

# 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.

## Recommended Applications

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

## Approvals



Cable Attributes		page 640	
OIL	OR-01	FLAME	FR-02
MOTION	CF-01	MECH.	MP-01

Complete the Installation	
SKINTOP® Strain Relief	page 488
EPIC® Connectors	page 280

ÖLFLEX® CONNECT Solution	
	ÖLFLEX® CONNECT CHAIN page 609

## 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, FT1

## Technical Data

**Minimum Bend Radius:**  
 - for continuous flexing: 10 x cable diameter  
 - sliding applications: 12 x cable diameter

**Temperature Range:**  
 - for continuous flexing: 0°C to +80°C  
 - for stationary use: -40°C to +80°C

**Nominal Voltage:**  
 - UL/CSA: 1000V  
 - VDE U<sub>0</sub>/U: 300/500V

**Test Voltage:**  
 - Conductor/conductor: 4000V  
 - Conductor/shield: 2000V

**Conductor Stranding:** Class 5 fine wire

**Color Code:** Black with white numbers, plus green/yellow ground

**Approvals:**  
 UL: AWM 20886  
 Attributes: NFPA 79  
 Canada: cRU AWM I/II A/B FT 1  
 Additional: CE & RoHS  
 Based on VDE 0281 Part 13

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. For current information go to our website.

ÖLFLEX® CHAIN 809

Part Number	Number of Conductors (incl. ground)	Nominal Outer Diameter (in) (mm)		Copper Weight (lbs/mft)	Approx. Weight (lbs/mft)	SKINTOP® Non-Metallic PG Thread	Part Number	Number of Conductors (incl. ground)	Nominal Outer Diameter (in) (mm)		Copper Weight (lbs/mft)	Approx. Weight (lbs/mft)	SKINTOP® Non-Metallic PG Thread
<b>20 AWG (0.50 mm<sup>2</sup>)</b>							<b>16 AWG (1.50 mm<sup>2</sup>)</b>						
1026700*	2	0.205	5.2	7	27	S1107	1026724*	2	0.256	6.5	19	50	S1109
1026701	3	0.217	5.5	10	32	S1107	1026725	3	0.272	6.9	29	62	S1109
1026702	4	0.236	6.0	13	39	S1107	1026726	4	0.299	7.6	39	77	S1111
1026703	5	0.256	6.5	16	45	S1109	1026727	5	0.335	8.5	48	93	S1111
1026704	7	0.303	7.7	23	59	S1111	1026728	7	0.406	10.3	68	127	S1113
1026705	12	0.362	9.2	39	91	S1111	1026729	12	0.484	12.3	116	198	S1116
1026706	18	0.433	11.0	58	131	S1113	1026730	18	0.584	14.9	174	288	S1121
1026707	25	0.524	13.3	81	184	S1116	1026731	25	0.705	17.9	242	401	S1129
<b>19 AWG (0.75 mm<sup>2</sup>)</b>							<b>14 AWG (2.50 mm<sup>2</sup>)</b>						
1026708*	2	0.220	5.6	10	33	S1107	1026732	3	0.331	8.4	48	97	S1111
1026709	3	0.236	6.0	15	40	S1107	1026733	4	0.366	9.3	65	120	S1111
1026710	4	0.256	6.5	19	49	S1109	1026734	7	0.500	12.7	81	146	S1116
1026711	5	0.280	7.1	25	58	S1111	<b>12 AWG (4 mm<sup>2</sup>)</b>						
1026712	7	0.335	8.5	34	79	S1111	1026737	4	0.437	11.1	108	179	S1113
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 (1.00 mm<sup>2</sup>)</b>													
1026716*	2	0.232	5.9	13	39	S1107							
1026717	3	0.248	6.3	19	48	S1109							
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							

\* 2c cable does not include ground

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Part Number	Number of Conductors (incl. ground)	Nominal Outer Diameter (in) (mm)		Copper Weight (lbs/mft)	Approx. Weight (lbs/mft)	SKINTOP® MS-SC PG Thread	Part Number	Number of Conductors (incl. ground)	Nominal Outer Diameter (in) (mm)		Copper Weight (lbs/mft)	Approx. Weight (lbs/mft)	SKINTOP® MS-SC PG Thread
<b>20 AWG (0.50 mm<sup>2</sup>)</b>							<b>16 AWG (1.50 mm<sup>2</sup>)</b>						
1026751*	2	0.228	5.8	24	30	53112210	1026769	4	0.295	7.5	50	87	53112220
1026752	3	0.240	6.1	29	40	53112210	1026770	5	0.327	8.3	59	105	53112220
1026753	4	0.260	6.6	33	56	53112210	1026771	7	0.386	9.8	75	129	53112230
1026754	5	0.280	7.1	38	65	53112210	1026772	12	0.461	11.7	124	192	53112240
1026755	7	0.335	8.5	46	91	53112220	1026773	18	0.551	14.0	180	265	53112250
1026756	12	0.394	10.0	70	134	53112230	1026774	25	0.657	16.7	238	327	53112250
1026757	18	0.465	11.8	95	185	53112240	<b>14 AWG (2.50 mm<sup>2</sup>)</b>						
1026758	25	0.555	14.1	142	235	53112250	1026775*	2	0.280	7.1	44	65	53112210
<b>19 AWG (0.75 mm<sup>2</sup>)</b>							1026776	3	0.295	7.5	55	84	53112220
1026759*	2	0.244	6.2	29	38	53112210	1026777	4	0.331	8.4	67	111	53112220
1026760	3	0.260	6.6	35	47	53112210	1026778	5	0.358	9.1	80	130	53112220
1026761	4	0.280	7.1	41	64	53112210	1026779	7	0.429	10.9	103	165	53112230
1026762	5	0.303	7.7	48	87	53112220	1026780	12	0.524	13.3	180	245	53112240
1026763	7	0.358	9.1	60	113	53112220	1026781	18	0.618	15.7	251	372	53112250
1026764	12	0.429	10.9	93	156	53112230	1026782	25	0.736	18.7	356	493	53112260
1026765	18	0.512	13.0	142	212	53112240	<b>12 AWG (4 mm<sup>2</sup>)</b>						
1026766	25	0.614	15.6	188	292	53112250	1026783	3	0.354	9.0	79	126	53112220
<b>18 AWG (1.00 mm<sup>2</sup>)</b>							1026784	4	0.398	10.1	99	159	53112230
1026767*	2	0.256	6.5	34	56	53112210	1026785	7	0.531	13.5	170	228	53112240
1026768	3	0.272	6.9	42	74	53112210	1026788	4	0.469	11.9	167	205	53112240

\* 2c cable does not include ground

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. For current information go to our website.