

# ÖLFLEX® CHAIN 809/809 CY

Continuous flex control cable with PVC jacket



ÖLFLEX® CHAIN 809 is a flexible multi-conductor cable designed for basic continuous flexing applications. ÖLFLEX® CHAIN 809 CY is a shielded version available with an overall tinned copper braid. This is recommended when electrical interference needs to be suppressed. For bending cycles and operation parameters, see [www.lappusa.com/cf-rating](http://www.lappusa.com/cf-rating).

## Recommended applications

Cable tracks; power chains; gantry robots; pick and place units; conveyor systems; machine tools; basic continuous flexing applications

## Approvals



Cable attributes		page 648	
OIL	OR-01	FLAME	FR-02
MOTION	CF-01*	MECH.	MP-01

Complete the installation	
SKINTOP® strain relief	page 492
EPIC® connectors	page 284

ÖLFLEX® CONNECT solution	
ÖLFLEX® CONNECT CHAIN	page 617

## Unshielded construction

- Conductors:** finely stranded bare copper
- Insulation:** PVC; dry lubricant; non-woven wrapping over outer layer
- Jacket:** PVC; gray

## Shielded construction

- Conductors:** finely stranded bare copper
- Insulation:** PVC; dry lubricant; non-woven wrapping over outer layer
- Shielding:** tinned copper braid (85% coverage)
- Jacket:** PVC; gray

## Application advantage

- Designed with North American and European approvals
- Reduced-diameter shielded design
- Flame retardant: UL/CSA VW-1, FT 1

## Technical data

<p> <b>Minimum bend radius:</b>                      - for continuous flexing: 10 x cable diameter                      - sliding applications: 12 x cable diameter</p> <p> <b>Temperature range:</b>                      - for continuous flexing: 0°C to +80°C                      - for stationary use: -40°C to +80°C</p> <p> <b>Nominal voltage:</b>                      - UL/CSA: 1000V                      - VDE U<sub>0</sub>/U: 300/500V</p>	<p> <b>Test voltage:</b>                      - conductor/conductor: 4000V                      - conductor/shield: 2000V</p> <p> <b>Conductor stranding:</b> Class 5 fine wire</p> <p> <b>Color code:</b> black with white numbers, plus green/yellow ground</p> <p> <b>Approvals:</b>                      UL: AWM 20886                      Attributes: NFPA 79                      Canada: cRU AWM I/II A/B FT 1                      Additional: CE &amp; RoHS                      based on VDE 0281 Part 13</p>
<p>*UL Verified ID A522492: Continuous Flex Test Method Verified</p>	

If not otherwise specified, all values relating to the product are nominal values. Photographs are not to scale and are not true representations of the products in question.

ÖLFLEX® CHAIN 809

Part number	Number of conductors incl. ground*	Nominal outer diameter		Copper weight	Approx. weight	SKINTOP® SL
		in	mm	lbs/mft	lbs/mft	PG thread
<b>20 AWG (0.5 mm<sup>2</sup>)</b>						
1026700	2	0.205	5.2	7	27	S1107
1026701	3	0.217	5.5	10	32	S1107
1026702	4	0.236	6.0	13	39	S1107
1026703	5	0.256	6.5	16	45	S1109
1026704	7	0.303	7.7	23	59	S1111
1026705	12	0.362	9.2	39	91	S1111
1026706	18	0.433	11.0	58	131	S1113
1026707	25	0.524	13.3	81	184	S1116
<b>19 AWG (0.75 mm<sup>2</sup>)</b>						
1026708	2	0.220	5.6	10	33	S1107
1026709	3	0.236	6.0	15	40	S1107
1026710	4	0.256	6.5	19	49	S1109
1026711	5	0.280	7.1	25	58	S1111
1026712	7	0.335	8.5	34	79	S1111
1026713	12	0.406	10.3	58	122	S1113
1026714	18	0.480	12.2	87	174	S1116
1026715	25	0.583	14.8	122	244	S1121
<b>18 AWG (1 mm<sup>2</sup>)</b>						
1026716	2	0.232	5.9	13	39	S1107
1026717	3	0.248	6.3	19	48	S1109

\* 2c cable does not include ground

Part number	Number of conductors incl. ground*	Nominal outer diameter		Copper weight	Approx. weight	SKINTOP® SL
		in	mm	lbs/mft	lbs/mft	PG thread
1026718	4	0.272	6.9	26	59	S1109
1026719	5	0.295	7.5	32	70	S1111
1026720	7	0.354	9.0	45	95	S1111
1026721	12	0.429	10.9	77	149	S1113
1026722	18	0.520	13.2	116	218	S1116
1026723	25	0.618	15.7	161	299	S1121
<b>16 AWG (1.5 mm<sup>2</sup>)</b>						
1026724	2	0.256	6.5	19	50	S1109
1026725	3	0.272	6.9	29	62	S1109
1026726	4	0.299	7.6	39	77	S1111
1026727	5	0.335	8.5	48	93	S1111
1026728	7	0.406	10.3	68	127	S1113
1026729	12	0.484	12.3	116	198	S1116
1026730	18	0.584	14.9	174	288	S1121
1026731	25	0.705	17.9	242	401	S1129
<b>14 AWG (2.5 mm<sup>2</sup>)</b>						
1026732	3	0.331	8.4	48	97	S1111
1026733	4	0.366	9.3	65	120	S1111
1026734	7	0.500	12.7	81	146	S1116
<b>12 AWG (4 mm<sup>2</sup>)</b>						
1026737	4	0.437	11.1	108	179	S1113

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Part number	Number of conductors incl. ground*	Nominal outer diameter		Copper weight	Approx. weight	SKINTOP® MS-SC
		in	mm	lbs/mft	lbs/mft	PG thread
<b>20 AWG (0.5 mm<sup>2</sup>)</b>						
1026751	2	0.228	5.8	24	30	53112210
1026752	3	0.240	6.1	29	40	53112210
1026753	4	0.260	6.6	33	56	53112210
1026754	5	0.280	7.1	38	65	53112210
1026755	7	0.335	8.5	46	91	53112220
1026756	12	0.394	10.0	70	134	53112230
1026757	18	0.465	11.8	95	185	53112240
1026758	25	0.555	14.1	142	235	53112250
<b>19 AWG (0.75 mm<sup>2</sup>)</b>						
1026759	2	0.244	6.2	29	38	53112210
1026760	3	0.260	6.6	35	47	53112210
1026761	4	0.280	7.1	41	64	53112210
1026762	5	0.303	7.7	48	87	53112220
1026763	7	0.358	9.1	60	113	53112220
1026764	12	0.429	10.9	93	156	53112230
1026765	18	0.512	13.0	142	212	53112240
1026766	25	0.614	15.6	188	292	53112250
<b>18 AWG (1 mm<sup>2</sup>)</b>						
1026767	2	0.256	6.5	34	56	53112210
1026768	3	0.272	6.9	42	74	53112210

\* 2c cable does not include ground

Part number	Number of conductors incl. ground*	Nominal outer diameter		Copper weight	Approx. weight	SKINTOP® MS-SC
		in	mm	lbs/mft	lbs/mft	PG thread
1026769	4	0.295	7.5	50	87	53112220
1026770	5	0.327	8.3	59	105	53112220
1026771	7	0.386	9.8	75	129	53112230
1026772	12	0.461	11.7	124	192	53112240
1026773	18	0.551	14.0	180	265	53112250
1026774	25	0.657	16.7	238	327	53112250
<b>16 AWG (1.5 mm<sup>2</sup>)</b>						
1026775	2	0.280	7.1	44	65	53112210
1026776	3	0.295	7.5	55	84	53112220
1026777	4	0.331	8.4	67	111	53112220
1026778	5	0.358	9.1	80	130	53112220
1026779	7	0.429	10.9	103	165	53112230
1026780	12	0.524	13.3	180	245	53112240
1026781	18	0.618	15.7	251	372	53112250
1026782	25	0.736	18.7	356	493	53112260
<b>14 AWG (2.5 mm<sup>2</sup>)</b>						
1026783	3	0.354	9.0	79	126	53112220
1026784	4	0.398	10.1	99	159	53112230
1026785	7	0.531	13.5	170	228	53112240
<b>12 AWG (4 mm<sup>2</sup>)</b>						
1026788	4	0.469	11.9	167	205	53112240

Recommended SKINTOP® assumes minimal OD variance. Additional configurations are available; please see our SKINTOP® section. If not otherwise specified, all values relating to the product are nominal values.