



DIN47100, 250V, twisted pairs, shielded, CPR Eca



APPLICATION

halogen-free and environmentally data transmission cable, control and connecting cable predominantly for transmission of analog and digital signals in process controlled facilities in measurement and control technology, in fire vulnerable areas and facilities with high concentration of people and property values, for lossless transmission of datas and signals. For fixed laying and flexible applications with undefined cable routing and without tensile stress. Suitable for use in dry and humid rooms. Outdoor use only with UV-protection, no laying underground.



SPECIAL FEATURES

- twisted pairs
- free from lacquer damaging substances and silicone (during production)
- FRNC (Flame Retardant, Non Corrosive)
- LSF 0H (Low smoke in fume, zero halogen)
- recommended for EMC-applications

PRODUCT DETAILS

DESIGN

Conductor material	bare copper strand
Conductor class	acc. to IEC 60228 cl. 5; exception: 0,34 mm ² , stranded (7 x 0,25 mm)
Core insulation	special halogen-free compound
Core identification	acc. to DIN 47100 different colours
Stranding	2 cores twisted to a pair; pairs stranded in layers
Protection against contact	plastic foil
Overall shield	copper braid tinned; coverage approx. 85%
Outer sheath material	special halogen-free compound
Sheath colour	grey, RAL 7032

ELECTRICAL PROPERTIES

Rated voltage AC IEC	250 V; peak-voltage on 0,14 mm ² : 350 V; > 0,14 mm ² : 500 V
Testing voltage	on 0,14 mm ² : core/core: 1.2 kV; core/shield: 1 kV > 0,14 mm ² : core/core: 1.5 kV; core/shield: 1 kV
Conductor resistance	acc. to IEC 60228 cl. 5
Insulation resistance	min. 20 MΩ xkm
Current carrying capacity	acc. to DIN VDE, s. Techn. Guidelines
Capacity	core/core ca. 120 nF/km; core/shield ca. 160 nF/km

MECHANICAL & DYNAMIC PROPERTIES

Min. bending radius fixed	up to 20 mm Ø 7,5 x d; > 20 mm Ø 10 x d
Min. bending radius moved	up to 20 mm Ø 15 x d; > 20 mm Ø: 20 x d

THERMAL PROPERTIES

Operat. temp. fixed min./max. [°C]	-30 °C / +80 °C
Operat. temp. moved min/max [°C]	-5 °C / +70 °C

PROPERTIES IN CASE OF FIRE

Halogen-free	acc. to IEC 60754-2
Burning behavior	flame-retardant acc. to IEC 60332-3-24 (Cat. 24)

STANDARDS & APPROVALS

Standard	similar to DIN VDE 0812
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ITEM OVERVIEW**PAARTRONIC-CH LIHCH (TP)**

Item no. [TKD]	Dimension	Outer-Ø [mm]	Cu Index [kg/km]	Weight [kg/km]
0507045	2 X 2 X 0,14	5,2	18,5	39,0
0507046	3 X 2 X 0,14	5,4	23,0	48,0
0506427	4 X 2 X 0,14	5,5	26,6	54,0
0507047	6 X 2 X 0,14	7,1	48,5	85,0
0507049	8 X 2 X 0,14	7,5	53,7	97,0
0507050	10 X 2 X 0,14	8,3	59,0	110,0
0507051	12 X 2 X 0,14	8,8	66,0	142,0
0507052	16 X 2 X 0,14	9,8	79,0	154,0
0507053	20 X 2 X 0,14	10,3	97,0	184,0
0500825	25 X 2 X 0,14	11,7	113,0	238,0
0502605	25 X 2 X 0,14	11,7	113,0	238,0
0507263	30 X 2 X 0,14	12,3	140,0	270,0
0507054	30 X 2 X 0,14	12,3	140,0	270,0
0507055	2 X 2 X 0,25	6,0	28,0	54,0
0507079	3 X 2 X 0,25	6,4	39,6	66,0
0507056	4 X 2 X 0,25	6,5	44,9	81,0
0507057	6 X 2 X 0,25	8,5	69,5	115,0
0507058	8 X 2 X 0,25	9,0	76,9	130,0
0507059	10 X 2 X 0,25	9,7	102,0	158,0
0507060	12 X 2 X 0,25	10,9	120,0	190,0
0507061	16 X 2 X 0,25	12,0	146,5	238,0
0507455	18 X 2 X 0,25	13,7	139,7	248,0
0500832	24 X 2 X 0,25	14,5	226,0	298,0
0507062	24 X 2 X 0,25	14,5	226,0	298,0
0507274	5 X 2 X 0,34	8,6	60,0	85,0
0502562	2 X 2 X 0,5	7,7	48,1	93,0
0502489	3 X 2 X 0,5	8,1	73,7	129,0
0502563	4 X 2 X 0,5	8,2	82,0	146,0
0503606	6 X 2 X 0,5	10,8	110,0	198,0
0502567	8 X 2 X 0,5	11,4	139,0	259,0
0502564	12 X 2 X 0,5	14,0	198,3	354,0
0502565	16 X 2 X 0,5	15,6	240,0	459,0
0500835	24 X 2 X 0,5	18,3	394,0	570,0
0502566	24 X 2 X 0,5	18,3	394,0	570,0
0503141	2 X 2 X 0,75	8,4	58,0	106,0
0507063	3 X 2 X 0,75	8,8	84,0	140,0
0502622	4 X 2 X 0,75	8,9	108,0	179,0
0507064	5 X 2 X 0,75	10,3	126,0	215,0
0506799	6 X 2 X 0,75	11,7	146,0	246,0
0507065	8 X 2 X 0,75	12,5	180,0	305,0
0502669	12 X 2 X 0,75	15,4	261,0	456,0
0507066	16 X 2 X 0,75	17,2	336,0	492,0
0507067	2 X 2 X 1	9,4	84,0	142,0
0502658	3 X 2 X 1	9,8	96,0	173,0
0507068	4 X 2 X 1	10,0	121,0	212,0
0507069	5 X 2 X 1	11,6	161,0	266,0
0507070	8 X 2 X 1	15,0	240,0	400,0
0507071	10 X 2 X 1	16,2	282,0	510,0
0507072	12 X 2 X 1	17,8	324,0	590,0

PAARTRONIC-CH LIHCH (TP)

Item no. [TKD]	Dimension	Outer-Ø [mm]	Cu Index [kg/km]	Weight [kg/km]
0506852	2 X 2 X 1,5	10,5	112,0	165,0
0507073	3 X 2 X 1,5	11,0	140,0	218,0
0507074	4 X 2 X 1,5	11,1	176,0	265,0
0507075	5 X 2 X 1,5	13,0	212,0	310,0
0507076	8 X 2 X 1,5	16,7	322,0	642,0
0507077	10 X 2 X 1,5	18,0	380,0	870,0
0507078	12 X 2 X 1,5	19,5	442,0	939,0