

readycable® pulse encoder cable suitable for
Baumüller 448819, ECN1313/EQN1325 basic cable,
TPE 6.8xd, Speedtec

MAT9291066



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cable, TPE 6.8xd, Speedtec

- For extremely heavy duty applications
- TPE outer jacket
- Oil-resistant (following DIN EN 60811-404), resistant to bio oils (following VDMA 24568 with Plantocut 8 S-MB tested by DEA)
- Halogen-free
- Silicone-free
- Hydrolysis and microbe-resistant
- PVC-free
- CFRIP®
- Guarantee up to 4 years

Product description

Introducing the readycable® pulse encoder cable, designed for Baumüller 448819 and ECN1313/EQN1325 applications. This robust cable features a TPE outer jacket, making it ideal for extremely heavy-duty tasks. It offers exceptional oil resistance, including against bio-oils, and is halogen-free and silicone-free. Perfect for both indoor and outdoor use (excluding direct sunlight), it supports unsupported travels over 400m, making it suitable for various applications like machine tools and cleanroom environments.

Manufacturer attributes

Manufacturer Part No	448819
Cable type	ECN1313/EQN1325 Basic cable SpeedTec

Connectors

Connector A	Connector M23 socket 12-pin
Connector B	SUB-D connector 15-pin angled



General properties

Number of cores and conductor nominal cross-section	(5x(2x0.14)+2x0.5)C
Outer diameter (d) max. mm	8.5 mm
Weight per km	88 kg/km
Copper index kg/km	52 kg/km

Electricity attributes

Nominal voltage	50V
UL Voltage Rating	300 V
Test voltage	1500V (according to DIN EN 50395)

Cable structure

Conductor	Stranded conductor in an especially flexible design consisting of tinned copper wires (according to DIN EN 60228).
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	5x(2x0.14)
Core group 1 colour code	brown/green, yellow/grey, white/violet, red/black, pink/blue
Core group 2 core structure	2x0.5
Element shield	Extremely flexible braiding made of tinned copper wires. Coverage linear approx. 70%, optical approx. 90%
Element jacket	TPE mixture on pair shielding adapted to suit the requirements in e-chains®.
Inner jacket	TPE mixture adapted to suit the requirements in e-chains®.
Overall shield	Extremely flexible braiding made of tinned copper wires. Coverage linear approx. 70%, optical approx. 90%
Outer jacket	Low-adhesion, extremely abrasion-resistant and highly flexible TPE mixture, adapted to suit the requirements in e-chains®.
Outer jacket colour	Yellow-green (comparable to RAL 6018)
CFRIP®	Strip cables faster: a tear strip is moulded into the inner jacket



Properties and approvals

UV resistance	Medium
Oil resistance	Oil-resistant (according to DIN EN 60811-404), bio-oil-resistant (according to VDMA 24568 with Plantocut 8 S-MB tested by DEA), Class 4
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 AWM	Style 10467 and 22355, 300 V, 80 °C
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 CF9.15.07 - tested by IPA according to standard DIN EN ISO 14644-1
DESINA	According to VDW, DESINA standardisation
CE	According to 2014/35/EU

Dynamic properties

Min. bend radius, e-chain (factor)	6.8 x d
Min. bend radius, e-chain	57.8 mm
Min. bend radius, flexible (factor)	5 x d
Min. bend radius, fixed (factor)	4 x d
Temperature e-chain®	-35°C up to +90°C
Temperature, flexible	-50°C to +90°C (according to DIN EN 60811-504)
Temperature, fixed	-55°C to +90°C (according to DIN EN 50305)
v max. unsupported (speed)	10 m/s
v max. gliding (speed)	6 m/s
a max. (acceleration)	100 m/s²
travel length	Class 6
torsion	No torsion

Certificates and standards

