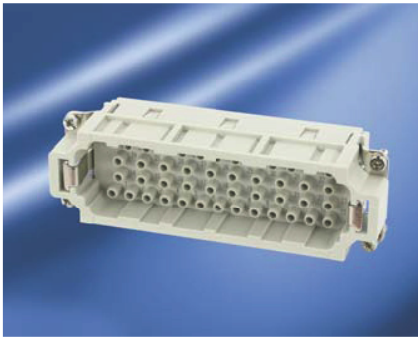






## heavy | mate<sup>®</sup> EE

- Rated voltage 500 V (600 V UL / CSA)
- Rated current 16 A
- Termination: crimp
- Numbers of contacts: 10, 18, 32, 46

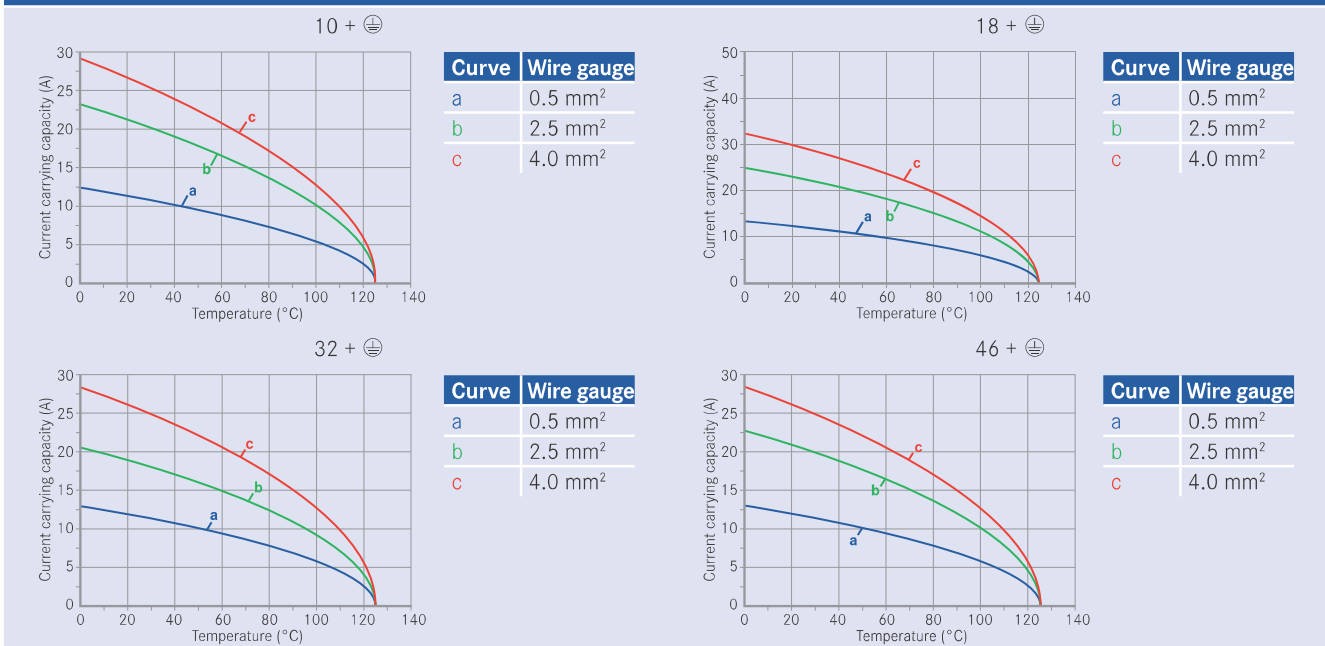


| Approvals, Testhouse   | Characteristics | Approval-Number             |
|--|-----------------|-----------------------------|
| UL<br>  | 600 V, 15 A     | E 63093                     |
| CSA<br> | 600 V, 16 A     | 172062-1027396 (LR 48323-2) |

In general approvals refer to representative versions of the connector series. Extent and specification of tests upon request.

| General Characteristics               | Standard        | Value                                     |            |        |        |
|---------------------------------------|-----------------|---|------------|--------|--------|
| Number of contacts                    |                 | 10 + ⊕                                    | 18 + ⊕     | 32 + ⊕ | 46 + ⊕ |
| Termination technique                 |                 | crimp                                     |            |        |        |
| Wire gauge                            |                 | 0.5 mm <sup>2</sup> - 4.0 mm <sup>2</sup> |            |        |        |
| Flammability                          | UL 94           | V-0                                       |            |        |        |
| Electrical Characteristics            |                 |   |            |        |        |
| Rated voltage                         | IEC 60664-1     | 500 V (600 V UL / CSA)                    |            |        |        |
| Pollution degree                      | IEC 60664-1     | 3   |            |        |        |
| Installation (overvoltage) category   | IEC 60664-1     | III                                       |            |        |        |
| Material group                        | IEC 60664-1     | III b                                     |            |        |        |
| Rated impulse withstand voltage       | IEC 60664-1     | 6 kV                                      |            |        |        |
| Current carrying capacity             | IEC 60512-5-2   | see derating curves                       |            |        |        |
| Contact resistance                    | IEC 60512-2-1   | ≤ 5 m Ω                                   |            |        |        |
| Insulation resistance                 | IEC 60512-3-1   | ≥ 10 <sup>10</sup> Ω                      |            |        |        |
| Climatical Characteristics            |                 |   |            |        |        |
| Climatic category                     | IEC 60068-1     | 40 / 100 / 21                             |            |        |        |
| Upper temperature                     | IEC 60512-11-9  | + 100 °C                                  |            |        |        |
| Lower temperature                     | IEC 60512-11-10 | - 40 °C                                   |            |        |        |
| Mechanical Characteristics            |                 |   |            |        |        |
| Mechanical operation                  | IEC 60512-9-1   | > 500 mating cycles                       |            |        |        |
| IP-degree of protection pin insert    | IEC 60529       | unmated IP00                              | mated IP20 |        |        |
| IP-degree of protection socket insert | IEC 60529       | unmated IP20                              | mated IP20 |        |        |
| Materials                             |                 |   |            |        |        |
| Insert                                |                 | PC  |            |        |        |
| Colour insert                         |                 | grey                                      |            |        |        |
| Contacts                              |                 | CuZn (brass)                              |            |        |        |
| Contact plating                       |                 | Ag (silver) / Au (gold)                   |            |        |        |

Derating curves



| Description  | Part Number        | Drawing | Figure |
|--|--------------------|---------|--------|
| <b>Contact insert 10 + ⊕ Size E 6 (Please order contacts separately, see page 67) Housings from page 196</b> |                    |         |        |
| Male insert<br>for turned crimp contacts   | C146 10A010 500 10 |         |        |
| Female insert<br>for turned crimp contacts   | C146 10B010 500 10 |         |        |

| Pin layout                              | Assembly instruction          |  |
|---|-------------------------------|--|
| <p>Male insert</p> <p>Female insert</p> | <p>Panel cut out (insert)</p> |  |

| Description   | Part Number        | Drawing | Figure |
|---|--------------------|---------|--------|
| <b>Contact insert 18 + ⊕ Size E 10 (Please order contacts separately, see page 67) Housings from page 198</b> |                    |         |        |
| Male insert<br>for turned crimp contacts  | C146 10A018 500 10 |         |        |
| Female insert<br>for turned crimp contacts  | C146 10B018 500 10 |         |        |

| Pin layout                              | Assembly instruction          |  |
|---|-------------------------------|--|
| <p>Male insert</p> <p>Female insert</p> | <p>Panel cut out (insert)</p> |  |



| Description   | Part Number        | Drawing | Figure |
|---|--------------------|---------|--------|
| <b>Contact insert 32 + ⊕ Size E 16 (Please order contacts separately, see page 67) Housings from page 205</b> |                    |         |        |
| Male insert<br>for turned crimp contacts  | C146 10A032 500 10 |         |        |
| Female insert<br>for turned crimp contacts  | C146 10B032 500 10 |         |        |

| Pin layout                              | Assembly instruction          |
|---|-------------------------------|
| <p>Male insert</p> <p>Female insert</p> | <p>Panel cut out (insert)</p> |

| Description   | Part Number        | Drawing | Figure |
|---|--------------------|---------|--------|
| <b>Contact insert 46 + ⊕ Size E 24 (Please order contacts separately, see page 67) Housings from page 211</b> |                    |         |        |
| Male insert<br>for turned crimp contacts  | C146 10A046 500 10 |         |        |
| Female insert<br>for turned crimp contacts  | C146 10B046 500 10 |         |        |

| Pin layout                              | Assembly instruction          |
|---|-------------------------------|
| <p>Male insert</p> <p>Female insert</p> | <p>Panel cut out (insert)</p> |

| Supplied as                                       | for wire gauge             | AWG | Pieces | Part Number      |                  | Figure  |
|---|----------------------------|-----|--------|------------------|------------------|---|
|   |                            |     |        | Male contact     | Female contact   |   |
| <b>Turned crimp contacts single contact 2.5mm</b> |                            |     |        |                  |                  |   |
| silver plating                                    | 0.5 mm <sup>2</sup>        | 20  | 100    | VN01 025 0035 1C | VN02 025 0035 1C |  |
|   | 0.75 - 1.0 mm <sup>2</sup> | 18  | 100    | VN01 025 0036 1C | VN02 025 0036 1C |   |
|   | 1.5 mm <sup>2</sup>        | 16  | 100    | VN01 025 0037 1C | VN02 025 0037 1C |   |
|   | 2.5 mm <sup>2</sup>        | 14  | 100    | VN01 025 0038 1C | VN02 025 0038 1C |   |
|   | 4.0 mm <sup>2</sup>        | 12  | 100    | VN01 025 0039 1C | VN02 025 0039 1C |   |
| gold plating                                      | 0.5 mm <sup>2</sup>        | 20  | 100    | VN01 025 0035 2C | VN02 025 0035 2C |   |
|   | 0.75 - 1.0 mm <sup>2</sup> | 18  | 100    | VN01 025 0036 2C | VN02 025 0036 2C |   |
|   | 1.5 mm <sup>2</sup>        | 16  | 100    | VN01 025 0037 2C | VN02 025 0037 2C |   |
|   | 2.5 mm <sup>2</sup>        | 14  | 100    | VN01 025 0038 2C | VN02 025 0038 2C |   |
|   | 4.0 mm <sup>2</sup>        | 12  | 100    | VN01 025 0039 2C | VN02 025 0039 2C |   |

**Tools for turned crimp contacts**

| Description                                | for wire gauge                                 | Part Number                            |                            |                    |
|--|--|--|----------------------------|--------------------|
|  |  | Contact locator                        | Crimping dies              | Tool               |
| Removal tool for contacts                  |  |  |                            | FG 0300 146 7      |
| Crimping tool for stamped single contacts  | 0.5 - 2.5 mm <sup>2</sup><br>4 mm <sup>2</sup> | TA 0010 146 000 6<br>TA 0010 146 000 7 | TA 0000 144<br>TA 0000 124 | TA 0000<br>TA 0500 |
| 4-indent crimping tool for turned contacts |  |  |                            | TB 0600 146        |
| Further tools see catalogue "Tools"        |  |  |                            |                    |