

Spindle cable/Single core | TPE | chainflex® CF300.UL.D

36

10 million

Guaranteed double strokes

7.5 x d

Bend radius, e-chain®

400 m

Travel distance, e-chain®

- For extremely heavy duty applications







● TPE outer jacket

● Oil and bio-oil-resistant




● Flame-retardant
- UV-resistant

● Hydrolysis and microbe-resistant

Dynamic information

	Bend radius	e-chain® linear flexible fixed	minimum 7.5 x d minimum 6 x d minimum 4 x d
	Temperature	e-chain® linear flexible fixed	-35 °C up to +90 °C -45 °C up to +90 °C (following DIN EN 60811-504) -50 °C up to +90 °C (following DIN EN 50305)
	v max.	unsupported	10 m/s
	a max.	gliding	6 m/s
	Travel distance	Unsupported travels and up to 400 m and more for gliding applications, Class 6	
	Torsion	Torsion ±90°, with 1m cable length, Class 2	







Cable structure

	Conductor	Conductor cable consisting of pre-leads (following DIN EN 60228).	
	Core insulation	Mechanically high-quality TPE mixture.	
	Outer jacket	Low-adhesion, extremely abrasion-resistant and highly flexible TPE mixture, adapted to suit the requirements in e-chains®. Colour: Signal black (similar to RAL 9004)	

Electrical information

	Nominal voltage	600/1000 V (following DIN VDE 0298-3) 1000 V (following UL)	
	Testing voltage	4000 V (following DIN EN 50395)	

Properties and approvals

	UV resistance	High	
	Oil resistance	Oil-resistant (following DIN EN 60811-404), bio-oil-resistant (following VDMA 24568 with Plantocut 8 S-MB tested by DEA), Class 4	
	Flame retardant	According to IEC 60332-1-2, FT1, VW-1	
	Silicone-free	Free from silicone which can affect paint adhesion (following PV 3.10.7 – status 1992)	
	UL verified	Certificate No. B129699: „igus 36-month chainflex cable guarantee and service life calculator based on 2 billion test cycles per year“	
	UL/CSA AWM	See data sheet for details ► www.igus.eu/CF300.UL.D	

EPLAN download, configurators ► www.igus.eu/CF300.UL.D

36 month guarantee ... 1,354 types from stock ... no cutting charges



Class 6.6.4.2



Basic requirements
Travel distance
Oil resistance
Torsion

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

Following NFPA 79-2018, chapter 12.9

Type approval certificate No. TAE00003XC

Certificate No. RU C-DE.ME77.B.02324 (TR ZU)

Certificate No. C-DE.PB49.B.00420 (Fire protection)

In accordance with regulation (EC) No. 1907/2006 (REACH)

Following 2011/65/EC (RoHS-II/RoHS-III)

According to ISO Class 1. The outer jacket material of this series complies with CF34.UL.25.04.D - tested by IPA according to standard DIN EN ISO 14644-1
According to VDW, DESINA standardisation

Following 2014/35/EU

Guaranteed service life (details see page 26-27)

Double strokes*	5 million		7.5 million		10 million	
	Temperature, from/to [°C]		Temperature, from/to [°C]		Temperature, from/to [°C]	
	R min. [factor x d]		R min. [factor x d]		R min. [factor x d]	
	-35/-25		-25/+80		+80/+90	
	10		7.5		10	
	-25/+80		+80/+90			
	7.5		11		12	
	+80/+90					
	10					

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

Typical mechanical application areas

- For extremely heavy duty applications, Class 6
- Unsupported travels and up to 400 m and more for gliding applications, Class 6
- Almost unlimited resistance to oil, also with bio-oils, Class 4
- Torsion ±90°, with 1m cable length, Class 2
- Indoor and outdoor applications, UV-resistant
- Storage and retrieval units for high-bay warehouses, Machining units/machine tools, quick handling, Cleanroom, semiconductor insertion, outdoor cranes, low temperature applications

Part No.	Number of cores and conductor nominal cross section	Outer diameter (d) max.	Copper index	Weight
	[mm²]	[mm]	[kg/km]	[kg/km]
CF300.UL.40.01.D	1x4.0	6.0	41	59
CF300.UL.60.01.D	1x6.0	7.0	61	83
CF300.UL.100.01.D	1x10	7.5	100	124
CF300.UL.160.01.D	1x16	9.5	159	195
CF300.UL.250.01.D	1x25	11.5	248	294
CF300.UL.350.01.D	1x35	12.5	347	395
CF300.UL.500.01.D	1x50	14.5	495	551
CF300.UL.700.01.D	1x70	16.5	710	769
CF300.UL.950.01.D	1x95	20.0	936	1042
CF300.UL.1200.01.D	1x120	21.5	1184	1295
CF300.UL.1500.01.D	1x150	23.5	1469	1579
CF300.UL.1850.01.D	1x185	26.5	1928	2052

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

