ÖLFLEX® 190/190 CY

Extremely Oil-Resistant Flexible Control Cable with UL MTW; Unshielded & Shielded

ÖLFLEX® 190 is a multi-conductor cable with a highly oil-, coolant-, and solvent-resistant PVC jacket for control and power applications in an industrial environment. It is designed for use in all electrical equipment under dry, damp, and wet conditions. ÖLFLEX® 190 CY is a shielded version for EMI and RFI protection.

Unshielded Construction

Conductors: Finely stranded bare copper

Insulation: Specially blended PVC/nylon

Jacket: Specially formulated oil-resistant gray PVC

Shielded Construction

Conductors: Finely stranded bare copper

Insulation: Specially blended PVC/nylon

Shielding: PVC inner jacket; tinned copper braid (85% coverage)

Jacket: Specially formulated oil-resistant gray PVC

Recommended Applications

CNC machining centers; grinding machines; bottling equipment; conveyors; processing equipment; assembly lines; control panels

Application Advantage

- Extremely oil-resistant (Oil Res I & II)
- Meets NFPA 79 machinery wiring standard
- Very flexible and number-coded for easy routing and termination
- Round jacket for optimal seal with a SKINTOP® strain relief cable gland
- 20+ years of reliable performance

Approvals

Cable Attributes, see page 659

OR-04	FR-02	FL-02	MP-02
OIL	FLAME	MOTION	MECHANICAL

Similar Cables

- ÖLFLEX® CONTROL TM
- ÖLFLEX® 150 QUATTRO

Complete the Installation

SKINTOP® Strain Relief: page 502

EPIC® Connectors: page 278

Technical Data

Minimum Bend Radius:
- for installation: 4 x cable diameter
- shielded: 6 x cable diameter

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

Nominal Voltage:
- UL MTW/CSA AWM: 600V
- UL AWM: 1000V

Test Voltage: 2000V

Conductor Stranding:
- 20 - 6 AWG: Class 5 fine wire*
- 4 AWG and larger:
  - MTW: Class K fine wire
  - AWM only: Class 5 fine wire

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

Approvals:
- UL: MTW per UL 1063 (P/Ns with * are not MTW)
- AWM 2587 & 21098 (Oil)
- Attributes: UL Oil Res I/II
- NFPA 79 2012
- Canada: CSA AWM I/II A/B FT1
- CSA C22.2 210.2
- Additional: Passes Impact and Crush tests per UL 1277, excluding 20 AWG
- CE & RoHS

* 18 AWG meets only the Class 5 cross section and DC resistance

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® 190

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)						
602002**	2	0.253	6.4	7	40	S1109
602003	3	0.265	6.7	10	42	S1109
602004	4	0.285	7.2	13	51	S1111
602005	5	0.308	7.8	17	60	S1111
602007	7	0.331	8.4	23	82	S1111
602009	9	0.409	10.4	30	100	S1113
602012	12	0.421	10.7	39	168	S1113
602018	18	0.487	12.4	59	198	S1116
602025	25	0.586	14.9	82	242	S1121
18 AWG (1.00 mm²)						
601802**	2	0.277	7.0	13	42	S1111
601803	3	0.291	7.4	20	44	S1111
601803NG	3	0.291	7.4	20	44	S1111
601804	4	0.314	8.0	26	55	S1111
601805	5	0.340	8.6	33	64	S1111
601807	7	0.367	9.3	46	84	S1111
601809	9	0.454	11.5	59	119	S1113
601812	12	0.471	12.0	79	141	S1116
601818	18	0.579	14.7	118	207	S1121
601825	25	0.656	16.7	164	278	S1121
601834	34	0.937	23.8	206	575	S1129
621834*	34	0.783	19.9	232	475	S1129
601841	41	1.041	26.4	250	680	S1136
621841*	41	0.846	21.5	289	541	S1129
601850	50	1.092	27.7	305	825	S1136
621850*	50	0.961	24.4	336	697	S1129
16 AWG (1.50 mm²)						
601602**	2	0.303	7.7	20	57	S1111
601603	3	0.319	8.1	29	62	S1111
601604	4	0.345	8.8	39	75	S1111
601605	5	0.375	9.5	49	90	S1111
601607	7	0.406	10.3	68	121	S1113
601609	9	0.509	12.9	88	174	S1116
601612	12	0.557	14.1	112	209	S1121
601618	18	0.644	16.4	175	298	S1121
601625	25	0.733	18.6	242	417	S1129
601634	34	1.020	25.9	296	760	S1136
621634*	34	0.925	23.5	339	652	S1129
601641	41	1.101	28.0	357	875	S1136
621641*	41	0.988	25.1	407	768	S1136
601650	50	1.192	30.3	437	1020	S1136
621650*	50	1.079	27.4	504	911	S1136
601661	61	1.265	32.1	530	1180	S1248
621661*	61	1.142	29.0	591	1036	S1136
14 AWG (2.50 mm²)						
601402**	2	0.337	8.6	33	88	S1111
601403	3	0.356	9.0	49	93	S1111
601404	4	0.386	9.8	65	121	S1113
601405	5	0.421	10.7	81	145	S1113
601407	7	0.457	11.6	113	192	S1113
601409	9	0.609	15.5	145	317	S1121
601412	12	0.628	16.0	194	401	S1121
601418	18	0.729	18.5	290	575	S1129
601425	25	0.872	22.1	404	860	S1129
12 AWG (4 mm²)						
601203	3	0.417	10.6	78	156	S1113
601204	4	0.454	11.5	104	198	S1113
601205	5	0.497	12.6	129	238	S1116
601207	7	0.573	14.6	181	363	S1121
601211	11	0.745	18.9	284	397	S1129
10 AWG (6 mm²)						
601003	3	0.492	12.5	116	223	S1116
601004	4	0.570	14.5	155	267	S1121
601005	5	0.623	15.8	194	322	S1121
8 AWG (10 mm²)						
600804	4	0.695	17.7	258	436	S1129
600805	5	0.764	19.4	323	525	S1129
6 AWG (16 mm²)						
600604	4	0.870	22.1	413	699	S1129
600605	5	0.955	24.3	516	842	S1129
4 AWG (25 mm²)						
600404	4	1.118	28.4	515	950	S1136
620404*	4	0.976	24.8	646	863	S1136
600405	5	1.228	31.2	645	1200	S1248
620405*	5	1.094	27.8	807	1105	S1136
2 AWG (35 mm²)						
600204	4	1.292	32.8	876	1405	S1248
620204*	4	1.091	27.7	904	1165	S1136
600205	5	1.422	36.1	1129	1752	S1142

ÖLFLEX® 190 CY

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)						
602002CY**	2	0.329	8.4	25	66	53112220
602003CY	3	0.341	8.7	30	82	53112220
602004CY	4	0.361	9.2	35	88	53112220
602005CY	5	0.384	9.8	41	99	53112230
602007CY	7	0.407	10.3	51	112	53112230
602012CY	12	0.497	12.6	73	181	53112240
602025CY	25	0.678	17.2	139	295	53112260
18 AWG (1.00 mm²)						
601802CY**	2	0.353	9.0	28	75	53112220
601803CY	3	0.367	9.3	40	82	53112230
601804CY	4	0.390	9.9	48	106	53112230
601805CY	5	0.416	10.6	57	123	53112230
601807CY	7	0.443	11.3	94	139	53112240
601812CY	12	0.586	14.9	153	229	53112250
601818CY	18	0.678	17.2	216	317	53112260
601825CY	25	0.764	19.4	226	436	53112260
16 AWG (1.50 mm²)						
601603CY	3	0.395	10.0	52	115	53112230
601604CY	4	0.421	10.7	66	128	53112230
601605CY	5	0.451	11.5	76	150	53112240
601607CY	7	0.482	12.2	98	181	53112240
601612CY	12	0.656	16.7	167	311	53112250
601618CY	18	0.743	18.9	235	456	53112260
601625CY	25	0.897	22.8	313	639	53112260
14 AWG (2.50 mm²)						
601403CY	3	0.432	11.0	75	148	53112230
601404CY	4	0.462	11.7	93	181	53112240
601405CY	5	0.497	12.6	115	218	53112240
601407CY	7	0.572	14.5	147	282	53112250
601412CY	12	0.736	18.7	253	516	53112260
601418CY	18	0.905	23.0	361	741	53112260
12 AWG (4 mm²)						
601203CY	3	0.500	12.7	124	227	53112240
601204CY	4	0.585	14.9	154	311	53112250
601205CY	5	0.628	16.0	180	359	53112250
601207CY	7	0.672	17.1	234	494	53112260
10 AWG (6 mm²)						
601003CY	3	0.623	15.8	164	311	53112250
601004CY	4	0.669	17.0	208	386	53112250
601005CY	5	0.731	18.6	255	474	53112260
601007CY	7	0.786	20.0	335	639	53112260
8 AWG (10 mm²)						
600804CY	4	0.803	20.4	324	574	53112260
6 AWG (16 mm²)						
600604CY	4	0.994	25.2	494	1115	53112270
4 AWG (25 mm²)						
620404CY*	4	1.133	28.8	777	1153	53112270
2 AWG (35 mm²)						
620204CY*	4	1.247	31.7	1051	1987	53112270

* Part numbers are not MTW.

** 2c cable does not include ground.

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.