

## Plug - SP 4/ 1-L - 3042751

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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Plug, number of positions: 1, connection method: Spring-cage connection, cross section: 0.08 mm<sup>2</sup>- 6 mm<sup>2</sup>, AWG: 28 - 10, nominal current: 32 A, nom. voltage: 800 V, width: 6.2 mm, color: gray

### Product Description


Connector element left, left housing without 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



### Key Commercial Data

Packing unit	50 pc
GTIN	 4 017918 956059
GTIN	4017918956059

### Technical data

#### General

Number of positions	1
Nominal cross section	4 mm <sup>2</sup>
Color	gray
Insulating material	PA
Flammability rating according to UL 94	V0
Rated surge voltage	8 kV
Degree of pollution	3
Overvoltage category	III
Insulating material group	I
Maximum power dissipation for nominal condition	1.02 W

# Plug - SP 4/ 1-L - 3042751

## Technical data

### General

Maximum load current	32 A (with 6 mm <sup>2</sup> conductor cross section)
Nominal current I <sub>N</sub>	32 A
Nominal voltage U <sub>N</sub>	800 V
Relative insulation material temperature index (Elec., UL 746 B)	130 °C
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	130 °C
Static insulating material application in cold	-60 °C
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
Calorimetric heat release NFPA 130 (ASTM E 1354)	28 MJ/kg
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

### Dimensions

Width	6.2 mm
Length	21 mm
Height	41.5 mm
	24 mm
Pitch	6.2 mm

### Connection data

Connection method	Spring-cage connection
Stripping length	8 mm ... 10 mm
Connection in acc. with standard	IEC 61984
Conductor cross section solid min.	0.08 mm <sup>2</sup>
Conductor cross section solid max.	6 mm <sup>2</sup>
Conductor cross section AWG min.	28
Conductor cross section AWG max.	10
Conductor cross section flexible min.	0.08 mm <sup>2</sup>
Conductor cross section flexible max.	4 mm <sup>2</sup>
Min. AWG conductor cross section, flexible	28
Max. AWG conductor cross section, flexible	10
Conductor cross section flexible, with ferrule without plastic sleeve min.	0.14 mm <sup>2</sup>
Conductor cross section flexible, with ferrule without plastic sleeve max.	4 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.14 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve max.	4 mm <sup>2</sup>
Two conductors with the same cross section, flexible, with TWIN ferrules, with plastic sleeve, minimum	0.5 mm <sup>2</sup>
Two conductors with the same cross section, flexible, with TWIN ferrules, with plastic sleeve, maximum	1 mm <sup>2</sup>

# Plug - SP 4/ 1-L - 3042751

## Technical data

### Connection data

Internal cylindrical gage	A4
---------------------------	----

### Standards and Regulations

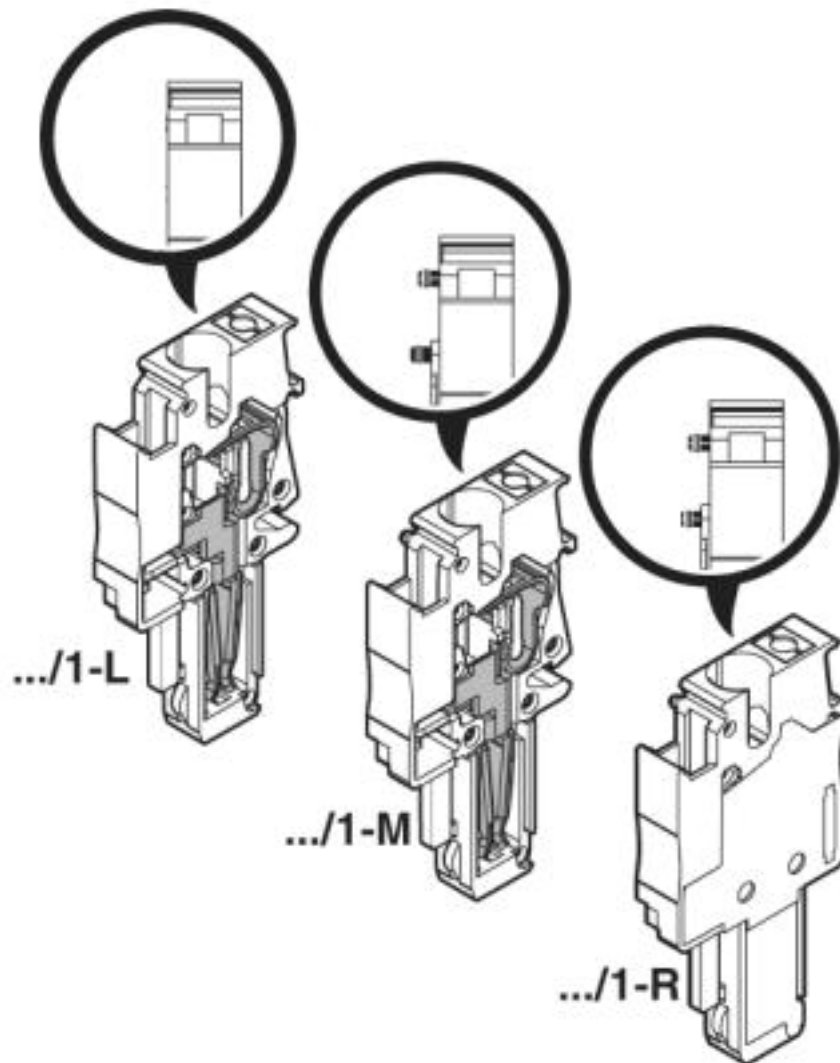
Connection in acc. with standard	CSA
	IEC 61984
Flammability rating according to UL 94	V0

### Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

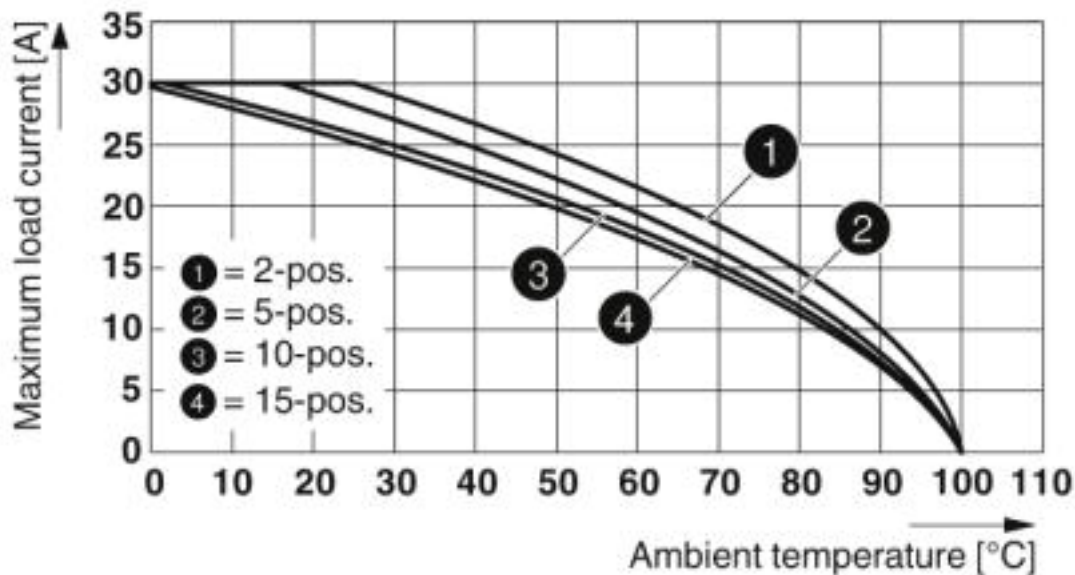
## Drawings

Schematic diagram



# Plug - SP 4/ 1-L - 3042751

Diagram



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

Circuit diagram



## Classifications

eCl@ss

eCl@ss 4.0	27260700
eCl@ss 4.1	27260700
eCl@ss 5.0	27260700
eCl@ss 5.1	27260700
eCl@ss 6.0	27141100
eCl@ss 7.0	27141151
eCl@ss 8.0	27141151
eCl@ss 9.0	27141151

ETIM

ETIM 2.0	EC000897
ETIM 3.0	EC000897
ETIM 4.0	EC002021
ETIM 5.0	EC002021
ETIM 6.0	EC002021
ETIM 7.0	EC002021

# Plug - SP 4/ 1-L - 3042751

## Classifications

### UNSPSC

UNSPSC 6.01	30211802
UNSPSC 7.0901	39121402
UNSPSC 11	39121402
UNSPSC 12.01	39121402
UNSPSC 13.2	39121402
UNSPSC 18.0	39121402
UNSPSC 19.0	39121402
UNSPSC 20.0	39121402
UNSPSC 21.0	39121402

## Approvals

### Approvals

#### Approvals

CSA / UL Recognized / cUL Recognized / IECCEB Scheme / EAC / EAC / EAC / VDE Zeichengenehmigung / cULus Recognized

#### Ex Approvals

### Approval details

CSA		<a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a>	13631
	B	C	
Nominal voltage UN	600 V	600 V	
Nominal current IN	30 A	30 A	
mm <sup>2</sup> /AWG/kcmil	24-12	24-12	

UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 60425
	B	C	
Nominal voltage UN	600 V	600 V	
Nominal current IN	30 A	30 A	
mm <sup>2</sup> /AWG/kcmil	28-10	28-10	

# Plug - SP 4/ 1-L - 3042751

## Approvals

cUL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 60425
		B	C
Nominal voltage UN		600 V	600 V
Nominal current IN		30 A	30 A
mm <sup>2</sup> /AWG/kcmil		28-10	28-10

IECEE CB Scheme		<a href="http://www.iecee.org/">http://www.iecee.org/</a>	DE1-62736/B1/B2
-----------------	--	---	-----------------

EAC		EAC-Zulassung
-----	--	---------------

EAC		RU C-DE.A*30.B.01742
-----	--	----------------------

EAC		RU C-DE.BL08.B.00511
-----	--	----------------------

VDE Zeichengenehmigung		<a href="http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx">http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx</a>	40019518
Nominal voltage UN		800 V	
mm <sup>2</sup> /AWG/kcmil		0.2-6	

cULus Recognized		
------------------	--	--

## Accessories

Accessories

Labeled terminal marker

## Plug - SP 4/ 1-L - 3042751

### Accessories

#### Zack Marker strip, flat - ZBF 6 CUS - 0825027



Zack Marker strip, flat, Strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into flat marker groove, for terminal block width: 6.2 mm, lettering field size: 5.15 x 6.15 mm, Number of individual labels: 10

---

#### Marker for terminal blocks - UC-TMF 6 CUS - 0824646



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into flat marker groove, for terminal block width: 6.2 mm, lettering field size: 5.6 x 5.1 mm, Number of individual labels: 80

---

#### Marker for terminal blocks - UCT-TMF 6 CUS - 0829665



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into flat marker groove, for terminal block width: 6.2 mm, lettering field size: 5.4 x 4.7 mm, Number of individual labels: 60

---

#### Zack Marker strip, flat - ZBF 6,LGS:FORTL.ZAHLEN - 0808749



Zack Marker strip, flat, Strip, white, labeled, printed horizontally: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 100, mounting type: snap into flat marker groove, for terminal block width: 6.2 mm, lettering field size: 5.15 x 6.15 mm, Number of individual labels: 10

---

#### Zack Marker strip, flat - ZBF 6,QR:FORTL.ZAHLEN - 0808765



Zack Marker strip, flat, Strip, white, labeled, Printed vertically: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 100, mounting type: snap into flat marker groove, for terminal block width: 6.2 mm, lettering field size: 5.15 x 6.15 mm, Number of individual labels: 10

## Plug - SP 4/ 1-L - 3042751

### Accessories

Zack Marker strip, flat - ZBF 6,LGS:GERADE ZAHLEN - 0810834



Zack Marker strip, flat, Strip, white, labeled, printed horizontally: consecutive numbers 2 ... 20, 22 ... 40, etc. up to 82 ... 100, mounting type: snap into flat marker groove, for terminal block width: 6.2 mm, lettering field size: 5.15 x 6.15 mm, Number of individual labels: 10

Zack Marker strip, flat - ZBF 6,LGS:UNGERADE ZAHLEN - 0810876



Zack Marker strip, flat, Strip, white, labeled, printed horizontally: Odd numbers 1 - 19, 21 - 39, etc. up to 81 - 99, mounting type: snap into flat marker groove, for terminal block width: 6.2 mm, lettering field size: 5.15 x 6.15 mm, Number of individual labels: 10

### Marker pen

Marker pen - B-STIFT - 1051993



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

### Mounting material

Latching - PR - 3040559



Latching, length: 29.8 mm, width: 4.4 mm, number of positions: 1, color: orange

Latching - PR/2 - 3040630



Latching, length: 29.8 mm, width: 10 mm, number of positions: 2, color: orange



## Plug - SP 4/ 1-L - 3042751

### Accessories

Latching - PRT/2 - 3040631



Latching, can only be released using a screwdriver, length: 23.2 mm, width: 9 mm, number of positions: 2, color: orange

---

Latching - PRZ - 3040614



Latching, length: 63.6 mm, width: 9.7 mm, number of positions: 2, color: orange

---

### Screwdriver tools

Actuation tool - ST-BW - 1207608



Actuation tool, for all 2.5 mm<sup>2</sup> - 4.0 mm<sup>2</sup> spring-cages

---

### Shield connection

Shield connection clamp - PSH 3- 6 - 3040591



Shield connection clamp, color: black

---

Shield connection clamp - PSH 5-10 - 3040601



Shield connection clamp, color: black

---

### Strain relief

## Plug - SP 4/ 1-L - 3042751

### Accessories

Strain relief - PZ/2 - 3040627



Strain relief, length: 48.7 mm, width: 9.3 mm, number of positions: 2, color: black

---

Strain relief - PZ/4 - 3040643



Strain relief, length: 48.7 mm, width: 19.6 mm, number of positions: 4, color: black

---

### Terminal marking

Zack Marker strip, flat - ZBF 6:UNBEDRUCKT - 0808710



Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into flat marker groove, for terminal block width: 6.2 mm, lettering field size: 5.15 x 6.15 mm, Number of individual labels: 10

---

Marker for terminal blocks - UC-TMF 6 - 0818140



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into flat marker groove, for terminal block width: 6.2 mm, lettering field size: 5.6 x 5.1 mm, Number of individual labels: 80

---

Marker for terminal blocks - UCT-TMF 6 - 0828746



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: snap into flat marker groove, for terminal block width: 6.2 mm, lettering field size: 5.4 x 4.7 mm, Number of individual labels: 60

---

---

Phoenix Contact 2020 © - all rights reserved  
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG  
Flachmarktstr. 8  
32825 Blomberg  
Germany  
Tel. +49 5235 300  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>