



[igus.eu/...chainflex.cables/](https://www.igus.eu/...chainflex.cables/)...6.2009...plastics.for.longer.life...

chainflex®

lasts!

Starting at 1 m length.

No minimum order.

No cutting costs.

With warranty.

Will ship within 24 hours.












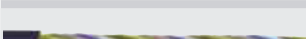
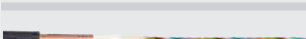
Your way through the Chainflex® catalogue

Chainflex® cable	Requirements	Travel distance	Resistance to oil
CF210.UL	4	1	2
CF270.UL.D	4	1	3
CF260	4	1	3
CF111/CF111.D	4	1	4
CF130.UL	4	2	1
CF140.UL	4	2	1
CF240	4	2	2
CF77.UL.D	5	2	3
CF78.UL	5	2	3
CF5	5	3	2
CF6	5	3	2
CF211	5	3	2
CF21.UL	5	3	2
CF30	5	3	2
CF31	5	3	2
CFLK	5	1	3
CF2	6	3	3
CF112	6	3	3
CF113/CF113.D	6	3	3
CFLG.2H	6	3	3
CF27.D	6	3	3
CF14.CAT5	6	3	4
CFCRANE	6	4	3
CF9.UL	6	4	4
CF10.UL	6	4	4
CF11/CF11.D	6	4	4
CF12	6	4	4
CF11.LC./LC.D	6	4	4
CFBUS	6	4	4
CFKOAX	6	4	4
CF34.UL.D	6	4	4
CF35.UL	6	4	4
CF300.UL.D	6	4	4
CFPE	6	4	4
CF310.UL	6	4	4
CFLG.2LB	7	3	4
CF9	7	4	4
CF10	7	4	4
CF98	7	4	4
CF99	7	4	4
CFLG.G	7	4	4
CF37.D	7	4	4
CF38	7	4	4
CF330.D	7	4	4
CF340	7	4	4

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Data, Bus, Measuring system cables, Koax cables	98
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Chainflex® types



Chainflex® cable	Jacket	Shield	Minimum bending radius, moved [factor x dj]	Temperature, moved from/to [°C]	Minimum bending radius, fixed [factor x dj]	Temperature, fixed from/to [°C]	Price index	
Control cables								
	CF130.UL	PVC		7,5-10	-5/ +70	5	-20/ +70	●●●●
	CF140.UL	PVC	✓	7,5-15	-5/ +70	5	-20/ +70	●●●●
	CF5	PVC		6,8-7,5	-5/ +70	4	-20/ +70	●●●●
	CF6	PVC	✓	6,8-7,5	-5/ +70	4	-20/ +70	●●●●
	CF77.UL.D	PUR		6,8-7,5	-35/ +80	4	-40/ +80	●●●●
	CF78.UL	PUR	✓	6,8-7,5	-35/ +80	4	-40/ +80	●●●●
	CF2	PUR	✓	5	-20/ +80	4	-40/ +80	●●●●
	CF9	TPE		5	-35/ +100	3	-40/ +100	●●●●
	CF10	TPE	✓	5	-35/ +100	3	-40/ +100	●●●●
	CF9.UL	TPE		5	-35/ +100	3	-40/ +100	●●●●
	CF10.UL	TPE	✓	5	-35/ +100	3	-40/ +100	●●●●
	CF98	TPE		4	-35/ +90	3	-40/ +90	●●●●
	CF99	TPE	✓	4	-35/ +90	3	-40/ +90	●●●●

These values are based on concrete applications or tests. These values do not represent the limit of what is technically feasible.

Get online and use all the advantages of www.igus.eu

Download the eplan-library for any type of cables

► www.igus.eu/eplan-download

Chainflex® types

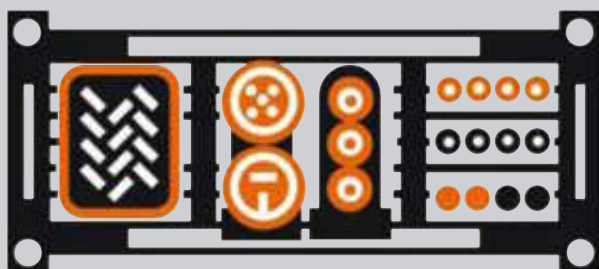


Approvals and standards	Flame-retardant	Oil-resistant	Halogen-free	UV-resistant	Torsion resistant	v max. unsupported [m/s]	v max. gliding [m/s]	a max. [m/s ²]	Number of cores	Cross section Ø [mm ²]	Page
CE RoHS UL US	✓				✓	3	2	20	2 - 25	0,25 - 6,0	54
CE RoHS UL US	✓					3	2	20	3 - 36	0,25 - 2,5	58
CE RoHS Clean Room UL US	✓	✓		✓	✓	10	5	80	2 - 42	0,25 - 2,5	62
CE RoHS Clean Room UL US	✓	✓		✓		10	5	80	3 - 25	0,25 - 2,5	66
CE RoHS UL US	✓	✓	✓	✓	✓	10	5	80	2 - 30	0,50 - 4,0	70
CE RoHS UL US	✓	✓	✓	✓		10	5	80	3 - 24	0,50 - 4,0	72
CE RoHS UL US	✓	✓		✓		10	5	80	3 - 48	0,14 - 1,5	74
CE RoHS Clean Room		✓	✓	✓	✓	10	6	100	2 - 36	0,25 - 35,0	78
CE RoHS Clean Room		✓	✓	✓		10	6	100	2 - 25	0,14 - 4,0	82
CE RoHS Clean Room UL US	✓	✓		✓	✓	10	6	100	2 - 36	0,25 - 6,0	86
CE RoHS Clean Room UL US	✓	✓		✓		10	6	100	2 - 25	0,25 - 4,0	90
CE RoHS Clean Room		✓	✓	✓	✓	10	6	100	2 - 8	0,14 - 0,5	94
CE RoHS Clean Room		✓	✓	✓		10	6	100	2 - 8	0,14 - 0,34	96

Chainflex® types mentioned in the catalogue as “resistant to bio oil” have been tested by DEA following VDMA 24568 with Plantocut 8 S-MB.

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Chain – cable – guarantee!

Ask for fully harnessed and preassembled Ready-Chains® – increase your cash-flow and profit immediately. The igus® system guarantee also covers components delivered loose.

www.readychain.eu

Chainflex® types



Chainflex® Cable	Jacket	Shield	Minimum bending radius, moved [factor x dj]	Temperature, moved from/to [°C]	Minimum bending radius, fixed [factor x dj]	Temperature, fixed from/to [°C]	Price index	
Data cables								
	CF240	PVC	✓	10-12	-5/ +70	5	-20/ +70	●●●●
	CF211	PVC	✓	10	-5/ +70	5	-20/ +70	●●●●
	CF112	PUR	✓	10	-35/ +80	5	-40/ +80	●●●●
	CF113	PUR	✓	10	-35/ +80	5	-40/ +80	●●●●
	CF111	TPE	✓	10	-35/ +100	6	-40/ +100	●●●●
	CF11	TPE	✓	10	-35/ +100	5	-40/ +100	●●●●
	CF12	TPE	✓	10	-35/ +100	5	-40/ +100	●●●●
Bus cables (with selection chart for Chainflex® bus cables)								
	CF BUS	TPE	✓	10-12,5	-35/ +70	5	-40/ +70	●●●●
	CF11.LC	TPE	✓	10	-35/ +70	5	-40/ +70	●●●●
	CF11.LC.D	TPE	✓	10	-35/ +70	5	-40/ +70	●●●●
	CF14 CAT5	TPE	✓	12,5	-35/ +70	7,5	-40/ +70	●●●●
Measuring system cables								
	CF211	PVC	✓	10	-5/ +70	5	-20/ +70	●●●●
	CF113.D	PUR	✓	10	-20/ +80	5	-40/ +80	●●●●
	CF111.D	TPE	✓	12	-35/ +100	6	-40/ +100	●●●●
	CF11.D	TPE	✓	10	-35/ +100	5	-40/ +100	●●●●
Koax cables								
	CF Koax 1	TPE		10	-35/ +100	7,5	-40/ +100	●●●●
Fibre optic cable (FOC)								
	CFLG.2H	PUR		12,5	-20/ +60	7,5	-25/ +60	●●●●
	CFLK	PUR		12,5	-20/ +70	7,5	-25/ +70	●●●●
	CFLG.2LB	TPE		5	-20/ +60	5	-25/ +70	●●●●
	CFLG. G	TPE		15	-40/ +60	8,5	-40/ +60	●●●●

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Chainflex® types



Approvals and standards	Flame-retardant	Oil-resistant	Halogen-free	UV-resistant	Torsion resistant	v max. unsupported [m/s]	v max. gliding [m/s]	a max. [m/s ²]	Number of cores	Cross section Ø [mm ²]	Page
98											
CE	✓	✓				3	2	20	3 - 24	0,14 - 0,34	100
CE	✓	✓				5	3	50	2 - 28	0,25 - 0,5	102
CE	✓	✓	✓	✓		5	3	50	4 - 12	0,25 - 0,5	104
CE	✓	✓	✓	✓		5	3	50	4 - 12	0,25 - 0,5	106
CE	✓	✓		✓		2		30	2 - 28	0,25 - 0,5	108
CE		✓	✓	✓		10	6	100	4 - 36	0,14 - 2,5	112
CE		✓	✓	✓		10	6	100	4 - 28	0,25 - 1,0	114
116											
CE	✓	✓		✓		10	6	100	2 - 10	0,08 - 1,5	118
CE		✓	✓	✓		10	6	100	2 - 9	0,25 - 1,0	122
CE		✓	✓	✓		10	6	100	2 - 6	0,25 - 1,5	124
CE		✓	✓	✓		10	6	100	4 - 10	0,25	126
128											
CE	✓	✓				5	3	50	6 - 16	0,14 - 1,0	128
CE	✓	✓	✓	✓		5	3	50	4 - 17	0,14 - 1,0	132
CE	✓	✓		✓		2		30	6 - 16	0,14 - 0,5	136
CE		✓	✓	✓		10	6	100	4 - 17	0,14 - 1,0	140
144											
CE		✓		✓		10	5	100	1 - 5		144
146											
CE		✓		✓		10	6	20	2	50 + 62,5/125, 200/230 µm	150
CE		✓	✓	✓		10	5	20	1	980/1000 µm	152
CE		✓		✓		10	6	20	2	50 + 62,5/125	154
CE		✓	✓	✓		10	6	20	6 - 12	50 + 62,5/125 µm	156

Chainflex® types mentioned in the catalogue as “resistant to bio oil” have been tested by DEA following VDMA 24568 with Plantocut 8 S-MB.

Chainflex® types



Chainflex® Cable	Jacket	Shield	Minimum bending radius, moved [factor x dj]	Temperature, moved from/to [°C]	Minimum bending radius, fixed [factor x dj]	Temperature, fixed from/to [°C]	Price index	
Servo cables								
	CF210.UL	PVC	✓	10	-5/ +70	5	-20/ +70	●●●
	CF21.UL	PVC	✓	7,5	-5/ +70	4	-20/ +70	●●●
	CF260	PUR	✓	10	-20/ +80	5	-40/ +80	●●●
	CF270.UL.D	PUR	✓	10	-20/ +80	5	-40/ +80	●●●
	CF27.D	PUR	✓	7,5	-20/ +80	4	-40/ +80	●●●
Power cables								
	CF30	PVC		7,5	-5/ +70	4	-20/ +70	●●●
	CF31	PVC	✓	7,5	-5/ +70	4	-20/ +70	●●●
	CF34.UL.D	TPE		7,5	-35/ +90	4	-40/ +90	●●●
	CF35.UL	TPE	✓	7,5	-35/ +90	4	-40/ +90	●●●
	CF37.D	TPE		7,5	-35/ +90	4	-40/ +90	●●●
	CF38	TPE	✓	7,5	-35/ +90	4	-40/ +90	●●●
	CF300.UL.D	TPE		7,5	-35/ +90	4	-40/ +90	●●●
	CFPE	TPE		7,5	-35/ +90	4	-40/ +90	●●●
	CF310.UL	TPE	✓	7,5	-35/ +90	4	-40/ +90	●●●
	CF330.D	TPE		7,5	-35/ +90	4	-40/ +90	●●●
	CF340	TPE	✓	7,5	-35/ +90	4	-40/ +90	●●●
	CF BRAID	TPE		7,5	-35/ +70	4	-40/ +70	●●●
	CF BRAID.C	TPE	✓	7,5	-35/ +70	4	-40/ +70	●●●
	CF CRANE	igupren	✓	10	-20/ +80	7,5	-30/ +80	●●●

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Chainflex® types










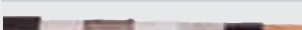
Approvals and standards	Flame-retardant	Oil-resistant	Halogen-free	UV-resistant	Torsion resistant	v max. unsupported [m/s]	v max. gliding [m/s]	a max. [m/s ²]	Number of cores	Cross section Ø [mm ²]	Page
158											
CE RoHS Clean Room	✓	✓		✓		10		80	4 - 8	0.75 - 35 / Pairs 0.34 - 1.5	160
CE RoHS Clean Room	✓	✓		✓		10	5	80	6 - 8	0.75 - 35 / Pairs 0.34 - 1.5	162
CE RoHS		✓	✓	✓		10		50	4 - 8	0.75 - 50 / Pairs 0.34 - 1.5	166
CE RoHS Clean Room	✓	✓	✓	✓		10		50	4 - 8	0.75 - 35 / Pairs 0.34 - 1.5	170
CE RoHS Clean Room	✓	✓	✓	✓		10	5	80	4 - 8	0.75 - 35 / Pairs 0.34 - 1.5	174
178											
CE RoHS Clean Room	✓	✓		✓	✓	10	5	80	4 - 5	1,5 - 50	180
CE RoHS Clean Room	✓	✓		✓		10	5	80	4 - 5	1,5 - 70	182
CE RoHS Clean Room	✓	✓		✓	✓	10	6	80	3 - 5	1,5 - 50	184
CE RoHS Clean Room	✓	✓		✓		10	6	80	3 - 4	0,5 - 50	186
CE RoHS Clean Room		✓	✓	✓	✓	10	6	80	3 - 5	1,5 - 50	188
CE RoHS Clean Room		✓	✓	✓		10	6	80	3 - 4	0,5 - 50	190
CE RoHS Clean Room	✓	✓		✓		10	6	100	1	6 - 185	192
CE RoHS Clean Room	✓	✓		✓		10	6	100	1	1,5 - 35	194
CE RoHS Clean Room	✓	✓		✓		10	6	100	1	4 - 185	196
CE RoHS Clean Room		✓	✓	✓		10	6	100	1	6 - 185	198
CE RoHS Clean Room		✓	✓	✓		10	6	100	1	4 - 185	200
CE RoHS Clean Room	✓	✓		✓		10	6	80	8	2,5	202
CE RoHS Clean Room	✓	✓		✓		10	6	80	8	2,5	202
CE RoHS	✓	✓		✓		10	6	50	1	25 - 95	204

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Chainflex® types



Chainflex® Cable	Jacket	Shield	Minimum bending radius, moved [factor x dj]	Temperature, moved from/to [°C]	Minimum bending radius, fixed [factor x dj]	Temperature, fixed from/to [°C]	Price index	
Pneumatic hose								
	CF AIR	PU	10	-25/ +80	8	-40/ +85	● ● ●	
	CF Clean AIR	PE	10	-25/ +60	8	-30/ +65	● ● ●	
Tordierbare Leitungen								
	CF ROBOT9	PUR		10	-25/ +80	4	-40/ +80	● ● ●
	CF ROBOT8	PUR	✓	10	-20/ +70	7,5	-25/ +70	● ● ●
	CF ROBOT6	PUR		10	-25/ +80	4	-40/ +80	● ● ●
	CF ROBOT7	PUR	✓	10	-25/ +80	4	-40/ +80	● ● ●
	CF ROBOT5	TPE		12,5	-20/ +60	7,5	-25/ +60	● ● ●
	CF ROBOT	TPE	✓	10	-35/ +100	4	-40/ +100	● ● ●

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Chainflex® types



Approvals and standards	Flame-retardant	Oil-resistant	Halogen-free	UV-resistant	Torsion resistant	v max. unsupported [m/s]	v max. gliding [m/s]	a max. [m/s ²]	Number of cores	Cross section Ø [mm ²]	Page
		✓	✓			10	6	50			206
		✓	✓			10	6	50			208
210											
	✓	✓		✓	✓	10		10	2 - 18	0,5 - 2,5	214
	✓	✓		✓	✓	10		10	2 - 4	0,15 - 0,25	216
	✓	✓		✓	✓	10		10	3 - 4	1,5 - 35	218
	✓	✓		✓	✓	10		10	3 - 4	1,5 - 35	218
		✓		✓	✓	10		10	2	50 + 62,5/125 µm	220
		✓			✓	10		10	1	10 - 50	222

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Chainflex® ReadyCable®



	Cable type	Jacket	Page
Video-, vision engineering/bus technology (with camera reference list ▶ page 244)			224
	FireWire FireWire special cable	TPE	226
	USB USB special cable	TPE	230
	GigE GigE special cable	TPE	232
	LWL FOC special cable	PUR	234
	LWL FOC special cable for robotic	TPE	238
	Koax Koax special cable	TPE	240
Network-/ethernet-/fibre cables (FOC)			248
	CFLG.6G Gradient fiber glass cable	TPE	250
	CFLG.12G Gradient fiber glass cable	TPE	252
	CAT5 Ethernet special cable	TPE	254
	CAT6 Ethernet special cable	TPE	256

Chainflex® ReadyCable®

		Cable type	Jacket	Page
Initiators CF9 – CF.INI (minimum bending radius 5 x d)				
		Direct line M12 x 1, straight/angled	TPE	260
		Direct line M12 x 1, straight/angled, LED	TPE	261
		Connecting cable M12 x 1, straight/angled	TPE	262
		Direct line M8 x 1, straight/angled	TPE	263
		Direct line M8 x 1, angled, LED	TPE	264
		Connecting cable M8 x 1, straight/angled	TPE	265
Initiators CF10 – CF.INI (minimum bending radius 5 x d) 360° shielded				
		Direct line M12 x 1, straight/angled	TPE	266
		Connecting cable M12 x 1, straight/angled	TPE	267
Initiators CF98 – CF.INI (minimum bending radius 4 x d)				
		Direct line M12 x 1, straight/angled	TPE	268
		Connecting cable M12 x 1, straight/angled	TPE	269
		Direct line M8 x 1, straight/angled	TPE	270
		Connecting cable M8 x 1, straight/angled	TPE	271

Chainflex® ReadyCable®



Harnessed according
to standard

Cable type

Jacket

Page

Cables for Drive Technology

273

Siemens – Selection for part no. and material

276



Siemens

Servo cable

PUR/PVC

278



Siemens

Power cable

TPE/PVC

282



Siemens

Signal cables/encoder

TPE/PVC

286

Lenze – Selection for part no. and material

294



Lenze

Servo cable

PUR/PVC

296



Lenze

Power cable

PUR/PVC

300



Lenze

Signal cables/encoder (Resolver)

TPE/PVC

304



Lenze

Signal cables/encoder (Encoder)

TPE/PVC

308



Lenze

Signal cables/encoder (Feedback)

TPE/PVC

312



Lenze

Signal cables/encoder (Decoder)

TPE/PVC

316



Lenze

Control cable (Fan)

TPE/PVC

320

Rexroth – Selection for part no. and material

324



Rexroth

Servo cable

PUR/PVC

326



Rexroth

Signal-/encoder cable

TPE/PVC

334

Fanuc – Selection for part no. and material

338



Fanuc

Servo cable

PUR

340



Fanuc

Signal cables/encoder

TPE

344

SEW – Selection for part no. and material

348



SEW

Servo cable

PUR/PVC

350



SEW

Power cable

TPE/PVC

354



SEW

Signal cables/encoder

TPE/PVC

358

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Plug configuration "Quick Pin" ► www.igus.eu/quickpin

Chainflex® ReadyCable®

Harnessed according
to standard

Cable type

Jacket

Page

Cables for Drive Technology

Heidenhain – Selection for part no. and material

362



Heidenhain

Signal cables/encoder

PUR/TPE

364

ELAU – Selection for part no. and material

368

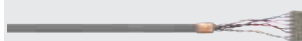


ELAU

Servo cable

PVC/PUR

370



ELAU

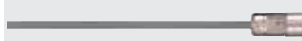
Signal cables/encoder

PVC/TPE

372

Danaher Motion – Selection for part no. and material

374



Danaher Motion

Signal cables/encoder

PVC/TPE

376



Danaher Motion

Servo cable

PVC/PUR

380



Danaher Motion

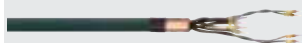
Power cable

PVC/TPE

384

B&R – Selection for part no. and material

388

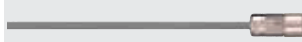


B&R

Servo cable

PVC/PUR

390



B&R

Signal cables/encoder (Resolver)

PVC/TPE

392



B&R

Signal cables/encoder (EnDat)

PVC/TPE

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