, flame-retardant according to DIN VDE 0472 part 804 test B and IEC 332-1 as well as of a halogen-free polymer compound.

**Application**

It is used for the wiring of electrical appliance-connections as a patch-, jumper-, switch- or connection cable. It is applied in switchboards or for data termination equipment.

Please, consider our laying instructions in the technical part of this catalogue!

**Temperature range**

In motion	0°C	till + 50°C
For fixed installation	- 20°C	till + 60°C

**Properties at 20°C**

	LAN 200 U flex	LAN 200 flex	mind. CAT 5e	
Loop resistance in Ohm / 100m	max. 29,0	max. 29,0	-	
Insulation resistance in GOhm x km	min. 5,0	min. 5,0	-	
Operating capacity in nF / km	50,0	50,0	-	
Rel. velocity of propagation ca.	0,66	0,66	-	
Wave resistance (1-100 MHz) in Ohm $\pm 15\%$	100,0	100,0	100,0	
Test a.c. voltage in	700,0	700,0	-	
Wave attenuation in dB / 100m at	1,0 MHz 4,0 MHz 10,0 MHz 16,0 MHz 20,0 MHz 31,25 MHz 62,5 MHz 100,0 MHz 200,0 MHz 250,0 MHz	2,8 5,9 8,7 11,8 12,6 16,3 22,0 29,2 38,0 40,2	2,8 5,9 8,7 11,8 12,6 16,3 22,0 29,2 38,0 40,2	3,2 6,5 9,9 12,3 13,8 17,7 25,6 33,0 - -
Min. near-end crosstalk attenuation in dB at	1,0 MHz 10,0 MHz 20,0 MHz 100,0 MHz 250,0 MHz	70,3 55,3 50,8 40,3 34,3	70,3 55,3 50,8 40,3 34,3	65,3 50,3 45,8 35,3 -
Coupling resistance at 10,0 MHz in mOhm / m	30,0	30,0	max 100,0	
Bending radius in n x cable diameter	8,0	8,0	-	

Number of pairs and nominal dimensions mm	Price EUR / km	Copper figure kg / km	Overall diameter ca. mm	Fire intensity MJ / km	Tensile force N	Weight ca. kg / km
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**LAN 200U flex**

4 x 2 x AWG 26	FRNC	1.024,20	15	4,9	400	30	24
4 x 2 x AWG 26		1.135,30	15	4,9	350	30	24

**LAN 200 flex**

4 x 2 x AWG 26	FRNC	1.492,92	15	5,2	400	30	30
4 x 2 x AWG 26		1.576,73	15	5,2	350	30	31

**LAN 200C flex**

UTP-SC / S-FTP / SC-UTP

**LAN 450 flex**

STP-C / S-STP / C-STP

**Patch Cable for Local Networks****Category 5e / Category 6**

according to ISO/IEC 11801, EN 50173, EN 50288-2-2 und EN 50288-5-2

**Construction**

Stranded bare copper conductor, foam-skin-PE-insulation (LAN 300 flex) or solid PE-insulation (LAN 100 C flex), coloured cores, colour sequence according to IEC 708, cores are stranded to pairs, pairwise screening of plastic-laminated aluminium foil for LAN 300 flex, pairs are stranded to bundles, overall screening of plastic-laminated aluminium foil and a tinned copper braiding, outer sheath of PVC, flame retardant according to DIN VDE 0472 part 804 test B and IEC 332-1 or of a halogen-free polymer compound.

**Application**

It is used for the wiring of electrical appliance-connections as a patch-, jumper-, switch- or connection cable. It is applied in switchboards or for data termination equipment.

Please, consider our laying instructions in the technical part of this catalogue.

**Temperature range**

In motion	0°C till + 50°C
For fixed installation	- 20°C till + 60°C

Properties at 20°C	LAN 200C flex	min.CAT 5e	LAN 450 flex	min.CAT 6	
Loop resistance in Ohm / 100m	max. 29,0	-	max. 29,0	-	
Insulation resistance in GOhm x km	mind. 5,0	-	mind. 5,0	-	
Operating capacity in nF / km	50,0	-	45,0	-	
Rel. velocity of propagation ca.	0,66	-	0,78	-	
Wave resistance (1-100 MHz) in Ohm ± 15 %	100,0	100,0	100	100,0	
Test a.c. voltage in	700,0	-	700,0	-	
Wave attenuation in dB / 100m at	1,0 MHz 4,0 MHz 10,0 MHz 16,0 MHz 20,0 MHz 31,25 MHz 62,5 MHz 100,0 MHz 200,0 MHz 250,0 MHz 300,0 MHz 450,0 MHz	2,8 5,9 8,7 11,8 12,6 16,3 22,0 29,2 38,0 40,2 - -	3,2 6,5 9,9 12,3 13,8 17,7 25,7 33,0 n.def. n.def.	2,8 5,5 8,7 11,1 12,5 14,7 21,8 27,7 39,8 44,1 50,2 67,8	3,2 5,9 9,0 11,4 12,8 15,5 22,5 28,5 40,5 45,0 n.def. n.def.
Min. near-end crosstalk attenuation in dB at	1,0 MHz 10,0 MHz 20,0 MHz 100,0 MHz 250,0 MHz	70,3 55,3 50,8 40,3 34,3	65,3 50,3 45,8 35,3 n.def.	80,0 80,0 80,0 69,5 63,5	66,0 59,3 54,8 44,3 38,3
Coupling resistance at 10,0 MHz in mOhm / m	25,0	max. 100	5,0	-	
Bending radius in n x cable diameter	8,0	-	8,0	-	

Number of pairs and nominal dimensions mm	Price EUR / km	Copper figure kg / km	Overall diameter ca. mm	Fire intensity MJ / km	Tensile force da N	Weight ca. kg / km
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**LAN 200C flex**

4 x 2 x AWG 26	FRNC	<b>1.913,40</b>	22	6,0	570	16	42
4 x 2 x AWG 26		2.236,50	22	6,0	530	16	43

**LAN 450 flex**

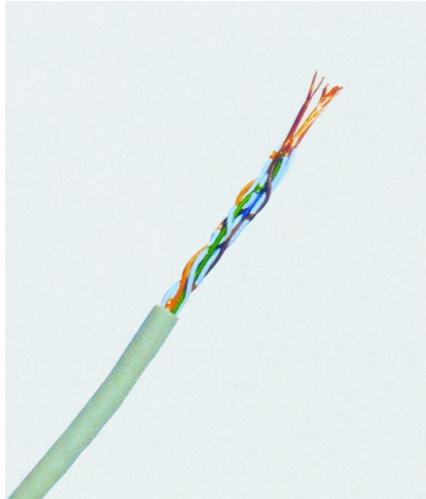
4 x 2 x AWG 26	FRNC	<b>2.204,00</b>	22	5,9	570	16	48
4 x 2 x AWG 26		2.890,60	22	5,9	530	16	49

## LAN 200U

UTP

### Data Transmission Cable for Local Networks, Unscreened Category 5e

according to ISO / IEC 11801, EN 50173 und EN 50288-3-1



#### Construction

Solid bare copper conductor, 0.5 mm diameter, PE insulation, coloured cores, colour sequence according to IEC 708, cores are stranded to pairs, pairs are stranded to bundles, outer sheath of PVC, flame-retardant according to DIN VDE 0472 part 804 test B and IEC 332-1

#### Application

This installation cable is to be applied for horizontal laying in cable ducts and conduits in telecommunications and data transmission systems.

Please, consider our laying instructions in the technical part of this catalogue.

#### Temperature range

In motion	0°C	till + 50°C
For fixed installation	- 20°C	till + 60°C

#### Properties at 20°C

#### LAN 200 U

#### mind. CAT 5e

Loop resistance in Ohm / 100m		max. 19,0	
Insulation resistance in GOhm x km		mind. 5,0	-
Operating capacity in nF / km		50,0	-
Rel. velocity of propagation ca.		0,66	-
Wave resistance (1-100 MHz) in Ohm $\pm$ 15 %		100,0	100,0
Test a.c. voltage in		700,0	-
Wave attenuation in dB / 100m at	1,0 MHz	1,9	2,1
	4,0 MHz	3,6	4,1
	10,0 MHz	5,8	6,5
	16,0 MHz	7,4	8,2
	20,0 MHz	8,3	9,3
	31,25 MHz	10,5	11,7
	62,5 MHz	15,0	17,0
	100,0 MHz	19,0	22,0
	200,0 MHz	27,0	n.def.
	250,0 MHz	30,0	n.def.
Min. near-end crosstalk attenuation in dB at	1,0 MHz	70,3	65,3
	10,0 MHz	55,3	50,3
	20,0 MHz	50,8	45,8
	100,0 MHz	40,3	35,3
Coupling resistance at 10,0 MHz in mOhm / m		60,0	-
Bending radius in n x cable diameter		8,0	-

Number of pairs and nominal dimensions mm	Price EUR / km	Copper figure kg / km	Overall diameter ca. mm	Fire intensity MJ / km	Tensile force N	Weight ca. kg / km
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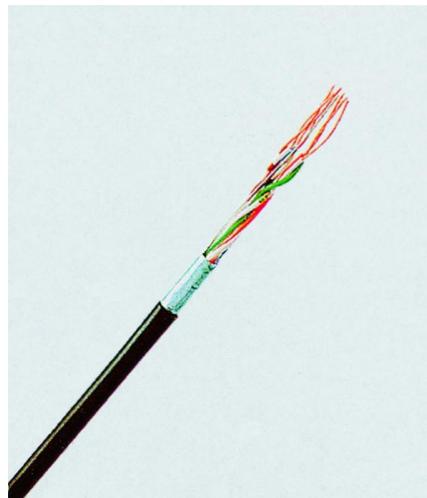
#### LAN 200U

4 x 2 x AWG 24	739,80	17	4,9	340	80	26
4 x 2 x AWG 24	FRNC 877,00	17	4,9	310	80	26

#### LAN 200U duplex

2 x (4 x 2 x AWG 24)	1480,00	34	4,9 x 10,0	680	80	52
2 x (4 x 2 x AWG 24)	FRNC 439,00	34	4,9 x 10,0	620	80	52

**LAN 200**  
**LAN 200 duplex**  
 UTP-S / FTP / S-UTP



**Data Transmission Cable for Local Networks  
with Overall Shielding, Category 5e**  
 according to ISO / IEC 11801, EN 50173 und EN 50288-2-1

**Construction**

Solid bare copper conductor with 0.5 mm or 0.6 mm diameter, foam-skin-PE insulation, cores are coloured, colour sequence according to IEC 708, cores are stranded to pairs, pairs are twisted to bundles, plastic foil, overall shielding of plastic-laminated aluminium foil with a tinned drain wire (0.5 mm diameter), outer sheath of PVC, flame-retardant according to DIN VDE 0472 part 804 test B and IEC 332-1 or of a halogen-free polymer compound.

**Application**

This installation cable is to be applied for horizontal laying in cable ducts and conduits in telecommunications and data transmission systems.

Please, consider our laying instructions in the technical part of this catalogue.

**Temperature range**

In motion	0°C till + 50°C
For fixed installation	- 20°C till + 60°C

**Properties at 20°C**

	LAN 200	min. CAT 5e
Loop resistance in Ohm / 100m	max. 19,0	
Insulation resistance in GOhm x km	mind. 5,0	-
Operating capacity in nF / km	50,0	-
Rel. velocity of propagation ca.	0,66	-
Wave resistance (1-100 MHz) in Ohm ± 15 %	100,0	100,0
Test a.c. voltage in	700,0	-
Wave attenuation in dB / 100m at		
1,0 MHz	1,9	2,1
4,0 MHz	3,6	4,1
10,0 MHz	5,8	6,5
16,0 MHz	7,4	8,2
20,0 MHz	8,3	9,3
31,25 MHz	10,5	11,7
62,5 MHz	15,0	17,0
100,0 MHz	19,0	22,0
200,0 MHz	27,0	n.def.
250,0 MHz	30,0	n.def.
Min. near-end crosstalk attenuation in dB at		
1,0 MHz	70,3	65,3
10,0 MHz	55,3	50,3
20,0 MHz	50,8	45,8
100,0 MHz	40,3	35,3
Coupling attenuation in dB	60,0	-
Coupling resistance at 10,0 MHz in mOhm / m	25,0	-
Bending radius in n x cable diameter	8,0	-

Number of pairs and nominal dimensions mm	Price EUR / km	Copper figure kg / km	Overall diameter ca. mm	Fire intensity MJ / km	Tensile force N	Weight ca. kg / km
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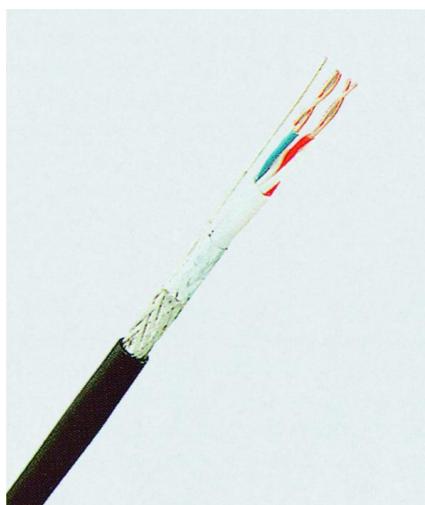
**LAN 200**

4 x 2 x AWG 24	<b>1.069,52</b>	18	6,0	500	80	41
4 x 2 x AWG 24 FRNC	1.267,64	18	6,0	420	80	43

**LAN 200 duplex**

2 x (4 x 2 x AWG 24)	<b>2.155,92</b>	36	6,0 x 12,2	1000	30	82
2 x (4 x 2 x AWG 24)	2.514,97	36	6,0 x 12,2	860	30	86

**LAN 200C**  
**LAN 200C plus**  
**LAN 200C duplex**  
 UTP-SC / S-FTP / SC-UTP



## Data Transmission Cable for Local Networks with Overall Shielding, Category 5e

according to ISO / IEC 11801, EN 50173 und EN 50288-2-1

### Construction

Solid bare copper conductor with 0.5 mm or 0.6 mm diameter, foam-skin-PE insulation, cores are coloured, colour sequence according to IEC 708, cores are stranded to pairs, pairs are twisted to bundles, plastic foil, overall shielding of plastic-laminated aluminium foil with a tinned drain wire (0.5 mm diameter) and of a tinned copper braiding, outer sheath of PVC, flame-retardant according to DIN VDE 0472 part 804 test B and IEC 332-1 or of a halogen-free polymer compound.

### Application

This installation cable is to be applied for horizontal laying in cable ducts and conduits in telecommunications and data transmission systems.

Please, consider our laying instructions in the technical part of this catalogue.

### Temperature range

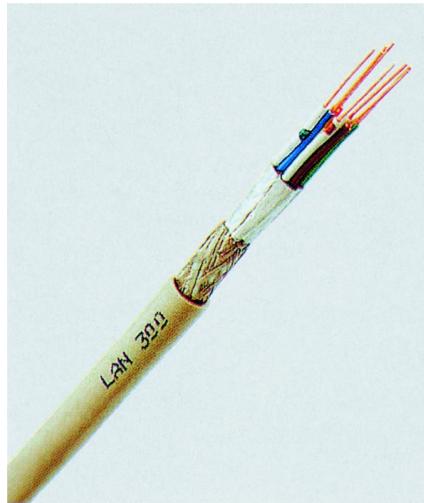
In motion	- 5°C	till + 70°C	
For fixed installation	- 20°C	till + 70°C	

Properties at 20°C		LAN 200C	LAN 200C plus	min. CAT 5e
Loop resistance in Ohm / 100m		max. 19,0	max. 13,0	-
Insulation resistance in GOhm x km		mind. 5,0	mind. 5,0	-
Operating capacity in nF / km		50,0	45,0	-
Rel. velocity of propagation ca.		0,66	0,78	-
Wave resistance (1-100 MHz) in Ohm $\pm$ 15 %		100,0	100,0	100,0
Test a.c. voltage in		700,0	700,0	-
Wave attenuation in dB / 100m at		1,0 MHz	1,8	2,1
		4,0 MHz	3,5	4,1
		10,0 MHz	5,8	6,5
		16,0 MHz	7,4	8,2
		20,0 MHz	8,3	9,3
		31,25 MHz	10,5	11,7
		62,5 MHz	15,0	17,0
		100,0 MHz	19,0	22,0
		200,0 MHz	27,0	n.def.
		250,0 MHz	30,0	n.def.
Min. near-end crosstalk attenuation in dB at		1,0 MHz	70,3	65,3
		10,0 MHz	55,3	50,3
		20,0 MHz	50,8	45,8
		100,0 MHz	40,3	35,3
Coupling resistance at 10,0 MHz in mOhm / m		25,0	5,0	max 100,0
Bending radius in n x cable diameter		8,0	8,0	-

Number of pairs and nominal dimensions mm	Price EUR / km	Copper figure kg / km	Overall diameter ca. mm	Fire intensity MJ / km	Tensile force N	Weight ca. kg / km
<b>LAN 200C</b>						
4 x 2 x AWG 24		1.399,69	32	6,5	520	95
4 x 2 x AWG 24	FRNC	1.825,32	32	6,5	440	95
<b>LAN 200C plus</b>						
4 x 2 x 0,6		1.775,79	45	7,2	520	95
4 x 2 x 0,6	FRNC	2.132,78	45	7,2	440	95
<b>LAN 200C duplex</b>						
2 x (4 x 2 x AWG 24)		2.964,16	64	6,5 x 13,2	1040	95
2 x (4 x 2 x AWG 24)	FRNC	3.851,16	64	6,5 x 13,2	880	95
						120
						126

**LAN 450**  
S-STP / S-STP / C-STP

**Data Transmission Cable for Local Networks with Pairwise Screening and Overall Shielding, Cat. 5**  
according to ISO / IEC 11801, EN 50173 und EN 50288-5-1



**Construction**

Solid bare copper conductor with 0.64 mm or 0.55 mm diameter, foam-skin-PE insulation, cores are coloured, colour sequence according to IEC 708, cores are stranded to pairs, pairwise shielding of plastic-laminated aluminium foil with a tinned drain wire (0.6 mm diameter), overall shielding of a tinned copper braiding, outer sheath of PVC, flame-retardant according to DIN VDE 0472 part 804 test B and IEC 332-1 or of a halogen-free polymer compound.

**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. 39 dB at 300 MHz, the LAN 300 cables offer an excellent transmission capacity. Durch die Konstruktion mit einzeln durch Metallfolien geschirmten Paaren bietet das LAN 450 eine hervorragende Übertragungskapazität und übertrifft alle Forderungen der Kategorie 6.

Please, consider our laying instructions in the technical part of this catalogue.

**Temperature range**

In motion	- 5°C	till + 70°C
For fixed installation	- 20°C	till + 70°C

<b>Properties at 20°C</b>		<b>LAN 450</b>	<b>max. CAT 6</b>
Loop resistance in Ohm / 100m		max. 13,0	-
Insulation resistance in GOhm x km		mind. 5,0	-
Operating capacity in nF / km		45,0	-
Rel. velocity of propagation ca.		0,78	-
Wave resistance (1-100 MHz) in Ohm + 15 %		100,0	100,0
Test a.c. voltage in		700,0	-
Wave attenuation in dB / 100m at	1,0 MHz	1,8	2,1
	4,0 MHz	3,7	3,8
	10,0 MHz	5,8	6,0
	16,0 MHz	7,4	7,6
	20,0 MHz	8,3	8,5
	62,5 MHz	14,8	15,5
	100,0 MHz	18,8	19,9
	200,0 MHz	26,8	29,2
	250,0 MHz	30,1	33,0
	300,0 MHz	33,0	-
	450,0 MHz	41,0	-
Min. near-end crosstalk attenuation in dB at	1,0 MHz	80,0	66,0
	10,0 MHz	80,0	59,3
	20,0 MHz	80,0	54,8
	100,0 MHz	69,5	44,3
	300,0 MHz	62,0	-
	450,0 MHz	59,6	-
Coupling resistance at 10,0 MHz in mOhm / m		5,0	max 100,0
Bending radius in n x cable diameter		8,0	-

<b>Number of pairs and nominal dimensions</b>	<b>Price</b>	<b>Copper figure</b>	<b>Overall diameter</b>	<b>Fire intensity</b>	<b>Tensile force</b>	<b>Weight ca.</b>
<b>mm</b>	<b>EUR / km</b>	<b>kg / km</b>	<b>ca. mm</b>	<b>MJ / km</b>	<b>N</b>	<b>kg / km</b>

**LAN 450**

4 x 2 x AWG 23	FRNC	<b>1.977,17</b>	44	8,0	650	110	74
4 x 2 x AWG 23		2.257,63	44	8,0	580	110	76

**LAN 450 duplex**

2x(4 x 2 x AWG 23)	FRNC	<b>3.954,40</b>	88	8,0x16,0	1300	110	148
2x(4 x 2 x AWG 23)		4.515,30	88	8,0x16,0	1160	110	152

**LAN 600**  
**LAN 900**  
**LAN 1200**  
 STP-C / S-STP / C-STP

**Data Transmission Cable for Local Networks with  
 Pairwise Screening and Overall Shielding,  
 according to a Draft of Category 7**

nach ISO / IEC 11801, EN 50173, IEC 61156-5 und EN 50288-4-1



**Construction**

Solid bare copper conductor with 0.55 mm or 0.64 mm diameter, foam-skin-PE insulation, cores are coloured, colour sequence according to IEC 708, cores are stranded to pairs, pairwise shielding of plastic-laminated aluminium foil with a tinned drain wire (0.6 mm diameter), overall shielding of a tinned copper braiding, outer sheath a halogen-free polymer compound.

**Application**

This installation cable is to be applied for horizontal laying in cable ducts and conduits in telecommunications and data transmission systems.

Please, consider our laying instructions in the technical part of this catalogue.

**Temperature range**

In motion	- 5°C	till + 70°C
For fixed installation	- 20°C	till + 70°C

<b>Properties at 20°C</b>		<b>LAN 600</b>	<b>LAN 900</b>	<b>LAN 1200</b>	<b>max. CAT 7</b>
Loop resistance in Ohm / 100m	max.	16,5	13,0	11,5	-
Insulation resistance in GOhm x km	mind.	5,0	5,0	5,0	-
Operating capacity in nF / km		43,0	43,0	40,0	-
Rel. velocity of propagation ca.		0,78	0,78	0,80	-
Wave resistance (1-100 MHz) in Ohm + 15 %		100,0	100,0	100,0	-
Test a.c. voltage in		700,0	700,0	700,0	-
Wave attenuation in dB / 100m at	1,0 MHz	1,9	1,9	1,6	2,1
	10,0 MHz	5,7	5,6	4,7	6,0
	20,0 MHz	8,1	7,9	6,7	8,5
	100,0 MHz	18,5	18,2	15,5	19,0
	200,0 MHz	26,8	26,4	22,6	27,0
	300,0 MHz	33,3	32,7	28,2	33,0
	600,0 MHz	48,9	48,3	41,7	50,0
	900,0 MHz	-	56,0	54,0	-
	1200,0 MHz	-	-	62,6	-
Min. near-end crosstalk attenuation in dB at	1,0 MHz	100,0	90,0	100,0	80,0
	10,0 MHz	100,0	90,0	100,0	80,0
	100,0 MHz	90,0	84,0	89,0	71,0
	300,0 MHz	82,0	73,0	78,0	64,0
	600,0 MHz	76,0	70,0	75,0	60,0
	900,0 MHz	-	65,0	70,0	-
	1200,0 MHz	-	-	65,0	-
Coupling resistance at 10,0 MHz in mOhm / m		10,0	5,0	5,0	max 100,0
Bending radius in n x cable diameter		8,0	8,0	10,0	-

<b>Number of pairs and nominal dimensions</b>	<b>Price</b>	<b>Copper figure</b>	<b>Overall diameter</b>	<b>Fire intensity</b>	<b>Tensile force</b>	<b>Weight ca.</b>
<b>mm</b>	<b>EUR / km</b>	<b>kg / km</b>	<b>ca. mm</b>	<b>MJ / km</b>	<b>N</b>	<b>kg / km</b>

**LAN 600**

4 x 2 x AWG 23	2.513,70	44	8,0	650	100	74
4 x 2 x AWG 23	2.890,80	44	8,0	580	100	76

**LAN 900**

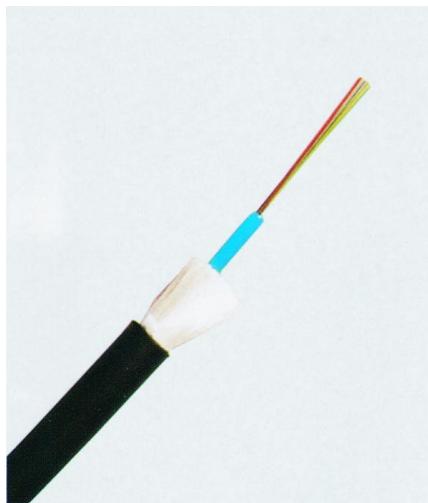
4 x 2 x AWG 23	2.645,99	44	8,0	650	110	74
4 x 2 x AWG 23	3.021,30	44	8,0	580	110	76

**LAN 1200**

4 x 2 x AWG 22	FRNC	3.193,50	52	8,7	745	130	94
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## A-DQ(ZN)2Y A-DQ(ZN)B2Y

## Light Dielectric Outdoor Cable with or without Non-Metallic Rodent Protection



### Construction

Central bundle core, for types with max. 12 fibres the interstices are filled with a filling compound (in case of stranded core structures up to 60 fibres the bundle cores are stranded around a stress relieving element), non-metallic stress relieving elements (aramid yarns), additional swellable material (swelling tape or swellable emulsion), PE outer sheath.

### Application

This metal-free optical fibre outdoor cable is suitable for installations directly into the earth or in conduits in telecommunications and data processing systems. The stranded design (nxm) is available till 60 fibres, and with a multifunctionally used reinforced glass roving braiding as a non-metallic stress relieving element and an armour for rodent protection.

### Type designation

e.g.: A-DQ(ZN)2Y 12 G50/125

### Temperature range

- 25°C till + 70°C during transport and storage
- 5°C till + 50°C during laying
- 20°C till + 60°C in operation

### Mechanical data and prices (single-mode on request)

Type	Price EUR/km	Overall diameter ca. mm	Weight kg/km	Bending radius dynamic mm	Crush strength permanent N/dm	Tractive force N
<b>A-DQ(ZN)2Y</b>						
4 G50/125	3.723,00	8,7	82	400	1000	2000
8 G50/125	5.721,10	8,7	82	400	1000	2000
12 G50/125	7.685,10	8,7	82	400	1000	2000
16 G50/125	11.613,10	11,3	112	226	1000	3000
24 G50/125	16.309,60	11,3	112	226	1000	3000
4 G62,5/125	4.431,80	8,7	82	400	1000	2000
8 G62,5/125	7.002,00	8,7	82	400	1000	2000
12 G62,5/125	9.905,30	8,7	82	400	1000	2000
16 G62,5/125	15.079,90	11,3	112	226	1000	3000
24 G62,5/125	21.347,60	11,3	112	226	1000	3000
<b>A-DQ(ZN)B2Y</b>						
4 G50/125	<b>4.098,70</b>	10,2	102	400	1000	2500
8 G50/125	<b>6.148,10</b>	10,2	102	400	1000	2500
12 G50/125	<b>8.026,70</b>	10,2	102	400	1000	2500
16 G50/125	12.467,00	12,6	112	252	1000	3700
24 G50/125	<b>17.026,80</b>	12,6	112	252	1000	3700
4 G62,5/125	<b>4.781,80</b>	10,2	102	400	1000	2500
8 G62,5/125	<b>7.514,30</b>	10,2	102	400	1000	2500
12 G62,5/125	<b>10.246,80</b>	10,2	102	400	1000	2500
16 G62,5/125	15.797,20	12,6	112	252	1000	3700
24 G62,5/125	22.201,50	12,6	112	252	1000	3700