- PVC outer jacket
- Shielded
- Oil-resistant
- Flame retardant



Dynamic information

Bend radius	e-chain® linear	minimum 7.5 x d
	flexible	minimum 6 x d
	fixed	minimum 4 x d
Temperature	e-chain® linear	+5 °C to +70 °C
	flexible	-5 °C to +70 °C (following DIN EN 60811-504)
	fixed	-15 °C to +70 °C (following DIN EN 50305)

v max.	unsupported	10 m/s
	gliding	5 m/s
a max.	80 m/s ²	



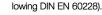
Unsupported travel distances and up to 100 m for gliding applications, Class 5

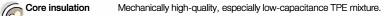
Cable structure

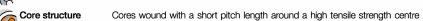
Cores < 10 mm²: Stranded conductor in especially bending-resistant design

consisting of bare copper wires (following DIN EN 60228).

Cores ≥ 10 mm²: Conductor consisting of pre-wound conductor bundles (fol-









1. Core: U / L1 / C / L+ 2. Core: V / L2

3. Core: W / L3 / D / L- 4. Core: 4 / N

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 % inear, approx. 90 % optical

Low-adhesion, oil-resistant PVC mixture, adapted to suit the requirements in

e-chains® (following DIN EN 50363-4-1). Colour: Jet black (similar to RAL 9005)

Strip cables faster: a tear strip is moulded into the inner jacket Video ► www.igus.eu/CFRIP

Electrical information

Outer jacket

CFRIP®



Nominal voltage 600/1000 V (following DIN VDE 0298-3)

Testing voltage 4000 V (following DIN EN 50395)

Class 5.5.2.1

Travel distance unsupported 2

CF31 7.5 x d

Properties and approvals UV resistance

NFPA

Oil resistance	Oil-resistant (following DIN EN 50363-4-1), Class 2.
Hame retardant	According to IEC 60332-1-2, CEI 20-35, FT1, VW-1

Basic requirements

Oil resistance

Silicone-free	Free from silicone which can affect paint adhesion (following PV 3.10.7 - status
8	1992).

Following NFPA 79-2012 chapter 12.9

UL/CSA	Style 10492 and 2570, 1000 V, 80 °C
--------	-------------------------------------

Medium.

NFPA 11171	Tollowing Til TYTO 2012 Graptor 12:01
EAC	Certificate no. RU C-DE.ME77.B.02324 (TR Z

LIIL	
CTP	Certificate no. C-DE.PB49.B.00420 (Fire safety)

CEI	Following CEI 20-35.
Lead-free	Following 2011/65/EU (RoHS-II).

	Cleanroom	Acco	ordin	g to ISO	Class	s 2.	Outer	jacket	material	complies	with	CF5.10	.07,
Room													

	tested by IPA according to standard 14644-1
C€ _{CE}	Following 2014/35/EU.

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

Double strokes*			
Temperature, from/to [°C]	R min. [factor x d]	R min. [factor x d]	R min. [factor x d]
+5/+15	10	11	12
+15/+60	7.5	8.5	9.5
+60/+70	10	11	12

Typical mechanical 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/ packaging machines, quick handling equipment, indoor cranes



















Motor cable | PVC | chainflex® CF31

Strip cables 50% faster

Class 5.5.2.1

igus[®] chainflex[®]CF31

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]
CF31.15.04	(4G1.5)C	10.5	94	168
CF31.25.04	(4G2.5)C	12.0	142	233
CF31.25.05	(5G2.5)C	13.0	174	295
CF31.40.04	(4G4.0)C	13.5	217	345
CF31.40.05	(5G4.0)C	15.0	281	424
CF31.60.04	(4G6.0)C	16.0	318	488
CF31.60.05	(5G6.0)C	18.0	385	598
CF31.100.04	(4G10.0)C	20.5	539	833
CF31.100.05	(5G10.0)C	22.5	687	954
CF31.160.04	(4G16.0)C	23.5	823	1127
CF31.250.04	(4G25.0)C	28.5	1254	1718
CF31.350.04	(4G35.0)C	32.5	1716	2298
CF31.500.04	(4G50.0)C	37.5	2420	3173
CF31.700.04	(4G70.0)C	43.0	3454	4085

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

















