

Control cable | TPE | chainflex® CF99

- For heaviest duty applications and especially small radii up to 4 x d
- TPE outer jacket
- Shielded
- Oil-resistant, bio-oil-resistant
- PVC and halogen-free
- Low-temperature-flexible
- Hydrolysis and microbe-resistant

Dynamic information

| | | | |
|--|------------------------|--|---|
| | Bend radius | e-chain® | minimum 4 x d |
| | | flexible | minimum 4 x d |
| | | fixed | minimum 3 x d |
| | Temperature | e-chain® | -35 °C to +90 °C |
| | | flexible | -50 °C to +90 °C (following DIN EN 60811-504) |
| | | fixed | -55 °C to +90 °C (following DIN EN 50305) |
| | v max. | unsupported | 10 m/s |
| | | gliding | 6 m/s |
| | a max. | | 100 m/s² |
| | Travel distance | Short, very fast applications with small radii and tight design space, Class 5 | |

Cable structure

| | | |
|--|----------------------------|--|
| | Conductor | Conductor consisting of a special highly flexible alloy. |
| | Core insulation | Mechanically high-quality TPE mixture. |
| | Core structure | Cores wound in a layer with a short pitch length. |
| | Core identification | Colour code in accordance with DIN 47100. CF99.02.03.INI: brown, blue, black CF99.03.04.INI: brown, blue, black, white |
| | Inner jacket | TPE mixture, adapted to suit the requirements in e-chains®. |
| | Overall shield | Extremely bending resistant, special alloy shield. Coverage approx. 70 % inear, approx. 90 % optical |
| | Outer jacket | Low-adhesion, extremely abrasion-resistant and highly flexible TPE mixture, adapted to suit the requirements in e-chains®. Colour: Steel-blue (similar to RAL 5011) |

Electrical information

| | | |
|--|------------------------|-----------|
| | Nominal voltage | 300/300 V |
| | Testing voltage | 1500 V |

Class 7.5.4.1

| | | | | | | | | | |
|--------------------|-------------|---|---|---|---|---|---|---|---------|
| Basic requirements | low | 1 | 2 | 3 | 4 | 5 | 6 | 7 | highest |
| Travel distance | unsupported | 1 | 2 | 3 | 4 | 5 | 6 | 7 | > 400 m |
| Oil resistance | none | 1 | 2 | 3 | 4 | 5 | 6 | 7 | highest |
| Torsion | none | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ±180° |

Properties and approvals

| | | |
|--|-----------------------|--|
| | UV resistance | High. |
| | Oil resistance | Oil resistant (following DIN EN 60811-404), bio-oil resistant (following VDMA 24568 with Plantocut 8 S-MB tested by DEA), Class 4. |
| | Silicone-free | Free from silicone which can affect paint adhesion (following PV 3.10.7 – status 1992). |
| | Halogen-free | Following DIN EN 60754. |
| | EAC | Certificate no. RU C-DE.ME77.B.01254 (TR ZU) |
| | Lead-free | Following 2011/65/EU (RoHS-II). |
| | Cleanroom | According to ISO Class 1. Outer jacket material complies with CF9.15.07, tested by IPA according to standard 14644-1. |
| | CE | Following 2014/35/EU. |

Guaranteed lifetime according to guarantee conditions (Page 22-23)

| Double strokes* | 20 million | | 30 million | | 40 million | |
|-----------------|---------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| | Temperature, from/to [°C] | R min. [factor x d] | R min. [factor x d] | R min. [factor x d] | R min. [factor x d] | R min. [factor x d] |
| -35/-25 | 5 | 6 | 7 | | | |
| -25/+80 | 4 | 5 | 6 | | | |
| +80/+90 | 5 | 6 | 7 | | | |

* Higher number of double strokes? Online lifetime calculation: www.igus.eu/chainflexlife

Typical mechanical application areas

- For heaviest duty applications and especially small radii up to 4 x d
- Almost unlimited resistance to oil, also with bio-oils
- Indoor and outdoor applications, UV resistant
- Especially for short, very fast applications with small radii and tight design space
- Pick and place machines, automatic doors, Clean room, very quick handling equipment

| Part No. | Number of cores and conductor nominal cross section | Outer diameter (d) max. | Copper index | Weight |
|-------------------|---|-------------------------|--------------|--------|
| | [mm²] | mm | kg/km | kg/km |
| CF99.01.02 | (2x0.14)C | 5.5 | 14 | 33 |
| CF99.01.04 | (4x0.14)C | 6.0 | 21 | 43 |
| CF99.01.08 | (8x0.14)C | 8.0 | 36 | 69 |
| CF99.02.04 | (4x0.25)C | 6.5 | 30 | 56 |
| CF99.02.07 | (7x0.25)C | 8.0 | 48 | 85 |
| CF99.03.08 | (8x0.34)C | 9.0 | 64 | 105 |

Note: The given outer diameters are maximum values and may tend toward lower tolerance limits.
G = with green-yellow earth core x = without earth core

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Multi-Paired Cables](#) category:

Click to view products by [Igus](#) manufacturer:

Other Similar products are found below :

[7-21000-9](#) [9805 060100](#) [1416402/M12MS/IP20/10](#) [9804 060100](#) [9808 060100](#) [9843 060100](#) [9873 060100](#) [190-038045-00](#) [44A0121-12-996CS2275](#)
[44A0121-20-09-MX](#) [55PC0211-14-9](#) [55PC0216-24-9](#) [55PC0221-22-2/6CS2756](#) [55PC0811-16-9](#) [55PC0811-24-9](#) [55PC1131-20-029-9](#) [Y60912](#)
[CW1922-000](#) [RI55D](#) [9157 060100](#) [2020D0309-0](#) [9774 060100](#) [8334 060100](#) [1350SB 0101000](#) [8342 060100](#) [8740 060U1000](#) [9505 060U1000](#)
[3613 003A1000](#) [44A0121-22-0/9-MX](#) [2412 009U1000](#) [82777 8771000](#) [9406 T35100](#) [3613 D151000](#) [1533R 0101000](#) [1533P 0101000](#) [9272](#)
[006U1000](#) [2413F D15A500](#) [9681 0601000](#) [44A0121-22-6/9-MX](#) [1533R 0061000](#) [RIT1000](#) [1533R 006A1000](#) [9812 060100](#) [2221 B59U1000](#)
[10GX13 D151000](#) [1874A 004A1000](#) [8340 060100](#) [8333 0601000](#) [1533R 0021000](#) [1583A 012U1000](#)