

**Data sheet | Item number: 733-204**

1-conductor male connector; 100% protected against mismatching; 0.5 mm<sup>2</sup>;

Pin spacing 2.5 mm; 4-pole



733-204



RoHS Compliant

[BOMcheck.net](https://www.bomcheck.net)

Color:

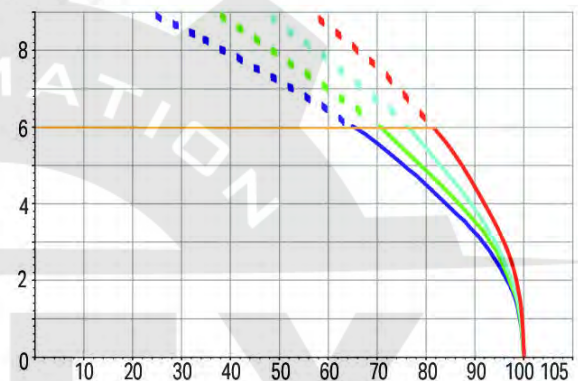
**Derating Curve**

1-conductor female connector (733-102) with  
THT male header (733-202)

Pin spacing: 2.5 mm / Conductor cross-section: 0.5 mm<sup>2</sup> "f-st"

Based on: EN 60512-5-2 / Reduction factor: 0.8

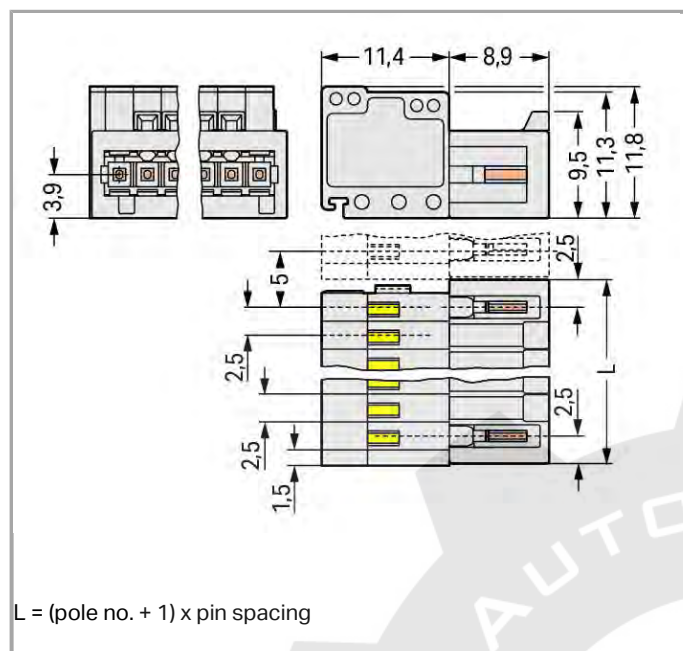
Current in A



Ambient operating temperature in °C

2-, 4-, 6-, 12-pole

— Conductor rated current



### Item description

- Universal connection for all conductor types
- Easy cable pre-assembly and on-unit wiring via vertical and horizontal CAGE CLAMP® actuation
- For wire-to-wire connections
- 100% protected against mismatching
- Coding via coding fingers

### Safety information 1:

The *MULTI CONNECTION SYSTEM (MCS)* is designed without breaking capacity for compliance with DIN EN 61984. When used as intended, MCS Connectors shall 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.

### Data

#### Electrical data

#### Ratings per IEC/EN 60664-1

|                                 |        |
|---------------------------------|--------|
| Rated voltage (III / 3)         | 100 V  |
| Rated impulse voltage (III / 3) | 2.5 kV |
| Rated voltage (III / 2)         | 160 V  |
| Rated impulse voltage (III / 2) | 2.5 kV |
| Rated voltage (II / 2)          | 320 V  |
| Rated impulse voltage (II / 2)  | 2.5 kV |
| Rated current                   | 6 A    |

## Approvals per UL 1059

|                                |       |
|--------------------------------|-------|
| Rated voltage UL (Use Group B) | 150 V |
| Rated current UL (Use Group B) | 4 A   |

## Approvals per CSA

|                                 |       |
|---------------------------------|-------|
| Rated voltage CSA (Use Group B) | 150 V |
| Rated current CSA (Use Group B) | 4 A   |

## Connection data

|                                                             |                                  |
|-------------------------------------------------------------|----------------------------------|
| Connection technology                                       | CAGE CLAMP®                      |
| Actuation type                                              | Operating tool                   |
| Solid conductor                                             | 0.08 ... 0.5 mm² / 28 ... 20 AWG |
| Fine-stranded conductor                                     | 0.08 ... 0.5 mm² / 28 ... 20 AWG |
| Fine-stranded conductor with ferrule with plastic collar    | 0.25 ... 0.34 mm²                |
| Fine-stranded conductor with ferrule without plastic collar | 0.25 ... 0.34 mm²                |
| Strip length                                                | 5 ... 6 mm / 0.2 ... 0.24 inch   |
| No. of poles                                                | 4                                |
| Total number of connection points                           | 4                                |
| Total number of potentials                                  | 4                                |
| Number of connection types                                  | 1                                |
| Number of levels                                            | 1                                |
| Conductor entry direction to mating direction               | 0°                               |

## Geometrical Data

|             |                      |
|-------------|----------------------|
| Pin spacing | 2.5 mm / 0.098 inch  |
| Width       | 12.5 mm / 0.492 inch |
| Height      | 11.8 mm / 0.465 inch |
| Depth       | 20.3 mm / 0.799 inch |

## Plug connection

|                                    |                     |
|------------------------------------|---------------------|
| Contact type (pluggable connector) | Male connector/plug |
| Connector connection type          | for conductors      |
| Mismating protection               | Yes                 |

## Material Data

|                     |                      |
|---------------------|----------------------|
| Color               | light gray           |
| Material group      | I                    |
| Insulating material | Polyamide 66 (PA 66) |

|                             |                                        |
|-----------------------------|----------------------------------------|
| Flammability class per UL94 | V0                                     |
| Clamping spring material    | Chrome nickel spring steel (CrNi)      |
| Contact material            | Electrolytic copper (E <sub>Cu</sub> ) |
| Contact plating             | tin-plated                             |
| Fire load                   | 0.043 MJ                               |
| Weight                      | 2.128 g                                |

## Environmental Requirements

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

## Commercial data

|                    |                        |
|--------------------|------------------------|
| Product Group      | 3 (Multi Conn. System) |
| Country of origin  | PL                     |
| GTIN               | 4044918849548          |
| Customs Tariff No. | 85366990990            |

## Approvals / Certificates

### Country specific Approvals

| Logo                                                                               | Approval                        | Additional Approval Text | Certificate name |
|------------------------------------------------------------------------------------|---------------------------------|--------------------------|------------------|
|  | CCA<br>DEKRA Certification B.V. | EN 61984                 | 2169534.01       |
|                                                                                    | CCA<br>DEKRA Certification B.V. | IEC 61984                | NL-31141         |
|  | CSA<br>DEKRA Certification B.V. | C22.2                    | 1465035          |
|  | CSA<br>DEKRA Certification B.V. | C22.2                    | 1465035          |

### Ship Approvals

| Logo                                                                               | Approval                                         | Additional Approval Text | Certificate name         |
|------------------------------------------------------------------------------------|--------------------------------------------------|--------------------------|--------------------------|
|  | ABS<br>American Bureau of Shipping               | -                        | 14-<br>HG1241537-<br>PDA |
|                                                                                    | DNV GL<br>Det Norske Veritas, Germanischer Lloyd | -                        | TAE000016Z               |



## UL-Approvals

| Logo                                                                             | Approval                             | Additional Approval Text | Certificate name |
|----------------------------------------------------------------------------------|--------------------------------------|--------------------------|------------------|
|  | UL<br>UL International Germany GmbH  | UL 1977                  | E45171           |
|  | UL<br>Underwriters Laboratories Inc. | UL 1059                  | 20190122-E45172  |

## Compatible products

## ferrule

|                                                                                   |                                                                                                         |         |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|---------|
|  | Item no.: 216-131<br>Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated | 216-131 |
|  | Item no.: 216-132<br>Ferrule; Sleeve for 0.34 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated | 216-132 |
|  | Item no.: 216-151<br>Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated | 216-151 |
|  | Item no.: 216-152<br>Ferrule; Sleeve for 0.34 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated | 216-152 |
|                                                                                   | Item no.: 216-301<br>Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; insulated; electro-tin plated   | 216-301 |
|  | Item no.: 216-302<br>Ferrule; Sleeve for 0.34 mm <sup>2</sup> / 22 AWG; insulated; electro-tin plated   | 216-302 |
|                                                                                   | Item no.: 216-321<br>Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; insulated; electro-tin plated   | 216-321 |
|  | Item no.: 216-322<br>Ferrule; Sleeve for 0.34 mm <sup>2</sup> / 22 AWG; insulated; electro-tin plated   | 216-322 |

## Coding

|                                                                                    |                                               |         |
|------------------------------------------------------------------------------------|-----------------------------------------------|---------|
|  | Item no.: 733-330<br>Coding key; snap-on type | 733-330 |
|------------------------------------------------------------------------------------|-----------------------------------------------|---------|



**Item no.: 733-331**  
Coding key; snap-on type

733-331

## tools



**Item no.: 210-251**  
Operating tool; for female and male connectors with CAGE CLAMP® connection; MCS MINI & MICRO

210-251



**Item no.: 210-719**  
Operating tool with partially insulated shaft; Type 1, blade (2.5 x 0.4) mm

210-719



**Item no.: 233-331**  
Operating tool; for female and male connectors with CAGE CLAMP® connection; insulated

233-331



**Item no.: 233-332**  
Operating tool; for 233 and 733 Series; of insulating material

233-332



**Item no.: 233-335**  
Operating tool; for 233 and 733 Series

233-335



**Item no.: 733-130**  
Operating tool; for male and female connectors with CAGE CLAMP®; loose

733-130



**Item no.: 733-191**  
Operating tool; for male and female connectors with CAGE CLAMP®; loose

733-191

## check



**Item no.: 735-500**  
Test pin; 1 mm Ø; with solder connection for test wire

735-500

## Strain relief plate



**Item no.: 734-127**  
Strain relief plate

734-127

## Downloads

## CAD/CAE - Smart Data

## CAD data

3D Download 733-204

URL

Download

Subject to changes.