

## Feed-through modular terminal block - BTO 38 - 3281200

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Feed-through modular terminal block, nom. voltage: 690 V, nominal current: 125 A, connection method: Ring cable lug, number of connections: 2, width: 26 mm, height: 56 mm, color: black, mounting type: NS 35/7,5, NS 35/15

### Your advantages

- ✓ Reduction in logistics costs with the uniform CLIPLINE complete system accessories
- ✓ Maximum overview thanks to extensive marking and labeling of every terminal point
- ✓ Convenient ring cable lug connection thanks to the screw connection principle with spring-guided screw; maintenance-free with integrated screw locking
- ✓ Safety for users thanks to integrated shock protection
- ✓ Easy potential distribution with time-saving jumper system

### Key Commercial Data

|              |               |
|--------------|---------------|
| Packing unit | 25 pc         |
| GTIN         |               |
| GTIN         | 4055626406954 |

### Technical data

#### General

|   |                    |
|---|--------------------|
| Number of levels                                | 1                  |
| Number of connections                           | 2                  |
| Nominal cross section                           | 35 mm <sup>2</sup> |
| Color   | black              |
| Insulating material                             | PC                 |
| Flammability rating according to UL 94          | V0                 |
| Rated surge voltage                             | 8 kV               |
| Degree of pollution                             | 3                  |
| Overvoltage category                            | III                |
| Insulating material group                       | IIIa               |
| Maximum power dissipation for nominal condition | 4.06 W             |

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## Technical data

### General

|  |  |
|--|--|
| Ambient temperature (operation)          | -60 °C ... 85 °C   |
| Ambient temperature (storage/transport)  | -25 °C ... 55 °C (For a short time, not exceeding 24 h, -60 to +70 °C) |
| Permissible humidity (storage/transport) | 30 % ... 70 %  |
| Ambient temperature (assembly)           | -5 °C ... 70 °C  |
| Ambient temperature (actuation)          | -5 °C ... 70 °C  |
| Connection method                        | Ring cable lug   |
| Connection in acc. with standard         | IEC 60947-7-1  |
| Maximum load current                     | 125 A  |
| Nominal current $I_N$                    | 125 A  |
| Nominal voltage $U_N$                    | 690 V  |
| Open side panel                          | Yes  |

### Dimensions

|                  |         |
|------------------|---------|
| Width            | 26 mm   |
| Length           | 77.2 mm |
| Height NS 35/7,5 | 57.3 mm |
| Height NS 35/15  | 64.8 mm |

### Connection data

|   |   |
|---|---|
| Connection method                           | Ring cable lug  |
| Connection in acc. with standard            | IEC 60947-7-1   |
| Stripping length                            | The stripping length depends on the specification provided by the cable lug manufacturer. |
| Cable lug connection according to standard  | DIN 46235:1983-07   |
| Min. cross section for cable lug connection | 1.5 mm <sup>2</sup>   |
| Max. cross section for cable lug connection | 35 mm <sup>2</sup>  |
| AWG min                                     | 20  |
| AWG max                                     | 2   |
| Hole diameter, min.                         | 8.4 mm  |
| Cable lug width, max.                       | 23.7 mm   |
| Bolt diameter                               | 8 mm  |
| Screw thread                                | M8  |
| Tightening torque, min                      | 10 Nm   |
| Tightening torque max                       | 13.5 Nm   |
| Connection in acc. with standard            | JIS 8207-7-1  |
| Cable lug connection according to standard  | JIS 8207-7-1  |
| Min. cross section for cable lug connection | 1.25 mm <sup>2</sup>  |
| Max. cross section for cable lug connection | 38 mm <sup>2</sup>  |
| Hole diameter, min.                         | 8.4 mm  |
| Cable lug width, max.                       | 23.7 mm   |
| Bolt diameter                               | 8 mm  |
| Screw thread                                | M8  |

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## Technical data

### Connection data

|                        |                    |
|------------------------|--------------------|
| Tightening torque, min | 10 Nm              |
| Tightening torque max  | 13.5 Nm            |
| Nominal cross section  | 38 mm <sup>2</sup> |

### Standards and Regulations

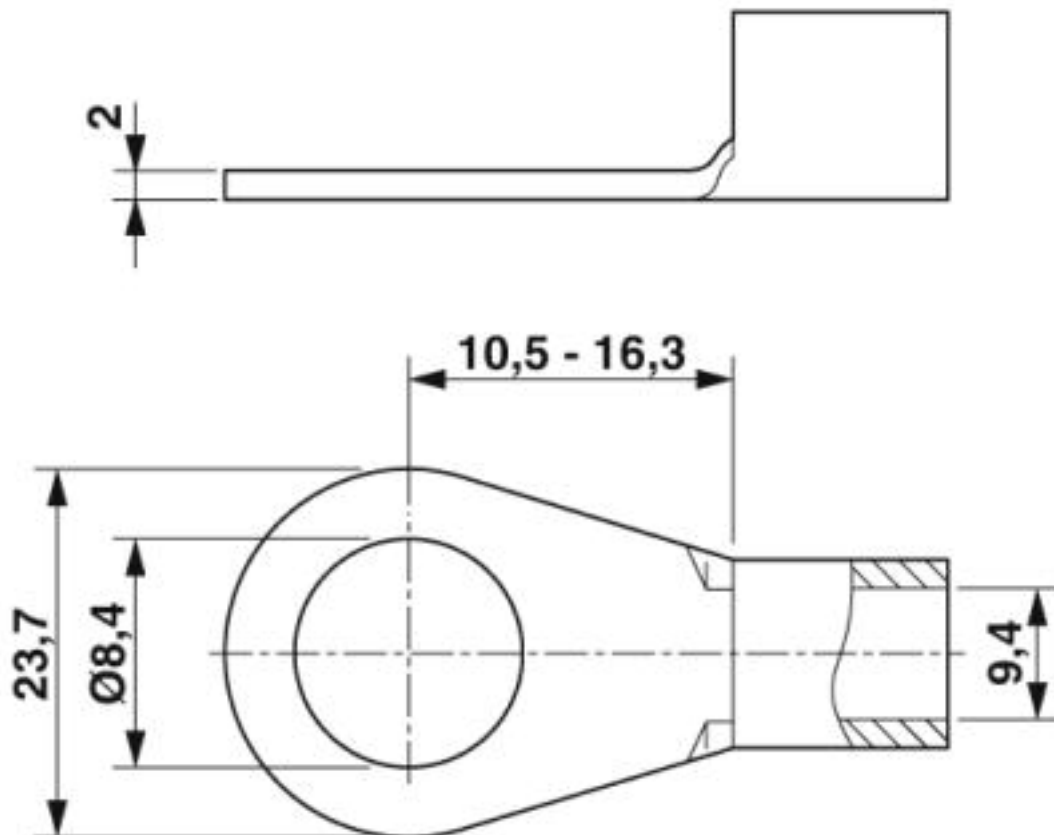
|  |               |
|--|---------------|
| Connection in acc. with standard       | IEC 60947-7-1 |
| Flammability rating according to UL 94 | V0            |

### Environmental Product Compliance

|            |   |
|------------|---|
| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
|            | No hazardous substances above threshold values          |

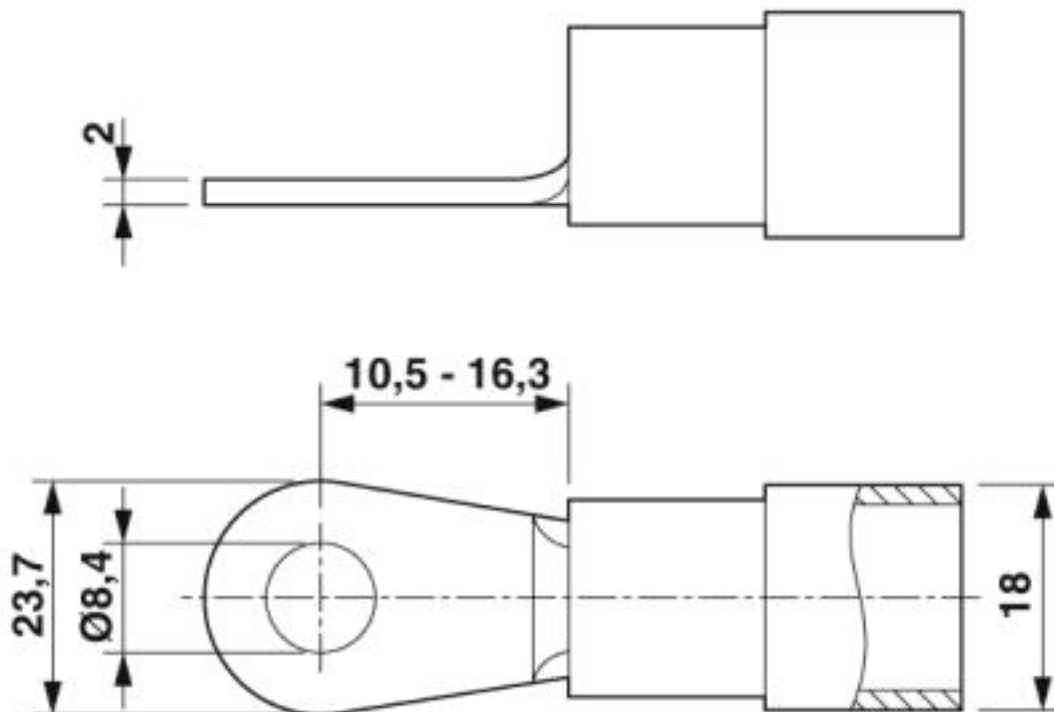
## Drawings

Dimensional drawing



# Feed-through modular terminal block - BTO 38 - 3281200

Dimensional drawing



Circuit diagram



## Classifications

eCl@ss

|               |          |
|---------------|----------|
| eCl@ss 10.0.1 | 27141120 |
| eCl@ss 4.0    | 27141120 |
| eCl@ss 4.1    | 27141120 |
| eCl@ss 5.0    | 27141120 |
| eCl@ss 5.1    | 27141120 |
| eCl@ss 6.0    | 27141100 |
| eCl@ss 7.0    | 27141120 |
| eCl@ss 8.0    | 27141120 |
| eCl@ss 9.0    | 27141120 |

ETIM

|          |          |
|----------|----------|
| ETIM 2.0 | EC000897 |
| ETIM 3.0 | EC000897 |
| ETIM 4.0 | EC000897 |

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## Classifications

### ETIM

|          |          |
|----------|----------|
| ETIM 5.0 | EC000897 |
| ETIM 6.0 | EC000897 |
| ETIM 7.0 | EC000897 |

### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 30211811 |
| UNSPSC 7.0901 | 39121410 |
| UNSPSC 11     | 39121410 |
| UNSPSC 12.01  | 39121410 |
| UNSPSC 13.2   | 39121410 |
| UNSPSC 18.0   | 39121410 |
| UNSPSC 19.0   | 39121410 |
| UNSPSC 20.0   | 39121410 |
| UNSPSC 21.0   | 39121410 |

## Approvals

### Approvals


#### Approvals

DNV GL / CSA / UL Recognized / cUL Recognized / EAC / cULus Recognized

#### Ex Approvals

### Approval details

|        |   |   |            |
|--------|---|---|------------|
| DNV GL |  | <a href="https://approvalfinder.dnvgl.com/">https://approvalfinder.dnvgl.com/</a> | TAE00001S2 |
|--------|---|---|------------|

|                            |   |   |       |
|----------------------------|---|---|-------|
| CSA                        |  | <a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a> | 13631 |
|                            | B   | C   |       |
| Nominal voltage UN         | 600 V   | 600 V   |       |
| Nominal current IN         | 100 A   | 100 A   |       |
| mm <sup>2</sup> /AWG/kcmil | 20-2  | 20-2  |       |

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## Approvals

|                            |       |   |              |
|----------------------------|-------|---|--------------|
| UL Recognized              |       | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 60425 |
|                            | B     | C   |              |
| Nominal voltage UN         | 600 V | 600 V   |              |
| Nominal current IN         | 100 A | 100 A   |              |
| mm <sup>2</sup> /AWG/kcmil | 20-2  | 20-2  |              |

|                            |       |   |              |
|----------------------------|-------|---|--------------|
| cUL Recognized             |       | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 60425 |
|                            | B     | C   |              |
| Nominal voltage UN         | 600 V | 600 V   |              |
| Nominal current IN         | 100 A | 100 A   |              |
| mm <sup>2</sup> /AWG/kcmil | 20-2  | 20-2  |              |

|     |  |                          |
|-----|--|--------------------------|
| EAC |  | RU C-<br>DE.BL08.B.00541 |
|-----|--|--------------------------|

|                  |  |
|------------------|--|
| cULus Recognized |  |
|------------------|--|

## Accessories

Accessories

Cover profile

Cover profile - AP-BTO 38 - 3281221

Cover profile, width: 81 mm, height: 10.5 mm, material: PC, length: 1000 mm, color: transparent



DIN rail

## Feed-through modular terminal block - BTO 38 - 3281200

### Accessories

DIN rail perforated - NS 35/ 7,5 PERF 2000MM - 0801733



DIN rail perforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

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DIN rail, unperforated - NS 35/ 7,5 UNPERF 2000MM - 0801681



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

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DIN rail perforated - NS 35/ 7,5 WH PERF 2000MM - 1204119



DIN rail perforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

---

DIN rail, unperforated - NS 35/ 7,5 WH UNPERF 2000MM - 1204122



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

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DIN rail, unperforated - NS 35/ 7,5 AL UNPERF 2000MM - 0801704



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Aluminum, uncoated, length: 2000 mm, color: silver

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## Feed-through modular terminal block - BTO 38 - 3281200

### Accessories

DIN rail perforated - NS 35/ 7,5 ZN PERF 2000MM - 1206421



DIN rail perforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, length: 2000 mm, color: silver

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DIN rail, unperforated - NS 35/ 7,5 ZN UNPERF 2000MM - 1206434



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, length: 2000 mm, color: silver

---

DIN rail, unperforated - NS 35/ 7,5 CU UNPERF 2000MM - 0801762



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Copper, uncoated, length: 2000 mm, color: copper-colored

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End cap - NS 35/ 7,5 CAP - 1206560



DIN rail end piece, for DIN rail NS 35/7.5

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DIN rail perforated - NS 35/15 PERF 2000MM - 1201730



DIN rail perforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

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## Feed-through modular terminal block - BTO 38 - 3281200

### Accessories

DIN rail, unperforated - NS 35/15 UNPERF 2000MM - 1201714



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

DIN rail perforated - NS 35/15 WH PERF 2000MM - 0806602



DIN rail perforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

DIN rail, unperforated - NS 35/15 WH UNPERF 2000MM - 1204135



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

DIN rail, unperforated - NS 35/15 AL UNPERF 2000MM - 1201756



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Aluminum, uncoated, length: 2000 mm, color: silver

DIN rail perforated - NS 35/15 ZN PERF 2000MM - 1206599



DIN rail perforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, length: 2000 mm, color: silver

## Feed-through modular terminal block - BTO 38 - 3281200

### Accessories

DIN rail, unperforated - NS 35/15 ZN UNPERF 2000MM - 1206586



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, length: 2000 mm, color: silver

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DIN rail, unperforated - NS 35/15 CU UNPERF 2000MM - 1201895



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Copper, uncoated, length: 2000 mm, color: copper-colored

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End cap - NS 35/15 CAP - 1206573



DIN rail end piece, for DIN rail NS 35/15

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End block

End clamp - E/NS 35 N BK - 0804271



End clamp, width: 9.5 mm, height: 32.8 mm, material: PA, length: 48.6 mm, color: black

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End cover

End cover - D-BTO 38 - 3281216



End cover, with flange on the right-hand side, length: 77.2 mm, width: 23.5 mm, height: 51 mm, color: black

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Insulating sleeve

## Feed-through modular terminal block - BTO 38 - 3281200

### Accessories

Insulating sleeve - MPS-IH WH - 0201663

Insulating sleeve, color: white



Insulating sleeve - MPS-IH RD - 0201676

Insulating sleeve, color: red



Insulating sleeve - MPS-IH BU - 0201689

Insulating sleeve, color: blue



Insulating sleeve - MPS-IH YE - 0201692

Insulating sleeve, color: yellow



Insulating sleeve - MPS-IH GN - 0201702

Insulating sleeve, color: green



## Feed-through modular terminal block - BTO 38 - 3281200

### Accessories

Insulating sleeve - MPS-IH GY - 0201728

Insulating sleeve, color: gray



Insulating sleeve - MPS-IH BK - 0201731

Insulating sleeve, color: black



### Jumper

Plug-in bridge - FBS 2-16 - 3005963



Plug-in bridge, pitch: 16 mm, length: 43.7 mm, width: 25.9 mm, number of positions: 2, color: red

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### Labeled terminal marker

Marker for terminal blocks - TMT 6 R CUS - 0824488



Marker for terminal blocks, can be ordered: by line, white, labeled according to customer specifications, mounting type: snap into universal marker groove, snap into flat marker groove, for terminal block width: 6.2 mm, lettering field size: 6.35 x 6.15 mm

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### Partition plate

Spacer plate - DP PS-5 - 3036725



Spacer plate, length: 22.4 mm, width: 5.2 mm, height: 29 mm, number of positions: 1, color: red

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### Planning and marking software

## Feed-through modular terminal block - BTO 38 - 3281200

### Accessories

#### Software - CLIP-PROJECT ADVANCED - 5146040



Multilingual software for convenient configuration of Phoenix Contact products on standard DIN rails.

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#### Software - CLIP-PROJECT PROFESSIONAL - 5146053



Multilingual software for terminal strip configuration. A marking module enables the professional marking of markers and labels for identifying terminal blocks, conductors and cables, and devices.

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### Screwdriver tools

#### Philips screwdriver - SF-PH 3-150 - 1212561



Screwdriver, PH crosshead (lasered), uninsulated, size: PH 3 x 150, 2-component grip, with non-slip grip

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### Terminal marking

#### Marker for terminal blocks - TMT 6 R - 0816498



Marker for terminal blocks, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, THERMOMARK S1.1, perforated, mounting type: snap into universal marker groove, snap into flat marker groove, for terminal block width: 6.2 mm, lettering field size: 6.35 x 6.15 mm, Number of individual labels: 16000

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#### Marker for terminal blocks - TMT (EX9,5)R - 0828295



Marker for terminal blocks, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: snap into universal marker groove, snap into tall marker groove, for terminal block width: 50000 mm, lettering field size: 9.5 x 50000 mm, Number of individual labels: 1

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## Feed-through modular terminal block - BTO 38 - 3281200

### Accessories

Marker for terminal blocks - US-TM 100 - 0829255



Marker for terminal blocks, Card, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: snap into universal marker groove, lettering field size: 104 x 9.8 mm, Number of individual labels: 13

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### Test plug terminal block

Test plugs - PS-5 - 3030983



Test plugs, Modular test plug, color: red

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Test plugs - PS-5/2,3MM RD - 3038723



Test plugs, color: red

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Test plugs - MPS-MT - 0201744



Test plugs, with solder connection up to 1 mm<sup>2</sup> conductor cross section, color: gray

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### Test socket

Test adapter - PAI-4 - 3030925



Test adapter, for 4 mm test plug and terminal blocks with 4.2 mm ... 8.2 mm pitch, color: gray

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