

**Data sheet | Item number: 734-146**

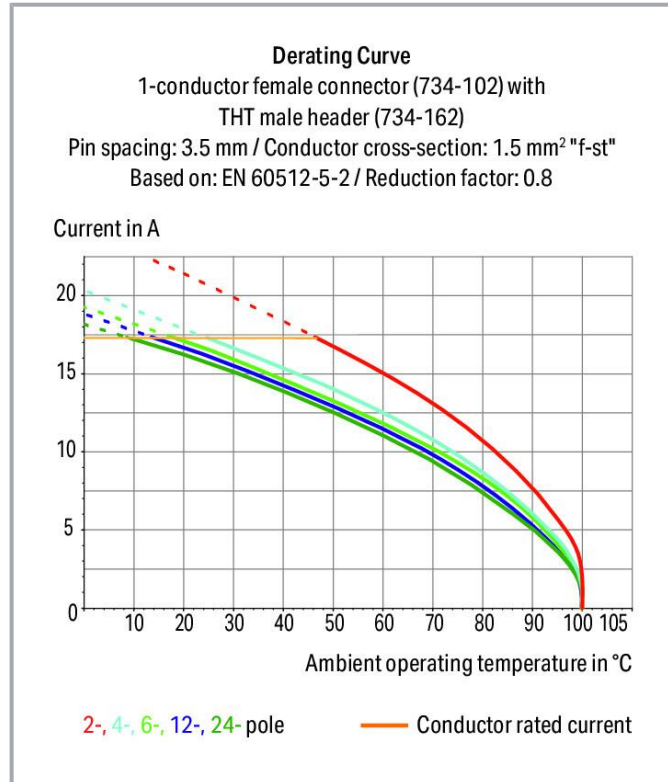
THT male header; 1.0 x 1.0 mm solder pin; straight; 100% protected against mismatching; Pin spacing 3.5 mm; 16-pole; light gray

[www.wago.com/734-146](http://www.wago.com/734-146)



**i** Picture differs from the item.

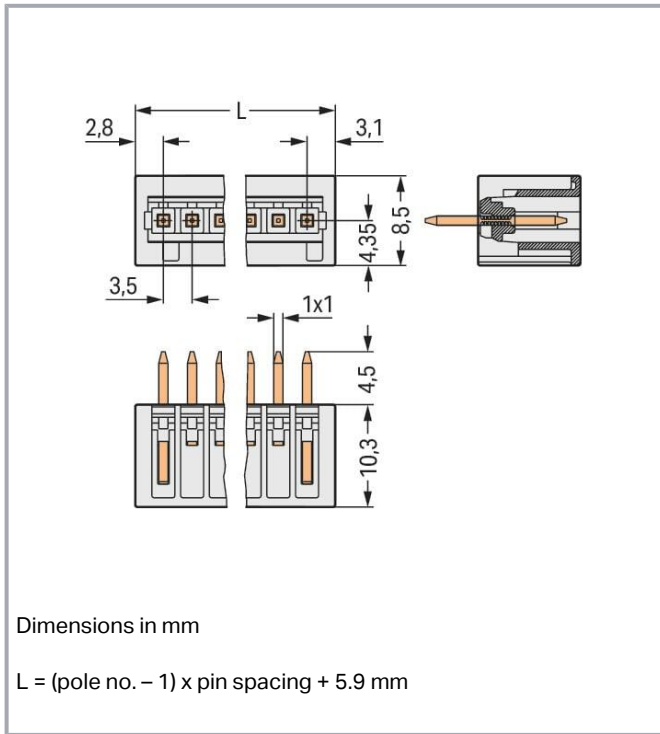
Color:



Subject to changes. Please also observe the further product documentation!

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### Item description

- Horizontal or vertical PCB mounting via straight or angled solder pins
- 100% protected against mismatching; only mating halves with the same number of poles can be connected together
- Coding option available

### Data

#### Notes

##### Safety information

The *MCS – MULTI CONNECTION SYSTEM* includes connectors without breaking capacity in accordance with DIN EN 61984. When used as intended, these connectors must not be connected /disconnected when live or under load. When used as intended, these connectors must not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live when unmated.

##### Variants:

Other pole numbers  
 3.8 mm pin projection for male headers with straight solder pins  
 Gold-plated or partially gold-plated contact surfaces  
 Other versions (or variants) can be requested from WAGO Sales or configured at <https://configurator.wago.com/>.

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## Electrical data

### Ratings per IEC/EN

| Ratings per                   | IEC/EN 60664-1  |
|-------------------------------|---|
| Nominal voltage (III/3)       | 160 V   |
| Rated impulse voltage (III/3) | 2.5 kV  |
| Rated voltage (III/2)         | 160 V   |
| Rated impulse voltage (III/2) | 2.5 kV  |
| Nominal voltage (II/2)        | 320 V   |
| Rated surge voltage (II/2)    | 2.5 kV  |
| Rated current                 | 10 A  |
| Legend (ratings)              | (III / 2) $\hat{=}$ Overvoltage category III / Pollution degree 2 |

### Ratings per UL 1059

| Approvals per                  | UL 1059 |
|--------------------------------|---------|
| Rated voltage UL (Use Group B) | 300 V   |
| Rated current UL (Use Group B) | 10 A    |
| Rated voltage UL (Use Group D) | 300 V   |
| Rated current UL (Use Group D) | 10 A    |

### Ratings per CSA

| Approvals per                   | CSA   |
|---------------------------------|-------|
| Rated voltage CSA (Use Group B) | 300 V |
| Rated current CSA (Use Group B) | 10 A  |
| Rated voltage CSA (Use Group D) | 300 V |
| Rated current CSA (Use Group D) | 10 A  |

### Connection data

|                            |    |
|----------------------------|----|
| Total number of potentials | 16 |
| Number of connection types | 1  |
| Number of levels           | 1  |

### Connection 1

|             |    |
|-------------|----|
| Pole number | 16 |
|-------------|----|

Subject to changes. Please also observe the further product documentation!



## Physical data

|                                      |                          |
|--------------------------------------|--------------------------|
| Pin spacing                          | 3.5 mm / 0.138 inches    |
| Width                                | 58.4 mm / 2.299 inches   |
| Height                               | 14.8 mm / 0.583 inches   |
| Height from the surface              | 10.3 mm / 0.406 inches   |
| Depth                                | 8.5 mm / 0.335 inches    |
| Solder pin length                    | 4.5 mm                   |
| Solder pin dimensions                | 1 x 1 mm                 |
| Drilled hole diameter with tolerance | 1.4 <sup>(+0.1)</sup> mm |

## Mechanical Data

|                          |     |
|--------------------------|-----|
| Variable coding          | Yes |
| Anti-rotation protection | Yes |

## Plug-in connection

|                                      |                     |
|--------------------------------------|---------------------|
| Contact type (pluggable connector)   | Male connector/plug |
| Connector (connection type)          | for PCB             |
| Mismating protection                 | Yes                 |
| Plugging without loss of pin spacing | No                  |
| Mating direction to the PCB          | 90 °                |
| Locking of plug-in connection        | none                |

## PCB contact

|                                     |  |
|-------------------------------------|--|
| PCB contact                         | THT                                      |
| Solder pin arrangement              | over the entire male connector (in-line) |
| Number of solder pins per potential | 1  |

## Material Data

|                             |  |
|-----------------------------|--|
| Note (material data)        | Information on material specifications can be found here |
| Color                       | light gray   |
| Material group              | I  |
| Insulation material         | Polyamide (PA66)   |
| Flammability class per UL94 | V0   |

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|                  |  |
|------------------|--|
| Contact material | Electrolytic copper (E <sub>Cu</sub> ) |
| Contact plating  | Tin                                    |
| Fire load        | 0.06 MJ                                |
| Weight           | 3.6 g                                  |

### Environmental requirements

|                         |                 |
|-------------------------|-----------------|
| Limit temperature range | -60 ... +100 °C |
| Processing temperature  | -35 ... +60 °C  |

### Commercial data



|                       |                        |
|-----------------------|------------------------|
| Product Group         | 3 (Multi Conn. System) |
| eCl@ss 10.0           | 27-44-04-02            |
| eCl@ss 9.0            | 27-44-04-02            |
| ETIM 8.0              | EC002637               |
| ETIM 7.0              | EC002637               |
| PU (SPU)              | 50 pcs                 |
| Packaging type        | box                    |
| Country of origin     | DE                     |
| GTIN                  | 4044918847766          |
| Customs tariff number | 85366990990            |

### Environmental Product Compliance



|                        |                         |
|------------------------|-------------------------|
| RoHS Compliance Status | Compliant, No Exemption |
|------------------------|-------------------------|

### Approvals / Certificates


#### General approvals

| Logo   | Approval                        | Additional Approval Text | Certificate name |
|--|---------------------------------|--------------------------|------------------|
|  | CCA<br>DEKRA Certification B.V. | EN 61984                 | 2169534.02       |
|  | CCA<br>DEKRA Certification B.V. | EN 61984                 | nl-54190         |
|  | CSA<br>DEKRA Certification B.V. | C22.2                    | 1465035          |




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|  |                                      |         |        |
|--|--------------------------------------|---------|--------|
|  | UL<br>UL International Germany GmbH  | UL 1977 | E45171 |
|  | UR<br>Underwriters Laboratories Inc. | UL 1059 | E45172 |


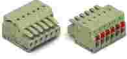

**Declarations of conformity and manufacturer's declarations**

| Logo   | Approval                      | Additional Approval Text | Certificate name |
|--|-------------------------------|--------------------------|------------------|
|  | Railway<br>WAGO GmbH & Co. KG | -                        | Railway Ready    |

**Approvals for marine applications**

| Logo  | Approval   | Additional Approval Text | Certificate name         |
|---|--|--------------------------|--------------------------|
|    | ABS<br>American Bureau of Shipping               | -                        | 19-<br>HG1869876-<br>PDA |
|   | DNV GL<br>Det Norske Veritas, Germanischer Lloyd | -                        | TAE000016Z               |
|  | LR<br>Lloyds Register                            | IEC 61984                | 96/20035<br>(E5)         |







**Counterpart**

|  |   |  |
|--|---|--|
|  | <b>Item no.734-116</b><br>1-conductor female connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 16-pole; 100% protected against mismatching; 1,50 mm²; light gray                       | <a href="http://www.wago.com/734-116">www.wago.com/734-116</a>                   |
|  | <b>Item no.2734-116</b><br>1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 16-pole; 100% protected against mismatching; 1,50 mm²; light gray | <a href="http://www.wago.com/2734-116">www.wago.com/2734-116</a>                 |
|  | <b>Item no.2734-116/027-000</b>   | <a href="http://www.wago.com/2734-116/027-000">www.wago.com/2734-116/027-000</a> |



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|   |   |  |
|---|---|--|
|   | 1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 16-pole; 100% protected against mismatching; clamping collar; 1,50 mm²; light gray   | 116/027-000  |
|   | <b>Item no. 2734-116/037-000</b><br>1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 16-pole; 100% protected against mismatching; Lateral locking levers; 1,50 mm²; light gray        | <a href="http://www.wago.com/2734-116/037-000">www.wago.com/2734-116/037-000</a>               |
|   | <b>Item no. 734-116/037-000</b><br>1-conductor female connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 16-pole; 100% protected against mismatching; Lateral locking levers; 1,50 mm²; light gray                              | <a href="http://www.wago.com/734-116/037-000">www.wago.com/734-116/037-000</a>                 |
|   | <b>Item no. 734-116/037-000/035-000</b><br>1-conductor female connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 16-pole; 100% protected against mismatching; Lateral locking levers; Strain relief plate; 1,50 mm²; light gray | <a href="http://www.wago.com/734-116/037-000/035-000">www.wago.com/734-116/037-000/035-000</a> |
|   | <b>Item no. 2734-1116/327-000</b><br>1-conductor female connector; lever; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 16-pole; 100% protected against mismatching; 1,50 mm²; light gray                                     | <a href="http://www.wago.com/2734-1116/327-000">www.wago.com/2734-1116/327-000</a>             |
|   | <b>Item no. 2734-1116/328-000</b><br>1-conductor female connector; lever; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 16-pole; 100% protected against mismatching; Lateral locking levers; 1,50 mm²; light gray             | <a href="http://www.wago.com/2734-1116/328-000">www.wago.com/2734-1116/328-000</a>             |
|  | <b>Item no. 2734-1116/038-000</b><br>1-conductor female connector; lever; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 16-pole; 100% protected against mismatching; Lateral locking levers; 1,50 mm²; light gray             | <a href="http://www.wago.com/2734-1116/038-000">www.wago.com/2734-1116/038-000</a>             |

## Optional accessories

|  |  |  |
|--|--|--|
| <b>Coding</b>  |  |  |
| Coding   |  |  |
|  | <b>Item no.: 734-159</b><br>Coding key; to be snapped above top level; black | <a href="http://www.wago.com/734-159">www.wago.com/734-159</a> |
|  | <b>Item no.: 734-130</b><br>Coding key; to be snapped above top level; white | <a href="http://www.wago.com/734-130">www.wago.com/734-130</a> |

## Downloads

### Documentation

#### Additional Information

|                        |            |        |          |
|------------------------|------------|--------|----------|
| Technical Section      | 2019 Apr 3 | pdf    | Download |
| Technical explanations |            | 2.0 MB |          |

Subject to changes. Please also observe the further product documentation!



## CAD/CAE-Data

### CAE data

|                           |                     |                          |
|---------------------------|---------------------|--------------------------|
| EPLAN Data Portal 734-146 | <a href="#">URL</a> | <a href="#">Download</a> |
| ZUKEN Portal 734-146      | <a href="#">URL</a> | <a href="#">Download</a> |

### PCB Design

|                              |                     |                          |
|------------------------------|---------------------|--------------------------|
| Symbol and Footprint 734-146 | <a href="#">URL</a> | <a href="#">Download</a> |
|------------------------------|---------------------|--------------------------|

CAX data for your PCB design, consisting of "schematic symbols and PCB footprints", allow easy integration of the WAGO component into your development environment.

### Supported formats:

- Accel EDA 14 & 15
- Altium 6 to current version
- Cadence Allegro
- DesignSpark
- Eagle Libraries
- KiCad
- Mentor Graphics BoardStation
- Mentor Graphics Design Architect
- Mentor Graphics Design Expedition 99 and 2000
- OrCAD 9.X PCB and Capture
- PADS PowerPCB 3, 3.5, 4.X, and 5.X
- PADS PowerPCB and PowerLogic 3.0
- PCAD 2000, 2001, 2002, 2004, and 2006
- Pulsonix 8.5 or newer
- STL
- 3D STEP
- TARGET 3001!
- View Logic ViewDraw
- Quadcept
- Zuken CadStar 3 and 4
- Zuken CR-5000 and CR-8000

PCB Component Libraries (EDA), PCB CAD Library Ultra Librarian

### CAD data

2D/3D Models 734-146

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## Environmental Product Compliance

### Compliance Search

Environmental Product Compliance 734-146

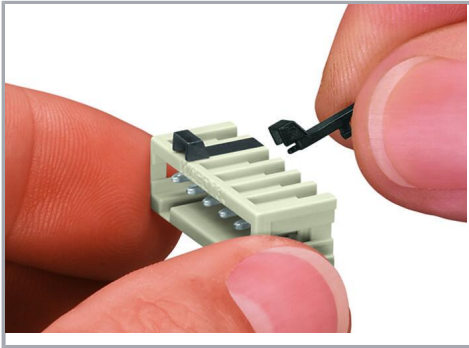
[URL](#)

[Download](#)

THT male header; 1.0 x 1.0 mm solder pin; straight; 100% protected against mismatching; Pin spacing 3.5 mm; 16-pole; light gray

## Installation Notes

### Coding



Coding a male header – fitting coding key(s).

## Product family

**MCS MINI**

[Show all products from the family](#)

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