

ÖLFLEX® FD 891 12G0,75

Article No.: 1026112

Power and control cable; 12G0.75; Core-Line; U_0/U : 300/500 V; PVC; Core identification: Numbers; UL recognized; Cable chain



Details

Benefits

- Highly flexible cable design means excellent product performance.
- Durable cable chain use with medium travel distances or increased acceleration (LAPP performance class “Core Line”).
- Shorter conductor stranding allows very small bending radii.
- UL/CSA certification according to technical data enables the product to be used on the North American market.
- Product with multiple certifications enables universal use and reduces the variety of parts, thus guaranteeing logistics savings.
- Classified fire behavior according to EU Directive 305/2011 (BauPVO/CPR) with article number selection on the LAPP website.

Application

- The cable design allows flexible, continuously flexing use in moving machine parts and in the cable chain.
- For use in control, regulating and measurement circuits.
- Can be used in dry, damp or wet environments.
- Suitable for medium mechanical stress.
- Suitable for outdoor use, subject to the temperature range.

Notes

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

If applicable, the prices are solid metal prices without additional charges and VAT. Sales only to business customers.

Unless specified otherwise, the product values shown are rated values at room temperature. You can receive additional values, such as tolerances, upon request if they are available and have been released for publication.

The absence of PWIS raw materials does not protect against the potential risk of contamination with substances that interfere with the paint wetting during subsequent handling of the product(s) during transport, storage or further processing after delivery.

Remarks

When used in cable chains: please follow the T3 technical assembly guidelines

Bending cycles and usage parameters: please refer to the A2-1 selection table

Technical Data

General information

| | |
|-------------------|---|
| Brand | ÖLFLEX® |
| Product type | Power and control cable |
| Copper index | 581.2 lb/10000 ft |
| Performance class | Core-Line |
| Industry segment | Food & Beverage Intralogistics & Material handling Machine Tools Packaging |

Electrical parameters

| | |
|-----------------------------|---|
| Nominal voltage | U_0/U : 300/500 V AC rms according to IEC |
| Rated voltage | 600 V AC rms according to UL AWM 600 V AC rms according to CSA AWM |
| test voltage | 4 kV |
| Current rating according to | VDE 0298-4 |

Product design

| | |
|--|------------------------------------|
| Cable dimension | 12G0.75 |
| Nominal cross section conductor (mm ²) | 0.75 mm ² |
| Nominal cross section conductor (AWG) | 19 AWG |
| Leading conductor cross-section | mm ² |
| Conductor material | Bare Copper |
| Conductor design | IEC 60228 class 6: extra-fine wire |
| Including protective ground | Yes |
| Number of cores | 12 |
| Stranding type | Layered Stranding |
| Wrapping above stranding | Fleece Wrapping |
| Shielded | No |
| Nominal outer diameter | 0.457 in |
| Cable form | Round |
| Core insulation base material | Polyvinylchloride |

| | |
|---|-------------------|
| Conductor insulation basic material, short form | PVC |
| Basic material of outer jacket | Polyvinylchloride |
| Base material of outer sheath, shortname | PVC |
| Outer jacket color | black |
| Colour outer sheath RAL code | RAL 9005 |
| Core identification | Numbers |

| | |
|----------------------|------------------------|
| Conductor color code | EN 50334 VDE 0293-1 |
|----------------------|------------------------|

Product features

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|------------------------------------|-------------------------|
| Application area | Cable chain Flexible |
| For permanent bending | Yes |
| For torsional load | No |
| Minimum bending radius, stationary | 4 x outer diameter |

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|--|---|
| Minimum bending radius in inch, fixed installation | 1.827 in |
| Minimum bending radius, dynamic continuously flexing | 7.5 x outer diameter |
| Minimum bending radius in inch, dynamic continuously flexing | 3.425 in |
| Minimum bending radius, occasionally moved | 7.5 x outer diameter |
| Minimum bending radius in mm, occasionally moved | 3.425 in |
| Maximum bending cycles | 7,000,000 |
| Maximum travel distance | 65.617 ft |
| Maximum speed sliding | 16.404 ft/s |
| Maximum speed unsupported | 32.808 ft/s |
| Maximum acceleration | 65.617 ft/s ² |
| Temperature, fixed installation | to 90 °C max. conductor temperature according to CSA AWM -40 °C to 80 °C max. conductor temperature according to IEC to 90 °C max. conductor temperature according to UL AWM |
| Temperature, occasionally moved | -5 °C to 90 °C max. conductor temperature according to CSA AWM -5 °C to 90 °C max. conductor temperature according to UL AWM -5 °C to 70 °C max. conductor temperature according to IEC |
| temperature, dynamic permanently moved | -5 °C to 90 °C max. conductor temperature according to UL AWM -5 °C to 90 °C max. conductor temperature according to CSA AWM -5 °C to 70 °C max. conductor temperature according to IEC |
| Flame-retardant | Yes |
| Flame retardance according to | IEC 60332-1-2 UL VW-1 CSA FT1 |
| UV-resistant | Yes |

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|-----------------------------|--|
| UV-resistant according to | EN ISO 4892-2, method A (color change permitted) EN 50525-1 (cables with a black jacket are suitable for permanent outdoor use) |
| Halogenfree | No |
| Oil resistant | Yes |
| Oil resistance according to | EN 50363-4-1: TM5 UL 80°C (176°F) rating according to UL 758 CSA C22.2 No. 210-15 |
| PWIS-free | Yes |
| PWIS-free according to | VDMA 24364-B2-L |
| Low-adhesive jacket surface | Yes |

Certifications and standards

| | |
|---|--|
| CE marking | Yes |
| EAC certified | Yes |
| EAC certification number | EAЭC N RU Д-DE.АЮ64.В.00130/20 |
| UL recognized | Yes |
| UL AWM certification | 21098 according to UL 758 (e-file number: E63634) 10012 according to UL 758 (e-file number: E63634) |
| UL listed | No |
| cUR recognized | Yes |
| cUR certification | AWM I A according to CSA C22.2 No. 210 (e-file number: E63634) AWM I B according to CSA C22.2 No. 210 (e-file number: E63634) AWM II A according to CSA C22.2 No. 210 (e-file number: E63634) AWM II B according to CSA C22.2 No. 210 (e-file number: E63634) |
| cUL listed | No |
| CSA certified | No |
| Resistance to flame propagation tested according to UN/ECE-R118 | No |

ÖLFLEX® FD 891

| Article No. | Name | Number of cores | Including protective ground | Nominal cross section conductor (mm ²) | Nominal outer diameter | Copper index |
|-------------|------------------------|-----------------|-----------------------------|--|------------------------|---------------------|
| 1026012 | ÖLFLEX® FD 891 12G0,5 | 12 | Yes | 0.5 mm ² | 0.425 in | 387 lb/10000 ft |
| 1026103 | ÖLFLEX® FD 891 3G0,75 | 3 | Yes | 0.75 mm ² | 0.26 in | 145.1 lb/10000 ft |
| 1026104 | ÖLFLEX® FD 891 4G0,75 | 4 | Yes | 0.75 mm ² | 0.287 in | 193.5 lb/10000 ft |
| 1026105 | ÖLFLEX® FD 891 5G0,75 | 5 | Yes | 0.75 mm ² | 0.315 in | 241.9 lb/10000 ft |
| 1026107 | ÖLFLEX® FD 891 7G0,75 | 7 | Yes | 0.75 mm ² | 0.378 in | 338.6 lb/10000 ft |
| 1026112 | ÖLFLEX® FD 891 12G0,75 | 12 | Yes | 0.75 mm ² | 0.457 in | 581.2 lb/10000 ft |
| 1026118 | ÖLFLEX® FD 891 18G0,75 | 18 | Yes | 0.75 mm ² | 0.547 in | 870.8 lb/10000 ft |
| 1026125 | ÖLFLEX® FD 891 25G0,75 | 25 | Yes | 0.75 mm ² | 0.654 in | 1209.4 lb/10000 ft |
| 1026127 | ÖLFLEX® FD 891 3G1 | 3 | Yes | 1 mm ² | 0.28 in | 193.53 lb/10000 ft |
| 1026128 | ÖLFLEX® FD 891 7G1 | 7 | Yes | 1 mm ² | 0.413 in | 451.5 lb/10000 ft |
| 1026129 | ÖLFLEX® FD 891 4G1 | 4 | Yes | 1 mm ² | 0.307 in | 262.07 lb/10000 ft |
| 1026130 | ÖLFLEX® FD 891 5G1 | 5 | Yes | 1 mm ² | 0.346 in | 322.55 lb/10000 ft |
| 1026131 | ÖLFLEX® FD 891 12G1 | 12 | Yes | 1 mm ² | 0.492 in | 779.48 lb/10000 ft |
| 1026132 | ÖLFLEX® FD 891 18G1 | 18 | Yes | 1 mm ² | 0.591 in | 1162.51 lb/10000 ft |
| 1026133 | ÖLFLEX® FD 891 25G1 | 25 | Yes | 1 mm ² | 0.705 in | 1612.73 lb/10000 ft |
| 1026303 | ÖLFLEX® FD 891 3G1,5 | 3 | Yes | 1.5 mm ² | 0.303 in | 290.3 lb/10000 ft |
| 1026304 | ÖLFLEX® FD 891 4G1,5 | 4 | Yes | 1.5 mm ² | 0.346 in | 387 lb/10000 ft |
| 1026305 | ÖLFLEX® FD 891 5G1,5 | 5 | Yes | 1.5 mm ² | 0.378 in | 483.76 lb/10000 ft |
| 1026307 | ÖLFLEX® FD 891 7G1,5 | 7 | Yes | 1.5 mm ² | 0.457 in | 677.3 lb/10000 ft |
| 1026312 | ÖLFLEX® FD 891 12G1,5 | 12 | Yes | 1.5 mm ² | 0.547 in | 1161.04 lb/10000 ft |
| 1026318 | ÖLFLEX® FD 891 18G1,5 | 18 | Yes | 1.5 mm ² | 0.665 in | 1741.56 lb/10000 ft |
| 1026325 | ÖLFLEX® FD 891 25G1,5 | 25 | Yes | 1.5 mm ² | 0.791 in | 2418.84 lb/10000 ft |
| 1026334 | ÖLFLEX® FD 891 34G1,5 | 34 | Yes | 1.5 mm ² | 0.929 in | 3289.6 lb/10000 ft |
| 1026403 | ÖLFLEX® FD 891 3G2,5 | 3 | Yes | 2.5 mm ² | 0.346 in | 483.8 lb/10000 ft |
| 1026404 | ÖLFLEX® FD 891 4G2,5 | 4 | Yes | 2.5 mm ² | 0.386 in | 645 lb/10000 ft |
| 1026405 | ÖLFLEX® FD 891 5G2,5 | 5 | Yes | 2.5 mm ² | 0.433 in | 806.3 lb/10000 ft |
| 1026407 | ÖLFLEX® FD 891 7G2,5 | 7 | Yes | 2.5 mm ² | 0.528 in | 1128.8 lb/10000 ft |
| 1026412 | ÖLFLEX® FD 891 12G2,5 | 12 | Yes | 2.5 mm ² | 0.622 in | 1935.07 lb/10000 ft |
| 1026504 | ÖLFLEX® FD 891 4G4 | 4 | Yes | 4 mm ² | 0.465 in | 1032 lb/10000 ft |
| 1026505 | ÖLFLEX® FD 891 5G4 | 5 | Yes | 4 mm ² | 0.52 in | 1290 lb/10000 ft |

| Article No. | Name | Number of cores | Including protective ground | Nominal cross section conductor (mm ²) | Nominal outer diameter | Copper index |
|-------------|---------------------|-----------------|-----------------------------|--|------------------------|--------------------|
| 1026507 | ÖLFLEX® FD 891 7G4 | 7 | Yes | 4 mm ² | 0.634 in | 1806.1 lb/10000 ft |
| 1026604 | ÖLFLEX® FD 891 4G6 | 4 | Yes | 6 mm ² | 0.539 in | 1548.1 lb/10000 ft |
| 1026614 | ÖLFLEX® FD 891 4G10 | 4 | Yes | 10 mm ² | 0.705 in | 2580.1 lb/10000 ft |
| 1026624 | ÖLFLEX® FD 891 4G16 | 4 | Yes | 16 mm ² | 0.949 in | 4128.2 lb/10000 ft |
| 1026634 | ÖLFLEX® FD 891 4G25 | 4 | Yes | 25 mm ² | 1.098 in | 6450.2 lb/10000 ft |
| 1026644 | ÖLFLEX® FD 891 4G35 | 4 | Yes | 35 mm ² | 1.224 in | 9030.3 lb/10000 ft |

V1.1