

# SPDB 2,5/12 - Plug

3040517

<https://www.phoenixcontact.com/us/products/3040517>

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.



Plug, nom. voltage: 500 V, nominal current: 24 A, number of positions: 12, 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

- Plug with bridging option, for use with basic terminal blocks
- Tested for railway applications

## Commercial data

Item number	3040517
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	BE02
Product key	BE2144
GTIN	4017918833190
Weight per piece (including packing)	59.53 g
Weight per piece (excluding packing)	59.53 g
Customs tariff number	85366990
Country of origin	PL

# SPDB 2,5/12 - Plug

3040517

<https://www.phoenixcontact.com/us/products/3040517>

## Technical data

### Product properties

Product type	Terminal plug
Number of positions	12
Pitch	5.2 mm

### 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>
Connection method	Spring-cage connection
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 cross section	2.5 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

### Dimensions

Width	62.4 mm
Height	39 mm
Length	32.7 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

# SPDB 2,5/12 - Plug



3040517

<https://www.phoenixcontact.com/us/products/3040517>

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
----------------------------------	-----------

Drawings

Diagram



Derating curve for ST 2,5/ 1P, ST 2,5/ 2P, ST 2,5-TWIN/ 1P and for all plug versions SP...

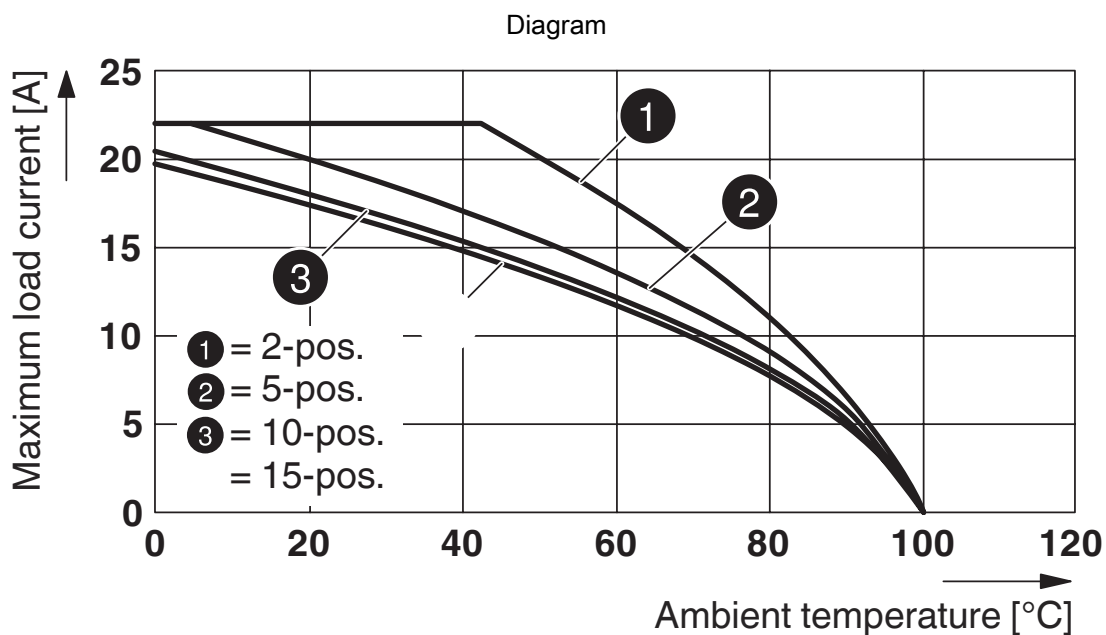
Diagram



Derating curve for ST 2,5-TWIN-MT/1P, ST 2,5-TWIN-TG/1P and for all plug versions SP...



Derating curve for ST 2,5-QUATTRO/2P, ST 2,5-QUATTRO/4P and for all plug versions SP... .



Derating curve for STTB 2,5/ 2P, STTB 2,5/ 2P-PV and for all plug versions SP... .



Derating curve for ST 2,5-4L/1P, ST 2,5-4L/2P and for all plug versions SP...

Circuit diagram



# SPDB 2,5/12 - Plug



3040517

<https://www.phoenixcontact.com/us/products/3040517>

## Classifications

### ECLASS

ECLASS-13.0

27250306

### ETIM

ETIM 9.0

EC002021

### UNSPSC

UNSPSC 21.0

39121400

# SPDB 2,5/12 - Plug



3040517

<https://www.phoenixcontact.com/us/products/3040517>

## 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%
-------------------------------------	----------------------------

Phoenix Contact 2026 © - 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)