

# PP-H 4/ 3 - Plug

3212022

<https://www.phoenixcontact.com/us/products/3212022>



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Plug, nom. voltage: 800 V, nominal current: 32 A, number of connections: 3, number of positions: 3, connection method: Push-in connection, 1st level connection left, Rated cross section: 4 mm<sup>2</sup>, cross section: 0.2 mm<sup>2</sup> - 6 mm<sup>2</sup>, color: gray

## Your advantages

- Large-surface labeling option
- The Push-in technology COMBI plugs for self-assembly provide solutions that users can implement themselves
- Tested for railway applications

## Commercial data

|                                      |                     |
|--------------------------------------|---------------------|
| Item number                          | 3212022             |
| Packing unit                         | 50 pc               |
| Minimum order quantity               | 50 pc               |
| Sales key                            | BE22                |
| Product key                          | BE2244              |
| Catalog page                         | Page 327 (C-1-2019) |
| GTIN                                 | 4046356483070       |
| Weight per piece (including packing) | 14.8 g              |
| Weight per piece (excluding packing) | 14.72 g             |
| Customs tariff number                | 85366990            |
| Country of origin                    | PL                  |

## Technical data

### Product properties

|                       |                   |
|-----------------------|-------------------|
| Product type          | Terminal plug     |
| Area of application   | Railway industry  |
|                       | Machine building  |
|                       | Plant engineering |
| Number of positions   | 3                 |
| Pitch                 | 6.2 mm            |
| Number of connections | 3                 |
| Number of rows        | 1                 |
| Potentials            | 3                 |

### Insulation characteristics

|                      |     |
|----------------------|-----|
| Overvoltage category | III |
| Degree of pollution  | 3   |

### Electrical properties

|                                                 |        |
|-------------------------------------------------|--------|
| Rated surge voltage                             | 8 kV   |
| Maximum power dissipation for nominal condition | 1.02 W |

### Connection data

|                                 |                   |
|---------------------------------|-------------------|
| Number of connections per level | 3                 |
| Nominal cross section           | 4 mm <sup>2</sup> |

#### 1st level connection left

|                                                                                           |                                                       |
|-------------------------------------------------------------------------------------------|-------------------------------------------------------|
| Stripping length                                                                          | 10 mm ... 12 mm                                       |
| Internal cylindrical gage                                                                 | A4                                                    |
| Connection in acc. with standard                                                          | IEC 61984                                             |
| Conductor cross section rigid                                                             | 0.2 mm <sup>2</sup> ... 6 mm <sup>2</sup>             |
| Cross section AWG                                                                         | 24 ... 10 (converted acc. to IEC)                     |
| Conductor cross section flexible                                                          | 0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>             |
| Conductor cross section, flexible [AWG]                                                   | 24 ... 12 (converted acc. to IEC)                     |
| Conductor cross-section flexible (ferrule without plastic sleeve)                         | 0.25 mm <sup>2</sup> ... 4 mm <sup>2</sup>            |
| Flexible conductor cross section (ferrule with plastic sleeve)                            | 0.25 mm <sup>2</sup> ... 4 mm <sup>2</sup>            |
| 2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve | 0.5 mm <sup>2</sup> ... 1 mm <sup>2</sup>             |
| Nominal current                                                                           | 32 A                                                  |
| Maximum load current                                                                      | 32 A (with 6 mm <sup>2</sup> conductor cross section) |
| Nominal voltage                                                                           | 800 V                                                 |
| Nominal cross section                                                                     | 4 mm <sup>2</sup>                                     |

#### 1st level connection left Connection cross sections directly pluggable

|                                                                   |                                           |
|-------------------------------------------------------------------|-------------------------------------------|
| Conductor cross section rigid                                     | 0.5 mm <sup>2</sup> ... 6 mm <sup>2</sup> |
| Conductor cross-section flexible (ferrule without plastic sleeve) | 0.5 mm <sup>2</sup> ... 4 mm <sup>2</sup> |

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|                                                                |                                           |
|----------------------------------------------------------------|-------------------------------------------|
| Flexible conductor cross section (ferrule with plastic sleeve) | 0.5 mm <sup>2</sup> ... 4 mm <sup>2</sup> |
|----------------------------------------------------------------|-------------------------------------------|

## Dimensions

|        |         |
|--------|---------|
| Width  | 18.6 mm |
| Height | 21 mm   |
| Depth  | 42.3 mm |
| Pitch  | 6.2 mm  |

## Material specifications

|                                                                         |             |
|-------------------------------------------------------------------------|-------------|
| Color                                                                   | gray        |
| Flammability rating according to UL 94                                  | V0          |
| Insulating material group                                               | I           |
| Insulating material                                                     | PA          |
| Static insulating material application in cold                          | -60 °C      |
| Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21)) | 130 °C      |
| Relative insulation material temperature index (Elec., UL 746 B)        | 130 °C      |
| Fire protection for rail vehicles (DIN EN 45545-2) R22                  | HL 1 - HL 3 |
| Fire protection for rail vehicles (DIN EN 45545-2) R23                  | HL 1 - HL 3 |
| Fire protection for rail vehicles (DIN EN 45545-2) R24                  | HL 1 - HL 3 |
| Fire protection for rail vehicles (DIN EN 45545-2) R26                  | HL 1 - HL 3 |
| Calorimetric heat release NFPA 130 (ASTM E 1354)                        | 28 MJ/kg    |
| Surface flammability NFPA 130 (ASTM E 162)                              | passed      |
| Specific optical density of smoke NFPA 130 (ASTM E 662)                 | passed      |
| Smoke gas toxicity NFPA 130 (SMP 800C)                                  | passed      |

## Mechanical properties

### Mechanical data

|                 |    |
|-----------------|----|
| Open side panel | No |
|-----------------|----|

## Environmental and real-life conditions

### Ambient conditions

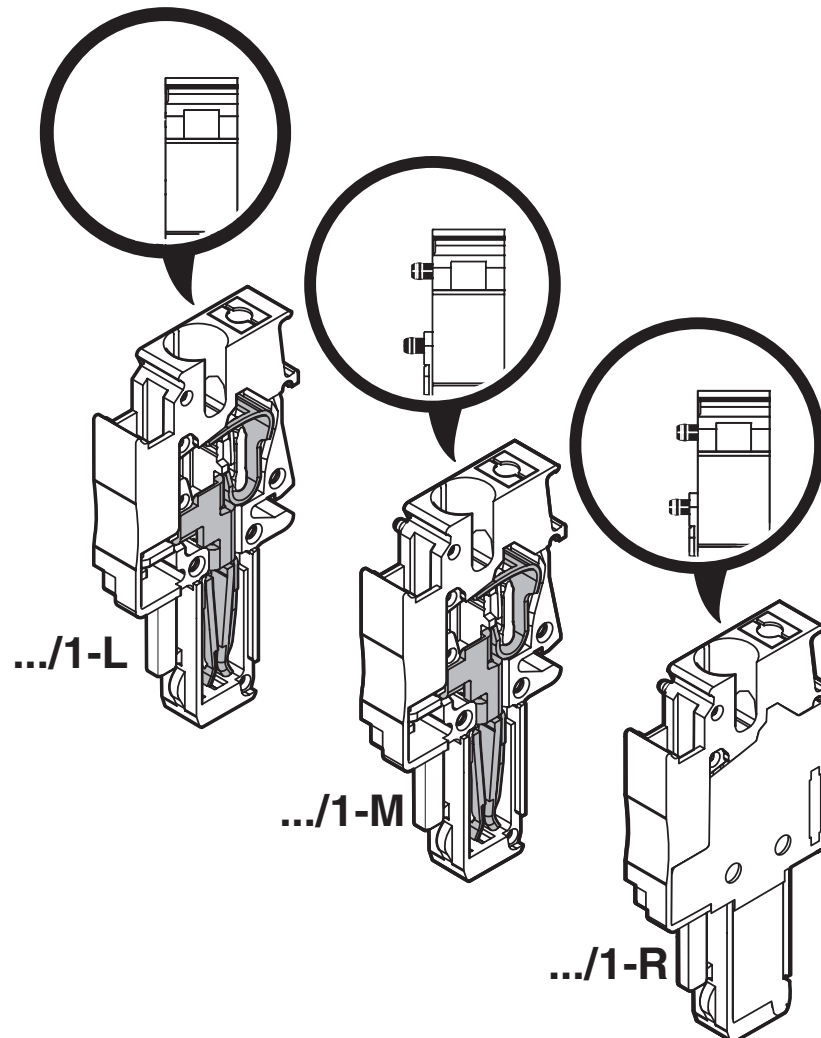
|                                          |                                                                          |
|------------------------------------------|--------------------------------------------------------------------------|
| Ambient temperature (operation)          | -60 °C (max. operating temperature see derating curve)                   |
| Ambient temperature (storage/transport)  | -25 °C ... 60 °C (for a short time, no longer than 24 h, -60°C to +70°C) |
| Ambient temperature (assembly)           | -5 °C ... 70 °C                                                          |
| Ambient temperature (actuation)          | -5 °C ... 70 °C                                                          |
| Permissible humidity (operation)         | 20 % ... 90 %                                                            |
| Permissible humidity (storage/transport) | 30 % ... 70 %                                                            |

## Standards and regulations

|                                  |           |
|----------------------------------|-----------|
| Connection in acc. with standard | IEC 61984 |
|----------------------------------|-----------|

## Drawings

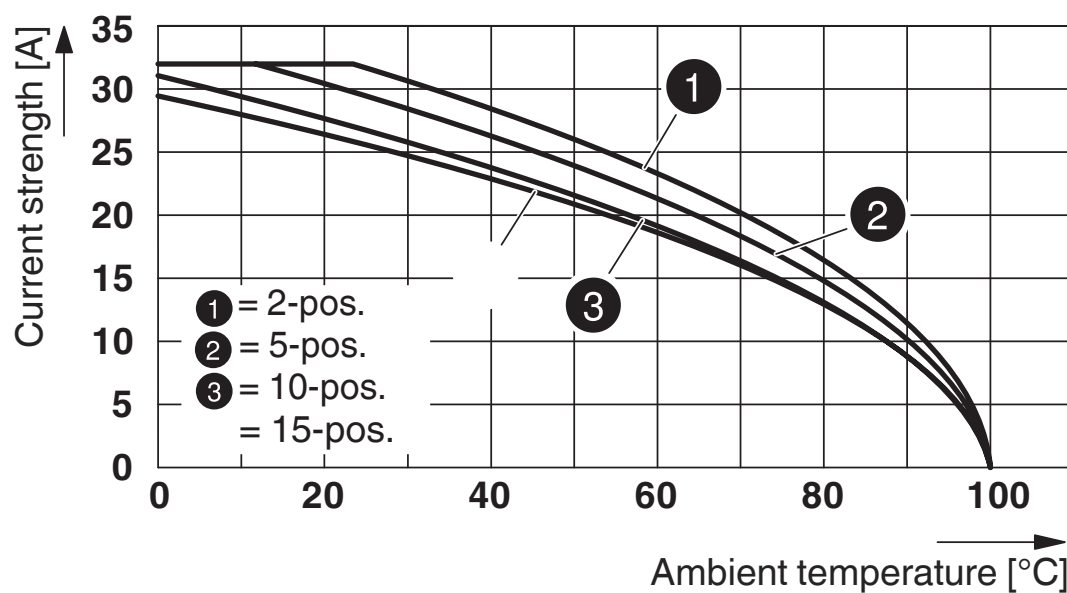
Schematic diagram



Circuit diagram



Diagram



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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3212022>

### DNV

Approval ID: TAE000010T



### IECEE CB Scheme

Approval ID: DE1-64672\_B1\_B2

|  | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
|--|-----------------------|-----------------------|-------------------|-----------------------------|
|  | 800 V                 | 32 A                  | -                 | -                           |



### EAC

Approval ID: RU C-DE.BL08.B.00511



### cULus Recognized

Approval ID: E60425



### BV

Approval ID: 39979/B0 BV



### VDE Zeichengenehmigung

Approval ID: 40043445

|                          | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
|--------------------------|-----------------------|-----------------------|-------------------|-----------------------------|
| Only flexible conductors | 800 V                 | 32 A                  | -                 | 0.2 - 4                     |



### cULus Recognized

Approval ID: E60425



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Approval ID: E60425

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## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-11.0 | 27141151 |
| ECLASS-12.0 | 27141151 |
| ECLASS-13.0 | 27250306 |

### ETIM

|          |          |
|----------|----------|
| ETIM 9.0 | EC002021 |
|----------|----------|

### UNSPSC

|             |          |
|-------------|----------|
| UNSPSC 21.0 | 39121400 |
|-------------|----------|

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## Environmental product compliance

|                                         |                                          |
|-----------------------------------------|------------------------------------------|
| EU RoHS                                 |                                          |
| Fulfills EU RoHS substance requirements | Yes, No exemptions                       |
| China RoHS                              |                                          |
| Environment friendly use period (EFUP)  | EFUP-E                                   |
|                                         | No hazardous substances above the limits |
| EU REACH SVHC                           |                                          |
| REACH candidate substance (CAS No.)     | No substance above 0.1 wt%               |

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## Accessories

### PR/2 - Latching

3040630

<https://www.phoenixcontact.com/us/products/3040630>



Latching, width: 10 mm, height: 29.8 mm, number of positions: 2, color: orange

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### PRT/2 - Latching

3040631

<https://www.phoenixcontact.com/us/products/3040631>



Latching, can only be released using a screwdriver, width: 9 mm, height: 23.2 mm, number of positions: 2, color: orange

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## PRZ - Latching

3040614

<https://www.phoenixcontact.com/us/products/3040614>



Latching, number of positions: 2, length: 64 mm, color: orange

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## PZ/2 - Strain relief

3040627

<https://www.phoenixcontact.com/us/products/3040627>



Strain relief, width: 9.3 mm, height: 48.7 mm, number of positions: 2, color: black

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## PR - Latching

3040559

<https://www.phoenixcontact.com/us/products/3040559>



Latching, width: 4.4 mm, height: 29.8 mm, number of positions: 1, color: orange

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## ZBF 6:UNBEDRUCKT - Zack Marker strip, flat

0808710

<https://www.phoenixcontact.com/us/products/0808710>



Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 6.2 mm, lettering field size: 5.15 x 6.15 mm, Number of individual labels: 10

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<https://www.phoenixcontact.com/us/products/3212022>



## ZBF 6 CUS - Zack Marker strip, flat

0825027

<https://www.phoenixcontact.com/us/products/0825027>



Zack Marker strip, flat, Strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into flat marker groove, for terminal block width: 6.2 mm, lettering field size: 5.15 x 6.15 mm, Number of individual labels: 10

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## UC-TMF 6 - Marker for terminal blocks

0818140

<https://www.phoenixcontact.com/us/products/0818140>



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 6.2 mm, lettering field size: 5.6 x 5.1 mm, Number of individual labels: 80

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## UC-TMF 6 CUS - Marker for terminal blocks

0824646

<https://www.phoenixcontact.com/us/products/0824646>



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into flat marker groove, for terminal block width: 6.2 mm, lettering field size: 5.6 x 5.1 mm, Number of individual labels: 80

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## UCT-TMF 6 - Marker for terminal blocks

0828746

<https://www.phoenixcontact.com/us/products/0828746>



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: snapped, for terminal block width: 6.2 mm, lettering field size: 5.4 x 4.7 mm, Number of individual labels: 60

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<https://www.phoenixcontact.com/us/products/3212022>



## UCT-TMF 6 CUS - Marker for terminal blocks

0829665

<https://www.phoenixcontact.com/us/products/0829665>



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into flat marker groove, for terminal block width: 6.2 mm, lettering field size: 5.4 x 4.7 mm, Number of individual labels: 60

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## ZBF 6,LGS:FORTL.ZAHLEN - Zack Marker strip, flat

0808749

<https://www.phoenixcontact.com/us/products/0808749>



Zack Marker strip, flat, Strip, white, labeled, printed horizontally: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 100, mounting type: snapped, for terminal block width: 6.2 mm, lettering field size: 5.15 x 6.15 mm, Number of individual labels: 10

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## ZBF 6,QR:FORTL.ZAHLEN - Zack Marker strip, flat

0808765

<https://www.phoenixcontact.com/us/products/0808765>



Zack Marker strip, flat, Strip, white, labeled, Printed vertically: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 100, mounting type: snapped, for terminal block width: 6.2 mm, lettering field size: 5.15 x 6.15 mm, Number of individual labels: 10

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## ZBF 6,LGS:GERADE ZAHLEN - Zack Marker strip, flat

0810834

<https://www.phoenixcontact.com/us/products/0810834>



Zack Marker strip, flat, Strip, white, labeled, printed horizontally: consecutive even numbers 2 ... 20, 22 ... 40, etc. up to 82 ... 100, mounting type: snapped, for terminal block width: 6.2 mm, lettering field size: 5.15 x 6.15 mm, Number of individual labels: 10

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## ZBF 6,LGS:UNGERADE ZAHLEN - Zack Marker strip, flat

0810876

<https://www.phoenixcontact.com/us/products/0810876>



Zack Marker strip, flat, Strip, white, labeled, printed horizontally: Odd numbers 1 - 19, 21 - 39, etc. up to 81 - 99, mounting type: snapped, for terminal block width: 6.2 mm, lettering field size: 5.15 x 6.15 mm, Number of individual labels: 10

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## MPS-MT - Test plug

0201744

<https://www.phoenixcontact.com/us/products/0201744>



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

# PP-H 4/ 3 - Plug

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<https://www.phoenixcontact.com/us/products/3212022>



## MPS-IH WH - Insulating sleeve

0201663

<https://www.phoenixcontact.com/us/products/0201663>

Insulating sleeve, color: white



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## MPS-IH RD - Insulating sleeve

0201676

<https://www.phoenixcontact.com/us/products/0201676>

Insulating sleeve, color: red



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<https://www.phoenixcontact.com/us/products/3212022>

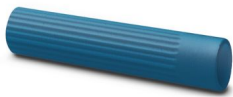


## MPS-IH BU - Insulating sleeve

0201689

<https://www.phoenixcontact.com/us/products/0201689>

Insulating sleeve, color: blue



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## MPS-IH YE - Insulating sleeve

0201692

<https://www.phoenixcontact.com/us/products/0201692>

Insulating sleeve, color: yellow



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<https://www.phoenixcontact.com/us/products/3212022>



## MPS-IH GN - Insulating sleeve

0201702

<https://www.phoenixcontact.com/us/products/0201702>

Insulating sleeve, color: green



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## MPS-IH GY - Insulating sleeve

0201728

<https://www.phoenixcontact.com/us/products/0201728>

Insulating sleeve, color: gray



# PP-H 4/ 3 - Plug

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<https://www.phoenixcontact.com/us/products/3212022>



## MPS-IH BK - Insulating sleeve

0201731

<https://www.phoenixcontact.com/us/products/0201731>

Insulating sleeve, color: black



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## ISH 4/0,5 - Insulating sleeve

3002885

<https://www.phoenixcontact.com/us/products/3002885>

Insulating sleeve, color: gray



## PP-H 4/ 3 - Plug

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<https://www.phoenixcontact.com/us/products/3212022>



## ISH 4/1,0 - Insulating sleeve

3002898

<https://www.phoenixcontact.com/us/products/3002898>



Insulating sleeve, color: black

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## SZF 1-0,6X3,5 - Screwdriver

1204517

<https://www.phoenixcontact.com/us/products/1204517>



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

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<https://www.phoenixcontact.com/us/products/3212022>



## ST-BW - Actuation tool

1207608

<https://www.phoenixcontact.com/us/products/1207608>

Actuation tool, for all 2.5 mm<sup>2</sup> - 4.0 mm<sup>2</sup> spring-cages



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