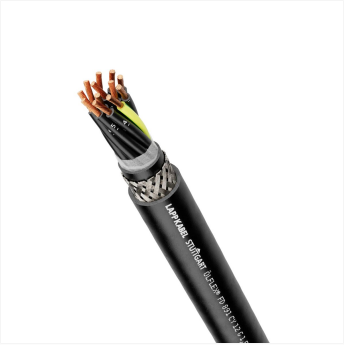
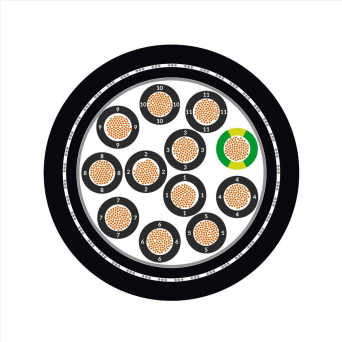
ÖLFLEX® FD 891 CY 4G0,5

Article No.: 1027004

Power and control cable; 4G0.5; Core-Line; U_0/U: 300/500 V; PVC; Core identification: Numbers; Shielded; 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.
- Ideal protection against electromagnetic interference thanks to copper shielding braiding with a high degree of coverage.
- 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.
- Especially for environments where electromagnetic compatibility (EMC) is required.

- Can be used in dry, damp or wet environments.
- Suitable for medium mechanical stress.
- The PVC outer jacket is resistant to acids and alkaline solutions and has limited oil resistance.
- 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	317.8 lb/10000 ft
Performance class	Core-Line
Industry segment	Automotive Process Industry

Electrical parameters

Nominal voltage	U_0/U: 300/500 V AC rms according to IEC
Rated voltage	600 V AC rms according to CSA AWM 600 V AC rms according to UL AWM

Test voltage conductor/conductor	4 kV
Test voltage conductor/shielding	4 kV
Current rating according to	VDE 0298-4

Product design

Cable dimension	4G0.5
Nominal cross section conductor (mm2)	0.5 mm^2
Nominal cross section conductor (AWG)	21 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	4
Stranding type	Layered Stranding
Wrapping above stranding	Fleece Wrapping
Shielded	Yes
Type of overall shielding	Tin-plated copper braiding
Nominal outer diameter	0.335 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

Application area	Cable chain Flexible

For permanent bending	Yes
For torsional load	No
Minimum bending radius, stationary	4 x outer diameter
Minimum bending radius in inch, fixed installation	1.339 in
Minimum bending radius, dynamic continuously flexing	7.5 x outer diameter
Minimum bending radius in inch, dynamic continuously flexing	2.512 in
Minimum bending radius, occasionally moved	7.5 x outer diameter
Minimum bending radius in mm, occasionally moved	2.512 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/s²
Temperature, fixed installation	to 90 °C max. conductor temperature according to UL AWM -40 °C to 80 °C max. conductor temperature according to IEC to 90 °C max. conductor temperature according to CSA AWM
Temperature, occasionally moved	-5 °C to 90 °C max. conductor temperature according to CSA AWM -5 °C to 70 °C max. conductor temperature according to IEC -5 °C to 90 °C max. conductor temperature according to UL AWM
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
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	ЕАЭС 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 B according to CSA C22.2 No. 210 (e-file number: E63634) AWM I A 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 CY

Article No.	Name	Number of cores	Including protective ground	Nominal cross section conductor (mm2)	Nominal outer diameter	Copper index
1027003	ÖLFLEX® FD 891 CY 3G0,5	3	Yes	0.5 mm^2	0.311 in	261.4 lb/10000 ft
1027004	ÖLFLEX® FD 891 CY 4G0,5	4	Yes	0.5 mm^2	0.335 in	317.8 lb/10000 ft
1027005	ÖLFLEX® FD 891 CY 5G0,5	5	Yes	0.5 mm^2	0.362 in	371.6 lb/10000 ft
1027007	ÖLFLEX® FD 891 CY 7G0,5	7	Yes	0.5 mm^2	0.429 in	544.9 lb/10000 ft
1027012	ÖLFLEX® FD 891 CY 12G0,5	12	Yes	0.5 mm^2	0.496 in	671.2 lb/10000 ft
1027018	ÖLFLEX® FD 891 CY 18G0,5	18	Yes	0.5 mm^2	0.61 in	1075.7 lb/10000 ft
1027025	ÖLFLEX® FD 891 CY 25G0,5	25	Yes	0.5 mm^2	0.697 in	1370 lb/10000 ft
1027103	ÖLFLEX® FD 891 CY 3G0,75	3	Yes	0.75 mm^2	0.323 in	330.6 lb/10000 ft
1027104	ÖLFLEX® FD 891 CY 4G0,75	4	Yes	0.75 mm^2	0.35 in	402.5 lb/10000 ft
1027105	ÖLFLEX® FD 891 CY 5G0,75	5	Yes	0.75 mm^2	0.394 in	460.9 lb/10000 ft
1027107	ÖLFLEX® FD 891 CY 7G0,75	7	Yes	0.75 mm^2	0.457 in	616.1 lb/10000 ft
1027112	ÖLFLEX® FD 891 CY 12G0,75	12	Yes	0.75 mm^2	0.543 in	1022 lb/10000 ft
1027118	ÖLFLEX® FD 891 CY 18G0,75	18	Yes	0.75 mm^2	0.642 in	1373.4 lb/10000 ft
1027292	ÖLFLEX® FD 891 CY 3G1	3	Yes	1 mm^2	0.343 in	376.3 lb/10000 ft
1027293	ÖLFLEX® FD 891 CY 5G1	5	Yes	1 mm^2	0.417 in	564.4 lb/10000 ft
1027294	ÖLFLEX® FD 891 CY 7G1	7	Yes	1 mm^2	0.484 in	725.65 lb/10000 ft
1027295	ÖLFLEX® FD 891 CY 12G1	12	Yes	1 mm^2	0.579 in	1196.1 lb/10000 ft
1027296	ÖLFLEX® FD 891 CY 25G1	25	Yes	1 mm^2	0.807 in	2365.1 lb/10000 ft
1027301	ÖLFLEX® FD 891 CY 4G1	4	Yes	1 mm^2	0.386 in	471.72 lb/10000 ft
1027302	ÖLFLEX® FD 891 CY 18G1	18	Yes	1 mm^2	0.681 in	1713.52 lb/10000 ft
1027303	ÖLFLEX® FD 891 CY 3G1,5	3	Yes	1.5 mm^2	0.382 in	502.6 lb/10000 ft
1027304	ÖLFLEX® FD 891 CY 4G1,5	4	Yes	1.5 mm^2	0.417 in	632.9 lb/10000 ft
1027305	ÖLFLEX® FD 891 CY 5G1,5	5	Yes	1.5 mm^2	0.449 in	679.3 lb/10000 ft
1027307	ÖLFLEX® FD 891 CY 7G1,5	7	Yes	1.5 mm^2	0.543 in	1112.7 lb/10000 ft
1027312	ÖLFLEX® FD 891 CY 12G1,5	12	Yes	1.5 mm^2	0.642 in	1656.23 lb/10000 ft
1027318	ÖLFLEX® FD 891 CY 18G1,5	17	Yes	1.5 mm^2	0.768 in	2517.6 lb/10000 ft
1027325	ÖLFLEX® FD 891 CY 25G1,5	25	Yes	1.5 mm^2	0.929 in	3288.3 lb/10000 ft
1027403	ÖLFLEX® FD 891 CY 3G2,5	3	Yes	2.5 mm^2	0.417 in	698.1 lb/10000 ft
1027404	ÖLFLEX® FD 891 CY 4G2,5	4	Yes	2.5 mm^2	0.465 in	1087.1 lb/10000 ft
1027405	ÖLFLEX® FD 891 CY 5G2,5	5	Yes	2.5 mm^2	0.512 in	1240.3 lb/10000 ft

Article No.	Name	Number of cores	Including protective ground	Nominal cross section conductor (mm2)	Nominal outer diameter	Copper index
1027407	ÖLFLEX® FD 891 CY 7G2,5	7	Yes	2.5 mm^2	0.622 in	1626.7 lb/10000 ft
1027412	ÖLFLEX® FD 891 CY 12G2,5	12	Yes	2.5 mm^2	0.717 in	2711.1 lb/10000 ft
1027503	ÖLFLEX® FD 891 CY 3G4	3	Yes	4 mm^2	0.488 in	1058.2 lb/10000 ft
1027504	ÖLFLEX® FD 891 CY 4G4	4	Yes	4 mm^2	0.551 in	1465.4 lb/10000 ft
1027507	ÖLFLEX® FD 891 CY 7G4	7	Yes	4 mm^2	0.72 in	2507.5 lb/10000 ft
1027604	ÖLFLEX® FD 891 CY 4G6	4	Yes	6 mm^2	0.634 in	2047.3 lb/10000 ft
1027624	ÖLFLEX® FD 891 CY 4G16	4	Yes	16 mm^2	1.067 in	5399.4 lb/10000 ft
1027634	ÖLFLEX® FD 891 CY 4G25	4	Yes	25 mm^2	1.232 in	7931.1 lb/10000 ft
1027644	ÖLFLEX® FD 891 CY 4G35	4	Yes	35 mm^2	1.35 in	10708.1 lb/10000 ft

V1.1