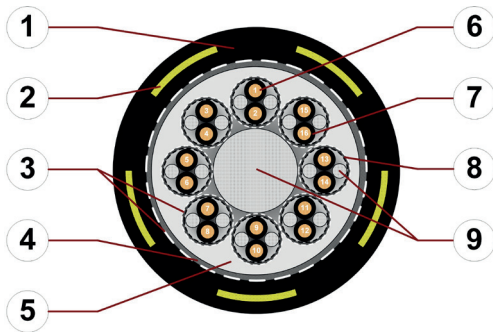


Data sheet

chainflex® CFSPECIAL.532



Data cable for TopDrive applications | For heavy duty applications, PUR outer jacket, shielded, oil-resistant and coolant-resistant, flame retardant, PVC and halogen-free, UV-resistant, hydrolysis and microbe-resistant



1. Outer jacket: Pressure extruded PUR mixture
2. Reinforcement: Tensile strength aramid braiding (embedded in the outer jacket)
3. Banding: Plastic fleece
4. Overall shield: Bending-resistant braiding made of tinned copper wires
5. Inner jacket: Pressure extruded, gusset-filling TPE mixture
6. Conductor: Fine-wire strand in especially bending-stable version consisting of bare copper wires
7. Core insulation: Mechanically high quality XLPE mixture
8. Element shield: Bending-resistant braiding made of tinned copper wires
9. Strain relief: Tensile stress-resistant centre element

Example image
For detailed overview please see design table

Cable structure

	Conductor	Stranded conductor in especially bending-resistant version consisting of bare copper wires (following DIN EN 60228).
	Core insulation	Mechanically high-quality, especially low-capacitance XLPE mixture.
	Core identification	Black cores with white numbers.
	Overall shield	Bending-resistant braiding made of tinned copper wires. Coverage linear approx. 70 %, optical approx. 90 %
	Outer jacket	Low-adhesion, halogen-free PUR mixture, adapted to suit the requirements in e-chains® (following DIN EN 50363-10-2). Colour: Jet black (similar to RAL 9005)

„00000 m** igus chainflex CFSPECIAL.532.① ----② 600/1000V E310776
 cRUus AWM Style 21223 VW-1 AWM I/II A/B 80°C 1000V FT1 DNV TAE00004G4
 CE UKCA www.igus.eu +++ chainflex cable works +++

* **Length printing:** Not calibrated. Only intended as an orientation aid.
 ① / ② Cable identification according to Part No. (see technical table).
 Example: ... chainflex CFSPECIAL.532.15.08.02 (8x(2x1.5)C)C 600/1000V ...



Data sheet

chainflex® CFSPECIAL.532








Data cable for TopDrive applications | For heavy duty applications, PUR outer jacket, shielded, oil-resistant and coolant-resistant, flame retardant, PVC and halogen-free, UV-resistant, hydrolysis and microbe-resistant





Example image

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	-25 °C up to +80 °C
		flexible	-40 °C up to +80 °C (following DIN EN 60811-504)
		fixed	-50 °C up to +80 °C (following DIN EN 50305)
	v max.	unsupported	10 m/s
		gliding	2 m/s
	a max.		50 m/s ²
	Travel		For hanging TopDrive applications up to 50 m

These values are based on specific applications or tests. They do not represent the limit of what is technically feasible.

Electrical information

	Nominal voltage	600/1,000V (following DIN VDE 0298-3)
		1,000V (following UL)
	Testing voltage	4000 V (following DIN EN 50395)



Data sheet














chainflex® CFSPECIAL.532



Data cable for TopDrive applications | For heavy duty applications, PUR outer jacket, shielded, oil-resistant and coolant-resistant, flame retardant, PVC and halogen-free, UV-resistant, hydrolysis and microbe-resistant



Properties and approvals

-  **UV resistance** High
-  **Oil resistance** Oil-resistant (following DIN EN 50363-10-2)
-  **Offshore** MUD-resistant following NEK 606 - status 2009
-  **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)
-  **Halogen-free** Following DIN EN 60754
-  **PFAS-free** Use of PFAS-free materials according to the content of the REACH directive and its rules for the production and processing of chemical substances
-  **UL/CSA AWM** Details see table UL/CSA AWM
-  **NFPA** Following NFPA 79-2018, chapter 12.9
-  **DNV** Type Approval Certificate TAE00004G4
-  **REACH** In accordance with regulation (EC) No. 1907/2006 (REACH)
-  **RoHS** Following 2011/65/EC (RoHS-II/RoHS-III)
-  **CE** Following 2014/35/EU



Properties and approvals

UL/CSA AWM details

Conductor nominal cross section [mm ²]	Number of cores	UL style core insulation	UL style outer jacket	UL Temperature Rating [°C]	UL Voltage Rating [V]
1.5	16-32	30054	21223	80	1000



Example image

Data sheet

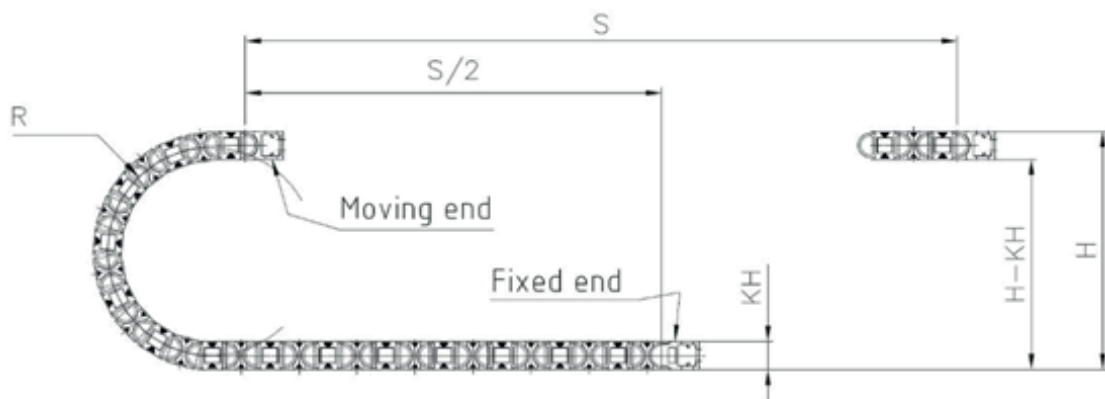
chainflex® CFSPECIAL.532



Data cable for TopDrive applications | For heavy duty applications, PUR outer jacket, shielded, oil-resistant and coolant-resistant, flame retardant, PVC and halogen-free, UV-resistant, hydrolysis and microbe-resistant

Typical lab test setup for this cable series

Test bend radius R	approx. 250 - 300 mm
Test travel S	approx. 1 - 15 m
Test duration	minimum 2 - 4 million double strokes
Test speed	approx. 0.5 - 2 m/s
Test acceleration	approx. 0.5 - 1.5 m/s ²



Typical mechanical application areas

- For increased tensile load
- Almost unlimited resistance to oil
- For hanging TopDrive applications up to 50 m



Example image



Data sheet

chainflex® CFSPECIAL.532



Data cable for TopDrive applications | For heavy duty applications, PUR outer jacket, shielded, oil-resistant and coolant-resistant, flame retardant, PVC and halogen-free, UV-resistant, hydrolysis and microbe-resistant

Technical tables:

Mechanical information

Part No.	Number of cores and conductor nominal cross section [mm ²]	Outer diameter maximum [mm]	Copper index [kg/km]	Weight [kg/km]
CFSPECIAL.532.15.08.02	(8x(2x1.5)C)C	30.0	513	1014
CFSPECIAL.532.15.16.02	(16x(2x1.5)C)C	36.5	972	1669

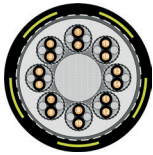
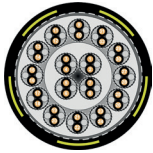
Note: The given outer diameters are maximum values and may tend toward lower tolerance limits.
G = with green-yellow earth core x = without earth core

Electrical information

Conductor nominal cross section [mm ²]	Maximum conductor resistance at 20 °C (following DIN EN 50289-1-2) [Ω/km]	Max. current rating at 30 °C [A]
1.5	13.3	21

The final maximum current rating depends among other things on the ambient conditions, the type of the installation and the number of loaded cores.

Design table

Part No.	Number of cores	Core design
CFSPECIAL.532.15.08.02	8x2	
CFSPECIAL.532.15.16.02	16x2	



Example image

