

readycable® encoder cable suitable for Bosch
Rexroth RKG4200, basic cable TPE 7.5xd

MAT9100013



readycable® encoder cable suitable for Bosch
Rexroth RKG4200, basic cable TPE 7.5xd

- For extremely heavy duty applications
- TPE outer jacket
- Oil-resistant (following DIN EN 60811-404), resistant to bio oils (following VDMA 24568 with Plantocut 8 S-MB tested by DEA)
- Halogen-free
- Silicone-free
- Hydrolysis and microbe-resistant
- PVC-free
- CFRIP®
- Guarantee up to 4 years

Product description

Introducing the readycable® encoder cable, expertly designed for Bosch Rexroth RKG4200 applications. This robust cable features a TPE outer jacket, ensuring exceptional durability for heavy-duty use. It offers outstanding oil resistance, including bio-oils, and is suitable for both indoor and outdoor environments. With hydrolysis and microbe resistance, plus being halogen and PVC-free, this cable is perfect for demanding settings like cleanrooms and machining units. Experience reliability with readycable® today.

Manufacturer attributes

Manufacturer Part No	RKG4200
Cable type	Basic cable

Connectors

Connector A	round plug, socket
Connector B	SUB-D, pin

General properties

Number of cores and conductor nominal cross-section	(4x(2x0.25)+2x0.5)C
Outer diameter (d) max. mm	8.5 mm
Weight per km	91 kg/km
Copper index kg/km	57 kg/km



Electricity attributes



Nominal voltage

50V

UL Voltage Rating

300 V



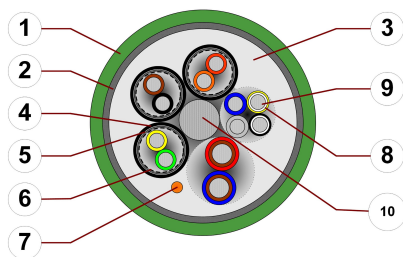
Test voltage

1500V (according to DIN EN 50395)



Cable structure

	Conductor	Stranded conductor in an especially flexible design consisting of tinned copper wires (according to DIN EN 60228).
	Core insulation	Mechanically high-quality TPE mixture.
	Core stranding	According to measuring system specification
	Conductor colours	according to measuring system specification
Core group 1 core structure		4x(2x0.25)
Core group 1 colour code		brown/green, blue/violet, grey/pink, red/black
Core group 2 core structure		2x0.5
	Element shield	Extremely flexible braiding made of tinned copper wires. Coverage linear approx. 70%, optical approx. 90%
Element jacket		TPE mixture on pair shielding adapted to suit the requirements in e-chains®.
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, extremely abrasion-resistant and highly flexible TPE mixture, adapted to suit the requirements in e-chains®.
	Outer jacket colour	Yellow-green (comparable to RAL 6018)
	CFRIP®	Strip cables faster: a tear strip is moulded into the inner jacket



1. Outer jacket: pressure-extruded, halogen-free TPE mixture
2. Overall shield: extremely flexible braiding made of tinned copper wires
3. Inner jacket: pressure-extruded, gusset-filling TPE mixture
4. Element jacket: mechanically high-quality TPE mixture
5. Element shield: extremely flexible tinned copper wire
6. Banding: plastic foil
7. CFRIP: tear strip for faster stripping
8. Core insulation: mechanically high-quality TPE mixture
9. Conductor: stranded wire conductors in a particularly flexible design made of tinned copper wires
10. Strain relief: high tensile strength centre element



Dynamic properties

	Min. bend radius, e-chain (factor)	6.8 x d
	Min. bend radius, e-chain	57.8 mm
	Min. bend radius, flexible (factor)	5 x d
	Min. bend radius, fixed (factor)	4 x d
	Temperature e-chain®	-35°C up to +90°C
	Temperature, flexible	-50°C to +90°C (according to DIN EN 60811-504)
	Temperature, fixed	-55°C to +90°C (according to DIN EN 50305)
	v max. unsupported (speed)	10 m/s
	v max. gliding (speed)	6 m/s
	a max. (acceleration)	100 m/s ²
	travel length	Class 6
	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		12.5 million	
Temperature, from/to [°C]	R min. [Factor x d]		R min. [Factor x d]		R min. [Factor x d]	
	< 10 m	≥ 10 m	< 10 m	≥ 10 m	< 10 m	≥ 10 m
-35/-25	8.5	10	9.5	11	10.5	12
-25/+80	6.8	7.5	7.5	8.5	8.8	9.5
+80/+90	8.5	10	9.5	11	10.5	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 60811-404), bio-oil-resistant (according to VDMA 24568 with Plantocut 8 S-MB tested by DEA), Class 4



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 AWM

Style 10467 and 22355, 300 V, 80 °C



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 CF9.15.07 - tested by IPA according to standard DIN EN ISO 14644-1



DESINA

According to VDW, DESINA standardisation



CE

According to 2014/35/EU



Certificates and standards

