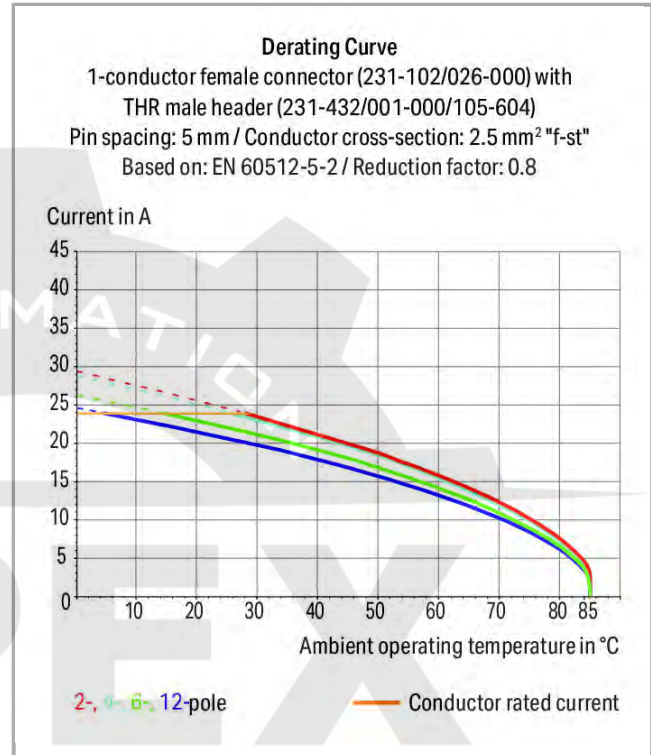
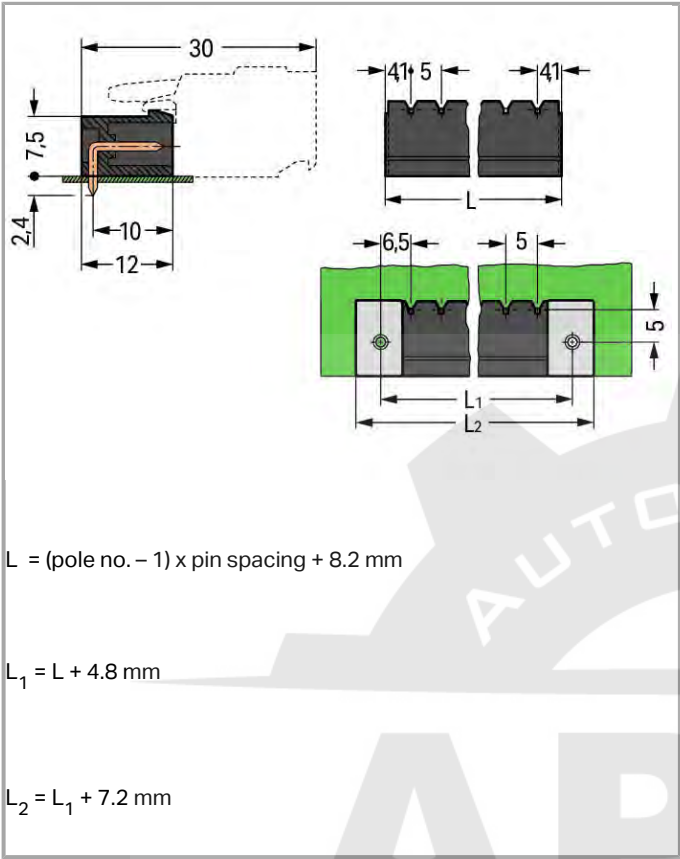






Item description

- THR male headers for reflow soldering in SMT applications
- Available in tape-and-reel packaging for automated pick-and-place PCB assembly
- Also available in bulk packaging for manual placement
- Male headers may be mounted horizontally or vertically
- With 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)         | 320 V |
| Rated impulse voltage (III / 3) | 4 kV  |
| Rated voltage (III / 2)         | 320 V |



|                                 |       |
|---------------------------------|-------|
| Rated impulse voltage (III / 2) | 4 kV  |
| Rated voltage (II / 2)          | 630 V |
| Rated impulse voltage (II / 2)  | 4 kV  |
| Rated current                   | 12 A  |

### 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  |

### Approvals per UL 1977

|                                                 |       |
|-------------------------------------------------|-------|
| Rated voltage per UL 1977 (factory wiring only) | 600 V |
| Rated current per UL 1977 (factory wiring only) | 10 A  |

### 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

|                            |   |
|----------------------------|---|
| No. of poles               | 5 |
| Total number of potentials | 5 |
| Number of connection types | 1 |
| Number of levels           | 1 |

### Geometrical Data

|                         |                      |
|-------------------------|----------------------|
| Pin spacing             | 5 mm / 0.197 inch    |
| Width                   | 28.2 mm / 1.11 inch  |
| Height                  | 10.8 mm / 0.425 inch |
| Height from the surface | 8.4 mm / 0.331 inch  |
| Depth                   | 12 mm / 0.472 inch   |
| Solder pin length       | 2.4 mm               |
| Solder pin dimensions   | 1 x 1 mm             |

### Plug connection

|                                    |                     |
|------------------------------------|---------------------|
| Contact type (pluggable connector) | Male connector/plug |
| Connector connection type          | for PCBs            |

|                             |    |
|-----------------------------|----|
| Mismating protection        | No |
| Mating direction to the PCB | 0° |

### PCB contact

|                                     |                                         |
|-------------------------------------|-----------------------------------------|
| PCB contact                         | THR                                     |
| Solder pin arrangement              | over the entire male connector, in line |
| Number of solder pins per potential | 1                                       |

### Material Data

|                             |                                        |
|-----------------------------|----------------------------------------|
| Color                       | black                                  |
| Material group              | I                                      |
| Insulating material         | Polyphthalamide (PPA GF)               |
| Flammability class per UL94 | V0                                     |
| Contact material            | Electrolytic copper (E <sub>Cu</sub> ) |
| Contact plating             | tin-plated                             |
| Fire load                   | 0.039 MJ                               |
| Weight                      | 1.85 g                                 |

### Environmental Requirements

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

### Commercial data

|                    |                        |
|--------------------|------------------------|
| Product Group      | 3 (Multi Conn. System) |
| Country of origin  | DE                     |
| GTIN               | 4044918988681          |
| Customs Tariff No. | 85366990990            |

### Approvals / Certificates

#### Country specific Approvals

| Logo                                                                               | Approval                               | Additional Approval Text | Certificate name |
|------------------------------------------------------------------------------------|----------------------------------------|--------------------------|------------------|
|                                                                                    | <b>CB</b><br>DEKRA Certification B.V.  | IEC 61984                | NL-39756         |
|  | <b>CSA</b><br>DEKRA Certification B.V. | C22.2                    | 1466354          |
|  | <b>CSA</b><br>DEKRA Certification B.V. | C22.2                    | 1466354          |

## Ship Approvals

| Logo                                                                             | Approval                                  | Additional Approval Text | Certificate name |
|----------------------------------------------------------------------------------|-------------------------------------------|--------------------------|------------------|
|  | <b>ABS</b><br>American Bureau of Shipping | -                        | 14-HG1241537-PDA |

## UL-Approvals

| Logo                                                                             | Approval                                   | Additional Approval Text | Certificate name |
|----------------------------------------------------------------------------------|--------------------------------------------|--------------------------|------------------|
|  | <b>UR</b><br>UL International Germany GmbH | UL 1977                  | E45171           |
|  | <b>UR</b><br>UL International Germany GmbH | UL 1977                  | E45171           |

## Compatible products

### Marking accessories

|                                                                                    |                                                                                      |         |
|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------|
|  | <b>Item no.: 210-833</b><br>Marking strips; on reel; 6 mm wide; plain; Self-adhesive | 210-833 |
|  | <b>Item no.: 210-834</b><br>Marking strips; on reel; 5 mm wide; plain; Self-adhesive | 210-834 |

### Coding

|                                                                                    |                                                             |         |
|------------------------------------------------------------------------------------|-------------------------------------------------------------|---------|
|  | <b>Item no.: 231-129</b><br>Coding key; snap-on type        | 231-129 |
|  | <b>Item no.: 231-500</b><br>Spacer; for formation of groups | 231-500 |

## Downloads

### CAD/CAE - Smart Data

#### PCB libraries

|                                                                                                                                              |                      |               |          |
|----------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------|----------|
| TARGET Library for WAGO Pluggable PCB Connectors (Multi-Connection System)<br>Compatible with TARGET PCB Design Software Version 17.x        | 1.1.0<br>Oct 6, 2014 | zip<br>7.4 MB | Download |
| EAGLE Library for WAGO Pluggable PCB Connectors (MULTI CONNECTION SYSTEM)<br>Compatible with EAGLE PCB Design Software Version 6.x or higher | 2.1<br>Oct 6, 2014   | zip<br>6.2 MB | Download |



DesignSpark Library for WAGO Pluggable PCB Connectors (MULTI CONNECTION SYSTEM)

2.1  
Oct 6, 2014

zip  
6.1 MB

[Download](#)

Compatible with DesignSpark PCB Version 4.x or higher

CAD data

3D Download 231-435/001-000/105-604

[URL](#)

[Download](#)



Subject to changes.