

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

MAT904151689



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specification, extension cable socket-socket,
axis 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 heavy-duty applications with torsion movements. This extension cable features a durable PUR outer jacket, ensuring exceptional oil and coolant resistance. Ideal for both indoor and outdoor use, it is UV-resistant and flame retardant. Perfect for robots, 3D movements, and lead screw drives, this cable combines resilience with flexibility, making it a reliable choice for demanding environments. Elevate your performance with readycable®!

Connectors

Connector A	AIDA power socket
Connector B	AIDA power socket

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

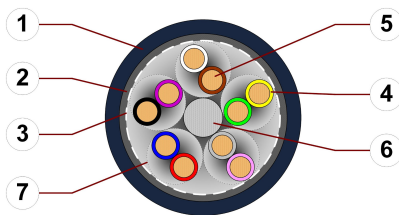


Electricity attributes

	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



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.

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



Certificates and standards

