

# SP 4/ 1-M BU - Plug

3042793

<https://www.phoenixcontact.com/us/products/3042793>



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: 800 V, nominal current: 32 A, number of positions: 1, connection method: Spring-cage connection, Rated cross section: 4 mm<sup>2</sup>, cross section: 0.08 mm<sup>2</sup>- 6 mm<sup>2</sup>, color: blue

## Product description

Connector element center, left housing with engagement pin, right opened without cover

## Your advantages

- Cable housing can be snapped on to the plugs, see figure below
- The plug with spring-cage connection is assembled directly on site by snapping together single-position plug elements
- The ST-COMBI plugs for self-assembly provide solutions that users can implement themselves
- Tested for railway applications

## Commercial data

Item number	3042793
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE02
Product key	BE2144
GTIN	4017918956097
Weight per piece (including packing)	4.48 g
Weight per piece (excluding packing)	4.48 g
Customs tariff number	85366990
Country of origin	PL

# SP 4/ 1-M BU - Plug

3042793

<https://www.phoenixcontact.com/us/products/3042793>

## Technical data

### Notes

Notes on operation	COMBI connectors are connectors without switching power in accordance with IEC 61984 and can be connected or disconnected without load or voltage when used as intended
--------------------	---

### General

Note	With a free-hanging connection, an insulating foil has to be placed between the plug connection and electrically conductive surfaces.
------	---

### Product properties

Product type	Terminal plug
Number of positions	1
Pitch	6.2 mm

### Insulation characteristics

Overvoltage category	III
Degree of pollution	3

### Electrical properties

Rated surge voltage	8 kV
---------------------	------

### Connection data

Nominal cross section	4 mm <sup>2</sup>
Connection method	Spring-cage connection
Stripping length	8 mm ... 10 mm
Internal cylindrical gage	A4
Connection in acc. with standard	IEC 61984
Conductor cross-section rigid	0.08 mm <sup>2</sup> ... 6 mm <sup>2</sup>
Cross section AWG	28 ... 10 (converted acc. to IEC)
Conductor cross-section flexible	0.08 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Conductor cross-section, flexible [AWG]	28 ... 12 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.14 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Flexible conductor cross-section (ferrule with plastic sleeve)	0.14 mm <sup>2</sup> ... 4 mm <sup>2</sup>
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm <sup>2</sup> ... 1 mm <sup>2</sup>
Nominal cross section	4 mm <sup>2</sup>
Nominal current	32 A
Maximum load current	32 A (with 6 mm <sup>2</sup> conductor cross-section)
Nominal voltage	800 V

### Dimensions

Width	6.2 mm
Height	21 mm

# SP 4/ 1-M BU - Plug



3042793

<https://www.phoenixcontact.com/us/products/3042793>

Depth	41.5 mm
Length	21 mm
Pitch	6.2 mm

## Material specifications

Color	blue (RAL 5015)
Flammability rating according to UL 94	V0
Insulating material group	I
Insulating material	PA

## Electrical tests

### Surge voltage test

Result	Test passed
Short-time withstand current 4 mm <sup>2</sup>	0.48 kA
Result	Test passed

### Power-frequency withstand voltage

Test voltage setpoint	2 kV
Result	Test passed

## Mechanical tests

### Attachment on the carrier

Result	Test passed
--------	-------------

## 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	Long life test category 1, class B, body mounted
Frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 150 \text{ Hz}$
ASD level	0.964 (m/s <sup>2</sup> )/Hz
Acceleration	0.58g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Result	Test passed

### Shocks

Pulse shape	Half-sine
Acceleration	5g
Shock duration	30 ms
Number of shocks per direction	3

# SP 4/ 1-M BU - Plug



3042793

<https://www.phoenixcontact.com/us/products/3042793>

Test directions	X-, Y- and Z-axis (pos. and neg.)
Result	Test passed

## 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
----------------------------------	-----------

# SP 4/ 1-M BU - Plug

3042793

<https://www.phoenixcontact.com/us/products/3042793>



## Drawings

Schematic diagram



# SP 4/ 1-M BU - Plug

3042793

<https://www.phoenixcontact.com/us/products/3042793>



Derating curve for spring-cage terminals ST 4/1P.. and ST 4/2P.. with all plug versions SP 4/... . The derating curves are determined by multiplying the values of the base curves by the factor 0.8.

Diagram



Derating curve for the spring-cage terminal with all plug versions SP 4/... .

Diagram



Derating curve for ST 4/ 1P and for all plug versions SP...

Circuit diagram



# SP 4/ 1-M BU - Plug




3042793


<https://www.phoenixcontact.com/us/products/3042793>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3042793>

 <b>CSA</b> Approval ID: 13631				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
B	600 V	30 A	24 - 12	-
C	600 V	30 A	24 - 12	-

 <b>IECEE CB Scheme</b> Approval ID: DE1-62736/B1/B2				
--	--	--	--	--

 <b>cULus Recognized</b> Approval ID: E60425				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
B	600 V	30 A	28 - 10	-
C	600 V	30 A	28 - 10	-

 <b>VDE Zeichengenehmigung</b> Approval ID: 40019518				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine				
Only flexible conductors	800 V	-	-	0.2 - 4
Only rigid conductors	800 V	-	-	0.2 - 6

 <b>EAC</b> Approval ID: KZ7500651131219505				
---	--	--	--	--

# SP 4/ 1-M BU - Plug

3042793

<https://www.phoenixcontact.com/us/products/3042793>



## Classifications

### ECLASS

ECLASS-13.0	27250306
ECLASS-15.0	27250306

### ETIM

ETIM 10.0	EC002021
-----------	----------

### UNSPSC

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

# SP 4/ 1-M BU - Plug



3042793

<https://www.phoenixcontact.com/us/products/3042793>

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

### EF3.1 Climate Change

CO2e kg	0.032 kg CO2e
---------	---------------

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)