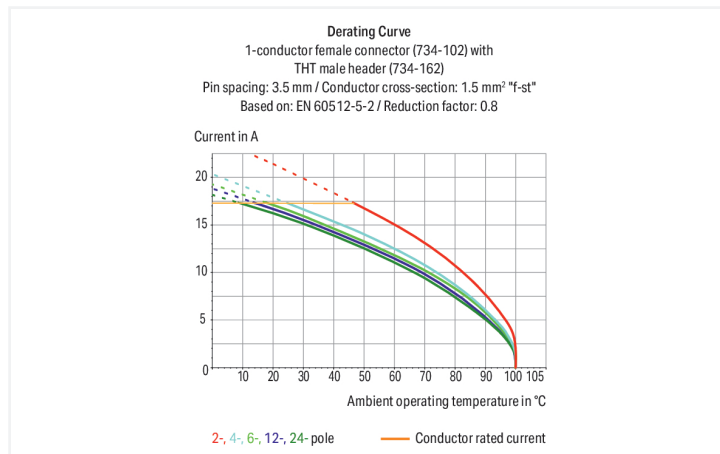


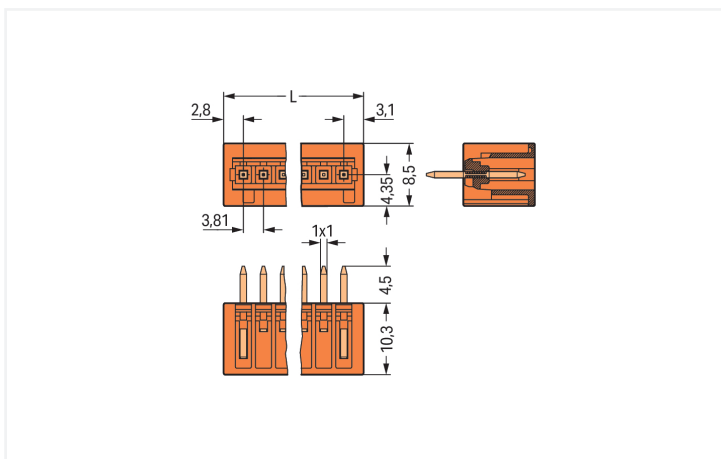
Data Sheet | Item Number: 734-242

THT male header; 1.0 x 1.0 mm solder pin; straight; 100% protected against mismatching; Pin spacing 3.81 mm; 12-pole; orange

<https://www.wago.com/734-242>



Color: ■ orange



Dimensions in mm

$L = (\text{pole no.} - 1) \times \text{pin spacing} + 5.9 \text{ mm}$

Male connector, 734 Series, with 3.81 mm pin spacing

Our male connector (item number 734-242) is designed for seamless electrical installations. Dimensions: (47.81 x 14.8 x 8.5) mm (width x height x depth).

The contact surface is coated with tin. The pcb connector is designed for THT soldering.

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

| Ratings per | | IEC/EN 60664-1 | | | Approvals per | | UL 1059 | | |
|---------------------------------|--|----------------|--------|--------|---------------|-------|---------|-------|--|
| Overvoltage category | | III | III | II | Use group | B | C | D | |
| Pollution degree | | 3 | 2 | 2 | Rated voltage | 300 V | - | 300 V | |
| Nominal voltage | | 160 V | 160 V | 320 V | Rated current | 10 A | - | 10 A | |
| Rated impulse withstand voltage | | 2.5 kV | 2.5 kV | 2.5 kV | | | | | |
| Rated current | | 10 A | 10 A | 10 A | | | | | |

| Approvals per | | CSA | | |
|---------------|--|-------|---|-------|
| Use group | | B | C | D |
| Rated voltage | | 300 V | - | 300 V |
| Rated current | | 10 A | - | 10 A |

Connection Data

| | | | | |
|----------------------------|----|---------------------|----|--|
| Total number of potentials | 12 | Connection 1 | | |
| Number of connection types | 1 | Pole number | 12 | |
| Number of levels | 1 | | | |

Physical data

| | |
|--------------------------------------|--------------------------|
| Pin spacing | 3.81 mm / 0.15 inches |
| Width | 47.81 mm / 1.882 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 ^(+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 |
| Mating direction to the PCB | 90 ° |

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 (main housing) | Polyamide (PA66) |
| Flammability class per UL94 | V0 |
| Contact material | Electrolytic copper (E _{Cu}) |
| Contact Plating | Tin |
| Fire load | 0.045 MJ |
| Weight | 2.9 g |

Environmental requirements

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

Environmental Testing

| | |
|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| Test specification: Railway applications – Rolling stock – Electronic equipment | DIN EN 50155 (VDE 0115-200):2022-06 |
| Test procedure: Railway applications – Rolling stock equipment – Vibration and shock tests | DIN EN 61373 (VDE 0115-0106):2011-04 |
| Spectrum/Mounting location | Service life test, Category 1, Class A/B |
| Functional test with noise-like oscillations | Test passed according to Section 8 of the standard |
| Frequency | f ₁ = 5 Hz to f ₂ = 150 Hz |
| Acceleration | 0.101g (highest test level used for all axes) |
| Test duration per axis | 10 min. |
| Test directions | X, Y and Z axes |
| Monitoring of contact faults and interruptions | Passed |
| Voltage drop measurement before and after each axis | Passed |
| Simulated service life test through increased levels of noise-like oscillations | Test passed according to Section 9 of the standard |
| Frequency | f ₁ = 5 Hz to f ₂ = 150 Hz |
| Acceleration | 0.572g (highest test level used for all axes) |
| Test duration per axis | 5 h |
| Test directions | X, Y and Z axes |
| Extended testing: Monitoring of contact faults and interruptions | Passed |
| Extended testing: Voltage drop measurement before and after each axis | Passed |
| Shock test | Test passed according to Section 10 of the standard |
| Shock pulse form | Half sine |

Environmental Testing

| | |
|-----------------------------------------------------------------------|-------------------------------------------|
| Acceleration | 5g (highest test level used for all axes) |
| Shock duration | 30 ms |
| Number of shocks (per axis) | 3 pos. und 3 neg. |
| Test directions | X, Y and Z axes |
| Extended testing: Monitoring of contact faults and interruptions | Passed |
| Extended testing: Voltage drop measurement before and after each axis | Passed |
| Vibration and shock stress for rolling stock equipment | Passed |

Commercial data

| | |
|-----------------------|------------------------|
| Product Group | 3 (Multi Conn. System) |
| PU (SPU) | 100 pcs |
| Packaging type | Box |
| Country of origin | PL |
| GTIN | 4044918847988 |
| Customs tariff number | 85366930000 |

Product Classification

| | |
|-------------|----------------------|
| UNSPSC | 39121409 |
| eCl@ss 10.0 | 27-44-04-02 |
| eCl@ss 9.0 | 27-44-04-02 |
| ETIM 9.0 | EC002637 |
| ETIM 10.0 | EC002637 |
| ECCN | NO US CLASSIFICATION |

Environmental Product Compliance

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

Approvals / Certificates

General approvals



| Approval | Standard | Certificate Name |
|---------------------------------------|----------|------------------|
| CB DEKRA Certification B.V. | EN 61984 | NL-54190 |
| KEMA/KEUR DEKRA Certification B.V. | EN 61984 | 71-105522 |
| UL Underwriters Laboratories Inc. | UL 1977 | E 45171 |

Declarations of conformity and manufacturer's declarations



| Approval | Standard | Certificate Name |
|-------------------------------|----------|------------------|
| Railway WAGO GmbH & Co. KG | - | Railway Ready |

Approvals for marine applications



| Approval | Standard | Certificate Name |
|-------------------------------|-----------|-------------------|
| DNV DNV GL SE | - | TAE000016Z |
| LR Lloyds Register | IEC 61984 | 96/20035 (E5) |
| PRS Polski Rejestr Statków | - | TE/1095/880590/23 |

Downloads


Environmental Product Compliance



| Compliance Search |
|----------------------------------------------------------------------------------------------------------------------------|
| Environmental Product Compliance 734-242  |

Documentation


| Additional Information | | | |
|------------------------|------------|-------------------|-------------------------------------------------------------------------------------|
| Technical Section | 03.04.2019 | pdf 2027.26 KB |  |

CAD/CAE-Data

| CAD data |
|----------------------------------------------------------------------------------------------------------|
| 2D/3D Models 734-242  |

| CAE data |
|-----------------------------------------------------------------------------------------------------------------|
| EPLAN Data Portal 734-242  |
| ZUKEN Portal 734-242  |

PCB Design

| |
|--------------------------------------------------------------------------------------------------------------------------------------|
| Symbol and Footprint via SamacSys 734-242  |
| Symbol and Footprint via Ultra Librarian 734-242  |

1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket



Item No.: 734-212/037-000

1-conductor female connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.81 mm; 12-pole; 100% protected against mismatching; Lateral locking levers; orange

Item No.: 734-212

1-conductor female connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.81 mm; 12-pole; 100% protected against mismatching; orange

Item No.: 2734-212/027-000

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.81 mm; 12-pole; 100% protected against mismatching; clamping collar; orange

Item No.: 2734-212/031-000

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.81 mm; 12-pole; 100% protected against mismatching; clamping collar; orange



Item No.: 2734-212/037-000

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.81 mm; 12-pole; 100% protected against mismatching; Lateral locking levers; orange

Item No.: 2734-212

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.81 mm; 12-pole; 100% protected against mismatching; orange

Item No.: 734-572

THT female header; angled; Pin spacing 3.81 mm; 12-pole; 100% protected against mismatching; 0.9 x 0.9 mm solder pin; orange

Item No.: 734-572/037-000

THT female header; angled; Pin spacing 3.81 mm; 12-pole; 100% protected against mismatching; Locking lever; 0.9 x 0.9 mm solder pin; orange



Item No.: 734-512

THT female header; straight; Pin spacing 3.81 mm; 12-pole; 100% protected against mismatching; 0.9 x 0.9 mm solder pin; orange

Item No.: 734-512/037-000

THT female header; straight; Pin spacing 3.81 mm; 12-pole; 100% protected against mismatching; Locking lever; 0.9 x 0.9 mm solder pin; orange

1.2 Optional Accessories

1.2.1 Coding

1.2.1.1 Coding

Item No.: 734-159

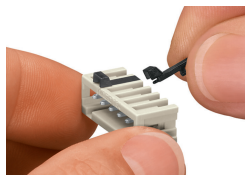
Coding key; to be snapped above top level; black

Item No.: 734-130

Coding key; to be snapped above top level; white

Installation Notes

Coding



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