

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, Connection method: Spring-cage connection, Number of positions: 1, Cross section: 0.08 mm<sup>2</sup> - 4 mm<sup>2</sup>, AWG: 28 - 12, Width: 5.2 mm, Height: 39 mm, Color: gray

Illustration shows versions of the SPB 2,5/1-... connector in various colors

#### **Product Description**

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

#### Product Features

- Plug with bridging option, for use with basic terminal blocks
- 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



#### **Key Commercial Data**

Packing unit	1 pc
Minimum order quantity	50 pc
Weight per Piece (excluding packing)	3.74 g
Custom tariff number	85366990
Country of origin	Poland

#### Technical data

#### General

Number of levels	1
Number of connections	1
Nominal cross section	2.5 mm²
Color	gray
Insulating material	PA
Flammability rating according to UL 94	V0



### Technical data

#### General

Maximum load current	24 A (with a 2.5 mm² conductor cross section)	
Rated surge voltage	6 kV	
Degree of pollution	3	
Overvoltage category	III	
Insulating material group	1	
Maximum load current	24 A (with 4 mm² conductor cross section)	
Nominal current I <sub>N</sub>	24 A	
Nominal voltage U <sub>N</sub>	500 V	
Open side panel	No	

#### Dimensions

Width	5.2 mm
Length	20 mm
Height	39 mm
	24.00 mm
Pitch	5.20 mm

#### Connection data

Connection method	Spring-cage connection
Connection in acc. with standard	IEC 61984
Conductor cross section solid min.	0.08 mm²
Conductor cross section solid max.	4 mm <sup>2</sup>
Conductor cross section AWG min.	28
Conductor cross section AWG max.	12
Conductor cross section flexible min.	0.08 mm²
Conductor cross section flexible max.	2.5 mm <sup>2</sup>
Min. AWG conductor cross section, flexible	28
Max. AWG conductor cross section, flexible	14
Conductor cross section flexible, with ferrule without plastic sleeve min.	0.14 mm²
Conductor cross section flexible, with ferrule without plastic sleeve max.	2.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.14 mm²
Conductor cross section flexible, with ferrule with plastic sleeve max.	2.5 mm²
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max.	0.5 mm <sup>2</sup>
Stripping length	8 mm 10 mm
Internal cylindrical gage	A3
Connection method	Plug connection

#### Standards and Regulations



### Technical data

#### Standards and Regulations

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

### Classifications

#### eCl@ss

eCl@ss 4.0	272607xx
eCl@ss 4.1	27260701
eCl@ss 5.0	27260701
eCl@ss 5.1	27260701
eCl@ss 6.0	27141151
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

#### **UNSPSC**

UNSPSC 6.01	30211802
UNSPSC 7.0901	39121402
UNSPSC 11	39121402
UNSPSC 12.01	39121402
UNSPSC 13.2	39121402

### Approvals

#### Approvals

#### Approvals

CSA / UL Recognized / VDE Gutachten mit Fertigungsüberwachung / cUL Recognized / LR / GL / BV / RS / IECEE CB Scheme / EAC / cULus Recognized



### Approvals

Ex Approvals	3
--------------	---

Approvals submitted

#### Approval details

CSA (1)		
	В	С
mm²/AWG/kcmil	24-12	24-12
Nominal current IN	20 A	20 A
Nominal voltage UN	300 V	300 V

UL Recognized <b>S</b>			
	В	С	D
mm²/AWG/kcmil	28-12	28-12	28-12
Nominal current IN	20 A	20 A	5 A
Nominal voltage UN	300 V	300 V	600 V

VDE Gutachten mit Fertigungsüberwachung	
mm²/AWG/kcmil	0.2-4
Nominal voltage UN	500 V

cUL Recognized 51				
	В	С	D	
mm²/AWG/kcmil	28-12	28-12	28-12	
Nominal current IN	20 A	20 A	5 A	
Nominal voltage UN	300 V	300 V	600 V	



### Approvals

LR		
<u> </u>		
GL		
BV		
RS		
IECEE CB Scheme CB		
mm²/AWG/kcmil	0.2-4	
Nominal voltage UN	500 V	
EAC		
cULus Recognized • Nus		
Accessories		

Accessories

Flange

Flange cover - DFS-SPDB 2,5 - 3061457



Flange cover, Length: 35.8 mm, Width: 4.5 mm, Height: 24.7 mm, Color: gray

Insulating sleeve



#### Accessories

Insulating sleeve - ISH 2,5/0,2 - 3002843



Insulating sleeve, Color: white

Insulating sleeve - ISH 2,5/0,5 - 3002856



Insulating sleeve, Color: gray

Insulating sleeve - ISH 2,5/1,0 - 3002869



Insulating sleeve, Color: black

#### Jumper

Plug-in bridge - FBS 2-5 - 3030161



Plug-in bridge, Pitch: 5.2 mm, Length: 22.7 mm, Width: 9 mm, Number of positions: 2, Color: red

Plug-in bridge - FBS 3-5 - 3030174



Plug-in bridge, Pitch: 5.2 mm, Length: 22.7 mm, Width: 14.2 mm, Number of positions: 3, Color: red



#### Accessories

Plug-in bridge - FBS 4-5 - 3030187



Plug-in bridge, Pitch: 5.2 mm, Length: 22.7 mm, Width: 19.4 mm, Number of positions: 4, Color: red

Plug-in bridge - FBS 5-5 - 3030190



Plug-in bridge, Pitch: 5.2 mm, Length: 22.7 mm, Width: 24.6 mm, Number of positions: 5, Color: red

Plug-in bridge - FBS 10-5 - 3030213



Plug-in bridge, Pitch: 5.2 mm, Length: 22.7 mm, Width: 50.6 mm, Number of positions: 10, Color: red

Plug-in bridge - FBS 20-5 - 3030226



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 20, Color: red

Plug-in bridge - FBS 50-5 - 3038930



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 50, Color: red



#### Accessories

Plug-in bridge - FBS 2-5 BU - 3036877



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 2, Color: blue

Plug-in bridge - FBS 3-5 BU - 3036880



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 3, Color: blue

Plug-in bridge - FBS 4-5 BU - 3036893



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 4, Color: blue

Plug-in bridge - FBS 5-5 BU - 3036903



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 5, Color: blue

Plug-in bridge - FBS 10-5 BU - 3036916



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 10, Color: blue



#### Accessories

Plug-in bridge - FBS 20-5 BU - 3036929



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 20, Color: blue

Plug-in bridge - FBS 50-5 BU - 3032114



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 50, Color: blue

Plug-in bridge - FBS 2-5 GY - 3038969



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 2, Color: gray

Plug-in bridge - FBS 3-5 GY - 3038972



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 3, Color: gray

Plug-in bridge - FBS 4-5 GY - 3038985



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 4, Color: gray



#### Accessories

Plug-in bridge - FBS 5-5 GY - 3038998



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 5, Color: gray

Plug-in bridge - FBS 10-5 GY - 3039007



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 10, Color: gray

Plug-in bridge - FBS 20-5 GY - 3038671



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 20, Color: gray

Plug-in bridge - FBS 50-5 GY - 3032127



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 50, Color: gray

Plug-in bridge - FBSR 2-5 - 3033702



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 2, Color: red



#### Accessories

Plug-in bridge - FBSR 3-5 - 3001591



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 3, Color: red

Plug-in bridge - FBSR 4-5 - 3001592



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 4, Color: red

Plug-in bridge - FBSR 5-5 - 3001593



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 5, Color: red

Plug-in bridge - FBSR 10-5 - 3033710



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 10, Color: red

#### Labeled terminal marker

Zack Marker strip, flat - ZBF 5 CUS - 0825025



Zack Marker strip, flat, can be ordered: Strip, white, labeled according to customer specifications, Mounting type: Snap into flat marker groove, for terminal block width: 5 mm, Lettering field: 5.15 x 5.15 mm



#### Accessories

Zack Marker strip, flat - ZBF 5,LGS:FORTL.ZAHLEN - 0808671



Zack Marker strip, flat, Strip, white, labeled, Printed horizontally: Consecutive numbers 1 - 10, 11 - 20, etc. up to 491 - 500, Mounting type: Snap into flat marker groove, for terminal block width: 5 mm, Lettering field: 5.15 x 5.15 mm

Zack Marker strip, flat - ZBF 5,QR:FORTL.ZAHLEN - 0808697



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: 5 mm, Lettering field: 5.15 x 5.15 mm

Zack Marker strip, flat - ZBF 5,LGS:GERADE ZAHLEN - 0810821



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: 5 mm, Lettering field: 5.15 x 5.15 mm

Zack Marker strip, flat - ZBF 5,LGS:UNGERADE ZAHLEN - 0810863



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: 5 mm, Lettering field:  $5.15 \times 5.15 \text{ mm}$ 

Marker for terminal blocks - UC-TMF 5 CUS - 0824638



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: 5.2 mm, Lettering field: 4.6 x 5.1 mm



#### Accessories

Marker for terminal blocks - UCT-TMF 5 CUS - 0829658



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: 5.2 mm, Lettering field: 4.4 x 4.7 mm

#### 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

Marker pen - X-PEN 0,35 - 0811228



Marker pen without ink cartridge, for manual labeling of markers, labeling extremely wipe-proof, line thickness 0.35 mm

#### Mounting material

Strain relief - PDZ/2 - 3040562



Strain relief, Length: 3 mm, Width: 9.6 mm, Height: 23 mm, Number of positions: 2, Color: black

Strain relief - PDZ/4 - 3040575



Strain relief, Length: 3 mm, Width: 19.9 mm, Height: 23 mm, Number of positions: 4, Color: black



#### Accessories

Latching - PR - 3040559



Latching, Number of positions: 1, Color: orange

Latching - PR/2 - 3040630



Latching, Number of positions: 2, Color: orange

#### Latching - PRT/2 - 3040631



Latching, can only be released using a screwdriver, Number of positions: 2, Color: orange

#### Latching - PRZ - 3040614



Latching, Length: 3 mm, Width: 5.2 mm, Number of positions: 2, Color: orange

#### Screwdriver tools

Screwdriver - ST-BW - 1207608



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



#### Accessories

Shield connection

Shield connection clip - PSH 3- 6 - 3040591



Shield connection clip, Color: black

Shield connection clip - PSH 5-10 - 3040601



Shield connection clip, Color: black

#### Terminal marking

Zack Marker strip, flat - ZBF 5:UNBEDRUCKT - 0808642



Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into flat marker groove, for terminal block width: 5 mm, Lettering field: 5.1 x 5.2 mm

Marker for terminal blocks - UC-TMF 5 - 0818153



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK CLED, BLUEMARK LED, Plotter, Mounting type: Snap into flat marker groove, for terminal block width: 5.2 mm, Lettering field: 4.6 x 5.1 mm

Marker for terminal blocks - UCT-TMF 5 - 0828744



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: THERMOMARK CARD, BLUEMARK CLED, BLUEMARK LED, TOPMARK LASER, Mounting type: Snap into flat marker groove, for terminal block width: 5.2 mm, Lettering field: 4.4 x 4.7 mm



#### Accessories

### **Drawings**

#### Diagram

Derating curve for ST 2,5/ 117√IN-**S**IT/1P, 2,ъ/ 2F5,-\$TVIN-**17,05**/1P amuln/ fbP ahd **foli**ag **a**ersions **βli**Bg.. versions SP....

#### Diagram

Derating curve for STTB 2,5/ **QR**JATTRO/2P, STTB 2,5/ **2RJATTRO/4P** ₽Nd **for**d ædr **pll**ug **perg**ions 8€Prsions SP....

#### Diagram

Derating curve for ST

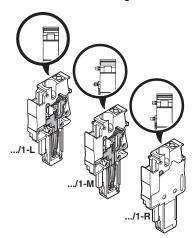
Circuit diagram

---



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

#### Schematic diagram



Phoenix Contact 2016 @ - all rights reserved http://www.phoenixcontact.com

## **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Phoenix Contact: 3043161