



300/500V, unshielded, CPR Eca
UN/ECE-R 118.02



APPLICATION

power, control and connecting cable in electrical facilities for fixed laying and flexible applications without tensile stress and without defined cable routing. Suitable for use in dry, humid and wet rooms. Outdoor use only with UV-protection, no laying underground. Applicable also for YSLY or YY.



SPECIAL FEATURES

- 4kV test voltage
- Largely resistant to acids, alkalis and certain oils.
- Flame retardant & tested according to UN/ECE-R 118.02

REMARKS

- RoHS compliant
- Compliant with the 2014/35/EU Directive ("Low Voltage Directive") CE
- LABS-free/silicone-free (during production)
- when used in the cable drag chain, the number of cores (2-7) and the cross-section (0.5-2.5 mm²) is limited.
- Special versions, other dimensions, cross-sections, wire and sheath colors are available on request.

PRODUCT DETAILS

DESIGN

Conductor material	bare copper strand
Conductor class	acc. to IEC 60228 cl. 5
Core insulation	PVC
Core identification	acc. to DIN VDE 0293 black cores with white numerals; G: with GNYE
Stranding	stranded in layers
Outer sheath material	PVC
Sheath colour	grey, RAL 7001

ELECTRICAL PROPERTIES

Rated voltage AC IEC	Uo/U: 300/500 V
Testing voltage	4 kV
Conductor resistance	acc. to IEC 60228 cl. 5
Insulation resistance	min. 20 MΩ x km
Current carrying capacity	acc. to DIN VDE, see technical Guidelines

MECHANICAL & DYNAMIC PROPERTIES

Min. bending radius fixed	4 x d
Min. bending radius moved	15 x d
Traverse speed (m/s) - drag chain	3 m/s
Acceleration (m/s ²) - drag chain	5 m/s ²
Bending cycles (mln)	max. 1 mln

THERMAL PROPERTIES

Operat. temp. fixed min./max. [°C]	-40 °C / +80 °C
Operat. temp. moved min/max [°C]	-15 °C / +70 °C (-5 °C / +70 °C in drag chain application)
Temp. at conductor in operation max [°C]	+70 °C in operation; +150 °C in case of short-circuit

PROPERTIES IN CASE OF FIRE

Burning behavior	self-extinguishing & flame-retardant acc.to IEC 60332-1
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CHEMICAL RESISTANCE & OTHER PROPERTIES

Oil resistance	in acc. to EN 50290-2-22 (TM54)
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STANDARDS & APPROVALS

Standard	similar to EN 50525-2-51
Approvals	UN/ECE-R 118.02: DEKRA TR 202560451

ITEM OVERVIEW**ÖPVC-JZ/OZ**

Item no. [TKD]	Dimension	Outer-Ø [mm]	Cu Index [kg/km]	Weight [kg/km]
1001034	2 X 0,5	4,7	10,0	33,0
1000528	3 G 0,5	5,1	15,0	41,0
1001053	3 X 0,5	5,1	15,0	41,0
1000554	4 G 0,5	5,5	19,0	50,0
1001065	4 X 0,5	5,5	19,0	50,0
1000580	5 G 0,5	6,2	24,0	63,0
1001072	5 X 0,5	6,2	24,0	63,0
1000609	6 G 0,5	6,7	28,8	70,0
1002772	6 X 0,5	6,7	28,8	70,0
1000613	7 G 0,5	6,8	34,0	78,0
1001078	7 X 0,5	6,8	34,0	78,0
1000632	8 G 0,5	7,9	38,0	98,0
1001709	8 X 0,5	7,9	38,0	98,0
0503269	9 G 0,5	8,4	43,2	108,0
1000449	10 G 0,5	8,6	48,0	120,0
1004377	10 X 0,5	8,6	48,0	120,0
1000455	12 G 0,5	9,0	58,0	130,0
1001024	12 X 0,5	9,0	58,0	130,0
1000465	14 G 0,5	9,7	67,0	148,0
1003846	15 G 0,5	9,8	72,0	162,0
1000474	16 G 0,5	10,7	76,8	174,0
1000479	18 G 0,5	11,0	86,0	194,0
1000488	19 G 0,5	11,0	91,2	208,0
1000496	21 G 0,5	12,2	101,0	230,0
1000505	25 G 0,5	13,0	120,0	254,0
1000513	27 G 0,5	12,8	130,0	282,0
1000516	30 G 0,5	13,6	144,0	226,0
1000519	34 G 0,5	15,0	163,0	342,0
1000525	37 G 0,5	15,6	178,0	280,0
1000546	40 G 0,5	16,4	192,0	425,0
1005169	42 G 0,5	15,8	202,0	449,0
1000575	50 G 0,5	17,9	240,0	520,0
1000599	61 G 0,5	19,7	293,0	608,0
1000604	65 G 0,5	20,9	312,0	673,0
1001699	80 G 0,5	22,4	384,0	785,0
1000445	100 G 0,5	24,1	480,0	975,0
1001033	2 X 0,75	5,2	15,0	43,0
1000529	3 G 0,75	5,6	22,0	52,0
1001054	3 X 0,75	5,6	22,0	52,0
1000555	4 G 0,75	6,3	29,0	64,0
1001064	4 X 0,75	6,3	29,0	64,0
1000581	5 G 0,75	6,7	36,0	77,0
1001073	5 X 0,75	6,7	36,0	77,0
1000610	6 G 0,75	7,4	43,0	95,0
1000614	7 G 0,75	7,4	50,0	97,0
1001077	7 X 0,75	7,4	50,0	97,0

ÖPVC-JZ/OZ

Item no. [TKD]	Dimension	Outer-Ø [mm]	Cu Index [kg/km]	Weight [kg/km]
1000633	8 G 0,75	8,9	58,0	130,0
1001082	8 X 0,75	8,9	58,0	130,0
1000640	9 G 0,75	9,4	65,0	153,0
1000450	10 G 0,75	9,6	72,0	153,0
1000456	12 G 0,75	10,0	86,0	167,0
1001025	12 X 0,75	10,0	86,0	167,0
1000466	14 G 0,75	10,6	101,0	206,0
1000471	15 G 0,75	11,1	108,0	206,0
1000475	16 G 0,75	11,5	115,0	228,0
1000480	18 G 0,75	11,9	130,0	242,0
1000489	19 G 0,75	11,9	137,0	250,0
1000497	21 G 0,75	12,9	151,0	291,0
1000506	25 G 0,75	14,1	180,0	330,0
1001031	26 G 0,75	14,3	187,2	373,0
1000517	32 G 0,75	15,6	230,0	425,0
1000520	34 G 0,75	16,1	245,0	441,0
1000526	37 G 0,75	17,2	266,0	542,0
1000547	40 G 0,75	17,9	288,0	520,0
1000548	41 G 0,75	17,9	296,0	533,0
1000550	42 G 0,75	17,9	302,0	567,0
1000576	50 G 0,75	19,4	360,0	633,0
1000600	61 G 0,75	20,9	439,0	770,0
1000605	65 G 0,75	21,0	468,0	803,0
1001828	80 G 0,75	24,3	576,0	1.017,0
1001035	2 X 1	5,5	19,0	50,0
1000532	3 G 1	6,1	29,0	63,0
1001057	3 X 1	6,1	29,0	63,0
1000557	4 G 1	6,6	38,0	77,0
1001067	4 X 1	6,6	38,0	77,0
1000582	5 G 1	7,2	48,0	92,0
1001074	5 X 1	7,2	48,0	92,0
1000611	6 G 1	8,1	58,0	114,0
1002707	6 X 1	8,1	58,0	114,0
1000617	7 G 1	8,1	67,0	121,0
1001079	7 X 1	8,1	67,0	121,0
1000635	8 G 1	9,4	77,0	157,0
1001631	8 X 1	9,4	77,0	157,0
1000642	9 G 1	10,0	86,0	182,0
1000452	10 G 1	10,2	96,0	185,0
1000458	12 G 1	10,4	115,0	200,0
1001026	12 X 1	10,4	115,0	200,0
1000467	14 G 1	11,4	134,0	232,0
1002656	15 G 1	11,8	144,0	252,0
1000476	16 G 1	12,0	154,0	262,0
1004036	16 X 1	12,0	154,0	262,0
1000483	18 G 1	12,9	173,0	298,0
1003065	18 X 1	12,9	173,0	298,0
1000490	19 G 1	12,9	182,0	303,0
1000493	20 G 1	13,7	192,0	334,0
1000498	21 G 1	14,1	202,0	355,0
1000502	24 G 1	14,7	230,0	392,0
1000508	25 G 1	15,0	240,0	403,0
1000512	26 G 1	15,1	250,0	410,0
1000514	27 G 1	15,2	259,0	421,0
1002371	32 G 1	17,0	307,2	515,0
1000521	34 G 1	17,4	326,0	542,0
1000524	36 G 1	17,6	346,0	565,0
1000527	37 G 1	17,5	356,0	572,0
1001677	37 X 1	17,5	356,0	593,0
1000549	41 G 1	19,0	394,0	651,0
1000551	42 G 1	19,1	403,0	660,0
1000577	50 G 1	21,0	480,0	778,0
1000601	61 G 1	22,5	586,0	934,0
1000606	65 G 1	23,2	624,0	987,0
1001875	80 G 1	26,2	768,0	1.245,0
1001037	2 X 1,5	6,3	29,0	67,0
1000534	3 G 1,5	6,8	43,0	81,0
1001056	3 X 1,5	6,8	43,0	81,0
1000558	4 G 1,5	7,3	58,0	101,0
1001069	4 X 1,5	7,3	58,0	101,0
1000584	5 G 1,5	8,2	72,0	122,0
1001075	5 X 1,5	8,2	72,0	122,0
1000612	6 G 1,5	9,0	86,0	149,0

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Item no. [TKD]	Dimension	Outer-Ø [mm]	Cu Index [kg/km]	Weight [kg/km]
1000618	7 G 1,5	9,1	101,0	159,0
1001080	7 X 1,5	9,1	101,0	159,0
1000636	8 G 1,5	10,5	115,0	206,0
1000643	9 G 1,5	11,4	130,0	242,0
1000453	10 G 1,5	11,6	144,0	245,0
1000460	12 G 1,5	12,1	173,0	273,0
1001027	12 X 1,5	12,1	173,0	273,0
1000468	14 G 1,5	12,8	202,0	309,0
1000477	16 G 1,5	13,7	230,0	355,0
1000485	18 G 1,5	14,5	259,0	397,0
1000491	19 G 1,5	15,2	274,0	443,0
1000494	20 G 1,5	15,2	288,0	451,0
1000499	21 G 1,5	16,1	302,0	484,0
1000509	25 G 1,5	17,0	360,0	541,0
1000515	27 G 1,5	17,5	389,0	607,0
1000518	32 G 1,5	19,3	461,0	698,0
1000522	34 G 1,5	19,6	490,0	722,0
1004096	34 X 1,5	19,6	490,0	722,0
1004390	37 G 1,5	20,2	533,0	892,0
1004097	41 X 1,5	21,5	590,0	969,4
1000552	42 G 1,5	21,5	605,0	885,0
1000578	50 G 1,5	23,6	720,0	1.051,0
1000602	61 G 1,5	25,5	878,0	1.259,0
1000607	65 G 1,5	26,0	936,0	1.283,0
1000631	80 G 1,5	29,8	1.152,0	1.677,0
1000448	100 G 1,5	32,5	1.440,0	2.460,0
1001047	2 X 2,5	7,6	48,0	101,0
1000542	3 G 2,5	8,3	72,0	128,0
1004985	3 X 2,5	8,3	72,0	130,0
1000564	4 G 2,5	9,1	96,0	154,0
1002591	4 X 2,5	9,1	96,0	154,0
1000593	5 G 2,5	10,2	120,0	200,0
1000626	7 G 2,5	11,3	168,0	250,0
1000639	8 G 2,5	13,2	192,0	331,0
1001826	9 G 2,5	14,0	216,0	354,0
1001564	10 G 2,5	14,6	240,0	375,0
1000463	12 G 2,5	14,9	288,0	438,0
1000470	14 G 2,5	16,0	336,0	503,0
1000487	18 G 2,5	18,0	432,0	629,0
1000511	25 G 2,5	21,2	600,0	852,0
1000523	34 G 2,5	24,6	816,0	1.150,0
1003254	40 G 2,5	26,3	960,0	1.392,0
1000553	42 G 2,5	27,2	1.008,0	1.495,0
1002369	50 G 2,5	29,7	1.200,0	1.691,0
1000603	61 G 2,5	32,0	1.464,0	2.172,0
1002297	2 X 4	9,2	77,0	152,0
1000544	3 G 4	10,1	115,0	193,0
1004245	3 X 4	10,1	115,2	193,0
1000569	4 G 4	11,0	154,0	242,0
1000597	5 G 4	12,3	192,0	302,0
1000629	7 G 4	13,7	269,0	390,0
1001762	11 G 4	17,9	422,0	646,0
1002730	12 G 4	17,9	461,0	660,0
1000737	15 G 4	19,7	576,0	875,0
1002963	25 G 4	27,1	960,0	1.375,0
1000545	3 G 6	11,7	173,0	276,0
1000571	4 G 6	12,8	230,0	342,0
1000598	5 G 6	14,4	288,0	427,0
1000630	7 G 6	16,0	403,0	550,0
1000539	3 G 10	14,7	288,0	451,0
1000561	4 G 10	16,3	384,0	573,0
1000590	5 G 10	18,2	480,0	712,0
1000622	7 G 10	20,1	672,0	931,0
1000540	3 G 16	17,6	461,0	707,0
1000563	4 G 16	20,6	614,0	952,0
1000591	5 G 16	22,4	768,0	1.153,0
1000623	7 G 16	25,6	1.075,0	1.497,0
1000566	4 G 25	25,7	960,0	1.454,0
1000595	5 G 25	28,7	1.200,0	1.778,0

ÖPVC-JZ/OZ

Item no. [TKD]	Dimension	Outer-Ø [mm]	Cu Index [kg/km]	Weight [kg/km]
1004125	3 G 35	25,6	1.008,0	1.740,0
1000568	4 G 35	27,2	1.344,0	1.972,0
1000596	5 G 35	33,1	1.680,0	2.542,0
1001305	4 G 50	33,8	1.920,0	2.746,0
1004126	5 G 50	38,3	2.400,0	2.936,0
1000574	4 G 70	39,7	2.688,0	4.092,0
1001306	4 G 95	45,6	3.648,0	5.400,0