

readycable® hybrid cable suitable for Allen Bradley

2090-CSBM1DE-10AF, basic cable PUR 10xd

MAT9851723



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10xd

- For medium-duty applications
- PUR outer jacket
- Oil-resistant (according to DIN EN 50363-10-2)
- Halogen-free
- Silicone-free
- Flame retardant
- Offshore
- Coolant-resistant
- Hydrolysis and microbe-resistant
- Notch-resistant
- Overall shield
- PVC-free
- Guarantee up to 4 years

Product description

Introducing the readycable® hybrid cable, designed for Allen Bradley 2090-CSBM1DE-10AF. This medium-duty cable features a durable PUR outer jacket that offers exceptional oil resistance, making it ideal for various applications. It's halogen-free, silicone-free, and flame retardant, ensuring safety and reliability. Suitable for both indoor and outdoor use without direct sunlight, it withstands unsupported travel distances and is resistant to coolant, hydrolysis, and microbes. Choose this cable for robust performance in challenging environments.

Manufacturer attributes

Manufacturer Part No	2090-CSBM1DE-10AF
Cable type	Basic cable

Connectors

Connector A	val_282
Connector B	val_282



General properties

Number of cores and conductor nominal cross-section	(4G6.0+(2x1.0)C)+(2xAWG22)C)C
Outer diameter (d) max. mm	17.5 mm
Weight per km	475 kg/km
Copper index kg/km	343 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	Stranded conductor in a bend-resistant version consisting of bare copper wires (according to DIN EN 60228).
 Core insulation	Mechanically high-quality, especially low-capacity XLPE mixture.
 Core stranding	Power cores and control pair elements wound with a short pitch length around a high tensile strength centre element.
 Conductor colours	According to servo hybrid specification.
Core group 1 core structure	4G6.0
Core group 1 colour code	3 black cores with white printing: 1st core: U/L1/C/L+ 2nd core: V/L2 3rd core: W/L3/D/L- followed by a green-yellow core
Core group 2 core structure	(2x1.0)C
 Element shield	Flexible braiding made of tinned copper wires.
 Overall shield	Bend-resistant braiding made of tinned copper wires. Coverage approx. 55% 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	Pastel orange (comparable to RAL 2003)



Dynamic properties

	Min. bend radius, e-chain (factor)	10 x d
	Min. bend radius, e-chain	175 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
	v max. gliding (speed)	2 m/s
	a max. (acceleration)	50 m/s ²
	travel length	Class 2
	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	10 million
Temperature,	R min.	R min.	R min.
from/to [°C]	[Factor x d]	[Factor x d]	[Factor x d]
-25 / -15	12.5	13.5	14.5
-15 / +70	10	11	12
+70 / +80	12.5	13.5	14.5

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



Properties and approvals

	UV resistance	Medium
	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. V293650: "The igus 4-year chainflex cable guarantee and service life calculator based on 2 billion test cycles per year"
	UL/CSA AWM	val_ul_csa_50
	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
	DESINA	According to VDW, DESINA standardisation
	CE	According to 2014/35/EU



Certificates and standards

