

## ÖLFLEX® 191

Oil-resistant multi-standard cable with AWM approval

ÖLFLEX® 191 - PVC control cable with UL/CSA AWM, oil-resistant and flexible for various applications, UL/CSA: 600V

### Info

Conductor cross-section up to 120 mm<sup>2</sup>

Further items with 0,5 and 0,75 mm<sup>2</sup>: see ÖLFLEX® 150

Oil-resistant according to EN 50363-4-1: TM5



Good chemical resistance



Oil-resistant

### Benefits

High electrical performance due to 4 kV test voltage

For various applications

### Application range

Plant engineering

Industrial machinery

Heating and air-conditioning systems

Machine tools

Mainly used in dry, damp and wet interiors (including water-oil mixtures), but not for outdoor use

For fixed installation under medium mechanical load conditions, and applications with occasional flexing at free, non-continuously recurring movement without tensile load or compulsory guidance

Note: for the use of AWM (Appliance Wiring Material) cables in industrial machinery (USA) according to NFPA 79: please see the catalogue appendix table T29

### Product features

Flame-retardant according to IEC 60332-1-2

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Product Management [www.lappkabel.de](http://www.lappkabel.de)

You can find the current technical data in the corresponding data sheet.

PN 0456 / 02\_03.16

800.633.6339

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## ÖLFLEX® 191

and UL 1581 §1061 Cable Flame Test  
Oil-resistant according to EN 50363-4-1: TM5

### Norm references / Approvals

UL AWM Style 21098  
CSA AWM I A/B II A/B

Multi-standard cables have conductor strands with nominal sizes in mm<sup>2</sup> or AWG/kcmil. The master size is mentioned in the table below, while the equivalent size of the other system can be found in the Appendix T16 of this catalogue. For this related secondary size the cross-section of the conductor mostly works out to be greater than the specified nominal value.

### Product Make-up

Fine-wire strand made of bare copper wires  
PVC core insulation  
Cores twisted in layers  
PVC outer sheath, high oil-resistance, grey (similar to RAL 7001)

### Technical Data

Classification ETIM 5:	ETIM 5.0 Class-ID: EC000104 ETIM 5.0 Class-Description: Control cable
Classification ETIM 6:	ETIM 6.0 Class-ID: EC000104 ETIM 6.0 Class-Description: Control cable
Core identification code:	Black with white numbers acc. to VDE 0293-334
Conductor stranding:	Fine wire according to VDE 0295, class 5/IEC 60228 class 5
Minimum bending radius:	Occasional flexing: 15 x outer diameter Fixed installation: 4 x outer diameter
Nominal voltage:	HAR U0/U: 300/500 V UL/CSA: 600 V
Test voltage:	4000 V
Protective conductor:	G = with GN-YE protective conductor X = without protective conductor
Temperature range:	Occasional flexing: -5 °C to +70 °C UL/CSA: -5 °C to +90 °C Fixed installation: -40 °C to +70 °C UL/CSA: +90 °C

### Note

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Please find our standard lengths at: [www.lappkabel.de/en/cable-standardlengths](http://www.lappkabel.de/en/cable-standardlengths)

Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum

Please specify the preferred type of packaging (e.g. 1 x 600 m drum or 8 x 75 m coils).

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Prices are net prices without VAT and surcharges. Sale to business customers only.

**ÖLFLEX® 191**

Article number	Number of cores and mm <sup>2</sup> per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
0011222	7 G 0.75	8.3	50.4	116
0011223	9 G 0.75	10.5	64.8	152
0011224	12 G 0.75	11.2	86.4	194
0011113	3 G 1.0	6.7	28.8	66
0011114	4 G 1.0	7.2	38.4	81
0011115	5 G 1.0	8.1	48	95
0011116	7 G 1.0	8.9	67.2	125
0011117	12 G 1.0	12	115.2	211
0011118	18 G 1.0	14.4	172.8	309
0011119	25 G 1.0	17.3	240	413
0011136	2 X 1.5	6.9	28.8	74
0011137	3 G 1.5	7.3	44	91
0011138	4 G 1.5	8.2	58	112
0011139	5 G 1.5	9	72	136
0011140	7 G 1.5	10	101	179
0011125	9 G 1.5	12.6	129.6	230
0011142	12 G 1.5	13.4	173	313
0011143	18 G 1.5	16.1	260	444
0011144	25 G 1.5	19.5	360	620
0011150	3 G 2.5	8.4	72	138
0011151	4 G 2.5	9.1	96	182
0011152	5 G 2.5	10.2	120	216
0011153	7 G 2.5	11.3	168	286
0011160	3 G 4.0	9.9	115.2	202
0011161	4 G 4.0	10.8	154	245
0011162	5 G 4.0	12.1	192	310
0011167	7 G 4.0	13.4	268.8	470
0011165	4 G 6.0	13	231	398
0011166	5 G 6.0	14.5	288	479
0011169	4 G 10.0	16.5	384	559
0011170	5 G 10.0	18.4	480	782
0011172	4 G 16.0	22.1	615	904
0011173	5 G 16.0	24.3	768	1171
0011175	4 G 25.0	25.2	960	1299

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**ÖLFLEX® 191**

Article number	Number of cores and mm <sup>2</sup> per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
0011176	5 G 25.0	28	1200	1640
0011178	4 G 35.0	28.1	1344	2119
0011179	5 G 35.0	31.5	1680	2606
0011205	4 G 50.0	35.7	1920	2898
0011206	4 G 70.0	43	2688	4052
0011207	4 G 95.0	47.2	3648	5430
0011208	4 G 120.0	51	4608	6290

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## ÖLFLEX® 191 CY

Screened and oil-resistant multi-standard cable with AWM approval

ÖLFLEX® 191 CY - PVC control cable with UL/CSA AWM, oil-resistant, screened and flexible for various applications, UL/CSA: 600V

### Info

Conductor cross-section up to 120 mm<sup>2</sup>

Further items with 0,75 mm<sup>2</sup>: see ÖLFLEX® 150 CY

Oil-resistant according to EN 50363-4-1: TM5



Good chemical resistance



Oil-resistant



Interference signals

### Benefits

High electrical performance due to 4 kV test voltage

Multifunctional application possibilities

### Application range

Plant engineering

Industrial machinery

Heating and air-conditioning systems

In EMC-sensitive environments

(electromagnetic compatibility)

Mainly used in dry, damp and wet interiors (including water-oil mixtures), but not for outdoor use

For fixed installation under medium mechanical load conditions, and applications with occasional flexing at free, non-continuously recurring movement without tensile load or compulsory guidance

Note: for the use of AWM (Appliance Wiring Material) cables in industrial machinery (USA) according to NFPA 79: please see

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## ÖLFLEX® 191 CY

the catalogue appendix table T29

### Product features

Flame-retardant according to IEC 60332-1-2  
and UL 1581 §1061 Cable Flame Test  
Oil-resistant according to EN 50363-4-1: TM5  
High degree of screening  
low transfer impedance  
(max. 250 Ω/km at 30 MHz)

### Norm references / Approvals

UL AWM Style 21098  
CSA AWM I A/B II A/B

Multi-standard cables have conductor strands with nominal sizes in mm<sup>2</sup> or AWG/kcmil. The master size is mentioned in the table below, while the equivalent size of the other system can be found in the Appendix T16 of this catalogue. For this related secondary size the cross-section of the conductor mostly works out to be greater than the specified nominal value.

### Product Make-up

Fine-wire strand made of bare copper wires  
PVC core insulation  
Cores twisted in layers  
PVC inner sheath, grey  
Tinned-copper braiding  
PVC outer sheath, high oil-resistance, grey (similar to RAL 7001)

### Technical Data

Classification ETIM 5:	ETIM 5.0 Class-ID: EC000104 ETIM 5.0 Class-Description: Control cable
Classification ETIM 6:	ETIM 6.0 Class-ID: EC000104 ETIM 6.0 Class-Description: Control cable
Core identification code:	Black with white numbers acc. to VDE 0293-334
Conductor stranding:	Fine wire according to VDE 0295, class 5/IEC 60228 class 5
Minimum bending radius:	Occasional flexing: 20 x outer diameter Fixed installation: 6 x outer diameter
Nominal voltage:	HAR U0/U: 300/500 V UL/CSA: 600 V
Test voltage:	4000 V
Protective conductor:	G = with GN-YE protective conductor X = without protective conductor
Temperature range:	Occasional flexing: -5 °C to +70 °C UL/CSA: -5 °C to +90 °C Fixed installation: -40 °C to +70 °C UL/CSA: +90 °C

### Note

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

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## ÖLFLEX® 191 CY

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Please find our standard lengths at: [www.lappkabel.de/en/cable-standardlengths](http://www.lappkabel.de/en/cable-standardlengths)

Packaging size: coil  $\leq$  30 kg or  $\leq$  250 m, otherwise drum

Please specify the preferred type of packaging (e.g. 1 x 600 m drum or 8 x 75 m coils).

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Article number	Number of cores and mm <sup>2</sup> per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
0011234	7 G 0.75	10.5	85.9	187
0011202	2 X 1.0	8.4	48	126
0011180	3 G 1.0	8.8	55.8	122
0011181	4 G 1.0	9.6	80.8	157
0011182	5 G 1.0	10.3	89.4	183
0011183	7 G 1.0	11.2	99.9	207
0011184	12 G 1.0	14.6	175.7	342
0011185	18 G 1.0	17	241.7	472
0011186	25 G 1.0	20.1	341.7	648
0011302	2 X 1.5	9	64.7	156
0011187	3 G 1.5	9.6	89.1	166
0011188	4 G 1.5	10.3	96.6	191
0011189	5 G 1.5	11.3	111.2	222
0011190	7 G 1.5	12.1	145.2	270
0011191	12 G 1.5	16.1	257	464
0011192	18 G 1.5	18.7	382.8	679
0011193	25 G 1.5	23	546.2	952
0011194	3 G 2.5	10.8	111.1	221
0011195	4 G 2.5	11.4	140.6	269
0011196	5 G 2.5	12.9	167.3	325
0011197	7 G 2.5	14.1	240	421
30010542	12 G 2.5	17.9	414.9	769
30010543	18 G 2.5	22	626.1	1102
30010544	4 G 4.0	13.6	236.7	462
30010545	5 G 4.0	14.9	277.8	535
30010546	7 G 4.0	16.2	393.4	735
30010548	4 G 6.0	15.8	317.1	574
3023130	5 G 6.0	17.3	413.7	737
30010547	7 G 6.0	18.8	563.8	950
3023131	4 G 10.0	19.5	550.4	946
30010639	4 G 16.0	24.7	819.1	1189
3023132	4 G 25.0	28.7	1165	1692
30010928	4 G 35.0	32	1683	2700
3026535	4 G 50.0	39.7	2342	3362

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Article number	Number of cores and mm <sup>2</sup> per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
3025946	4 G 70.0	44.8	3229	4490
3025947	4 G 95.0	50	4010	5540
3026536	4 G 120.0	55.4	5012	6960