

Servo cables



Chainflex® types



Chainflex® cable	Jacket	Shield	Minimum bending radius, moved [factor x d]	Temperature moved from/to [°C]	Approvals and standards	Oil-resistant	Torsion resistant	v max. [m/s] unsupported	v max. [m/s] gliding	a max. [m/s ²]	Page
Servo cables											
CF210.UL	PVC	✓	10	-5/ +70	CE RoHS Chainflex UL	✓		10		50	160
CF21.UL	PVC	✓	7,5	-5/ +70	CE RoHS Chainflex UL	✓		10	5	80	162
CF260*	PUR	✓	10	-20/ +80	CE RoHS	✓		10		50	166
CF270.UL.D	PUR	✓	10	-20/ +80	CE RoHS Chainflex UL	✓		10		50	170
CF27.D	PUR	✓	7,5	-20/ +80	CE RoHS Chainflex UL	✓		10	5	80	174

* phase-out model, is replaced by CF210.UL (PVC) and CF270.UL.D (PUR)

CF210.UL

PVC

10 x d

New! PVC Servo cable Chainflex® CF210.UL

- for medium load requirements
- PVC outer jacket
- shielded
- oil-resistant
- flame-retardant



Bending-resistant conductor



Extremely highly flexible braided-pair copper shield



Energy conductor with signal pair elements stranded together with elements for high tensile stresses



Bending-resistant braided copper shield



Pressure extruded, oil-resistant PVC blend



Temperature range moved

-5 °C to +70 °C, minimum bending radius 10 x d



Temperature range fixed

-20 °C to +70 °C, minimum bending radius 5 x d



v max. unsupported

10 m/s



a max.

50 m/s²



Travel distance

Freely suspended travel distances, Class 1



UV-resistant

Medium



Nominal voltage

600/1000 V (following DIN VDE 0250).



Testing voltage

4000 V (following DIN VDE 0281-2).



Oil

Oil-resistant (following DIN EN 60811-2-1, DIN EN 50363-4-1), Class 2.



Flame-retardant

According to IEC 332-1, CEI 20-35, FT1.



Silicon-free

Free from silicon which can affect paint adhesion (following PV 3.10.7 – status 192).



Conductor

Fine-wire stranded conductor in bending-resistant version consisting of bare copper wires (following EN 60228).



Core insulation

Mechanically high-quality, especially low-capacitance PE mixture.



Core stranding

Energy conductor with signal pair elements stranded together with elements for high tensile stresses.



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-

1 signal pair: cores black with white numerals.

1. control core: 4

2. control core: 5

2 signal pairs: cores black with white numerals.

1. control core: 5

2. control core: 6

3. control core: 7

4. control core: 8

Star-quad: yellow, black, red, white



Element shield

Bending-resistant, tinned braided copper shield.



Intermediate jacket

Coverage approx. 55% linear, approx. 80% optical.

Foil taping over the external layer.

Class 4.1.2



... no minimum order quantity
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	Overall shield	Bending-resistant, tinned braided copper shield. Coverage approx. 55% linear, approx. 80% optical.
	Outer jacket	Low-adhesion, oil-resistant mixture on the basis of PVC, adapted to suit the requirements in Energy Chains® (following DIN VDE 0282 Part 10). Colour: orange (similar to RAL 2003) Style 10989 and 2570, 1000 V, 80 °C
	UL	
	CEI	Following CEI 20-35
	CE	Following 2006/95/EG
	Lead free	Following EU guideline (RoHS) 2002/95/EG
	Clean room	According to ISO Klasse 2. Outer jacket material complies with CF5.10.07, tested by IPA according to standard 14644-1

Typical application area

- for medium load requirements
- light oil influence
- preferably indoor applications, but also outdoor ones at temperatures > 5 °C
- especially for freely suspended travel distances
- Wood/stone processing, packaging industry, supply system, handling, adjusting equipment

Delivery program Part No.	Number of cores and conductor nominal cross section [mm ²]	External diameter approx. [mm]	Copper index [kg/km]	Weight [kg/km]	
1 control pair shielded					
CF210.UL.15.15.02.01 ⁽¹⁾	(4 G 1.5+(2x1.5)C)C	12.0	149	250	New
CF210.UL.25.15.02.01	(4 G 2.5+(2x1.5)C)C	13.5	203	320	New
CF210.UL.40.15.02.01 ⁽¹⁾	(4 G 4.0+(2x1.5)C)C	15.0	272	412	New
CF210.UL.60.15.02.01 ⁽¹⁾	(4 G 6.0+(2x1.5)C)C	16.5	364	521	New
2 control pairs shielded					
CF210.UL.15.07.02.02 ⁽¹⁾	(4 G 1.5+2x(2x0.75)C)C	13.5	169	290	New
CF210.UL.25.15.02.02 ⁽¹⁾	(4 G 2.5+2x(2x1.5)C)C	15.5	260	408	New
CF210.UL.40.15.02.02 ⁽¹⁾	(4 G 4.0+2x(2x1.5)C)C	17.0	330	506	New
CF210.UL.60.15.02.02 ⁽¹⁾	(4 G 6.0+2x(2x1.5)C)C	18.5	425	633	New

⁽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: CF210.25.15.02.01.UL – in your desired length (0.5 m steps)

CF210.UL Chainflex® series .25 Code nominal cross section .15 Code nominal cross section signal pairs
.02 Identification pairs .01 Number of pairs



Please use www.chainflex.eu/en/210.UL for your online order.

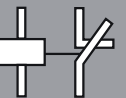


Delivery time 24h or today*

* Delivery time means time until shipping of goods

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850 types from stock no cutting costs ...

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(for up to 10 cuts of the same type)


CF21.UL
PVC
7.5 x d

PVC Servo cable Chainflex® CF21.UL


- for high load requirements
- PVC outer jacket
- shielded
- oil-resistant
- flame-retardant



Highly flexible special conductor



Energy conductor with signal pair elements stranded around high-tensile center cord



Extremely highly flexible braided-pair copper shield


















Gusset-filled, pressure extruded



Highly flexible braided copper shield



Pressure extruded, oil-proof PVC sheath blend










	Temperature range moved	-5 °C to +70 °C, minimum bending radius 7.5 x d
	Temperature range fixed	-20 °C to +70 °C, minimum bending radius 4 x d
	v max. unsupported/gliding	10 m/s, 5 m/s
	a max.	80 m/s ²
	Travel distance	Freely suspended and gliding travel distances up to 100 m, Class 3
	UV-resistant	Medium
	Nominal voltage	600/1000 V (following DIN VDE 0250).
	Testing voltage	4000 V (following DIN VDE 0281-2).
	Oil	Oil-resistant (following DIN EN 60811-2-1, DIN EN 50363-4-1), Class 2
	Flame-retardant	According to IEC 332-1, CEI 20-35, FT1.
	Silicon-free	Free from silicon which can affect paint adhesion (following PV 3.10.7 – status 1992).
	Conductor	Fine-wire stranded conductor in especially bending-resistant version consisting of bare copper wires (following EN 60228).
	Core insulation	Mechanically high-quality, especially low-capacitance TPE mixture.
	Core stranding	Energy conductor with signal pair elements stranded around high-tensile center cord.
	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- 1 control pair: cores black with white numerals. 1. control pair: 4 2. control pair: 5 2 control pairs: cores black with white numerals. 1. control pair: 6 2. control pair: 7 3. control pair: 8 4. control pair: 8

Class 5.3.2



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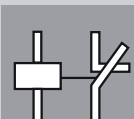
	Element shield	Extremely bending-resistant, tinned braided copper shield. Coverage approx. 70% linear, approx. 90% optical.
	Inner jacket	PVC mixture adapted to suit the requirements in Energy Chains®.
	Overall shield	Extremely bending-resistant, tinned braided copper shield. Coverage approx. 70% linear, approx. 90% optical.
	Outer jacket	Low-adhesion, oil-resistant mixture on the basis of PVC, adapted to suit the requirements in Energy Chains® (following DIN VDE 0282 Part 10). Colour: green (similar to RAL 6005)
	UL/CSA	Style 10492 and 2570, 1000 V, 80 °C
	CEI	Following CEI 20-35
	CE	Following 2006/95/EG
	Lead free	Following EU guideline (RoHS) 2002/95/EC
	Clean room	According to ISO Class 2. Outer jacket material complies with CF5.10.07, tested by IPA according to standard 14644-1

Typical application area

- for high load requirements
- light oil influence
- preferably indoor applications, but also outdoor ones at temperatures > 5 °C
- especially for freely suspended and gliding travel distances up to 100 m
- storage and retrieval units for high-bay warehouses, machining units/packaging machines, quick handling, indoor cranes

Servo cable

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850 types from stock no cutting costs ...

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(for up to 10 cuts of the same type)

PVC Servo cable Chainflex® CF21.UL

- for high load requirements
- PVC outer jacket
- shielded
- oil-resistant
- flame-retardant

Delivery program Part No.	Number of cores and conductor nominal cross section [mm ²]	External diameter approx. [mm]	Copper index [kg/km]	Weight [kg/km]
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1 control pair shielded

CF21.07.05.02.01.UL	(4 G 0.75+(2x0.5)C)C	11.0	95	172
CF21.15.10.02.01.UL	(4 G 1.5+(2x1)C)C	12.5	125	250
CF21.15.15.02.01.UL ⁽¹⁾	(4 G 1.5+(2x1.5)C)C	13.0	140	280
CF21.25.10.02.01.UL	(4 G 2.5+(2x1)C)C	13.5	177	300
CF21.25.15.02.01.UL ⁽¹⁾	(4 G 2.5+(2x1.5)C)C	14.0	182	312
CF21.40.10.02.01.UL	(4 G 4.0+(2x1)C)C	15.5	232	372
CF21.40.15.02.01.UL	(4 G 4.0+(2x1.5)C)C	16.0	241	390
CF21.60.10.02.01.UL	(4 G 6.0+(2x1)C)C	18.0	327	495
CF21.60.15.02.01.UL ⁽¹⁾	(4 G 6.0+(2x1.5)C)C	18.5	357	605
CF21.100.10.02.01.UL ⁽¹⁾	(4 G 10.0+(2x1)C)C	22.0	530	786
CF21.100.15.02.01.UL	(4 G 10.0+(2x1.5)C)C	22.5	540	925
CF21.160.10.02.01.UL ⁽¹⁾	(4 G 16.0+(2x1)C)C	24.5	700	1050
CF21.160.15.02.01.UL ⁽¹⁾	(4 G 16.0+(2x1.5)C)C	24.5	716	1165
CF21.250.15.02.01.UL ⁽¹⁾	(4 G 25.0+(2x1.5)C)C	29.5	1056	1466
CF21.350.15.02.01.UL ⁽¹⁾	(4 G 35.0+(2x1.5)C)C	33.0	1557	2090

2 control pairs shielded

CF21.07.03.02.02.UL	(4 G 0.75+2x(2x0.34)C)C	12.5	113	210
CF21.10.07.02.02.UL	(4 G 1.0+2x(2x0.75)C)C	13.5	146	266
CF21.15.07.02.02.UL	(4 G 1.5+2x(2x0.75)C)C	14.5	175	310
CF21.25.15.02.02.UL	(4 G 2.5+2x(2x1.5)C)C	17.0	265	370
CF21.40.15.02.02.UL	(4 G 4.0+2x(2x1.5)C)C	18.5	304	435
CF21.60.15.02.02.UL	(4 G 6.0+2x(2x1.5)C)C	20.5	397	697
CF21.100.15.02.02.UL	(4 G 10.0+2x(2x1.5)C)C	24.0	560	1025
CF21.160.15.02.02.UL	(4 G 16.0+2x(2x1.5)C)C	27.0	790	1270
CF21.250.15.02.02.UL	(4 G 25.0+2x(2x1.5)C)C	31.0	1140	1910
CF21.350.15.02.02.UL	(4 G 35.0+2x(2x1.5)C)C	34.0	1597	2175

⁽¹⁾ Delivery time upon inquiry

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

G = with earthed conductor green-yellow x = without earthed conductor



Order example: **CF21.15.10.02.01.UL** – in your desired length (0.5 m steps)

CF21.UL Chainflex® series **.15** Code nominal cross section **.10** Code nominal cross section signalpairs
.02 Identification pairs **.01** Number of pairs



Please use www.chainflex.eu/en/CF21UL for your online order.

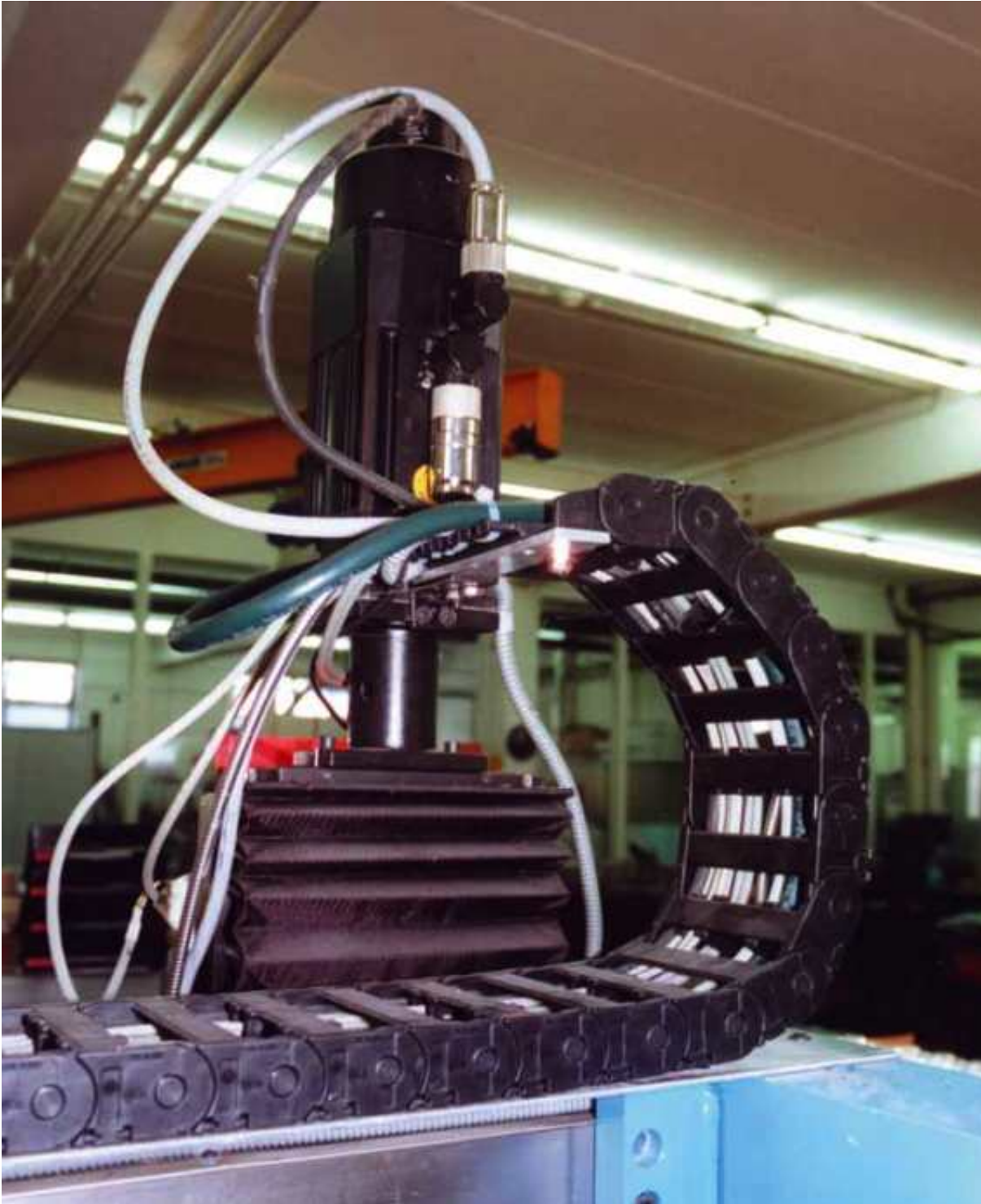


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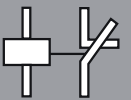
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Chainflex® CF21.UL: cables for energy supply systems in spinneret production. E-Chain®: Series E2/000

Servo cable

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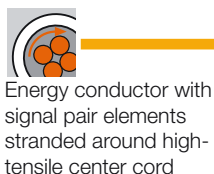
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(for up to 10 cuts of the same type)

CF260
PUR
10 x d

PUR Servo cable Chainflex® CF260

- for medium load requirements
- PUR outer jacket
- shielded
- oil-resistant
- PVC-free/halogen-free



	Temperature range moved	-20 °C to +80 °C, minimum bending radius 10 x d
	Temperature range fixed	-40 °C to +80 °C, minimum bending radius 5 x d
	v max. unsupported	10 m/s
	a max.	50 m/s ²
	Travel distance	Freely suspended travel distances, Class 1
	UV-resistant	Medium
	Nominal voltage	600/1000 V (following DIN VDE 0250).
	Testing voltage	4000 V (following DIN VDE 0281-2).
	Oil	Oil-resistant (following DIN EN 60811-2-1, DIN EN 50363-10-2), Class 3
	Offshore	MUD-resistant following NEK 606
	Silicon-free	Free from silicon which can affect paint adhesion (following PV 3.10.7 – status 1992).
	Halogen-free	Following EN 50267-2-1.
	Conductor	Fine-wire stranded conductor in bending-resistant version consisting of bare copper wires (following EN 60228).
	Core insulation	Mechanically high-quality, especially low-capacitance TPE mixture.
	Core stranding	Energy conductor with signal pair elements stranded around high-tensile center cord.
	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- 1 control pair: cores black with white numerals. 1. control pair: 4 2. control pair: 5 2 control pairs: cores black with white numerals. 1. control pair: 6 2. control pair: 7 3. control pair: 8 4. control pair: 8 Star-quad: yellow, black, red, white

Class 4.1.3



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Class 4.1.3

Price index



igus®

CF260
PUR
10 x d

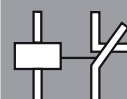
	Element shield	Bending-resistant, tinned braided copper shield. Coverage approx. 55% linear, approx. 80% optical.
	Intermediate sheath	Foil taping over the external layer.
	Overall shield	Bending-resistant, tinned braided copper shield. Coverage approx. 55% linear, approx. 80% optical.
	Outer jacket	Low-adhesion mixture on the basis of PUR, adapted to suit the requirements in Energy Chains® (following DIN VDE 0282 Part 10). Colour: orange (similar to RAL 2003)
	CE	Following 2006/95/EG
	DESINA	According to VDW, DESINA standardisation
	Lead free	Following EU guideline (RoHS) 2002/95/EC.

Typical application area

- for medium load requirements
- almost unlimited resistance to oil
- indoor and outdoor applications without direct sun radiation
- especially for freely suspended travel distances
- machining units/machine tools, low temperature applications

Servo cable

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(for up to 10 cuts of the same type)

PUR Servo cable Chainflex® CF260

- for medium load requirements
- PUR outer jacket
- shielded
- oil-resistant
- PVC-free/halogen-free

Delivery program Part No.	Number of cores and conductor nominal cross section [mm ²]	External diameter approx. [mm]	Copper index [kg/km]	Weight [kg/km]
1 control pair shielded				
CF260.15.10.02.01	(4 G 1.5+(2x1.0)C)C	11.0	120	178
CF260.25.10.02.01	(4 G 2.5+(2x1.0)C)C	12.5	160	229
CF260.40.10.02.01	(4 G 4.0+(2x1.0)C)C	13.5	235	309
CF260.60.10.02.01	(4 G 6.0+(2x1.0)C)C	15.0	309	402
CF260.100.10.02.01	(4 G 10.0+(2x1.0)C)C	20.0	530	690
CF260.160.10.02.01	(4 G 16.0+(2x1.0)C)C	21.5	753	905
2 control pairs shielded				
CF260.10.07.02.02	(4 G 1.0+2x(2x0.75)C)C	12.0	148	295
CF260.15.07.02.02	(4 G 1.5+2x(2x0.75)C)C	12.5	155	225
1 star quad shielded				
CF260.25.05.04	(4 G 2.5+(4 G 0.5)C)C	13.0	181	258
CF260.60.05.04	(4 G 6.0+(4 G 0.5)C)C	16.0	344	430
Without control pair				
CF260.15.04	(4 G 1.5)C	8.5	76	113
CF260.25.04	(4 G 2.5)C	10.5	128	155
CF260.40.04	(4 G 4.0)C	12.0	193	231
CF260.60.04	(4 G 6.0)C	14.0	272	347
CF260.100.04	(4 G 10.0)C	17.5	441	548
CF260.160.04	(4 G 16.0)C	20.5	672	801
CF260.250.04	(4 G 25.0)C	26.0	1095	1299
CF260.350.04	(4 G 35.0)C	29.0	1447	1692

* phase-out model, is replaced by CF210.UL(PVC) and CF270.UL.D (PUR)

Note: The mentioned external diameters are maximum values and may tend toward lower tolerance limits.
G = with earthed conductor green-yellow x = without earthed conductor



Order example: **CF260.15.10.02.01** – in your desired length (0.5 m steps)
CF260 Chainflex® series .15 Code nominal cross section .10 Code nominal cross section signalpairs
.02 Identification pairs .01 Number of pairs



Please use www.chainflex.eu/en/CF260 for your online order.



Delivery time 24h or today*

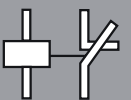
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Pre-assembled energy chains with Chainflex® cables for special mechanical engineering applications.

Servo cable

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(for up to 10 cuts of the same type)

CF270.UL.D
PUR
10 x d

New! PUR Servo cable Chainflex® CF270.UL.D


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



Bending-resistant conductor



Extremely highly flexible braided-pair copper shield



















Energy conductor with signal pair elements stranded together with elements for high tensile stresses



Bending-resistant braided copper shield



Pressure extruded PUR blend

	Temperature range moved	-20 °C to +80 °C, minimum bending radius 10 x d
	Temperature range fixed	-40 °C to +80 °C, minimum bending radius 5 x d
	v max. unsupported	10 m/s
	a max.	50 m/s ²
	Travel distance	Freely suspended travel distances, Class 1
	UV-resistant	Medium
	Nominal voltage	600/1000 V (following DIN VDE 0250).
	Testing voltage	4000 V (following DIN VDE 0281-2).
	Oil	Oil-resistant (following DIN EN 60811-2-1, DIN EN 50363-10-2), Class 3.
	Offshore	MUD-resistant following NEK 606.
	Flame-retardant	According to IEC 332-1, CEI 20-35, FT1.
	Silicon-free	Free from silicon which can affect paint adhesion (following PV 3.10.7 – status 192).
	Halogen-free	Following EN 50267-2-1.
	Conductor	Fine-wire stranded conductor in bending-resistant version consisting of bare copper wires (following EN 60228)
	Core insulation	Mechanically high-quality, especially low-capacitance PE mixture.
	Core stranding	Energy conductor with signal pair elements stranded together with elements for high tensile stresses.

Class 4.1.3



... no minimum order quantity
eplan download, configurator, PDF catalogues, lifetime ...



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-

1 signal pair: cores black with white numerals.

1. control core: 4
2. control core: 5

2 signal pairs: cores black with white numerals.

1. control core: 5
2. control core: 6
3. control core: 7
4. control core: 8



Element shield

Bending-resistant, tinned braided copper shield.

Coverage approx. 55% linear, approx. 80% optical.



Intermediate jacket

Foil taping over the external layer.



Overall shield

Bending-resistant, tinned braided copper shield.

Coverage approx. 55% linear, approx. 80% optical.



Outer jacket

Low-adhesion mixture on the basis of PUR, adapted to suit the requirements in Energy Chains® (following DIN VDE 0282 Part 10).

Colour: orange (similar to RAL 2003)

Style 10989 and 21223, 1000 V, 80 °C



UL/CSA



CEI

Following CEI 20-35



CE

Following 2006/95/EG



DESINA

According to VDW, DESINA standardisation



Lead free

Following EU guideline (RoHS) 2002/95/EG.



Clean room

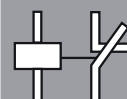
According to ISO Class 1, material/cable tested by IPA according to ISO standard 14644-1

Typical application area

- for medium load requirements
- almost unlimited resistance to oil
- indoor and outdoor applications without direct sun radiation
- especially for freely suspended travel distances
- Machining units/machine tools, low temperature applications

Servo cable

Tel. 0 22 03-96 49-0
Fax 0 22 03-96 49-222



850 types from stock no cutting costs ...

... and order online ► www.igus.eu/en/CF270ULD (for up to 10 cuts of the same type)

New! PUR Servo cable Chainflex® CF270.UL.D

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

Delivery program Part No.	Number of cores and conductor nominal cross section [mm ²]	External diameter approx. [mm]	Copper index [kg/km]	Weight [kg/km]	
1 control pair shielded					
CF270.UL.15.15.02.01.D	(4 G 1.5+(2x1.5)C)C	12.0	149	246	New
CF270.UL.25.15.02.01.D ⁽¹⁾	(4 G 2.5+(2x1.5)C)C	13.5	203	317	New
CF270.UL.40.15.02.01.D ⁽¹⁾	(4 G 4.0+(2x1.5)C)C	15.0	272	408	New
CF270.UL.60.15.02.01.D ⁽¹⁾	(4 G 6.0+(2x1.5)C)C	16.5	364	521	New
CF270.UL.100.15.02.01.D ⁽¹⁾	(4 G 10.0+(2x1.5)C)C	20.5	582	841	New
CF270.UL.160.15.02.01.D ⁽¹⁾	(4 G 16.0+(2x1.5)C)C	24.0	855	1225	New
2 control pairs shielded					
CF270.UL.10.07.02.02.D ⁽¹⁾	(4 G 1.0+2x(2x0.75)C)C	13.0	143	251	New
CF270.UL.15.07.02.02.D ⁽¹⁾	(4 G 1.5+2x(2x0.75)C)C	13.5	169	290	New
CF270.UL.25.15.02.02.D ⁽¹⁾	(4 G 2.5+2x(2x1.5)C)C	15.5	260	408	New
CF270.UL.40.15.02.02.D ⁽¹⁾	(4 G 4.0+2x(2x1.5)C)C	17.0	330	506	New
CF270.UL.60.15.02.02.D ⁽¹⁾	(4 G 6.0+2x(2x1.5)C)C	18.5	425	633	New
CF270.UL.100.15.02.02.D ⁽¹⁾	(4 G 10.0+2x(2x1.5)C)C	22.0	632	940	New
CF270.UL.160.15.02.02.D ⁽¹⁾	(4 G 16.0+2x(2x1.5)C)C	26.0	901	1315	New
CF270.UL.250.15.02.02.D ⁽¹⁾	(4 G 25.0+2x(2x1.5)C)C	28.0	1365	1847	New
CF270.UL.350.15.02.02.D ⁽¹⁾	(4 G 35.0+2x(2x1.5)C)C	35.0	1804	2516	New
Without signal pair					
CF270.UL.15.04.D ⁽¹⁾	(4 G 1.5)C	9.0	82	147	New
CF270.UL.25.04.D ⁽¹⁾	(4 G 2.5)C	11.0	141	224	New
CF270.UL.40.04.D ⁽¹⁾	(4 G 4.0)C	12.5	211	309	New
CF270.UL.60.04.D ⁽¹⁾	(4 G 6.0)C	14.5	306	434	New
CF270.UL.100.04.D ⁽¹⁾	(4 G 10.0)C	18.0	496	698	New
CF270.UL.160.04.D ⁽¹⁾	(4 G 16.0)c	21.5	782	1052	New
CF270.UL.250.04.D ⁽¹⁾	(4 G 25.0)C	25.5	1197	1572	New
CF270.UL.350.04.D ⁽¹⁾	(4 G 35.0)C	33.0	1695	2312	New

⁽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



Class 4.1.3

Price index



CF270.ULD
PUR
10 x d



Order example: **CF270.UL.25.15.02.01.D** – in your desired length (0.5 m steps)
CF270.ULD Chainflex® series **.25** Code nominal cross section **.15** Code nominal cross section signal pairs
.02 Identification pairs **.01** Number of pairs



Please use www.chainflex.eu/en/CF270ULD for your online order.

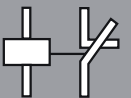


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* Delivery time means time until shipping of goods

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CF27.D

PUR


7.5 x d

PUR Servo cable Chainflex® CF27.D


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



Highly flexible special conductor



Energy conductor with signal pair elements stranded around high-tensile center cord



Extremely highly flexible braided-pair copper shield



















Gusset-filled extruded



Highly flexible braided copper shield



Pressure extruded, halogen-free PUR blend

	Temperature range moved	-20 °C to +80 °C, minimum bending radius 7.5 x d
	Temperature range fixed	-40 °C to +80 °C, minimum bending radius 4 x d
	v max. unsupported/gliding	10 m/s, 5 m/s
	a max.	80 m/s ²
	Travel distance	Freely suspended and gliding travel distances up to 100 m, Class 3
	UV-resistant	Medium
	Nominal voltage	600/1000 V (following DIN VDE 0250).
	Testing voltage	4000 V (following DIN VDE 0281-2).
	Oil	Oil-resistant (following DIN EN 60811-2-1, DIN EN 50363-10-2), Class 3
	Offshore	MUD-resistant following NEK 606
	Flame-retardant	According to IEC 332-1, CEI 20-35, FT1.
	Silicon-free	Free from silicon which can affect paint adhesion (following PV 3.10.7 – status 1992).
	Halogen-free	Following EN 50267-2-1.
	Conductor	Fine-wire stranded conductor in especially bending-resistant version consisting of bare copper wires (following EN 60228).
	Core insulation	Mechanically high-quality, especially low-capacitance TPE mixture.
	Core stranding	Energy conductor with signal pair elements stranded around high-tensile center cord.

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Class 6.3.3





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-

1 control pair: cores black with white numerals.

- 1. control pair: 4 2. control pair: 5

2 control pairs: cores black with white numerals.

- 1. control pair: 5 2. control pair: 6
- 3. control pair: 7 4. control pair: 8

Star-quad: yellow, black, red, white



Element shield

Extremely bending-resistant, tinned braided copper shield.
Coverage approx. 70% linear, approx. 90% optical.



Inner jacket

PUR mixture adapted to suit the requirements in Energy Chains®.



Overall shield

Extremely bending-resistant, tinned braided copper shield.
Coverage approx. 70% linear, approx. 90% 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: orange (similar to RAL 2003)



UL/CSA

Style 10492 and 20234, 1000 V, 80 °C



CEI

Following CEI 20-35



CE

Following 2006/95/EG



DESINA

According to VDW, DESINA standardisation



Lead free

Following EU guideline (RoHS) 2002/95/EC.



Clean room

According to ISO Class 1, material/cable tested by IPA according to ISO standard 14644-1

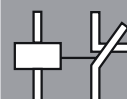
Typical application area

- for maximum load requirements
- almost unlimited resistance to oil
- indoor and outdoor applications, UV-resistant
- especially for freely suspended and gliding travel distances up to 100 m
- storage and retrieval units for high-bay warehouses, machining units/machine tools, quick handling, clean room, semiconductor insertion, outdoor cranes, low-temperature applications

Servo cable

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(for up to 10 cuts of the same type)

PUR Servo cable Chainflex® CF27.D

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

Delivery program Part No.	Number of cores and conductor nominal cross section [mm ²]	External diameter approx. [mm]	Copper index [kg/km]	Weight [kg/km]
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1 control pair shielded

CF27.07.05.02.01.D	(4 G 0.75+(2x0.5)C)C	11.5	95	171
CF27.15.10.02.01.D	(4 G 1.5+(2x1)C)C	12.5	125	220
CF27.15.15.02.01.D ⁽¹⁾	(4 G 1.5+(2x1.5)C)C	12.5	140	260
CF27.25.10.02.01.D	(4 G 2.5+(2x1)C)C	13.5	177	286
CF27.25.15.02.01.D ⁽¹⁾	(4 G 2.5+(2x1.5)C)C	14.0	182	300
CF27.40.10.02.01.D	(4 G 4.0+(2x1)C)C	16.0	232	356
CF27.40.15.02.01.D ⁽¹⁾	(4 G 4.0+(2x1.5)C)C	16.0	241	375
CF27.60.10.02.01.D	(4 G 6.0+(2x1)C)C	17.5	327	481
CF27.60.15.02.01.D ⁽¹⁾	(4 G 6.0+(2x1.5)C)C	17.5	357	580
CF27.100.10.02.01.D	(4 G 10.0+(2x1)C)C	20.5	530	740
CF27.100.15.02.01.D ⁽¹⁾	(4 G 10.0+(2x1.5)C)C	21.5	540	900
CF27.160.10.02.01.D	(4 G 16.0+(2x1)C)C	23.0	700	1023
CF27.160.15.02.01.D ⁽¹⁾	(4 G 16.0+(2x1.5)C)C	24.5	716	1150
CF27.250.15.02.01.D	(4 G 25.0+(2x1.5)C)C	28.5	1056	1435
CF27.350.15.02.01.D	(4 G 35.0+(2x1.5)C)C	32.5	1553	2079

2 control pairs shielded

CF27.07.03.02.02.D ⁽¹⁾	(4 G 0.75+2x(2x0.34)C)C	12.5	102	195
CF27.10.07.02.02.D	(4 G 1.0+2x(2x0.75)C)C	13.5	143	251
CF27.15.07.02.02.D	(4 G 1.5+2x(2x0.75)C)C	14.5	175	295
CF27.25.15.02.02.D	(4 G 2.5+2x(2x1.5)C)C	16.5	265	349
CF27.40.15.02.02.D	(4 G 4.0+2x(2x1.5)C)C	18.0	303	405
CF27.60.15.02.02.D	(4 G 6.0+2x(2x1.5)C)C	19.5	397	643
CF27.100.15.02.02.D	(4 G 10.0+2x(2x1.5)C)C	23.5	560	1000
CF27.160.15.02.02.D	(4 G 16.0+2x(2x1.5)C)C	26.0	790	1250
CF27.250.15.02.02.D	(4 G 25.0+2x(2x1.5)C)C	30.0	1140	1890
CF27.350.15.02.02.D ⁽¹⁾	(4 G 35.0+2x(2x1.5)C)C	33.5	1597	2150

1 star quad shielded

CF27.15.05.04.D ⁽¹⁾	(4 G 1.5+(4x0.5)C)C	14.5	142	310
CF27.25.05.04.D ⁽¹⁾	(4 G 2.5+(4x0.5)C)C	15.0	199	325
CF27.40.05.04.D ⁽¹⁾	(4 G 4.0+(4x0.5)C)C	17.0	256	480
CF27.60.05.04.D ⁽¹⁾	(4 G 6.0+(4x0.5)C)C	18.0	371	550

⁽¹⁾ Delivery time upon inquiry

Note: The mentioned external diameters are maximum values and may tend toward lower tolerance limits.
G = with earthed conductor green-yellow x = without earthed conductor



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Class 6.3.3

Price index



CF27.D
PUR
7.5 x d

Delivery program
Part No.

Number of cores and
conductor nominal
cross section [mm²]

External
diameter
approx. [mm]

Copper
index
[kg/km]

Weight
[kg/km]

Without control pair

Part No.	Number of cores and conductor nominal cross section [mm ²]	External diameter approx. [mm]	Copper index [kg/km]	Weight [kg/km]
CF27.07.04.D ⁽¹⁾	(4 G 0.75)C	9.5	52	113
CF27.10.04.D ⁽¹⁾	(4 G 1.0)C	10.0	62	126
CF27.15.04.D	(4 G 1.5)C	10.5	86	160
CF27.25.04.D	(4 G 2.5)C	12.0	140	260
CF27.50.04.D	(4 G 50.0)C	37.5	2230	3200

⁽¹⁾ Delivery time upon inquiry

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

G = with earthed conductor green-yellow x = without earthed conductor



Order example: **CF27.15.10.02.01.D** – in your desired length (0.5 m steps)

CF27 Chainflex® series .15 Code nominal cross section .10 Code nominal cross section signalpairs
.02 Identification pairs .01 Number of pairs



Please use www.chainflex.eu/en/CF27D for your online order.

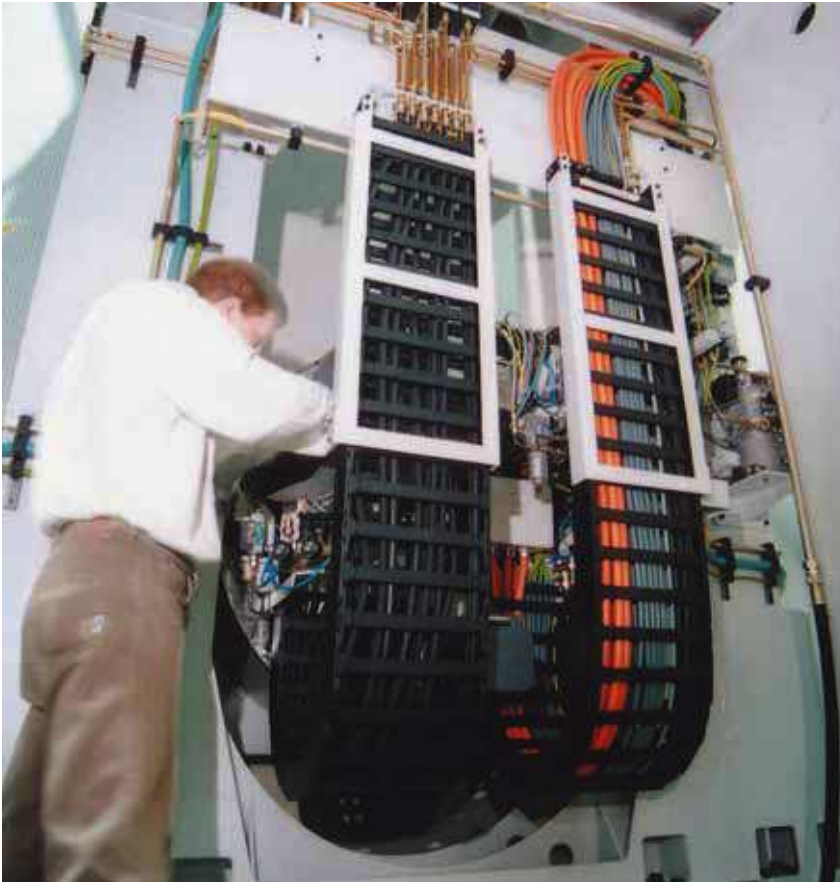


Delivery time 24h or today*

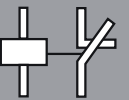
* Delivery time means time until shipping of goods

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