

# PTFIX 4/12X1,5-G BN - Distribution block



1046976

<https://www.phoenixcontact.com/us/products/1046976>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Distribution block, nominal current: 41 A, number of connections: 13, connection method: Push-in connection, Line contact, Rated cross section: 4 mm<sup>2</sup>, cross section: 0.2 mm<sup>2</sup> - 6 mm<sup>2</sup>, Load contact, cross section: 0.14 mm<sup>2</sup> - 2.5 mm<sup>2</sup>, mounting type: adhesive, color: brown

## Commercial data

|                                      |                     |
|--------------------------------------|---------------------|
| Item number                          | 1046976             |
| Packing unit                         | 1 pc                |
| Minimum order quantity               | 20 pc               |
| Sales key                            | BE09                |
| Product key                          | BEA123              |
| Catalog page                         | Page 436 (C-1-2019) |
| GTIN                                 | 4055626669014       |
| Weight per piece (including packing) | 13.84 g             |
| Weight per piece (excluding packing) | 13.84 g             |
| Customs tariff number                | 85369010            |
| Country of origin                    | PL                  |

# PTFIX 4/12X1,5-G BN - Distribution block



1046976

<https://www.phoenixcontact.com/us/products/1046976>

## Technical data

### Notes

#### General

|      |  |
|------|--|
| Note | The maximum load current of a single clamping unit must not be exceeded.   |
|      | For power distribution applications, IEC 60364-4-43:2008; modified + corrigendum Okt. 2008 (DIN VDE 0100-430:2010-10) section 433.2 ff must be observed! |

### Product properties

|                       |                            |
|-----------------------|----------------------------|
| Product type          | Distributor terminal block |
| Number of connections | 13                         |
| Number of rows        | 1                          |

#### Insulation characteristics

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

### Electrical properties

|   |        |
|---|--------|
| Rated surge voltage                             | 6 kV   |
| Maximum power dissipation for nominal condition | 0.56 W |

### Connection data

|                                 |                     |
|---------------------------------|---------------------|
| Service Entrance                | yes                 |
| Number of connections per level | 13                  |
| Nominal cross section           | 1.5 mm <sup>2</sup> |
| Rated cross section AWG         | 14                  |

#### Line contact

|   |  |
|---|--|
| Stripping length  | 10 mm ... 12 mm                                    |
| Connection in acc. with standard                                  | IEC 60998-2-2                                      |
| 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 ... 10 (converted acc. to IEC)                  |
| Conductor cross-section flexible (ferrule without plastic sleeve) | 0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>          |
| Flexible conductor cross section (ferrule with plastic sleeve)    | 0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>          |
| Nominal current   | 41 A   |
| Maximum load current  | 41 A (with 6 mm <sup>2</sup> conductor connection) |
| Maximum total current   | 41 A   |
| Nominal cross section   | 4 mm <sup>2</sup>                                  |

#### Load contact

|                  |                |
|------------------|----------------|
| Stripping length | 8 mm ... 10 mm |
|------------------|----------------|

# PTFIX 4/12X1,5-G BN - Distribution block



1046976

<https://www.phoenixcontact.com/us/products/1046976>

|   |   |
|---|---|
| Internal cylindrical gage   | A3  |
| Connection in acc. with standard                                  | IEC 60998-2-2   |
| Conductor cross section rigid                                     | 0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>              |
| Cross section AWG   | 26 ... 14 (converted acc. to IEC)                         |
| Conductor cross section flexible                                  | 0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>              |
| Conductor cross section, flexible [AWG]                           | 26 ... 14 (converted acc. to IEC)                         |
| Conductor cross-section flexible (ferrule without plastic sleeve) | 0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>              |
| Flexible conductor cross section (ferrule with plastic sleeve)    | 0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>              |
| Nominal current   | 17.5 A  |
| Maximum load current  | 22 A (with a 2.5 mm <sup>2</sup> conductor cross section) |
| Maximum total current   | 32 A  |
| Nominal voltage   | 450 V   |

## Line contact Connection cross sections directly pluggable

|   |  |
|---|--|
| Conductor cross section rigid                                     | 0.34 mm <sup>2</sup> ... 6 mm <sup>2</sup> |
| Conductor cross section, rigid [AWG]                              | 24 ... 12 (converted acc. to IEC)          |
| Conductor cross section flexible                                  | 0.34 mm <sup>2</sup> ... 4 mm <sup>2</sup> |
| Conductor cross-section flexible (ferrule without plastic sleeve) | 0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>  |
| Flexible conductor cross section (ferrule with plastic sleeve)    | 0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>  |

## Load contact Connection cross sections directly pluggable

|   |  |
|---|--|
| Conductor cross section rigid                                     | 0.34 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> |
| Conductor cross-section flexible (ferrule without plastic sleeve) | 0.34 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> |
| Flexible conductor cross section (ferrule with plastic sleeve)    | 0.34 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> |

## Dimensions

|        |         |
|--------|---------|
| Width  | 31.4 mm |
| Height | 21.6 mm |
| Depth  | 18.7 mm |

## Material specifications

|   |             |
|---|-------------|
| Color   | brown       |
| 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)) | 125 °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)                        | 27,5 MJ/kg  |
| Surface flammability NFPA 130 (ASTM E 162)                              | passed      |

# PTFIX 4/12X1,5-G BN - Distribution block



1046976

<https://www.phoenixcontact.com/us/products/1046976>

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

### Needle-flame test

|                  |             |
|------------------|-------------|
| Time of exposure | 30 s        |
| Result           | Test passed |

### Oscillation/broadband noise

|                        |  |
|------------------------|--|
| Specification          | DIN EN 50155 (VDE 0115-200):2018-05            |
| Spectrum               | Service life test category 2, bogie-mounted    |
| Frequency              | $f_1 = 5 \text{ Hz}$ to $f_2 = 250 \text{ Hz}$ |
| ASD level              | $6.12 \text{ (m/s}^2\text{)}^2\text{/Hz}$      |
| Acceleration           | 3.12g  |
| Test duration per axis | 5 h  |
| Test directions        | X-, Y- and Z-axis                              |
| Result                 | Test passed                                    |

### Shocks

|                                |                                     |
|--------------------------------|-------------------------------------|
| Specification                  | DIN EN 50155 (VDE 0115-200):2018-05 |
| Pulse shape                    | Half-sine                           |
| Acceleration                   | 30g                                 |
| Shock duration                 | 18 ms                               |
| Number of shocks per direction | 3                                   |
| Test directions                | X-, Y- and Z-axis (pos. and neg.)   |
| Result                         | Test passed                         |

### Ambient conditions

|  |   |
|--|---|
| Ambient temperature (operation)          | -35 °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 60998-2-2 |
|                                  | IEC 60998-2-2 |

## Mounting

# PTFIX 4/12X1,5-G BN - Distribution block



1046976

<https://www.phoenixcontact.com/us/products/1046976>

|               |          |
|---------------|----------|
| Mounting type | adhesive |
|---------------|----------|

# PTFIX 4/12X1,5-G BN - Distribution block

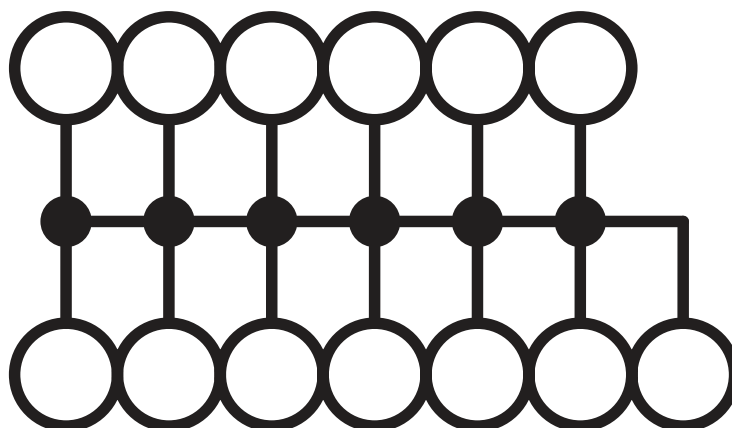


1046976

<https://www.phoenixcontact.com/us/products/1046976>

## Drawings

Circuit diagram



# PTFIX 4/12X1,5-G BN - Distribution block



1046976

<https://www.phoenixcontact.com/us/products/1046976>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1046976>

| DNV<br>Approval ID: TAE00002TT-04 |                       |                       |                   |                      |
|-----------------------------------|-----------------------|-----------------------|-------------------|----------------------|
|                                   | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $mm^2$ |
|                                   | 500 V                 | 24 A                  | -                 | -                    |

| CSA<br>Approval ID: 13631 |                       |                       |                   |                      |
|---------------------------|-----------------------|-----------------------|-------------------|----------------------|
|                           | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $mm^2$ |
| Use group B               |                       |                       |                   |                      |
| Output                    | 300 V                 | 20 A                  | 26 - 12           | -                    |
| Input                     | 300 V                 | 30 A                  | 24 - 10           | -                    |
| Use group C               |                       |                       |                   |                      |
| Output                    | 150 V                 | 20 A                  | 26 - 12           | -                    |
| Input                     | 150 V                 | 30 A                  | 24 - 10           | -                    |

| CB<br>IECEE CB Scheme<br>Approval ID: DE1-63084 |                       |                       |                   |                      |
|---|-----------------------|-----------------------|-------------------|----------------------|
|   | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $mm^2$ |
|   | 450 V                 | 32 A                  | -                 | - 4                  |

| EAC<br>Approval ID: RU C-DE.BL08.B.00644 |  |  |  |  |
|--|--|--|--|--|
|--|--|--|--|--|

| LR<br>Approval ID: LR2002627TA |  |  |  |  |
|--------------------------------|--|--|--|--|
|--------------------------------|--|--|--|--|

| BV<br>Approval ID: 59146/A0 BV |  |  |  |  |
|--------------------------------|--|--|--|--|
|--------------------------------|--|--|--|--|

| VDE Zeichengenehmigung<br>Approval ID: 40047798 |  |  |  |  |
|---|--|--|--|--|
|---|--|--|--|--|

| cULus Recognized<br>Approval ID: E60425 |                       |                       |                   |                      |
|---|-----------------------|-----------------------|-------------------|----------------------|
|   | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $mm^2$ |
| Use group B                             |                       |                       |                   |                      |

# PTFIX 4/12X1,5-G BN - Distribution block



1046976

<https://www.phoenixcontact.com/us/products/1046976>

|             |       |      |         |   |
|-------------|-------|------|---------|---|
| Output      | 300 V | 20 A | 26 - 12 | - |
| Input       | 300 V | 30 A | 24 - 10 | - |
| Use group C |       |      |         |   |
| Output      | 150 V | 20 A | 26 - 12 | - |
| Input       | 150 V | 30 A | 24 - 10 | - |



# PTFIX 4/12X1,5-G BN - Distribution block



1046976

<https://www.phoenixcontact.com/us/products/1046976>

## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-11.0 | 27141120 |
| ECLASS-13.0 | 27250118 |

### ETIM

|          |          |
|----------|----------|
| ETIM 8.0 | EC000897 |
|----------|----------|

### UNSPSC

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

# PTFIX 4/12X1,5-G BN - Distribution block



1046976

<https://www.phoenixcontact.com/us/products/1046976>

## Environmental product compliance

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

# PTFIX 4/12X1,5-G BN - Distribution block



1046976

<https://www.phoenixcontact.com/us/products/1046976>

## Accessories

### FBS 2-4 - Plug-in bridge

3030116

<https://www.phoenixcontact.com/us/products/3030116>



Plug-in bridge, pitch: 4.2 mm, number of positions: 2, color: red

---

### FBS 2-4 GY - Plug-in bridge

3030118

<https://www.phoenixcontact.com/us/products/3030118>



Plug-in bridge, pitch: 4.2 mm, number of positions: 2, color: gray

# PTFIX 4/12X1,5-G BN - Distribution block

1046976

<https://www.phoenixcontact.com/us/products/1046976>



## FBS 2-4 BU - Plug-in bridge

3030117

<https://www.phoenixcontact.com/us/products/3030117>



Plug-in bridge, pitch: 4.2 mm, number of positions: 2, color: blue

---

## MPS-MT 1-S4-B RD - Accessories

1982800

<https://www.phoenixcontact.com/us/products/1982800>



Test plug terminal block, Accessories

# PTFIX 4/12X1,5-G BN - Distribution block



1046976

<https://www.phoenixcontact.com/us/products/1046976>

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

3206131

<https://www.phoenixcontact.com/us/products/3206131>



Insulating sleeve, color: white

---

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

3031034

<https://www.phoenixcontact.com/us/products/3031034>



Insulating sleeve, color: gray

# PTFIX 4/12X1,5-G BN - Distribution block



1046976

<https://www.phoenixcontact.com/us/products/1046976>

## SK 3,8 REEL P4,15 WH CUS - Marker card

0825990

<https://www.phoenixcontact.com/us/products/0825990>



Marker card, can be ordered: by card, white, labeled according to customer specifications, mounting type: adhesive, for terminal block width: 4.15 mm, lettering field size: continuous x 3.8 mm

---

## TML (EX3,8)R - Marker strip

0801837

<https://www.phoenixcontact.com/us/products/0801837>



Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, lettering field size: 30000 x 3.8 mm, Number of individual labels: 12

# PTFIX 4/12X1,5-G BN - Distribution block



1046976

<https://www.phoenixcontact.com/us/products/1046976>

## TML (104X3,8)R - Marker strip

0801833

<https://www.phoenixcontact.com/us/products/0801833>



Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, for terminal block width: 104 mm, lettering field size: 104 x 3.8 mm, Number of individual labels: 2500

---

## TML (104X2,8)R - Marker strip

0801832

<https://www.phoenixcontact.com/us/products/0801832>



Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, for terminal block width: 104 mm, lettering field size: 104 x 2.8 mm, Number of individual labels: 2500

# PTFIX 4/12X1,5-G BN - Distribution block



1046976

<https://www.phoenixcontact.com/us/products/1046976>

## TML (EX2,8)R - Marker strip

0801836

<https://www.phoenixcontact.com/us/products/0801836>



Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, for terminal block width: 30000 mm, lettering field size: 30000 x 2.8 mm, Number of individual labels: 14

---

## SK 2,8 REEL P4,15 WH CUS - Marker card

8199987

<https://www.phoenixcontact.com/us/products/8199987>



Marker card, can be ordered: by card, white, labeled according to customer specifications, mounting type: adhesive, for terminal block width: 4.15 mm, lettering field size: continuous x 2.8 mm



# PTFIX 4/12X1,5-G BN - Distribution block



1046976

<https://www.phoenixcontact.com/us/products/1046976>

## US-TML (104X3,8) - Marker for terminal blocks

0830768

<https://www.phoenixcontact.com/us/products/0830768>



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: adhesive, lettering field size: 104 x 3.8 mm, Number of individual labels: 22

---

## US-TML (104X2,8) - Marker for terminal blocks

0830767

<https://www.phoenixcontact.com/us/products/0830767>



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: adhesive, lettering field size: 104 x 2.8 mm, Number of individual labels: 26

## PTFIX 4/12X1,5-G BN - Distribution block



1046976

<https://www.phoenixcontact.com/us/products/1046976>

### SK U/3,8 WH:UNBEDRUCKT - Marker card

0803906

<https://www.phoenixcontact.com/us/products/0803906>



Marker card, Din A4, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, Office printing systems, mounting type: adhesive, for terminal block width: 210 mm, lettering field size: 186 x 3.8 mm, Number of individual labels: 1440

---

### SK U/2,8 WH:UNBEDRUCKT - Marker card

0803883

<https://www.phoenixcontact.com/us/products/0803883>



Marker card, Din A4, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, Office printing systems, mounting type: adhesive, for terminal block width: 210 mm, lettering field size: 186 x 2.8 mm, Number of individual labels: 3600

# PTFIX 4/12X1,5-G BN - Distribution block



1046976

<https://www.phoenixcontact.com/us/products/1046976>

## MM-TML (EX3,8)R C1 WH/BK - Label

1092026

<https://www.phoenixcontact.com/us/products/1092026>



Label, Roll, white/black, unlabeled, can be labeled with: THERMOFOX, THERMOMARK GO, THERMOMARK GO.K, mounting type: adhesive, lettering field size: continuous x 2.8 mm

---

Phoenix Contact 2023 © - all rights reserved

<https://www.phoenixcontact.com>

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