

Servo cables



chainflex® types



chainflex® cable	Jacket	Shield	Bending radius min., e-chain® [factor x d]	Temperature, e-chain® from/to [°C]	Approvals and standards	oil-resistant	torsion resistant	v max. [m/s] unsupported	v max. [m/s] gliding	a max. [m/s²]	Page
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Servo cables

Exclusive! chainflex® guarantee – guaranteed lifetime








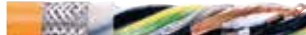
► Selection table page 274

CF887	PVC	✓	15	+5/ +70	UL US ENEC EAC GTP	✓		3	20	276	
CF210.UL	PVC	✓	10	+5/ +70	UL US ENEC EAC GTP	✓	✓	10	2	50	278
CF220.UL.H	PVC	✓	10	+5/ +70	UL US ENEC EAC GTP	✓	✓	10	2	50	282 New
CF21.UL	PVC	✓	7.5	+5/ +70	UL US ENEC EAC GTP	✓	✓	10	5	80	286
CF897	iguPUR	✓	15	-20/ +80	UL US ENEC EAC GTP	✓	✓	3	20	290	
CF270.UL.D	PUR	✓	10	-20/ +80	UL US ENEC EAC GTP	✓	✓	10	2	50	292
CF280.UL.H	PUR	✓	10	-25/ +80	UL US ENEC EAC GTP	✓	✓	10	2	50	296 New
CF27.D	PUR	✓	7.5	-25/ +80	UL US ENEC EAC GTP	✓	✓	10	5	80	300

chainflex® guarantee



Guaranteed lifetime ⁽¹⁾

chainflex® cable	Temperature, from/to [°C]	v max. [m/s]		a max. [m/s ²]	Travel distance [m]	Bending radius min. [factor x d]		Bending radius min. [factor x d]		Page
		unsupported	gliding			5 million (1 million) double strokes *	7.5 million (3 Mio.) double strokes *	10 million (5 million) double strokes *		
Servo cables										
 CF887 chainflex® M	+5 / +15 +15 / +60 +70 / +70	3		20	≤ 10	17.5 15 17.5	18.5 16 18.5	19.5 17 19.5	276	
 CF210.UL	+5 / +15 +15 / +60 +60 / +70	10	2	50	≤ 10	12.5 10 12.5	13.5 11 13.5	14.5 12 14.5	278	
 CF220.UL.H	+5 / +15 +15 / +60 +60 / +70	10	2	50	≤ 10	12.5 10 12.5	13.5 11 13.5	14.5 12 14.5	282	
 CF21.UL	+5 / +15 +15 / +60 +60 / +70	10	5	80	≤ 100	10 7.5 10	11 8.5 11	12 9.5 12	286	
 CF897 chainflex® M	-20 / -10 -10 / +70 +70 / +80	3		20	≤ 10	17.5 15 17.5	18.5 16 18.5	19.5 17 19.5	290	
 CF270.UL.D	-20 / -10 -10 / +70 +70 / +80	10	2	50	≤ 10	12.5 10 12.5	13.5 11 13.5	14.5 12 14.5	292	
 CF280.UL.H	-20 / -10 -10 / +70 +70 / +80	10	2	50	≤ 10	12.5 10 12.5	13.5 11 13.5	14.5 12 14.5	296	
 CF27.D	-20 / -10 -10 / +70 +70 / +80	10	5	80	≤ 100	10 7.5 10	11 8.5 11	12 9.5 12	300	

⁽¹⁾ Exclusive! Guaranteed lifetime for this series according to the guarantee conditions ► Page 22-25






* Guaranteed lifetime, higher number of double strokes possible.
Figures in brackets refer to chainflex® M cables

PVC Servo cable | CF887








- For flexing applications
- PVC outer jacket
- Shielded
- Flame-retardant

**chainflex® M -
5 million double
strokes. Guaranteed.**



Dynamic information

	Bending radius	e-chain®	minimum 15 x d
		flexible	minimum 12 x d
		fixed	minimum 8 x d
	Temperature	e-chain®	+5 °C to +70 °C
		flexible	-5 °C to +70 °C (following EN 60811-504)
		fixed	-15 °C to +70 °C (following DIN EN 50305)
	v max.	unsupported	3 m/s
	a max.	gliding	20m/s²
	Travel distance	Unsupported travel distances.	

Cable structure

	Conductor	Conductor consisting of bare copper wires (according to EN 60228).
	Core insulation	Mechanically high-quality, especially low-capacitance TPE mixture.
	Core stranding	Cores and signal pair elements stranded together in an optimized pitch length.
	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: 5 2. Control core: 6
	Element shield	Foil taping of optimized, bending-resistant foil shield. Coverage approx. 100% optical.
	Overall shield	Braiding made of tinned copper wires. Coverage approx. 60% optical.
	Outer jacket	Low-adhesion mixture on the basis of PVC, adapted to suit the requirements in e-chains®. Colour: Pastel orange (similar to RAL 2003)

Electrical information

	Nominal voltage	600/1000 V (following DIN VDE 0250)
	Testing voltage	4000 V (following DIN EN 50396)



EPLAN download, configurators ► www.igus.eu/CF887

1,040 types from stock no cutting costs ...

(up to 10 cuts of the same types)









Class 3.1.1

3 low duty applications

1 unsupported travels

1 not oil-resistant

Properties and approvals

	Flame-retardant	According to IEC 60332-1-2, CEI 20-35, VW-1, FT-1
	Silicon-free	Free from silicon which can affect paint adhesion (following PV 3.10.7 – status 1992).
	UL/CSA	Style 10492 and 2570, 1000V, 80°C
	NFFPA	Following NFFPA 79-2012 chapter 12.9
	EAC	Certified according to No. TC RU C-DE.ME77.B.01561
	CTP	Certified according to No. C-DE.PB49.B.00450
	Lead free	Following 2011/65/EC (RoHS-II)
	CE	Following 2006/95/EC

Guaranteed lifetime according to guarantee conditions (Page 22-25)

Double strokes*				1 million	3 million	5 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]
+5 / +15				17.5	18.5	19.5
+15 / +60	3	20	≤ 10	15	16	17
+70 / +70				17.5	18.5	19.5

* Higher number of double strokes possible - please ask for your individual calculation.

Typical application areas

- For flexing applications
- Without influence of oil
- Preferably indoor applications
- Especially for unsupported travel distances
- Wood/stone processing, packaging industry, supply systems, handling, adjusting equipment

Delivery program Part No.	Number of cores and conductor nominal cross section [mm²]	External diameter max. [mm]	Copper index [kg/km]	Weight [kg/km]
New CF887.10.07.02.02 ^{1.6)}	(4G1.0+2x(2x0.75)C)C	11.5	117	192
CF887.15.15.02.01	(4G1.5+(2x1.5)C)C	12.5	132	212
CF887.25.15.02.01	(4G2.5+(2x1.5)C)C	13.5	194	281
New CF887.25.15.02.02 ^{1.6)}	(4G2.5+2x(2x1.5)C)C	14.5	231	339
CF887.40.15.02.01	(4G4.0+(2x1.5)C)C	14.5	252	368

^{1.6)} Delivery time: 6 weeks

Other types available on request.

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



... no minimum order quantity ...

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PVC Servo cable | CF210.UL

- For medium duty applications
- PVC outer jacket
- Shielded
- Oil-resistant
- Flame-retardant

Dynamic information

	Bending radius	e-chain®	minimum 10 x d
		flexible	minimum 8 x d
		fixed	minimum 5 x d
	Temperature	e-chain®	+5 °C to +70 °C
		flexible	-5 °C to +70 °C (following EN 60811-504)
		fixed	-15 °C to +70 °C (following DIN EN 50305)
	v max.	unsupported	10 m/s
		gliding	2 m/s
	a max.		50 m/s ²
	Travel distance	Unsupported travel distances and up to 10 m for gliding applications, Class 2	

Cable structure

	Conductor	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	Power cores with control pair elements stranded with elements for high tensile stresses.
	Core identification	Power cores: 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 core: 4 2. Control core: 5 2 Control pairs: Core black with white numerals. 1. Control core: 5 2. Control core: 6 3. Control core: 7 4. Control core: 8
	Element shield	Bending-resistant braiding made of tinned copper wires. Coverage approx. 55% linear, approx. 80% optical.
	Intermediate layer	Foil taping over the external layer.
	Overall shield	Bending-resistant braiding made of tinned copper wires. 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 e-chains® (following DIN VDE 0281 Part 13). Colour: Pastel orange (similar to RAL 2003)

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1,040 types from stock no cutting costs ...

(up to 10 cuts of the same types)

Class 4.2.2 4 medium duty applications 2 travel distance up to 10 m 2 oil-resistant

Electrical information

	Nominal voltage	600/1000 V (following DIN VDE 0250)
	Testing voltage	4000 V (following DIN EN 50396)

Properties and approvals

	UV-resistance	Medium
	Oil	Oil-resistant (following DIN EN 50363-4-1), Class 2
	Flame-retardant	According to IEC 60332-1-2, CEI 20-35, FT1
	Silicon-free	Free from silicon which can affect paint adhesion (following PV 3.10.7 – status 1992).
	UL/CSA	Style 10989 and 2570, 1000 V, 80 °C
	NFPA	Following NFPA 79-2012 chapter 12.9
	EAC	Certified according to No. TC RU C-DE.ME77.B.01255
	CTP	Certified according to No. C-DE.PB49.B.00420
	CEI	Following CEI 20-35
	Lead free	Following 2011/65/EC (RoHS-II)
	Clean room	According to ISO Class 2. Outer jacket material complies with CF5.10.07, tested by IPA according to standard 14644-1
	CE	Following 2006/95/EC

Guaranteed lifetime according to guarantee conditions (Page 22-25)

Double strokes*	Temperature, from/to [°C]	v max. [m/s]		a max. [m/s ²]	Travel distance [m]	5 million	7.5 million	10 million
		unsupported	gliding			R min. [factor x d]	R min. [factor x d]	R min. [factor x d]
+5 / +15					≤ 10	12.5	13.5	14.5
+15 / +60		10	2	50		10	11	12
+60 / +70						12.5	13.5	14.5

* higher number of double strokes possible

Typical application areas

- For medium duty applications
- Light oil influence
- Preferably indoor applications, but also outdoor ones at temperatures > 5 °C
- Unsupported travel distances and up to 10 m for gliding applications
- Wood/stone processing, packaging industry, supply systems, handling, adjusting equipment

... no minimum order quantity ...

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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]
1 Control pair shielded				
CF210.UL.15.15.02.01	(4 G 1.5+(2x1.5)C)C	12.0	164	263
CF210.UL.25.15.02.01	(4 G 2.5+(2x1.5)C)C	13.5	223	340
CF210.UL.40.15.02.01	(4 G 4.0+(2x1.5)C)C	15.0	300	448
CF210.UL.60.15.02.01	(4 G 6.0+(2x1.5)C)C	16.5	401	557
2 Control pairs shielded				
CF210.UL.15.07.02.02	(4 G 1.5+2x(2x0.75)C)C	13.5	185	309
CF210.UL.25.15.02.02	(4 G 2.5+2x(2x1.5)C)C	16.0	286	439
CF210.UL.40.15.02.02	(4 G 4.0+2x(2x1.5)C)C	17.0	363	543
CF210.UL.60.15.02.02	(4 G 6.0+2x(2x1.5)C)C	18.5	468	674

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.UL.25.15.02.01 – 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

 Online order ► www.chainflex.eu/CF210UL

 Delivery time 24h or today.
Delivery time means time until shipping of goods.

 EPLAN download, configurators ► www.igus.eu/CF210UL

1,040 types from stock no cutting costs ...

(up to 10 cuts of the same types)

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




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New!

- For medium duty applications
- PVC outer jacket
- Shielded
- Oil-resistant
- Flame-retardant

Dynamic information

	Bending radius	e-chain®	minimum 10 x d
		flexible	minimum 8 x d
		fixed	minimum 5 x d
	Temperature	e-chain®	+5 °C to +70 °C
		flexible	-5 °C to +70 °C (following EN 60811-504)
		fixed	-15 °C to +70 °C (following DIN EN 50305)
	v max.	unsupported	10 m/s
		gliding	2 m/s
	a max.		50 m/s ²
	Travel distance	Unsupported travel distances and up to 10 m for gliding applications, Class 2	

Cable structure

	Conductor	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	Power cores with control pair elements stranded with elements for high tensile stresses.
	Core identification	Power cores: 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- Control pair: Cores black with white numerals. 1. Control core: 5 2. Control core: 6 Bus element: white, blue
	Element shield	Bending-resistant braiding made of tinned copper wires. Coverage approx. 55% linear, approx. 80% optical.
	Intermediate layer	Foil taping over the external layer.
	Overall shield	Bending-resistant braiding made of tinned copper wires. 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 e-chains® (following DIN VDE 0281 Part 13). Colour: Pastel orange (similar to RAL 2003)



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1,040 types from stock no cutting costs ...













(up to 10 cuts of the same types)

Class 4.2.2 4 medium duty applications 2 travel distance up to 10 m 2 oil-resistant

Electrical information

	Nominal voltage	600/1000 V (following DIN VDE 0250)
	Testing voltage	4000 V (following DIN EN 50396)

Properties and approvals

	UV-resistance	Medium
	Oil	Oil-resistant (following DIN EN 50363-4-1), Class 2
	Flame retardant	According to IEC 60332-1-2, CEI 20-35, FT1
	Silicon-free	Free from silicon which can affect paint adhesion (following PV 3.10.7 – status 1992)
	UL/CSA	Style 10989 and 2570, 1000 V, 80 °C
	NFFPA	Following NFFPA 79-2012 chapter 12.9
	EAC	Certified according to No. TC RU C-DE.ME77.B.01255
	CTP	Certified according to No. C-DE.PB49.B.00420
	CEI	Following CEI 20-35
	Lead free	Following 2011/65/EC (RoHS-II)
	Clean room	According to ISO Class 2. Outer jacket material complies with CF5.10.07, tested by IPA according to standard 14644-1
	CE	Following 2006/95/EC

Guaranteed lifetime according to guarantee conditions (Page 22-25)

Double strokes*	Temperature, from/to [°C]	v max. [m/s]		Travel distance [m]	5 million	7.5 million	10 million
		unsupported	gliding		R min. [factor x d]	R min. [factor x d]	R min. [factor x d]
+5 / +15				≤ 10	12.5	13.5	14.5
+15 / +60		10	2	50	10	11	12
+60 / +70					12.5	13.5	14.5

* Higher number of double strokes possible - please ask for your individual calculation.

Typical application areas

- For medium duty applications
- Light oil influence
- Preferably indoor applications, but also outdoor ones at temperatures > 5 °C
- Unsupported travel distances and up to 10 m for gliding applications
- Wood/stone processing, packaging industry, supply systems, handling, adjusting equipment

... no minimum order quantity ...

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IGUS® CHAINFLEX® CF220.UL.H



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]	Part No.	Hybrid type
New CF220.UL.H100.07.04 ^{1.8)}	(4G0.75+(2x0.34)C +(2xAWG22)C)C	12.0	117	221	CF220.UL.H100.07.04	SICK, Hiperface DSL
New CF220.UL.H101.10.04 ^{1.8)}	(4G1.0+(2x0.75)C +(2xAWG22)C)C	12.5	139	257	CF220.UL.H101.10.04	SICK, Hiperface DSL
New CF220.UL.H101.15.04 ^{1.8)}	(4G1.5+(2x0.75)C +(2xAWG22)C)C	13.5	159	294	CF220.UL.H101.15.04	SICK, Hiperface DSL
New CF220.UL.H102.25.04 ^{1.8)}	(4G2.5+(2x1.0)C +(2xAWG22)C)C	15.0	217	362	CF220.UL.H102.25.04	SICK, Hiperface DSL

^{1.8)} Delivery time: 8 weeks

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: **CF220.UL.H101.10.04** – in your desired length (0.5 m steps)
CF220.UL chainflex® series .H1 Code hybrid bus element .01 Code nominal cross section braking pair
.10 Nominal cross section main cores .04 Number of main cores



Online order ► www.chainflex.eu/CF220ULH



Delivery time 24h or today.
Delivery time means time until shipping of goods.



EPLAN download, configurators ► www.igus.eu/CF220ULH

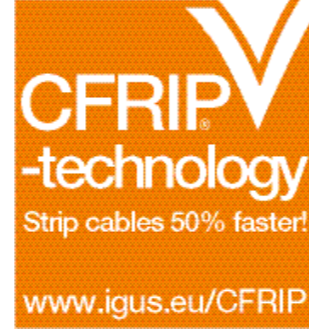
1,040 types from stock no cutting costs ...

(up to 10 cuts of the same types)

... no minimum order quantity ...

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- For heavy duty applications
- PVC outer jacket
- Shielded
- Oil-resistant
- Flame-retardant

Dynamic information

	Bending radius	e-chain®	minimum 7.5 x d
		flexible	minimum 6 x d
		fixed	minimum 4 x d
	Temperature	e-chain®	+5 °C to +70 °C
		flexible	-5 °C to +70 °C (following EN 60811-504)
		fixed	-15 °C to +70 °C (following DIN EN 50305)
	v max.	unsupported	10 m/s
	a max.	gliding	5 m/s
	Travel distance	Unsupported travel distances and up to 100 m for gliding applications, Class 5	

Cable structure

	Conductor	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	Power cores with control pair elements stranded with elements for high tensile stresses.
	Core identification	Power cores: 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 core: 4 2. Control core: 5 2 Control pairs: Core black with white numerals. 1. Control core: 5 2. Control core: 6 3. Control core: 7 4. Control core: 8
	Element shield	Extremely bending-resistant braiding made of tinned copper wires. Coverage approx. 70% linear, approx. 90% optical.
	Inner jacket	PVC mixture adapted to suit the requirements in e-chains®.
	Overall shield	Extremely bending-resistant braiding made of tinned copper wires. 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 e-chains® (following DIN VDE 0281 Part 13). Colour Moss green (comparable RAL 6005).
	CFRIP®	Strip cables 50% faster: The tear strip is in the inner jacket Video ► www.igus.eu/CFRIP

EPLAN download, configurators ► www.igus.eu/CF21UL

1,040 types from stock no cutting costs ...

(up to 10 cuts of the same types)

Class 5.5.2 5 heavy duty applications 5 travel distance up to 100 m 2 oil-resistant

Electrical information

	Nominal voltage	600/1000 V (following DIN VDE 0250)
	Testing voltage	4000 V (following DIN EN 50396)

Properties and approvals

	UV-resistance	Medium
	Oil	Oil-resistant (following DIN EN 50363-4-1), Class 2
	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)
	UL/CSA	Style 10492 and 2570, 1000 V, 80 °C
	NFFPA	Following NFFPA 79-2012 chapter 12.9
	EAC	Certified according to No. TC RU C-DE.ME77.B.01255
	CTP	Certified according to No. C-DE.PB49.B.00420
	CEI	Following CEI 20-35
	Lead free	Following 2011/65/EC (RoHS-II)
	Clean room	According to ISO Class 2. Outer jacket material complies with CF5.10.07, tested by IPA according to standard 14644-1
	CE	Following 2006/95/EC

Guaranteed lifetime according to guarantee conditions (Page 22-25)

Double strokes*	Temperature, from/to [°C]	v max. [m/s]		Travel distance [m]	5 million	7.5 million	10 million
		unsupported	gliding		R min. [factor x d]	R min. [factor x d]	R min. [factor x d]
+5 / +15				≤ 100	10	11	12
+15 / +60		10	5	80	7.5	8.5	9.5
+60 / +70					10	11	12

* Higher number of double strokes possible - please ask for your individual calculation.

Typical application areas

- For heavy duty applications
- Light oil influence
- Preferably indoor applications, but also outdoor ones at temperatures > 5 °C
- Unsupported travel distances and up to 100 m for gliding applications
- Storage and retrieval units for high-bay warehouses, machining units/packages machines, quick handling, indoor cranes

Test data ► Page 56

... no minimum order quantity ...

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Strip cables 50 % faster

IGUS® CHAINFLEX® CF21.UL

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]
1 Control pair shielded				
CF21.07.05.02.01.UL	(4 G 0.75+(2x0.5)C)C	11.5	87	189
CF21.15.15.02.01.UL	(4 G 1.5+(2x1.5)C)C	13.0	159	281
CF21.25.15.02.01.UL	(4 G 2.5+(2x1.5)C)C	14.5	2175	348
CF21.40.15.02.01.UL	(4 G 4.0+(2x1.5)C)C	16.0	282	440
CF21.60.15.02.01.UL	(4 G 6.0+(2x1.5)C)C	18.0	368	581
CF21.100.15.02.01.UL	(4 G 10.0+(2x1.5)C)C	22.5	586	910
CF21.160.15.02.01.UL ^{1.6)}	(4 G 16.0+(2x1.5)C)C	25.0	842	1208
CF21.250.15.02.01.UL ^{1.6)}	(4 G 25.0+(2x1.5)C)C	30.0	1282	1802
CF21.350.15.02.01.UL ^{1.6)}	(4 G 35.0+(2x1.5)C)C	33.5	1749	2379
2 Control pairs shielded				
CF21.07.03.02.02.UL	(4 G 0.75+2x(2x0.34)C)C	12.5	116	230
CF21.10.07.02.02.UL	(4 G 1.0+2x(2x0.75)C)C	13.5	168	293
CF21.15.07.02.02.UL	(4 G 1.5+2x(2x0.75)C)C	14.5	192	340
CF21.25.15.02.02.UL	(4 G 2.5+2x(2x1.5)C)C	17.0	285	476
CF21.40.15.02.02.UL	(4 G 4.0+2x(2x1.5)C)C	18.5	346	560
CF21.60.15.02.02.UL	(4 G 6.0+2x(2x1.5)C)C	21.5	450	754
CF21.100.15.02.02.UL	(4 G 10.0+2x(2x1.5)C)C	24.0	654	1016
CF21.160.15.02.02.UL	(4 G 16.0+2x(2x1.5)C)C	27.5	959	1393
CF21.250.15.02.02.UL	(4 G 25.0+2x(2x1.5)C)C	31.0	1359	1919
CF21.350.15.02.02.UL	(4 G 35.0+2x(2x1.5)C)C	34.0	1810	2442

^{1.6)} Delivery time: 6 weeks

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



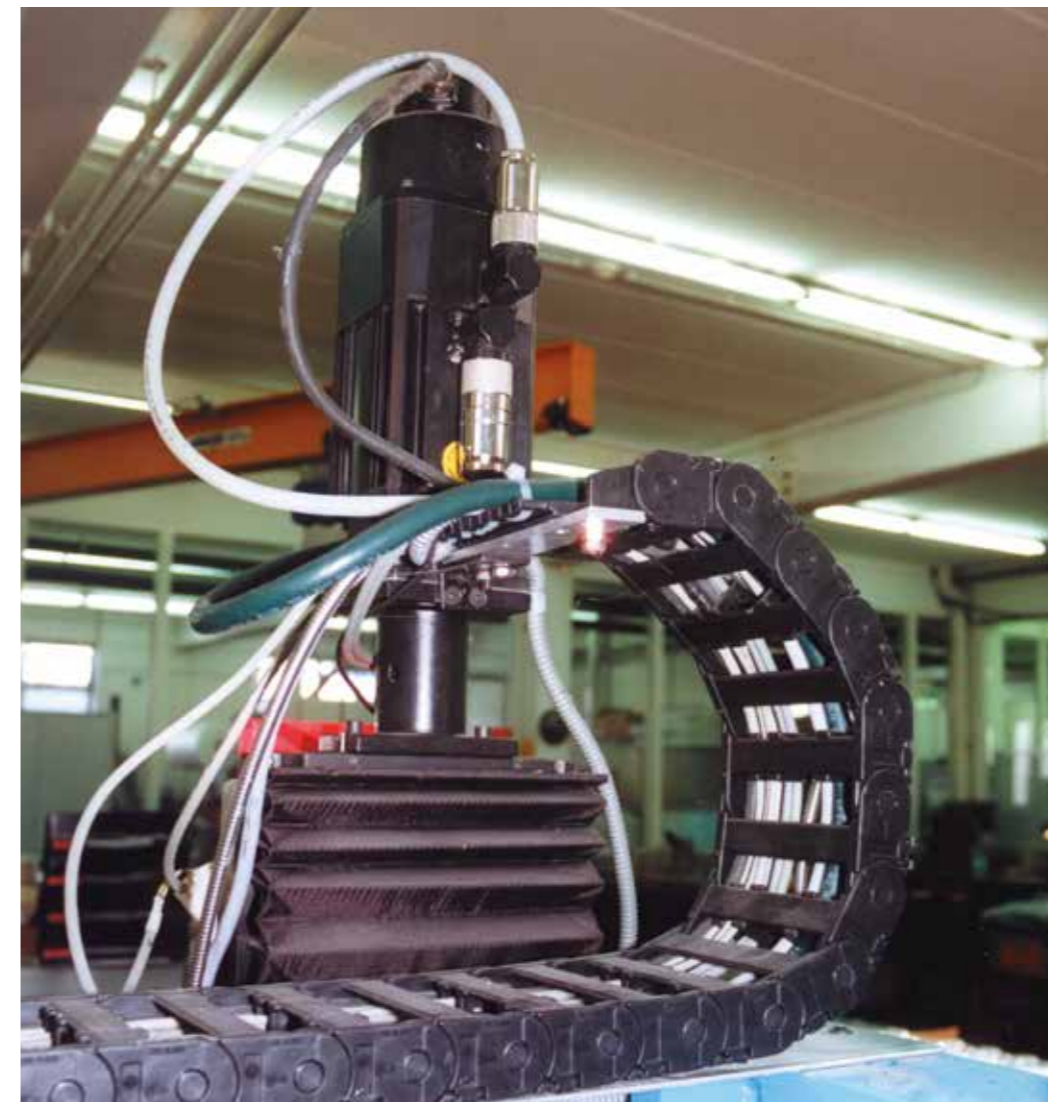
Order example: CF21.15.15.02.01.UL – in your desired length (0.5 m steps)
CF21.UL chainflex® series .15 Code nominal cross section .15 Code nominal cross section signal pairs
.02 Identification pairs .01 Number of pairs



Online order ► www.chainflex.eu/CF21UL



Delivery time 24h or today.
Delivery time means time until shipping of goods.



chainflex® CF21.UL: cables for supply systems in spinneret production.
e-chain®: Serie E2/000

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




(up to 10 cuts of the same types)










- For flexing applications
- iguPUR outer jacket
- Shielded
- Oil-resistant
- Flame-retardant

**chainflex® M -
5 million double
strokes. Guaranteed.**



Dynamic information

	Bending radius	e-chain®	minimum 15 x d
		flexible	minimum 12 x d
		fixed	minimum 8 x d
	Temperature	e-chain®	-20 °C to +80 °C
		flexible	-40 °C to +80 °C (following EN 60811-504)
		fixed	-50 °C to +80 °C (following DIN EN 50305)
	v max.	unsupported	3 m/s
	a max.	gliding	20m/s²
	Travel distance	Unsupported travel distances.	

Cable structure

	Conductor	Conductor consisting of bare copper wires (according to EN 60228).	
	Core insulation	Mechanically high-quality, especially low-capacitance TPE mixture.	
	Core stranding	Cores and signal pair elements stranded together in an optimized pitch length.	
	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: 5 2. Control core: 6	
	Element shield	Foil taping of optimized, bending-resistant foil shield. Coverage approx. 100% optical.	
	Overall shield	Braiding made of tinned copper wires. Coverage approx. 60% optical.	
	Outer jacket	Low-adhesion mixture on the basis of iguPUR, adapted to suit the requirements in e-chains®. Colour: Pastel orange (similar to RAL 2003)	

Electrical information

	Nominal voltage	600/1000 V (following DIN VDE 0250)
	Testing voltage	4000 V (following DIN EN 50396)

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1,040 types from stock no cutting costs ...

(up to 10 cuts of the same types)












Class 3.1.3

3 low duty applications

1 unsupported travels

3 oil-resistant

Properties and approvals

	UV-resistance	Medium
	Flame retardant	According to IEC 60332-1-2, CEI 20-35, VW-1, FT-1
	Oil	Oil-resistant (following DIN EN 50363-10-2)
	Silicon-free	Free from silicon which can affect paint adhesion (following PV 3.10.7 – status 1992).
	UL/CSA	Style 10492 and 21223, 1000V, 80°C
	NFFPA	Following NFFPA 79-2012 chapter 12.9
	EAC	Certified according to No. TC RU C-DE.ME77.B.01561
	CTP	Certified according to No. C-DE.PB49.B.00450
	Lead free	Following 2011/65/EC (RoHS-II)
	DESINA	According to VDW, DESINA standardisation
	CE	Following 2006/95/EC

Guaranteed lifetime according to guarantee conditions (Page 22-25)

Double strokes*				1 million	3 million	5 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]
-20 / -10				17.5	18.5	19.5
-10 / +70	3	20	≤ 10	15	16	17
+70 / +80				17.5	18.5	19.5

* Higher number of double strokes possible - please ask for your individual calculation.

Typical application areas

- For flexing applications
- With influence of oil
- Indoor and outdoor applications without direct sun radiation
- Especially for unsupported travel distances
- Machining units/machine tools, low temperature applications

Delivery program Part No.	Number of cores and conductor nominal cross section [mm²]	External diameter max. [mm]	Copper index [kg/km]	Weight [kg/km]
CF897.15.15.02.01	(4G1.5+(2x1.5)C)C	12.5	132	202
CF897.25.15.02.01	(4G2.5+(2x1.5)C)C	13.5	194	271
CF897.40.15.02.01	(4G4.0+(2x1.5)C)C	14.5	252	353

Other types available on request.

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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PUR Servo cable | CF270.UL.D

- For medium duty applications
- PUR outer jacket
- Shielded
- Oil-resistant and coolant-resistant
- Notch-resistant
- Flame-retardant
- Hydrolysis-/microbe-resistant
- PVC-free/halogen-free

Dynamic information

	Bending radius	e-chain®	minimum 10 x d
		flexible	minimum 8 x d
		fixed	minimum 5 x d
	Temperature	e-chain®	-25 °C to +80 °C
		flexible	-40 °C to +80 °C (following EN 60811-504)
		fixed	-50 °C to +80 °C (following DIN EN 50305)
	v max.	unsupported	10 m/s
		gliding	2 m/s
	a max.		50m/s²
	Travel distance	Unsupported travel distances and up to 10 m for gliding applications, Class 2	

Cable structure

	Conductor	Stranded conductor in bending-resistant version consisting of bare copper wires (following EN 60228). Single core: Conductor cable consisting of pre-leads (following EN 60228)
	Core insulation	Mechanically high-quality, especially low-capacitance TPE mixture.
	Core stranding	Power cores with control pair elements stranded with elements for high tensile stresses.
	Core identification	Power cores: 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 core: 4 2. Control core: 5 2 Control pairs: Core black with white numerals. 1. Control core: 5 2. Control core: 6 3. Control core: 7 4. Control core: 8 1 Control triple: Cores black with white numerals. 1. Control core: 1 2. Control core: 2 3. Control core: 3 Star-quad: yellow, black, red, white
	Element shield	Bending-resistant braiding made of tinned copper wires. Coverage approx. 55% linear, approx. 80% optical.
	Intermediate layer	Foil taping over the external layer.
	Overall shield	Bending-resistant braiding made of tinned copper wires. 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: Pastel orange (similar to RAL 2003)

1,040 types from stock no cutting costs ...

(up to 10 cuts of the same types)

Image exemplary.

Class 4.2.3 4 medium duty applications 2 travel distance up to 10 m 3 oil-resistant

Electrical information

	Nominal voltage	600/1000 V (following DIN VDE 0250)
	Testing voltage	4000 V (following DIN EN 50396)

Properties and approvals

	UV-resistance	Medium
	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	Style 10989 and 21223, 1000 V, 80 °C Spindle cable/Single core: Style 10492 and 10973, 1000 V, 80 °C
	NFFPA	Following NFFPA 79-2012 chapter 12.9
	EAC	Certified according to No. TC RU C-DE.ME77.B.01255
	CTP	Certified according to No. C-DE.PB49.B.00420
	CEI	Following CEI 20-35
	Lead free	Following 2011/65/EC (RoHS-II)
	Clean room	According to ISO Class 1. Outer jacket material complies with CF27.07.05.02.01.D, tested by IPA according to standard 14644-1.
	DESINA	According to VDW, DESINA standardisation
	CE	Following 2006/95/EC

Guaranteed lifetime according to guarantee conditions (Page 22-25)

Double strokes*	Temperature, from/to [°C]	v max. [m/s]		a max. [m/s²]	Travel distance [m]	5 million	7.5 million	10 million
		unsupported	gliding			R min. [factor x d]	R min. [factor x d]	R min. [factor x d]
-25 / -15					≤ 10	12.5	13.5	14.5
-15 / +70		10	2	50		10	11	12
+70 / +80						12.5	13.5	14.5

* higher number of double strokes possible

Typical application areas

- For medium duty applications
- Almost unlimited resistance to oil
- Indoor and outdoor applications without direct sun radiation
- Unsupported travel distances and up to 10 m for gliding applications
- Machining units/machine tools, low temperature applications

... no minimum order quantity ...

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IGUS® CHAINFLEX® CF270.UL.D

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]
1 Control pair shielded				
CF270.UL.15.15.02.01.D	(4 G 1.5+(2x1.5)C)C	12.0	164	263
CF270.UL.25.15.02.01.D	(4 G 2.5+(2x1.5)C)C	13.5	223	340
CF270.UL.40.15.02.01.D	(4 G 4.0+(2x1.5)C)C	15.0	300	448
CF270.UL.60.15.02.01.D	(4 G 6.0+(2x1.5)C)C	16.5	401	557
CF270.UL.100.15.02.01.D	(4 G 10.0+(2x1.5)C)C	20.5	640	899
CF270.UL.160.15.02.01.D	(4 G 16.0+(2x1.5)C)C	24.0	941	1311
CF270.UL.250.15.02.01.D	(4 G 25.0+(2x1.5)C)C	28.5	1445	1704
2 Control pairs shielded				
CF270.UL.07.03.02.02.D	(4 G 0.75+2x(2x0.34)C)C	11.5	117	208
CF270.UL.10.07.02.02.D	(4 G 1.0+2x(2x0.75)C)C	13.0	157	266
CF270.UL.15.07.02.02.D	(4 G 1.5+2x(2x0.75)C)C	13.5	185	309
CF270.UL.25.15.02.02.D	(4 G 2.5+2x(2x1.5)C)C	16.0	286	439
CF270.UL.40.15.02.02.D	(4 G 4.0+2x(2x1.5)C)C	17.0	363	543
CF270.UL.60.15.02.02.D	(4 G 6.0+2x(2x1.5)C)C	18.5	468	674
CF270.UL.100.15.02.02.D	(4 G 10.0+2x(2x1.5)C)C	22.5	696	1011
CF270.UL.160.15.02.02.D	(4 G 16.0+2x(2x1.5)C)C	26.0	992	1405
CF270.UL.250.15.02.02.D	(4 G 25.0+2x(2x1.5)C)C	28.5	1502	1983
CF270.UL.350.15.02.02.D ^{1.6)}	(4 G 35.0+2x(2x1.5)C)C	35.0	1984	2696
1 Control triple shielded				
CF270.UL.15.10.03.01.D ⁹⁾	(4 G 1.5+(3x1.0)C)C	14.0	176	303
CF270.UL.25.10.03.01.D ¹⁰⁾	(4 G 2.5+(3x1.0)C)C	14.0	224	348
1 Star-quad shielded				
CF270.UL.25.05.04.D	(4 G 2.5+(4x0.5)C)C	13.5	209	297
CF270.UL.60.05.04.D	(4 G 6.0+(4x0.5)C)C	16.5	384	546
without control pair				
CF270.UL.15.04.D	(4 G 1.5)C	9.5	90	156
CF270.UL.25.04.D	(4 G 2.5)C	11.5	154	240
CF270.UL.40.04.D	(4 G 4.0)C	12.5	231	337
CF270.UL.60.04.D	(4 G 6.0)C	14.5	337	465
CF270.UL.100.04.D	(4 G 10.0)C	18.0	545	747
CF270.UL.160.04.D	(4 G 16.0)C	22.0	861	1130
CF270.UL.250.04.D	(4 G 25.0)C	25.5	1316	1691
CF270.UL.350.04.D	(4 G 35.0)C	33.0	1864	2483

^{1.6)} Delivery time: 6 weeks

⁹⁾ Core/Core: 50 pF/m, Corer/Shield: 95 pF/m

¹⁰⁾ Core/Core: 70 pF/m, Core/Shield: 115 pF/m

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

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]
Spindle cable/Single core				
CF270.UL.100.01.D	(1 x 10.0)C	8.5	121	152
CF270.UL.160.01.D ^{1.6)}	(1 x 16.0)C	9.5	187	218
CF270.UL.250.01.D ^{1.6)}	(1 x 25.0)C	11.0	288	323
CF270.UL.350.01.D ^{1.6)}	(1 x 35.0)C	13.0	400	442
CF270.UL.500.01.D	(1 x 50.0)C	15.0	566	619
CF270.UL.700.01.D	(1 x 70.0)C	17.5	810	862

^{1.6)} Delivery time: 6 weeks

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

Detailed information about "Spindle cable/Single core" ► Page 342



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1,040 types from stock no cutting costs ...

(up to 10 cuts of the same types)

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New!

- For medium duty applications
- PUR outer jacket
- Shielded
- Oil-resistant and coolant-resistant
- Notch-resistant
- Flame-retardant
- Hydrolysis-/microbe-resistant
- PVC-free/halogen-free

Dynamic information

	Bending radius	e-chain®	minimum 10 x d
		flexible	minimum 8 x d
		fixed	minimum 5 x d
	Temperature	e-chain®	-25 °C to +80 °C
		flexible	-40 °C to +80 °C (following EN 60811-504)
		fixed	-50 °C to +80 °C (following DIN EN 50305)
	v max.	unsupported	10 m/s
		gliding	2 m/s
	a max.		50m/s²
	Travel distance	Unsupported travel distances and up to 10 m for gliding applications, Class 2	

Cable structure

	Conductor	Stranded conductor in bending-resistant version consisting of bare copper wires (following EN 60228). Single core: Conductor cable consisting of pre-leads (following EN 60228)
	Core insulation	Mechanically high-quality, especially low-capacitance TPE mixture.
	Core stranding	Power cores with control pair elements stranded with elements for high tensile stresses.
	Core identification	Power cores: 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- Control pair: Cores black with white numerals. 1. Control core: 5 2. Control core: 6 Bus element: white, blue
	Element shield	Bending-resistant braiding made of tinned copper wires. Coverage approx. 55% linear, approx. 80% optical.
	Intermediate layer	Foil taping over the external layer.
	Overall shield	Bending-resistant braiding made of tinned copper wires. 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: Pastel orange (similar to RAL 2003)

Electrical information

	Nominal voltage	600/1000 V (following DIN VDE 0250)
	Testing voltage	4000 V (following DIN EN 50396)

1,040 types from stock no cutting costs ...

(up to 10 cuts of the same types)

Class 4.2.3 4 medium duty applications 2 travel distance up to 10 m 3 oil-resistant

Properties and approvals

	UV-resistance	Medium
	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	Style 10989 and 21223, 1000 V, 80 °C Spindle cable/Single core: Style 10492 and 10973, 1000 V, 80 °C
	NFFPA	Following NFFPA 79-2012 chapter 12.9
	EAC	Certified according to No. TC RU C-DE.ME77.B.01255
	CTP	Certified according to No. C-DE.PB49.B.00420
	CEI	Following CEI 20-35
	Lead free	Following 2011/65/EC (RoHS-II)
	Clean room	According to ISO Class 1. Outer jacket material complies with CF27.07.05.02.01.D, tested by IPA according to standard 14644-1.
	DESINA	According to VDW, DESINA standardisation
	CE	Following 2006/95/EC

Guaranteed lifetime according to guarantee conditions (Page 22-25)

Double strokes*	Temperature, from/to [°C]	v max. [m/s]		a max. [m/s²]	Travel distance [m]	5 million	7.5 million	10 million
		unsupported	gliding			R min. [factor x d]	R min. [factor x d]	R min. [factor x d]
	-25 / -15				≤ 10	12.5	13.5	14.5
	-15 / +70	10	2	50		10	11	12
	+70 / +80					12.5	13.5	14.5

* Higher number of double strokes possible - please ask for your individual calculation.

Typical application areas

- For medium duty applications
- Almost unlimited resistance to oil
- Indoor and outdoor applications without direct sun radiation
- Unsupported travel distances and up to 10 m for gliding applications
- Machining units/machine tools, low temperature applications

... no minimum order quantity ...

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IGUS® CHAINFLEX® CF280.UL.H



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]	Part No.	Hybrid type
New CF280.UL.H100.07.04.D ^{1.8)}	(4G0.75+(2x0.34)C +(2xAWG22)C)C	12.0	117	207	CF280.UL.H100.07.04.D ^{1.x)}	SICK, Hiperface DSL
New CF280.UL.H101.10.04.D	(4G1.0+(2x0.75)C +(2xAWG22)C)C	12.5	139	233	CF280.UL.H101.10.04.D	SICK, Hiperface DSL
New CF280.UL.H101.15.04.D	(4G1.5+(2x0.75)C +(2xAWG22)C)C	13.5	159	278	CF280.UL.H101.15.04.D	SICK, Hiperface DSL
New CF280.UL.H102.25.04.D	(4G2.5+(2x1.0)C +(2xAWG22)C)C	15.0	217	338	CF280.UL.H102.25.04.D	SICK, Hiperface DSL
New CF280.UL.H200.15.07.D	(7x1.5+(2x0.75)C)C	16.5	216	368	CF280.UL.H200.15.07.D	SEW, Hybrid cable, cable type A
New CF280.UL.H201.15.04.D ^{1.8)}	4G1.5+(2x0.75)C +(3x0.75)C	14.0	148	281	CF280.UL.H201.15.04.D ^{1.8)}	SEW, Hybrid cable, cable type B/1,5
New CF280.UL.H201.25.04.D ^{1.8)}	4G2.5+(2x0.75)C +(3x0.75)C	15.0	195	330	CF280.UL.H201.25.04.D ^{1.8)}	SEW, Hybrid cable, cable type B/2,5
New CF280.UL.H203.15.04.D	(4G1.5+(3x1.0)C)C	12.0	169	264	CF280.UL.H203.15.04.D	SEW, Hybrid cable, cable type E/1,5
New CF280.UL.H203.25.04.D	(4G2.5+(3x1.0)C)C	14.0	206	323	CF280.UL.H203.25.04.D	SEW, Hybrid cable, cable type E/2,5
New CF280.UL.H204.15.04.D	(4G1.5+(2x0.75)C +(3x1.0)C)C	15.0	214	354	CF280.UL.H204.15.04.D	SEW, Hybrid cable, cable type D/1,5
New CF280.UL.H206.60.04.D	(4G6.0+(2x0.75)C +(3x1.5)C)C	19.5	460	677	CF280.UL.H206.60.04.D	SEW, Hybrid cable, cable type D/6,0

^{1.8)} Delivery time: 8 weeks

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



EPLAN download, configurators ► www.igus.eu/CF280ULH

1,040 types from stock no cutting costs ...

(up to 10 cuts of the same types)

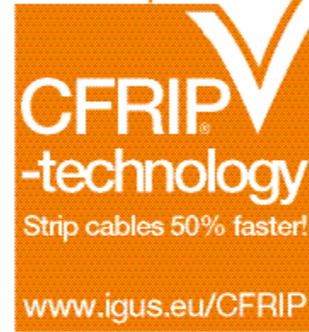
... no minimum order quantity ...

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



PUR Servo cable | CF27.D

Product improvement!



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

Dynamic information

	Bending radius	e-chain®	minimum 7.5 x d
		flexible	minimum 6 x d
		fixed	minimum 4 x d
	Temperature	e-chain®	-25 °C to +80 °C
		flexible	-40 °C to +80 °C (following EN 60811-504)
		fixed	-50 °C to +80 °C (following DIN EN 50305)
	v max.	unsupported	10 m/s
		gliding	5 m/s
	a max.		80 m/s ²
	Travel distance	Unsupported travel distances and up to 100 m for gliding applications, Class 5	

Cable structure

	Conductor	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 identification	Power cores: 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 core: 4 2. Control core: 5 2 Control pairs: Core 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
	Core stranding	Power cores with control pair elements stranded with elements for high tensile stresses.
	Element shield	Extremely bending-resistant braiding made of tinned copper wires. Coverage approx. 70% linear, approx. 90% optical.
	Inner jacket	TPE mixture adapted to suit the requirements in e-chains®.
	Overall shield	Extremely bending-resistant braiding made of tinned copper wires. 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 e-chains® (following DIN VDE 0282 Part 10). Colour: Pastel orange (similar to RAL 2003)
	CFRIP®	Strip cables 50% faster: The tear strip is in the inner jacket Video ► www.igus.eu/CFRIP

1,040 types from stock no cutting costs ...

(up to 10 cuts of the same types)

Class 6.5.3 6 extremely heavy duty applications 5 travel distance up to 100 m 3 oil-resistant

Electrical information

	Nominal voltage	600/1000 V (following DIN VDE 0250)
	Testing voltage	4000 V (following DIN EN 50396)

Properties and approvals

	UV-resistance	Medium
	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	Style 10492 and 20234, 1000 V, 80 °C
	NFFPA	Following NFPA 79-2012 chapter 12.9
	GL	Certified according to GL Type Testing – Certificate No.: 61 938-14 HH
	EAC	Certified according to No. TC RU C-DE.ME77.B.01255
	CTP	Certified according to No. C-DE.PB49.B.00420
	CEI	Following CEI 20-35
	Lead free	Following 2011/65/EC (RoHS-II)
	Clean room	According to ISO Class 1. Outer jacket material complies with CF27.07.05.02.01.D, tested by IPA according to standard 14644-1
	DESINA	According to VDW, DESINA standardisation
	CE	Following 2006/95/EC

Guaranteed lifetime according to guarantee 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/s ²] gliding	Travel distance [m]	R min. [factor x d]	R min. [factor x d]	R min. [factor x d]
-25 / -15				≤ 100	10	11	12
-15 / +70	10	5	80		7.5	8.5	8.5
+70 / +80					10	11	12

* Higher number of double strokes possible - please ask for your individual calculation.

Typical application areas

- For extremely heavy duty applications
- Almost unlimited resistance to oil
- Indoor and outdoor applications, UV-resistant
- Unsupported travel distances and up to 100 m for gliding applications
- Storage and retrieval units for high-bay warehouses, machining units/machine tools, quick handling, clean room, semiconductor insertion, outdoor cranes, low-temperature applications



Strip cables 50 % faster

IGUS® CHAINFLEX® CF27.D


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]
1 Control pair shielded				
CF27.07.05.02.01.D	(4 G 0.75+(2x0.5)C)C	11.5	95	175
CF27.15.15.02.01.D	(4 G 1.5+(2x1.5)C)C	13.0	144	260
CF27.25.15.02.01.D	(4 G 2.5+(2x1.5)C)C	14.5	199	325
CF27.40.15.02.01.D	(4 G 4.0+(2x1.5)C)C	16.0	257	402
CF27.60.15.02.01.D	(4 G 6.0+(2x1.5)C)C	17.5	357	580
CF27.100.15.02.01.D	(4 G 10.0+(2x1.5)C)C	21.5	540	900
CF27.160.15.02.01.D	(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	1140	1523
CF27.350.15.02.01.D	(4 G 35.0+(2x1.5)C)C	32.5	1560	2079
2 Control pairs shielded				
CF27.07.03.02.02.D	(4 G 0.75+2x(2x0.34)C)C	12.5	105	206
CF27.10.07.02.02.D	(4 G 1.0+2x(2x0.75)C)C	13.5	152	265
CF27.15.07.02.02.D	(4 G 1.5+2x(2x0.75)C)C	14.0	175	300
CF27.25.15.02.02.D	(4 G 2.5+2x(2x1.5)C)C	16.5	265	412
CF27.40.15.02.02.D	(4 G 4.0+2x(2x1.5)C)C	18.0	314	485
CF27.60.15.02.02.D	(4 G 6.0+2x(2x1.5)C)C	20.0	410	643
CF27.100.15.02.02.D	(4 G 10.0+2x(2x1.5)C)C	23.5	594	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	31.0	1200	1890
CF27.350.15.02.02.D ^{1.6)}	(4 G 35.0+2x(2x1.5)C)C	33.5	1597	2150
1 Star-quad shielded				
CF27.15.05.04.D	(4 G 1.5+(4x0.5)C)C	13.0	142	310
CF27.25.05.04.D	(4 G 2.5+(4x0.5)C)C	14.5	199	348
CF27.40.05.04.D	(4 G 4.0+(4x0.5)C)C	16.0	256	480
CF27.60.05.04.D	(4 G 6.0+(4x0.5)C)C	17.5	371	550


^{1.6)} Delivery time: 6 weeks
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

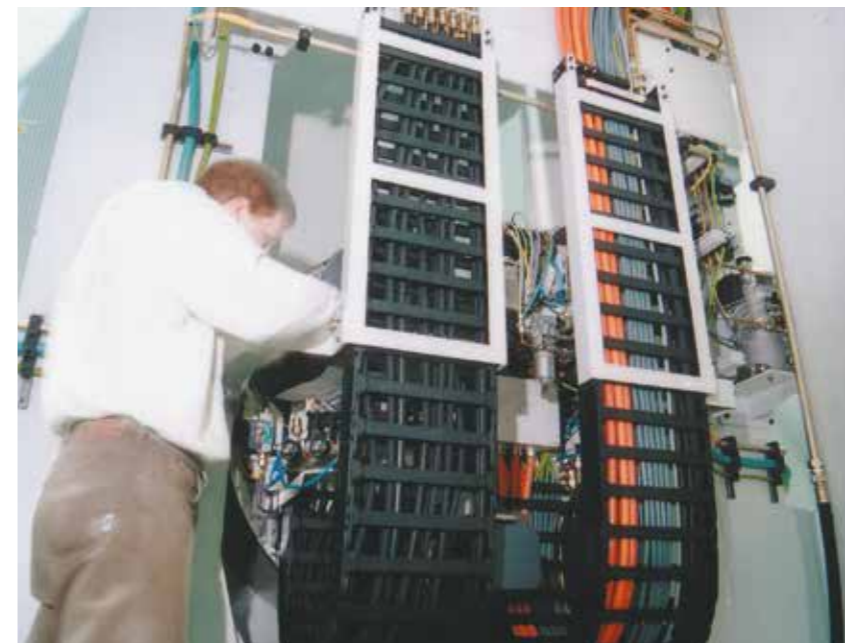
Delivery program Part No.	Number of cores and conductor nominal cross section [mm²]	External diameter max. [mm]	Copper index [kg/km]	Weight [kg/km]
Hybrid cable				
CF27.07.04.D ^{1.6)}	(4 G 0.75)C	9.5	52	113
CF27.10.04.D ^{1.6)}	(4 G 1.0)C	10.0	62	126
CF27.15.04.D	(4 G 1.5)C	10.5	86	163
CF27.25.04.D	(4 G 2.5)C	12.5	140	260
CF27.500.04.D	(4 G 50.0)C	37.0	2230	3200

^{1.6)} Delivery time: 6 weeks
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: CF27.40.10.02.01.D – in your desired length (0.5 m steps)**
 CF27 chainflex® series .40 Code nominal cross section .10 Code nominal cross section signal pairs
 .02 Identification pairs .01 Number of pairs

 Online order ► www.chainflex.eu/CF27D

 Delivery time 24h or today.
 Delivery time means time until shipping of goods.



Modular design, easy to retrofit: igus® E4 energy supply system and chainflex® cables.

... no minimum order quantity ...

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