

## T1 IP20 -M12 T1 SPE 1x2xAWG22/7 PUR 20m



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

|                    |   |
|--------------------|---|
| Part number        | 33 28 021 4002 200  |
| Specification      | T1 IP20 -M12 T1 SPE 1x2xAWG22/7<br>PUR 20m  |
| HARTING eCatalogue | <a href="https://harting.com/33280214002200">https://harting.com/33280214002200</a> |

### Identification

|                          |  |
|--------------------------|--|
| Category                 | System cabling   |
| Series                   | HARTING T1 Industrial<br>Circular connectors M12   |
| Element                  | Cable assemblies   |
| Specification            | Pre-assembled on both sides  |
| Connector 1              | HARTING T1 Industrial<br>Overmoulded<br>IP20   |
| Connector 2              | M12 Single Pair Ethernet (SPE)<br>Slim Design<br>Straight<br>Screw locking<br>IP65 / IP67 mated condition<br>Zinc die-cast |
| Type of cable            | Copper cable (round)   |
| Description of the cable | Halogen-free<br>Oil resistant<br>Flame retardant   |

### Version

|                    |  |
|--------------------|--|
| Cable length       | 20 m                                   |
| Number of cores    | 2                                      |
| Core structure     | 1x 2x AWG 22/7                         |
| Termination method | Crimp termination                      |
| Gender             | Male                                   |
| Shielding          | Fully shielded, 360° shielding contact |

## Version

|                    |                            |
|--------------------|----------------------------|
| Number of contacts | 2                          |
| further contacts   | + shielding                |
| Coding             | Single Pair Ethernet (SPE) |

## Technical characteristics

|                              |  |
|------------------------------|--|
| Rated current                | 4 A  |
| Rated voltage                | 60 V DC  |
| Transmission characteristics | 600 MHz Bandwidth                                  |
| Data rate                    | 1 Gbit/s   |
| Contact resistance           | ≤20 mΩ   |
| Shielding resistance         | ≤100 mΩ  |
| Limiting temperature         | -40 ... +80 °C unmoved<br>-25 ... +80 °C moved     |
| Mating cycles                | ≥1,000   |
| Test voltage U <sub>DC</sub> | 1 kV (contact-contact)<br>2.25 kV (contact-ground) |

## Material properties

|                                      |   |
|--------------------------------------|---|
| Material (cable)                     | PUR (polyurethane)  |
| Colour (cable)                       | Yellow  |
| RoHS                                 | compliant   |
| ELV status                           | compliant   |
| China RoHS                           | e   |
| REACH Annex XVII substances          | Not contained   |
| REACH ANNEX XIV substances           | Not contained   |
| REACH SVHC substances                | Yes   |
| REACH SVHC substances                | Potassium 1,1,2,2,3,3,4,4,4-nonafluorobutane-1-sulphonate |
| ECHA SCIP number                     | ff02956a-37e1-4ebf-a7f4-c1f2ab790cc0                      |
| California Proposition 65 substances | Yes   |
| California Proposition 65 substances | Lead<br>Nickel  |

## Specifications and approvals

|                |   |
|----------------|---|
| Specifications | IEC 63171-6<br>IEEE 802.3bu (remote power supply over PoDL = Power over Data Line)<br>IEEE 802.3cg (10BASE-T1)<br>IEEE 802.3bw (100BASE-T1)<br>IEEE 802.3bp (1000BASE-T1)<br>IEEE 802.3ch (2.5GBASE-T1 / 5GBASE-T1 / 10GBASE-T1)<br>IEC 60332-1-2 Flame retardancy<br>EN 60811-404 Oil resistance |
|----------------|---|

## Commercial data

|                                |  |
|--------------------------------|--|
| Packaging size                 | 1  |
| Net weight                     | 820 g  |
| Country of origin              | Latvia                                       |
| European customs tariff number | 85444290                                     |
| GTIN                           | 5713140263154                                |
| eCl@ss                         | 27060390 Ready-made data cable (unspecified) |
| ETIM                           | EC002599                                     |
| UNSPSC 24.0                    | 26121600                                     |