


U.I. Lapp GmbH	<b>PRODUCT INFORMATION</b>	
	<b>ÖLFLEX® CLASSIC 110</b>	05.11.2015

VDE-registered oil-resistant PVC control cable for a wide range of applications  
Wide choice of standardized lengths and individual cuts  
Very broad range, items with up to 100 conductors



Good chemical resistance



Oil-resistant



Power chain



Torsion-resistant

### Info

VDE certificate of conformity with factory surveillance  
More than 140 items with up to 100 conductors

### Application range

For fixed installation as well as occasional flexing at free, non-continuously recurring movement without tensile load  
Dry or damp rooms that are subject to medium mechanical loads  
Suitable for torsional applications which are typical for the loop in wind turbine generators (WTG)  
In power chains for a travelling distance up to 5 m and 0,2 ... 1 million bending cycles, for following dimensions: 0,5 to 2.5mm<sup>2</sup>  
and 2 to 7 conductors


### Product Make-up

Fine-wire strand made of bare copper wires  
PVC insulation LAPP P8/1  
Cores twisted in layers  
PVC outer sheath, grey (RAL 7001)

### Norm references / Approvals

VDE reg. no. 7030 for the following sizes:  
up to 2.5 mm<sup>2</sup>: 2 - 65 cores  
from 4 mm<sup>2</sup>: 2 - 7 cores  
from 25 mm<sup>2</sup>: 2 - 5 cores

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### Product features

Flame-retardant according IEC 60332-1-2  
 Good chemical resistance, see catalogue appendix T1  
 Oil-resistant according to DIN EN 50290-2-22 (TM54)

### Remark

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Packaging size: coil  $\leq$  30 kg or  $\leq$  250 m, otherwise drum

Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).

Photographs are not to scale and do not represent detailed images of the respective products.

### Technical Data

Core identification code:	Black with white numbers acc. to VDE 0293-1
Classification:	ETIM 5.0 Class-ID: EC000104 ETIM 5.0 Class-Description: Control cable
Conductor stranding:	Fine wire according to DIN EN 60228 (VDE 0295), class 5 / IEC 60228 class 5
Torsion movement in WTG:	TW-0 & TW-1, refer to Appendix T0
Minimum bending radius:	Occasional flexing: 10 x outer diameter In power chains: 15 x outer diameter Fixed installation: 4 x outer diameter
Nominal voltage:	$U_0/U$ : 300/500 V
Test voltage:	4000 V
Protective conductor:	G = with GN-YE protective conductor X = without protective conductor
Temperature range:	Occasional flexing: -15°C to +70°C In power chains: -5°C to +70°C Fixed installation: -40°C to +80°C

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Part number	Number of cores and mm <sup>2</sup> per conductor	Standard length (m) and standard packaging 25	Standard length (m) and standard packaging 50	Standard length (m) and standard packaging 100	Standard length (m) and standard packaging 200	Standard length (m) and standard packaging 300	Standard length (m) and standard packaging 500	Standard length (m) and standard packaging 1000	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® CLASSIC 110											
1119752	2 X0,5			100	200	300	500	1000	4,8	9.6	35
1119003	3 G0,5			100	200	300	500	1000	5,1	14.4	42
1119753	3 X0,5			100	200	300	500	1000	5,1	14.4	42
1119004	4 G0,5			100	200	300	500	1000	5,7	19.2	54
1119754	4 X0,5			100	200	300	500	1000	5,7	19.2	54
1119005	5 G0,5			100	200	300	500	1000	6,2	24.0	63
1119755	5 X0,5			100	200	300	500	1000	6,2	24.0	63
1119007	7 G0,5		50	100	200	300	500	1000	6,7	33.6	81
1119757	7 X0,5		50	100	200	300	500	1000	6,7	33.6	81
1119010	10 G0,5		50	100	200	300	500	1000	8,6	48.0	116
1119012	12 G0,5		50	100	200	300	500	1000	8,9	58.0	131
1119014	14 G0,5		50	100			500	1000	9,5	67.0	153
1119018	18 G0,5		50	100			500	1000	10,5	86.4	188
1119021	21 G0,5		50	100			500	1000	11,7	101.0	221
1119025	25 G0,5		50	100			500	1000	12,4	120.0	261
1119030	30 G0,5		50	100			500	1000	13,3	144.0	304
1119035	35 G0,5		50	100			500	1000	14,5	168.0	356
1119040	40 G0,5		50	100			500	1000	15,4	192.0	400
1119052	52 G0,5		50	100			500		17,3	250.0	517
1119061	61 G0,5		50	100			500		18,5	293.0	603
1119065	65 G0,5		50	100			500		19,6	312.0	644
1119080	80 G0,5		50	100			500		21,1	384.0	780
1119100	100 G0,5		50	100			500		23,6	480.0	975
1119802	2 X0,75			100	200	300	500	1000	5,4	14.4	45
1119103	3 G0,75			100	200	300	500	1000	5,7	21.6	55
1119803	3 X0,75			100	200	300	500	1000	5,7	21.6	55
1119104	4 G0,75			100	200	300	500	1000	6,2	28.8	66
1119804	4 X0,75			100	200	300	500	1000	6,2	28.8	66
1119105	5 G0,75		50	100	200	300	500	1000	6,7	36.0	79
1119805	5 X0,75		50	100	200	300	500	1000	6,7	36.0	79
1119107	7 G0,75		50	100	200	300	500	1000	7,3	50.0	101

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1119807	7 X0,75		50	100	200	300	500	1000	7,3	50.0	101
1119109	9 G0,75		50	100	200	300	500	1000	9,4	65.0	137
1119110	10 G0,75		50	100	200	300	500	1000	9,6	72.0	150
1119112	12 G0,75		50	100	200	300	500	1000	9,9	86.0	171
1119812	12 X0,75		50	100	200	300	500	1000	9,9	86.0	171
1119115	15 G0,75		50	100			500	1000	10,9	108.0	209
1119117	15 X0,75		50	100			500	1000	10,9	108.0	209
1119116	16 G0,75		50	100			500	1000	11,1	115.2	220
1119118	18 G0,75		50	100			500	1000	11,7	130.0	244
1119121	21 G0,75		50	100			500	1000	13.0	151.0	286
1119125	25 G0,75		50	100			500	1000	13,8	180.0	337
1119126	26 G0,75		50	100			500	1000	14,2	187.2	350
1119134	34 G0,75		50	100			500	1000	15,9	245.0	448
1119141	41 G0,75		50	100			500	1000	17,4	296.0	538
1119150	50 G0,75		50	100			500		19,2	360.0	648
1119151	51 G0,75		50	100			500		19,2	367.0	646
1119161	61 G0,75		50	100			500		20,5	439.0	779
1119165	65 G0,75		50	100			500		21,8	468.0	832
1119180	80 G0,75		50	100			500		23,6	576.0	1019
1119200	100 G0,75		50	100			500		26,4	718.0	1271
1119852	2 X1,0			100	200	300	500	1000	5,7	19.2	53
1119203	3 G1,0			100	200	300	500	1000	6.0	28.8	65
1119853	3 X1,0			100	200	300	500	1000	6.0	28.8	65
1119204	4 G1,0		50	100	200	300	500	1000	6,5	38.4	79
1119854	4 X1,0		50	100	200	300	500	1000	6,5	38.4	79
1119205	5 G1,0		50	100	200	300	500	1000	7,1	48.0	94
1119855	5 X1,0		50	100	200	300	500	1000	7,1	48.0	94
1119206	6 G1,0		50	100	200	300	500	1000	8.0	58.0	113
1119207	7 G1,0		50	100	200	300	500	1000	8.0	67.0	126
1119857	7 X1,0		50	100	200	300	500	1000	8.0	67.0	126
1119208	8 G1,0		50	100	200	300	500	1000	9,5	77.0	149
1119209	9 G1,0		50	100	200	300	500	1000	10.0	86.0	164

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1119210	10 G1,0		50	100	200	300	500	1000	10,2	96.0	180
1119212	12 G1,0		50	100	200	300	500	1000	10,5	115.0	205
1119862	12 X1,0		50	100	200	300	500	1000	10,5	115.0	205
1119214	14 G1,0		50	100			500	1000	11,2	134.0	238
1119216	16 G1,0		50	100			500	1000	11,8	153.6	266
1119218	18 G1,0		50	100			500	1000	12,7	173.0	320
1119868	18 X1,0		50	100			500	1000	12,7	173.0	320
1119220	20 G1,0		50	100			500	1000	13,4	192.0	330
1119870	20 X1,0		50	100			500	1000	13,4	192.0	330
1119225	25 G1,0		50	100			500	1000	14,7	240.0	408
1119226	26 G1,0		50	100			500	1000	15,1	249.0	424
1119234	34 G1,0		50	100			500	1000	17,1	326.0	551
1119236	36 G1,0		50	100			500	1000	17,4	346.0	578
1119241	41 G1,0		50	100			500	1000	18,8	394.0	661
1119250	50 G1,0		50	100			500		20,6	480.0	797
1119256	56 G1,0		50	100			500		21,4	538.0	888
1119261	61 G1,0		50	100			500		22,1	586.0	958
1119265	65 G1,0		50	100			500		23,6	624.0	1033
1119280	80 G1,0		50	100			500		25,3	768.0	1251
1119300	100 G1,0		50	100			500		28,3	960.0	1560
1119902	2 X1,5			100	200	300	500	1000	6,3	29.0	68
1119303	3 G1,5	25	50	100	200	300	500	1000	6,7	43.0	84
1119903	3 X1,5		50	100	200	300	500	1000	6,7	43.0	84
1119304	4 G1,5	25	50	100	200	300	500	1000	7,2	58.0	104
1119904	4 X1,5		50	100	200	300	500	1000	7,2	58.0	104
1119305	5 G1,5	25	50	100	200	300	500	1000	8,1	72.0	128
1119905	5 X1,5		50	100	200	300	500	1000	8,1	72.0	128
1119306	6 G1,5		50	100	200	300	500	1000	8,4	86.4	157
1119307	7 G1,5	25	50	100	200	300	500	1000	8,9	101.0	166
1119907	7 X1,5		50	100	200	300	500	1000	8,9	101.0	166
1119308	8 G1,5		50	100			500	1000	10,6	115.0	210
1119313	8 X1,5		50	100			500	1000	10,6	116.0	210

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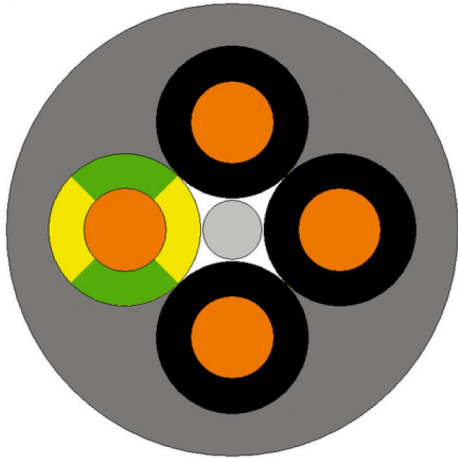
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1119309	9 G1,5		50	100			500	1000	11,4	130.0	221
1119310	10 G1,5		50	100			500	1000	11,6	143.0	243
1119311	11 G1,5		50	100			500	1000	11,6	158.0	258
1119312	12 G1,5	25	50	100			500	1000	12,0	173.0	279
1119912	12 X1,5		50	100			500	1000	12,0	173.0	279
1119314	14 G1,5		50	100			500	1000	12,7	202.0	323
1119316	16 G1,5		50	100			500	1000	13,4	230.4	361
1119318	18 G1,5	25	50	100			500	1000	14,4	259.0	407
1119321	21 G1,5		50	100			500	1000	15,7	302.0	469
1119325	25 G1,5	25	50	100			500	1000	16,9	360.0	560
1119326	26 G1,5		50	100			500	1000	17,3	374.4	582
1119332	32 G1,5		50	100			500	1000	18,7	461.0	704
1119334	34 G1,5		50	100			500	1000	19,4	490.0	746
1119341	41 G1,5		50	100			500	1000	21,3	591.0	895
1119350	50 G1,5		50	100			500		23,5	720.0	1089
1119361	61 G1,5		50	100			500		25,2	878.0	1309
1119365	65 G1,5		50	100			500		26,7	936.0	1398
1119952	2 X2,5	25	50	100	200	300	500	1000	7,5	48.0	101
1119403	3 G2,5	25	50	100	200	300	500	1000	8,1	72.0	132
1119404	4 G2,5	25	50	100	200	300	500	1000	8,9	96.0	163
1119405	5 G2,5	25	50	100	200	300	500	1000	10,0	120.0	200
1119407	7 G2,5	25	50	100			500	1000	11,1	168.0	267
1119412	12 G2,5	25	50	100			500	1000	14,8	288.0	445
1119414	14 G2,5		50	100			500	1000	15,8	336.0	515
1119418	18 G2,5	25	50	100			500	1000	17,8	432.0	648
1119425	25 G2,5	25	50	100			500	1000	20,8	600.0	890
1119434	34 G2,5		50	100			500	1000	24,4	816.0	1208
1119450	50 G2,5		50	100			500		29,4	1200.0	1754
1119503	3 G4	25	50	100			500	1000	9,9	115.0	201
1119504	4 G4	25	50	100			500	1000	10,8	154.0	249
1119505	5 G4	25	50	100			500	1000	12,1	192.0	294
1119507	7 G4	25	50	100			500	1000	13,4	269.0	407

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1119511	11 G4		50	100			500	1000	17,6	422.0	634
1119512	12 G4		50	100			500	1000	18,1	461.0	660
1119603	3 G6	25	50	100			500	1000	11,7	172.8	289
1119604	4 G6	25	50	100			500	1000	13,0	230.0	365
1119605	5 G6	25	50	100			500	1000	14,5	288.0	447
1119607	7 G6	25	50	100			500	1000	16,0	403.0	600
1119613	3 G10	25	50	100			500	1000	14,6	288.0	466
1119614	4 G10	25	50	100			500	1000	16,2	384.0	590
1119615	5 G10	25	50	100			500	1000	18,1	480.0	722
1119617	7 G10	25	50	100			500	1000	20,0	672.0	968
1119624	4 G16		50	100			500		18,8	614.0	1087
1119625	5 G16		50	100			500		21,2	768.0	1370
1119627	7 G16		50	100			500		23,4	1075.0	1779
1119634	4 G25		50	100			500		23,5	960.0	1582
1119635	5 G25		50	100			500		26,4	1200.0	1998
1119636	7 G25		50	100			500		29,1	1680.0	2825
1119644	4 G35		50	100			500		26,4	1344.0	2106
1119645	5 G35		50	100			500		29,6	1680.0	2635

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