



Pushing Performance  
Since 1945

# M12-SD-CC-CRIMP-8P-XCOD-F-STR-CF



Image is for illustration purposes only. Please refer to product description.

|                    |                                                                               |
|--------------------|-------------------------------------------------------------------------------|
| Part number        | 21 03 881 2821                                                                |
| Specification      | M12-SD-CC-CRIMP-8P-XCOD-F-STR-CF                                              |
| HARTING eCatalogue | <a href="https://harting.com/21038812821">https://harting.com/21038812821</a> |

## Identification

|                |                         |
|----------------|-------------------------|
| Category       | Connectors              |
| Series         | Circular connectors M12 |
| Identification | Slim Design             |
| Element        | Cable connector         |
| Specification  | Straight                |

## Version

|                    |                                                 |
|--------------------|-------------------------------------------------|
| Termination method | Crimp termination                               |
| Gender             | Female                                          |
| Shielding          | Shielded<br>Shield connection with crimp flange |
| Number of contacts | 8                                               |
| Coding             | X-coding                                        |
| Locking type       | Screw locking                                   |
| Details            | Please order crimp contacts separately.         |
| Details            | For Ethernet applications up to 10 Gbit only    |

## Technical characteristics

|                               |                               |
|-------------------------------|-------------------------------|
| Conductor cross-section       | 0.08 ... 0.25 mm <sup>2</sup> |
| Conductor cross-section [AWG] | AWG 28 ... AWG 23             |
| Wire outer diameter           | ≤1.4 mm                       |
| Rated current                 | 0.5 A                         |
| Rated voltage                 | 48 V                          |



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## Technical characteristics

|                                           |                                                        |
|-------------------------------------------|--------------------------------------------------------|
| Rated impulse voltage                     | 0.8 kV                                                 |
| Pollution degree                          | 3                                                      |
| Transmission characteristics              | Cat. 6 <sub>A</sub> Class E <sub>A</sub> up to 500 MHz |
| Overvoltage category                      | III                                                    |
| Data rate                                 | 10 Mbit/s                                              |
|                                           | 100 Mbit/s                                             |
|                                           | 1 Gbit/s                                               |
|                                           | 2.5 Gbit/s                                             |
|                                           | 5 Gbit/s                                               |
|                                           | 10 Gbit/s                                              |
| Insulation resistance                     | >10 <sup>8</sup> Ω                                     |
| Contact resistance                        | ≤10 mΩ                                                 |
| Tightening torque                         | 0.6 Nm                                                 |
| Wrench size (knurled screw / knurled nut) | 15                                                     |
| Limiting temperature                      | -40 ... +85 °C                                         |
| Mating cycles                             | ≥500                                                   |
| Degree of protection acc. to IEC 60529    | IP65 / IP67 mated condition                            |
| Isolation group                           | I (600 ≤ CTI)                                          |

## Material properties

|                                      |                                                        |
|--------------------------------------|--------------------------------------------------------|
| Material (insert)                    | Liquid crystal polymer (LCP)                           |
| Material (hood/housing)              | Zinc die-cast                                          |
| RoHS                                 | compliant with exemption                               |
| RoHS exemptions                      | 6(c): Copper alloy containing up to 4 % lead by weight |
| ELV status                           | compliant with exemption                               |
| China RoHS                           | 50                                                     |
| REACH Annex XVII substances          | Not contained                                          |
| REACH ANNEX XIV substances           | Not contained                                          |
| REACH SVHC substances                | Yes                                                    |
| REACH SVHC substances                | Lead                                                   |
| ECHA SCIP number                     | 0d7d3693-d625-47ab-934a-d241bf72c86e                   |
| California Proposition 65 substances | Yes                                                    |
| California Proposition 65 substances | Lead                                                   |
|                                      | Nickel                                                 |
| Fire protection on railway vehicles  | EN 45545-2 (2020-08) + A1 (2023-10)                    |



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Material properties

|                                    |              |
|------------------------------------|--------------|
| Requirement set with Hazard Levels | R22 (HL 1-3) |
|                                    | R23 (HL 1-3) |

Specifications and approvals

|                |                 |
|----------------|-----------------|
| Specifications | IEC 61076-2-109 |
|----------------|-----------------|

Commercial data

|                                |                                                  |
|--------------------------------|--------------------------------------------------|
| Packaging size                 | 1                                                |
| Net weight                     | 49 g                                             |
| Country of origin              | Romania                                          |
| European customs tariff number | 85366990                                         |
| GTIN                           | 5713140226111                                    |
| eCl@ss                         | 27440116 Circular connector (for field assembly) |
| ETIM                           | EC002635                                         |
| UNSPSC 24.0                    | 39121413                                         |