

# ÖLFLEX® CHAIN TM/TM CY

Continuous flex control cable with TC-ER rating



ÖLFLEX® CHAIN TM/TM CY are highly flexible multi conductor tray cables designed for continuous flex applications. ÖLFLEX® CHAIN TM CY has an overall tinned copper braid that provides protection against EMI and RFI. Fine stranding and a specially formulated thermoplastic polymer jacket optimize flex life and provide excellent resistance to mineral oils, synthetic oils, and water-based coolants.

### Recommended applications

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

### Approvals



Cable attributes		page 648	
OIL	OR-03	FLAME	FR-03
MOTION	CF-02*	MECH.	MP-03

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:** specially formulated PVC/nylon; non-woven wrapping over outer layer
- Jacket:** specially formulated thermoplastic polymer; black

### Shielded construction

- Conductors:** finely stranded bare copper
- Insulation:** specially formulated PVC/nylon; non-woven wrapping over outer layer
- Shielding:** tinned copper braid (85% coverage)
- Jacket:** specially formulated thermoplastic polymer; black

### Application advantage

- UL TC-ER reduces material costs, as no conduit is needed
- Multi-standard approval reduces part numbers and cost
- Meets UL Oil Res I/II, resistant to harsh environments for a long service life
- Copper shielding complies with EMC requirements
- Resistant to a wide range of disinfecting solutions used in the food, beverage, chemical and related industries, according to ECOLAB® PM 40-1 test procedure

### Technical data

<b>Minimum bend radius:</b>		<b>Color code:</b>	black with white numbers, plus green/yellow ground
- for continuous flexing:	7.5 x cable diameter		
- shielded:	10 x cable diameter		
<b>Temperature range:</b>		<b>Approvals:</b>	UL: TC-ER per UL 1277 MTW per UL 1063 WTTTC per UL 2277 submersible pump PLTC-ER per UL 13 ITC-ER per UL 2250 DP-1 per UL 1690 AWM 20886
- UL/CSA TC:	-25°C to +90°C	Attributes:	UL Oil Res I/II 75°C Wet; 90°C Dry sunlight resistant direct burial NFPA 79
- for continuous flexing:	-25°C to +90°C		
- for stationary use:	-40°C to +105°C		
<b>Nominal voltage:</b>		NEC:	Class 1 Division 2 per NEC Article 501
- UL/CSA TC:	600V	Canada:	c(UL) CIC/TC FT4 CSA AWM I/II A/B FT4
- UL AWM:	1000V	Additional:	CE & RoHS
- IEC U <sub>0</sub> /U:	300/500V	*UL Verified ID A522492:	Continuous Flex Test Method Verified
<b>Test voltage:</b>	2000V		
<b>Conductor stranding:</b>	Class 6 super fine wire		

ECOLAB® is a registered trademark of Ecolab, Inc.

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 TM

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>18 AWG (1 mm²)</b>						
8718030	3	0.308	7.8	20	44	S1111
8718040	4	0.337	8.6	26	55	S1111
8718050	5	0.365	9.3	33	64	S1111
8718070	7	0.423	10.7	46	84	S1113
8718120	12	0.486	12.3	79	141	S1116
8718180	18	0.606	15.4	118	207	S1121
8718250	25	0.699	17.8	164	278	S1129
<b>16 AWG (1.5 mm²)</b>						
8716030	3	0.340	8.6	29	62	S1111
8716040	4	0.373	9.5	39	75	S1111
8716050	5	0.405	10.3	49	90	S1113
8716070	7	0.473	12.0	68	121	S1116
8716120	12	0.580	14.7	112	209	S1121
8716180	18	0.679	17.2	175	298	S1121
8716250	25	0.786	20.0	242	417	S1129

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>14 AWG (2.5 mm²)</b>						
8714040	4	0.419	10.6	65	121	S1113
8714070	7	0.570	14.5	113	192	S1121
<b>12 AWG (4 mm²)</b>						
8712040	4	0.487	12.4	104	198	S1116
<b>10 AWG (6 mm²)</b>						
8710040	4	0.600	15.2	155	267	S1121

ÖLFLEX® CHAIN TM CY

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>18 AWG (1 mm²)</b>						
8718030S	3	0.330	8.4	40	82	53112220
8718040S	4	0.359	9.1	48	106	53112220
8718050S	5	0.392	10	57	123	53112230
8718070S	7	0.450	11.4	94	139	53112240
8718120S	12	0.547	13.9	153	229	53112250
8718180S	18	0.633	16.1	216	317	53112250
8718250S	25	0.734	18.6	226	436	53112260
<b>16 AWG (1.5 mm²)</b>						
8716030S	3	0.362	9.2	52	115	53112220
8716040S	4	0.400	10.2	66	128	53112230
8716050S	5	0.432	11	76	150	53112230
8716070S	7	0.500	12.7	98	181	53112240
8716120S	12	0.607	15.4	167	311	53112250
8716180S	18	0.714	18.1	235	456	53112260
8716250S	25	0.870	22.1	313	639	53112260

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>14 AWG (2.5 mm²)</b>						
8714040S	4	0.447	11.4	93	181	53112240
8714070S	7	0.597	15.2	147	282	53112250
<b>12 AWG (4 mm²)</b>						
8712040S	4	0.515	13.1	154	311	53112240
<b>10 AWG (6 mm²)</b>						
8710040S	4	0.635	16.1	208	386	53112250

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.