

Data sheet | Item number: 734-440

THT double-deck male header; 1.0 x 1.0 mm solder pin; angled; 100% protected against mismatching; Pin spacing 3.81 mm; 20-pole; orange

www.wago.com/734-440

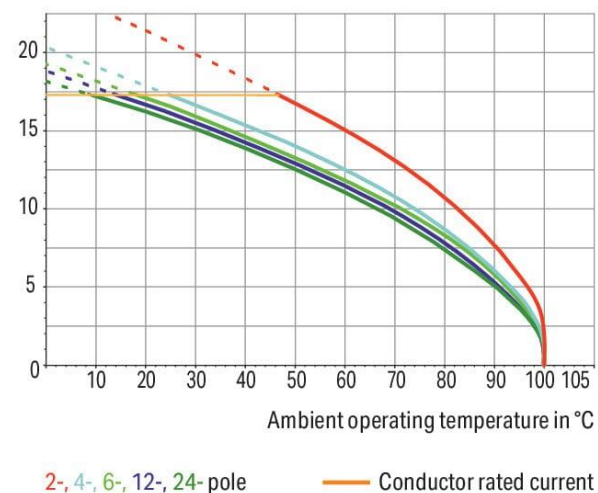


Picture differs from the item.

Color:

Derating Curve
1-conductor female connector (734-102) with
THT male header (734-162)
Pin spacing: 3.5 mm / Conductor cross-section: 1.5 mm² "f-st"
Based on: EN 60512-5-2 / Reduction factor: 0.8

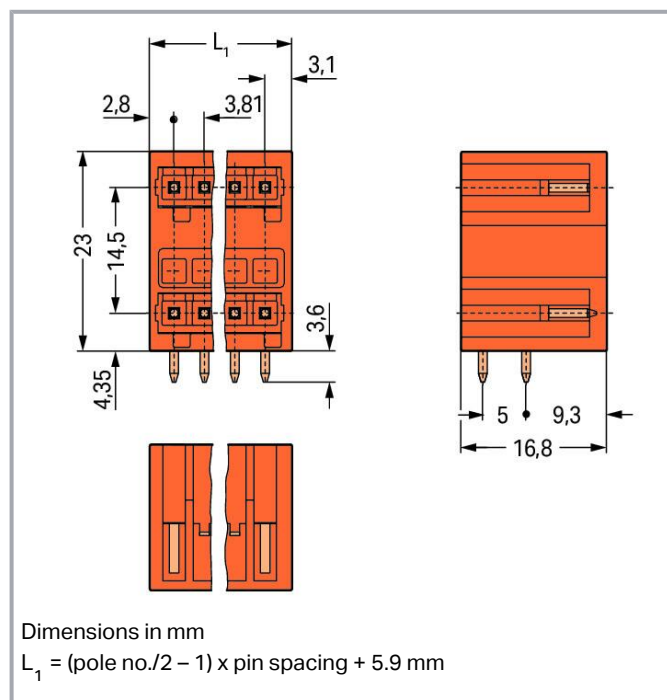
Current in A



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 mismating; 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
 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

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

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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) \triangleq Overvoltage category III / Pollution degree 2 |

Ratings per UL

| 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 | 20 |
| Number of connection types | 1 |
| Number of levels | 2 |

Connection 1

| | |
|-------------|----|
| Pole number | 20 |
|-------------|----|

Physical data

| | |
|-------------|-----------------------|
| Pin spacing | 3.81 mm / 0.15 inches |
|-------------|-----------------------|

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



| | |
|--------------------------------------|--------------------------|
| Width | 40.19 mm / 1.582 inches |
| Height | 26.6 mm / 1.047 inches |
| Height from the surface | 23 mm / 0.906 inches |
| Depth | 16.8 mm / 0.661 inches |
| Solder pin length | 3.6 mm |
| Solder pin dimensions | 1 x 1 mm |
| Drilled hole diameter with tolerance | 1.4 ^(+0.1) 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 | 0 ° |
| 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 | orange |
| Material group | I |
| Insulation material | Polyamide (PA66) |
| Flammability class per UL94 | V0 |
| Contact material | Electrolytic copper (E _{Cu}) |
| Contact plating | Tin |
| Fire load | 0.209 MJ |

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



| | |
|--------|--------|
| Weight | 11.6 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 |
| ECCN | NO DATA |
| PU (SPU) | 50 pcs |
| Packaging type | box |
| Country of origin | DE |
| GTIN | 4044918873369 |
| Customs tariff number | 85366930000 |

Environmental Product Compliance



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

Approvals / Certificates


General approvals

| Logo | Approval | Additional Approval Text | Certificate name |
|--|--|--------------------------|------------------|
| | CB DEKRA Certification B.V. | EN 61984 | NL-54190 |
|  | CCC CQC | GB/T 13140.1 | CQC03003003013 |
|  | CSA DEKRA Certification B.V. | C22.2 | 1465035 |
|  | KEMA/KEUR DEKRA Certification B.V. | EN 61984 | 71-105522 |

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

| | | | |
|--|--------------------------------|---------|---------|
|  | UL | UL 1977 | E 45171 |
| | Underwriters Laboratories Inc. | | |
|  | UR | UL 1059 | E45172 |
| | Underwriters Laboratories Inc. | | |

Approvals for marine applications

| Logo | Approval | Additional Approval Text | Certificate name |
|--|------------------|--------------------------|------------------|
|  | DNV DNV GL SE | - | TAE000016Z |

Counterpart






Item no. 734-210

1-conductor female connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.81 mm; 10-pole; 100% protected against mismatching; 1,50 mm²; orange

www.wago.com/734-210

Optional accessories

Coding

| Coding | | |
|--|---|--|
|  | Item no.: 734-159 Coding key; to be snapped above top level; black | www.wago.com/734-159 |
|  | Item no.: 734-400 Coding key; to be snapped above bottom level; light gray | www.wago.com/734-400 |
|  | Item no.: 734-130 Coding key; to be snapped above top level; white | www.wago.com/734-130 |

Downloads

Documentation

Additional Information

| | | | |
|------------------------|------------|--------|----------|
| Technical Section | 2019 年4月3日 | pdf | Download |
| Technical explanations | | 2.1 MB | |

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CAD/CAE-Data

CAD data

| | | |
|----------------------|-----|----------|
| 2D/3D Models 734-440 | URL | Download |
|----------------------|-----|----------|

CAE data

| | | |
|---------------------------|-----|----------|
| EPLAN Data Portal 734-440 | URL | Download |
|---------------------------|-----|----------|

| | | |
|----------------------|-----|----------|
| ZUKEN Portal 734-440 | URL | Download |
|----------------------|-----|----------|

PCB Design

| | | |
|--|-----|----------|
| Symbol and Footprint via Ultra Librarian 734-440 | 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

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- 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

Symbol and Footprint via SamacSys 734-440

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

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■ Xpedition

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

Asset Administration Shell

| | | |
|------------------------------------|-----|----------|
| Asset Administration Shell 734-440 | URL | Download |
|------------------------------------|-----|----------|

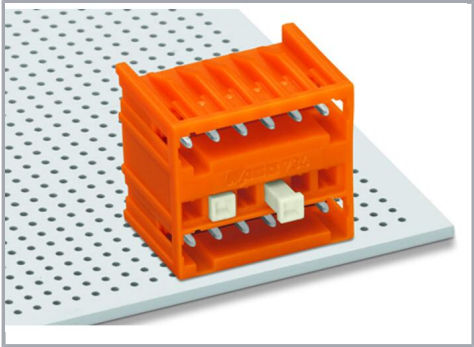
Environmental Product Compliance

Compliance Search

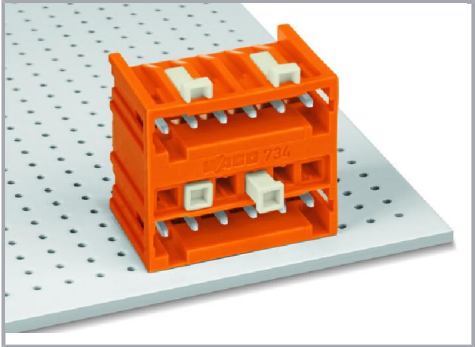
| | | |
|--|-----|----------|
| Environmental Product Compliance 734-440 | URL | Download |
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Installation Notes

Coding



Coding a THT double-deck male header – lower level.



Coding a THT double-deck male header.

Product family

MCS MINI
[Show all products from the family](#)

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