






















TPE Control cable | CF9

- for maximum load requirements
- TPE outer jacket
- oil-resistant
- biooil-resistant
- PVC-free/halogen-free
- low-temperature-flexible
- hydrolysis-resistant and microbe-resistant

-  **Conductor** Stranded conductor in especially bending-resistant version 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 < 0,75 mm²:** Colour code in accordance with DIN 47100
Cores ≥ 0,75 mm²: cores black with white numerals, one core green-yellow
CF9.02.03.INI: brown, blue, black
CF9.03.04.INI: brown, blue, black, white
CF9.03.05.INI: brown, blue, black, white, green-yellow
CF9.03.16.07.03.INI:
(0,34mm²): violet/red/grey/red-blue, green, grey-pink, white-green, white-yellow, white-grey/black/yellow-brown/brown-green, white/yellow/pink/grey-brown
(0,75mm²): blue/green-yellow/brown

-  **Outer jacket** Low-adhesion mixture on the basis of TPE, especially abrasion-resistant and highly flexible, adapted to suit the requirements in energy chains®.
Colour: Steel blue (similar to RAL 5011)
-  **Bending radius** **moved** minimum 5 x d
fixed minimum 3 x d
-  **Temperature** **moved** -35 °C to +100 °C
fixed -40 °C to +100 °C
-  **v max. unsupported/gliding** 10 m/s, 6 m/s
-  **a max.** 100 m/s²
-  **Travel distance** Freely suspended travel distances and up to 400 m and more for gliding applications, Class 5
-  **Torsion** ± 90°, with 1 m cable length
-  **UV-resistant** High

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

-  **Nominal voltage** 300/500 V (following DIN VDE 0245).
-  **Testing voltage** 2000 V (following DIN VDE 0281-2).
-  **Oil** Oil-resistant (following DIN EN 60811-2-1), biooil-resistant (following VDMA 24568 with Plantocut 8 S-MB tested by DEA), Class 4.
-  **Silicon-free** Free from silicon which can affect paint adhesion (following PV 3.10.7 – status 1992).
-  **Halogen-free** Following EN 50267-2-1.
-  **CE** Following 2006/95/EG
-  **Lead free** Following 2011/65/EC (RoHS-II)
-  **Clean room** According to ISO Class 1, material/cable tested by IPA according to ISO standard 14644-1
-  **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]	v max. [m/s] unsupported	a max. [m/s²]	Travel distance [m]	R min. [factor x d]	R min. [factor x d]	R min. [factor x d]
-35 / -25				6,8	7,5	8,5
-25 / +90	10	6	> 400	5	6	7
+90 / +100				6,8	7,5	8,5

* 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 and more 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



chainflex® CF9 for outdoor crane systems. e-chain®: Series E4/00

CHAINFLEX® CF9
Image exemplary.



Image exemplary.

Delivery program Part No.	Number of cores and conductor nominal cross section [mm ²]	External diameter max. [mm]	Copper index [kg/km]	Weight [kg/km]
CF9.02.02	2 x 0,25	4,5	6	18
CF9.02.03.INI	3 x 0,25	4,5	8	22
CF9.02.06	6 x 0,25	5,5	16	37
CF9.02.07	7 x 0,25	6,5	19	44
CF9.02.08	8 x 0,25	6,5	22	50
CF9.02.12	12 x 0,25	8,0	32	73
CF9.02.18 ⁽¹⁾	18 x 0,25	9,5	48	105
CF9.02.20	20 x 0,25	9,5	53	111
CF9.03.04.INI	4 x 0,34	5,0	15	32
CF9.03.05.INI	5 x 0,34	5,5	18	38
CF9.03.06	6 x 0,34	6,0	22	45
CF9.03.08	8 x 0,34	7,0	29	59
CF9.03.16.07.03.INI	4x(4x0,34)+(3x0,75)	11,0	82	159
CF9.05.02	2 x 0,5	5,0	11	26
CF9.05.03	3 x 0,5	5,0	16	32
CF9.05.04	4 x 0,5	5,5	22	40
CF9.05.05	5 x 0,5	6,0	27	48
CF9.05.07	7 x 0,5	7,0	37	66
CF9.05.12	12 x 0,5	10,0	64	120
CF9.05.18	18 x 0,5	11,5	96	177
CF9.05.25	25 x 0,5	13,0	132	236
CF9.05.36	36 x 0,5	15,5	191	334
CF9.07.04 ⁽¹⁾	4 G 0,75	6,0	32	55
CF9.07.05	5 G 0,75	6,5	40	68
CF9.07.07	7 G 0,75	8,0	56	94
CF9.07.12	12 G 0,75	11,0	96	170
CF9.07.20	20 G 0,75	13,5	159	267
CF9.07.25	25 G 0,75	14,5	198	329
CF9.10.03	3 G 1,0	6,0	32	54
CF9.10.04	4 G 1,0	6,5	43	69
CF9.10.05	5 G 1,0	7,5	53	84
CF9.10.12	12 G 1,0	12,0	127	214
CF9.10.18	18 G 1,0	14,5	191	314
CF9.10.25	25 G 1,0	17,0	264	450

New*

New*

Delivery program Part No.	Number of cores and conductor nominal cross section [mm ²]	External diameter max. [mm]	Copper index [kg/km]	Weight [kg/km]
CF9.15.02	2 x 1,5	6,5	32	57
CF9.15.04	4 G 1,5	7,5	64	90
CF9.15.05	5 G 1,5	8,0	81	110
CF9.15.07 ⁽¹⁷⁾	7 G 1,5	9,5	114	151
CF9.15.12	12 G 1,5	13,5	191	298
CF9.15.18	18 G 1,5	16,5	286	445
CF9.15.25	25 G 1,5	20,0	396	632
CF9.15.36	36 G 1,5	23,0	571	899
CF9.25.04	4 G 2,5	9,0	106	152
CF9.25.05	5 G 2,5	10,0	132	197
CF9.25.07 ⁽¹⁷⁾	7 G 2,5	12,0	187	245
CF9.25.12	12 G 2,5	17,5	317	515
CF9.25.16	16 G 2,5	19,5	423	687
CF9.25.18 ⁽⁷⁾	18 G 2,5	22,5	476	830
CF9.25.25	25 G 2,5	24,5	660	1059
CF9.40.04	4 G 4,0	10,5	169	236
CF9.60.04	4 G 6,0	12,5	254	332
CF9.60.05	5 G 6,0	13,5	317	410
CF9.100.04 ⁽⁶⁾	4 G 10,0	16,5	423	580
CF9.160.04 ⁽⁶⁾	4 G 16,0	18,0	528	719
CF9.350.04 ⁽⁶⁾	4 G 35,0	28,0	1479	1769

(7) Nominal voltage 600/1000 V (6) Nominal voltage 450/750 V

(17) Using the cables with "7 G 1,5 mm²" and "7 G 2,5 mm²" it is essential: bending radius 17 x d with travel distance ≥ 5 m.

When the travel distance is not less than 5 m, a bending radius not less than 17 x d has to be used.

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

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

* New in this catalogue.