

SPV 2,5/ 1-M - Plug

3041053

<https://www.phoenixcontact.com/us/products/3041053>



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: gray

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	3041053
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE02
Product key	BE2144
Catalog page	Page 320 (C-1-2019)
GTIN	4046356055024
Weight per piece (including packing)	3.359 g
Weight per piece (excluding packing)	3.3 g
Customs tariff number	85366990
Country of origin	PL

SPV 2,5/ 1-M - Plug

3041053

<https://www.phoenixcontact.com/us/products/3041053>



Technical data

Product properties

Product type	Terminal plug
Number of positions	1
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 ²
Stripping length	8 mm ... 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
Nominal current	24 A
Maximum load current	24 A (with 4 mm ² conductor cross section)
Nominal voltage	500 V
Nominal cross section	2.5 mm ²

Dimensions

Width	5.2 mm
Height	23.4 mm
Depth	34 mm
Length	23.4 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	130 °C

SPV 2,5/ 1-M - Plug



3041053

<https://www.phoenixcontact.com/us/products/3041053>

0304-21))	
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 (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
----------------------------------	-----------

SPV 2,5/ 1-M - Plug

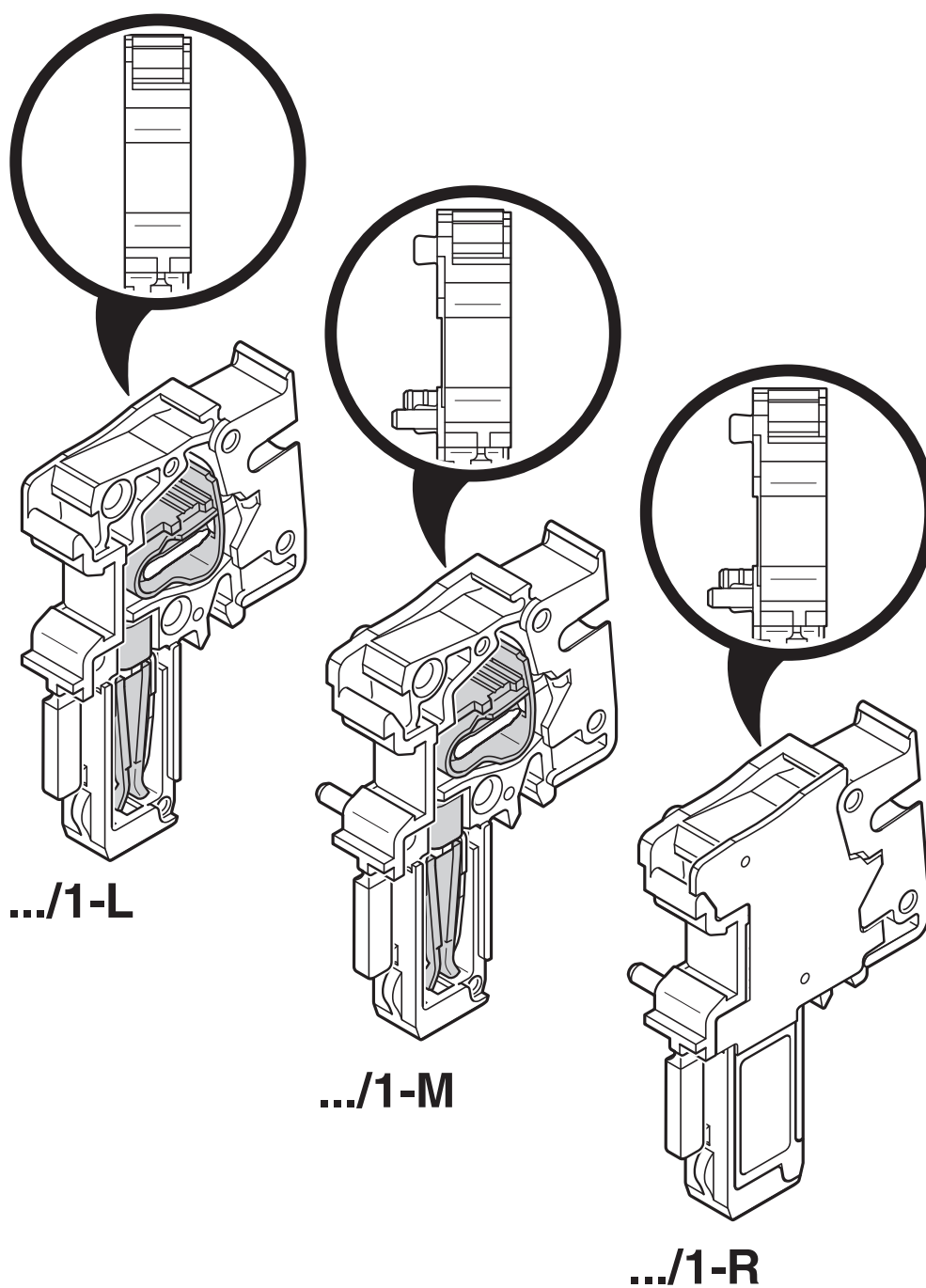
3041053

<https://www.phoenixcontact.com/us/products/3041053>

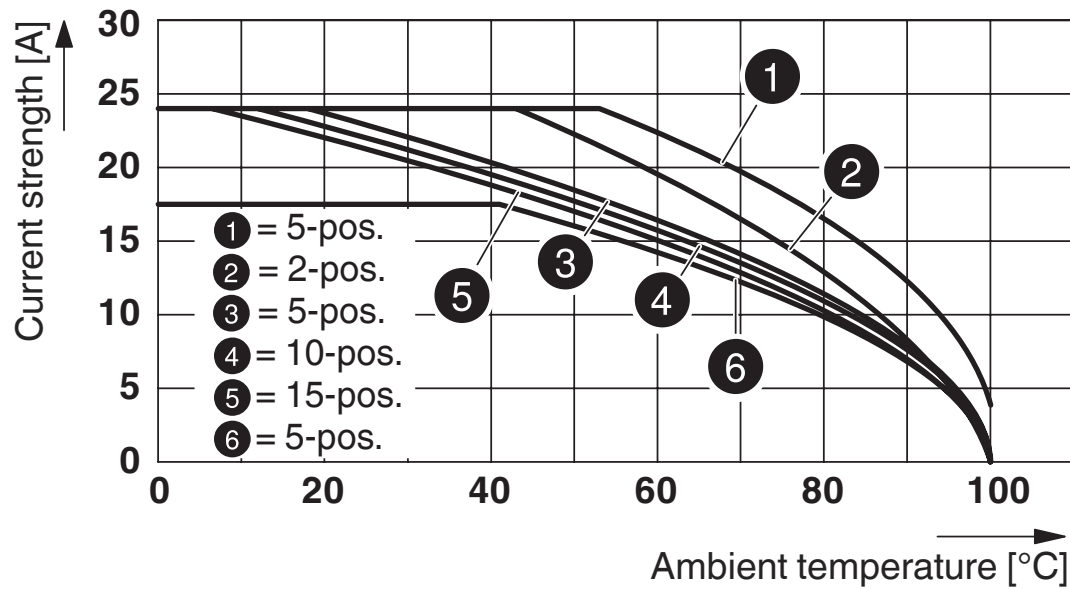


Drawings

Schematic diagram



Diagram



Circuit diagram



SPV 2,5/ 1-M - Plug

3041053

<https://www.phoenixcontact.com/us/products/3041053>



Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3041053>



IECEE CB Scheme

Approval ID: DE1-62736/B1/B2



VDE Zeichengenehmigung

Approval ID: 40019518

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Only flexible conductors	500 V	-	-	0.2 - 2.5
Only rigid conductors	500 V	-	-	0.2 - 4



cULus Recognized

Approval ID: E60425

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
	300 V	20 A	26 - 12	-
Use group C				
	300 V	20 A	26 - 12	-
Use group D				
	600 V	5 A	26 - 12	-



EAC

Approval ID: KZ7500651131219505

SPV 2,5/ 1-M - Plug

3041053

<https://www.phoenixcontact.com/us/products/3041053>



Classifications

ECLASS

ECLASS-13.0	27250306
-------------	----------

ETIM

ETIM 9.0	EC002021
----------	----------

UNSPSC

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

SPV 2,5/ 1-M - Plug

3041053

<https://www.phoenixcontact.com/us/products/3041053>



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 2025 © - 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