

Data cable | PVC | chainflex® CF240



10 million
Double strokes guaranteed



10 x d
Bend radius, e-chain®



50m
Travel distance, e-chain®

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

Dynamic information



Bend radius	e-chain® linear	minimum 10 x d
	flexible	minimum 8 x d
	fixed	minimum 5 x d



Temperature	e-chain® linear	+5°C up to +70°C
	flexible	-5°C up to +70°C (following DIN EN 60811-504)
	fixed	-15°C up to +70°C (following DIN EN 50305)



v max.	unsupported	3m/s
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a max.	gliding	2m/s
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Travel distance	Unsupported travels and up to 50m for gliding applications, Class 4	
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Cable structure



Conductor	Very finely stranded special conductors of particularly bending resistant design made of bare copper wires.
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Core insulation	Mechanically high-quality TPE mixture.
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Core structure	The individual cores are wound in layers with a short pitch length.
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Core identification	Colour code in accordance with DIN 47100.
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Intermediate layer	Foil taping over the outer layer.
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Overall shield	Extremely bending-resistant braiding made of tinned copper wires. Coverage linear approx. 70%, optical approx. 90%
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Outer jacket	Low-adhesion, oil-resistant PVC mixture, adapted to suit the requirements in e-chains® (following DIN EN 50363-4-1). Colour: Silver-grey (similar to RAL 7001)
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Electrical information



Nominal voltage	300/300V (following DIN VDE 0298-3) 300V (following UL)
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Testing voltage	1,500V (following DIN EN 50395)
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Basic requirements
Travel distance
Oil resistance
Torsion

low	1	2	3	4	5	6	7	highest
unsupported	1	2	3	4	5	6	≥ 400m	
none	1	2	3	4	highest			
none	1	2	3	4	±360°			

Class 4.4.2.1

Properties and approvals



Oil resistance	Oil-resistant (following DIN EN 50363-4-1), Class 2
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Flame-retardant	According to IEC 60332-1-2, Cable Flame, VW-1, FT1, FT2 / Horizontal Flame
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Silicone-free	Free from silicone which can affect paint adhesion (following PV 3.10.7 – status 1992)
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UL verified	Certificate No. B129699: "igus 36-month chainflex cable guarantee and service life calculator based on 2 billion test cycles per year"
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UL/CSA AWM	See data sheet for details ► www.igus.eu/CF240
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NFPA	Following NFPA 79-2018, chapter 12.9
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EAC	Certificate No. RU C-DE.ME77.B.00300/19
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REACH	In accordance with regulation (EC) No. 1907/2006 (REACH)
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Lead-free	Following 2011/65/EC (RoHS-II/RoHS-III)
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Cleanroom	According to ISO Class 1, material/cable tested by IPA according to DIN EN ISO standard 14644-1 Following 2014/35/EU
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UK CA	In accordance with the valid regulations of the United Kingdom (as at 08/2021)
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Guaranteed service life (details see page 28-29)

Double strokes*	5 million		7.5 million		10 million	
	< 10m	≥ 10m	< 10m	≥ 10m	< 10m	≥ 10m
Temperature, from/to [°C]	R min. [factor x d]	R min. [factor x d]	R min. [factor x d]	R min. [factor x d]	R min. [factor x d]	R min. [factor x d]
+5/+15	12.5	15	13.5	16	14.5	17
+15/+60	10	12.5	11	13.5	12	14.5
+60/+70	12.5	15	13.5	16	14.5	17

* Higher number of double strokes? Service life calculation online ► www.igus.eu/chainflexlife

Typical application areas

- For medium duty applications, Class 4
- Unsupported travels and up to 50m for gliding applications, Class 4
- Light oil influence, Class 2
- No torsion, Class 1
- Preferably indoor applications, but also outdoor ones at temperatures > 5 °C
- Storage and retrieval units, machining units/packaging machines, handling, indoor cranes

EPLAN download, configurators ► www.igus.eu/CF240

36-month guarantee ... more than 1,350 cable types from stock ... no cutting charges



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UL-verified chainflex® guarantee ... www.igus.eu/ul-verified



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Example image

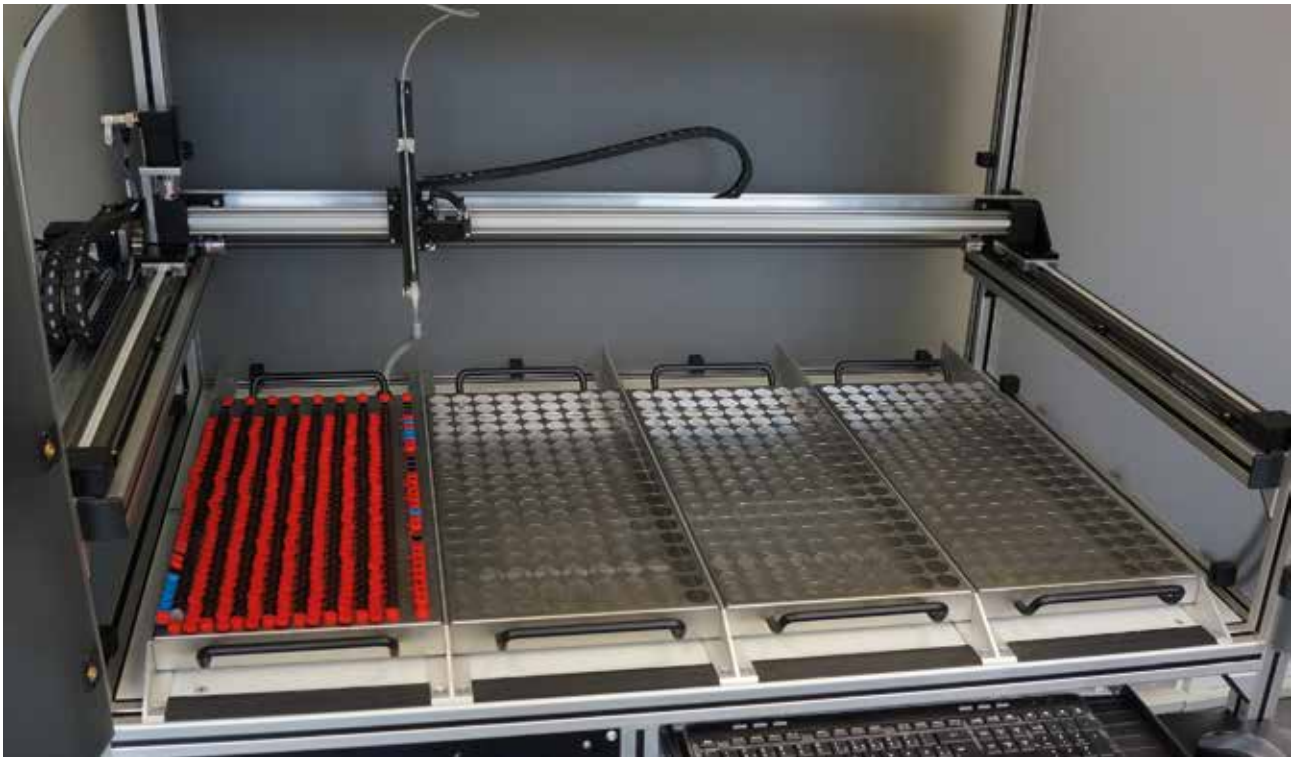
Part No.	Number of cores and conductor nominal cross section [mm²]	Outer diameter (d) max. [mm]	Copper index [kg/km]	Weight [kg/km]
CF240.01.03	(3x0.14)C	4.5	12	28
CF240.01.04	(4x0.14)C	5.0	17	32
CF240.01.05	(5x0.14)C	5.5	19	37
CF240.01.07	(7x0.14)C	6.0	25	47
CF240.01.14	(14x0.14)C	7.0	41	75
CF240.01.18	(18x0.14)C	7.5	51	90
CF240.01.24	(24x0.14)C	8.5	64	125
CF240.02.03	(3x0.25)C	5.0	19	35
CF240.02.04	(4x0.25)C	5.5	23	45
CF240.02.05	(5x0.25)C	6.0	28	49
CF240.02.07	(7x0.25)C	6.5	35	61
CF240.02.08	(8x0.25)C	7.0	39	68
CF240.02.14	(14x0.25)C	7.5	60	92
CF240.02.18	(18x0.25)C	8.5	71	122
CF240.02.24	(24x0.25)C	10.0	95	161
CF240.03.02	(2x0.34)C	5.5	21	37
CF240.03.03	(3x0.34)C	5.5	29	42
CF240.03.04	(4x0.34)C	6.0	33	51
CF240.03.05	(5x0.34)C	6.5	38	56
CF240.03.07	(7x0.34)C	7.5	50	77
CF240.03.10	(10x0.34)C	8.0	58	97
CF240.03.14	(14x0.34)C	8.0	74	112
CF240.03.18	(18x0.34)C	9.0	91	139
CF240.03.24	(24x0.34)C	10.0	119	177

Note: The given outer diameters are maximum values and may tend toward lower tolerance limits.
G = with green-yellow earth core x = without earth core

Order example: CF240.01.03 - to your desired length (0.5m steps)
CF240 chainflex® series .01 Code nominal cross section .03 Number of cores

Order online ► www.igus.eu/CF240

Delivery time 24hrs or today.
Delivery time means time until goods are shipped.



chainflex® CF240 data cables in small handling machines



Cables available in the chainflex® CASE

Simple savings on delivery, storage space and re-ordering with the chainflex® CASE - ship'n store by igus®.

More on this on page 24/25 and online: www.igus.eu/cf-case



EPLAN download, configurators ► www.igus.eu/CF240

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