

# Data cable | PVC | chainflex® CF240

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

## Dynamic information

	<b>Bend radius</b>	<b>e-chain® linear</b>	minimum 10 x d
		<b>flexible</b>	minimum 8 x d
		<b>fixed</b>	minimum 5 x d
	<b>Temperature</b>	<b>e-chain® linear</b>	+5 °C to +70 °C
		<b>flexible</b>	-5 °C to +70 °C (following DIN EN 60811-504)
		<b>fixed</b>	-15 °C to +70 °C (following DIN EN 50305)
	<b>v max.</b>	<b>unsupported</b>	3 m/s
		<b>gliding</b>	2 m/s
	<b>a max.</b>		20 m/s <sup>2</sup>
	<b>Travel distance</b>	Unsupported travel distances and up to 50 m for gliding applications, Class 4	

## Cable structure

	<b>Conductor</b>	Very finely stranded special conductors of particularly bending-resistant design made of bare copper wires.
	<b>Core insulation</b>	Mechanically high-quality TPE mixture.
	<b>Core structure</b>	The individual cores are wound in layers with short pitch lengths.
	<b>Core identification</b>	Colour code in accordance with DIN 47100.
	<b>Intermediate layer</b>	Foil taping over the outer layer.
	<b>Overall shield</b>	Extremely bending-resistant braiding made of tinned copper wires. Coverage approx. 70 % linear, approx. 90 % optical
	<b>Outer jacket</b>	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)

## Electrical information

	<b>Nominal voltage</b>	300/300 V (following DIN VDE 0298-3)
	<b>Testing voltage</b>	1500 V (following DIN EN 50395)

# Class 4.4.2.1

Basic requirements	low	1	2	3	4	5	6	7	highest
Travel distance	unsupported	1	2	3	4	5	6	≥ 400 m	
Oil resistance	none	1	2	3	4	highest			
Torsion	none	1	2	3	±180°				

## Properties and approvals

	<b>Oil resistance</b>	Oil-resistant (following DIN EN 50363-4-1), Class 2.
	<b>Flame retardant</b>	According to IEC 60332-1-2, CEI 20-35, FT1, VW-1
	<b>Silicone-free</b>	Free from silicone which can affect paint adhesion (following PV 3.10.7 – status 1992).
	<b>UL/CSA</b>	Style 10493 and 2464, 300 V, 80 °C
	<b>NFPA</b>	Following NFPA 79-2012 chapter 12.9.
	<b>EAC</b>	Certificate no. RU C-DE.ME77.B.01254 (TR ZU)
	<b>CTP</b>	Certificate no. C-DE.PB49.B.00416 (Fire safety)
	<b>CEI</b>	Following CEI 20-35.
	<b>Lead-free</b>	Following 2011/65/EU (RoHS-II).
	<b>Cleanroom</b>	According to ISO Class 1, material/cable tested by IPA according to ISO standard 14644-1.
	<b>CE</b>	Following 2014/35/EU.

## Guaranteed lifetime according to guarantee conditions (Page 22-23)

Double strokes*	5 million		7.5 million		10 million	
	< 10 m	≥ 10 m	< 10 m	≥ 10 m	< 10 m	≥ 10 m
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? Online lifetime calculation: [www.igus.eu/chainflexlife](http://www.igus.eu/chainflexlife)

## Typical mechanical 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 50 m for gliding applications
- Storage and retrieval units for high-bay warehouses, machining units/packaging machines, Handling, indoor cranes



Example image



igus® chainflex® CF240

Example image

Part No.	Number of cores and conductor nominal cross section mm <sup>2</sup>	Outer diameter (d) max. mm	Copper index kg/km	Weight kg/km
CF240.01.03	(3x0.14)C	5.0	15	28
CF240.01.04	(4x0.14)C	5.0	16	32
CF240.01.05	(5x0.14)C	5.5	18	35
CF240.01.07	(7x0.14)C	6.0	25	45
CF240.01.14	(14x0.14)C	7.5	43	74
CF240.01.18	(18x0.14)C	8.0	54	93
CF240.01.24	(24x0.14)C	9.0	67	128
CF240.02.03	(3x0.25)C	5.0	18	35
CF240.02.04	(4x0.25)C	5.5	21	46
CF240.02.05	(5x0.25)C	5.5	26	43
CF240.02.07	(7x0.25)C	6.5	33	55
CF240.02.08	(8x0.25)C	7.0	37	63
CF240.02.14	(14x0.25)C	8.0	63	93
CF240.02.18	(18x0.25)C	8.5	75	111
CF240.02.24	(24x0.25)C	9.5	100	166
CF240.03.02	(2x0.34)C	5.5	20	38
CF240.03.03	(3x0.34)C	5.5	27	40
CF240.03.04	(4x0.34)C	6.0	31	52
CF240.03.05	(5x0.34)C	6.0	36	57
CF240.03.07	(7x0.34)C	7.5	48	77
CF240.03.10	(10x0.34)C	8.5	63	98
CF240.03.14	(14x0.34)C	9.0	79	116
CF240.03.18	(18x0.34)C	10.0	96	142
CF240.03.24	(24x0.34)C	11.0	127	184

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 (0.5 m steps)**  
CF240 chainflex® series .01 Code nominal cross section .03 Code Number of cores



Online order ► [www.chainflex.eu/CF240](http://www.chainflex.eu/CF240)



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

