

# SP-H 2,5/ 2 - Plug

3210622

<https://www.phoenixcontact.com/us/products/3210622>



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Plug, nom. voltage: 500 V, nominal current: 24 A, number of positions: 2, connection method: Spring-cage connection, Rated cross section: 2.5 mm<sup>2</sup>, cross section: 0.08 mm<sup>2</sup>- 4 mm<sup>2</sup>, color: gray

## Your advantages

- Large-surface labeling option
- Practical coding option
- Tested for railway applications

## Commercial data

|                                      |                     |
|--------------------------------------|---------------------|
| Item number                          | 3210622             |
| Packing unit                         | 50 pc               |
| Minimum order quantity               | 50 pc               |
| Sales key                            | BE02                |
| Product key                          | BE2144              |
| Catalog page                         | Page 319 (C-1-2019) |
| GTIN                                 | 4046356411868       |
| Weight per piece (including packing) | 6.207 g             |
| Weight per piece (excluding packing) | 6.009 g             |
| Customs tariff number                | 85366990            |
| Country of origin                    | PL                  |

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## Technical data

### Product properties

|                     |               |
|---------------------|---------------|
| Product type        | Terminal plug |
| Number of positions | 2             |
| Pitch               | 5.2 mm        |
| Potentials          | 1             |

### Insulation characteristics

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

### Electrical properties

|                     |      |
|---------------------|------|
| Rated surge voltage | 6 kV |
|---------------------|------|

### Connection data

|                                                                                           |                                                       |
|-------------------------------------------------------------------------------------------|-------------------------------------------------------|
| Nominal cross section                                                                     | 2.5 mm <sup>2</sup>                                   |
| Stripping length                                                                          | 8 mm ... 10 mm                                        |
| Internal cylindrical gage                                                                 | A3                                                    |
| Connection in acc. with standard                                                          | IEC 61984                                             |
| Conductor cross section rigid                                                             | 0.08 mm <sup>2</sup> ... 4 mm <sup>2</sup>            |
| Cross section AWG                                                                         | 28 ... 12 (converted acc. to IEC)                     |
| Conductor cross section flexible                                                          | 0.08 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>          |
| Conductor cross section, flexible [AWG]                                                   | 28 ... 14 (converted acc. to IEC)                     |
| Conductor cross-section flexible (ferrule without plastic sleeve)                         | 0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>          |
| Flexible conductor cross section (ferrule with plastic sleeve)                            | 0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>          |
| 2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve | 0.5 mm <sup>2</sup>                                   |
| Nominal current                                                                           | 24 A                                                  |
| Maximum load current                                                                      | 24 A (with 4 mm <sup>2</sup> conductor cross section) |
| Nominal voltage                                                                           | 500 V                                                 |
| Nominal cross section                                                                     | 2.5 mm <sup>2</sup>                                   |

### Dimensions

|        |         |
|--------|---------|
| Width  | 10.4 mm |
| Height | 15.8 mm |
| Depth  | 39 mm   |
| Length | 15.8 mm |
| Pitch  | 5.2 mm  |

### Material specifications

|                                        |      |
|----------------------------------------|------|
| Color                                  | gray |
| Flammability rating according to UL 94 | V0   |
| Insulating material group              | I    |

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|                                                                         |             |
|-------------------------------------------------------------------------|-------------|
| 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      |

## Environmental and real-life conditions

### Ambient conditions

|                                          |                                                                           |
|------------------------------------------|---------------------------------------------------------------------------|
| Ambient temperature (operation)          | -60 °C ... 105 °C (max. short-term operating temperature RTI Elec.)       |
| Ambient temperature (storage/transport)  | -25 °C ... 60 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C) |
| Ambient temperature (assembly)           | -5 °C ... 70 °C                                                           |
| Ambient temperature (actuation)          | -5 °C ... 70 °C                                                           |
| Permissible humidity (storage/transport) | 30 % ... 70 %                                                             |

## Standards and regulations

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

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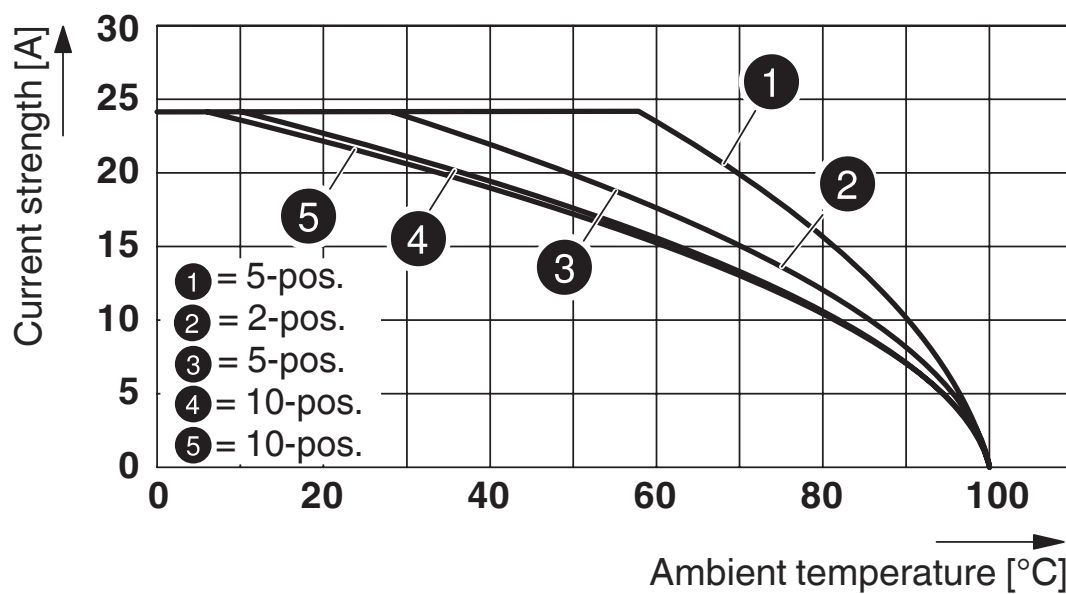


## Drawings

### Circuit diagram



### Diagram



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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3210622>



**CSA**  
Approval ID: 2030668



**CSA**  
Approval ID: 2030668



**IECEE CB Scheme**  
Approval ID: DE1-62736/B1/B2



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



**cULus Recognized**  
Approval ID: E60425



**cULus Recognized**  
Approval ID: E60425

|                                                                                     |                               |                       |                       |                               |
|-------------------------------------------------------------------------------------|-------------------------------|-----------------------|-----------------------|-------------------------------|
|  | <b>VDE Zeichengenehmigung</b> |                       |                       |                               |
|                                                                                     | Approval ID: 40019518         |                       |                       |                               |
|                                                                                     |                               | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG             |
|                                                                                     |                               |                       |                       | Cross section mm <sup>2</sup> |
| Only flexible conductors                                                            | 500 V                         | -                     | -                     | 0.2 - 2.5                     |
| Only rigid conductors                                                               | 500 V                         | -                     | -                     | 0.2 - 4                       |



**cULus Recognized**  
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

### 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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## 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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## DF-SP-H 2,5 - Flange cover

3209824

<https://www.phoenixcontact.com/us/products/3209824>



Flange cover, connection method: Screw connection, depth: 24.7 mm, width: 4.5 mm, height: 35.8 mm, color: gray

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<https://www.phoenixcontact.com/us/products/3210622>



## PH 2,5/ 2 - Cable housing

3209691

<https://www.phoenixcontact.com/us/products/3209691>



Cable housing, pitch: 10.4 mm, depth: 36.8 mm, width: 10.4 mm, height: 19.9 mm, number of positions: 2, color: gray

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## DFS-SP-H 2,5 - Flange cover

3061431

<https://www.phoenixcontact.com/us/products/3061431>



Flange cover, depth: 24.7 mm, width: 4.5 mm, height: 35.8 mm, color: gray

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<https://www.phoenixcontact.com/us/products/3210622>



## 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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## 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



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<https://www.phoenixcontact.com/us/products/3210622>



## 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/3210622>

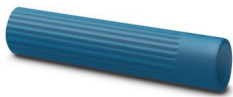


## MPS-IH BU - Insulating sleeve

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/3210622>



## 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



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## MPS-IH BK - Insulating sleeve

0201731

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

Insulating sleeve, color: black



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## ISH 2,5/0,2 - Insulating sleeve

3002843

<https://www.phoenixcontact.com/us/products/3002843>

Insulating sleeve, color: white



## SP-H 2,5/ 2 - Plug

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<https://www.phoenixcontact.com/us/products/3210622>



## ISH 2,5/0,5 - Insulating sleeve

3002856

<https://www.phoenixcontact.com/us/products/3002856>



Insulating sleeve, color: gray

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## ISH 2,5/1,0 - Insulating sleeve

3002869

<https://www.phoenixcontact.com/us/products/3002869>



Insulating sleeve, color: black

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### ZBF 5:UNBEDRUCKT - Zack Marker strip, flat

0808642

<https://www.phoenixcontact.com/us/products/0808642>



Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 5 mm, lettering field size: 5.1 x 5.2 mm, Number of individual labels: 10

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### ZBF 5 CUS - Zack Marker strip, flat

0825025

<https://www.phoenixcontact.com/us/products/0825025>



Zack Marker strip, flat, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into flat marker groove, for terminal block width: 5 mm, lettering field size: 5.15 x 5.15 mm, Number of individual labels: 10

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## ZBF 5,LGS:FORTL.ZAHLEN - Zack Marker strip, flat

0808671

<https://www.phoenixcontact.com/us/products/0808671>



Zack Marker strip, flat, Strip, white, labeled, printed horizontally: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 491 ... 500, mounting type: snapped, for terminal block width: 5 mm, lettering field size: 5.15 x 5.15 mm, Number of individual labels: 10

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## ZBF 5,QR:FORTL.ZAHLEN - Zack Marker strip, flat

0808697

<https://www.phoenixcontact.com/us/products/0808697>



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: 5 mm, lettering field size: 5.15 x 5.15 mm, Number of individual labels: 10

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## ZBF 5,LGS:GERADE ZAHLEN - Zack Marker strip, flat

0810821

<https://www.phoenixcontact.com/us/products/0810821>



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: 5 mm, lettering field size: 5.15 x 5.15 mm, Number of individual labels: 10

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## ZBF 5,LGS:UNGERADE ZAHLEN - Zack Marker strip, flat

0810863

<https://www.phoenixcontact.com/us/products/0810863>



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: 5 mm, lettering field size: 5.15 x 5.15 mm, Number of individual labels: 10

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## UC-TMF 5 - Marker for terminal blocks

0818153

<https://www.phoenixcontact.com/us/products/0818153>



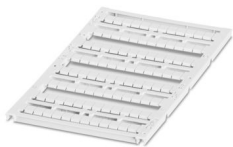
Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 5.2 mm, lettering field size: 4.6 x 5.1 mm, Number of individual labels: 96

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## UC-TMF 5 CUS - Marker for terminal blocks

0824638

<https://www.phoenixcontact.com/us/products/0824638>



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: 5.2 mm, lettering field size: 4.6 x 5.1 mm, Number of individual labels: 96

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## UCT-TMF 5 - Marker for terminal blocks

0828744

<https://www.phoenixcontact.com/us/products/0828744>



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: 5.2 mm, lettering field size: 4.4 x 4.7 mm, Number of individual labels: 72

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## UCT-TMF 5 CUS - Marker for terminal blocks

0829658

<https://www.phoenixcontact.com/us/products/0829658>



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: 5.2 mm, lettering field size: 4.4 x 4.7 mm, Number of individual labels: 72

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Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)