

# PP-H 2,5/12 - Plug

3209976

<https://www.phoenixcontact.com/sg/products/3209976>



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Plug, nom. voltage: 500 V, nominal current: 24 A, number of connections: 12, number of positions: 12, connection method: Push-in connection, 1 level, Rated cross section: 2.5 mm<sup>2</sup>, cross section: 0.14 mm<sup>2</sup> - 4 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	3209976
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	*****
Product key	BE2244
Catalog page	Page 298 (C-1-2019)
GTIN	4046356366861
Weight per piece (including packing)	41.03 g
Weight per piece (excluding packing)	41.03 g
Customs tariff number	85366990
Country of origin	PL

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## Technical data

### Product properties

Product type	Terminal plug
Area of application	Railway industry
	Machine building
	Plant engineering
Number of positions	12
Pitch	5.2 mm
Number of connections	12
Number of rows	1
Potentials	1

### Insulation characteristics

Overvoltage category	III
Degree of pollution	3

### Electrical properties

Rated surge voltage	6 kV
Maximum power dissipation for nominal condition	0.77 W

### Connection data

Number of connections per level	12
Nominal cross section	2.5 mm <sup>2</sup>

#### 1 level

Stripping length	8 mm ... 10 mm
Internal cylindrical gage	A3
Connection in acc. with standard	IEC 61984
Conductor cross section rigid	0.14 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Cross section AWG	26 ... 12 (converted acc. to IEC)
Conductor cross section flexible	0.14 mm <sup>2</sup> ... 2.5 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> ... 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>

#### 1 level Connection cross sections directly pluggable

Conductor cross section rigid	0.34 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Conductor cross-section flexible (ferrule without plastic sleeve)	0.34 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>

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Flexible conductor cross section (ferrule with plastic sleeve)	0.34 mm² ... 2.5 mm²
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## Dimensions

Width	62.4 mm
Height	15.8 mm
Depth	40.2 mm
Pitch	5.2 mm

## Material specifications

Color	gray (RAL 7042)
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
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## Environmental and real-life conditions

### Ambient conditions

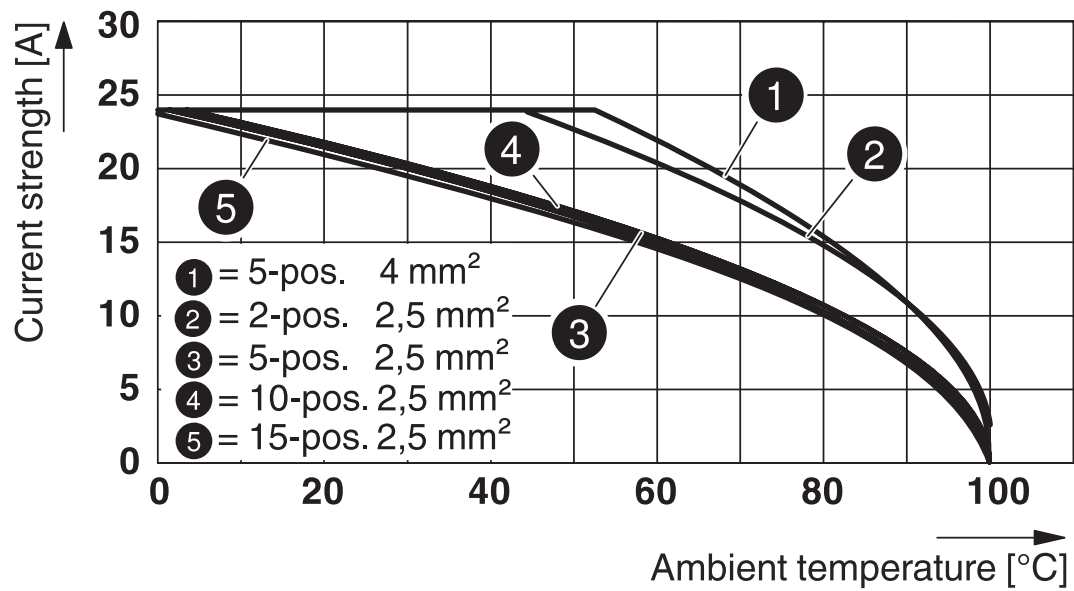
Ambient temperature (operation)	-60 °C (max. operating temperature see derating curve)
Ambient temperature (storage/transport)	-25 °C ... 60 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C)
Ambient temperature (assembly)	-5 °C ... 70 °C
Ambient temperature (actuation)	-5 °C ... 70 °C
Permissible humidity (operation)	20 % ... 90 %
Permissible humidity (storage/transport)	30 % ... 70 %

## Standards and regulations

Connection in acc. with standard	IEC 61984
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## Drawings

Diagram



Circuit diagram



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## Approvals


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 <b>CSA</b> Approval ID: 2030668				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
Use group B	300 V	20 A	26 - 12	-
Use group C	300 V	20 A	26 - 12	-

 <b>cULus Recognized</b> Approval ID: E60425				
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 <b>LR</b> Approval ID: LR2371832TA				
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 <b>ClassNK</b> <b>NK</b> Approval ID: 14ME0912				
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 <b>cULus Recognized</b> Approval ID: E60425				
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 <b>BV</b> Approval ID: 25278/C1 BV				
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<b>ABS</b> Approval ID: 21-2192245-PDA				
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<b>DNV</b> Approval ID: TAE000010T				
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 <b>EAC</b> Approval ID: EACKZ 08593				
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## Classifications

### ECLASS

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

### ETIM

ETIM 9.0	EC002021
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### UNSPSC

UNSPSC 21.0	39121400
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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### 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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