










## Fibre optic cable | PUR | chainflex® CFLK

- POF fibres for heavy duty applications and interference-free transmission
- PUR outer jacket
- Oil and coolant-resistant







### Dynamic information

|   |                        |                                 |   |
|---|------------------------|---------------------------------|---|
|  | <b>Bend radius</b>     | <b>e-chain® linear flexible</b> | minimum 12,5 x d<br>minimum 10 x d  |
|   |                        | <b>fixed</b>                    | minimum 7 x d   |
|  | <b>Temperature</b>     | <b>e-chain® linear flexible</b> | -20 °C to +60 °C<br>-40 °C to +60 °C (following DIN EN 60811-504)             |
|   |                        | <b>fixed</b>                    | -50 °C to +60 °C (following DIN EN 50305)                                     |
|  | <b>v max.</b>          | <b>unsupported</b>              | 10 m/s  |
|   |                        | <b>gliding</b>                  | 5 m/s   |
|  | <b>a max.</b>          |                                 | 20 m/s <sup>2</sup>   |
|  | <b>Travel distance</b> |                                 | Unsupported travel distances and up to 20 m for gliding applications, Class 3 |

### Cable structure

|   |                            |   |
|---|----------------------------|---|
|  | <b>Conductor</b>           | 980/1000 µm fibre with PE isolation.  |
|  | <b>Core structure</b>      | POF fibre with stranded high-tensile plastic reinforcement.   |
|  | <b>Core identification</b> | Black core.   |
|  | <b>Outer jacket</b>        | Low-adhesion PUR mixture, adapted to suit the requirements in e-chains® (following DIN EN 50363-10-2).<br>Colour: Red lilac (similar to RAL 4001) |

### Properties and approvals

|   |                       |   |
|---|-----------------------|---|
|  | <b>UV resistance</b>  | Medium.   |
|  | <b>Oil resistance</b> | Oil-resistant (following DIN EN 50363-10-2), Class 3.                                   |
|  | <b>Silicone-free</b>  | Free from silicone which can affect paint adhesion (following PV 3.10.7 – status 1992). |
|  | <b>Halogen-free</b>   | Following DIN EN 60754.   |
|  | <b>Lead-free</b>      | Following 2011/65/EU (RoHS-II).   |
|  | <b>CE</b>             | Following 2014/35/EU.   |

## Class 5.3.3.1

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

| Double strokes*           | 5 million           | 7.5 million         | 10 million          |
|---------------------------|---------------------|---------------------|---------------------|
| Temperature, from/to [°C] | R min. [factor x d] | R min. [factor x d] | R min. [factor x d] |
| -20/-10                   | 15                  | 16                  | 17                  |
| -10/+50                   | 12.5                | 13.5                | 14.5                |
| +50/+60                   | 15                  | 16                  | 17                  |

\* Higher number of double strokes? Online lifetime calculation: [www.igus.eu/chainflexlife](http://www.igus.eu/chainflexlife)

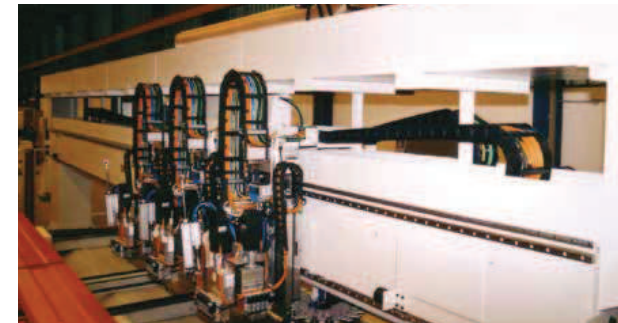
### Typical mechanical application areas

- For heavy duty applications
- Maximum EMC protection
- Almost unlimited resistance to oil
- Preferably indoor applications
- Unsupported travel distances and up to 20 m for gliding applications
- Wood/stone processing, Packaging industry, supply systems, Handling, adjusting equipment

| Part No.          | Number of fibres | Fibre diameter [µm] | Outer diameter (d) max. [mm] | Weight [kg/km] |
|-------------------|------------------|---------------------|------------------------------|----------------|
| <b>CFLK.L1.01</b> | 1                | 980/1000            | 6.0                          | 27             |
| <b>CFLK.L1.02</b> | 2                | 980/1000            | 7.0                          | 31             |

Note: The given outer diameters are maximum values and may tend toward lower tolerance limits.

| Part No.          | Bandwidth [MHz x km] @ 650 nm | Attenuation [dB/km] @ 650 nm | Fibre identification |
|-------------------|-------------------------------|------------------------------|----------------------|
| <b>CFLK.L1.01</b> | 2                             | 200                          | black                |
| <b>CFLK.L1.02</b> | 2                             | 200                          | black                |



Woodworking machines with e-chains® and chainflex® cables

