

# PUR Control cable | CF78.UL

- for high load requirements
- PUR outer jacket
- shielded
- oil-resistant and coolant-resistant
- flame-retardant
- notch-resistant
- PVC-free/halogen-free

- Conductor** Fine-wire stranded conductor consisting of bare copper wires (following EN 60228).
- Core insulation** Mechanically high-quality TPE mixture.
- Core stranding** **Number of cores < 12:** cores stranded in a layer with short pitch length. **Number of cores ≥ 12:** cores combined in bundles and stranded together around a centre for high tensile stresses with adapted, short pitch lengths and pitch directions, especially low-torsion structure.
- Core identification** **Cores < 0,5 mm²:** Colour code in accordance with DIN 47100 **Cores ≥ 0,5 mm²:** cores black with white numerals, one core green-yellow
- Inner jacket** PUR mixture adapted to suit the requirements in energy chains®.
- Overall shield** Bending-resistant braiding made of tinned copper wires. Coverage approx. 55% linear, approx. 80% optical.
- Outer jacket** Low-adhesion, highly abrasion-resistant mixture on the basis of PUR, adapted to suit the requirements in energy chains® (following DIN VDE 0282 Part 10). Colour: Window grey (similar to RAL 7040)
- Bending radius** **moved** < 10 m travel moved minimum 6,8 x d  
≥ 10 m travel moved minimum 7,5 x d  
**fixed** minimum 4 x d
- Temperature** **moved** -35 °C to +80 °C  
**fixed** -40 °C to +80 °C
- v max.** 10 m/s, 5 m/s
- unsupported/gliding**
- a max.** 80 m/s²
- Travel distance** Freely suspended travel distances and up to 100 m for gliding applications, Class 4
- UV-resistant** Medium
- Nominal voltage** **Number of cores < 12:** 300/500 V  
**Number of cores < 12 (0,25-0,34):** 300/300 V  
**Number of cores ≥ 12:** 300/300 V (following DIN VDE 0245)
- Testing voltage** 2000 V (following DIN VDE 0281-2).

eplan download, configurator ► [www.igus.eu/CF78](http://www.igus.eu/CF78)

**1030 types from stock no cutting costs ...**  
(for up to 10 cuts of the same type)

## Class 5.4.3 (5 high load requirements 4 travel distance up to 100 m 3 oil-resistant)

- Oil** Oil-resistant (following DIN EN 50363-10-2), Class 3.
- Offshore** MUD-resistant following NEK 606 – status 2009.
- Flame-retardant** According to IEC 60332-1-2, CEI 20-35, FT1, VW-1
- Silicon-free** Free from silicon which can affect paint adhesion (following PV 3.10.7 – status 1992).
- Halogen-free** Following EN 50267-2-1
- UL/CSA** < 0,5 mm²: Style 10493 and 20233, 300 V, 80 °C  
≥ 0,5 mm²: Style 11323 and 21223, 1000 V, 80 °C
- NFPA** Following NFPA 79-2012 chapter 12.9
- CEI** Following CEI 20-35
- 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 CF77.UL.05.12.D, tested by IPA according to standard 14644-1
- CTP** Certified according to N° C-DE.PB49.V.00396
- EAC** Certified according to N° TC RU C-DE.ME77.B.00960

**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, from/to [°C]	Travel distance [m]	R min. [factor x d]		R min. [factor x d]		R min. [factor x d]	
		< 10 m	≥ 10 m	< 10 m	≥ 10 m	< 10 m	≥ 10 m
-35 / -25		8,5	10	9,5	11	10,5	12
-25 / +70	≤ 100	6,8	7,5	7,5	8,5	8,5	9,5
+70 / +80		7,5	7,5	9,5	11	10,5	12

\* higher number of double strokes possible

### Typical application area

- for high load requirements
- almost unlimited resistance to oil
- indoor and outdoor applications with average sun radiation
- freely suspended travel distances and up to 100 m for gliding applications
- Machining units/machine tools, storage and retrieval units for high-bay warehouses, packaging industry, quick handling, refrigerating sector

**... no minimum order quantity ...**

igus® GmbH Cologne | Tel. +49(0)2203/9649-800 Fax -222 | info@igus.de | www.chainflex.eu






Image exemplary.

Delivery program Part No.	Number of cores and conductor nominal cross section [mm²]	External diameter max. [mm]	Copper index [kg/km]	Weight [kg/km]
CF78.UL.05.04	(4 G 0,5)C	8,0	40	79
CF78.UL.05.05	(5 G 0,5)C	8,5	48	94
CF78.UL.05.07	(7 G 0,5)C	9,5	62	123
CF78.UL.05.09	(9 G 0,5)C	11,0	81	148
CF78.UL.05.12	(12 G 0,5)C	12,5	97	207
CF78.UL.05.18	(18 G 0,5)C	14,0	156	257
CF78.UL.05.25	(25 G 0,5)C	16,0	180	366
CF78.UL.07.03	(3 G 0,75)C	8,0	44	79
CF78.UL.07.04	(4 G 0,75)C	8,5	52	99
CF78.UL.07.05	(5 G 0,75)C	9,5	64	108
CF78.UL.07.07	(7 G 0,75)C	10,5	87	146
CF78.UL.07.12	(12 G 0,75)C	13,5	145	252
CF78.UL.07.18 <sup>(1)</sup>	(18 G 0,75)C	16,0	207	367
CF78.UL.07.36	(36 G 0,75)C	21,5	416	728
CF78.UL.07.42 <sup>(1)</sup>	(42 G 0,75)C	23,5	489	800
CF78.UL.10.03	(3 G 1,0)C	8,5	53	90
CF78.UL.10.04	(4 G 1,0)C	9,0	65	107
CF78.UL.10.05	(5 G 1,0)C	9,5	78	124
CF78.UL.10.07	(7 G 1,0)C	11,0	110	170
CF78.UL.10.12	(12 G 1,0)C	14,5	178	307
CF78.UL.10.18 <sup>(1)</sup>	(18 G 1,0)C	17,0	256	424
CF78.UL.10.25	(25 G 1,0)C	19,5	347	567
CF78.UL.15.03	(3 G 1,5)C	9,5	72	133
CF78.UL.15.04	(4 G 1,5)C	10,0	90	139
CF78.UL.15.05	(5 G 1,5)C	10,5	115	166
CF78.UL.15.07	(7 G 1,5)C	12,5	153	226
CF78.UL.15.12	(12 G 1,5)C	16,5	249	403
CF78.UL.15.18	(18 G 1,5)C	19,0	368	564
CF78.UL.15.25	(25 G 1,5)C	22,5	495	755
CF78.UL.15.36 <sup>(1)</sup>	(36 G 1,5)C	26,5	715	1147
CF78.UL.15.42 <sup>(1)</sup>	(42 G 1,5)C	29,5	884	1360
CF78.UL.25.04	(4 G 2,5)C	11,5	148	212
CF78.UL.25.05	(5 G 2,5)C	12,5	177	247
CF78.UL.25.07	(7 G 2,5)C	14,5	245	350
CF78.UL.40.04 <sup>(1)</sup>	(4 G 4,0)C	14,0	217	342

(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

 Order example: CF78.UL.15.18 – in your desired length (0,5 m steps)  
CF78.UL chainflex® series .15 Code nominal cross section .18 Number of cores

 prices price list online  
[www.chainflex.eu/CF78](http://www.chainflex.eu/CF78)

 delivery time despatched in  
24 hours or today

 eplan download, configurator ► [www.igus.eu/CF78](http://www.igus.eu/CF78)

... no minimum order quantity ...

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