

ÖLFLEX® FD 890/890 CY

Super Flexible Heavy Duty Continuous Flex Control Cable with PVC Jacket



ÖLFLEX® FD 890 is a time-tested, performance-proven multi-conductor cable designed for continuous flex applications. Fine stranding and specially formulated compounds optimize flexing life and provide excellent resistance to mineral oils, synthetic oils, and water-based coolants. ÖLFLEX® FD 890 CY is a shielded version available with an overall tinned copper braid. This is recommended when electrical interference needs to be suppressed.

ÖLFLEX® FD 890/890 CY with black conductors replaces the red conductor design. Red conductor cables are available while supplies last.

Recommended Applications

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

Approvals



Unshielded Construction

Conductors: Finely stranded bare copper

Insulation: Specially blended PVC; dry lubricant; non-woven wrapping over outer layer

Jacket: Specially formulated PVC; black

Shielded Construction

Conductors: Finely stranded bare copper

Insulation: Specially blended PVC; dry lubricant; non-woven wrapping over outer layer

Inner Jacket: Black PVC

Shielding: Tinned copper braid (85% coverage)

Jacket: Specially formulated PVC; black

Application Advantage

- Over 20 years of proven performance
- Meets Oil Res I/II, resistant to harsh environments for long service life
- Pressure-extruded jacket for precision connectorization
- Passes UL 1277 impact and crush tests

Cable Attributes, see page 659

OR-04 OIL	FR-02 FLAME	CF-03 MOTION	MP-02 MECHANICAL
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Similar Cables

- ÖLFLEX® CHAIN 809/809 CY
- ÖLFLEX® FD 891/891 CY

Complete the Installation

SKINTOP® Strain Relief page 502	SKINTOP® MS-SC: page 528
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Technical Data

Minimum Bend Radius: - for continuous flexing: 7.5 x cable diameter - shielded: 10 x cable diameter	Conductor Stranding: Better than Class 6 super fine wire
Temperature Range: - for continuous flexing: -5°C to +90°C - for stationary use: -25°C to +90°C	Color Code: Black with white numbers, plus green/yellow ground
Nominal Voltage: 600V	Approvals: UL: AWM 2587 AWM 21098 (Oil) Attributes: UL Oil Res I/II Sunlight resistant NFPA 79 2012 UL 758 80°C Oil Test Canada: CSA AWM I/II A/B FT1 CSA C22.2, 210.2 Additional: CE & RoHS
Test Voltage: 2000V	

Photographs are not to scale and are not true representations of the products in question. For current information go to our website. If not otherwise specified, all values relating to the product are nominal values.

ÖLFLEX® FD 890

Part Number	Number of Conductors (incl. ground)	Nominal Outer Diameter (inches) (mm)	Copper Weight (lbs/mft)	Approx. Weight (lbs/mft)	SKINTOP® Non-Metallic PG Thread	Part Number	Number of Conductors (incl. ground)	Nominal Outer Diameter (inches) (mm)	Copper Weight (lbs/mft)	Approx. Weight (lbs/mft)	SKINTOP® Non-Metallic PG Thread
20 AWG (0.50 mm²)						14 AWG (2.50 mm²)					
8920034	3	0.264 6.7	10	43	S2109	8914044	4	0.456 11.6	65	148	S2113
8920044	4	0.291 7.4	13	53	S2111	8914074	7	0.614 15.6	113	227	S2121
8920054	5	0.323 8.2	17	68	S2111	12 AWG (4 mm²)					
8920074	7	0.382 9.7	23	75	S2113	8912044	4	0.531 13.5	104	208	S2121
8920124	12	0.457 11.6	39	124	S2113	8912074	7	0.740 18.8	181	335	S2129
8920184	18	0.539 13.7	59	183	S2121	10 AWG (6 mm²)					
8920254	25	0.677 17.2	81	265	S2121	8910044	4	0.640 16.3	155	275	S2121
18 AWG (0.75 mm²)						8 AWG (10 mm²)					
8918034	3	0.287 7.3	15	46	S2111	8908044	4	0.756 19.2	259	481	S2129
8918044	4	0.327 8.3	20	60	S2111	6 AWG (16 mm²)					
8918054	5	0.355 9.0	25	74	S2111	8906044	4	0.909 23.1	413	709	S2129
8918074	7	0.429 10.9	34	102	S2113	4 AWG (25 mm²)					
8918124	12	0.500 12.7	59	158	S2116	8904044	4	1.059 26.9	646	1005	S2136
8918154	15	0.559 14.2	73	202	S2121	2 AWG (35 mm²)					
8918184	18	0.614 15.6	88	234	S2121	8902044	4	1.252 31.8	904	1240	S2248
8918254	25	0.763 19.4	162	336	S2129						
8918344	34	0.826 21.0	211	434	S2129						
16 AWG (1.50 mm²)											
8916034	3	0.323 8.2	30	79	S2111						
8916044	4	0.358 9.1	39	106	S2111						
8916054	5	0.393 10.0	49	132	S2113						
8916074	7	0.480 12.2	68	138	S2116						
8916124	12	0.555 14.1	117	214	S2121						
8916184	18	0.685 17.4	175	323	S2129						
8916254	25	0.854 21.7	242	505	S2129						
8916344	34	0.925 23.5	329	623	S2129						
8916504	50	1.094 27.8	437	880	S2136						

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Part Number	Number of Conductors (incl. ground)	Nominal Outer Diameter (inches) (mm)	Copper Weight (lbs/mft)	Approx. Weight (lbs/mft)	SKINTOP® MS-SC PG Thread	Part Number	Number of Conductors (incl. ground)	Nominal Outer Diameter (inches) (mm)	Copper Weight (lbs/mft)	Approx. Weight (lbs/mft)	SKINTOP® MS-SC PG Thread
20 AWG (0.50 mm²)						14 AWG (2.50 mm²)					
8920034S	3	0.342 8.7	27	82	53112220	8914044S	4	0.551 14.0	113	181	53112250
8920044S	4	0.370 9.4	36	97	53112230	8914074S	7	0.709 18.0	175	347	53112260
8920054S	5	0.409 10.4	41	108	53112230	8914184S	18	1.012 25.7	369	762	53112270
8920074S	7	0.468 11.9	52	137	53112240	12 AWG (4 mm²)					
8920124S	12	0.551 14.0	68	214	53112250	8912044S	4	0.650 16.5	156	302	53112250
8920184S	18	0.657 16.7	112	293	53112250	8912074S	7	0.858 21.8	251	194	53112260
8920254S	25	0.803 20.4	146	421	53112260	10 AWG (6 mm²)					
18 AWG (0.75 mm²)						8 AWG (10 mm²)					
8918034S	3	0.375 9.5	40	91	53112230	8910044S	4	0.752 19.1	215	333	53112260
8918044S	4	0.419 10.6	44	112	53112230	6 AWG (16 mm²)					
8918054S	5	0.447 11.4	52	131	53112240	8908044S	4	0.882 22.4	337	701	53112260
8918074S	7	0.528 13.4	76	198	53112240	8906044S	4	1.066 27.1	498	986	53112270
8918124S	12	0.636 16.2	110	271	53112250						
8918184S	18	0.719 18.3	138	357	53112260						
8918254S	25	0.887 22.5	194	538	53112260						
8918344S	34	0.986 25.0	211	660	53112270						
16 AWG (1.50 mm²)											
8916034S	3	0.409 10.4	54	121	53112230						
8916044S	4	0.444 11.3	68	154	53112240						
8916054S	5	0.480 12.2	81	170	53112240						
8916074S	7	0.598 15.2	119	258	53112250						
8916124S	12	0.673 17.1	174	366	53112260						
8916184S	18	0.826 21.0	252	493	53112260						
8916254S	25	0.996 25.3	320	687	53112270						
8916344S	34	1.067 27.1	446	769	53112270						

Recommended SKINTOP® assumes minimal OD variance. Additional configurations are available, please see our SKINTOP® Section. Photographs are not to scale and are not true representations of the products in question. For current information go to our website. If not otherwise specified, all values relating to the product are nominal values.