

... harnessed cables for drive technology ...
chainflex® readycable®

Selection chart for igus® chainflex® cables (you can find the green number on

... harnessed cables for drive technology ...
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the product pages of the respective manufacturers)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
chainflex® series	CF31	CF35.UL	CF38	CF210.UL	CF21.UL	CF270.UL.D	CF27.D	CF211 Mess	CF111.D	CF113.D	CF11.D	CFBUS	CF240.PUR	CF211	CF113	CF11
Class	5.5.2.1	6.6.4.1	7.6.4.1	4.2.2.1	5.5.2.1	4.2.3.1	6.5.3.1	4.2.2.1	4.2.3.1	6.5.3.1	6.6.4.1	6.6.4.1	4.4.3.1	5.5.2.1	6.5.3	6.6.4.1
Outer jacket	PVC	TPE	TPE	PVC	PVC	PUR	PUR	PVC	PUR	PUR	TPE	TPE	PUR	PVC	PUR	TPE
Shielded	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Minimum bend radius [x d]	7.5 x d	7.5 x d	7.5 x d	10 x d	7.5 x d	10 x d	7.5 x d	10 x d	10 x d	7.5 x d	7.5 x d	10 - 12.5 x d	10 x d	7.5 x d	10 x d	6.8 x d
Travel distance [m]	≤ 100	≤ 400	≤ 400	≤ 10	≤ 100	≤ 10	≤ 100	≤ 10	≤ 10	≤ 100	≤ 400	≤ 400	≤ 50	≤ 100	≤ 100	≤ 400
Oil-resistant	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Oil-/coolant-resistant						✓	✓		✓	✓			✓		✓	
Flame-retardant	✓	✓		✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
Halogen-free			✓			✓	✓		✓	✓	✓		✓		✓	✓
Notch-resistant						✓	✓		✓	✓			✓		✓	✓
Hydrolysis-/microbe-resistant		✓	✓			✓	✓		✓	✓	✓	✓	✓		✓	✓
Temperature, from/to [°C]	-5/+70	-35/+90	-35/+90	+5/+70	+5/+70	-25/+80	-25/+80	+5/+70	-25/+80	-25/+80	-35/+90	-35/+70	-25/+80	+5/+70	-25/+80	-35/+100
Nominal voltage [V]	600/1000	600/1000	600/1000	600/1000	600/1000	600/1000	600/1000	50	50	50	50	50	300/300	300/300	300/300	300/300
Farbe	Jet black	Signal black	Jet black	Pastel orange	Moss green	Pastel orange	Pastel orange	Yellow green	Yellow green	Yellow green	Yellow green	Red lilac	Silver grey	Silver grey	Anthracite grey	Steel blue
CE/CEI																
RoHS																
CleanRoom																
EAC/CTP																
UL/CSA + NFPA																
Desina																
More Information																
► Catalogue page	296	316	322	252	260	266	274	216	226	232	238	174	120	124	-	132
www.igus.eu/	CF31	CF35UL	CF38	CF210UL	CF21UL	CF270ULD	CF27D	CF211M	CF111D	CF113D	CF11D	CFBUS	CF240PUR	CF211	CF113	CF11

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	17	18	19	20	21	22	23		24	25	26	27	28	29	30	31	32
chainflex® series	CF130.UL	CF140.UL	CF5	CF6	CF77.UL.D	CF78.UL	CF9		CF10	CF9.UL	CF211.PUR	CF220.UL.H	CF280.UL.H	CFBUS.PVC	CFBUS.PUR	CF240	CF29.D
Class	4.4.1.1	4.4.1.1	5.5.2.1	5.5.2.1	5.5.3.1	5.5.3.1	7.6.4.2		7.6.4.1	6.6.4.2	5.5.3.1	4.2.2.1	4.2.3.1	4.3.2.1	4.3.3.1	4.4.2.1	7.6.4.1
Outer jacket	PVC	PVC	PVC	PVC	PUR	PUR	TPE		TPE	TPE	PUR	PVC	PUR	PVC	PUR	PVC	TPE
Shielded		✓		✓		✓			✓		✓	✓	✓	✓	✓	✓	✓
Minimum bend radius [x d]	7.5 x d	7.5 x d	6.8 x d	6.8 x d	6.8 x d	6.8 x d	5 x d		5 x d	5 x d	7.5 x d	10 x d	10 x d	12.5 x d	12.5 x d	10 x d	6.8 x d
Travel distance [m]	≤ 50	≤ 50	≤ 50	≤ 50	≤ 100	≤ 100	> 400		> 400	> 400	≤ 100	≤ 10	≤ 10	≤ 20	≤ 20	≤ 50	≤ 400
Oil-resistant			✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Oil-/coolant-resistant					✓	✓					✓	✓			✓		✓
Flame-retardant	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓	✓	✓	✓	
Halogen-free					✓	✓	✓		✓				✓		✓		✓
Notch-resistant					✓	✓					✓		✓		✓		
Hydrolysis-/microbe-resistant					✓	✓	✓		✓	✓	✓		✓		✓		✓
Temperature, from/to [°C]	+5/+70	+5/+70	+5/+70	+5/+70	-25/+80	-25/+80	-35/+100		-35/+100	-35/+100	-25/+80	+5/+70	-25/+80	+5/+70	-20/+70	-15/+70	-55/+100
Nominal voltage [V]	300/500	300/500	300/500	300/500	300/500	300/500	300/500		300/500	300/500	300/300	600/1000	600/1000	50	50	300/300	600/1000
Farbe	Silver grey	Silver grey	Moss green	Moss green	Window grey	Window grey	Steel blue		Steel blue	Slate grey	Silver grey	Pastel orange	Pastel orange	Red lilac	Red lilac	Silver grey	Pastel orange
CE/CEI																	
RoHS																	
CleanRoom																	
EAC/CTP																	
UL/CSA + NFPA																	
Desina																	
More Information																	
► Catalogue page	50	54	58	62	78	82	90		94	98	128	256	270	162	170	116	278
www.igus.eu/	CF130	CF140	CF5	CF6	CF77	CF78	CF9		CF10	CF9UL	CF211PUR	CF220ULH	CF280ULH	CFBUSPVC	CFBUSPUR	CF240	CF29.D

Harnessed drive cables | Beckhoff

PVC/PUR

* Technical information on the cable quality ► page 498-501

Manufacturer Part No.	Cable quality	igus® Part No.	Number of cores and conductor nominal cross section	Ø	Minimum bend radius	Cable page 498-501
			[mm²]	[mm]	[x d]	

Beckhoff Motor cables

Basic cable



ZK4500-8015-xxx	PUR	MAT9850314	(4G4.0+(2x1.0)C+(2xAWG22)C)C	16.0	10	06
ZK4500-8024-xxx	PVC	MAT9750312	(4G2.5+(2x1.0)C+(2xAWG22)C)C	15.0	10	04
	PUR	MAT9850312	(4G2.5+(2x1.0)C+(2xAWG22)C)C	15.0	10	06

Basic cable



ZK4501-8024-xxx	PVC	MAT9750313	(4G2.5+(2x1.0)C+(2xAWG22)C)C	15.0	10	04
	PUR	MAT9850313	(4G2.5+(2x1.0)C+(2xAWG22)C)C	15.0	10	06

Basic cable



ZK4530-8110-xxxx	PVC	MAT9381006	(4x(2x0.25))C	8.0	7.5	14
	PUR	MAT9382006	(4x(2x0.25))C	9.0	10	15

Beckhoff Servo cables

Basic cable



ZK4000-2111-xxxx	PVC	MAT9750305	(4G1.5+(2x1.5)C)C	12.0	10	04
	PVC	MAT9371005	(4G1.5+(2x1.5)C)C	13.0	7.5	05
	PUR	MAT9850305	(4G1.5+(2x1.5)C)C	12.0	10	06
	PUR	MAT9372005	(4G1.5+(2x1.5)C)C	13.0	7.5	07

Basic cable



ZK4000-2112-xxxx	PVC	MAT9750306	(4G2.5+(2x1.5)C)C	14.0	10	04
	PVC	MAT9371006	(4G2.5+(2x1.5)C)C	14.5	7.5	05
	PUR	MAT9850306	(4G2.5+(2x1.5)C)C	14.0	10	06
	PUR	MAT9372006	(4G2.5+(2x1.5)C)C	14.5	7.5	07

Basic cable



ZK4000-2711-xxxx	PVC	MAT9750307	(4G1.5+(2x1.5)C)C	12.0	10	04
	PVC	MAT9371007	(4G1.5+(2x1.5)C)C	13.0	7.5	05
	PUR	MAT9850307	(4G1.5+(2x1.5)C)C	12.0	10	06
	PUR	MAT9372007	(4G1.5+(2x1.5)C)C	13.0	7.5	07

Note: The given outer diameters are maximum values and may tend toward lower tolerance limits. Example image igus® will gladly pre-harness cables to your specifications.
G = with green-yellow earth core x = without earth core

Harnessed drive cables | Beckhoff

PVC/PUR

* Technical information on the cable quality ► page 498-501

Manufacturer Part No.	Cable quality	igus® Part No.	Number of cores and conductor nominal cross section	Ø	Minimum bend radius	Cable page 498-501
			[mm²]	[mm]	[x d]	

Beckhoff Servo cables

Basic cable



ZK4500-0023-xxxx	PVC	MAT9750301	(4G1.5+2x(2x0.75)C)C	13.5	10	04
	PVC	MAT9371001	(4G1.5+2x(2x0.75)C)C	14.5	7.5	05
	PUR	MAT9850301	(4G1.5+2x(2x0.75)C)C	13.5	10	06
	PUR	MAT9372001	(4G1.5+2x(2x0.75)C)C	14.0	7.5	07

Basic cable



ZK4500-0024-xxxx	PVC	MAT9750302	(4G2.5+2x(2x1.5)C)C	16.0	10	04
	PVC	MAT9371002	(4G2.5+2x(2x1.5)C)C	17.0	7.5	05
	PUR	MAT9850302	(4G2.5+2x(2x1.5)C)C	16.0	10	06
	PUR	MAT9372002	(4G2.5+2x(2x1.5)C)C	17.0	7.5	07

Extension cable



ZK4501-0023-xxxx	PVC	MAT9750303	(4G1.5+2x(2x0.75)C)C	13.5	10	04
	PVC	MAT9371003	(4G1.5+2x(2x0.75)C)C	14.5	7.5	05
	PUR	MAT9850303	(4G1.5+2x(2x0.75)C)C	13.5	10	06
	PUR	MAT9372003	(4G1.5+2x(2x0.75)C)C	14.0	7.5	07

Extension cable



ZK4501-0024-xxxx	PVC	MAT9750304	(4G2.5+2x(2x1.5)C)C	16.0	10	04
	PVC	MAT9371004	(4G2.5+2x(2x1.5)C)C	17.0	7.5	05
	PUR	MAT9850304	(4G2.5+2x(2x1.5)C)C	16.0	10	06
	PUR	MAT9372004	(4G2.5+2x(2x1.5)C)C	17.0	7.5	07

Beckhoff Hybrid Servo cables

Basic cable



ZK4500-8022-xxxx	PVC	MAT9750308	(4G1.0+(2x0.75)C+(2xAWG22)C)C	12.5	10	27
	PUR	MAT9850308	(4G1.0+(2x0.75)C+(2xAWG22)C)C	12.5	10	28

Basic cable



ZK4500-8023-xxxx	PVC	MAT9750309	(4G2.5+(2x1.0)C+(2xAWG22)C)C	15.0	10	27
	PUR	MAT9850309	(4G2.5+(2x1.0)C+(2xAWG22)C)C	15.0	10	28

Note: The given outer diameters are maximum values and may tend toward lower tolerance limits. Example image igus® will gladly pre-harness cables to your specifications.
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Harnessed drive cables | Beckhoff

PVC/PUR

* Technical information on the cable quality ► page 498-501

Manufacturer Part No.	Cable quality	igus® Part No.	Number of cores and conductor nominal cross section [mm ²]	Ø [mm]	Minimum bend radius [x d]	Cable page 498-501
Beckhoff Hybrid Servo cables						
Basic cable						
ZK4704-0421-xxxx	PVC	MAT9750315	(4G0.75+(2x0.34)C+(2xAWG22)C)C	12.0	10	27
	PUR	MAT9850315	(4G0.75+(2x0.34)C+(2xAWG22)C)C	12.0	10	28
Extension cable						
ZK4501-8022-xxxx	PVC	MAT9750310	(4G1.0+(2x0.75)C+(2xAWG22)C)C	12.5	10	27
	PUR	MAT9850310	(4G1.0+(2x0.75)C+(2xAWG22)C)C	12.5	10	28
Extension cable						
ZK4501-8023-xxxx	PVC	MAT9750311	(4G2.5+(2x1.0)C+(2xAWG22)C)C	15.0	10	27
	PUR	MAT9850311	(4G2.5+(2x1.0)C+(2xAWG22)C)C	15.0	10	28
Beckhoff Encoder cables						
Basic cable						
ZK4000-2410-xxxx	PVC	MAT9381005	(8x(2x0.25))C	10.5	7.5	14
	PUR	MAT9382005	(8x(2x0.25))C	11.5	10	15
Basic cable						
ZK4000-2610-xxxx	PVC	MAT9381004	(8x(2x0.25))C	10.5	7.5	14
	PUR	MAT9382004	(8x(2x0.25))C	11.5	10	15
Basic cable						
ZK4510-0020-xxxx	PVC	MAT9381001	(8x(2x0.25))C	10.5	7.5	14
	PUR	MAT9382001	(8x(2x0.25))C	11.5	10	15
Basic cable						
ZK4520-0020-xxxx	PVC	MAT9381002	(6x(2x0.25))C	9.0	7.5	14
	PUR	MAT9382002	(6x(2x0.25))C	10.0	10	15
Extension cable						
ZK4511-0020-xxxx	PVC	MAT9381003	(8x(2x0.25))C	10.5	7.5	14
	PUR	MAT9382003	(8x(2x0.25))C	11.5	10	15

Note: The given outer diameters are maximum values and may tend toward lower tolerance limits. Example image igus® will gladly pre-harness cables to your specifications.
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Harnessed drive cables | Beckhoff

PVC/PUR/TPE

* Technical information on the cable quality ► page 498-501

Manufacturer Part No.	Cable quality	igus® Part No.	Number of cores and conductor nominal cross section [mm ²]	Ø [mm]	Minimum bend radius [x d]	Cable page 498-501
Beckhoff Thermal protection cables						
Basic cable						
ZK4000-2510-xxxx	PVC	MAT9386001	(2x0.25)C	5.0	7.5	14
	TPE	MAT9387001	(4x0.34)C	6.5	7.5	11
Beckhoff Resolver cables						
Basic cable						
ZK4000-2210-xxxx	PVC	MAT9383003	(4x(2x0.25))C	8.0	7.5	14
	PUR	MAT9384003	(4x(2x0.25))C	9.0	10	15
	TPE	MAT9920303	(4x(2x0.25))C	8.5	6.8	16
Basic cable						
ZK4530-0010-xxxx	PVC	MAT9383001	(4x(2x0.25))C	8.0	7.5	14
	PUR	MAT9384001	(4x(2x0.25))C	9.0	10	15
	TPE	MAT9920301	(4x(2x0.25))C	8.5	6.8	16
Extension cable						
ZK4531-0020-xxxx	PVC	MAT9383002	(4x(2x0.25))C	8.0	7.5	14
	PUR	MAT9384002	(4x(2x0.25))C	9.0	10	15
	TPE	MAT9920302	(4x(2x0.25))C	8.5	6.8	16
Beckhoff Network cables EtherCAT						
Basic cable						
ZK1090-9191-xxxx	TPE	MAT9385002	(4x(2x0.15))C	8.5	10	12
	TPE	MAT9385003	(4x(2x0.15))C	8.5	10	12

Note: The given outer diameters are maximum values and may tend toward lower tolerance limits. Example image igus® will gladly pre-harness cables to your specifications.
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