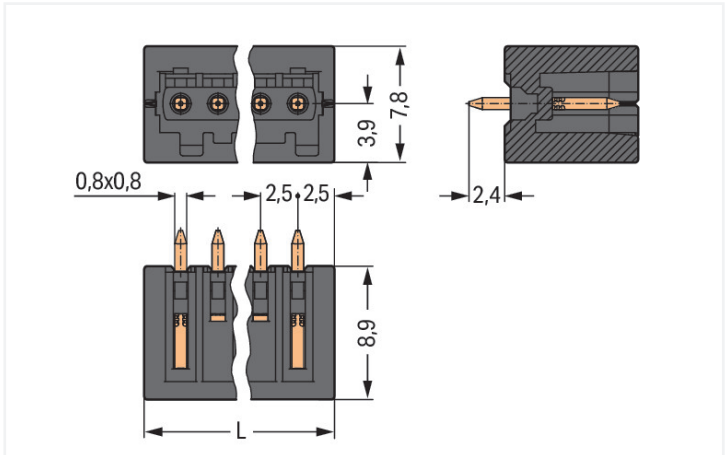


**Data Sheet | Item Number: 733-332/105-604**  
THR male header; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; Pin spacing 2.5 mm; 2-pole; black  
<https://www.wago.com/733-332/105-604>

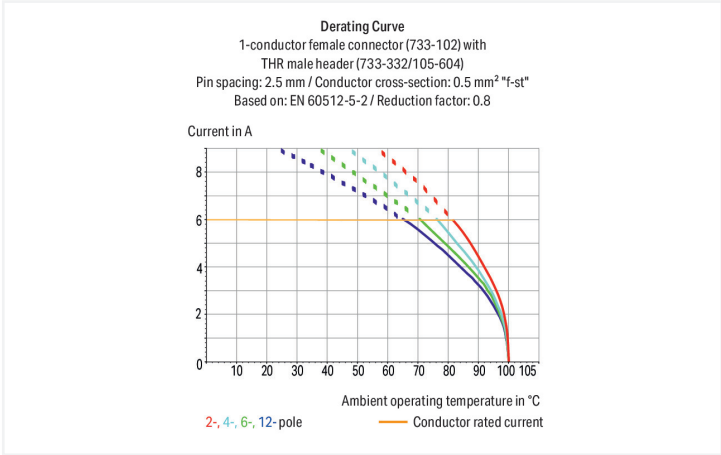


Color: ■ black

Similar to illustration



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



- 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 option available

| 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<br>Other solder pin lengths<br>Gold-plated or partially gold-plated contact surfaces<br>Other versions (or variants) can be requested from WAGO Sales or configured at <a href="https://configurator.wago.com/">https://configurator.wago.com/</a> .                                                                                                                                                 |



| Electrical data      |        |                |        |               |               |   |
|----------------------|--------|----------------|--------|---------------|---------------|---|
| Ratings per          |        | IEC/EN 60664-1 |        |               | Approvals per |   |
|                      |        | UL 1059        |        |               |               |   |
| Overvoltage category | III    | III            | II     | Use group     | B             | C |
| Pollution degree     | 3      | 2              | 2      | Rated voltage | 150 V         | - |
| Nominal voltage      | 80 V   | 160 V          | 320 V  | Rated current | 4 A           | - |
| Rated surge voltage  | 2.5 kV | 2.5 kV         | 2.5 kV |               |               |   |
| Rated current        | 6 A    | 6 A            | 6 A    |               |               |   |

| Approvals per |       | CSA |   |  |
|---------------|-------|-----|---|--|
| Use group     | B     | C   | D |  |
| Rated voltage | 150 V | -   | - |  |
| Rated current | 4 A   | -   | - |  |

| Connection data            |   |              |   |
|----------------------------|---|--------------|---|
| Total number of potentials | 2 | Connection 1 |   |
| Number of connection types | 1 | Pole number  | 2 |
| Number of levels           | 1 |              |   |

| Physical data                      |                          |
|------------------------------------|--------------------------|
| Pin spacing                        | 2.5 mm / 0.098 inches    |
| Width                              | 7.5 mm / 0.295 inches    |
| Height                             | 11.3 mm / 0.445 inches   |
| Height from the surface            | 8.9 mm / 0.35 inches     |
| Depth                              | 7.8 mm / 0.307 inches    |
| Solder pin length                  | 2.4 mm                   |
| Solder pin dimensions              | 0.8 x 0.8 mm             |
| Plated through-hole diameter (THR) | 1.2 <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                 |
| Mating direction to the PCB        | 90 °                |

| 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)        |                                        | <a href="#">Information on material specifications can be found here</a> |
| Color                       | black                                  |                                                                          |
| Material group              | I                                      |                                                                          |
| Insulation material         | Polyphthalamide (PPA GF)               |                                                                          |
| Flammability class per UL94 | V0                                     |                                                                          |
| Contact material            | Electrolytic copper (E <sub>CU</sub> ) |                                                                          |
| Contact plating             | Tin                                    |                                                                          |
| Fire load                   | 0.009 MJ                               |                                                                          |
| Weight                      | 0.4 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               |  |
| PU (SPU)              | 200 pcs                |  |
| Packaging type        | Box                    |  |
| Country of origin     | DE                     |  |
| GTIN                  | 4045454676070          |  |
| Customs tariff number | 85366930000            |  |

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

Approvals / Certificates

| General approvals                                                                                                                                                                                                                                                                                                                              |           |                  | Approvals for marine applications                                                                                                                                        |          |                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------------------|
|     |           |                  |   |          |                  |
| Approval                                                                                                                                                                                                                                                                                                                                       | Standard  | Certificate Name | Approval                                                                                                                                                                 | Standard | Certificate Name |
| CCA<br>DEKRA Certification B.V.                                                                                                                                                                                                                                                                                                                | EN 61984  | 2169534.01       | ABS<br>American Bureau of Ship-<br>ping                                                                                                                                  | -        | 19-HG1869876-PDA |
| CCA<br>DEKRA Certification B.V.                                                                                                                                                                                                                                                                                                                | IEC 61984 | NL-31141         | DNV<br>DNV GL SE                                                                                                                                                         | -        | TAE000016Z       |
| CSA<br>DEKRA Certification B.V.                                                                                                                                                                                                                                                                                                                | C22.2     | 1465035          |                                                                                                                                                                          |          |                  |
| UL<br>UL International Germany<br>GmbH                                                                                                                                                                                                                                                                                                         | UL 1977   | E45171           |                                                                                                                                                                          |          |                  |
| UL<br>Underwriters Laboratories<br>Inc.                                                                                                                                                                                                                                                                                                        | UL 1059   | E45172           |                                                                                                                                                                          |          |                  |



Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance733-332/105-604

↓

Documentation

Additional Information

Technical Section03.04.2019pdf2027.26 KB

↓

pdf535.32 KB

↓

CAD/CAE-Data

CAD data

2D/3D Models733-332/105-604

↓

CAE data

ZUKEN Portal733-332/105-604

↓

PCB Design

Symbol and Footprint via SamacSys733-332/105-604

↓

Symbol and Footprint via Ultra Librarian733-332/105-604

↓

1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket



Item No.: [733-102](#)  
1-conductor female connector; CAGE CLAMP®; 0.5 mm²; Pin spacing 2.5 mm; 2-pole; 100% protected against mismatching; 0,50 mm²; light gray

1.2 Optional Accessories

1.2.1 Coding

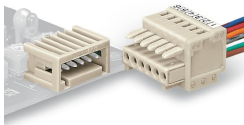
1.2.1.1 Coding



Item No.: [733-331](#)  
Coding key; snap-on type; black

Installation Notes

Mismating protection



Male headers and female connectors are 100% protected against mismating. Only mating halves with the same pole number can be connected.

Coding



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