

ÖLFLEX® FD 90/90 CY

Flexible Single-Conductor Power Supply Cable with PVC Jacket



ÖLFLEX® FD 90 is a flexible, 600V, UL and CSA approved single-conductor cable for continuous flex applications. It is designed with super fine wire stranding and specially formulated PVC compounds that are resistant to most mineral oils and water-based coolants. ÖLFLEX® FD 90 CY with tinned copper braid shielding is used for applications where EMI emissions need to be suppressed.

Recommended Applications

Power circuits and applications requiring flexible power cable to interconnect the power supply to the machine

Approvals



Cable Attributes		page 640	
OIL	OR-01	FLAME	FR-02
MOTION	CF-02	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: Specially formulated black PVC (also available in green/yellow); non-woven wrapping

Jacket: Specially formulated PVC; black

Shielded Construction

Conductors: Finely stranded bare copper

Insulation: Specially formulated black PVC; non-woven wrapping

Shielding: Tinned copper braid

Jacket: Specially formulated PVC; orange

Application Advantage

- North American UL/CSA and European market approvals
- Suitable for dry, damp interior use
- Available in larger conductor sizes for power applications
- CSA FT1 flame retardant

Technical Data

Minimum Bend Radius:
 - for continuous flexing: 7.5 x cable diameter
 - for stationary use: 3 x cable diameter

Temperature Range:
 - for continuous flexing: -5°C to +90°C
 - for stationary use: -40°C to +90°C

Nominal Voltage:
 - UL/CSA: 600V
 - IEC: 600/1000V

Test Voltage: 4000V

Conductor Stranding: Class 6 super fine wire

Approvals:
 UL: AWM 10107
 Attributes: NFPA 79
 Canada: CSA AWM I/II A/B FT 1 (≤ 4/0 AWG)
 cRU AWM I/II A/B FT 1 (≥ 300 KCMIL)
 Additional: CE & RoHS
 Based on VDE 0250/0281

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® FD 90

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
8 AWG (10 mm²)							3/0 AWG (95 mm²)						
0026601	1	0.354	9.0	65	118	S2111	0026620	1	0.780	19.8	613	792	S2129
6 AWG (16 mm²)							4/0 AWG (120 mm²)						
0026604	1	0.413	10.5	103	161	S2113	0026623	1	0.921	23.4	774	1022	S2129
4 AWG (25 mm²)							250 KCMIL (150 mm²)						
0026608	1	0.465	11.8	161	243	S2116	0026626	1	0.988	25.1	968	1169	S2136
2 AWG (35 mm²)							350 KCMIL (185 mm²)						
0026611	1	0.559	14.2	226	324	S2121	0026629	1	1.106	28.1	1193	1549	S2136
1 AWG (50 mm²)							450 KCMIL (240 mm²)						
0026614	1	0.638	16.2	323	444	S2121	0026635	1	1.244	31.6	1548	1978	S2248
2/0 AWG (70 mm²)							500 KCMIL (300 mm²)						
0026617	1	0.720	18.3	452	603	S2129	0026641	1	1.319	33.5	1935	2382	S2248

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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
8 AWG (10 mm²)							3/0 AWG (95 mm²)						
0026651	1	0.382	9.7	86	153	53112230	0026663	1	0.823	20.9	691	929	53112260
6 AWG (16 mm²)							4/0 AWG (120 mm²)						
0026653	1	0.441	11.2	125	200	53112240	0026665	1	0.965	24.5	862	1177	53112270
4 AWG (25 mm²)							250 KCMIL (150 mm²)						
0026655	1	0.492	12.5	173	276	53112240	0026667	1	1.031	26.2	948	1293	53112270
2 AWG (35 mm²)							350 KCMIL (185 mm²)						
0026657	1	0.594	15.1	269	408	53112250	0026669	1	1.150	29.2	1300	1755	53112270
1 AWG (50 mm²)							450 KCMIL (240 mm²)						
0026659	1	0.673	17.1	373	543	53112260	0026671	1	1.295	32.9	1697	2266	53112670*
2/0 AWG (70 mm²)							500 KCMIL (300 mm²)						
0026661	1	0.764	19.4	521	726	53112260	0026673	1	1.370	34.8	2103	2759	53112670*

* SKINTOP® MS-SC with metric thread.