

Bus cable | PUR | chainflex® CFSPECIAL-182

- For increased tensile load
- PUR outer jacket
- Shielded
- Oil-resistant and coolant-resistant
- Flame-retardant
- PVC and halogen-free
- Notch-resistant
- Hydrolysis and microbe-resistant

Especially for hanging applications

Dynamic Information

	Bend radius	E-Chain® linear	min. 10 x d
		flexible	min. 8 x d
		fixed	min. 5 x d
	Temperature	E-Chain® linear	-13 °F to +176 °F (-25 °C to +80 °C)
		flexible	-40 °F to +176 °F (-40 °C to +80 °C) (following DIN EN 60811-504)
		fixed	-58 °F to +176 °F (-50 °C to +80 °C) (following DIN EN 50305)
	v max.	unsupported	32.81 ft/s (10 m/s)
		gliding	19.69 ft/s (6 m/s)
	a max.	328.1 ft/s² (100 m/s²)	
	Travel distance	For hanging applications up to 164.1 ft (50 m)	

Cable structure

	Conductor	Conductor consisting of bare copper wires (according to DIN EN 60228).
	Conductor insulation	According to bus specification.
	Conductor construction	According to bus specification.
	Color code	According to bus specification.
	Inner jacket	TPE mixture adapted to suit the requirements in E-Chains®.
	Overall shield	Bending-resistant tinned copper braid. 90 % optical coverage
	Reinforcement	High tensile strength aramid braid embedded in the outer jacket.
	Outer jacket	1. outer jacket: PUR mixture adapted to suit the requirements in E-Chains®. Reinforcement: High tensile strength aramid braid embedded in the outer jacket. 2. outer jacket: Low-adhesion mixture on the basis of PUR, highly abrasion- and bending-resistant, adapted to suit the requirements in hanging applications (following DIN EN 50363-10-2). Color: Jet black (similar to RAL 9005)

Electrical Information

	Nominal voltage	300 V
	Test voltage	500 V

Configurators ► www.igus.com/CFSPECIAL-182

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

Properties and approvals

	UV resistance	High
	Oil resistance	Oil-resistant (following DIN EN 50363-10-2), Class 3
	Offshore	MUD-resistant following NEK 606 - status 2009
	Flame resistance	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)
	Halogen-free	Following DIN EN 60754
	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.com/CFSPECIAL-182
	NFPA 79	Complies to Electrical Standard for Industrial Machinery NFPA 79 Section 12.9
	EAC	Certificate No. RU C-DE.ME77.B.01218 (TR ZU)
	REACH	In accordance with regulation (EC) No. 1907/2006 (REACH)
	Lead-free	Following 2011/65/EC (RoHS-II/RoHS-III)
	CE	Following 2014/35/EU

Typical application areas

- For increased tensile load
- For hanging applications up to 50 m
- Almost unlimited resistance to oil
- Storage and retrieval units for high-bay warehouses, hanging control units, Elevators

Part No.	AWG	Number of Conductors and rated cross section [mm²]	Outer diameter max. [in.] [mm]	Copper index [lbs/mt] [kg/km]	Weight [lbs/mt] [kg/km]
Ethernet/CAT5e/PoE					
CFSPPECIAL-182-045 ¹⁵⁾	26	4 PR x 0.15	0.37 9.5	28.2 42	91.4 136
Profinet					
CFSPPECIAL-182-060	22	2 PR x 0.38	0.33 8.5	24.9 37	84.0 125

¹⁵⁾ Color outer jacket: Black (similar to RAL 9005)
Note: The given outer diameters are maximum values.
 G = with green-yellow earth core x = without earth core

Part No.	Characteristic wave impedance approx. [Ω]	Core group	Color code
Ethernet/CAT5e/PoE			
CFSPPECIAL-182-045 ¹⁵⁾	100	(4x2x0.15)C	white-blue/blue, white-orange/orange, white-green/green, white-brown/brown
Profinet			
CFSPPECIAL-182-060	100	(4x0.38)C	white, orange, blue, yellow (Star-quad)



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

