

readycable® encoder cable suitable for B&R

i8BCRxxxx.1121A-0, basic cable TPE 6.8xd

MAT9630015



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

Product description

Introducing the readycable® encoder cable, designed for B&R i8BCRxxxx.1121A-0. This heavy-duty cable features a robust TPE outer jacket, ensuring exceptional oil resistance, even against bio-oils. Ideal for both indoor and outdoor use, it is UV-resistant and suitable for unsupported travels up to 400m. Perfect for storage and retrieval units, machining tools, and cleanrooms, this halogen-free and silicone-free cable meets the highest standards for durability and performance.

Manufacturer attributes

Manufacturer Part No	i8BCRxxxx.1121A-0
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	(3x(2x0.25))C
Outer diameter (d) max. mm	8 mm
Weight per km	78 kg/km
Copper index kg/km	35 kg/km

Electricity attributes

 Nominal voltage	300/300V (according to DIN VDE 0298-3)
UL Voltage Rating	300 V
 Test voltage	500V
Maximum conductor resistance at 20°C [$\mu\Omega$/km]	79.0000

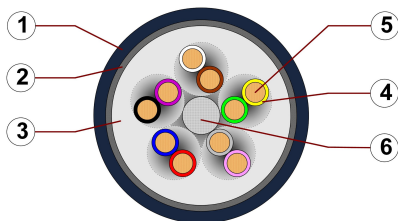
Properties and approvals

 UV resistance	High
 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 11884 and 22357, 300 V, 90 °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
 CE	According to 2014/35/EU



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 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		(3x(2x0.25))C
	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	Steel blue (comparable to RAL 5011)



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. Core insulation: mechanically high-quality TPE mixture
5. Conductor: fine-wire strand in especially bending-stable version consisting of bare copper wires
6. Strain relief: high tensile strength centre element



Dynamic properties

	Min. bend radius, e-chain (factor)	6.8 x d
	Min. bend radius, e-chain	54.4 mm
	Min. bend radius, flexible (factor)	5 x d
	Min. bend radius, fixed (factor)	4 x d
	Temperature e-chain®	-35°C up to +100°C
	Temperature, flexible	-50°C to +100°C (according to DIN EN 60811-504)
	Temperature, fixed	-55°C to +100°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/s²
	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,	R min.	R min.	R min.
from/to [°C]	[Factor x d]	[Factor x d]	[Factor x d]
-35 / -25	7.5	8.5	9.5
-25 / +90	6.8	7.5	8.5
+90 / +100	7.5	8.5	9.5

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

Certificates and standards

