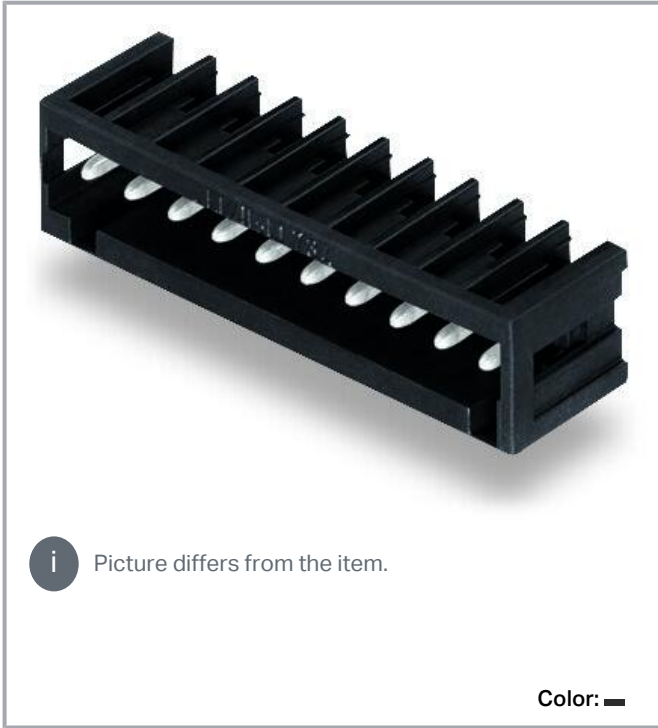


Data sheet | Item number: 734-167/105-604

THR male header; 1.0 x 1.0 mm solder pin; angled; 100% protected against mismatching; Pin spacing 3.5 mm; 7-pole; black

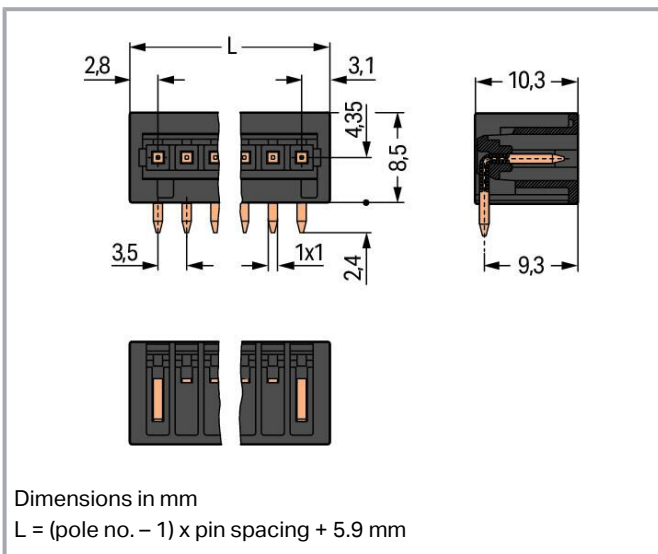
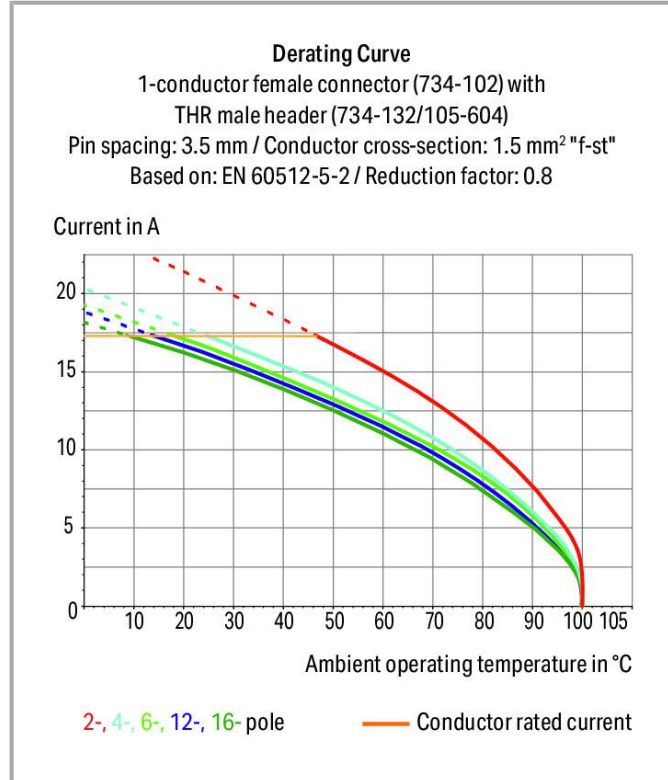


[www.wago.com/734-167/105-604](http://www.wago.com/734-167/105-604)



**i** Picture differs from the item.

Color: ■



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

WAGO GmbH & Co. KG  
Hansastr. 27  
32423 Minden  
Phone: +49571 887-0 | Fax: +49571 887-169  
Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

Do you have any questions about our products?  
We are always happy to take your call at +49 (571) 887-44222.



## Item description

- THR male headers for reflow soldering in SMT applications
- Available in tape-and-reel packaging for automated pick-and-place PCB assembly
- Optimal thermal penetration via pin enclosure design provides lower soldering temperatures
- 100% protected against mismatching
- Coding via coding fingers

## 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  
Other solder pin lengths  
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/>.

## 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) ≙ Overvoltage category III / Pollution degree 2 |

### Ratings per UL

|                                |         |
|--------------------------------|---------|
| Approvals per                  | UL 1059 |
| Rated voltage UL (Use Group B) | 300 V   |

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

WAGO GmbH & Co. KG  
Hansastr. 27  
32423 Minden  
Phone: +49571 887-0 | Fax: +49571 887-169  
Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

Do you have any questions about our products?  
We are always happy to take your call at +49 (571) 887-44222.



|                                |       |
|--------------------------------|-------|
| 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 | 7 |
| Number of connection types | 1 |
| Number of levels           | 1 |

### Connection 1

|             |   |
|-------------|---|
| Pole number | 7 |
|-------------|---|

### Physical data

|                                    |                          |
|------------------------------------|--------------------------|
| Pin spacing                        | 3.5 mm / 0.138 inches    |
| Width                              | 26.9 mm / 1.059 inches   |
| Height                             | 10.9 mm / 0.429 inches   |
| Height from the surface            | 8.5 mm / 0.335 inches    |
| Depth                              | 10.3 mm / 0.406 inches   |
| Solder pin length                  | 2.4 mm                   |
| Solder pin dimensions              | 1 x 1 mm                 |
| Plated through-hole diameter (THR) | 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 |
|------------------------------------|---------------------|

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



|                                      |         |
|--------------------------------------|---------|
| Connector (connection type)          | for PCB |
| Mismating protection                 | Yes     |
| Plugging without loss of pin spacing | No      |
| Mating direction to the PCB          | 0°      |
| Locking of plug-in connection        | none    |

### PCB contact

|                                     |  |
|-------------------------------------|--|
| PCB contact                         | THR                                      |
| 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                       | black  |
| Material group              | I  |
| Insulation material         | Polyphthalamide (PPA GF)                                 |
| Flammability class per UL94 | V0   |
| Contact material            | Electrolytic copper ( $E_{Cu}$ )                         |
| Contact plating             | Tin  |
| Fire load                   | 0.028 MJ   |
| Weight                      | 1.9 g  |
| MSL per J-STD 020D          | 1  |

### 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               |
| ECCN          | NO DATA                |
| PU (SPU)      | 100 pcs                |

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

WAGO GmbH & Co. KG  
 Hansastr. 27  
 32423 Minden  
 Phone: +49571 887-0 | Fax: +49571 887-169  
 Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

Do you have any questions about our products?  
 We are always happy to take your call at +49 (571) 887-44222.



|                       |               |
|-----------------------|---------------|
| Packaging type        | Box           |
| Country of origin     | DE            |
| GTIN                  | 4017332747837 |
| Customs tariff number | 85366930000   |

## Environmental Product Compliance

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

## Counterpart

**Item no. 734-107**

1-conductor female connector; CAGE CLAMP®; 1.5 mm<sup>2</sup>; Pin spacing 3.5 mm; 7-pole; 100% protected against mismatching; 1,50 mm<sup>2</sup>; light gray

[www.wago.com/734-107](http://www.wago.com/734-107)

## Optional accessories

### Coding

|        |  |  |
|--------|--|--|
| 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> |

## Downloads

### Documentation

#### Additional Information

|                        |            |          |          |
|------------------------|------------|----------|----------|
| Technical Section      | 2019 Apr 3 | pdf      | Download |
| Technical explanations |            | 2.1 MB   |          |
| THR Soldering Process  |            | pdf      | Download |
|                        |            | 548.2 kB |          |

## CAD/CAE-Data

### CAD data

|                              |     |          |
|------------------------------|-----|----------|
| 2D/3D Models 734-167/105-604 | URL | Download |
|------------------------------|-----|----------|

### CAE data

|                              |     |          |
|------------------------------|-----|----------|
| ZUKEN Portal 734-167/105-604 | URL | Download |
|------------------------------|-----|----------|

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

WAGO GmbH & Co. KG  
 Hansastr. 27  
 32423 Minden  
 Phone: +49571 887-0 | Fax: +49571 887-169  
 Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

Do you have any questions about our products?  
 We are always happy to take your call at +49 (571) 887-44222.



## Asset Administration Shell

|  |     |          |
|--|-----|----------|
| Asset Administration Shell 734-167/105-604 | URL | Download |
|--|-----|----------|

---

## PCB Design

|   |     |          |
|---|-----|----------|
| Symbol and Footprint via SamacSys 734-167/105-604 | URL | Download |
|---|-----|----------|

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:

- 3D (stp)
- Altium
- CADSTAR
- Capture
- CircuitStudio
- CR-5000
- CR-8000
- DEHDL
- DesignSpark PCB
- DesignSpark PCB PRO
- DipTrace
- EAGLE
- Easy-PC
- EasyEDA
- eCADSTAR
- KiCad
- OrCAD\_Allegro16
- PADS
- Proteus
- Pulsonix
- Quadcept
- SOLIDWORKS PCB
- TARGET 3001!
- xDX Designer
- Xpedition

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



PCB Component Libraries (EDA), PCB CAD Library SamacSys Electronic Component Search Engine

---

Symbol and Footprint via Ultra Librarian 734-167/105-604

URL

Download

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
- Altair
- Altium 6 to current version
- Autodesk Fusion 360
- 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
- Zuken eCADSTAR 2020 and 2021Zuken CR-5000 and CR-8000

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

---

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

---

WAGO GmbH & Co. KG  
Hansastr. 27  
32423 Minden  
Phone: +49571 887-0 | Fax: +49571 887-169  
Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

Do you have any questions about our products?  
We are always happy to take your call at +49 (571) 887-44222.

## Environmental Product Compliance

### Compliance Search

Environmental Product Compliance 734-167/105-604

URL

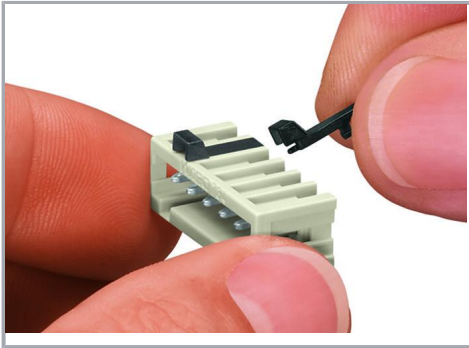
Download

THR male header; 1.0 x 1.0 mm solder pin; angled; 100% protected against mismatching; Pin spacing 3.5 mm; 7-pole; black

---

## Installation Notes

### Coding



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

## Product family

**MCS MINI**

[Show all products from the family](#)

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

---

WAGO GmbH & Co. KG

Hansastr. 27

32423 Minden

Phone: +49571 887-0 | Fax: +49571 887-169

Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

Do you have any questions about our products?

We are always happy to take your call at +49 (571) 887-44222.