

















# PUR Power cable, twistable | CFROBOT6/7










- for twistable loads
- PUR outer jacket
- unshielded/shielded
- oil-resistant and coolant-resistant
- notch-resistant
- flame-retardant
- hydrolysis-resistant and microbe-resistant

	<b>Conductor</b>	Stranded conductor in especially bending-resistant version consisting of bare copper wires (following EN 60228).
	<b>Core insulation</b>	Mechanically high-quality TPE mixture.
	<b>Core identification</b>	<b>Energy conductor:</b> Cores black with white numerals, one core green-yellow ▶ Schedule delivery program <b>2 signal pairs:</b> Cores black with white numerals. 1. control core: 5                      2. control core: 6 3. control core: 7                      4. control core: 8 <b>4 signal pairs:</b> Colour code in accordance with DIN 47100
	<b>Overall shield</b>	Extremely torsion resistant tinned braided copper shield. Coverage approx. 85% optical.
	<b>Outer jacket</b>	Low-adhesion, halogen-free, highly abrasion-resistant mixture on the basis of PUR, adapted to suit the requirements in energy chains® (following DIN VDE 0282 Part 10). Colour: Steel blue (similar to RAL 5011)
	<b>Bending radius</b>	<b>twistable</b> minimum 10 x d <b>moved</b> minimum 7,5 x d <b>fixed</b> minimum 5 x d
	<b>Temperature</b>	<b>twistable</b> -25 °C to +80 °C <b>fixed</b> -40 °C to +80 °C
	<b>v max. twisted</b>	180°/s
	<b>a max. twisted</b>	60°/s²
	<b>Travel distance</b>	For twistable applications, but also for freely suspended travel distances and up to 10 m for gliding applications, Class 6
	<b>Torsion</b>	± 180°, with 1 m cable length
	<b>UV-resistant</b>	High
	<b>Nominal voltage</b>	600/1000 V (following DIN VDE 0250).
	<b>Testing voltage</b>	4000 V (following DIN VDE 0281-2).
	<b>Oil</b>	Oil-resistant (following DIN EN 50363-10-2), Class 3.
	<b>Flame-retardant</b>	According to IEC 60332-1-2, CEI 20-35, FT1, VW-1

 eplan download, configurator ▶ [www.igus.eu/CFROBOT](http://www.igus.eu/CFROBOT)

**1030 types from stock no cutting costs ...**  
(for up to 10 cuts of the same type)

## Class 6.6.3 (6 maximum load requirements 6 travel distance twisted 3 oil-resistant)

	<b>Silicon-free</b>	Free from silicon which can affect paint adhesion (following PV 3.10.7 – status 1992).
	<b>UL/CSA</b>	Style 10492 and 21223, 1000 V, 80 °C
	<b>NFPA</b>	Following NFPA 79-2012 chapter 12.9
	<b>CEI</b>	Following CEI 20-35
	<b>CE</b>	Following 2006/95/EG
	<b>Lead free</b>	Following 2011/65/EC (RoHS-II)
	<b>Clean room</b>	According to ISO Class 1. Outer jacket material complies with CF27.07.05.02.01.D, tested by IPA according to standard 14644-1
	<b>CTP</b>	Certified according to N° C-DE.PB49.V.00397
	<b>EAC</b>	Certified according to N° TC RU C-DE.ME77.B.00964

**New! Guaranteed lifetime for this series according to the "chainflex® guarantee club" conditions ▶ Page 22-25**

Cycles*			5 million	7,5 million	10 million
Temperature, from/to [°C]	v max. [°/s] tordiert	a max. [°/s²] tordiert	Torsion max. [°]	Torsion max. [°]	Torsion max. [°]
-25 / -15			±150	±90	±30
-15 / +70	180	60	±180	±120	±60
+70 / +80			±150	±90	±30

\* higher number of cycles possible

### Typical application area

- for maximum load requirements with torsion movements
- almost unlimited resistance to oil
- indoor and outdoor applications, UV-resistant
- especially for robots and movements in the 3D range
- robots, handling, spindle drives

**... no minimum order quantity ...**

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Image exemplary.

Delivery program Part No.	Number of cores and conductor nominal cross section [mm <sup>2</sup> ]	External diameter max. [mm]	Copper index [kg/km]	Weight [kg/km]
CFROBOT6.100.03 <sup>(12)</sup>	3G10	16,0	317	414
CFROBOT6.160.03 <sup>(12)</sup>	3G16	18,5	508	618
CFROBOT6.250.03 <sup>(12)</sup>	3G25	23,0	795	962
CFROBOT6.350.03 <sup>(12)</sup>	3G35	25,5	1122	1298
<b>Without signal pair</b>				
CFROBOT7.15.03.C <sup>(12)</sup>	(3G1,5)C	8,5	64	103
CFROBOT7.15.04.C <sup>(13)</sup>	(4G1,5)C	9,5	82	127
CFROBOT7.25.03.C <sup>(12)</sup>	(3G2,5)C	10,0	98	147
CFROBOT7.25.04.C <sup>(13)</sup>	(4G2,5)C	10,5	127	182
CFROBOT7.60.04.C <sup>(13)</sup>	(4G6,0)C	15,0	296	403
<b>2 signal pairs</b>				
CFROBOT7.15.15.02.02.C <sup>(14)</sup>	(4G1,5+2x(2x1,5)C)C	16,5	211	325
CFROBOT7.25.15.02.02.C <sup>(14)</sup>	(4G2,5+2x(2x1,5)C)C	17,0	259	381
<b>4 signal pairs</b>				
CFROBOT7.40.02.02.04.C <sup>(14)</sup>	(4G4+4x(2x0,25)C)C	17,0	270	384

(12) Core identification energy conductor: 1. core: 1 2. core: 2

(13) Core identification energy conductor: 1. core: 1 2. core: 2 3. core: 3

(14) Core identification energy conductor: 1. core: U / L1 / C / L+ 2. core: V / L2 3. core: W / L3 / D / L-

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

G = with green-yellow earth core x = without earth core

Order example: CFROBOT6.100.03 – in your desired length (0,5 m steps)  
CFROBOT6 chainflex® series .100 Code nominal cross section .03 Number of cores

prices price list online  
www.chainflex.eu/CFROBOT

delivery time despatched in  
24 hours or today

eplan download, configurator ► www.igus.eu/CFROBOT

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