



Våre  
mest populære  
styrekabler

# ÖLFLEX® CLASSIC 110

## VDE godkjent styre- og kontrollkabel

Velegnet for maskiner, motorer og utstyr i tørre, fuktige og våte rom. God kjemikalie- og oljebestandighet. Lav vekt. Svært gode legge- og installasjonsegenskaper. Liten bøyeradius. ECOLAB og VDE godkjent 7030.

Egnet for fleksibelt bruk, helt ned til -15°C. Flammehemmende. Isolasjon og ytterkappe i PVC. Driftsspenning 300/500V. Testspenning 4kV. CPR klassifisert Eca.

[www.lapp.no](http://www.lapp.no)


### Bruksområde

Styre- og tilkoblingskabel for:

- Styresystemer i maskinverktøy
- Anleggsteknikk og styreskap
- Industrimaskiner
- Transportbåndsystem
- Produksjons- og samleband
- Måle-, kontroll- og databehandlingssystemer

Elnr.	Artikkelnummer	Tverrsnitt mm <sup>2</sup>	Ytter diameter mm	Kobberindeks (kg/km)	Vekt (kg/km)
<b>ÖLFLEX® CLASSIC 110</b>					
1090400	1119752	2 X 0.5	4.8	9.6	35
1090401	1119003	3 G 0.5	5.1	14.4	42
1090621	1119753	3 X 0.5	5.1	14.4	42
1090402	1119004	4 G 0.5	5.7	19.2	54
1085805	1119754	4 X 0.5	5.7	19.2	54
1090403	1119005	5 G 0.5	6.2	24	63
1085806	1119755	5 X 0.5	6.2	24	63
1090404	1119007	7 G 0.5	6.7	33.6	81
1085807	1119757	7 X 0.5	6.7	33.6	81
1090405	1119010	10 G 0.5	8.6	48	116
1090406	1119012	12 G 0.5	8.9	58	131
1090407	1119014	14 G 0.5	9.5	67	153
1090408	1119018	18 G 0.5	10.5	86.4	188
1090409	1119021	21 G 0.5	11.7	101	221
1090410	1119025	25 G 0.5	12.4	120	261
1090411	1119030	30 G 0.5	13.3	144	304
1085899	1119035	35 G 0.5	14.5	168	356
1090412	1119040	40 G 0.5	15.4	192	400
1090413	1119052	52 G 0.5	17.3	250	517
1085808	1119061	61 G 0.5	18.5	293	603
	1119065	65 G 0.5	19.6	312	644
	1119080	80 G 0.5	21.1	384	780
	1119100	100 G 0.5	23.6	480	975
1090415	1119802	2 X 0.75	5.4	14.4	45
1090416	1119103	3 G 0.75	5.7	21.6	55
1090622	1119803	3 X 0.75	5.7	21.6	55
1090417	1119104	4 G 0.75	6.2	28.8	66
1090620	1119804	4 X 0.75	6.2	28.8	66
1090418	1119105	5 G 0.75	6.7	36	79
1090623	1119805	5 X 0.75	6.7	36	79
1090419	1119107	7 G 0.75	7.3	50	101
1085809	1119807	7 X 0.75	7.3	50	101
1090420	1119109	9 G 0.75	9.4	65	137
1090421	1119110	10 G 0.75	9.6	72	150
1090422	1119112	12 G 0.75	9.9	86	171
1085810	1119812	12 X 0.75	9.9	86	171
1090423	1119115	15 G 0.75	10.9	108	209
1025129	1119117	15 X 0.75	10.9	108	209
1090424	1119116	16 G 0.75	11.1	115.2	220
1090425	1119118	18 G 0.75	11.7	130	244
1090426	1119121	21 G 0.75	13	151	286
1090427	1119125	25 G 0.75	13.8	180	337
1085811	1119126	26 G 0.75	14.2	187.2	350
1090428	1119134	34 G 0.75	15.9	245	448
1090429	1119141	41 G 0.75	17.4	296	538
1025130	1119150	50 G 0.75	19.2	360	648
1025131	1119151	51 G 0.75	19.2	367	646
1025132	1119161	61 G 0.75	20.5	439	779
1025133	1119165	65 G 0.75	21.8	468	832
1025134	1119180	80 G 0.75	23.6	576	1019
	1119200	100 G 0.75	26.4	718	1271
1090430	1119852	2 X 1.0	5.7	19.2	53
1090431	1119203	3 G 1.0	6	28.8	65
1090624	1119853	3 X 1.0	6	28.8	65
1090432	1119204	4 G 1.0	6.5	38.4	79
1090625	1119854	4 X 1.0	6.5	38.4	79
1090433	1119205	5 G 1.0	7.1	48	94
1085812	1119855	5 X 1.0	7.1	48	94
1090434	1119206	6 G 1.0	8	58	113
1090435	1119207	7 G 1.0	8	67	126
	1119857	7 X 1.0	8	67	126
1090436	1119208	8 G 1.0	9.5	77	149
1090437	1119209	9 G 1.0	10	86	164
	1119210	10 G 1.0	10.2	96	180
1090438	1119212	12 G 1.0	10.5	115	205
1085813	1119862	12 X 1.0	10.5	115	205
1090439	1119214	14 G 1.0	11.2	134	238
1090440	1119216	16 G 1.0	11.8	153.6	266
1090441	1119218	18 G 1.0	12.7	173	320
	1119868	18 X 1.0	12.7	173	320
1090442	1119220	20 G 1.0	13.4	192	330
	1119870	20 X 1.0	13.4	192	330
1090443	1119225	25 G 1.0	14.7	240	408
1090444	1119226	26 G 1.0	15.1	249	424
1090445	1119234	34 G 1.0	17.1	326	551
1090446	1119236	36 G 1.0	17.4	346	578
1090448	1119241	41 G 1.0	18.8	394	661
1090449	1119250	50 G 1.0	20.6	480	797
1090450	1119256	56 G 1.0	21.4	538	888
1090451	1119261	61 G 1.0	22.1	586	958
1090452	1119265	65 G 1.0	23.6	624	1033
1090453	1119280	80 G 1.0	25.3	768	1251
1090454	1119300	100 G 1.0	28.3	960	1560

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<b>ÖLFLEX® CLASSIC 110</b>					
1090460	1119902	2 X 1.5	6.3	29	68
1090461	1119303	3 G 1.5	6.7	43	84
1090626	1119903	3 X 1.5	6.7	43	84
1090462	1119304	4 G 1.5	7.2	58	104
1085814	1119904	4 X 1.5	7.2	58	104
1090463	1119305	5 G 1.5	8.1	72	128
1085815	1119905	5 X 1.5	8.1	72	128
	1119306	6 G 1.5	8.4	86.4	157
1090464	1119307	7 G 1.5	8.9	101	166
1085816	1119907	7 X 1.5	8.9	101	166
1090465	1119308	8 G 1.5	10.6	115	210
	1119313	8 X 1.5	10.6	116	210
1090466	1119309	9 G 1.5	11.4	130	221
	1119310	10 G 1.5	11.6	143	243
1090467	1119311	11 G 1.5	11.6	158	258
1090468	1119312	12 G 1.5	12	173	279
	1119912	12 X 1.5	12	173	279
1090469	1119314	14 G 1.5	12.7	202	323
1090470	1119316	16 G 1.5	13.4	230.4	361
1090471	1119318	18 G 1.5	14.4	259	407
1090472	1119321	21 G 1.5	15.7	302	469
1090473	1119325	25 G 1.5	16.9	360	560
	1119326	26 G 1.5	17.3	374.4	582
	1119332	32 G 1.5	18.7	461	704
1086056	1119334	34 G 1.5	19.4	490	746
	1119341	41 G 1.5	21.3	591	895
	1119350	50 G 1.5	23.5	720	1089
	1119361	61 G 1.5	25.2	878	1309
	1119365	65 G 1.5	26.7	936	1398
1090476	1119952	2 X 2.5	7.5	48	101
1090477	1119403	3 G 2.5	8.1	72	132
1090478	1119404	4 G 2.5	8.9	96	163
1090479	1119405	5 G 2.5	10	120	200
1090480	1119407	7 G 2.5	11.1	168	267
1090481	1119412	12 G 2.5	14.8	288	445
	1119414	14 G 2.5	15.8	336	515
1085817	1119418	18 G 2.5	17.8	432	648
	1119425	25 G 2.5	20.8	600	890
	1119434	34 G 2.5	24.4	816	1208
	1119450	50 G 2.5	29.4	1200	1754
1085818	1119503	3 G 4.0	9.9	115	201
1090482	1119504	4 G 4.0	10.8	154	249
1090483	1119505	5 G 4.0	12.1	192	294
1086057	1119507	7 G 4.0	13.4	269	407
	1119511	11 G 4.0	17.6	422	634
	1119512	12 G 4.0	18.1	461	660
1085819	1119603	3 G 6.0	11.7	172.8	289
1090484	1119604	4 G 6.0	13	230	365
1085820	1119605	5 G 6.0	14.5	288	447
1085821	1119607	7 G 6.0	16	403	600
1085822	1119613	3 G 10.0	14.6	288	466
1085823	1119614	4 G 10.0	16.2	384	590
	1119615	5 G 10.0	18.1	480	722
1085824	1119617	7 G 10.0	20	672	968
1085825	1119624	4 G 16.0	18.8	614	1087
1085826	1119625	5 G 16.0	21.2	768	1370
1086058	1119627	7 G 16.0	23.4	1075	1779
	1119634	4 G 25.0	23.5	960	1582
	1119635	5 G 25.0	26.4	1200	1998
	1119636	7 G 25.0	29.1	1680	2825
1085827	1119644	4 G 35.0	26.4	1344	2106
1086059	1119645	5 G 35.0	29.6	1680	2635

1119752	<b>DATA SHEET</b>	
valid from: 03.03.2023	<b>ÖLFLEX® CLASSIC 110</b>	

## Application

ÖLFLEX® CLASSIC 110 cables are VDE approved power and control cables for occasional flexible use and fixed installation for medium mechanical load conditions. They are also suitable for use in dry, damp or wet areas. If using outdoors, observe the indicated temperature range and use with UV protection. They are largely resistant to acids, alkalis and certain oils at room temperature.

ÖLFLEX® CLASSIC 110 cables are limited suitable for free and continuously recurring movements. The maximum tensile load is 15 N/mm<sup>2</sup> of conductor cross-section during installation and operation. Compulsory guidance is not permitted.

### Application range:

As power- and connecting cable for control systems in machine tools, plant engineering and construction, industrial machinery, conveyor systems, production and assembly lines as well as in measuring and control technology and data processing systems. This cable is suitable for torsion application in wind turbines. The torsional load is limited to applications, which are typical for the loop in wind turbine generators (WTG).

## Design

Design	based on EN 50525-2-51
Certification	< VDE-REG 7030 > limited to following dimension range: 0.5 mm <sup>2</sup> - 2.5 mm <sup>2</sup> 2 - 65 cores 4 mm <sup>2</sup> - 16 mm <sup>2</sup> 2 - 7 cores 25 mm <sup>2</sup> - 120 mm <sup>2</sup> 2 - 5 cores EN 13501-6 and EN 50575 Classification of fire behaviour (article/dimension range see <a href="http://www.lappkabel.com/cpr">www.lappkabel.com/cpr</a> )
Conductor	fine wire strands of bare copper, acc. to IEC 60228 resp. EN 60228, Class 5
Insulation	LAPP special PVC compound P8/1 TI2 acc. to EN 50363-3 rwith increased requirements acc. to LAPP specification
Core identification code	acc. to VDE 0293-1, with or without GN/YE ground conductor black cores with white numbers acc. to EN 50334
Stranding	cores are stranded in layers
Outer sheath	PVC compound TM2 acc. to EN 50363-4-1 with increased requirements acc. to LAPP specification colour: Silver Grey, similar RAL 7001

## Electrical properties at 20 °C


Nominal voltage	U <sub>0</sub> / U: 300 / 500 V
Test voltage	core / core: 4000 V AC

## Mechanical and thermal properties

Minimum bending radius	occasional flexing: 10 x outer diameter fixed installation: 4 x outer diameter
Temperature range	occasional flexing: - 15 °C up to +70 °C max. conductor temp. Fixed installation: - 40 °C up to +80 °C max. conductor temp.
Bending cycles and power chain operation parameters	Power chain limited to 2-7 cores and 0.5 - 2.5 mm <sup>2</sup> Min. bending radius: 15 x outer diameter temperature range: -5 °C up to +70 °C max. conductor temp. Travelling distance up to 5 m: 0.2 ... 1 million bending cycles
Torsional stress	in WTG: TW-0 (5000 cycles at ≥ +5 °C) TW-1 (2000 cycles at ≥ -20 °C) ± 150 °/m at 1 revolution per minute
Flammability	flame retardant acc. to IEC 60332-1-2 resp. EN 60332-1-2
Oil resistance	acc. to EN 50290-2-22 TM54

**Tests** acc. to IEC 60811 resp. EN 60811, EN 50395, EN 50396

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**General requirements**

These cables conform to the EU-Directive 2014/35/EU (Low Voltage Directive).

A part of these cables (see [www.lappkabel.com/cpr](http://www.lappkabel.com/cpr)) are classified in accordance with the EU-Regulation no. 305/2011 (CPR).

**Environmental information**

These cables meet the substance-specific requirements of the EU Directive 2011/65/EU (RoHS).

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