

# Data sheet

## chainflex® CFROBOT8

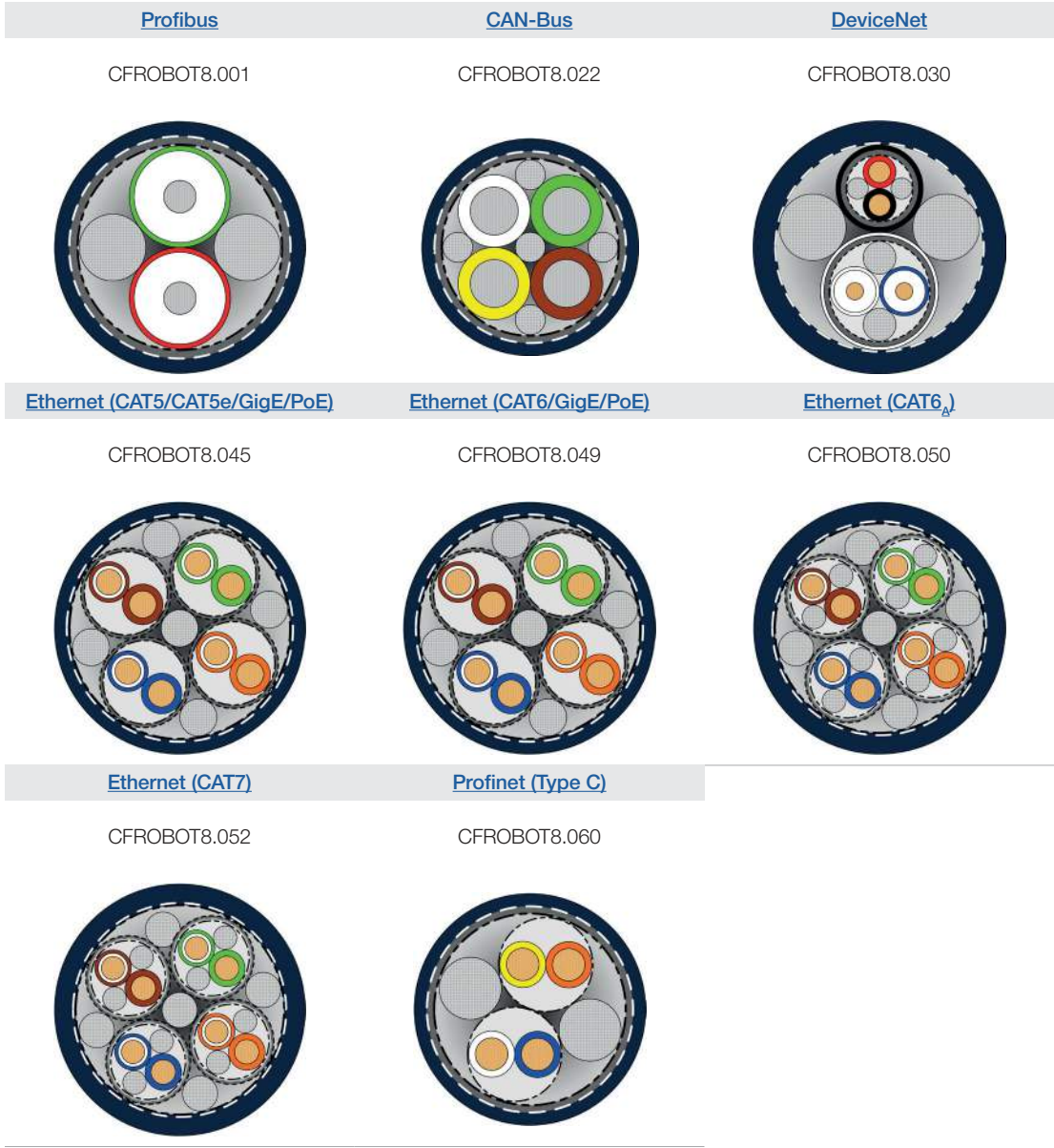


Bus cable (Class 6.1.3.3) ● For torsion applications ● PUR outer jacket ● Shielded ● Oil resistant and coolant-resistant ● Flame retardant ● Notch-resistant ● Hydrolysis and microbe-resistant



Example image

igus® chainflex® CFROBOT 8



Guarantee  
igus chainflex  
**36**  
up to 36 months guarantee

igus 36-month  
chainflex cable  
guarantee and  
service life  
calculator based  
on 2 billion test  
cycles per year



# Data sheet








## chainflex® CFROBOT8



Bus cable (Class 6.1.3.3) ● For torsion applications ● PUR outer jacket ● Shielded ● Oil resistant and coolant-resistant ● Flame retardant ● Notch-resistant ● Hydrolysis and microbe-resistant



### Cable structure

-  **Conductor** Stranded conductor in especially bending-resistant version consisting of bare copper wires (following DIN EN 60228).
-  **Core insulation** According to bus specification.
-  **Core structure** According to bus specification.
-  **Core identification** According to bus specification.  
▶ Product range table
-  **Intermediate layer** Foil taping over the outer layer.
-  **Overall shield** Torsion resistant tinned braided copper shield.  
Coverage approx. 80 % optical
-  **Outer jacket** Low-adhesion, halogen-free, highly abrasion resistant PUR mixture, adapted to suit the requirements in e-chains® (following DIN EN 50363-10-2).  
**Colour:** Steel-blue (similar to RAL 5011)  
**Printing:** white

„00000 m\*\* igus chainflex CFROBOT8.---① -----② E310776 cRUus AWM  
 Style -----③ VW-1 AWM I/II A/B 80°C 300V FT1 EAC CE UKCA ---⑤ conform  
 RoHS-II conform www.igus.de +++ chainflex cable works +++

\* **Length printing:** Not calibrated. Only intended as an orientation aid.  
 ① / ② Cable identification according to Part No. (see technical table).  
 ③ / ④ Printing of UL style (see related chapter).  
 ⑤ Printing according to bus specification (inclusive wave resistance).  
 Example: ... chainflex **CFROBOT8.001 (2x0.35)C** ...

### Guaranteed service life according to guarantee conditions

Cycles	5 million	7.5 million	10 million
Temperature, from/to [°C]	Torsion max. [°/m]	Torsion max. [°/m]	Torsion max. [°/m]
-25/-15	±150	±90	±30
-15/+60	±180	±120	±60
+60/+70	±150	±90	±30

Minimum guaranteed service life of the cable under the specified conditions.  
 The installation of the cable is recommended within the middle temperature range.



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### Properties and approvals

-  **UV resistance** High
-  **Oil resistance** Oil-resistant (following DIN EN 50363-10-2), Class 3
-  **Flame retardant** According to IEC 60332-1-2, Cable Flame, VW-1, FT1, FT2 / Horizontal Flame
-  **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 table UL/CSA AWM for details
-  **EAC** Certificate No. RU C-DE.ME77.B.00295/19 (TR ZU)
-  **REACH** In accordance with regulation (EC) No. 1907/2006 (REACH)
-  **Lead-free** Following 2011/65/EC (RoHS-II/RoHS-III)
-  **Cleanroom** According to ISO Class 1. The outer jacket material of this series complies with CF77. UL.05.12.D - tested by IPA according to standard DIN EN ISO 14644-1
-  **CE** Following 2014/35/EU
-  **UKCA** In accordance with the valid regulations of the United Kingdom (as at 08/2021)



### Properties and approvals

#### UL/CSA AWM Details

Part No.	UL style core insulation	UL style outer jacket	UL Voltage Rating [V]	UL Temperature Rating [°C]
CFROBOT8.001	1589	20236	300	80
CFROBOT8.022	1589	20236	300	80
CFROBOT8.030	1589	20236	300	80
CFROBOT8.045	10138	20317	300	80
CFROBOT8.049	10138	20317	300	80
CFROBOT8.050	1589	20236	300	80
CFROBOT8.052	1589	20236	300	80
CFROBOT8.060	1589	20236	300	80

Example image

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







Bus cable (Class 6.1.3.3) ● For torsion applications ● PUR outer jacket ● Shielded ● Oil resistant and coolant-resistant ● Flame retardant ● Notch-resistant ● Hydrolysis and microbe-resistant



Example image

### Dynamic information

	<b>Bend radius</b>	<b>e-chain® twisted</b> <b>flexible</b> <b>fixed</b>	min. 10 x d min. 8 x d min. 5 x d
	<b>Temperature</b>	<b>e-chain® twisted</b> <b>flexible</b> <b>fixed</b>	-25 °C up to +70 °C -40 °C up to +70 °C (following DIN EN 60811-504) -50 °C up to +70 °C (following DIN EN 50305)
	<b>v max.</b>	<b>twisted</b>	180 °/s
	<b>a max.</b>	<b>twisted</b>	60 °/s <sup>2</sup>
	<b>Travel distance</b>	Robots and multi-axis movements, Class 1	
	<b>Torsion</b>	Torsion ±180°, with 1 m cable length, Class 3	

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

### Typical application areas

- For heaviest duty applications with torsion movements, Class 6
- Especially for robots and 3D movements, Class 1
- Almost unlimited resistance to oil, also with bio-oils, Class 3
- Torsion ±180°, with 1 m cable length, Class 3, Class 3
- Indoor and outdoor applications, UV-resistant
- robots, Handling, spindle drives



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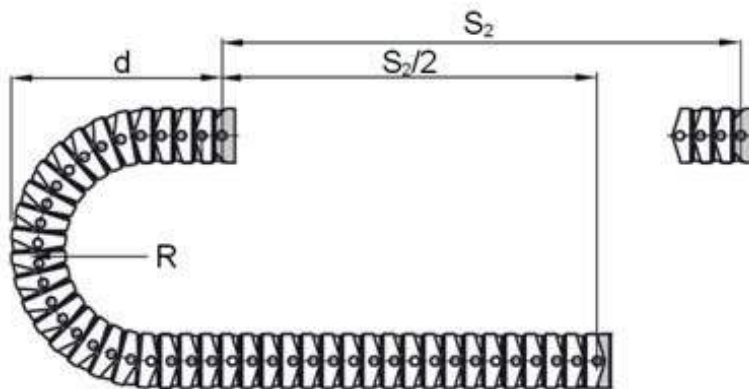


Bus cable (Class 6.1.3.3) ● For torsion applications ● PUR outer jacket ● Shielded ● Oil resistant and coolant-resistant ● Flame retardant ● Notch-resistant ● Hydrolysis and microbe-resistant



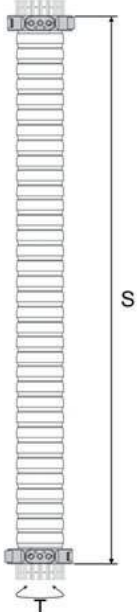
### Typical lab test setup for this cable series

Tes bend radius R	approx 63 - 75 mm
Test travel S	approx. 1 - 12 m
Test duration	minimum 1.5 - 3 million double strokes
Test speed	approx. 0.5 m/s
Test acceleration	approx. 1.5 m/s <sup>2</sup>



### Typical lab test setup (torsion) for this cable series

Torsion range T	±180°/m
Length 3D e-chain®	1 m
Test duration (torsion)	minimum 3 - 5 million cycles
Test speed (torsion)	approx. 80 - 120 °/s
Test acceleration (torsion)	approx. 40°/s <sup>2</sup>



Example image



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Bus cable (Class 6.1.3.3) ● For torsion applications ● PUR outer jacket ● Shielded ● Oil resistant and coolant-resistant ● Flame retardant ● Notch-resistant ● Hydrolysis and microbe-resistant

### Technical tables:

#### Mechanical information

Part No.	Number of cores and conductor nominal cross section [mm²]	Outer diameter (d) max. [mm]	Copper index [kg/km]	Weight [kg/km]
<b>Profibus (1x2x0,64 mm)</b>				
CFROBOT8.001	(2x0.35)C	8.0	28	63
<b>CAN-Bus</b>				
CFROBOT8.022	(4x0.5)C	7.5	41	78
<b>DeviceNet</b>				
CFROBOT8.030	(2xAWG24)C+(2xAWG22)C	9.5	31	77
<b>Ethernet/CAT5e/PoE</b>				
CFROBOT8.045	4x(2x0.15)C	9.5	48	96
<b>Ethernet/CAT6/PoE</b>				
CFROBOT8.049	4x(2x0.15)C	9.5	48	96
<b>Ethernet/CAT6<sub>A</sub></b>				
CFROBOT8.050	4x(2x0.15)C	10.5	51	134
<b>Ethernet/CAT7</b>				
CFROBOT8.052	4x(2x0.15)C	10.5	51	134
<b>Profinet</b>				
CFROBOT8.060	 (2x(2x0.34))C	8.5	34	74

G = with green-yellow earth core

x = without earth core

**Note:** The given outer diameters are maximum values and may tend toward lower tolerance limits.



Example image

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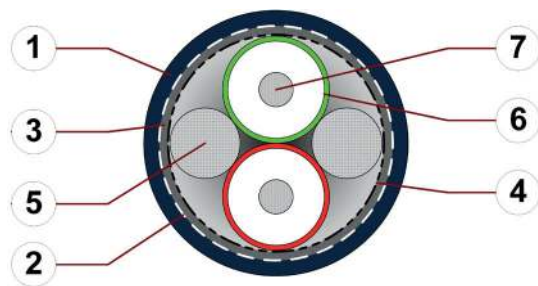
Bus cable (Class 6.1.3.3) ● For torsion applications ● PUR outer jacket ● Shielded ● Oil resistant and coolant-resistant ● Flame retardant ● Notch-resistant ● Hydrolysis and microbe-resistant



**Profibus**  
CFROBOT8.001

### Cable structure

(Electrical information please see next page)



1. Outer jacket: Pressure extruded PUR mixture
2. Overall banding: Plastic fleece
3. Overall shield: Torsion resistant tinned braided copper shield
4. Banding: Gliding PTFE foil
5. Filler: Plastic yarns
6. Core insulation: Mechanically high quality TPE mixture (according to bus specification)
7. Conductor: Fine-wire strand in especially bending-stable version consisting of tinned copper wires

### Example image

For detailed overview please see design table

### Design table

Part No.	Core group	Colour code	Drawing
CFROBOT8.001	(2x0.35)C	red, green	



Example image

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Bus cable (Class 6.1.3.3) ● For torsion applications ● PUR outer jacket ● Shielded ● Oil resistant and coolant-resistant ● Flame retardant ● Notch-resistant ● Hydrolysis and microbe-resistant



Example image

**Profibus**  
CFROBOT8.001

### Electrical information

(Cable structure please see previous page)

<b>Part No.</b>	<b>CFROBOT8.001</b>
<b>Nominal voltage</b>	50 V 300 V (following UL)
<b>Testing voltage</b> (following DIN EN 50289-1-3)	500 V
<b>Characteristic wave impedance</b> (following DIN EN 50289-1-11)	150 ± 15 Ω (3-20 MHz)
<b>Operating capacity</b> (following DIN EN 50289-1-5)	30 pF/m

<b>Conductor nominal cross section</b> [mm <sup>2</sup> ]	<b>Maximum conductor resistance at 20 °C</b> (following DIN EN 50289-1-2) [Ω/km]	<b>Maximum current rating at 30 °C</b> (following DIN VDE 0298-4) [A]
0.35	64.0	7

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





# Data sheet

## chainflex® CFROBOT8

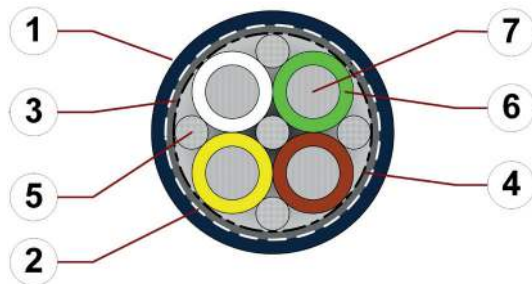


Bus cable (Class 6.1.3.3) ● For torsion applications ● PUR outer jacket ● Shielded ● Oil resistant and coolant-resistant ● Flame retardant ● Notch-resistant ● Hydrolysis and microbe-resistant

**CAN-Bus**  
CFROBOT8.022

### Cable structure

(Electrical information please see next page)



1. Outer jacket: Pressure extruded PUR mixture
2. Overall banding: Plastic fleece
3. Overall shield: Torsion resistant tinned braided copper shield
4. Banding: Gliding PTFE foil
5. Filler: Plastic yarns
6. Core insulation: Mechanically high quality TPE mixture (according to bus specification)
7. Conductor: Fine-wire strand in especially bending-stable version consisting of tinned copper wires

**Example image**  
For detailed overview please see design table

### Design table

Part No.	Core group	Colour code	Drawing
CFROBOT8.022	(4x0.5)C	white, green, brown, yellow (Star-quad)	



Example image



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Bus cable (Class 6.1.3.3) ● For torsion applications ● PUR outer jacket ● Shielded ● Oil resistant and coolant-resistant ● Flame retardant ● Notch-resistant ● Hydrolysis and microbe-resistant



**CAN-Bus**  
CFROBOT8.022

### Electrical information

(Cable structure please see previous page)

<b>Part No.</b>	<b>CFROBOT8.022</b>
<b>Nominal voltage</b>	50 V 300 V (following UL)
<b>Testing voltage</b> (following DIN EN 50289-1-3)	500 V
<b>Characteristic wave impedance</b> (following DIN EN 50289-1-11)	120 ± 12 Ω (0,425-1 MHz)
<b>Operating capacity</b> (following DIN EN 50289-1-5)	40 pF/m

<b>Conductor nominal cross section</b> [mm <sup>2</sup> ]	<b>Maximum conductor resistance at 20 °C</b> (following DIN EN 50289-1-2) [Ω/km]	<b>Maximum current rating at 30 °C</b> (following DIN VDE 0298-4) [A]
0.5	44	10

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



Example image

# Data sheet

## chainflex® CFROBOT8

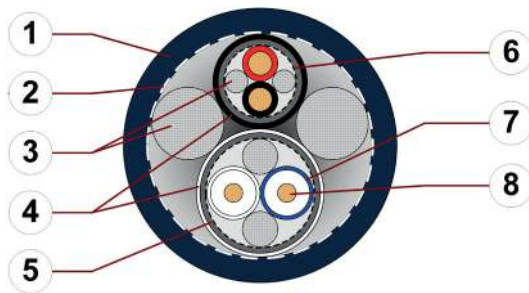


Bus cable (Class 6.1.3.3) ● For torsion applications ● PUR outer jacket ● Shielded ● Oil resistant and coolant-resistant ● Flame retardant ● Notch-resistant ● Hydrolysis and microbe-resistant

**DeviceNet**  
CFROBOT8.030

### Cable structure

(Electrical information please see next page)



1. Outer jacket: Pressure extruded PUR mixture
2. Overall banding: Plastic fleece
3. Filler: Plastic yarns
4. Element jacket: Mechanically high-quality TPE mixture
5. Element shield: Torsion resistant tinned braided copper shield
6. Element banding: Plastic foil
7. Core insulation: Mechanically high quality TPE mixture (according to bus specification)
8. Conductor: Fine-wire strand in especially bending-stable version consisting of bare copper wires

### Example image

For detailed overview please see design table

### Design table

Part No.	Core group	Colour code	Drawing
CFROBOT8.030	(2xAWG24)C	white/blue	
	(2xAWG22)C	red/black	



Example image



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Bus cable (Class 6.1.3.3) ● For torsion applications ● PUR outer jacket ● Shielded ● Oil resistant and coolant-resistant ● Flame retardant ● Notch-resistant ● Hydrolysis and microbe-resistant



Example image

**DeviceNet**  
CFROBOT8.030

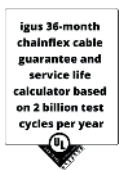
### Electrical information

(Cable structure please see previous page)

<b>Part No.</b>	<b>CFROBOT8.030</b>
<b>Nominal voltage</b>	50 V 300 V (following UL)
<b>Testing voltage</b> (following DIN EN 50289-1-3)	500 V
<b>Characteristic wave impedance</b> (following DIN EN 50289-1-11)	120 ± 12 Ω (1 MHz)

<b>Conductor nominal cross section</b>	<b>Maximum conductor resistance at 20 °C</b> (following DIN EN 50289-1-2)	<b>Maximum current rating at 30 °C</b> (following DIN VDE 0298-4)
<b>[mm<sup>2</sup>]</b>	<b>[Ω/km]</b>	<b>[A]</b>
AWG24	83	5
AWG22	54	7

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



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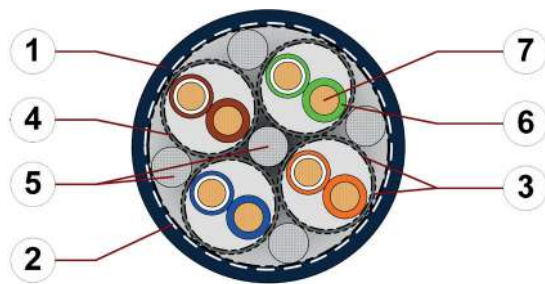
Bus cable (Class 6.1.3.3) ● For torsion applications ● PUR outer jacket ● Shielded ● Oil resistant and coolant-resistant ● Flame retardant ● Notch-resistant ● Hydrolysis and microbe-resistant



Ethernet (CAT5/CAT5e/GigE/PoE)  
CFROBOT8.045

### Cable structure

(Electrical information please see next page)



1. Outer jacket: Pressure extruded PUR mixture
2. Overall banding: Plastic fleece
3. Element banding: Plastic foil
4. Element shield: Torsion resistant tinned braided copper shield
5. Filler: Plastic yarns
6. Core insulation: Mechanically high quality TPE mixture (according to bus specification)
7. Conductor: Fine-wire strand in especially bending-stable version consisting of bare copper wires

### Example image

For detailed overview please see design table

### Design table

Part No.	Core group	Colour code	Drawing
CFROBOT8.045	4x(2x0.15)C	white-green/green, white-orange/orange, white-blue/blue, white-brown/brown	



Example image



# Data sheet

## chainflex® CFROBOT8



Bus cable (Class 6.1.3.3) ● For torsion applications ● PUR outer jacket ● Shielded ● Oil resistant and coolant-resistant ● Flame retardant ● Notch-resistant ● Hydrolysis and microbe-resistant



Example image

### Ethernet (CAT5/CAT5e/GigE/PoE) CFROBOT8.045

#### Electrical information

(Cable structure please see previous page)

<b>Part No.</b>	<b>CFROBOT8.045</b>
<b>Nominal voltage</b>	50 V 300 V (following UL)
<b>Testing voltage</b> (following DIN EN 50289-1-3)	500 V
<b>Operating capacity</b> (following DIN EN 50289-1-5)	55 pF/m
<b>Nominal Velocity of Propagation (NVP)</b>	67 %
<b>Characteristic wave impedance</b> (following DIN EN 50289-1-11)	100 ± 25 Ω

<b>Conductor nominal cross section</b> [mm <sup>2</sup> ]	<b>Maximum conductor resistance at 20 °C</b> (following DIN EN 50289-1-2) [Ω/km]	<b>Maximum current rating at 30 °C</b> (following DIN VDE 0298-4) [A]
0.15	133	2.5

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

<b>Part No.</b>	<b>Bus type</b>	<b>Link class</b>	<b>Maximum transmission length</b>
CFROBOT8.045	Ethernet/CAT5e	Class D - (Data applications up to 100 MHz)	60 m



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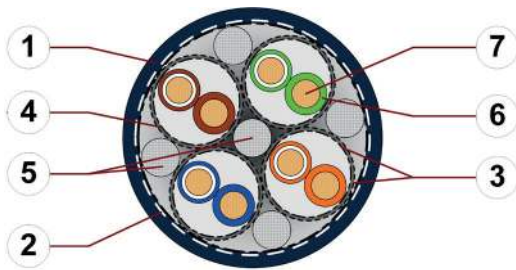


Bus cable (Class 6.1.3.3) ● For torsion applications ● PUR outer jacket ● Shielded ● Oil resistant and coolant-resistant ● Flame retardant ● Notch-resistant ● Hydrolysis and microbe-resistant

**Ethernet (CAT6/GigE/PoE)**  
CFROBOT8.049

### Cable structure

(Electrical information please see next page)



1. Outer jacket: Pressure extruded PUR mixture
2. Overall banding: Plastic fleece
3. Element banding: Plastic foil
4. Element shield: Torsion-resistant braiding made of tinned copper wires
5. Filler: Plastic yarns
6. Core insulation: Mechanically high quality TPE mixture (according to bus specification)
7. Conductor: Fine-wire strand in especially bending-stable version consisting of bare copper wires

### Example image

For detailed overview please see design table

### Design table

Part No.	Core group	Colour code	Drawing
CFROBOT8.049	4x(2x0.15)C	white-green/green, white-orange/orange, white-blue/blue, white-brown/brown	



Example image



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Example image

### Ethernet (CAT6/GigE/PoE) CFROBOT8.049

#### Electrical information

(Cable structure please see previous page)

<b>Part No.</b>	<b>CFROBOT8.049</b>
<b>Nominal voltage</b>	50 V 300 V (following UL)
<b>Testing voltage</b> (following DIN EN 50289-1-3)	500 V
<b>Operating capacity</b> (following DIN EN 50289-1-11)	55 pF/m
<b>Nominal Velocity of Propagation (NVP)</b>	67%
<b>Characteristic wave impedance</b> (following DIN EN 50289-1-11)	100 ± 40 Ω

<b>Conductor nominal cross section</b> [mm <sup>2</sup> ]	<b>Maximum conductor resistance at 20 °C</b> (following DIN EN 50289-1-2) [Ω/km]	<b>Maximum current rating at 30 °C</b> (following DIN VDE 0298-4) [A]
0.15	133	2.5

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

<b>Part No.</b>	<b>Bus type</b>	<b>Link class</b>	<b>Maximum transmission length</b>
CFROBOT8.049	Ethernet/CAT6	Class E - (Data applications up to 250 MHz)	60 m



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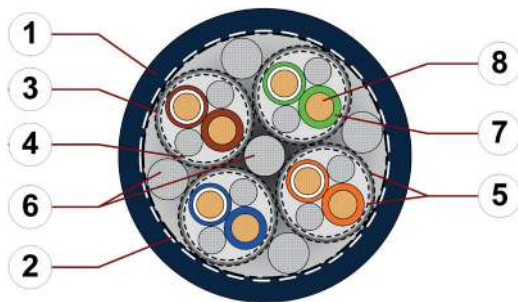


Bus cable (Class 6.1.3.3) ● For torsion applications ● PUR outer jacket ● Shielded ● Oil resistant and coolant-resistant ● Flame retardant ● Notch-resistant ● Hydrolysis and microbe-resistant

Ethernet (CAT6<sub>A</sub>)  
CFROBOT8.050

### Cable structure

(Electrical information please see next page)



1. Outer jacket: Pressure extruded PUR mixture
2. Overall banding: Plastic fleece
3. Element shield: Torsion resistant tinned braided copper shield
4. Element shield foil: Aluminium-coated polyester foil
5. Element banding: Plastic foil
6. Filler: Plastic yarns
7. Core insulation: Mechanically high quality TPE mixture (according to bus specification)
8. Conductor: Fine-wire strand in especially bending-stable version consisting of bare copper wires

### Example image

For detailed overview please see design table

### Design table

Part No.	Core group	Colour code	Drawing
CFROBOT8.050	4x(2x0.15)C	white-green/green, white-orange/orange, white-blue/blue, white-brown/brown	



Example image



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Bus cable (Class 6.1.3.3) ● For torsion applications ● PUR outer jacket ● Shielded ● Oil resistant and coolant-resistant ● Flame retardant ● Notch-resistant ● Hydrolysis and microbe-resistant



### Ethernet (CAT6<sub>A</sub>) CFROBOT8.050

#### Electrical information

(Cable structure please see previous page)

Part No.	CFROBOT8.050
Nominal voltage	50 V 300 V (following UL)
Testing voltage (following DIN EN 50289-1-3)	500 V
Operating capacity (following DIN EN 50289-1-11)	40 pF/m
Nominal Velocity of Propagation (NVP)	74%
Characteristic wave impedance (following DIN EN 50289-1-11)	100 ± 5 Ω

Conductor nominal cross section [mm <sup>2</sup> ]	Maximum conductor resistance at 20 °C (following DIN EN 50289-1-2) [Ω/km]	Maximum current rating at 30 °C (following DIN VDE 0298-4) [A]
0.15	121	2.5

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

Part No.	Bus type	Link class	Maximum transmission length
CFROBOT8.050	Ethernet/CAT6 <sub>A</sub>	Class EA - (Data applications up to 500 MHz)	60 m



Example image



# Data sheet

## chainflex® CFROBOT8



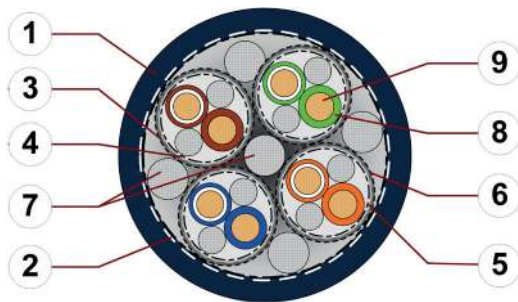
Bus cable (Class 6.1.3.3) ● For torsion applications ● PUR outer jacket ● Shielded ● Oil resistant and coolant-resistant ● Flame retardant ● Notch-resistant ● Hydrolysis and microbe-resistant



Ethernet (CAT7)  
CFROBOT8.052

### Cable structure

(Electrical information please see next page)



1. Outer jacket: Pressure extruded PUR mixture
2. Overall banding: Plastic fleece
3. Element shield: Torsion resistant tinned braided copper shield
4. Element shield foil: Aluminium-coated polyester foil
5. Element banding: Plastic foil
6. Filler: Plastic yarns
7. Core insulation: Mechanically high quality TPE mixture (according to bus specification)
8. Conductor: Fine-wire strand in especially bending-stable version consisting of bare copper wires
9. (Label in diagram pointing to the outer jacket)

#### Example image

For detailed overview please see design table

### Design table

Part No.	Core group	Colour code	Drawing
CFROBOT8.052	4x(2x0.15)C	white-green/green, white-orange/orange, white-blue/blue, white-brown/brown	



Example image

igus® chainflex® CFROBOT 8

# Data sheet

## chainflex® CFROBOT8



Bus cable (Class 6.1.3.3) ● For torsion applications ● PUR outer jacket ● Shielded ● Oil resistant and coolant-resistant ● Flame retardant ● Notch-resistant ● Hydrolysis and microbe-resistant



### Ethernet (CAT7) CFROBOT8.052

### Electrical information

(Cable structure please see previous page)

Part No.	CFROBOT8.052
Nominal voltage	50 V 300 V (following UL)
Testing voltage (following DIN EN 50289-1-3)	500 V
Operating capacity (following DIN EN 50289-1-11)	40 pF/m
Nominal Velocity of Propagation (NVP)	78%
Characteristic wave impedance (following DIN EN 50289-1-11)	100 ± 5 Ω

Conductor nominal cross section [mm <sup>2</sup> ]	Maximum conductor resistance at 20 °C (following DIN EN 50289-1-2) [Ω/km]	Maximum current rating at 30 °C (following DIN VDE 0298-4) [A]
0.15	121	2.5

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

Part No.	Bus type	Link class	Maximum transmission length
CFROBOT8.052	Ethernet/CAT7	Class F - (Data applications up to 600 MHz)	60 m



Example image

# Data sheet

## chainflex® CFROBOT8

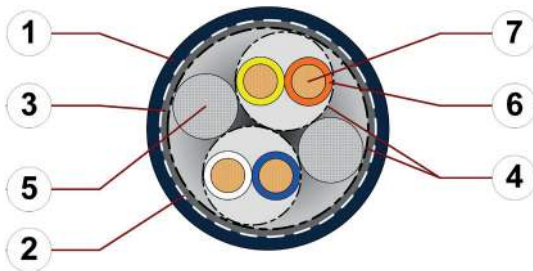


Bus cable (Class 6.1.3.3) ● For torsion applications ● PUR outer jacket ● Shielded ● Oil resistant and coolant-resistant ● Flame retardant ● Notch-resistant ● Hydrolysis and microbe-resistant

### Profinet (Type C) CFROBOT8.060

#### Cable structure

(Electrical information please see next page)



1. Outer jacket: Pressure extruded PUR mixture
2. Overall banding: Plastic fleece
3. Overall shield: Torsion resistant tinned braided copper shield
4. Banding: Gliding PTFE foil
5. Filler: Plastic yarns
6. Core insulation: Mechanically high quality TPE mixture (according to bus specification)
7. Conductor: Fine-wire strand in especially bending-stable version consisting of bare copper wires

#### Example image

For detailed overview please see design table

#### Design table

Part No.	Core group	Colour code	Drawing
CFROBOT8.060	(2x(2x0.34))C	white/blue, yellow/orange	



Example image



# Data sheet

## chainflex® CFROBOT8



Bus cable (Class 6.1.3.3) ● For torsion applications ● PUR outer jacket ● Shielded ● Oil resistant and coolant-resistant ● Flame retardant ● Notch-resistant ● Hydrolysis and microbe-resistant



Example image

### Profinet (Type C) CFROBOT8.060

### Electrical information

(Cable structure please see previous page)

Part No.	CFROBOT8.060
Nominal voltage	50 V 300 V (following UL)
Testing voltage (following DIN EN 50289-1-3)	500 V
Operating capacity	48 pF/m
Nominal Velocity of Propagation (NVP)	74%
Characteristic wave impedance (following DIN EN 50289-1-11)	100 ± 5 Ω

Conductor nominal cross section [mm <sup>2</sup> ]	Maximum conductor resistance at 20 °C (following DIN EN 50289-1-2) [Ω/km]	Maximum current rating at 30 °C (following DIN VDE 0298-4) [A]
0.34	62	7

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

