

SPB 2,5/ 1-R BK - Plug

3215038

<https://www.phoenixcontact.com/us/products/3215038>



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: 1, connection method: Spring-cage connection, Rated cross section: 2.5 mm², cross section: 0.08 mm²- 4 mm², color: black

Product description

Connector element right, left housing with engagement pin, right closed with cover

Commercial data

Item number	3215038
Packing unit	50 pc
Minimum order quantity	50 pc
Product key	BE2144
GTIN	4046356633284
Weight per piece (including packing)	3.692 g
Weight per piece (excluding packing)	3.692 g
Country of origin	PL

SPB 2,5/ 1-R BK - Plug

3215038

<https://www.phoenixcontact.com/us/products/3215038>



Technical data

Product properties

Product type	Terminal plug
Number of positions	1
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 ²
Connection method	Spring-cage connection
Stripping length	10 mm
Internal cylindrical gage	A3
Connection in acc. with standard	IEC 61984
Conductor cross-section rigid	0.08 mm ² ... 4 mm ²
Cross section AWG	28 ... 12 (converted acc. to IEC)
Conductor cross-section flexible	0.08 mm ² ... 2.5 mm ²
Conductor cross-section, flexible [AWG]	28 ... 14 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.14 mm ² ... 2.5 mm ²
Flexible conductor cross-section (ferrule with plastic sleeve)	0.14 mm ² ... 2.5 mm ²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm ²
Nominal cross section	2.5 mm ²
Nominal current	24 A
Maximum load current	24 A (with 4 mm ² conductor cross-section)
Nominal voltage	500 V

Dimensions

Width	5.2 mm
Height	39 mm
Length	20 mm
Pitch	5.2 mm

Material specifications

Color	black (RAL 9005)
Flammability rating according to UL 94	V0
Insulating material group	I

SPB 2,5/ 1-R BK - Plug



3215038

<https://www.phoenixcontact.com/us/products/3215038>

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

SPB 2,5/ 1-R BK - Plug

3215038

<https://www.phoenixcontact.com/us/products/3215038>



Drawings

Schematic diagram





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



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...

SPB 2,5/ 1-R BK - Plug

3215038

<https://www.phoenixcontact.com/us/products/3215038>



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

Circuit diagram



SPB 2,5/ 1-R BK - Plug

3215038

<https://www.phoenixcontact.com/us/products/3215038>



Classifications

ECLASS

ECLASS-13.0

27250306

ETIM

ETIM 9.0

EC002021

UNSPSC

UNSPSC 21.0

39121400

SPB 2,5/ 1-R BK - Plug



3215038

<https://www.phoenixcontact.com/us/products/3215038>

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