

readycable® bus cable suitable for Schunk

Profibus, extension cable, PVC 15xd

MAT9423801



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- For energy chain applications
- PVC outer jacket
- Bend factor 15xd
- Overall shield
- Flame retardant
- 5 million double strokes guaranteed

Product description

Introducing the readycable® bus cable, specially designed for Schunk Profibus applications. This high-performance extension cable features a durable PVC outer jacket and is flame retardant, ensuring safety and reliability. With a bend factor of 15xd, it is perfect for flexing applications and can handle unsupported travels of up to 10m. Ideal for indoor use in industries such as wood processing, packaging, and device handling, it guarantees 5 million double strokes for long-lasting performance.

Connectors

Connector A	Round connector ITT 4-pin
Connector B	val_265

Manufacturer attributes

Manufacturer Part No	Schunk Profibus
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General properties

Bus system	Profibus (1x2x0.64mm)
Number of cores and conductor nominal cross-section	(2x0.25)C
Outer diameter (d) max. mm	8 mm
Weight per km	59 kg/km
Copper index kg/km	18 kg/km



Electricity attributes

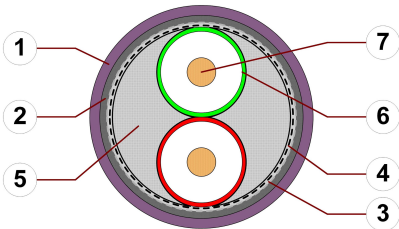
Nominal voltage	50V
UL Voltage Rating	30 V
Test voltage	500V
Wave resistance approx.	150 Ω

Properties and approvals

UV resistance	none
Oil resistance	No oil resistance
Flame-retardant	val_flame_retardant_11
Silicone-free	Free from silicone which can affect paint adhesion (according to PV 3.10.7 – status 1992)
UL verified	Certificate no. V293650: "igus 4-year chainflex cable guarantee and service life calculator based on 2 billion test cycles per year"
UL/CSA AWM	Style 1589 and 2560, 30 V, 60 °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)
CE	According to 2014/35/EU

Cable structure

Conductor	Conductor consisting of bare copper wires (according to DIN EN 60228).
Core insulation	According to bus specification.
 Conductor colours	red, green
Core group 1 core structure	2x0.25
Core group 1 colour code	red, green
Overall shield	Braiding made of tinned copper wires. Cover approx. 60% optical.
Outer jacket	Low-adhesion PVC mixture, adapted to suit the requirements in e-chains®.
Outer jacket colour	Red lilac (comparable to RAL 4001)



1. Outer jacket: pressure-extruded PVC mixture
2. Overall shield: braiding made of tinned copper wires
3. Shield film: aluminium-coated plastic foil
4. Banding: plastic foil
5. Filler: plastic yarns
6. Core insulation: mechanically high-quality TPE mixture (according to bus specification)
7. Conductor: strands consisting of bare copper wires



Dynamic properties

	Min. bend radius, e-chain (factor)	15 x d
	Min. bend radius, e-chain	120 mm
	Min. bend radius, flexible (factor)	12 x d
	Min. bend radius, fixed (factor)	8 x d
	Temperature e-chain®	+5°C up to +70°C
	Temperature, flexible	-5°C to +70°C (according to DIN EN 60811-504)
	Temperature, fixed	-15°C to +70°C (according to DIN EN 50305)
	v max. unsupported (speed)	3 m/s
	a max. (acceleration)	20 m/s ²
	travel length	Class 1
	torsion	No torsion



chainflex®Lifetime

Guaranteed service life for this series according to guarantee conditions
Further information: [chainflex® guarantee](#)

Double strokes*	1 million	3 million	5 million
Temperature,	R min.	R min.	R min.
from/to [°C]	[Factor x d]	[Factor x d]	[Factor x d]
+5 / +15	17.5	18.5	19.5
+15 / +60	15	16	17
+80 / +90	17.5	18.5	19.5

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

Technical note on bus cables

chainflex® bus cables have been specially developed and tested for continuously moving use in e-chains® applications. Depending on the outer jacket material and the design principle, the bus cables are designed for different mechanical requirements and media resistance. The cables have been electrically designed in such a way that, on the one hand, the electrical requirements of the respective bus specification are reliably met and, on the other, that great value is placed on a high degree of EMC reliability. It is also ensured that the electrical values remain stable over the long term in spite of permanent movement. However, the overall quality of transmission in a complete bus communication system is not solely dependent on the cable used. Rather, it requires precise co-ordination of all components (electronic components,

connection technology and cable) as well as observing the maximum transmission levels depending on the respective systems in relation to the required data transmission rates. A cable is therefore not solely responsible for the secure transmission of signals.

igus® advises you when you are designing your bus system to take all these factors into account and, with extensive tests, helps you to ensure the process reliability of your system from the very beginning.

Certificates and standards

