






## 7th axis robot cable | PUR | chainflex® CFSPECIAL-792









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



### Dynamic Information

	<b>Bend radius</b>	<b>E-Chain® linear</b>	min. 10 x d
		<b>flexible</b>	min. 8 x d
		<b>fixed</b>	min. 5 x d
	<b>Temperature</b>	<b>E-Chain® linear</b>	-13 °F to +176 °F (-25 °C to +80 °C)
		<b>flexible</b>	-40 °F to +176 °F (-40 °C to +80 °C) (following DIN EN 60811-504)
		<b>fixed</b>	-58 °F to +176 °F (-50 °C to +80 °C) (following DIN EN 50305)
	<b>v max.</b>	<b>unsupported</b>	9.84 ft/s (3 m/s)
		<b>gliding</b>	6.56 ft/s (2 m/s)
	<b>a max.</b>		65.6 ft/s <sup>2</sup> (20 m/s <sup>2</sup> )
	<b>Travel distance</b>		Unsupported travel distances and for gliding applications up to 328.1 ft (100 m), Class 5














### Cable structure

	<b>Conductor</b>	Conductor consisting of bare copper wires (according to DIN EN 60228).
	<b>Conductor insulation</b>	Mechanically high-quality TPE mixture.
	<b>Color code</b>	► See P/N Table
	<b>Inner jacket</b>	TPE mixture adapted to suit the requirements in E-Chains®.
	<b>Overall shield</b>	Bending-resistant tinned copper braid. 80 % optical coverage
	<b>Outer jacket</b>	Low-adhesion, halogen-free, highly abrasion-resistant mixture on the basis of PUR, adapted to suit the requirements in E-Chains® (following DIN EN 50363-10-2). Color: Jet black (similar to RAL 9005)

### Electrical Information

	<b>Nominal voltage</b>	1000 V
	<b>Test voltage</b>	4000 V (following DIN EN 50395)

### Properties and approvals

	<b>UV resistance</b>	High
	<b>Oil resistance</b>	Oil-resistant (following DIN EN 50363-10-2), Class 3
	<b>Offshore</b>	MUD-resistant following NEK 606 - status 2009
	<b>Flame resistance</b>	According to IEC 60332-1-2, FT1, VW-1
	<b>Silicone-free</b>	Free from silicone which can affect paint adhesion (following PV 3.10.7 – status 1992)
	<b>Halogen-free</b>	Following DIN EN 60754
	<b>UL verified</b>	Certificate No. B129699: igus 36-month chainflex cable guarantee and service life calculator based on 2 billion test cycles per year See data sheet for details ► <a href="http://www.igus.com/CFSPECIAL-792">www.igus.com/CFSPECIAL-792</a>
	<b>UL/CSA AWM</b>	
	<b>NFPA 79</b>	Complies to Electrical Standard for Industrial Machinery NFPA 79 Section 12.9
	<b>EAC</b>	Certificate No. RU C-DE.ME77.B.00302/19 (TR ZU)
	<b>REACH</b>	In accordance with regulation (EC) No. 1907/2006 (REACH)
	<b>Lead-free</b>	Following 2011/65/EC (RoHS-II/RoHS-III)
	<b>CE</b>	Following 2014/35/EU

### Typical application areas

- Reliable E-Chain® cable for the seventh robot axis
- Electrical properties in line with Kuka (.011/.013/.014), ABB (.012) and Fanuc (.015/.016)



# 7th axis robot cable | PUR | chainflex® CFSPECIAL-792



Example image

Part No.	Number of Conductors and rated cross section [mm²]	Outer diameter max.		Copper index		Weight		Part No.	AWG	Core group	Color code
		[in.]	[mm]	[lbs/mft]	[kg/km]	[lbs/mft]	[kg/km]				
<b>ABB</b>											
CFSPECIAL-792-012	(18G2.5)C	1.00	25.5	366.2	545	592.7	882	CFSPECIAL-792-012	14	(18G2.5)C	Black cores with white numbers 1-17, one green-yellow core
<b>Fanuc</b>											
CFSPECIAL-792-015	(7x(6x2.0))C	1.44	36.5	671.3	999	1173.9	1747	CFSPECIAL-792-015	14	(7x(6x2.0))C	Black cores with white numbers 1-29 Blue cores with white numbers 1-4 Yellow cores with black numbers 1-9
CFSPECIAL-792-016	(5x(4x0.25)+10x(3x0.75))C	1.04	26.5	283.6	422	589.3	877	CFSPECIAL-792-016	24	5x(4x0.25)	(blue/violet/brown/green),(gray/violet/yellow/brown), (gray/blue/brown/green),(gray/blue/green/yellow), (green/violet/brown/yellow)
									18	10x(3x0.75)	Brown cores with white numbers 1, 7, 24 & 30 Black cores with white numbers 16-21 Blue cores with white numbers 2, 8 & 25 Green cores with black numbers 3, 9 & 26 Yellow cores with black numbers 5, 22 & 28 Red cores with white numbers 11-15 Violet cores with white numbers 4, 10 & 27 Grey cores with black numbers 6, 23 & 29
<b>Kuka</b>											
CFSPECIAL-792-011	(5x(2x6.0+2x2.5)+(2x(6x1.0))C)C	1.40	35.5	840.0	1250	1366.1	2033	CFSPECIAL-792-011	10	10x6.0	Black cores with white numbers 1-9, one green-yellow core
									14	10x2.5	Black cores with white numbers 10-18, one green-yellow core
									17	2x(6x1.0)C	Black cores with white numbers 19-30
CFSPECIAL-792-013	((6x1.5)C+3x(3x4)+1G6)C	1.10	28.0	456.3	679	819.8	1220	CFSPECIAL-792-013	16	(6x1.5)C	Black cores with white numbers 10-15
									12	3x(3x4)	Black cores with white numbers 1-9
									10	1G6	Green-yellow core
CFSPECIAL-792-014	(2x(3x1.5)C+3x(3x10)+1G10)C	1.40	35.5	900.4	1340	1425.9	2122	CFSPECIAL-792-014	16	2x(3x1.5)C	Black cores with white numbers 10-15
									8	3x(3x10)	Black cores with white numbers 1-9
									8	1G10	Green-yellow core

Note: The given outer diameters are maximum values.  
G = with green-yellow earth core x = without earth core

