

Robotics

Harnessed hose packages
and cables for robots



Chainflex® ReadyCable®



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Hose packages for robots



ReadyChain® Robot Harnessed hose packages for welding robots

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Harnessed cables for axis 7 on robots



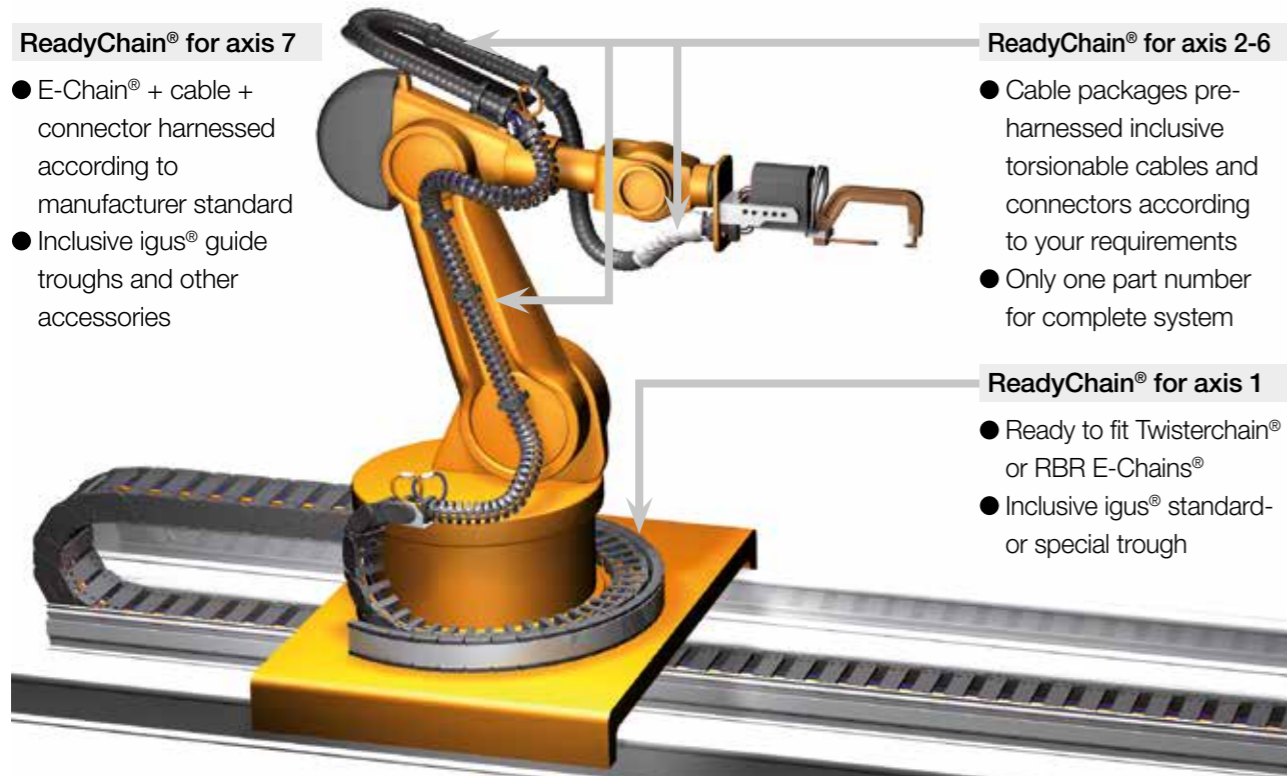
CFSPECIAL-792 Harnessed connecting cables for KUKA robots

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Assembled energy supply systems, connectors and cables from igus®. Everything from a single source. Directly from the manufacturer. Quick delivery on your robot, delivered in 1-10 days

ReadyChain® for axis 7

- E-Chain® + cable + connector harnessed according to manufacturer standard
- Inclusive igus® guide troughs and other accessories



ReadyChain® for axis 2-6

- Cable packages pre-harnessed inclusive torsionable cables and connectors according to your requirements
- Only one part number for complete system

ReadyChain® for axis 1

- Ready to fit Twisterchain® or RBR E-Chains®
- Inclusive igus® standard- or special trough

Additional services for you

- Survey of existing systems on your robot by our sales engineers
- Optional system guarantee
- Worldwide readychain® specialists and 11 production sites for fast maintenance and spare part support

Moving energy made easy – even with robot applications

The modular igus® robot construction kit comprises over 5,000 different items. We can offer you the optimum, customised solution for almost any robot application. Our "Quick Robot" online tool can be used to create the ideal configuration in seconds – try it for yourself: www.igus.com/quickrobot

All igus® robotic components are tested in our laboratory and have already been reliably used in applications for many years. Our primary aim is to design a reliable overall energy supply system for your robot. We do not simply focus on mechanical protection but instead look at the entire application including the cables that have been specially developed for use on the robot. We will gladly find a solution for your application too – and look forward to receiving your enquiry.

Triflex® ReadyChain® hose packages

Delivery program hose packages for welding robots

Product range	Equipment hose package
Part No.	

Welding axis 1-3

(1 m breakout/side + 1 m E-Chain® for each)



RRC-S-001

- Consisting of:
- 1 m TRCF-85-135-0, including mounting brackets
 - Welding cable (2x35 mm² + 1x25 mm²) including multi-contact TSB and TSS welding connector
 - Control cable (18x0.75 mm² + 5x0.75 mm²) including rectangular connector on both ends
 - Welding control cable (5x2x0.5 mm²) including rectangular connector on both ends
 - 3x hoses - DN12 red, green, blue - including fixture on both ends

Welding axis 3-6

(1 m breakout/side + 1 m E-Chain® for each)



RRC-S-002

- Consisting of:
- 1 m TRC-85-135-0 including protectors and mounting brackets
 - Welding cable (2x35 mm² + 1x25 mm²) including multi-contact TSB and TSS welding connector
 - Control cable (18x0.75 mm² + 5x0.75 mm²) including round connector and rectangular connector
 - Welding control cable (5x2x0.5 mm²) including rectangular connector on both ends
 - 3x hoses - DN12 red, green, blue - including fixture on both ends

PUR Control cable | CFSPECIAL.792



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

Dynamic information

	Bending radius	E-Chain®	min. 10 x d
		flexible	min. 8 x d
		fixed	min. 5 x d
	Temperature	E-Chain®	-13°F to 176°F (-25°C to 80°C)
		flexible	-40°F to 176°F (-40°C to 80°C)
		fixed	-58°F to 176°F (-50°C to 80°C)
	v max.	unsupported	9,84 ft/s (3 m/s)
		gliding	6,56 ft/s (2 m/s)
	a max.		20 m/s²
	Travel distance	Unsupported travel distances and up to 328ft (100m) for gliding applications, Class 5	

Cable structure

	Conductors	Fine-wired stranded conductor consisting of bare copper wires (following DIN EN 60228).
	Conductor insulation	Mechanically high-quality TPE mixture.
	Color code	According to bus specification.
	Inner jacket	TPE mixture adapted to suit the requirements in E-Chains®.
	Overall shield	Bending-resistant braiding made of tinned copper wires.
	Outer jacket	Low-adhesion mixture on the basis of PUR, adapted to suit the requirements in e-chains® (following DIN VDE 0282 Part 10). Color: Jet black (similar to RAL 9005)

Electrical information

	Nominal voltage	1000 V
	Test voltage	4000 V (following DIN EN 50396)

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-retardant	According to IEC 60332-1-2, CEI 20-35, FT1, VW-1
	Silicone-free	Free from silicone which can affect paint adhesion (following PV 3.10.7 – status 1992)
	Halogen-free	Following EN 50267-2-1
	UL/CSA	Style 10258 and 20234, 1000 V, 80 °C
	NFFPA	Following NFFPA 79-2012 chapter 12.9
	CEI	Following CEI 20-35
	Lead free	Following 2011/65/EC (RoHS-II)
	CE	Following 2006/95/EC

Typical application areas

- Secure E-Chain® cable for KUKA robots

Delivery program connecting cables (PUR) for KUKA robots

Base article	Product range Part No.	Number of Conductors and rated cross section [mm²]	Outer diameter [in]	Outer diameter [mm]	Bend radius
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Cable design with Quantec pin assignment



CFSPECIAL-792-011	MAT90489759	(2x(6x1.0)C +5x(2x2.5+2x6.0))C	1.40	35.5	7.5
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Cable design with Fortec pin assignment



CFSPECIAL-792-011	MAT90489760	(2x(6x1.0)C +5x(2x2.5+2x6.0))C	1.40	35.5	7.5
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1,244 types from stock ... no cutting costs*
... no minimum order quantity ... *(up to 10 cuts of the same part number)

36 months guarantee on every chainflex® cable ...
... up to 10 million cycles guaranteed ...