

readycable® encoder cable suitable for Mitsubishi

Electric MR-J3ENCBL-xxx-A2-H, basic cable, PVC

7.5xd

MAT9722003



readycable® encoder cable suitable for

Mitsubishi Electric MR-J3ENCBL-xxx-A2-H,

basic cable, PVC 7.5xd

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

Product description

Introducing the readycable encoder cable, designed for Mitsubishi Electric MR-J3ENCBL-xxx-A2-H. This durable cable features a PVC outer jacket, making it suitable for heavy-duty applications. It is oil resistant, flame retardant, and silicone-free, ensuring reliability in various environments. Ideal for indoor and outdoor use at temperatures above 5°C, it supports unsupported travel distances and is perfect for storage, machining, and handling units. Choose readycable for quality and performance you can trust.

Manufacturer attributes

|                      |                     |
|----------------------|---------------------|
| Manufacturer Part No | MR-J3ENCBL-xxx-A2-H |
| Cable type           | Connecting cable    |

Connectors

|             |         |
|-------------|---------|
| Connector A | val_257 |
| Connector B | val_271 |

General properties

|                                                     |               |
|-----------------------------------------------------|---------------|
| Number of cores and conductor nominal cross-section | (3x(2x0.25))C |
| Outer diameter (d) max. mm                          | 7 mm          |
| Weight per km                                       | 63 kg/km      |
| Copper index kg/km                                  | 36 kg/km      |

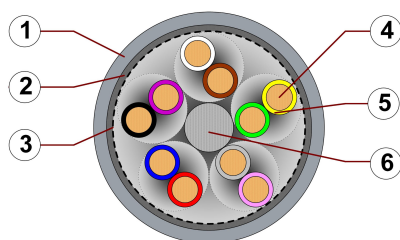


## Electricity attributes

|                                                                                  |                                                      |                                        |
|----------------------------------------------------------------------------------|------------------------------------------------------|----------------------------------------|
|  | Nominal voltage                                      | 300/300V (according to DIN VDE 0298-3) |
|                                                                                  | UL Voltage Rating                                    | 300 V                                  |
|  | Test voltage                                         | 1500V (according to DIN EN 50395)      |
|                                                                                  | Maximum conductor resistance at 20°C [ $\Omega$ /km] | 79.0000                                |

## Cable structure

|                                                                                    |                     |                                                                                                                         |
|------------------------------------------------------------------------------------|---------------------|-------------------------------------------------------------------------------------------------------------------------|
|    | Conductor           | Very finely stranded special conductors of a particularly bend-resistant design, made of bare copper wires.             |
|    | Core insulation     | Mechanically high-quality TPE mixture.                                                                                  |
|    | Core stranding      | Cores twisted in pairs with short pitch lengths, core pairs then wound with short pitch lengths.                        |
|   | Conductor colours   | Colour code according to DIN 47100                                                                                      |
|  | Overall shield      | Extremely flexible braiding made of tinned copper wires. Coverage linear approx. 70%, optical approx. 90%               |
|  | 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 | Silver grey (comparable to RAL 7001)                                                                                    |



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. Conductor: very finely stranded special conductor of particularly bend-resistant design made of bare copper wires
5. Core insulation: mechanically high-quality TPE mixture
6. Strain relief: high tensile strength centre element



## Dynamic properties

|                                                                                    |                                     |                                               |
|------------------------------------------------------------------------------------|-------------------------------------|-----------------------------------------------|
|    | Min. bend radius, e-chain (factor)  | 7.5 x d                                       |
|    | Min. bend radius, e-chain           | 52.5 mm                                       |
|    | Min. bend radius, flexible (factor) | 6 x d                                         |
|    | Min. bend radius, fixed (factor)    | 4 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)               | 50 m/s <sup>2</sup>                           |
|  | travel length                       | Class 5                                       |
|  | torsion                             | No torsion                                    |



## chainflex® Lifetime

Guaranteed service life for this series according to the guarantee conditions

More information: chainflex® guarantee

Double strokes\* 5 million 7.5 million 10 million

Temperaturr, R min. R min. R min.

from/to [°C] [factor x d] [factor x d] [factor x d]

-25 / -15 10 11 12

-15 / +70 7.5 8.5 9.5

+70 / +80 10 11 12

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

## Properties and approvals

|            |                 |                                                                                                                                                       |
|------------|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
|            | UV resistance   | Medium                                                                                                                                                |
|            | 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 10493 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 1. The outer jacket material of this series complies with CF240.02.24 - tested by IPA according to standard DIN EN ISO 14644-1 |
|            | CE              | According to 2014/35/EU                                                                                                                               |

## Certificates and standards

