

readycable® control cable Kuka Quantec single
axis 7th axis
MAT904105009



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- For extremely heavy duty applications
- PUR outer jacket
- Overall shield
- Oil-resistant (according to DIN EN 50363-10-2)
- Coolant-resistant
- Notch-resistant
- Guarantee up to 4 years

Product description

Introducing the readycable® control cable Kuka Quantec single axis 7th axis, designed for extremely heavy-duty applications. This cable features a durable PUR outer jacket that is resistant to oil, coolant, and UV rays, making it perfect for both indoor and outdoor use. With outstanding flexibility and the ability to withstand unsupported travel distances up to 100m, it's ideal for machine tools, packaging, and refrigeration sectors. Enjoy reliability and performance with this top-quality control cable.

Connectors

Connector A	round connector, female, 12 poles
Connector B	round connector, male, 12 poles

General properties

Number of cores and conductor nominal cross-section	(4x(2x0.25)C)C
Outer diameter (d) max. mm	11 mm
Weight per km	153 kg/km
Copper index kg/km	78 kg/km



Electricity attributes



Nominal voltage

300/300V (according to DIN VDE 0298-3)

UL Voltage Rating

300 V



Test voltage

1500V (according to DIN EN 50395)

Cable structure



Conductor

Very finely stranded special conductors of a particularly bend-resistant design, made of bare copper wires.



Core insulation

Mechanically high-quality TPE mixture.



Core stranding

Cores twisted in pairs with short pitch lengths, core pairs then wound with short pitch lengths.



Conductor colours

Colour code according to DIN 47100

Core group 1 core structure

(4x(2x0.25)C)C

Element shield

Extremely flexible braiding made of tinned copper wires. Coverage linear approx. 70%, optical approx. 90%



Inner jacket

TPE mixture adapted to suit the requirements in e-chains®.



Overall shield

Extremely flexible braiding made of tinned copper wires. Coverage linear approx. 70%, optical approx. 90%



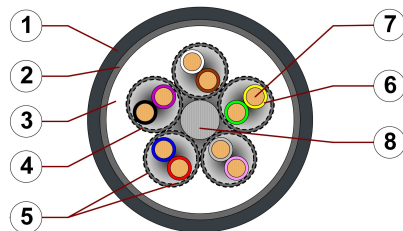
Outer jacket

Low-adhesion, halogen-free, highly abrasion-resistant PUR mixture, adapted to suit the requirements in e-chains® (according to DIN EN 50363-10-2).



Outer jacket colour

Anthracite grey (comparable to RAL 7016)



1. Outer jacket: pressure extruded PUR mixture
2. Overall shield: extremely flexible braiding made of tinned copper wires.
3. Inner jacket: pressure-extruded, gusset-filling PUR mixture
4. Element shield: extremely flexible braiding made of tinned copper wires.
5. Banding: plastic foil
6. Core insulation: mechanically high-quality TPE mixture
7. Conductor: very finely stranded special conductor of particularly bend-resistant design made of bare copper wires
8. Strain relief: high tensile strength centre element



Dynamic properties

	Min. bend radius, e-chain (factor)	10 x d
	Min. bend radius, e-chain	110 mm
	Min. bend radius, flexible (factor)	8 x d
	Min. bend radius, fixed (factor)	5 x d
	Temperature e-chain®	-25°C up to +80°C
	Temperature, flexible	-40°C to +80°C (according to DIN EN 60811-504)
	Temperature, fixed	-50°C to +80°C (according to DIN EN 50305)
	v max. unsupported (speed)	10 m/s
	v max. gliding (speed)	5 m/s
	a max. (acceleration)	80 m/s ²
	travel length	Class 5
	torsion	No torsion



chainflex®Lifetime

Guaranteed service life for this series according to guarantee conditions

Further information: [chainflex® guarantee](#)

Double strokes*	5 million	7.5 million	10 million
Temperature,	R min.	R min.	R min.
from/to [°C]	[Factor x d]	[Factor x d]	[Factor x d]
-25 / -15	12.5	13.5	14.5
-15 / +70	10	11	12
+70 / +80	12.5	13.5	15.5

* Higher number of double strokes possible - use the service life calculation function on this page.



Properties and approvals

	UV resistance	High
	Oil resistance	Oil-resistant (according to DIN EN 50363-10-2), Class 3
	Offshore	MUD-resistant according to NEK 606 - status 2018
	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 (according to PV 3.10.7 – status 1992)
	Halogen-free	According to DIN EN 60754
	UL verified	Certificate no. V293650: "The igus 4-year chainflex cable guarantee and service life calculator based on 2 billion test cycles per year"
UL/CSA AWM		Style 10493 and 20233, 300 V, 80 °C
	NFPA	According to NFPA 79-2018, chapter 12.9
	DNV	Type approval certificate TAE00003X3
	REACH	In accordance with Regulation (EC) No. 1907/2006 (REACH)
	Lead-free	According to 2011/65/EU (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	According to 2014/35/EU

Certificates and standards

