



Pushing Performance  
Since 1945

# M12 CAT5 Bu gerade HWM



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

|                    |                                                                               |
|--------------------|-------------------------------------------------------------------------------|
| Part number        | 21 03 381 2809                                                                |
| Specification      | M12 CAT5 Bu gerade HWM                                                        |
| HARTING eCatalogue | <a href="https://harting.com/21033812809">https://harting.com/21033812809</a> |

## Identification

|               |                                                |
|---------------|------------------------------------------------|
| Category      | Connectors                                     |
| Series        | Circular connectors M12                        |
| Element       | PCB adapter                                    |
| Specification | Straight<br>incl. housing<br>for rear mounting |

## Version

|                    |                                    |
|--------------------|------------------------------------|
| Termination method | Reflow soldering termination (THR) |
| Gender             | Female                             |
| Shielding          | Unshielded                         |
| Number of contacts | 8                                  |
| Coding             | X-coding                           |
| Locking type       | Screw locking                      |
| Pack contents      | 60 pieces in a tray                |

## Technical characteristics

|                              |                              |
|------------------------------|------------------------------|
| Rated current                | 0.5 A                        |
| Rated voltage                | 50 V                         |
| Rated impulse voltage        | 0.8 kV                       |
| Pollution degree             | 3                            |
| Transmission characteristics | Cat. 5 Class D up to 100 MHz |
| Overvoltage category         | III                          |



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## Technical characteristics

|                                        |                                      |
|----------------------------------------|--------------------------------------|
| Data rate                              | 10 Mbit/s                            |
|                                        | 100 Mbit/s                           |
|                                        | 1 Gbit/s                             |
|                                        | 2.5 Gbit/s                           |
| Insulation resistance                  | $>10^8 \Omega$                       |
| Contact resistance                     | $\leq 10 \text{ m}\Omega$            |
| Tightening torque                      | 2 Nm Lock nut                        |
| Limiting temperature                   | -40 ... +85 °C                       |
| Mating cycles                          | $\geq 100$                           |
| Degree of protection acc. to IEC 60529 | IP65 / IP67 mated condition          |
| Isolation group                        | IIIa ( $175 \leq \text{CTI} < 400$ ) |

## Material properties

|                                           |                                                        |
|-------------------------------------------|--------------------------------------------------------|
| Material (insert)                         | Liquid crystal polymer (LCP)                           |
| Material (contacts)                       | Copper alloy                                           |
| Surface (contacts)                        | Au over Ni Mating side                                 |
| Material (hood/housing)                   | Zinc die-cast                                          |
| Material flammability class acc. to UL 94 | V-0                                                    |
| 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                          | 5dbb3851-b94e-4e88-97a1-571845975242                   |
| California Proposition 65 substances      | Yes                                                    |
| California Proposition 65 substances      | Lead                                                   |
|                                           | Nickel                                                 |
| Fire protection on railway vehicles       | EN 45545-2 (2020-08) + A1 (2023-10)                    |
| Requirement set with Hazard Levels        | R26                                                    |

## Specifications and approvals

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



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## Specifications and approvals

|          |                                   |
|----------|-----------------------------------|
| UL / CSA | UL 1977 ECBT2.E102079             |
|          | CSA-C22.2 No. 182.3 ECBT8.E102079 |
| PROFINET | Yes                               |

## Commercial data

|                                |                                          |
|--------------------------------|------------------------------------------|
| Packaging size                 | 60                                       |
| Net weight                     | 18.7 g                                   |
| Country of origin              | Romania                                  |
| European customs tariff number | 85366990                                 |
| GTIN                           | 5713140228276                            |
| eCl@ss                         | 27460201 PCB connector (board connector) |
| ETIM                           | EC002637                                 |
| UNSPSC 24.0                    | 39121415                                 |