

readycable® servo cable suitable for Beckhoff

ZK4500-0023-xxxx, basic cable PVC 7.5xd

MAT9371001



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- For heavy-duty applications
- PVC outer jacket
- Oil resistant (following DIN EN 50363-4-1)
- Silicone-free
- Flame retardant
- Overall shield
- Guarantee up to 4 years

Product description

Introducing the readycable® servo cable, designed specifically for Beckhoff ZK4500-0023-xxxx applications. This robust cable features a durable PVC outer jacket, making it ideal for heavy-duty use in environments with light oil influence. It's silicone-free, flame retardant, and has an overall shield for added protection. Suitable for indoor and outdoor applications above 5°C, it excels in unsupported and gliding travels up to 100m, perfect for storage units, packaging machines, and indoor cranes.

Manufacturer attributes

Manufacturer Part No	ZK4500-0023-xxxx
Cable type	Basic cable

Connectors

Connector A	Connector M23 socket 8-pin
Connector B	Circuit board connection

General properties

Number of cores and conductor nominal cross-section	(4G1.5+2x(2x0.75)C)C
Outer diameter (d) max. mm	14.5 mm
Weight per km	309 kg/km
Copper index kg/km	167 kg/km



Electricity attributes



Nominal voltage

600/1,000V (according to DIN VDE 0298-3)

UL Voltage Rating

1000 V



Test voltage

4000V (according to DIN EN 50395)



Cable structure



Conductor

Stranded conductor in an especially bend-resistant version consisting of bare copper wires (according to DIN EN 60228).



Core insulation

Mechanically high-quality, especially low-capacity XLPE mixture.



Core stranding

Power cores with control pair elements wound with elements for high-tensile stresses.



Conductor colours

Power cores: Cores black with white digits, one core green-yellow. 1st core: U / L1 / C / L+ 2nd core: V / L2 3rd core: W / L3 / D / L- 2 control pairs: cores black with white digits. 1st control wire: 5 2nd control wire: 6 3rd control wire: 7 4th control wire: 8

Core group 1 core structure

4G1.5

Core group 2 core structure

2x(2x0.75)C)C



Element shield

Extremely bend-resistant braiding made of tinned copper wires.

Inner jacket

PVC 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 PVC mixture, adapted to suit the requirements in e-chains® (according to DIN EN 50363-4-1).

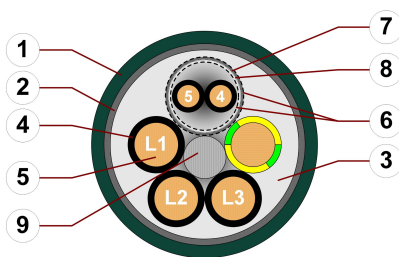


Outer jacket colour

Moss green (comparable to RAL 6005)

CFRIP®

Strip cables faster: a tear strip is moulded into the inner jacket



1. Outer jacket: pressure-extruded, oil-resistant PVC mixture
2. Overall shield: extremely flexible braiding made of tinned copper wires.
3. Inner jacket: pressure-extruded, gusset-filling PVC mixture
4. Core insulation: mechanically high-quality, especially low-capacitance TPE mixture
5. Conductor: particularly resistant to bending made of bare copper wires
6. Element banding: plastic foil
7. Element shield: extremely flexible tinned copper wire
8. Shield film: aluminium-coated plastic foil
9. Strain relief: high tensile strength centre element



Dynamic properties

	Min. bend radius, e-chain (factor)	7.5 x d
	Min. bend radius, e-chain	108.75 mm
	Min. bend radius, flexible (factor)	6 x d
	Min. bend radius, fixed (factor)	4 x d
	Temperature e-chain®	+5°C up to +70°C
	Temperature, flexible	-5°C to +70°C (according to DIN EN 60811-504)
	Temperature, fixed	-15°C to +70°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]
+5 / +15	10	11	12
+15 / +60	7.5	8.5	9.5
+60 / +70	10	11	12

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

Properties and approvals

	UV resistance	Medium
	Oil resistance	Oil-resistant (according to DIN EN 50363-4-1), Class 2
	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)
	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 30052 und 20886, 1000V, 90°C
	NFPA	According to NFPA 79-2018, chapter 12.9
	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 2. The outer jacket material of this series complies with CF5.10.07 - tested by IPA according to standard DIN EN ISO 14644-1
	CE	According to 2014/35/EU



Certificates and standards

