- TPE outer jacket
- shielded
- oil-resistant, biooil-resistant
- PVC-free/halogen-free
- UV-resistant
- hydrolysis-resistant and microbe-resistant





Conductor < 10 mm<sup>2</sup>: stranded conductor in especially bending-resistant version consisting of bare copper wires (following EN 60228).

≥ 10 mm<sup>2</sup>: conductor cable consisting of pre-leads

(following EN 60228).

Core insulation

Mechanically high-quality, especially low-capacitance TPE

Core stranding

Cores stranded in short pitch lengths over a centre for high

Core identification

Energy conductor: Cores black with white numerals, one core green-yellow.

1. core: U / L1 / C / L+ 2. core: V / L2

3. core: W / L3 / D / L- 4. core: 4 / N

TPE mixture adapted to suit the requirements in energy chains<sup>®</sup>.



Overall shield

Outer jacket

Temperature

**CFRIP** 

Inner jacket

Extremely bending-resistant braiding made of tinned copper

wires. Coverage approx. 70% linear, approx. 90% optical. Low-adhesion mixture on the basis of TPE, especially abrasion-

resistant and highly flexible, adapted to suit the requirements in

energy chains®. Colour: Jet black (similar to RAL 9005)

Strip cables 50% faster! The tear strip is in the inner jacket (starting from manufacturing date 5/2013). Video ▶ www.igus.eu/CFRIP

Bending radius

**moved** minimum 7,5 x d fixed minimum 4 x d moved -35 °C to +90 °C

10 m/s, 6 m/s

fixed

unsupported/gliding

a max. 80 m/s<sup>2</sup>

Travel distance

Freely suspended travel distances and up to 400 m for gliding

-40 °C to +90 °C

applications, Class 5

**UV-resistant** High

Nominal voltage

600/1000 V (following DIN VDE 0250)

Testing voltage

4000 V (following DIN VDE 0281-2).

Oil-resistant (following DIN EN 60811-2-1), biooil-resistant (following

VDMA 24568 with Plantocut 8 S-MB tested by DEA), Class 4.



AINFLEX CF38

www.igus.eu/CFRIP

eplan download, configurator ▶ www.igus.eu/CF38

1030 types from stock no cutting costs ...

(for up to 10 cuts of the same type)

## Class 7.5.4 (7 maximum load requirements 5 travel distance up to 400 m 4 oil-resistant)

Halogen-free

Silicon-free Free from silicon which can affect paint adhesion

Following EN 50267-2-1.

(following PV 3.10.7 - status 1992).

Hal

CE Following 2006/95/EG

Lead free Following 2011/65/EC (RoHS-II)

Clean room According to ISO Class 1. Outer jacket material complies with CF9.15.07, tested

by IPA according to standard 14644-1

EAC Certified according to Nº TC RU C-DE.ME77.B.00964

| New! Guaranteed lifetime for this series according to the "chainflex® guarantee club" conditions ▶ Page 22-25 |             |           |           |                 |              |              |              |  |  |  |
|---|-------------|-----------|-----------|-----------------|--------------|--------------|--------------|--|--|--|
| Double strokes*   |             |           |           |                 | 5 million    | 7,5 million  | 10 million   |  |  |  |
| Temperature,  | v max.      | m/s]      | a max.    | Travel distance | R min.       | R min.       | R min.       |  |  |  |
| from/to [°C]  | unsupported | d gliding | $[m/s^2]$ | [m]             | [factor x d] | [factor x d] | [factor x d] |  |  |  |
| -35 / -25   |             |           |           |                 | 10           | 11           | 12           |  |  |  |
| -25 / +80   | 10          | 6         | 80        | ≤ 400           | 7,5          | 8,5          | 9,5          |  |  |  |
| +80 / +90   |             |           |           |                 | 10           | 11           | 12           |  |  |  |

<sup>\*</sup> higher number of double strokes possible

## Typical application area

- for maximum load requirements
- almost unlimited resistance to oil, also with bio-oils
- Indoor and outdoor applications, UV-resistant
- freely suspended travel distances and up to 400 m for gliding applications
- Storage and retrieval units for high-bay warehouses, machining units/machine tools, quick handling, clean room, semiconductor insertion, ship to shore, outdoor cranes, low-temperature applications

| Delivery program                | Number of cores and | External  | Copper  | Weight  |  |
|---------------------------------|---------------------|-----------|---------|---------|--|
| Part No.                        | conductor nominal   | diameter  | index   | [kg/km] |  |
|                                 | cross section [mm²] | max. [mm] | [kg/km] |         |  |
| CF38.05.04 <sup>(1)</sup>       | (4 G 0,5)C          | 8,0       | 39      | 81      |  |
| CF38.07.04 <sup>(1)</sup>       | (4 G 0,75)C         | 8,5       | 52      | 104     |  |
| CF38.15.04                      | (4 G 1,5)C          | 9,5       | 85      | 149     |  |
| CF38.25.04 <sup>(1)</sup>       | (4 G 2,5)C          | 11,5      | 128     | 207     |  |
| CF38.40.04                      | (4 G 4,0)C          | 13,5      | 201     | 326     |  |
| CF38.60.04 <sup>(1)</sup>       | (4 G 6,0)C          | 16,0      | 298     | 450     |  |
| CF38.100.04                     | (4 G 10,0)C         | 19,5      | 454     | 682     |  |
| CF38.160.04                     | (4 G 16,0)C         | 23,0      | 723     | 1003    |  |
| CF38.250.04                     | (4 G 25,0)C         | 27,5      | 1160    | 1524    |  |
|                                 |                     |           |         |         |  |
| CF38.60.03.O.PE(1)              | (3 x 6,0)C          | 14,5      | 231     | 367     |  |
| CF38.100.03.O.PE <sup>(1)</sup> | (3 x 10,0)C         | 17,5      | 356     | 568     |  |
| CF38.160.03.O.PE(1)             | (3 x 16,0)C         | 21,0      | 553     | 789     |  |
| CF38.250.03.O.PE(1)             | (3 x 25,0)C         | 24,5      | 884     | 1208    |  |
| CF38.350.03.O.PE(1)             | (3 x 35,0)C         | 28,5      | 1200    | 1675    |  |
| CF38.500.03.O.PE(1)             | (3 x 50,0)C         | 33,5      | 1660    | 2283    |  |

(1) Delivery time upon inquiry

Note: The mentioned external diameters are maximum values and may tend toward lower tolerance limits

G = with green-yellow earth core x = without earth core



