

readycable® pulse encoder cable suitable for  
Baumüller 393889 (2m), basic cable  
ECN1313EQN1325, PVC 10xd

MAT9290030



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- 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 Baumüller 393889. This 2m cable features a durable PVC outer jacket that is oil-resistant and flame retardant, making it perfect for medium-duty applications. Its silicone-free design ensures compatibility with various environments. Ideal for both indoor and outdoor use at temperatures above 5°C, this cable is perfect for storage and retrieval units, processing machines, and more. Experience reliability and performance with readycable®.

Manufacturer attributes

|                      |              |
|----------------------|--------------|
| Manufacturer Part No | 393889 (2 m) |
| Cable type           | Basic cable  |

Connectors

|             |                    |
|-------------|--------------------|
| Connector A | round plug, socket |
| Connector B | SUB-D, pin         |



General properties

|                                                     |                     |
|-----------------------------------------------------|---------------------|
| Drive technology system                             | B&R, Baumüller      |
| 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



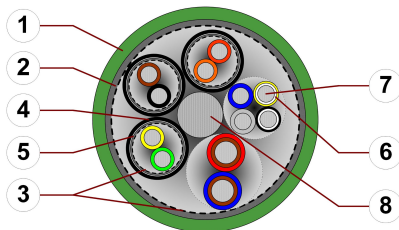
**Outer jacket**

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)



1. Outer jacket: pressure extruded, oil-resistant PVC mixture
2. Overall shield: extremely flexible braiding made of tinned copper wires
3. Banding: plastic foil
4. Element jacket: mechanically high-quality TPE mixture
5. Element shield: extremely flexible tinned copper wire
6. Core insulation: mechanically high-quality TPE mixture
7. Conductor: very finely stranded special conductors of a particularly bend-resistant design, made of tinned copper wires.
8. Strain relief: high tensile strength centre element



## 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/s <sup>2</sup>                           |
|  | 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,    | v max. [m/s] |         | a max. | Travel | R min. [Factor x d] | R min. [Factor x d] | R min. [Factor x d] |
| from/to [°C]    | unsupported  | gliding | [m/s²] | [m]    |                     |                     |                     |
| +5/ +15         |              |         |        |        | 12.5                | 13.5                | 14.5                |
| +15 / +60       | 5            | 3       | 30     | ≤ 10   | 10                  | 11                  | 12                  |
| +60 / +70       |              |         |        |        | 12.5                | 13.5                | 14.5                |

\* Higher number of double strokes possible - please ask for your individual calculation.

## 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                                                                                                                             |



## Certificates and standards

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