

Data cable | PUR | chainflex® CF211.PUR

- For heavy duty applications
- PUR outer jacket
- Shielded, twisted pair
- Oil and coolant-resistant
- Flame retardant
- PVC and halogen-free
- Notch-resistant
- Hydrolysis and microbe-resistant

Now with offshore approval!

Dynamic information

	Bend radius	e-chain® linear	minimum 7.5 x d
		flexible	minimum 6 x d
		fixed	minimum 4 x d
	Temperature	e-chain® linear	-25 °C to +80 °C
		flexible	-40 °C to +80 °C (following DIN EN 60811-504)
		fixed	-50 °C to +80 °C (following DIN EN 50305)
	v max.	unsupported	5 m/s
		gliding	3 m/s
		a max.	50 m/s²
	Travel distance	Unsupported travel distances and up to 100 m for gliding applications, Class 5	

Cable structure

	Conductor	Very finely stranded special conductors of particularly bending-resistant design made of bare copper wires.
	Core insulation	Mechanically high-quality TPE mixture.
	Core structure	Cores twisted in pairs with a short pitch length, core pairs then wound with short pitch lengths.
	Core identification	Colour code in accordance with DIN 47100.
	Intermediate layer	Foil taping over the outer layer.
	Overall shield	Extremely bending-resistant braiding made of tinned copper wires. Coverage approx. 70 % inear, approx. 90 % optical
	Outer jacket	Low-adhesion, highly abrasion-resistant PUR mixture, adapted to suit the requirements in e-chains® (following DIN EN 50363-10-2). Colour: Window-grey (similar to RAL 7040)

Electrical information

	Nominal voltage	300/300 V (following DIN VDE 0298-3)
	Testing voltage	1500 V (following DIN EN 50395)

Class 5.5.3.1

Properties and approvals

	UV resistance	Medium.
	Oil resistance	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
	Silicone-free	Free from silicone which can affect paint adhesion (following PV 3.10.7 – status 1992).
	Halogen-free	Following DIN EN 60754.
	UL/CSA	Style 10493 and 20233, 300 V, 80 °C
	NFFPA	Following NFFPA 79-2012 chapter 12.9.
	DNV-GL	Certified according to GL type testing – Certificate no.: 13 656-14 HH
	EAC	Certificate no. RU C-DE.ME77.B.01254 (TR ZU)
	CTP	Certificate no. C-DE.PB49.B.00449 (Fire safety)
	CEI	Following CEI 20-35.
	Lead-free	Following 2011/65/EU (RoHS-II).
	Cleanroom	According to ISO Class 1. Outer jacket material complies with CF77.UL.05.12.D, tested by IPA according to standard 14644-1.
	CE	Following 2014/35/EU.

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]	R min. [factor x d]	R min. [factor x d]
-25/-15	10	11	12			
-15/+70	7.5	8.5	9.5			
+70/+80	10	11	12			

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

Typical mechanical application areas

- For heavy duty applications
- Almost unlimited resistance to oil
- Indoor and outdoor applications with average sun radiation
- Unsupported 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 equipment, refrigerating sector



Example image





Example image

Part No.	Number of cores and conductor nominal cross section mm ²	Outer diameter (d) max. mm	Copper index kg/km	Weight kg/km
CF211.PUR.02.01.02	(2x0.25)C	5.0	17	30
CF211.PUR.02.02.02 ²⁾	(2x(2x0.25))C	6.0	24	40
CF211.PUR.02.03.02	(3x(2x0.25))C	7.0	34	64
CF211.PUR.02.04.02	(4x(2x0.25))C	7.5	42	67
CF211.PUR.02.05.02	(5x(2x0.25))C	8.5	50	84
CF211.PUR.02.06.02	(6x(2x0.25))C	9.0	59	100
CF211.PUR.02.08.02	(8x(2x0.25))C	10.5	75	128
CF211.PUR.02.10.02	(10x(2x0.25))C	12.0	95	160
CF211.PUR.02.14.02	(14x(2x0.25))C	12.0	115	182
CF211.PUR.03.03.02	(3x(2x0.34))C	8.0	47	84
CF211.PUR.03.08.02	(8x(2x0.34))C	12.0	97	152
CF211.PUR.05.01.02	(2x0.5)C	5.5	25	42
CF211.PUR.05.02.02 ²⁾	(2x(2x0.5))C	7.0	39	61
CF211.PUR.05.03.02	(3x(2x0.5))C	9.0	58	101
CF211.PUR.05.04.02	(4x(2x0.5))C	9.5	71	122
CF211.PUR.05.05.02	(5x(2x0.5))C	10.5	87	154
CF211.PUR.05.06.02	(6x(2x0.5))C	11.5	96	179
CF211.PUR.05.08.02	(8x(2x0.5))C	13.0	133	220
CF211.PUR.05.10.02	(10x(2x0.5))C	15.0	181	277
CF211.PUR.05.14.02	(14x(2x0.5))C	15.0	200	301

The chainflex® types marked with ²⁾ are cables designed as a star-quad.
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

