

Flexible, oil resistant Power Cord: (UL) listed for Tray + Extra-hard usage per NEC; NFPA 79

ÖLFLEX<sup>®</sup> TC + Extra-hard usage Flexible Cord STOOW 600 V, NEC Art 336+400, OIL RES II, DIR. BUR., FT4, IEC 300/500 V, NEC Art 501 Class I Division 1, IEC Class 5

Flexible Cord STOOW for NEC Extra-hard usage in the USA Broad application range (NFPA 70/NEC), NFPA 79 compliance FT4 + OIL RES I/II















Mechanical and plant engineering



Oil & Gas



Solar Energy



Wind Energy



Suitable for outdoor use



Flame-retardant



Cold-resistant



Mechanical resistance





Assembly time



Oil-resistant



Robust



**UV-resistant** 



Variety of approval certifications



### **Benefits**

Suitability for different operation types and locations in the USA as per NFPA/ NEC under one LAPP part number, thanks to UL listings (UL) STOOW and (UL) TC, resp. TC-ER, as well as thanks to design and characteristics associated with these listings Apart from unprotected laying on tray in the USA thanks to TC(-ER) listing: ...further, normatively specified, unprotected wiring methods in the USA per application related NEC Articles, thanks to (UL) listing STOOW/ Extra-hard usage Flexible Cord

### **Application range**

Industrial machinery, plant engineering in the USA

Unprotected 600V operation on cable tray in the USA, incl. 6 ft. Exposed Run laying sections for version with at least 3 conductors As per Article 400 of NEC/ NFPA 70: General Uses Permitted in the USA and General Uses Not Permitted to the overall group of Flexible Cords and Flexible Cables acc. to UL 62;

Operating bids and limitations for Flexible Cords in special applications acc. to further NEC Articles, such as 501 (Class I Locations), 422 (Appliances), or 520 (specific locations for play and production of entertainment), etc.

Further, typical locations in the USA, as specified by respective US installation standardization (e.g., NEC/ NFPA 70): Power cord for equipment, paint booths, appliances, factory installations (branch circuit), any power hook-up in the plant, for harnessed power connecting or extension cord set assemblies

In hazardous locations in the USA, as per Chapter 5 of NEC/ NFPA 70: Classes I thru III, Divisions 1 and 2 each, plus intrinsically safe circuits, taking account of:

- Provisions on cable design, cable type, installation, application in NEC Chapter 5 (esp.: Articles 500 thru 504);
- This cable's design, approvals, component identification

### **Product features**

Highly flame retardant FT4 Highly oil resistant OIL RES I/II

Tested sunlight resistant per UL 1277, UL 62, UL 2556 in terms of UV resistance

Tested for unprotected, direct burial in the USA per UL 1277

### Norm references / Approvals

Certified by UL per UL 1277 for TC 600V use in the USA, subject to individual third-party inspection: Generally UL Type TC (Tray Cable), and for at least 3 or more conductors TC-ER (Tray Cable for Exposed Run) in addition [UL CCN: QPOR; UL File No.: E171371]

Certified by UL per UL 62 for STOOW use in the USA, subject to individual third-party inspection: UL Type STOOW (Extra-hard usage Flexible Cord) [UL CCN: ZJCZ; UL File No.: E146118]

Certified by UL per CSA C22.2 No. 239, and CSA C22.2 No. 230 for possible CIC/TC use in Canada, subject to individual third-party inspection: c(UL) CIC/TC FT4 [UL CCN: QPOR7; UL File No.: E171371]

Certified by UL per CSA C22.2 No. 49 for STOOW use in Canada, subject to individual third-party inspection: c(UL) STOOW [UL

Last Update (18.05.2025)

©2025 Lapp Group - Technical changes reserved

Product Management www.lappkabel.de

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

PN 0456 / 02\_03.16



CCN: ZJCZ7; UL File No.: E146118]

Certified by CSA per CSA C22.2 No. 210 for AWM use in Canada, subject to individual third-party inspection: CSA AWM II A/B

FT4

### **Product Make-up**

Fine-wire strand made of bare copper wires Specially formulated PVC insulation

Durable, black sheath made of specially formulated thermoplastic polymer for improved service life

**Technical Data** 

Classification ETIM 5: ETIM 5.0 Class-ID: EC001578

ETIM 5.0 Class-Description: Flexible cable

Classification ETIM 6: ETIM 6.0 Class-ID: EC001578

ETIM 6.0 Class-Description: Flexible cable

Core identification code: - Coloured conductors with numbers, plus ground in green/yellow

(30 % stripe width);

- For 2-conductor cable only: No green/yellow ground

- Example 3 conductors: BLACK conductor: "1 - ONE" WHITE conductor: "2 - TWO"

GREEN/YELLOW conductor: No Numbers

- Colour code: 2C: Black, White

3C: Black, White, Green-Yellow 4C: Black, White, Red, Green-Yellow 5C: Black, White, Red, Brown, Green-Yellow

6C or more: Black with white numbers, except for the included

Green-Yellow ground

Conductor stranding: Fine wire according to DIN EN 60228 (VDE 0295), class 5 / IEC

60228 class 5

Minimum bending radius: Installation: 4 x outer diameter

Nominal voltage: UL/CSA TC/STOOW: 600 V

IEC U0/U: 300/500 V

Test voltage: 2000 V

Protective conductor: G = with GN-YE protective conductor

Temperature range: UL/CSA TC: -25°C to +90°C;

Occasional flexing/ North America: -25°C to +105°C; Fixed installation/ North America: -40°C to 105°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

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

Please specify the preferred type of packaging (e.g. 1 x 610 m drum or 8 x 76 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.

\*OD = Outer diameter

Last Update (18.05.2025)

©2025 Lapp Group - Technical changes reserved

Product Management www.lappkabel.de

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

PN 0456 / 02\_03.16

Article number	Number of cores and mm <sup>2</sup> per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
611803	3 G 1.0	9.4	29.763	92
611804	4 G 1.0	10.1	38.692	106
611805	5 G 1.0	12.0	49.109	122
611812	12 G 1.0	16.1	115.195	260
611603	3 G 1.5	10.1	43.157	110
611604	4 G 1.5	10.9	58.038	128
611605	5 G 1.5	12.9	72.027	153
611612	12 G 1.5	18.3	172.775	330
611618	18 G 1.5	20.9	259.237	440
611625	25 G 1.5	24.5	360.134	598
611403	3 G 2.5	13.8	72.027	137
611404	4 G 2.5	14.8	96.73	167
611405	5 G 2.5	16.8	120.541	198
611203	3 G 4.0	16.0	115.183	188
611205	5 G 4.0	18.8	191.972	286
611003	3 G 6.0	17.2	172.775	342
611004	4 G 6.0	18.6	230.664	402
610803	3 G 10.0	21.3	288.702	641
610804	4 G 10.0	24.0	383.944	844



