

readycable® pulse encoder cable suitable for  
Baumüller 448823, ECN1313/EQN1325 basic cable,  
PVC 10xd, Speedtec

MAT9290072



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cable, PVC 10xd, Speedtec

- 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® pulse encoder cable, designed for medium duty applications. This cable features a durable PVC outer jacket that is oil-resistant and flame retardant, ensuring reliability in various environments. Ideal for both indoor and outdoor use at temperatures above 5°C, it supports unsupported travel distances and gliding applications up to 10m. Perfect for storage and retrieval units, processing machines, and handling systems, this cable is silicone-free and built to last.

Manufacturer attributes

|                      |                                      |
|----------------------|--------------------------------------|
| Manufacturer Part No | 448823                               |
| 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 mm                |
| Weight per km                                       | 75 kg/km            |
| Copper index kg/km                                  | 45 kg/km            |



## Electricity attributes

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

## 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 | 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 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)                                                                                   |

## 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                                                                                                             |
| 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 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                                                                                                                             |



## Dynamic properties

|                                     |                                               |
|-------------------------------------|-----------------------------------------------|
| Min. bend radius, e-chain (factor)  | 10 x d                                        |
| Min. bend radius, e-chain           | 80 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/s²                                       |
| travel length                       | Class 2                                       |
| torsion                             | No torsion                                    |

## Certificates and standards

