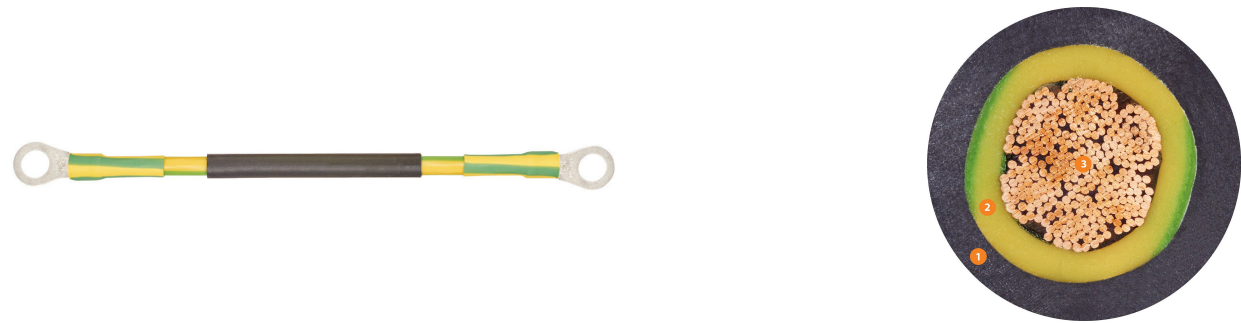


readycable® harnessed signal cable for ABB
robots, R1.SMB, PUR, 7.5 x d
MAT904117144



readycable® harnessed signal cable for ABB
robots, R1.SMB, PUR, 7.5 x d

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

Product description

Introducing the readycable harnessed signal cable for ABB robots, designed for extremely heavy-duty applications. This durable cable features a TPE outer jacket that is hydrolysis and microbe-resistant, flame retardant, and silicone-free. With high UV resistance and exceptional oil resistance, including bio-oils, it is perfect for both indoor and outdoor use. Ideal for storage and retrieval units, machining tools, and cleanrooms, it supports unsupported travels and gliding distances of 400m and more.

General properties

Number of cores and conductor nominal cross-section	1 G16
Outer diameter (d) max. mm	9.5 mm
Weight per km	195 kg/km
Copper index kg/km	159 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

Conductor cable made of stranded wires (according to DIN EN 60228).



Core insulation

Mechanically high-quality TPE mixture.



Conductor colours

Green-yellow

Core group 1 core structure

1G16



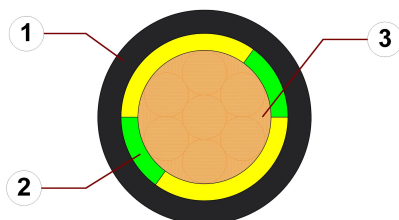
Outer jacket

Low-adhesion, extremely abrasion-resistant and highly flexible TPE mixture, adapted to suit the requirements in e-chains®.



Outer jacket colour

Signal black (comparable to RAL 9004)



1. Outer jacket: pressure extruded, flame-retardant TPE mixture
2. Core insulation: mechanically high-quality TPE mixture
3. Conductor: braided conductor in a particularly flexible design made from bare copper wires



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
	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 10492 and 21218, 1000 V, 80 °C
	NFPA	According to NFPA 79-2018, chapter 12.9
	DNV	Type approval certificate TAE00003XC
	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 CF34.UL.25.04.D - tested by IPA according to standard DIN EN ISO 14644-1
	CE	According to 2014/35/EU



Dynamic properties

	Min. bend radius, e-chain (factor)	7.5 x d
	Min. bend radius, e-chain	71.25 mm
	Min. bend radius, flexible (factor)	6 x d
	Min. bend radius, fixed (factor)	4 x d
	Temperature e-chain®	-35°C up to +90°C
	Temperature, flexible	-45°C to +90°C (according to DIN EN 60811-504)
	Temperature, fixed	-50°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 13
	torsion	Torsion ±90°, with 1m cable length, Class 2



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,	v max. [m/s]		a max.	Travel	R min. [Factor x d]	R min. [Factor x d]	R min. [Factor x d]
from/to [°C]	unsupported	gliding	[m/s²]	[m]			
-35 / -25					10	11	12
-25 / +80	10	6	100	≤ 400	7.5	8.5	9.5
+80 / +90					10	11	12

* Higher number of double strokes possible - please ask for your individual calculation.

Certificates and standards

