

readycable® EnDat cable suitable for B&R

i8CExxx.12-1, basic cable TPE 7.5xd

MAT9660001



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i8CExxx.12-1, basic cable TPE 7.5xd

- 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® EnDat cable, designed for B&R i8CExxx.12-1 applications. This heavy-duty cable features a durable TPE outer jacket that is resistant to oil and bio-oils, ensuring reliable performance in demanding environments. Suitable for both indoor and outdoor use, it supports unsupported travels and gliding distances of over 400m. With its halogen-free, silicone-free, and PVC-free composition, this cable is perfect for cleanroom, semiconductor assembly, and low-temperature applications.

Manufacturer attributes

|                      |              |
|----------------------|--------------|
| Manufacturer Part No | i8CExxx.12-1 |
| Cable type           | Basic cable  |

Connectors

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

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®.

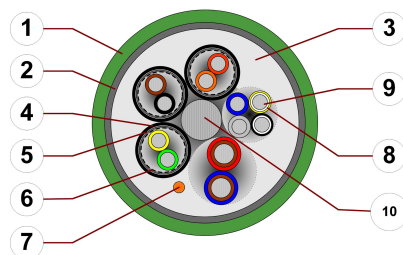


**Outer jacket colour**

Yellow-green (comparable to RAL 6018)

**CFRIP®**

Strip cables faster: a tear strip is moulded into the inner jacket



1. Outer jacket: pressure-extruded, halogen-free TPE mixture
2. Overall shield: extremely flexible braiding made of tinned copper wires
3. Inner jacket: pressure-extruded, gusset-filling TPE mixture
4. Element jacket: mechanically high-quality TPE mixture
5. Element shield: extremely flexible tinned copper wire
6. Banding: plastic foil
7. CFRIP: tear strip for faster stripping
8. Core insulation: mechanically high-quality TPE mixture
9. Conductor: stranded wire conductors in a particularly flexible design made of tinned copper wires
10. Strain relief: high tensile strength centre element



## 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/s <sup>2</sup>                           |
|  | travel length                       | Class 6                                        |
|  | 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         |        | 12.5 million        |        |
|-----------------|---------------------|--------|---------------------|--------|---------------------|--------|
| Temperature,    | R min. [Factor x d] |        | R min. [Factor x d] |        | R min. [Factor x d] |        |
| from/to [°C]    | < 10 m              | ≥ 10 m | < 10 m              | ≥ 10 m | < 10 m              | ≥ 10 m |
| -35/-25         | 8.5                 | 10     | 9.5                 | 11     | 10.5                | 12     |
| -25/+80         | 6.8                 | 7.5    | 7.5                 | 8.5    | 8.8                 | 9.5    |
| +80/+90         | 8.5                 | 10     | 9.5                 | 11     | 10.5                | 12     |

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

Certificates and standards

