

readycable® measuring system cable, suitable for
Harmonic Drive, AFC2-H-12M23-A-xxx-01, basic
cable PVC 10xd

MAT9742703



readycable® measuring system cable, suitable
for Harmonic Drive, AFC2-H-12M23-A-xxx-01,
basic cable PVC 10xd

- For medium-duty applications
- PVC outer jacket
- Oil resistant (following DIN EN 50363-4-1)
- Silicone-free
- Flame retardant
- Guarantee up to 4 years

Product description

Introducing the readycable measuring system cable by Harmonic Drive, designed for medium duty applications. This durable cable features a PVC outer jacket that is oil resistant and flame retardant, ensuring reliable performance in various environments. Ideal for indoor and outdoor use at temperatures above 5°C, it supports unsupported travel distances and is perfect for storage and retrieval units, processing machines, and handling equipment. Experience quality and versatility with this essential cable solution.

Connectors

Connector A	Plug-in connector socket M23 12-pin
Connector B	SUB-D pin 15-pin straight

Manufacturer attributes

Manufacturer Part No	AFC2-H-12M23-A-xxx-01
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General properties

Number of cores and conductor nominal cross-section	(4x(2x0.25)C+(2x0.5))C
Outer diameter (d) max. mm	10.5 mm
Weight per km	124 kg/km
Copper index kg/km	77 kg/km



Electricity attributes

Nominal voltage	50V
UL Voltage Rating	300 V
Test voltage	500V

Properties and approvals

UV resistance	none
Oil resistance	Oil-resistant (according to DIN EN 50363-4-1), Class 2
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 10467 and 2464, 300 V, 80 °C
NFPA	According to NFPA 79-2018, chapter 12.9
Lead-free	According to 2011/65/EU (RoHS-II/RoHS-III)
Cleanroom	According to ISO Class 2. The outer jacket material of this series complies with CF5.10.07 - tested by IPA according to standard DIN EN ISO 14644-1
CE	According to 2014/35/EU

Cable structure

Conductor	Very finely stranded special conductors of particularly bending resistant design made of tinned copper wires.
Core insulation	Mechanically high-quality TPE mixture.
Core stranding	According to measuring system specification
Conductor colours	according to measuring system specification
Core group 1 core structure	4x(2x0.25)C
Core group 1 colour code	white/brown, green/yellow, grey/pink, blue/red
Core group 2 core structure	(2x0.5)
Element shield	Extremely bend-resistant, tinned copper shielding. Cover approx. 90% optical
Element jacket	TPE mixture on pair shielding adapted to suit the requirements in e-chains®.
Overall shield	Extremely bend-resistant braiding made of tinned copper wires. Coverage approx. 55% linear, approx. 80% optical
Outer jacket	Low-adhesion, oil-resistant PVC mixture, adapted to suit the requirements in e-chains® (according to DIN EN 50363-4-1).
Outer jacket colour	Yellow-green (comparable to RAL 6018)



Dynamic properties

Min. bend radius, e-chain (factor)	10 x d
Min. bend radius, e-chain	105 mm
Min. bend radius, flexible (factor)	8 x d
Min. bend radius, fixed (factor)	5 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)	5 m/s
v max. gliding (speed)	3 m/s
a max. (acceleration)	30 m/s ²
travel length	Class 2
torsion	No torsion

Certificates and standards

