

readycable® data cable according to AIDA
specification, extension cable socket-pin, axis 1-6
MAT904152123



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1-6

- For torsion applications
- PUR outer jacket
- Overall shield
- Oil-resistant (according to DIN EN 50363-10-2)
- Guarantee up to 4 years

Product description

Introducing the readycable® data cable, designed for the toughest applications with torsion movements. This extension cable features a durable PUR outer jacket, ensuring exceptional oil and coolant resistance. It's perfect for both indoor and outdoor use, with UV protection and flame retardant properties. Ideal for robots, 3D movements, and lead screw drives, this cable is notch, hydrolysis, and microbe-resistant, making it a reliable choice for demanding environments. Choose readycable® for unmatched performance.

Connectors

Connector A	AIDA signal pin
Connector B	AIDA signal pin

General properties

Number of cores and conductor nominal cross-section	(5x(2x0.5))C
Outer diameter (d) max. mm	12.5 mm
Weight per km	170 kg/km
Copper index kg/km	80 kg/km

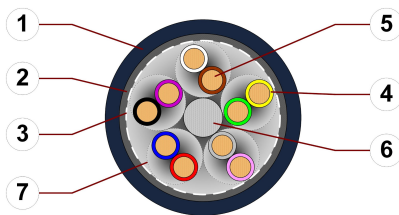


Electricity attributes

	Nominal voltage	300/500V (according to DIN VDE 0298-3)
	UL Voltage Rating	300 V
	Test voltage	2000V (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 TPE mixture.
	Conductor colours	Colour code according to DIN 47100
	Core group 1 core structure	(5x(2x0.5))C
	Overall shield	Extremely torsion-resistant, tinned copper shield. Cover approx. 85% 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	Steel blue (comparable to RAL 5011)



- 1. Outer jacket: pressure extruded PUR mixture
- 2. Overall shield: extremely flexible tinned copper wire
- 3. Banding: plastic fleece
- 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
- 7. Core structure: pairs with optimised pitch length and direction



Properties and approvals

	UV resistance	High
	Oil resistance	Oil-resistant (according to DIN EN 50363-10-2), Class 3
	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 10497 and 20911, 300 V, 80 °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 1. The outer jacket material of this series complies with CF77.UL.05.12.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)	10 x d
	Min. bend radius, e-chain	125 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)	10 m/s
	travel length	Class 8
	torsion	Torsion ±180°, with 1m cable length, Class 3



chainflex®Lifetime

Guaranteed service life for this series according to guarantee conditions

Further information: [chainflex® guarantee](#)

Cycles*			5 million	7.5 million	10 million
Temperature,	v max. [°/s]	a max. [°/s²]	Torsion max.	R min. [Factor x d]	R min. [Factor x d]
from/to [°C]	twisted	twisted	[°/m]	[°/m]	[°/m]
-25 / -15			±150	±90	±30
-15 / +70	180	60	±180	±120	±60
+70 / +80			±150	±90	±30

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

Certificates and standards

