

readycable® harnessed hybrid cable, direct connection cable for ABB robot, PUR
MAT904145760



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- PUR outer jacket
- Shielded
- Oil-resistant and coolant-resistant
- Flame retardant
- PVC and halogen-free
- Notch-resistant
- Hydrolysis and microbe-resistant

Product description

Introducing the readycable® harnessed hybrid cable, designed for direct connection to ABB robots. This high-quality cable features a durable PUR outer jacket, ensuring it is oil-resistant, coolant-resistant, and flame retardant. It is also PVC and halogen-free, notch-resistant, and offers protection against hydrolysis and microbes. Perfect for demanding environments, this cable guarantees reliable performance and longevity for your robotic applications.

General properties

Number of cores and conductor nominal cross-section	(18G2.5)C
Outer diameter (d) max. mm	25.5 mm
Weight per km	882 kg/km
Copper index kg/km	545 kg/km

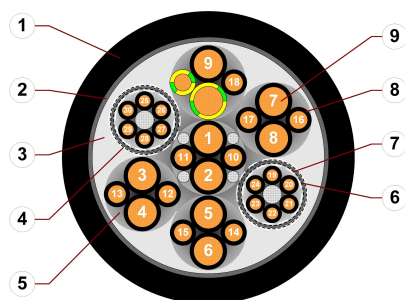
Electricity attributes

 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	Finely stranded conductor consisting of bare copper wires (according to DIN EN 60228).
	Core insulation	Mechanically high-quality TPE mixture.
Core group 1 core structure		(18G2.5)C
Core group 1 colour code		Black cores with white numbers 1-17, one green-yellow core
	Inner jacket	TPE mixture adapted to suit the requirements in e-chains®.
	Overall shield	Bend-resistant braiding made of tinned copper wires. Coverage approx. 50% linear, approx. 80% optical
	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	Jet black (comparable to RAL 9005)



1. Outer jacket: pressure extruded PUR mixture
2. Overall shield: flexible braiding made of tinned copper wires.
3. Inner jacket: pressure extruded, gusset-filling TPE mixture
4. Element banding: synthetic fleece over plastic foil
5. Bundles with optimised pitch length and direction
6. Element shield: bend-resistant braiding of tinned copper wires
7. Element banding: plastic foil over plastic fleece
8. Core insulation: mechanically high-quality TPE mixture
9. Conductor: fine stranded wire made of bare copper wires



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. B129699: "igus 36-month chainflex cable guarantee and service life calculator based on 2 billion test cycles per year"
	NFPA	According to NFPA 79-2018, chapter 12.9
	CE	According to 2014/35/EU



Dynamic properties

	Min. bend radius, e-chain (factor)	10 x d
	Min. bend radius, e-chain	255 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)	3 m/s
	v max. gliding (speed)	2 m/s
	a max. (acceleration)	20 m/s ²
	torsion	No torsion

Certificates and standards

