

Connection Technology for Printed Circuit Boards Pitch 5 mm

WECO - making contact



Catalogue 2

Electronic

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VECO

950-D-SMD-DS

R



120-A-111



900-SUB-5

Symbols on data sheets

These symbols can be found on our data sheets on the right side of the product image.

COMPLIANT	These articles comply with the RoHS regulations and are, in addition, fitted with a high temperature resistant housing.
Tape-on-Reel Product	This product is available in Tape-on-Reel. Detailed information about number of poles, part numbers, tape width, belt height and packing units is given on the data sheet.
pottable	Through its geometry, this product is specially suitable for potting.
"no flame" after glow-wire test according to household appliance standard DIN EN/IEC 60335-1	The materials used for enclosures are VDE-tested and approved according to the glow-wire tests specified in DIN EN/IEC 60335-1. It is conforms with the requirements of the increased household appliance standard.

We reserve the right to make technical as well as changes to measurements, colours and formats after print. Only the values given in our written confirmations will be binding for us. Please take notice that it is not allowed to use our photos, drawings or catalogue pages for your own applications without having our written agreement.

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Overview













Connectors for printed circuit boards

WECO PCB connectors always offer a good solution for almost any connection problem by its big variety of types. The screw connections are available in socket terminal style, in elevator clamping style or as head contact terminals. The plug connectors are especially designed for the connection of components or peripheral devices. Tab connectors and screwless types complete the product program.

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Plug-In connector systems

The series of conecta are plug-in connector systems consisting of plug connectors with screw and their corresponding pin strips.

Due to four different pitch sizes, lateral flange executions, tier versions and different plug directions, this product serie suit almost every application on the PCB. All connectors offer coding possibilities to avoid incorrect plugging.

SMD & THR

"SMarTconn" covers terminals and plug connectors for surface mount and reflow soldering technique. Apart from the proven Through-Hole-Technology (THR) we focus on genuine SMD - Surface Mount Devices – in this product serie. With their reliable adhesive forces and their good reflow soldering capabilities, we offer products, which are a worthy replacement for the conventional soldering technique. All products of this series are packed in tape-on-reel or tube magazines for the automatic assembling with a pick & place machine.

Terminal strips

This group contains socket terminals, plug-in connectors, screwless types and additionally the combination of screw and solder tag for the wire-to-wire connection. All types are available for different cross sections, with and without wire protectors. The used Polyamide plastic material pass the ball pressure test with 125°C according to VDE 0470, which is demanded in many IEC and VDE regulations for insulants.

Tab connectors

These connectors are equipped with receptacles in different sizes and styles. Mixed arrangements per terminal block as well as per pole (Multi-Point Tab Connectors) are possible. Combinations of tab / solder connectors, flat plug couplers and space saving tier versions increase the density of connections. The tab connectors offer a wide spectrum of possible combinations, whereby many connection problems can be solved.

Ceramic terminal blocks

This group covers mantle terminals, ceramic terminal strips and terminals for explosion and firedamp-hazard areas. Various sizes and designs permit them to be used for wire cross sections up to 120 mm² and including applications in furnace construction and ship building, for engines and intrinsically safe electrical equipment. The terminal blocks with ceramic insulator can be used at increased temperatures.



We, WECO Contact GmbH, are a German manufacturer of high reputation in the field of electronics and electrical engineering. Our headquarter is located in Hanau and has own assembly and sales companies in USA, Canada, Brazil, France, China, Hong Kong and Mexico. With over 450 employees and a worldwide distribution network in 56 countries, we speak the language of our customers. Our extensive product range includes nearly 17,000 different articles.

We are well known for innovation which is particularly evident in the patented SMD series for the genuine surface mounting technology. Hereby, the user experiences real cost savings in the manufacturing process, especially if the terminal is the last component of the customer to be soldered on the board. Another strength are the customerspecific developments and a fast and flexible project implementation with which we respond to the increasing engineering demands of the middle class customers.

The entire WECO Group is a reliable partner for our customers, and the customers' satisfaction is one of our main goals to achieve.

Household Appliance Standard DIN EN/IEC 60335-1

What is the household appliance standard all about?

The household appliance standard DIN EN/IEC 60335-1:2007-02 standardizes the safety features of electrical appliances for household use and similar purposes.

The standard requires testing of glow wire resistance for non-metallic materials used in appliances operated with >0,2 A and applies for non-metallic materials which hold active components in position.

These fire protection requirements shall prevent self-ignition of unattended appliances thus significantly increasing fire safety.

For which appliances does this standard apply?

The standard is applicable for electric and electronic components in unattended household appliances with rated currents of >0,2 A, such as

terminals and switches, e.g. in:

- Dishwashers, washing machines, refrigerators
- Kitchen stoves, microwaves
- Small household appliances, such as mixers, coffee machines

Unattended equipment used in small and medium-sized enterprises is also affected, namely:

- Pump components
- Illuminant components
- Industrial and commercial cleaning equipment
- Hair salon equipment etc.

WECO products are compliant with the glow-wire tests according to the household appliance standard!

For the white goods market segment, WECO Contact GmbH offers an extensive range of products meeting the requirements of the Household Appliance Standard DIN EN/IEC 60335-1. Even before the transition period expired in July 2007, many WECO products had already been compliant with the tightened household appliance standard, providing WECO Contact with an enormous edge over competitors, particularly over those in Asia.

The materials used for enclosures are VDE-tested and approved according to the glow-wire tests specified in DIN EN/ IEC 60335-1. This applies for all standard WECO colors!

PRODUCTS:

- All products of the connections for printed circuit boards with the exception of large-pole articles of the series 95.., 96.. and 97.. as well as SMD and THR products.
- Series 326 and 327
- Other products: Producibility must verified for each product

We designate products compliant with this tightened household appliance standard, if a specific variant compatible to the household appliance standard is available:

- PART NUMBER: The existing 8-digit article number will be continued and supplemented by "EN6".
- DESIGNATION:

The existing designation will be continued. A "6" will be placed before "GP" resulting in "6GP".



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Are you affected?

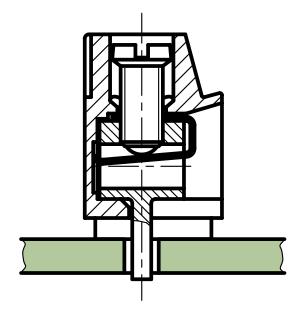
Even today, long after the tightened Household Appliance Standard DIN EN/ IEC 60335-1 entered into force, many questions still arise and need clarification.

Even equipment manufacturers affected by this household appliance standard often are unaware of the standard's requirements and only find out that they ARE AFFEC-TED, when they submit their products at VDE and are denied approval because products do not meet the currently valid standards.

We at WECO Contact take technical support and service for our customers seriously. Therefore, we have compiled on our website a list of all manufacturer products affected by the household appliance standard. At a glance, our customers can now gather information on whether their appliances are affected or not.

The list is also a valuable tool for both sales staff and field reps, helping them to resolve possible unclear issues in project meetings, and enabling them to optimally support the customer.





Thanks to their versatile design, WECO Contact PCB connectors offers a solution for every connection application. Here, you can find all 5.08 mm pitch connector systems available for printed circuits.

Depending on the respective series, PCB connectors are available with the standard pole numbers 2 to 12 or 2 to 24 poles. With their lateral latching elements they can be locked to terminal strips of any pole number. That way, maintaining accuracy and correctness of the pitch is always guaranteed.

The screw terminals are built on the principle of the socket terminal, either as a lift system or as a head contact terminal.

Damage to flexible conductors can be prevented through the use of our products with wire protection (indicated by the name "-DS" in the product) reliably prevented. An enlarged clamping space with nearly square shape offered in the versions of our products of the series 958 and 978. In the version with wire protection also finestranded conductors up to 2.5 mm² can be connected.

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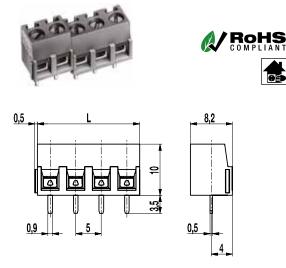
Our articles with wire protection (recognizable by the "DS" in the product description) reliably prevent damage to flexible conductors.

All versions are equipped with captive screws which also allow over-head assembly.

As standard, our terminals are delivered unmarked. Upon request, they can also be printed, e.g. with consecutive numbering or individual labeling according to customer requirement.

140-A-111

Screw connection, interlocking



The PCB connector 140-A-111 with lift system is designed as one-tier basic version with a pitch of 5 mm and available with 2 to 24 poles.

Lateral latching elements on the housing allow to latch the PCB connector to longer terminal rows without pole loss. The wire entrance is parallel to the PCB. The screws are captive.

Part Numbers

i art it			
No. of poles	140-A-111	Length	Pcs
2	10.801.402	10,00	250
3	10.801.403	15,00	250
4	10.801.404	20,00	200
5	10.801.405	25,00	100
6	10.801.406	30,00	100
7	10.801.407	35,00	100
8	10.801.408	40,00	100
9	10.801.409	45,00	100
10	10.801.410	50,00	100
11	10.801.411	55,00	100
12	10.801.412	60,00	100
13	10.801.413	65,00	100
14	10.801.414	70,00	100
15	10.801.415	75,00	100
16	10.801.416	80,00	100
17	10.801.417	85,00	100
18	10.801.418	90,00	100
19	10.801.419	95,00	100
20	10.801.420	100,00	100
21	10.801.421	105,00	100
22	10.801.422	110,00	100
23	10.801.423	115,00	100
24	10.801.424	120,00	100

General Information

Pitch	5 mm
No. of poles	2 - 24

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ECO

Technical Data

Clamping Range	solid / flexible / AWG			
	0,14 - 2,5 mm² / 0,14 - 1,5 mm² / 26 - 14 AWG			
Rated Cross Section	1,5 mm²			
Wire Stripping Length	6 mm ± 0,5 mm			
Overvoltage Category	III	III	П	
Pollution Severity Level	3	2	2	
Rated Voltage	200 V	320 V	500 V	
Rated Impulse Voltage	4 kV	4 kV	4 kV	
Rated Insulation Voltage	250 V acc. to EN	60998-1		
Rated Current	16 A			
Hole in PCB	ø 1,2 mm			
Torque	0,5 Nm			

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	I
Temperature Range	-40°C up to 100°C
Terminal body	Nickel plated brass
Pressure clamp	Tin plated tin bronze
Screw	M3; zinc plated steel, blue passivated
Solder pin	0,9 x 0,5 mm; tin plated tin bronze

Approvals

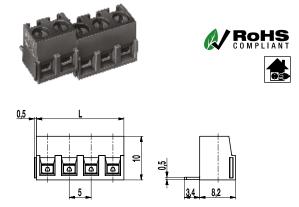
	Current	Voltage	Group	AWG	Nm
AI ®	10 [1]	300	B, D	30 - 14	0,51
€₽ ®	15	300	В	30 - 14	0,51

[1] 20 A max for factory-wiring applications only

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances

140-A-121

Screw connection, wire entrance vertical to PCB, interlocking



The PCB connector 140-A-121 with lift system is the horizontal version of 140-A-111 with a pitch of 5 mm and available with 2 to 24 poles.

Lateral latching elements on the housing allow to lock the PCB connector to longer terminal rows without pole loss. The wire entrance is vertical to the PCB. The screws are captive.

Part Numbers

No. of poles	140-A-121	Length	Pcs
2	20.801.402	10,00	250
3	20.801.403	15,00	250
4	20.801.404	20,00	100
5	20.801.405	25,00	100
6	20.801.406	30,00	100
7	20.801.407	35,00	100
8	20.801.408	40,00	100
9	20.801.409	45,00	100
10	20.801.410	50,00	100
11	20.801.411	55,00	100
12	20.801.412	60,00	100
13	20.801.413	65,00	100
14	20.801.414	70,00	100
15	20.801.415	75,00	100
16	20.801.416	80,00	100
17	20.801.417	85,00	100
18	20.801.418	90,00	100
19	20.801.419	95,00	100
20	20.801.420	100,00	100
21	20.801.421	105,00	100
22	20.801.422	110,00	100
23	20.801.423	115,00	100
24	20.801.424	120,00	100

Pitch	5 mm
No. of poles	2 - 24

EC

Technical Data

Clamping Range	solid / flexible / AWG			
	0,14 - 2,5 mm² / 0,14 - 1,5 mm² / 26 - 14 AWG			
Rated Cross Section	1,5 mm²	1,5 mm²		
Wire Stripping Length	6 mm ± 0,5 mm			
Overvoltage Category	III	III	II	
Pollution Severity Level	3	2	2	
Rated Voltage	200 V	320 V	500 V	
Rated Impulse Voltage	4 kV	4 kV	4 kV	
Rated Insulation Voltage	250 V acc. to EN	60998-1		
Rated Current	16 A			
Hole in PCB	ø 1,2 mm			
Torque	0,5 Nm			

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	I
Temperature Range	-40°C up to 100°C
Terminal body	Nickel plated brass
Pressure clamp	Tin plated tin bronze
Screw	M3; zinc plated steel, blue passivated
Solder pin	0,9 x 0,5 mm; tin plated tin bronze

Approvals

	Current	Voltage	Group	AWG	Nm	
۶L®	10 [1]	300	B, D	30 - 14	0,51	
()	15	300	В	30 - 14	0,51	

[1] 20 A max for factory-wiring applications only

Options / Accessories

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances

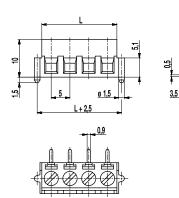
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PCB connector for SMD

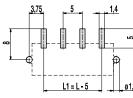
140-A-SMD

Screw connection, with anti-twist peg





PCB Layout



Solder paste thickness: 0,15 - 0,2 mm

The 2 to 12 pole terminals with a pitch of 5 mm have a screw connection with elevator clamping system and are equipped with M3 captive screws. The wire clamp and soldering tag are manufactured as a single unit and permanently engaged in the housing. The solder pins are exactly aligned parallel to the printed circuit board in order to create a coplanar connection after the reflow soldering process.

The moulding is made of heat resistant thermoplastic material and equipped with plastic pegs on both sides to prevent twisting.

Packed in magazines or equipped with Pick Discs in Tape-on-Reel, this genuine SMD terminal is suitable for the automatic assembly.

Part Numbers			
No. of poles	140-A-SMD	Length	Pcs
2	10.801.602	10,00	1036
3	10.801.603	15,00	756
4	10.801.604	20,00	588
5	10.801.605	25,00	504
6	10.801.606	30,00	420
7	10.801.607	35,00	364
8	10.801.608	40,00	308
9	10.801.609	45,00	280
10	10.801.610	50,00	252
11	10.801.611	55,00	224
12	10.801.612	60,00	224

General Information

Pitch	5 mm
No. of poles	2 - 12

ECO

Technical Data

RoHS 0 M F

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e solid / flexible / AWG		
0,14 - 2,5 mm² / 0),14 - 1,5 mm² / 2	26 - 16 AWG
1,5 mm²		
6 mm ± 0,5 mm		
III	III	II
3	2	2
200 V	320 V	500 V
4 kV	4 kV	4 kV
250 V acc. to EN	60998-1	
15 A		
Reflow solder		
0,5 Nm		
	0,14 - 2,5 mm² / 0 1,5 mm² 6 mm ± 0,5 mm III 3 200 V 4 kV 250 V acc. to EN 15 A Reflow solder	0,14 - 2,5 mm² / 0,14 - 1,5 mm² / 2 1,5 mm² 6 mm ± 0,5 mm III III 3 2 200 V 320 V 4 kV 4 kV 250 V acc. to EN 60998-1 15 A Reflow solder

Material

PA HT, black, V-0
CTI ≥ 600
-40°C up to 150°C; reflow solder temperature (Peak) max 260°C (15-30 s)
Nickle plated brass
Tin plated tin bronze
M3; zinc plated steel, blue passivated
0,5 x 0,9 mm; tin plated tin bronze

Approvals

	Current	Voltage	Group	AWG	Nm	
FL ®	10 [1]	300	B, D	30 - 14	0,51	
S₽ °	15	300	В	30 - 14	0,51	

Options / Accessories

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00 [2] •

Part Numbers: Tape-on-Reel

No. of poles	140-A-SMD	Tape Width	Tape Height	Pcs
2	10.801.602.A00	32 mm	13 mm	375
further number of poles on request				

[1] 20 A max for factory-wiring applications only

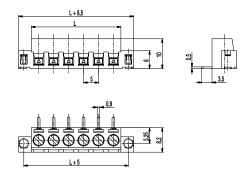
[2] To be fitted after reflow soldering process

PCB connector for SMD

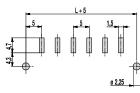
140-A-126-SMD

Screw connection, with solder flanges





PCB Layout



Solder paste thickness: 0,15 - 0,2 mm

The 2 to 12 pole terminals with a pitch of 5 mm have a screw connection with elevator clamping system and are equipped with M3 captive screws. The wire clamp and soldering tag are manufactured as a single unit and permanently engaged in the casing. The solder pins are exactly aligned parallel to the printed circuit board in order to create a coplanar connection after the reflow soldering process.

Soldering cylinders on either side of the housing (floating anchors), are movable in vertical direction and thereby they obtain 100% coplanarity between solder pins and soldering cylinders. They are transferred more to the front in comparison to the connector centre in order to keep the retaining strength, where the wires are connected. Thus, the force, acting on the solder pins, is reduced in a very important way.

At the base side the housing is equipped with spacers (stand offs), which ensure a better air circulation during the Reflow soldering process and thus an optimal soldering result.

Packed in magazines or equipped with Pick Discs in Tape-on-Reel, this genuine SMD terminal is suitable for the automatic assembly.

Part I	Numbers		
No. of poles	140-A-126-SMD	Length	Pcs
2	10.801.632	10,00	784
4	10.801.634	20,00	504
6	10.801.636	30,00	364
8	10.801.638	40,00	280
10	10.801.640	50,00	224
12	10.801.642	60,00	196
furthor nu	mbor of polos on request		

further number of poles on request

General Information

Pitch	5 mm
No. of poles	2 - 12
Areas of application	Systems for measurement and control

Technical Data

solid / flexible / AWG			
0,14 - 2,5 mm² / 0),14 - 1,5 mm² / 2	26 - 16 AWG	
1,5 mm²			
6 mm ± 0,5 mm			
	III	II	
3	2	2	
200 V	320 V	500 V	
4 kV	4 kV	4 kV	
250 V acc. to EN	60998-1		
15 A			
Reflow solder			
0,5 Nm			
	0,14 - 2,5 mm² / (1,5 mm² 6 mm ± 0,5 mm III 3 200 V 4 kV 250 V acc. to EN 15 A Reflow solder	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	

Material

Moulding	PA HT, black, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 150°C; reflow solder temperature (Peak) max. 260°C (15-30 s)
Terminal body	Nickel plated brass
Pressure clamp	Tin plated tin bronze
Screw	M3; zinc plated steel, blue passivated
Solder pin	0,9 x 0,5 mm; tin plated tin bronze
Solder cylinder	Tin plated brass

Approvals

	Current	Voltage	Group	AWG	Nm
۶L®	10 [1]	300	B, D	30 - 14	0,51
S₽ °	15	300	В	30 - 14	0,51

Options / Accessories

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00 [2]

Part Numbers: Tape-on-Reel

No. of poles	140-A-126-SMD	Tape Width	Tape Height	Pcs
2	10.801.632.A00	32 mm	13 mm	375
3	10.801.633.A00	56 mm	13 mm	375
4	10.801.634.A00	56 mm	13 mm	375
5	10.801.635.A00	56 mm	13 mm	375
6	10.801.636.A00	56 mm	13 mm	375
further	number of poles on request			

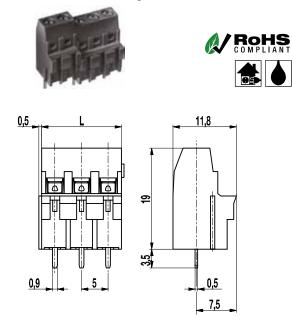
further number of poles on request

[1] 20 A max for factory-wiring applications only

[2] To be fitted after reflow soldering process

140-B-111

Screw connection, interlocking, raised version



The PCB connector 140-B-111 with lift system is the raised version with a pitch of 5 mm and available with 2 or 3 poles.

Due to the raised design, the clamping space projects over e.g. parts or housing edges in front. This PCB connector can also be used for encapsulating circuits.

Lateral latching elements on the housing allow to lock the PCB connector to longer terminal rows without pole loss. The wire entrance is parallel to the PCB. The screws are captive.

Connecting the two PCB connectors 140-B-111 and 140-A-111 yields the two-tier versions 140-B-151 and 140-B-153.

Part N	umbers		
No. of poles	140-B-111	Length	Pcs
2	10.801.472	10,00	200
3	10.801.473	15,00	200

General Information

Pitch	5 mm
No. of poles	2 + 3
Usable with	PCB connector 140-A-111

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Technical Data

Clamping Range	solid / flexible / A	WG	
	0,14 - 1,5 mm² / (),14 - 1,5 mm² / 2	26 - 16 AWG
Rated Cross Section	1,5 mm²		
Wire Stripping Length	6 mm ± 0,5 mm		
Overvoltage Category	III	III	II
Pollution Severity Level	3	2	2
Rated Voltage	160 V	160 V	320 V
Rated Impulse Voltage	2,5 kV	2,5 kV	2,5 kV
Rated Insulation Voltage	250 V acc. to EN	60998-1	
Rated Current	16 A		
Hole in PCB	ø 1,2 mm		
Torque	0,5 Nm		

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	I
Temperature Range	-40°C up tp 100°C
Terminal body	Nickel plated brass
Pressure clamp	Copper alloy, tin plated
Screw	M3; zinc plated steel, blue passivated
Solder pin	0,9 x 0,5 mm; copper alloy, tin plated

Approvals

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	Current	Voltage	Group	AWG	Nm	
AN ®	10 [1]	300	В	30 - 14	0,51	
SP [®]	15 10	300 300	B D	30 - 14 30 - 14	0,51 0,51	
VDE						

[1] 20 A max for factory-wiring applications only

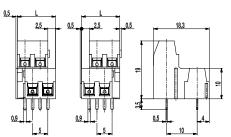
- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Can be fitted together to larger pole numbers

140-B-151/-153

Screw connection, interlocking (only -153), two-tier version



140-B-151 140-B-153



The PCB connectors 140-B-151 and 140-B-153 with lift system are designed as two-tier version with a pitch of 5 mm and available with 4 or 6 poles.

The two-tier version offers higher connection density. Offset individual rows of PCB connectors provide easy access to the terminal leads.

The housing has lateral latching elements. The version ..-153 allows the customer to lock the 4 or 6 pole PCB connectors to longer terminal rows without any pole loss. The ..-151 does not have this option, but is available as a PCB connector with a higher number of poles.

The wire entry is parallel to the PCB.

Part N	umbers			
No. of poles	140-B-151	140-B-153	Length	Pcs
4	30.801.472	40.801.472	12,50	100
6	30.801.473	40.801.473	17,50	100

General Information

Pitch	5 mm
No. of poles	4 + 6
Additonal Information	Ordering information: 151: Front PCB connector is offset to the right 153: Front PCB connector is offset to the left

ECO

Technical Data

Clamping Range	solid / flexible / A	solid / flexible / AWG				
	0,14 - 1,5 mm² / (),14 - 1,5 mm² / 2	26 - 16 AWG			
Rated Cross Section	1,5 mm²	1,5 mm²				
Wire Stripping Length	6 mm ± 0,5 mm					
Overvoltage Category	III	III	II			
Pollution Severity Level	3	2	2			
Rated Voltage	160 V	160 V	320 V			
Rated Impulse Voltage	2,5 kV	2,5 kV	2,5 kV			
Rated Insulation Voltage	250 V acc. to EN	60998-1				
Rated Current	16 A					
Hole in PCB	ø 1,2 mm					
Torque	0,5 Nm					

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	I
Temperature Range	-40°C up to 100°C
Terminal body	Nickel plated brass
Pressure clamp	Copper alloy, tin plated
Screw	M3; zinc plated steel, blue passivated
Solder pin	0,9 x 0,5 mm; Copper alloy, tin plated

Approvals

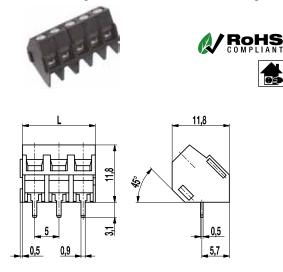
	Current	Voltage	Group	AWG	Nm
FL ®	10 [1]	300	В	30 - 14	0,5
S ₽°	15	300	В	30 - 14	0,51

[1] 20 A max for factory-wiring applications only

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Can be fitted together to larger pole numbers

140-C-111

Screw connection diagonal 45° to PCB, interlocking



The PCB connector 140-C-111 is the inclined version with lift system with a pitch of 5 mm and available with 2 to 24 poles.

The wire entrance is diagonal, i.e. in a 45° angle to the PC board. Therefore, this PCB connector is ideal for the assembly in the center of PCBs. The design of this PCB connector allows space-saving arrangement of consecutive rows of terminals.

Lateral latching elements on the housing allow to lock the PCB connector to longer terminal rows without pole loss. The screws are captive.

Part N	umbers		
No. of poles	140-C-111	Length	Pcs
2	10.801.502	10,00	250
3	10.801.503	15,00	250
4	10.801.504	20,00	200
5	10.801.505	25,00	100
6	10.801.506	30,00	100
7	10.801.507	35,00	100
8	10.801.508	40,00	100
9	10.801.509	45,00	100
10	10.801.510	50,00	100
11	10.801.511	55,00	100
12	10.801.512	60,00	100
13	10.801.513	65,00	100
14	10.801.514	70,00	100
15	10.801.515	75,00	100
16	10.801.516	80,00	100
17	10.801.517	85,00	100
18	10.801.518	90,00	100
19	10.801.519	95,00	100
20	10.801.520	100,00	100
21	10.801.521	105,00	100
22	10.801.522	110,00	100
23	10.801.523	115,00	100
24	10.801.524	120,00	100

General Information

Pitch	5 mm
No. of poles	2 - 24

Technical Data

Clamping Range	solid / flexible / AWG
	0,14 - 2,5 mm² / 0,14 - 1,5 mm² / 26 - 14 AWG
Rated Cross Section	1,5 mm²
Wire Stripping Length	6 mm
Overvoltage Category	III
Pollution Severity Level	3
Rated Voltage	200 V
Rated Impulse Voltage	4 kV
Rated Insulation Voltage	250 V acc. to EN 60998-1
Rated Current	16 A
Hole in PCB	ø 1,2 mm
Torque	0,5 Nm

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C
Terminal body	Nickel plated brass
Pressure clamp	Copper alloy, tin plated
Screw	M3; zinc plated steel, blue passivated
Solder pin	0,9 x 0,5 mm; Copper alloy, tin plated

Approvals

	Current	Voltage	Group	AWG	Nm
AI ®	10 [1]	300	B, D	30 - 14	0,51
€₽ ®	15	300	В	30 - 14	0,51

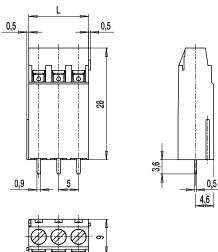
[1] 20 A max for factory-wiring applications only

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Can be fitted together to larger pole numbers

140-E-111

Screw connection, interlocking, tall version





The PCB connector 140-E-111, tall version with lift system with a pitch of 5 mm, is available with 2 or 3 poles.

Due to the raised design, the clamping space projects over e.g. parts or housing edges in front. This PCB connector can also be used for encapsulating circuits.

Lateral latching elements on the housing allow to lock the 2- or 3-pole PCB connector to connectors of any pole number without pole loss. The wire entrance is parallel to the PCB.

The screws are captive.

Part Nu	umbers		
No. of poles	140-E-111	Length	Pcs
2	10.801.482	10,00	100
3	10.801.483	15,00	100

General Information

Pitch	5 mm
No. of poles	2 + 3

R

ECO

Technical Data

Clamping Range	solid / flexible / A	WG	
	0,14 - 1,5 mm² / 0),14 - 1,5 mm² / 2	26 - 16 AWG
Rated Cross Section	1,5 mm²		
Wire Stripping Length	6 mm ± 0,5 mm		
Overvoltage Category	III	III	11
Pollution Severity Level	3	2	2
Rated Voltage	160 V	160 V	320 V
Rated Impulse Voltage	2,5 kV	2,5 kV	2,5 kV
Rated Insulation Voltage	250 V acc. to EN	60998-1	
Rated Current	16 A		
Hole in PCB	ø 1,2 mm		
Torque	0,5 Nm		

Material

PA, grey, V-0
CTI ≥ 600
1
-40°C up to 100°C
Nickel plated brass
Copper alloy, tin plated
M3; zinc plated steel, blue passivated
0,9 x 0,5 mm; Copper alloy, tin plated

Approvals

	Current	Voltage	Group	AWG	Nm	
FL ®	10 [1]	300	В	30 - 14	0,51	
S₽ °	15 10	150 300	B D	30 - 14 30 - 14	0,51 0,51	

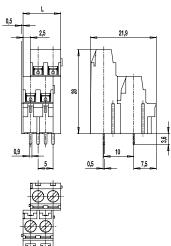
[1] 20 A max for factory-wiring applications only

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Can be fitted together to larger pole numbers

140-E-253

Screw connection, interlocking, two-tier tall version





The PCB connector 140-E-253 with lift system is designed as two-tier tall version with a pitch of 5 mm and available with 4 or 6 poles.

The multi-tier version offers higher connection density. Offset individual rows of PCB connectors provide easy access to the terminal leads. This PCB connector can also be used for encapsulating circuits.

This 4- or 6-pole PCB connector has lateral locking elements which allow to lock the connectors to any pole number without pole loss. The wire entrance is parallel to the PCB.

Connecting PCB connectors 140-E-253 with 140-A-111 yields the three-tier versions 140-E-271 and/or 140-E-273.

Part	Numbers		
No. of poles	140-E-253	Length	Pcs
4	10.801.494	12,50	100
6	10.801.496	17,50	100

General Information

Pitch	5 mm
No. of poles	4 + 6

ECO

Technical Data

Clamping Range	solid / flexible / A	solid / flexible / AWG		
	0,14 - 1,5 mm² / 0),14 - 1,5 mm² / 2	26 - 16 AWG	
Rated Cross Section	1,5 mm²			
Wire Stripping Length	6 mm ± 0,5 mm			
Overvoltage Category	III	III	II	
Pollution Severity Level	3	2	2	
Rated Voltage	160 V	160 V	320 V	
Rated Impulse Voltage	2,5 kV	2,5 kV	2,5 kV	
Rated Insulation Voltage	250 V acc. to EN	60998-1		
Rated Current	16 A			
Hole in PCB	ø 1,2 mm			
Torque	0,5 Nm			

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C
Terminal body	Nickel plated brass
Pressure clamp	Copper alloy, tin plated
Screw	M3; zinc plated steel, blue passivated
Solder pin	0,9 x 0,5 mm; Copper alloy, tin plated

Approvals

	Current	Voltage	Group	AWG	Nm
FL®	10 [1]	300	В	30 - 14	0,51
€₽ °	15	300	В	30 - 14	0,51

[1] 20 A max for factory-wiring applications only

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Can be fitted together to larger pole numbers

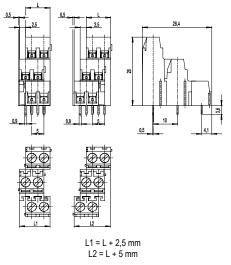
140-E-271/-273

Screw connection, interlocking (only -273), three-tier version





140-E-271 140-E-273



The PCB connectors 140-E-271 and 140-E-273 with lift system are designed as three-tier version with a pitch of 5 mm and are available with 4 to 6 poles.

These three-tier versions offer highest connection density. Offset individual rows of PCB connectors provide easy access to the terminal leads.

The housing has lateral latching elements. The version ..-273 allow the customer to lock the 6 or 9 pole PCB connectors to longer terminal rows without pole loss. The ..-271 does not have this option, but it is available as PCB connector with larger pole numbers.

The wire entrance is parallel to the PCB.

Part N	umbers			
No. of poles	140-E-271	140-E-273	Length	Pcs
6	30.801.402	40.801.402	10,00	100
9	30.801.403	40.801.403	15,00	100

General Information

Pitch	5 mm
No. of poles	6 + 9
Additonal Information	Ordering information: 271: Front PCB connector is offset to the right 273: Front PCB connector is offset to the left

ECO

Technical Data

Clamping Range	solid / flexible / A	WG		
	0,14 - 1,5 mm² / (),14 - 1,5 mm² / 2	26 - 16 AWG	
Rated Cross Section	1,5 mm²	1,5 mm²		
Wire Stripping Length	6 mm ± 0,5 mm			
Overvoltage Category	III	III	II	
Pollution Severity Level	3	2	2	
Rated Voltage	160 V	160 V	320 V	
Rated Impulse Voltage	2,5 kV	2,5 kV	2,5 kV	
Rated Insulation Voltage	250 V acc. to EN	60998-1		
Rated Current	16 A			
Hole in PCB	ø 1,2 mm			
Torque	0,5 Nm			

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	I
Temperature Range	-40°C up to 100°C
Terminal body	Nickel plated brass
Pressure clamp	Copper alloy, tin plated
Screw	M3; zinc plated steel, blue passivated
Solder pin	0,9 x 0,5 mm; Copper alloy, tin plated

Approvals

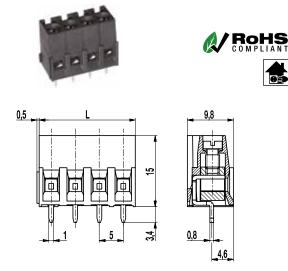
·	Current	Voltage	Group	AWG	Nm
FN ®	10 [1]	300	В	30 - 14	0,51
€₽ ®	15	300	В	30 - 14	0,51
VDE					

[1] 20 A max for factory-wiring applications only

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Can be fitted together to larger pole numbers

145-A-111

Screw connection, interlocking



The PCB connector 145-A-111 with lift system is designed as single-tier basic version with a pitch of 5 mm and is available with 2 to 24 poles.

Lateral latching elements on the housing allow to connect the PCB connector to longer terminal strips without pole loss. The wire entrance is parallel to the PCB. The screws are captive.

Part Numbers

145-A-111	Length	Pcs
10.805.402	10,00	250
10.805.403	15,00	250
10.805.404	20,00	200
10.805.405	25,00	100
10.805.406	30,00	100
10.805.407	35,00	100
10.805.408	40,00	100
10.805.409	45,00	100
10.805.410	50,00	100
10.805.411	55,00	100
10.805.412	60,00	100
10.805.413	65,00	100
10.805.414	70,00	100
10.805.415	75,00	100
10.805.416	80,00	100
10.805.417	85,00	100
10.805.418	90,00	100
10.805.419	95,00	100
10.805.420	100,00	100
10.805.421	105,00	100
10.805.422	110,00	100
10.805.423	115,00	100
10.805.424	120,00	100
	10.805.402 10.805.403 10.805.404 10.805.405 10.805.406 10.805.407 10.805.408 10.805.409 10.805.409 10.805.410 10.805.411 10.805.412 10.805.413 10.805.413 10.805.415 10.805.415 10.805.416 10.805.417 10.805.418 10.805.419 10.805.421 10.805.421 10.805.423	10.805.402 10,00 10.805.403 15,00 10.805.403 15,00 10.805.404 20,00 10.805.405 25,00 10.805.406 30,00 10.805.407 35,00 10.805.408 40,00 10.805.409 45,00 10.805.410 50,00 10.805.411 55,00 10.805.412 60,00 10.805.413 65,00 10.805.414 70,00 10.805.415 75,00 10.805.416 80,00 10.805.417 85,00 10.805.418 90,00 10.805.419 95,00 10.805.422 100,00 10.805.423 115,00

General Information

Pitch	5 mm
No. of poles	2 - 24

R

ECO

Technical Data

Clamping Range	solid / flexible / AWG		
	0,14 - 4 mm² / 0,1	14 - 2,5 mm² / 26	- 14 AWG
Rated Cross Section	2,5 mm²		
Wire Stripping Length	7 mm ± 0,5 mm		
Overvoltage Category	III	III	
Pollution Severity Level	3	2	2
Rated Voltage	250 V	320 V	630 V
Rated Impulse Voltage	4 kV	4 kV	4 kV
Rated Insulation Voltage	250 V acc. to EN	60998-1	
Rated Current	24 A		
Hole in PCB	ø 1,4 mm		
Torque	0,5 Nm		

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	I
Temperature Range	-40°C up to 100°C
Terminal body	Nickel plated brass
Pressure clamp	Copper alloy, tin plated
Screw	M3; zinc plated steel, blue passivated
Solder pin	1,0 x 0,8 mm; copper alloy, tin plated

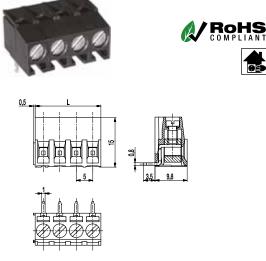
Approvals

	Current	Voltage	Group	AWG	Nm
۶L®	20	300	B	26 - 12	0,51
	10	300	D	26 - 12	0,51
S₽ °	20	300	B	26 - 12	0,51
	10	300	D, E	26 - 12	0,51

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances

145-A-121

Screw connection, wire entrance vertical to PCB, interlocking



The PCB connector 145-A-121 with lift system is the horizontal version of 145-A-111 with a pitch of 5 mm and is available with 2 to 24 poles.

Lateral latching elements on the housing allow to connect the PCB connector to longer terminal strips without pole loss. The wire entrance is vertical to the PCB. The screws are captive.

Part Numbers

No. of poles	145-A-121	Length	Pcs
2	20.805.402	10,00	250
3	20.805.403	15,00	250
4	20.805.404	20,00	200
5	20.805.405	25,00	100
6	20.805.406	30,00	100
7	20.805.407	35,00	100
8	20.805.408	40,00	100
9	20.805.409	45,00	100
10	20.805.410	50,00	100
11	20.805.411	55,00	100
12	20.805.412	60,00	100
13	20.805.413	65,00	100
14	20.805.414	70,00	100
15	20.805.415	75,00	100
16	20.805.416	80,00	100
17	20.805.417	85,00	100
18	20.805.418	90,00	100
19	20.805.419	95,00	100
20	20.805.420	100,00	100
21	20.805.421	105,00	100
22	20.805.422	110,00	100
23	20.805.423	115,00	100
24	20.805.424	120,00	100

General Information

Pitch	5 mm
No. of poles	2 - 24

R

Technical Data

Clamping Range	solid / flexible / A	solid / flexible / AWG				
	0,14 - 4 mm² / 0,1	0,14 - 4 mm² / 0,14 - 2,5 mm² / 26 - 14 AWG				
Rated Cross Section	2,5 mm²	2,5 mm²				
Wire Stripping Length	7 mm ± 0,5 mm					
Overvoltage Category	III	Ш	II			
Pollution Severity Level	3	2	2			
Rated Voltage	250 V	320 V	630 V			
Rated Impulse Voltage	4 kV	4 kV	4 kV			
Rated Insulation Voltage	250 V acc. to EN	60998-1				
Rated Current	24 A					
Hole in PCB	ø 1,4 mm					
Torque	0,5 Nm					

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C
Terminal body	Nickel plated brass
Pressure clamp	Copper alloy, tin plated
Screw	M3; zinc plated steel, blue passivated
Solder pin	1,0 x 0,8 mm; copper alloy, tin plated

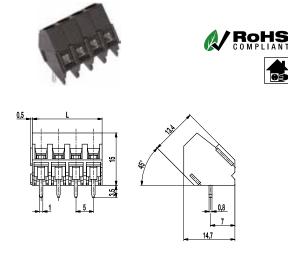
Approvals

	Current	Voltage	Group	AWG	Nm
۶L®	20	300	B	26 - 12	0,51
	10	300	D	26 - 12	0,51
S₽ ®	20	300	B	26 - 12	0,51
	10	300	D, E	26 - 12	0,51
VDE					

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances

145-C-111

Screw connection diagonal 45° to PCB, with test holes, interlocking



The PCB connector 145-C-111 is the inclined version with lift system with a pitch of 5 mm and available with 2 to 24 poles.

The wire entrance is located in a 45° angle to the PC board. Therefore, this PCB connector is ideal for the assembly in the center of PCBs. The design of this PCB connector allows space-saving arrangement of consecutive rows of terminals.

Lateral latching elements on the housing allow to connect the PCB connector to longer terminal strips without pole loss. The screws are captive.

This PCB connector has test holes for ø 2.3 mm test plugs.

Part Nur	nbers		
No. of poles	145-C-111	Length	Pcs
2	10.805.502	10,00	250
3	10.805.503	15,00	250
4	10.805.504	20,00	200
5	10.805.505	25,00	100
6	10.805.506	30,00	100
7	10.805.507	35,00	100
8	10.805.508	40,00	100
9	10.805.509	45,00	100
10	10.805.510	50,00	100
11	10.805.511	55,00	100
12	10.805.512	60,00	100
13	10.805.513	65,00	100
14	10.805.514	70,00	100
15	10.805.515	75,00	100
16	10.805.516	80,00	100
17	10.805.517	85,00	100
18	10.805.518	90,00	100
19	10.805.519	95,00	100
20	10.805.520	100,00	100
21	10.805.521	105,00	100
22	10.805.522	110,00	100
23	10.805.523	115,00	100
24	10.805.524	120,00	100

General Information		
Pitch	5 mm	
No. of poles	2 - 24	

R

ECO

Technical Data

Clamping Range	solid / flexible / A	solid / flexible / AWG			
	0,14 - 4 mm² / 0,14 - 2,5 mm² / 26 - 12 A				
Rated Cross Section	2,5 mm²				
Wire Stripping Length	7 mm ± 0,5 mm				
Overvoltage Category	III	III	II		
Pollution Severity Level	3	2	2		
Rated Voltage	250 V	320 V	630 V		
Rated Impulse Voltage	4 kV	4 kV	4 kV		
Rated Insulation Voltage	250 V acc. to EN	60998-1			
Rated Current	24 A				
Hole in PCB	ø 1,4 mm				
Torque	0,5 Nm				

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	I
Temperature Range	-40°C up to 100°C
Terminal body	Nickel plated brass
Pressure clamp	Copper alloy, tin plated
Screw	M3; zinc plated steel, blue passivated
Solder pin	1,0 x 0,8 mm; copper alloy, tin plated

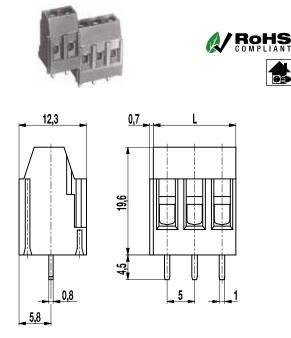
Approvals

	Current	Voltage	Group	AWG	Nm
۶L®	20	300	B	26 - 12	0,51
	10	300	D	26 - 12	0,51
S₽ °	20	300	B	26 - 12	0,51
	10	300	D, E	26 - 12	0,51

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances

150-A-111

Screw connection, interlocking, with test holes



The PCB connector 150-A-111 with a pitch of 5 mm is available with 2 or 3 poles.

Due to the ample terminal space and the lift system, this PCB connector is particularly user-friendly. Optimum wire protection is guaranteed even after countless disconnections of one or multiple wires.

Lateral latching elements on the housing allow to connect the PCB connector to longer terminal strips without pole loss. The wire entrance is parallel to the PCB. The screws are captive.

This PCB connector has test holes for ø 2.3 mm test plugs.

Part N	umbers		
No. of poles	150-A-111	Length	Pcs
2	10.801.002	10,00	200
3	10.801.003	15,00	200

General Information

Pitch	5 mm
No. of poles	2 + 3

ECO

Technical Data

Clamping Range	solid / flexible / A	WG	
	0,14 - 4 mm² / 0,1	14 - 2,5 mm² / 26	- 14 AWG
Rated Cross Section	2,5 mm²		
Wire Stripping Length	7,5 mm ± 0,5 mm	ı	
Overvoltage Category	III	III	II
Pollution Severity Level	3	2	2
Rated Voltage	250 V	320 V	630 V
Rated Impulse Voltage	4 kV	4 kV	4 kV
Rated Insulation Voltage	250 V acc. to EN	60998-1	
Rated Current	24 A		
Hole in PCB	ø 1,3 mm		
Torque	0,5 Nm		

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	I
Temperature Range	-40°C up to 100°C
Terminal body	Nickel plated brass
Pressure clamp	Copper alloy, tin plated
Screw	M3; zinc plated steel, blue passivated
Solder pin	1,0 x 0,8 mm; copper alloy, tin plated

Approvals

	Current	Voltage	Group	AWG	Nm	
AI ®	20 [1] 10	300 300	B D	22-10 [2] 22-10 [2]	0,51 0,51	
<u>ج</u>	20 10	300 300	B D, E	26 - 10 26 - 10	0,51 0,51	

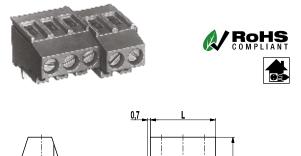
[1] 20 A max for factory-wiring only

[2] Wire sizes No. 26 - 24 AWG for factory-wiring only

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Can be fitted together to larger pole numbers

150-A-121

Screw connection, wire entrance vertical to PCB, interlocking, with test holes



The PCB connector 150-A-121 is the horizontal version of 150-A-111 with a pitch of 5 mm and is available with 2 or 3 poles.

õ

12,3

Due to the ample terminal space and the lift system, this PCB connector is particularly user-friendly. Optimum wire protection is guaranteed even after countless disconnections of one or multiple wires.

Lateral latching elements on the housing allow to connect the PCB connector to longer terminal strips without pole loss. The wire entrance is vertical to the PCB. The screws are captive.

This PCB connector has test holes for ø 2.3 mm test plugs.

Part N	umbers		
No. of poles	150-A-121	Length	Pcs
2	20.801.002	10,00	200
3	20.801.003	15,00	200

General Information		
Pitch	5 mm	

T IION	U IIIII
No. of poles	2 + 3

ECO

Technical Data

Clamping Range	solid / flexible / A	WG	
	0,14 - 4 mm² / 0,7	14 - 2,5 mm² / 26	- 14 AWG
Rated Cross Section	2,5 mm²		
Wire Stripping Length	7,5 mm ± 0,5 mn	ı	
Overvoltage Category	III	III	
Pollution Severity Level	3	2	2
Rated Voltage	250 V	320 V	630 V
Rated Impulse Voltage	4 kV	4 kV	4 kV
Rated Insulation Voltage	250 V acc. to EN	60998-1	
Rated Current	24 A		
Hole in PCB	ø 1,3 mm		
Torque	0,5 Nm		

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	
Temperature Range	-40°C up to 100°C
Terminal body	Nickel plated brass
Pressure clamp	Copper alloy, tin plated
Screw	M3; zinc plated steel, blue passivated
Solder pin	1,0 x 0,8 mm; copper alloy, tin plated

Approvals

	Current	Voltage	Group	AWG	Nm	
AI ®	20 [1] 10	300 300	B D	22-10 [2] 22-10 [2]	0,51 0,51	
€₽ °	20 10	300 300	B D, E	26 - 10 26 - 10	0,51 0,51	

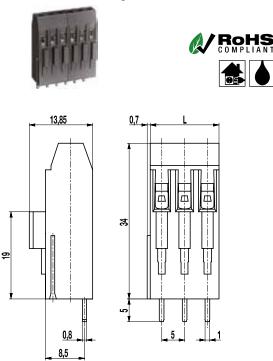
[1] 20 A max for factory-wiring only

[2] Wire sizes No. 26 - 24 AWG for factory-wiring only

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Can be fitted together to larger pole numbers

150-B-111

Screw connection, interlocking, tall version



The PCB connector 150-B-111, tall version with a pitch of 5 mm, is available with 2 or 3 poles.

Due to the ample terminal space and the lift system, this PCB connector is particularly user-friendly. Optimum wire protection is guaranteed even after countless disconnections of one or multiple wires.

Lateral latching elements on the housing allow to connect the PCB connector to longer terminal strips without pole loss. The wire entrance is parallel to the PCB. The screws are captive.

Connecting the two PCB connectors 150-B-111 and 150-A-111 yields the two-tier versions 150-B-151 and 140-B-153.

Part N	umbers		
No. of poles	150-B-111	Length	Pcs
2	10.801.014	10,00	100
3	10.801.016	15,00	100

General Information

Pitch	5 mm
No. of poles	2 + 3

ECO

Technical Data

Clamping Range 0,14 - 4 mm² / 0,14 - 2,5 mm² / 26 - 14 AWG Rated Cross Section 2,5 mm² Wire Stripping Length 8 mm **Overvoltage Category** Ш Pollution Severity Level 3 Rated Voltage 250 V 4 kV Rated Impulse Voltage Rated Insulation Voltage 250 V acc. to EN 60998-1 Rated Current 24 A Hole in PCB ø 1.3 mm 0,5 Nm Torque

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C
Terminal body	Nickel plated brass
Pressure clamp	Copper alloy, tin plated
Screw	M3; zinc plated steel, blue passivated
Solder pin	1,0 x 0,8 mm; copper alloy, tin plated

Approvals

	Current	Voltage	Group	AWG	Nm
RI ®	20	300	B	22 - 10	0,51 [1]
	10	300	D	22 - 10	0,51
€₽ °	20	300	B	26 - 10	0,51
	10	300	D, E	26 - 10	0,51

[1] Wire sizes No. 26 - 24 AWG and 20 A max for factory-wiring only

- · Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Can be fitted together to larger pole numbers

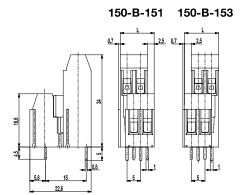
150-B-151/-153

Screw connection, interlocking (only -153), two-tier version









The PCB connectors 150-B-151 and 150-B-153 are designed as two-tier version with a pitch of 5 mm and are available with 4 or 6 poles.

Due to the ample terminal space and the lift system, this PCB connector is particularly user-friendly. The lift system guarantees optimum wire protection even after countless disconnections of one or multiple wires. The two-tier version provides high wiring density in a confined space.

In order to simplify the assembly, the rear solder pins protrude farther from the housing than the front pins.

The housing has lateral latching elements. The version ..-153 allows the customer to lock the 4 or 6 pole PCB connectors to longer terminal rows without pole loss. The ..-151 does not have this option, but it is available as PCB connector with larger pole numbers.

The wire entrance is parallel to the PCB.

The screws are captive.

Part Numbers

No. of poles	150-B-151	150-B-153	Length	Pcs
4	30.801.014	40.801.014	12,50	100
6	30.801.016	40.801.016	17,50	50

General Information

Pitch	5 mm
No. of poles	4 + 6
Additonal Information	Ordering information: 151: Front PCB connector is offset to the right 153: Front PCB connector is offset to the left

ECO

Technical Data

Clamping Range

solid /	flexible / A

	0,14 - 4 mm² / 0,14 - 2,5 mm² / 26 - 14 AWG
Rated Cross Section	2,5 mm²
Wire Stripping Length	8 mm
Overvoltage Category	III
Pollution Severity Level	3
Rated Voltage	250 V
Rated Impulse Voltage	4 kV
Rated Insulation Voltage	250 V acc. to EN 60998-1
Rated Current	24 A
Hole in PCB	ø 1,3 mm
Torque	0,5 Nm

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C
Terminal body	Nickel plated brass
Pressure clamp	Copper alloy, tin plated
Screw	M3; zinc plated steel, blue passivated
Solder pin	1,0 x 0,8 mm; copper alloy, tin plated

Approvals

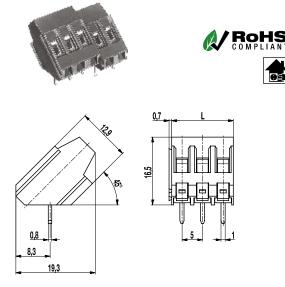
	Current	Voltage	Group	AWG	Nm
AN ®	20	300	B	22 - 10	0,51 [1]
	10	300	D	22 - 10	0,51
()	20	300	B	26 - 10	0,51
	10	300	D, E	26 - 10	0,51

[1] Wire sizes No. 26 - 24 AWG and 20 A max for factory-wiring only

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Can be fitted together to larger pole numbers

150-C-111

Screw connection diagonal 45° to PCB, interlocking, with test holes



The PCB connector 150-C-111 is the inclined version with lift system with a pitch of 5 mm and available with 2 or 3 poles.

The wire entrance is in a 45° angle to the PC board. Therefore, this PCB connector is ideal for the assembly in the center of PCBs. The design of this PCB connector allows space-saving arrangement of consecutive rows of terminals.

Due to the ample terminal space and the lift system, this PCB connector is particularly user-friendly. The lift system guarantees optimum wire protection even after countless disconnections of one or multiple wires.

Lateral latching elements on the housing allow to connect the PCB connector to longer terminal strips without pole loss. The screws are captive.

This PCB connector has test holes for ø 2.3 mm test plug.

Part Numbers

No. of poles	150-C-111	Length	Pcs
2	10.801.022	10,00	200
3	10.801.023	15,00	200

General Information		
Pitch	5 mm	
No. of poles	2 + 3	

Technical Data

Clamping Range 0,14 - 4 mm² / 0,14 - 2,5 mm² / 26 - 14 AWG Rated Cross Section 2,5 mm² Wire Stripping Length 8 mm **Overvoltage Category** Ш Pollution Severity Level 3 Rated Voltage 250 V Rated Impulse Voltage 4 kV Rated Insulation Voltage 250 V acc. to EN 60998-1 Rated Current 24 A Hole in PCB ø 1.3 mm 0,5 Nm Torque

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	I
Temperature Range	-40°C up to 100°C
Terminal body	Nickel plated brass
Pressure clamp	Copper alloy, tin plated
Screw	M3; zinc plated steel, blue passivated
Solder pin	1,0 x 0,8 mm; copper alloy, tin plated

Approvals

	Current	Voltage	Group	AWG	Nm
RI ®	20	300	B	22 - 10	0,51 [1]
	10	300	D	22 - 10	0,51
<u>ج</u>	20	300	B	26 - 10	0,51
	10	300	D, E	26 - 10	0,51

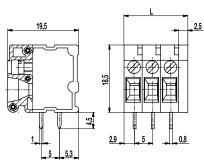
[1] Wire sizes No. 26 - 24 AWG and 20 A max for factory-wiring only

- · Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Can be fitted together to larger pole numbers

180-A-111

Screw connection





Part	Numbers		
No. of poles	180-A-111	Length	Pcs
1	11.819.002	7,50	500
2	12.819.002	12,50	250
3	13.819.002	17,50	250
4	14.819.002	22,50	100
5	15.819.002	27,50	50
6	16.819.002	32,50	50
7	17.819.002	37,50	50
8	18.819.002	42,50	50
9	19.819.002	47,50	50
10	20.819.002	52,50	25
11	21.819.002	57,50	25
12	22.819.002	62,50	25

further number of poles on request

General Information

Pitch	5 mm
No. of poles	1 - 12
Areas of application	Especially suitable for narrow spaces or restricted access.

R

WECO

Technical Data

Clamping Range	solid / flexible / A	WG	
	0,14 - 4 mm² / 0,1	14 - 2,5 mm² / 26	- 12 AWG
Rated Cross Section	2,5 mm²		
Wire Stripping Length	9 mm ± 0,5 mm		
Overvoltage Category	111	III	I
Pollution Severity Level	3	2	2
Rated Voltage	320 V	320 V	630 V
Rated Impulse Voltage	4 kV	4 kV	4 kV
Rated Insulation Voltage	450 V acc. to EN	60998-1	
Rated Current	24 A		
Hole in PCB	ø 1,4 mm		
Torque	0,4 Nm		

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C
Pressure clamp	Tin plated copper
Screw	M2,5; zinc plated steel, blue passivated
Solder pin	1,0 x 0,8 mm; tin plated copper
Terminal body	Zinc plated steel, blue passivated
Pressure plate	Brass, bright

Approvals

	Current	Voltage	Group	AWG	Nm
۶V®	20	300	B	24 - 12	0,4
	10	300	D	24 - 12	0,4
S₽ °	20	300	B	24 - 12	0,4
	10	300	D, E	24 - 12	0,4

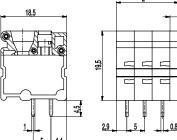
- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00

180-A-121

Screw connection, wire entrance vertical to PCB



2.5



Part Numbers				
No. of poles	180-A-121	Length	Pcs	
1	11.819.001	7,50	500	
2	12.819.001	12,50	250	
3	13.819.001	17,50	250	
4	14.819.001	22,50	100	
5	15.819.001	27,50	50	
6	16.819.001	32,50	50	
7	17.819.001	37,50	50	
8	18.819.001	42,50	50	
9	19.819.001	47,50	50	
10	20.819.001	52,50	25	
11	21.819.001	57,50	25	
12	22.819.001	62,50	25	
· ··				

further number of poles on request

General Information

Pitch	5 mm
No. of poles	1 - 12
Areas of application	Especially suitable for narrow spaces or restricted access.

R

VECO

Technical Data

Clamping Range	solid / flexible / A	WG	
	0,14 - 4 mm² / 0,7	14 - 2,5 mm² / 26	- 12 AWG
Rated Cross Section	2,5 mm ²		
Wire Stripping Length	9 mm ± 0,5 mm		
Overvoltage Category	III	Ш	П
Pollution Severity Level	3	2	2
Rated Voltage	320 V	320 V	630 V
Rated Impulse Voltage	4 kV	4 kV	4 kV
Rated Insulation Voltage	450 V acc. to EN	60998-1	
Rated Current	24 A		
Hole in PCB	ø 1,4 mm		
Torque	0,4 Nm		

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	
Temperature Range	-40°C up to 100°C
Pressure clamp	Tin plated copper
Screw	M2,5; zinc plated steel, blue passivated
Solder pin	1,0 x 0,8 mm; tin plated copper
Terminal body	Zinc plated steel, blue passivated
Pressure plate	Brass, bright

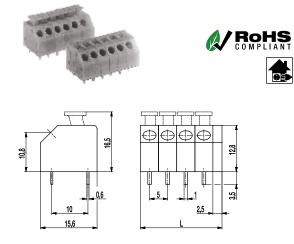
Approvals

	Current	Voltage	Group	AWG	Nm
۶V®	20	300	B	24 - 12	0,4
	10	300	D	24 - 12	0,4
S₽ °	20	300	B	24 - 12	0,4
	10	300	D, E	24 - 12	0,4

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00

874(-DR)

Spring clamp connection diagonal 45° to PCB



The PCB connectors 874 und 874-DR with spring clamp connection and a pitch of 5 mm, are available with 2 to 12 poles.

They provide easy connection of solid and stranded conductors and feature a stainless steel spring clamp which ensures safe permanent contact. The spring clamp of version 874 is operated by pressing a pusher inside the housing with a screwdriver whereas the spring clamp of version 874-DR is manually operated by a protruding lever.

The wire entrance is in a 45° angle to the PC board.

Each pole has a double solder termination with 10 mm pin spacing.

Part N	Part Numbers				
No. of poles	874	874-DR	Length	Pcs	
1	11.812.001	41.812.001	7,50	250	
2	12.812.001	42.812.001	12,50	200	
3	13.812.001	43.812.001	17,50	100	
4	14.812.001	44.812.001	22,50	100	
5	15.812.001	45.812.001	27,50	100	
6	16.812.001	46.812.001	32,50	50	
7	17.812.001	47.812.001	37,50	50	
8	18.812.001	48.812.001	42,50	50	
9	19.812.001	49.812.001	47,50	50	
10	20.812.001	50.812.001	52,50	50	
11	21.812.001	51.812.001	57,50	50	
12	22.812.001	52.812.001	62,50	50	

further number of poles on request

General Information

Pitch	5 mm
No. of poles	1 - 12

ECO

Technical Data

Clamping Range	solid / flexible / A	WG	
	0,14 - 2,5 mm² / 0),14 - 1,5 mm² / 2	26 - 16 AWG
Rated Cross Section	1,5 mm²		
Wire Stripping Length	10 mm ± 0,5 mm		
Overvoltage Category	III	III	
Pollution Severity Level	3	2	2
Rated Voltage	250 V	320 V	630 V
Rated Impulse Voltage	4 kV	4 kV	4 kV
Rated Insulation Voltage	250 V acc. to EN	60998-1	
Rated Current	10 A		
Hole in PCB	ø 1,3 mm		

Material

Moulding	PA, red, V-2	
Comparative Tracking Index	CTI ≥ 600	
Insulating Group	I	
Temperature Range	-40°C up to 100°C	
Terminal body	Tin plated brass	
Solder pin	0,6 x 1,0 mm; tin plated brass	
Spring	Stainless strip steel	

Approvals

	Current	Voltage	Group	AWG	Nm
FL ®	10	300	В	22 - 16	
€ ₽°	10	300	B, D, E	22 - 16	

Options / Accessories

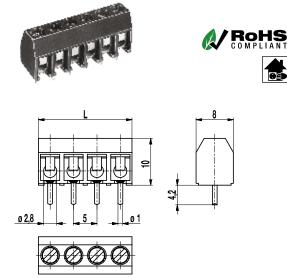
• Consecutive numbering

- Special marking according to drawing
- Self-adhesive marking strip BST-5,00

• Other Pitch

950(-DS)

Screw connection



PCB connectors 950 with a pitch of 5 mm are available in 2- to 32-pole design and can be mounted side-by-side without pole loss.

Wire protection in DS-design reliably prevents damage to stranded wires by the screw.

The screws are secured against self-loosening.

Part Numbers

No. of	950	950-DS	Length	Pcs
poles				
2	10.871.006	20.871.006	10,00	250
3	10.871.053	20.871.053	15,00	250
4	10.871.054	20.871.054	20,00	100
5	10.871.055	20.871.055	25,00	100
6	10.871.056	20.871.056	30,00	100
7	10.871.001	20.871.001	35,00	100
8	10.871.008	20.871.008	40,00	100
9	10.871.009	20.871.009	45,00	100
10	10.871.010	20.871.010	50,00	100
11	10.871.011	20.871.011	55,00	100
12	10.871.062	20.871.062	60,00	100
13	10.871.063	20.871.063	65,00	100
14	10.871.064	20.871.064	70,00	100
15	10.871.065	20.871.065	75,00	100
16	10.871.066	20.871.066	80,00	100
17	10.871.067	20.871.067	85,00	100
18	10.871.068	20.871.068	90,00	100
19	10.871.069	20.871.069	95,00	100
20	10.871.070	20.871.070	100,00	100
21	10.871.071	20.871.071	105,00	100
22	10.871.072	20.871.072	110,00	100
23	10.871.073	20.871.073	115,00	100
24	10.871.074	20.871.074	120,00	100
25	10.871.075	20.871.075	125,00	100
26	10.871.076	20.871.076	130,00	100
27	10.871.077	20.871.077	135,00	100
28	10.871.078	20.871.078	140,00	100
29	10.871.079	20.871.079	145,00	100
30	10.871.080	20.871.080	150,00	100
31	10.871.061	20.871.061	155,00	100
32	10.871.052	20.871.052	160,00	100

General Information

Pitch	5 mm
No. of poles	2 - 32

R

ECO

Clamping Range

Solid / Hexible / A	WG		
0,75 - 4 mm² / 0,75 - 2,5 mm² / 18 - 12 AWG			
0,34 - 2,5 mm² / 0,34 - 2,5 mm² / 22 - 14 AWG			
1,5 mm²			
6 mm ± 0,5 mm			
III	III	П	
3	2	2	
160 V	160 V	320 V	
2,5 kV	2,5 kV	2,5 kV	
130 V acc. to EN	60998-1		
17,5 A			
ø 1,3 mm			
0,4 Nm			
2-8 poles types: '	'no-flame" acc. to	glow-wire tes	
	0,75 - 4 mm² / 0,7 0,34 - 2,5 mm² / 0 1,5 mm² 6 mm ± 0,5 mm III 3 160 V 2,5 kV 130 V acc. to EN 17,5 A Ø 1,3 mm 0,4 Nm	0,34 - 2,5 mm² / 0,34 - 2,5 mm² / 2 1,5 mm² 6 mm ± 0,5 mm III III 3 2 160 V 160 V 2,5 kV 2,5 kV 130 V acc. to EN 60998-1 17,5 A Ø 1,3 mm	

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	2-8 poles: CTI ≥ 600; 9-32 poles: CTI 400
Insulating Group	2-8 poles: I; 9-32 poles: II
Temperature Range	-40°C up to 100°C
Terminal body	Tin plated brass
Screw	M2,6; zinc plated steel, blue passivated
Solder pin	ø 1 mm; tin plated copper
Wire protector	Tin plated tin bronze

Approvals

	Current	Voltage	Group	AWG	Nm
FL ®	15	300	В	26 - 14	0,4
S₽ ®	15	300	В	26 - 14	0,4
	Current	Voltage	mm²		
(\$)	17,5	250	1,5		

Options / Accessories

Consecutive numbering

- Special marking according to drawing
- Self-adhesive marking strip BST-5,00

Longer P.C. pins up to 75 mm

PCB connector for SMD

950-A-SMD

Screw connection, with solder tags





General Information

Pitch	5 mm
No. of poles	2 - 12

Technical Data

Rated Cross Section 1,	solid / flexible / AWG		
Wire Stripping Length6	34 - 2,5 mm² / 0,34 - 2,5 mm² / 22 - 14 AWG		
	5 mm²		
Overvoltage Category	mm		
oververlage eulogery	III		
Pollution Severity Level	3		
Rated Voltage	125 V		
Rated Impulse Voltage	2,5 kV		
Rated Insulation Voltage 13	30 V acc. to EN 60998-1		
Rated Current 6	A		
Soldering process Re	eflow solder		
Torque 0,	4 Nine		

Material

Moulding	PA, black, V-0
Comparative Tracking Index	CTI 250
Insulating Group	Illa
Temperature Range	-40°C up to 105°C; reflow solder temperature (Peak) max. 250°C (15-30 s)
Terminal body	Nickel plated brass
Screw	M2,6; zinc plated steel, blue passivated
Wire protector	Tin plated tin bronze

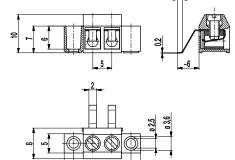
Approvals

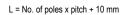
	Current	Voltage	Group	AWG	Nm	
AN ®	15	300	В	26 - 14	0,4	
€₽ °	15	300	В	26 - 14	0,4	

Options / Accessories

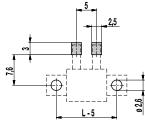
- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00 [1]
- Tape-on-Reel on request

[1] To be fitted after reflow soldering process





PCB Layout



Solder paste thickness: 0,15 - 0,2 mm

Screw connections with wire protection are used on versions 950-A-SMD with a pitch of 5 mm.

This wire protection is extended beyond the rear panel of the housing and bent downwards for connection to the soldering pads. When the terminal strip is fitted, the preloaded soldering tags push against the soldering pads. This assures current transfer with high contact stability.

The housings have mounting flanges at either side, for reliable mechanical fastening on the circuit board. This terminals are packed in tube magazines.

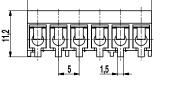
Part Numbers

No. of poles	950-A-SMD	Length	Pcs
2	20.871.266	20,00	624
3	20.871.267	25,00	504
4	20.871.268	30,00	408
5	20.871.269	35,00	360
6	20.871.270	40,00	312
7	20.871.271	45,00	264
8	20.871.272	50,00	240
9	20.871.273	55,00	216
10	20.871.274	60,00	192
11	20.871.275	65,00	192
12	20.871.276	70,00	168

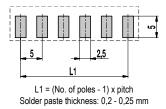
PCB connector for SMD 950-D-SMD-DS

Screw connection









The 950-D-SMD-DS is a reflow solderable PCB terminal for true surface mounting with a pitch of 5 mm.

The geometry of the terminal Body creates enough space for the solder paste and it also enables a good heat circulation for flawless soldering and an optical solder joint inspection.

The housing is made of high temperature material. Its design ensures a good hot-air circulation during the reflow soldering process in a convection oven. The connection side of this product should be positioned in the direction of passage. This terminal can be delivered from 2 to 12 poles.

Part Numbers

No. of poles	950-D-SMD-DS	Length	Pcs
2	20.879.502	10,00	250
3	20.879.503	15,00	250
4	20.879.504	20,00	100
5	20.879.505	25,00	100
6	20.879.506	30,00	100
7	20.879.507	35,00	100
8	20.879.508	40,00	100
9	20.879.509	45,00	100
10	20.879.510	50,00	100
11	20.879.511	55,00	100
12	20.879.512	60,00	100

General Information

Pitch	5 mm
No. of poles	2 - 12

Technical Data

œ

Clamping Range	solid / flexible / Al	NG	
with wire protector	0,34 - 2,5 mm² / 0),34 - 2,5 mm² / 2	2 - 14 AWG
Rated Cross Section	1,5 mm²		
Wire Stripping Length	6 mm ± 0,5 mm		
Overvoltage Category	III		II
Pollution Severity Level	3	2	2
Rated Voltage	160 V	160 V	320 V
Rated Impulse Voltage	2,5 kV	2,5 kV	2,5 kV
Rated Insulation Voltage	130 V acc. to EN	60998-1	
Rated Current	17,5 A		
Soldering process	Reflow solder		
Torque	0,4 Nm		

Material

PA, black, V-0
CTI ≥ 600
l
-40°C up to 150°C; reflow solder temperature (Peak) max. 260°C (15-30 s)
Tin plated brass
M2,6; zinc plated steel, blue passivated
Tin plated tin bronze

Approvals

	Current	Voltage	Group	AWG	Nm	
RI ®	15	300	В	26 - 14	0,4	
S₽ °	15	300	В	26 - 14	0,4	

Options / Accessories

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00 [1]
- Special packaging on request: Tape-on-Reel Tray Tube magazine

Part Numbers: Tape-on-Reel

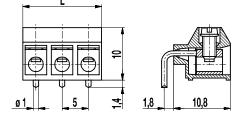
No. of poles	950-D-SMD-DS		Tape Height	Pcs
2	20.879.502.A00	32 mm	12,3 mm	500

[1] To be fitted after reflow soldering process

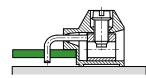
950-LH(-DS)

Screw connection, with angled solder pin, pottable





Example of application



By placing the circuit board below the point where the solder pins leaves the housing, a reduction of the effective height can be achieved. Longer terminal pins and another position of the bend upon request.

The 950-LH series PCB screw connector with a pitch of 5 mm features an angled solder pin and is particularly suited for potting printed circuits. For such potting applications, the solder pin is sealed at the housing opening against seeping casting resin. This PCB screw connector with a pitch of 5 mm is available in 2- to 12-pole design and can be mounted side-by-side without pole loss.

Wire protection in DS-design reliably prevents damage to stranded wires by the screw.

The wire entrance is parallel to the PCB whereas the casting resin surface is vertical to the wire entrance. Version 951-LH alternatively provides wire entrance vertical to the PCB.

Part Numbers					
No. of poles	950-LH	950-LH-DS	Length	Pcs	
2	10.871.452	20.871.452	10,00	250	
3	10.871.453	20.871.453	15,00	250	
4	10.871.454	20.871.454	20,00	200	
5	10.871.455	20.871.455	25,00	100	
6	10.871.456	20.871.456	30,00	100	
7	10.871.457	20.871.457	35,00	100	
8	10.871.458	20.871.458	40,00	100	
9	10.871.459	20.871.459	45,00	100	
10	10.871.460	20.871.460	50,00	100	
11	10.871.461	20.871.461	55,00	100	
12	10.871.462	20.871.462	60,00	100	

General Information

Pitch	5 mm
No. of poles	2 - 12

Technical Data

Clamping Range	solid / flexible / A	WG				
without wire protector	0,75 - 2,5 mm² / 0),75 - 2,5 mm² / 1	8 - 14 AWG			
with wire protector	0,34 - 2,5 mm² / 0	0,34 - 2,5 mm² / 0,34 - 2,5 mm² / 22 - 14 AWG				
Rated Cross Section	1,5 mm²					
Wire Stripping Length	6 mm ± 0,5 mm					
Overvoltage Category	III	Ш	II			
Pollution Severity Level	3	2	2			
Rated Voltage	160 V	160 V	320 V			
Rated Impulse Voltage	2,5 kV	2,5 kV	2,5 kV			
Rated Insulation Voltage	130 V acc. to EN	60998-1				
Rated Current	17,5 A					
Hole in PCB	ø 1,3 mm					
Torque	0,4 Nm					

Material

TI ≥ 600
0°C up to 100°C
in plated brass
2,6; zinc plated steel, blue passivated
1 mm; tin plated copper
in plated tin bronze

Approvals

1.00	alo					
	Current	Voltage	Group	AWG	Nm	
FL ®	15	300	В	26 - 14	0,4	
S ₽°	15	300	В	26 - 14	0,4	
	Current	Voltage	mm²			
(\$)	17,5	250	1,5			

Options / Accessories

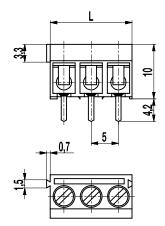
- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distance
- · Other P.C. pin length and bending positions on request

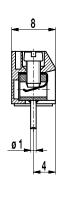
950-T(-DS)

Screw connection, interlocking









Part Numbers

i uit iii				
No. of poles	950-T	950-T-DS	Length	Pcs
2	10.871.602	20.871.602	10,00	250
3	10.871.603	20.871.603	15,00	250

General Information

Pitch	5 mm
No. of poles	2 + 3

R

WECO

Technical Data

Clamping Range	solid / flexible / A	solid / flexible / AWG				
without wire protector	0,75 - 4 mm² / 0,75 - 2,5 mm² / 18 - 12 AWG					
with wire protector	0,34 - 2,5 mm² / 0	0,34 - 2,5 mm² / 0,34 - 2,5 mm² / 22 - 14 AWG				
Rated Cross Section	1,5 mm²					
Wire Stripping Length	6 mm ± 0,5 mm					
Overvoltage Category	III	111	II			
Pollution Severity Level	3	2	2			
Rated Voltage	160 V	160 V	320 V			
Rated Impulse Voltage	2,5 kV	2,5 kV	2,5 kV			
Rated Insulation Voltage	130 V acc. to EN	60998-1				
Rated Current	17,5 A					
Hole in PCB	ø 1,3 mm					
Torque	0,4 Nm					

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C
Terminal body	Tin plated brass
Screw	M2,6; zinc plated steel, blue passivated
Solder pin	ø 1 mm; tin plated copper
Wire protector	Tin plated tin bronze

Approvals

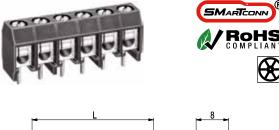
		N/+11++++	0	414/0	N1
	Current	Voltage	Group	AWG	Nm
FU ®	15	300	В	26 - 14	0,4
S ₽°	15	300	В	26 - 14	0,4
	Current	Voltage	mm²		
(\$)	17,5	250	1,5		

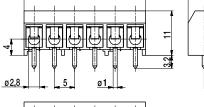
- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Longer P.C. pins up to 75 mm

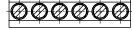
PCB connector for THR

950-THR(-DS)

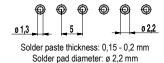
Screw connection







PCB Layout



The products based on our established 950 series have been designed for the soldering process in Through-Hole-Reflow technology.

The soldering paste is applied to the plated through holes and the pins are placed in the circuit board and soldered by a reflow oven.

The terminal mouldings are made of heat-resistant material. The stand-offs on the base ensures there is enough room for the soldering paste and facilitates good heat circulation for optimum soldering and enables the soldering joint to be visually inspected.

The solder pin projects very slightly with a circuit board thickness of 1,6 mm and creates a solder point on both sides and thus guarantees a secure mounting. The position of the solder pins enables an equally minimal allocation area on the circuit board as with wave soldering.

This PCB terminal is for a conductor cross sections of 1,5 mm² in 5 mm pitch and available in 2 to 12 pole lengths, with or without wire protector as well as a version with enlarged clamping size (958-THR).

Part Numbers							
No. of poles	950-THR	950-THR-DS	Length	Pcs			
2	10.879.102	20.879.102	10,00	250			
3	10.879.103	20.879.103	15,00	250			
4	10.879.104	20.879.104	20,00	100			
5	10.879.105	20.879.105	25,00	100			
6	10.879.106	20.879.106	30,00	100			
7	10.879.107	20.879.107	35,00	100			
8	10.879.108	20.879.108	40,00	100			
9	10.879.109	20.879.109	45,00	100			
10	10.879.110	20.879.110	50,00	100			
11	10.879.111	20.879.111	55,00	100			
12	10.879.112	20.879.112	60,00	100			

General Information

Pitch	5 mm
No. of poles	2 - 12

Technical Data

solid / flexible / AWG					
0,75 - 4 mm² / 0,7	0,75 - 4 mm² / 0,75 - 2,5 mm² / 18 - 12 AWG				
0,34 - 2,5 mm² / 0	0,34 - 2,5 mm² / 0,34 - 2,5 mm² / 22 - 14 AWG				
1,5 mm²					
6 mm ± 0,5 mm					
III	Ш	II			
3	2	2			
160 V	160 V	320 V			
2,5 kV	2,5 kV	2,5 kV			
130 V acc. to EN 60998-1					
17,5 A					
Wave solder & re	flow solder				
ø 1,3 mm					
Wave solder max. 1,6 mm; reflow solder 1,6 - 3,2 mm					
0,4 Nm					
	0,75 - 4 mm² / 0,7 0,34 - 2,5 mm² / 0 1,5 mm² 6 mm ± 0,5 mm III 3 160 V 2,5 kV 130 V acc. to EN 17,5 A Wave solder & re ø 1,3 mm Wave solder max mm	0,75 - 4 mm² / 0,75 - 2,5 mm² / 18 0,34 - 2,5 mm² / 0,34 - 2,5 mm² / 2 1,5 mm² 6 mm ± 0,5 mm III III 3 2 160 V 160 V 2,5 kV 2,5 kV 130 V acc. to EN 60998-1 17,5 A Wave solder & reflow solder ø 1,3 mm Wave solder max. 1,6 mm; reflow mm			

Material

Moulding	PA HT, black, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	
Temperature Range	-40°C up to 150°C; reflow solder temperature (Peak) max. 260°C (15-30 s)
Terminal body	Tin plated brass
Screw	M2,6; zinc plated steel, blue passivated
Solder pin	ø 1 mm; tin plated brass
Wire protector	Tin plated tin bronze

Approvals

	Current	Voltage	Group	AWG	Nm	
RI ®	15	300	В	26 - 14	0,4	
€₽ ®	15	300	В	26 - 14	0,4	

Options / Accessories

Consecutive numbering

- Special marking according to drawing
- Self-adhesive marking strip BST-5,00 [1]
- Other P.C. pin lengths on request

Part Numbers: Tape-on-Reel

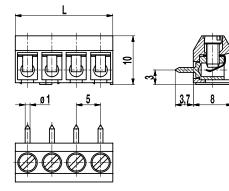
No. of poles	950-THR	950-THR-DS	Tape Width	Tape Height	Pcs		
6		20.879.106.A00	56 mm	15,7 mm	300		
further number of poles on request							

[1] To be fitted after reflow soldering process

951(-DS)

Screw connection, wire entrance vertical to PCB





Part Numbers					
No. of			Length	Pcs	
poles	•				
2	10.871.012	20.871.012	10,00	250	
3	10.871.083	20.871.083	15,00	250	
4	10.871.084	20.871.084	20,00	200	
5	10.871.085	20.871.085	25,00	100	
6	10.871.086	20.871.086	30,00	100	
7	10.871.022	20.871.022	35,00	100	
8	10.871.018	20.871.018	40,00	100	
9	10.871.019	20.871.019	45,00	100	
10	10.871.020	20.871.020	50,00	100	
11	10.871.021	20.871.021	55,00	100	
12	10.871.082	20.871.082	60,00	100	
13	10.871.023	20.871.023	65,00	100	
14	10.871.024	20.871.024	70,00	100	
15	10.871.025	20.871.025	75,00	100	
16	10.871.026	20.871.026	80,00	100	
17	10.871.027	20.871.027	85,00	100	
18	10.871.028	20.871.028	90,00	100	
19	10.871.029	20.871.029	95,00	100	
20	10.871.030	20.871.030	100,00	100	
21	10.871.031	20.871.031	105,00	100	
22	10.871.032	20.871.032	110,00	100	
23	10.871.039	20.871.039	115,00	100	
24	10.871.040	20.871.040	120,00	100	
25	10.871.041	20.871.041	125,00	100	
26	10.871.042	20.871.042	130,00	100	
27	10.871.037	20.871.037	135,00	100	
28	10.871.088	20.871.088	140,00	100	
29	10.871.089	20.871.089	145,00	100	
30	10.871.090	20.871.090	150,00	100	
31	10.871.091	20.871.091	155,00	100	
32	10.871.092	20.871.092	160,00	100	

General Information

Pitch	5 mm
No. of poles	2 - 32

R

WECO

Technical Data

Clamping Range	solid / flexible / AWG				
without wire protector	0,75 - 4 mm² / 0,75 - 2,5 mm² / 18 - 12 AWG				
with wire protector	0,34 - 2,5 mm² / 0,3	0,34 - 2,5 mm² / 0,34 - 2,5 mm² / 22 - 14 AWG			
Rated Cross Section	1,5 mm²	1,5 mm ²			
Wire Stripping Length	5 mm ± 0,5 mm				
Overvoltage Category	III	Ш	II		
Pollution Severity Level	3	2	2		
Rated Voltage	160 V (125 V)	160 V	320 V (250 V)		
Rated Impulse Voltage	2,5 kV	2,5 kV	2,5 kV		
Rated Insulation Voltage	130 V acc. to EN 6	0998-1			
Rated Current	17,5 A				
Hole in PCB	ø 1,3 mm				
Torque	0,4 Nm	0,4 Nm			
Other specifications	v		Voltage data in brackets are valid for 9-32 poles types. 2-8 poles types are "no-flame" acc. to		

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	2-8 poles: CTI ≥ 600; 9-32 poles: CTI 400
Insulating Group	2-8 poles: I; 9-32 poles: II
Temperature Range	-40°C up to 100°C
Terminal body	Tin plated brass
Screw	M2,6; zinc plated steel, blue passivated
Solder pin	ø 1 mm; tin plated brass
Wire protector	Tin plated tin bronze

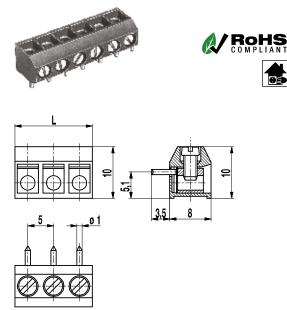
Approvals

	Current	Voltage	Group	AWG	Nm
FL ®	15	300	В	26 - 14	0,4
S ₽®	15	300	В	26 - 14	0,4
	Current	Voltage	mm²		
(\$)	17,5	250	1,5		

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00

951-HG(-DS)

Screw connection, wire entrance vertical to PCB, extended insertion length



The PCB connector 951-HG has a solder pin welded on top of the socket bore, which expands the insertion length to series 950 socket depth. Extra-long solder pins are available upon request.

The wire entrance is vertical to the PCB.

Wire protection in DS-design reliably prevents damage to stranded wires by the screw.

Part N	umbers			
No. of poles	951-HG	951-HG-DS	Length	Pcs
2	10.871.202	20.871.202	10,00	250
3	10.871.203	20.871.203	15,00	250
4	10.871.204	20.871.204	20,00	200
5	10.871.205	20.871.205	25,00	100
6	10.871.206	20.871.206	30,00	100
7	10.871.207	20.871.207	35,00	100
8	10.871.208	20.871.208	40,00	100
9	10.871.209	20.871.209	45,00	100
10	10.871.210	20.871.210	50,00	100
11	10.871.211	20.871.211	55,00	100
12	10.871.212	20.871.212	60,00	100
13	10.871.213	20.871.213	65,00	100
14	10.871.214	20.871.214	70,00	100
15	10.871.215	20.871.215	75,00	100
16	10.871.216	20.871.216	80,00	100
17	10.871.217	20.871.217	85,00	100
18	10.871.218	20.871.218	90,00	100
19	10.871.219	20.871.219	95,00	100
20	10.871.220	20.871.220	100,00	100
21	10.871.221	20.871.221	105,00	100
22	10.871.222	20.871.222	110,00	100
23	10.871.223	20.871.223	115,00	100
24	10.871.224	20.871.224	120,00	100
25	10.871.225	20.871.225	125,00	100
26	10.871.226	20.871.226	130,00	100
27	10.871.227	20.871.227	135,00	100
28	10.871.228	20.871.228	140,00	100
29	10.871.229	20.871.229	145,00	100
further numl	ber of poles on reque	st		

General Information		
Pitch	5 mm	
No. of poles	2 - 32	

R

ECO

Technical Data

Clamping Range	solid / flexible / AWG				
without wire protector	0,75 - 4 mm² / 0,7	0,75 - 4 mm² / 0,75 - 2,5 mm² / 18 - 12 AWG			
with wire protector	0,34 - 2,5 mm² / (0,34 - 2,5 mm² / 0,34 - 2,5 mm² / 22 - 14 AWG			
Rated Cross Section	1,5 mm²	1,5 mm²			
Wire Stripping Length	6 mm ± 0,5 mm	6 mm ± 0,5 mm			
Overvoltage Category	III	III	II		
Pollution Severity Level	3	2	2		
Rated Voltage	160 V	160 V	320 V		
Rated Impulse Voltage	2,5 kV	2,5 kV	2,5 kV		
Rated Insulation Voltage	130 V acc. to EN	60998-1			
Rated Current	17,5 A				
Hole in PCB	ø 1,3 mm				
Torque	0,4 Nm				
Other specifications	2-8 poles types a test.	re "no-flame" acc	c. to glow-wire		

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	2-8 poles: CTI ≥ 600; 9-32 poles: CTI 400
Insulating Group	2-8 poles: I; 9-32 poles: II
Temperature Range	-40°C up to 100°C
Terminal body	Tin plated brass
Screw	M2,6; zinc plated steel, blue passivated
Solder pin	ø 1 mm; tin plated copper
Wire protector	Tin plated tin bronze

Approvals

	Current	Voltage	Group	AWG	Nm
FL ®	15	300	В	26 - 14	0,4
€₽ °	15	300	В	26 - 14	0,4
	Current	Voltage	mm²		
(\$)	17,5	250	1,5		

Options / Accessories

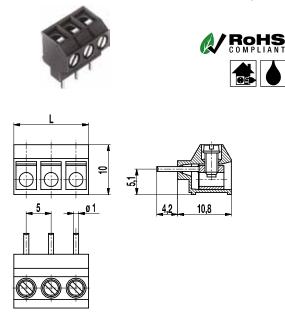
Consecutive numbering

- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Longer P.C. pins up to 75 mm

further number of poles on request

951-LH(-DS)

Screw connection, wire entrance vertical to PCB, pottable



The 951-LH series PCB screw connector with a pitch of 5 mm is particularly suited for potting printed circuits. For such potting applications, the solder pin is sealed at the housing opening against seeping casting resin. This PCB screw connector with a pitch of 5 mm is available in 2- to 12-pole design and can be mounted side-by-side without pole loss.

Wire protection in DS-design reliably prevents damage to stranded wires by the screw.

The wire entrance is vertical to the PCB - the casting resin surface is also vertical to the wire entrance. Version 950-LH alternatively provides wire entrance parallel to the PCB.

Part Numbers

No. of poles	951-LH	951-LH-DS	Length	Pcs
2	15.871.452	25.871.452	10,00	250
3	15.871.453	25.871.453	15,00	250
4	15.871.454	25.871.454	20,00	200
5	15.871.455	25.871.455	25,00	100
6	15.871.456	25.871.456	30,00	100
7	15.871.457	25.871.457	35,00	100
8	15.871.458	25.871.458	40,00	100
9	15.871.459	25.871.459	45,00	100
10	15.871.460	25.871.460	50,00	100
11	15.871.461	25.871.461	55,00	100
12	15.871.462	25.871.462	60,00	100

General Information

Pitch	5 mm
No. of poles	2 - 12

ECO

Technical Data

Clamping Range	solid / flexible / AWG				
without wire protector	0,75 - 2,5 mm² / 0	0,75 - 2,5 mm² / 0,75 - 2,5 mm² / 18 - 14 AWG			
with wire protector	0,34 - 2,5 mm² / 0	0,34 - 2,5 mm² / 0,34 - 2,5 mm² / 22 - 14 AWG			
Rated Cross Section	1,5 mm²	1,5 mm²			
Wire Stripping Length	6 mm ± 0,5 mm				
Overvoltage Category	III	111	II		
Pollution Severity Level	3	2	2		
Rated Voltage	160 V	160 V	320 V		
Rated Impulse Voltage	2,5 kV	2,5 kV	2,5 kV		
Rated Insulation Voltage	130 V acc. to EN	60998-1			
Rated Current	17,5 A				
Hole in PCB	ø 1,3 mm				
Torque	0,4 Nm				

Material

PA, grey, V-0
CTI ≥ 600
1
-40°C up to 100°C
Tin plated brass
M2,6; zinc plated steel, blue passivated
ø 1 mm; tin plated brass
Tin plated tin bronze

Approvals

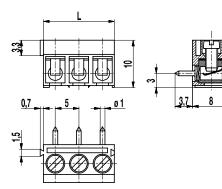
, ppi o raio							
	Current	Voltage	Group	AWG	Nm		
RI ®	15	300	В	26 - 14	0,4		
SP°	15	300	В	26 - 14	0,4		
	Current	Voltage	mm²				
(\$)	17,5	250	1,5				

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Other P.C. pin lengths on request

951-T(-DS)

Screw connection, wire entrance vertical to PCB, interlocking





Part Numbers

No. of poles	951-T	951-T-DS	Length	Pcs
2	10.871.612	20.871.612	10,00	250
3	10.871.613	20.871.613	15,00	250

General Informatio	on
Pitch	5 mm
No. of poles	2 + 3

R

WECO

Technical Data

05

Clamping Range	solid / flexible / A	WG				
without wire protector	0,75 - 4 mm² / 0,7	0,75 - 4 mm² / 0,75 - 2,5 mm² / 18 - 12 AWG				
with wire protector	0,34 - 2,5 mm² / 0),34 - 2,5 mm² / 2	22 - 14 AWG			
Rated Cross Section	1,5 mm²					
Wire Stripping Length	6 mm ± 0,5 mm					
Overvoltage Category	III	III	II			
Pollution Severity Level	3	2	2			
Rated Voltage	160 V	160 V	320 V			
Rated Impulse Voltage	2,5 kV	2,5 kV	2,5 kV			
Rated Insulation Voltage	130 V acc. to EN	60998-1				
Rated Current	17,5 A					
Hole in PCB	ø 1,3 mm					
Torque	0,4 Nm					

Material

PA, grey, V-0
CTI ≥ 600
-40°C up to 100°C
Tin plated brass
M2,6; zinc plated steel, blue passivated
ø 1 mm; tin plated brass
Tin plated tin bronze

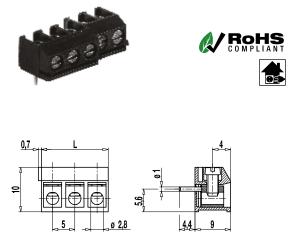
Approvals

, hb						
	Current	Voltage	Group	AWG	Nm	
FU ®	15	300	В	26 - 14	0,4	
S ₽°	15	300	В	26 - 14	0,4	
	Current	Voltage	mm²			
(\$)	17,5	250	1,5			

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00

951-THG(-DS)

Screw connection, wire entrance vertical to PCB, extended insertion length, interlocking



On version 951-THG(-DS) the copper solder pin is welded on top of the socket bore which expands the insertion length to series 950 socket depth and allows to use extra-long solder pins.

Wire protection in DS-design reliably prevents damage to stranded wires by the screw.

Lateral latching elements allow to link this type of screw connector with terminal strips of any length.

Part Nu		
No. of	951-THG	951-TH

No. of poles	951-THG	951-THG-DS	Length	Pcs
2	10.871.622	20.871.622	10,00	250
3	10.871.623	20.871.623	15,00	250

General Information

Pitch	5 mm	
No. of poles	2 + 3	

ECO

Technical Data

Clamping Range	solid / flexible / AWG
without wire protector	0,75 - 4 mm² / 0,75 - 2,5 mm² / 18 - 12 AWG
with wire protector	0,34 - 2,5 mm² / 0,34 - 2,5 mm² / 22 - 14 AWG
Rated Cross Section	1,5 mm²
Wire Stripping Length	6 mm
Overvoltage Category	III
Pollution Severity Level	3
Rated Voltage	160 V
Rated Impulse Voltage	2,5 kV
Rated Insulation Voltage	130 V acc. to EN 60998-1
Rated Current	17,5 A
Hole in PCB	ø 1,3 mm
Torque	0,4 Nm

Material

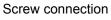
PA, grey, V-0
CTI ≥ 600
-40°C up to 100°C
Tin plated brass
M2,6; zinc plated steel, blue passivated
ø 1 mm; tin plated copper
Tin plated tin bronze

Approvals

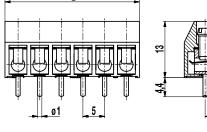
	Current	Voltage	Group	AWG	Nm	
FL®	15	300	В	26 - 14	0,4	
(F)	15	300	В	26 - 14	0,4	
	Current	Voltage	mm²			
(\$)	17,5	250	1,5			

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Longer P.C. pins up to 75 mm

PCB connector 970(-DS)









Part Numbers

Fait Numbers						
No. of poles	970	970-DS	Length	Pcs		
2	10.872.002	20.872.002	11,00	250		
3	10.872.003	20.872.003	16,00	250		
4	10.872.004	20.872.004	21,00	200		
5	10.872.005	20.872.005	26,00	100		
6	10.872.006	20.872.006	31,00	100		
7	10.872.007	20.872.007	36,00	100		
8	10.872.008	20.872.008	41,00	100		
9	10.872.009	20.872.009	46,00	100		
10	10.872.010	20.872.010	51,00	100		
11	10.872.011	20.872.011	56,00	100		
12	10.872.012	20.872.012	61,00	100		
13	10.872.013	20.872.013	66,00	100		
14	10.872.014	20.872.014	71,00	100		
15	10.872.015	20.872.015	76,00	100		
16	10.872.016	20.872.016	81,00	100		
17	10.872.017	20.872.017	86,00	100		
18	10.872.018	20.872.018	91,00	100		
19	10.872.019	20.872.019	96,00	100		
20	10.872.020	20.872.020	101,00	100		
21	10.872.021	20.872.021	106,00	100		
22	10.872.022	20.872.022	111,00	100		
23	10.872.023	20.872.023	116,00	100		
24	10.872.024	20.872.024	121,00	100		
25	10.872.025	20.872.025	126,00	100		
26	10.872.026	20.872.026	131,00	100		
27	10.872.027	20.872.027	136,00	100		
28	10.872.028	20.872.028	141,00	100		
29	10.872.029	20.872.029	146,00	100		
30	10.872.030	20.872.030	151,00	100		
31	10.872.031	20.872.031	156,00	100		
32	10.872.032	20.872.032	161,00	100		

General Information

Pitch	5 mm
No. of poles	2 - 32

R

ECO

Technical Data

Clamping Range	solid / flexible / AW	solid / flexible / AWG			
without wire protector	1 - 6 mm² / 1 - 2,5 mm² / 16 - 12 AWG				
with wire protector	0,75 - 4 mm² / 0,75	0,75 - 4 mm² / 0,75 - 2,5 mm² / 18 - 12 AWG			
Rated Cross Section	2,5 mm²	2,5 mm²			
Wire Stripping Length	6,5 mm ± 0,5 mm				
Overvoltage Category	III	Ш	II		
Pollution Severity Level	3	2	2		
Rated Voltage	250 V (200 V)	320 V	630 V (400 V)		
Rated Impulse Voltage	4 kV	4 kV	4 kV		
Rated Insulation Voltage	250 V acc. to EN 60	250 V acc. to EN 60998-1			
Rated Current	24 A	24 A			
Hole in PCB	ø 1,3 mm				
Torque	0,5 Nm				
Other specifications	Voltage data in brackets are valid for 9-32 poles types. 2-8 poles types are "no-flame" acc. to glow-wire test.				

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	2-8 poles: CTI ≥ 600; 9-32 poles: CTI 400
Insulating Group	2-8 poles: I; 9-32 poles: II
Temperature Range	-40°C up to 100°C
Terminal body	Tin plated brass
Screw	M3; zinc plated steel, blue passivated
Solder pin	ø 1 mm; tin plated copper
Wire protector	Tin plated tin bronze

Approvals

	Current	Voltage	Group	AWG	Nm
AI ®	20 10	300 300	B D	22-12 [1] 22-12 [1]	0,51 0,51
€₽ ®	20 10	300 300	B D, E	26 - 12 26 - 12	0,51 0,51
	Current	Voltage	mm²		
(\$)	24	400	2,5		

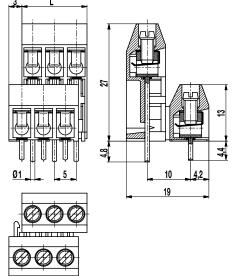
[1] Min No. 26 AWG for factory-wiring only

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Longer P.C. pins up to 95 mm
- With test holes, see 970-MP(-DS)
- Version with extended wire entrance
- Double wire protector as bridge

970-EN(-DS)

Screw connection, two-tier version





The PCB screw connector 970-EN is a two-tier version with a pitch of 5 mm and available with 4 to 24 poles.

This connector is a combination of the 979-HEN with the 970 version. The rear latching hook on the 970 series locks both terminals to one unit. This configuration allows application-specific locking combinations.

Wire protection in DS-design reliably prevents damage to stranded wires by the screw.

Part Numbers

Partin	umpers			
No. of poles	970-EN	970-EN-DS	Length	Pcs
4	10.872.962	20.872.962	10,00	100
6	10.872.963	20.872.963	15,00	50
8	10.872.964	20.872.964	20,00	50
10	10.872.965	20.872.965	25,00	50
12	10.872.966	20.872.966	30,00	50
14	10.872.967	20.872.967	35,00	25
16	10.872.968	20.872.968	40,00	25
18	10.872.969	20.872.969	45,00	25
20	10.872.970	20.872.970	50,00	25
22	10.872.971	20.872.971	55,00	25
24	10.872.972	20.872.972	60,00	25

General Information

Pitch	5 mm
No. of poles	4 - 24

ECO

Technical Data

Clamping Range	solid / flexible / A	solid / flexible / AWG			
without wire protector	1 - 6 mm² / 1 - 2,5	1 - 6 mm² / 1 - 2,5 mm² / 16 - 12 AWG			
with wire protector	0,75 - 4 mm² / 0,7	0,75 - 4 mm² / 0,75 - 2,5 mm² / 18 - 12 AWG			
Rated Cross Section	2,5 mm²	2,5 mm ²			
Wire Stripping Length	6,5 mm				
Overvoltage Category	111	III	II		
Pollution Severity Level	3	2	2		
Rated Voltage	250 V	320 V	630 V		
Rated Impulse Voltage	4 kV	4 kV	4 kV		
Rated Insulation Voltage	250 V acc. to EN	60998-1			
Rated Current	24 A	24 A			
Hole in PCB	ø 1,3 mm	ø 1,3 mm			
Torque	0,5 Nm	0,5 Nm			

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C
Terminal body	Tin plated brass
Screw	M3; zinc plated steel, blue passivated
Solder pin	ø 1 mm; tin plated copper
Wire protector	Tin plated tin bronze

Approvals

	Current	Voltage	Group	AWG	Nm
AI ®	20 10	300 300	B D	22-12 [1] 22-12 [1]	0,51 0,51
€₽ °	20 10	300 300	B D, E	26 - 12 26 - 12	0,51 0,51
	Current	Voltage	mm²		
(t)	24	250	2,5		

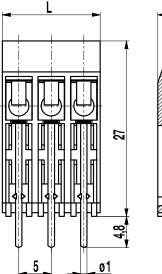
[1] Min No. 26 AWG for factory-wiring only

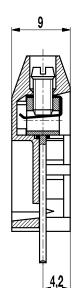
- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Other P.C. pin lengths on request
- Double wire protector as bridge
- Cover for the solder pins for additional misplacing and contact protection
- Two-tier version with front PCB connector offset to the right

PCB connector 970-HEN(-DS) Screw connection, tall version









The PCB connector 970-HEN is a tall version with a pitch of 5 mm and available with 2 to 12 poles.

This tall version is particularly designed for encapsulating PCBs whose mounting location shall provide connection outside the housing.

Wire protection in DS-design reliably prevents damage to stranded wires by the screw.

Connecting the two PCB connectors 970 and 970-EN yields the two-tier version 970-EN.

Part Numbers

No. of poles	970-HEN	970-HEN-DS	Length	Pcs
2	17.872.962	27.872.962	10,00	250
3	17.872.963	27.872.963	15,00	200
4	17.872.964	27.872.964	20,00	100
5	17.872.965	27.872.965	25,00	100
6	17.872.966	27.872.966	30,00	50
7	17.872.967	27.872.967	35,00	50
8	17.872.968	27.872.968	40,00	50
9	17.872.969	27.872.969	45,00	50
10	17.872.970	27.872.970	50,00	50
11	17.872.971	27.872.971	55,00	50
12	17.872.972	27.872.972	60,00	50

General Information

Pitch	5 mm
No. of poles	2 - 12

VECO

Technical Data

Clamping Range	solid / flexible / AWG				
without wire protector	1 - 6 mm² / 1 - 2,5 mm² / 16 - 12 AWG				
with wire protector	0,75 - 4 mm² / 0,75 - 2,5 mm² / 18 - 12 AWG				
Rated Cross Section	2,5 mm ²				
Wire Stripping Length	6,5 mm ± 0,5 mm				
Overvoltage Category	III	Ш	II		
Pollution Severity Level	3	2	2		
Rated Voltage	250 V	320 V	630 V		
Rated Impulse Voltage	4 kV	4 kV	4 kV		
Rated Insulation Voltage	250 V acc. to EN	60998-1			
Rated Current	24 A				
Hole in PCB	ø 1,3 mm				
Torque	0,5 Nm				

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C
Terminal body	Tin plated brass
Screw	M3; zinc plated steel, blue passivated
Solder pin	ø 1 mm; tin plated copper
Wire protector	Tin plated tin bronze

Approvals

	Current	Voltage	Group	AWG	Nm
AD ®	20 10	300 300	B D	22-12 [1] 22-12 [1]	0,51 0,51
€ ₽°	20 10	300 300	B D, E	26 - 12 26 - 12	0,51 0,51
	Current	Voltage	mm²		
(\$)	24	250	2,5		

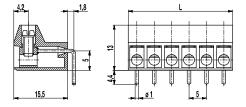
[1] Min No. 26 AWG for factory-wiring only

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Other P.C. pin lengths on request
- Double wire protector as bridge
- Cover for the solder pins for additional misplacing and contact protection

970-LH(-DS)

Screw connection, right angle solder pin, pottable





The 970-LH series PCB screw connector with a pitch of 5 mm features an angled solder pin is particularly suited for potting printed circuits. For such potting applications, the solder pin is sealed at the housing opening against seeping casting resin. This PCB screw connector is available in 2- to 12-pole design and can be mounted side-by-side without pole loss.

Wire protection in DS-design reliably prevents damage to stranded wires by the screw.

The wire entrance is parallel to the PCB whereas the casting resin surface is vertical to the wire entrance. Version 971-LH alternatively provides wire entrance vertical to the PCB.

Part Nu	umbers			
No. of poles	970-LH	970-LH-DS	Length	Pcs
2	10.873.402	20.873.402	10,00	100
3	10.873.403	20.873.403	15,00	100
4	10.873.404	20.873.404	20,00	100
5	10.873.405	20.873.405	25,00	500
6	10.873.406	20.873.406	30,00	100
7	10.873.407	20.873.407	35,00	50
8	10.873.408	20.873.408	40,00	50
9	10.873.409	20.873.409	45,00	50
10	10.873.410	20.873.410	50,00	50
11	10.873.411	20.873.411	55,00	50
12	10.873.412	20.873.412	60,00	50

General Information

Pitch	5 mm
No. of poles	2 - 12

Technical Data

Clamping Range	solid / flexible / A	solid / flexible / AWG			
without wire protector	1 - 6 mm² / 1 - 2,5	1 - 6 mm² / 1 - 2,5 mm² / 16 - 12 AWG			
with wire protector	0,75 - 4 mm² / 0,7	0,75 - 4 mm² / 0,75 - 2,5 mm² / 18 - 12 AWG			
Rated Cross Section	2,5 mm²	2,5 mm²			
Wire Stripping Length	8 mm ± 0,5 mm				
Overvoltage Category	III	III	II		
Pollution Severity Level	3	2	2		
Rated Voltage	250 V	320 V	630 V		
Rated Impulse Voltage	4 kV	4 kV	4 kV		
Rated Insulation Voltage	250 V acc. to EN	60998-1			
Rated Current	24 A	24 A			
Hole in PCB	ø 1,3 mm	ø 1,3 mm			
Torque	0,5 Nm				

Material

PA, grey, V-0
CTI ≥ 600
1
-40°C up to 100°C
Tin plated brass
M3; zinc plated steel, blue passivated
ø 1 mm; tin plated copper
Tin plated tin bronze

Approvals

	Current	Voltage	Group	AWG	Nm
AN ®	20 10	300 300	B D	22-12 [1] 22-12 [1]	0,51 0,51
S₽ °	20 10	300 300	B D, E	26 - 12 26 - 12	0,51 0,51
	Current	Voltage	mm²		
(\$)	24	400	2,5		

[1] Min No. 26 AWG for factory-wiring only

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Other P.C. pin lengths and bending positions on request
- Version with extended wire entrance
- Version with larger clamping range
- Double wire protector as bridge

PCB connector 970-MP(-DS)

Screw connection, with test holes

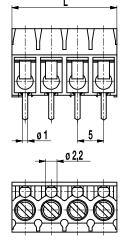




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4.4





Part Numbers

i ait ii	umbers			
No. of poles	970-MP	970-MP-DS	Length	Pcs
2	10.872.202	20.872.202	10,00	250
3	10.872.203	20.872.203	15,00	250
4	10.872.204	20.872.204	20,00	200
5	10.872.205	20.872.205	25,00	100
6	10.872.206	20.872.206	30,00	100
7	10.872.207	20.872.207	35,00	100
8	10.872.208	20.872.208	40,00	100
9	10.872.209	20.872.209	45,00	100
10	10.872.210	20.872.210	50,00	100
11	10.872.211	20.872.211	55,00	100
12	10.872.212	20.872.212	60,00	100
13	10.872.213	20.872.213	65,00	100
14	10.872.214	20.872.214	70,00	100
15	10.872.215	20.872.215	75,00	100
16	10.872.216	20.872.216	80,00	100
17	10.872.217	20.872.217	85,00	100
18	10.872.218	20.872.218	90,00	100
19	10.872.219	20.872.219	95,00	100
20	10.872.220	20.872.220	100,00	100
21	10.872.221	20.872.221	105,00	100
22	10.872.222	20.872.222	110,00	100
23	10.872.223	20.872.223	115,00	100
24	10.872.224	20.872.224	120,00	100

General Information

Pitch	5 mm
No. of poles	2 - 24

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VECO

Technical Data

Clamping Range	solid / flexible / AWG
without wire protector	1 - 6 mm² / 1 - 2,5 mm² / 16 - 12 AWG
with wire protector	0,75 - 4 mm² / 0,75 - 2,5 mm² / 18 - 12 AWG
Rated Cross Section	2,5 mm²
Wire Stripping Length	7 mm
Overvoltage Category	III
Pollution Severity Level	3
Rated Voltage	250 V (200 V)
Rated Impulse Voltage	4 kV
Rated Insulation Voltage	250 V acc. to EN 60998-1
Rated Current	24 A
Hole in PCB	ø 1,3 mm
Torque	0,5 Nm

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	2-8 poles: CTI ≥ 600; 9-24 poles: CTI 250
Insulating Group	2-8 poles: I; 9-24 poles: Illa
Temperature Range	-40°C up to 100°C
Terminal body	Tin plated brass
Screw	M3; zinc plated steel, blue passivated
Solder pin	ø 1 mm; tin plated copper
Wire protector	Tin plated tin bronze

Approvals

	Current	Voltage	Group	AWG	Nm
FL ®	20 10	300 300	B D	22-12 [1] 22-12 [1]	0,51 0,51
S₽ °	20 10	300 300	B D, E	26 - 12 26 - 12	0,51 0,51
	Current	Voltage	mm²		
(t)	24	400	2,5		

[1] Min No. 26 AWG for factory-wiring only

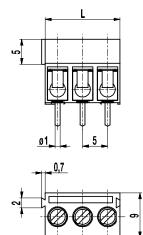
- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Longer P.C. pins up to 95 mm
- Version with larger clamping range
- Version with two P.C. pins per pole
- Version with extended wire entrance
- Double wire protector as bridge

970-T(-DS)

Screw connection, interlocking









No. of poles	970-T	970-T-DS	Length	Pcs
2	10.872.602	20.872.602	10,00	250
3	10.872.603	20.872.603	15,00	250

<u></u>

General Information

Pitch	5 mm
No. of poles	2 + 3

R

WECO

Technical Data

Clamping Range	solid / flexible / A	WG				
without wire protector	1 - 6 mm² / 1 - 2,5	1 - 6 mm² / 1 - 2,5 mm² / 16 - 12 AWG				
with wire protector	0,75 - 4 mm² / 0,7	0,75 - 4 mm² / 0,75 - 2,5 mm² / 18 - 12 AWG				
Rated Cross Section	2,5 mm²	2,5 mm ²				
Wire Stripping Length	6,5 mm ± 0,5 mm	ı				
Overvoltage Category	III	III	I			
Pollution Severity Level	3	2	2			
Rated Voltage	250 V	320 V	630 V			
Rated Impulse Voltage	4 kV	4 kV	4 kV			
Rated Insulation Voltage	250 V acc. to EN	60998-1				
Rated Current	24 A					
Hole in PCB	ø 1,3 mm					
Torque	0,5 Nm					

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	I
Temperature Range	-40°C up to 100°C
Terminal body	Tin plated brass
Screw	M3; zinc plated steel, blue passivated
Solder pin	ø 1 mm; tin plated copper
Wire protector	Tin plated tin bronze

Approvals

	Current	Voltage	Group	AWG	Nm
FL ®	20 10	300 300	B D	22-12 [1] 22-12 [1]	0,51 0,51
S ₽°	20 10	300 300	B D, E	26 - 12 26 - 12	0,51 0,51
	Current	Voltage	mm²		
(\$)	24	400	2,5		

[1] Min No. 26 AWG for factory-wiring only

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Longer P.C. pins up to 95 mm
- Version with extended wire entrance
- With test hole, see 970-TMP
- Double wire protector as bridge

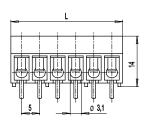
PCB connector for THR

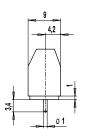
970-THR(-DS)

Screw connection



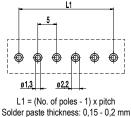








PCB Layout



Solder pad diameter: ø 2,2 mm

The products based on our established 970 series have been designed for the soldering process in Through-Hole-Reflow technology.

The soldering paste is applied to the plated through holes and the pins are placed in the circuit board and soldered by a reflow oven.

The terminal mouldings are made of heat-resistant material. The stand-offs on the base ensures there is enough room for the soldering paste and facilitates good heat circulation for optimum soldering and enables the soldering joint to be visually inspected.

The solder pin projects very slightly with a circuit board thickness of 1,6 mm and creates a solder point on both sides and thus guarantees a secure mounting. The position of the solder pins enables an equally minimal allocation area on the circuit board as with wave soldering.

This PCB connector with a pitch of 5 mm is for a conductor cross sections of 2,5 mm² and available in 2 to 12 pole lengths, with or without wire protector. This may always a protect or the section of the section o

This connector is also available with enlarged clamping size.

Part Numbers								
No. of poles	970-THR	970-THR-DS	Length	Pcs				
2	10.879.202	20.879.202	11,00	250				
3	10.879.203	20.879.203	16,00	250				
4	10.879.204	20.879.204	21,00	200				
5	10.879.205	20.879.205	26,00	100				
6	10.879.206	20.879.206	31,00	100				
8	10.879.208	20.879.208	41,00	100				
10	10.879.210	20.879.210	51,00	100				
12	10.879.212	20.879.212	61,00	100				

further number of poles on request

General Information

Pitch	5 mm
No. of poles	2 - 12

Technical Data

solid / flexible / AWG			
1 - 6 mm² / 1 - 2,5 mm² / 16 - 12 AWG			
0,75 - 4 mm² / 0,7	- 12 AWG		
2,5 mm²			
6,5 mm ± 0,5 mm	ı		
III	III	II	
3	2	2	
250 V	320 V	630 V	
4 kV	4 kV	4 kV	
250 V acc. to EN	60998-1		
24 A			
Wave solder & re	flow solder		
ø 1,3 mm			
Wave solder max mm	a. 1,6 mm; reflow	solder 1,6 - 3,2	
0,5 Nm			
	$\begin{array}{c c} 1 - 6 \ \text{mm}^2 / 1 - 2, \\ 0, 75 - 4 \ \text{mm}^2 / 0, \\ 2,5 \ \text{mm}^2 \\ \hline 6,5 \ \text{mm} \pm 0,5 \ \text{mm} \\ \hline & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	

Material

Moulding	PA HT, black, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	l
Temperature Range	-40°C up to 150°C; reflow solder temperature (Peak) max. 260°C (15-30 s)
Terminal body	Tin plated brass
Screw	M3; zinc plated steel, blue passivated
Solder pin	ø 1 mm; tin plated copper
Wire protector	Tin plated tin bronze

Approvals

	Current	Voltage	Group	AWG	Nm	
AI ®	20 10	300 300	B D	22-12 [1] 22-12 [1]	0,51 0,51	
SP°	20 10	300 300	B D, E	26 - 12 26 - 12	0,51 0,51	

Options / Accessories

• Consecutive numbering / Special marking according to drawing

- Self-adhesive marking strip BST-5,00 [2]
- Other P.C. pin lengths on request

Part Numbers: Tape-on-Reel

No. of poles	970-THR	970-THR-DS	Tape Width	Tape Height	Pcs	
2		20.879.202.A00	32 mm	18,8 mm	225	
4		20.879.204.A00	32 mm	18,8 mm	225	
further number of poles on request						

further number of poles on request

[1] No. 26 AWG min for factory-wiring only

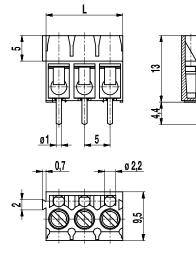
[2] To be fitted after reflow soldering process

970-TMP(-DS)

Screw connection, with test holes, interlocking



49



Part Numbers

No. of poles	970-TMP	970-TMP-DS	Length	Pcs
2	10.872.232	20.872.232	10,00	250
3	10.872.233	20.872.233	15,00	250

General Information

Pitch	5 mm
No. of poles	2 + 3

R

ECO

Technical Data

Clamping Range	solid / flexible / AWG
without wire protector	1 - 6 mm² / 1 - 2,5 mm² / 16 - 12 AWG
with wire protector	0,75 - 4 mm² / 0,75 - 2,5 mm² / 18 - 12 AWG
Rated Cross Section	2,5 mm²
Wire Stripping Length	7 mm
Overvoltage Category	III
Pollution Severity Level	3
Rated Voltage	250 V
Rated Impulse Voltage	4 kV
Rated Insulation Voltage	250 V acc. to EN 60998-1
Rated Current	24 A
Hole in PCB	ø 1,3 mm
Torque	0,5 Nm

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	I
Temperature Range	-40°C up to 100°C
Terminal body	Tin plated brass
Screw	M3; zinc plated steel, blue passivated
Solder pin	ø 1 mm; tin plated copper
Wire protector	Tin plated tin bronze

Approvals

	Current	Voltage	Group	AWG	Nm
AI ®	20 10	300 300	B D	22-12 [1] 22-12 [1]	0,51 0,51
S₽ °	20 10	300 300	D D, E	26 - 12 26 - 12	0,51 0,51
	Current	Voltage	mm²		
(\$)	24	400	2,5		

[1] Min No. 26 AWG for factory-wiring only

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Longer P.C. pins up to 95 mm
- Version with two P.C. pins per pole
- Version with extended wire entrance
- Version with larger clamping range
- Double wire protector as bridge

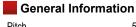
970-TX..(-DS)

Screw connection, 2 to 4 screw connections at only one pole, interlocking





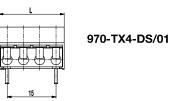




Pitch	5 mm	
No. of poles	1	

ECO

970-TX2-DS/01



The PCB screw connector 970-TX with a "pitch" of 5 mm has 2 to 4 screw connections at only one pole and can be used e.g. as potential distributors. This allows to loop through earth conductors easily.

Lateral latching elements allow to latch this type of screw connector to terminal strips of any length.

Wire protection in DS-design reliably prevents damage to stranded wires by the screw.

A not latchable version with 2 to 12 screw connections at one pole is available as type 970-X.

NOTE:

The pole numbers indicated in the article number do not designate the actual number of poles but the number of screw connections instead!

Part Numbers

Fait Numbers					
No. of poles	970-TX	970-TXDS	Length	Pcs	
2	10.872.619	20.872.619	10,00	250	
3	10.872.620	20.872.620	15,00	250	
4	10.872.621	20.872.621	20,00	200	

Technical Data
Clamping Range

Clamping Range	solid / flexible / A	WG	
without wire protector	1 - 6 mm² / 1 - 2,5	5 mm² / 16 - 12 A	WG
with wire protector	0,75 - 4 mm² / 0,7	75 - 2,5 mm² / 18	- 12 AWG
Rated Cross Section	2,5 mm ²		
Wire Stripping Length	6,5 mm ± 0,5 mm	ı	
Overvoltage Category	III	III	П
Pollution Severity Level	3	2	2
Rated Voltage	250 V	320 V	630 V
Rated Impulse Voltage	4 kV	4 kV	4 kV
Rated Insulation Voltage	250 V acc. to EN	60998-1	
Rated Current	24 A		
Hole in PCB	ø 1,3 mm		
Torque	0,5 Nm		

Material

PA, grey, V-0
CTI ≥ 600
1
-40°C up to 100°C
Tin plated brass
M3; zinc plated steel, blue passivated
ø 1 mm; tin plated copper
Tin plated tin bronze

Approvals

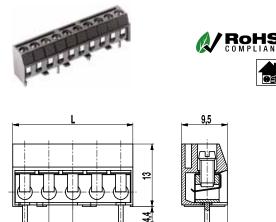
	Current	Voltage	Group	AWG	Nm
AI ®	20 10	300 300	B D	22-12 [1] 22-12 [1]	0,51 0,51
€ ₽°	20 10	300 300	B D, E	26 - 12 26 - 12	0,51 0,51
	Current	Voltage	mm²		
(\$)	24	400	2,5		

[1] Min No. 26 AWG for factory-wiring only

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Longer P.C. pins up to 95 mm
- · P.C. pins with different lengths between each other
- Version with extended wire entrance
- Other position of P.C. pins

970-X..(-DS)

Screw connection, 2 to 12 screw connections at only one pole



The PCB screw connector 970-X.. with a "pitch" of 5 mm has 2 to 12 screw connections at only one pole and can be used e.g. as potential distributors. This allows to loop through earth conductors easily.

Wire protection in DS-design reliably prevents damage to stranded wires by the screw.

ø 1

E

20

A latchable version with 2 to 4 screw connections at one pole is available as type 970-TX..

NOTE:

The pole numbers indicated in the article number do not designate the actual number of poles but the number of screw connections instead!

Part Numbers

No. of poles	970-X	970-XDS	Length	Pcs
2	10.872.582	20.872.582	10,00	250
3	10.872.583	20.872.583	15,00	250
4	10.872.584	20.872.584	20,00	100
5	10.872.585	20.872.585	25,00	100
6	10.872.586	20.872.586	30,00	100
7	10.872.587	20.872.587	35,00	100
8	10.872.588	20.872.588	40,00	100
9	10.872.589	20.872.589	45,00	100
10	10.872.590	20.872.590	50,00	100
11	10.872.591	20.872.591	55,00	100
12	10.872.592	20.872.592	60,00	100

General	Information	
Pitch	5 mm	

No. of poles	1

ECO

Technical Data

Clamping Range	solid / flexible / A	WG	
without wire protector	1 - 6 mm² / 1 - 2,5	5 mm² / 16 - 12 A	WG
with wire protector	0,75 - 4 mm² / 0,7	75- 2,5 mm² / 18 -	- 12 AWG
Rated Cross Section	2,5 mm²		
Wire Stripping Length	6,5 mm ± 0,5 mm	ı	
Overvoltage Category	III	Ш	II
Pollution Severity Level	3	2	2
Rated Voltage	250 V	320 V	630 V
Rated Impulse Voltage	4 kV	4 kV	4 kV
Rated Insulation Voltage	250 V acc. to EN	60998-1	
Rated Current	24 A		
Hole in PCB	ø 1,3 mm		
Torque	0,5 Nm		

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C
Terminal Body	Tin plated brass
Screw	M3; zinc plated steel, blue passivated
Solder pin	ø 1 mm; tin plated copper
Wire protector	Tin plated tin bronze

Approvals

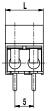
	Current	Voltage	Group	AWG	Nm
RI ®	20 10	300 300	B D	22-12 [1] 22-12 [1]	0,51 0,51
€₽ °	20 10	300 300	B D, E	26 - 12 26 - 12	0,51 0,51
	Current	Voltage	mm²		
(t)	24	400	2,5		

[1] Min No. 26 AWG for factory-wiring only

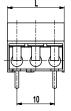
- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Longer P.C. pins up to 95 mm
- · P.C. pins with different lengths between each other
- Version with extended wire entrance
- Other position of P.C. pins

970-X.. (-DS) ADDITION: Overview 2 to 12 screw terminals, 1 pole

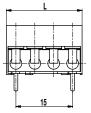
970-X02-DS/01



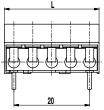
970-X03-DS/01



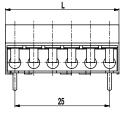
970-X04-DS/01



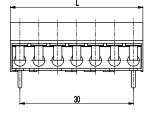
970-X05-DS/01



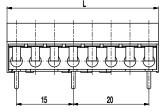
970-X06-DS/01



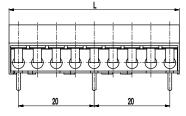
970-X07-DS/01



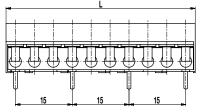
970-X08-DS/01



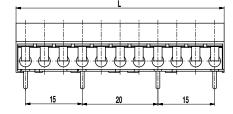
970-X09-DS/01



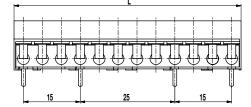
970-X10-DS/01



970-X11-DS/01



970-X12-DS/01



R

WECO

Pin strip

971-SLW

Soldering area ø 1 mm; plug-in area ø 1,3 mm, with long support

ø 1,3





Pitch	5 mm
No. of poles	2 - 24
Usable with	all sockets and plugs of series 95-FB und 97-FB, 97-FBW, 97-FBS
Additonal Information	Application tip: In combination with 95-FB or 97-FB series socket connectors, printed circuit boards can be directly connected.

R

WECO

Technical Data

Overvoltage Category	III	III	II
Pollution Severity Level	3	2	2
Rated Voltage	200 V	320 V	320 V
Rated Impulse Voltage	4 kV	4 kV	4 kV
Rated Insulation Voltage	250 V acc. to EN	60998-1	
Rated Current	6 A		
Hole in PCB	ø 1,3 mm		

Material

Moulding	PBTP, black , V-0
Comparative Tracking Index	CTI 175
Insulating Group	Illa
Temperature Range -40°C up to 100°C	
Solder pin	ø 1,3 mm (plug-in area) / ø 1,0 mm (soldering area); tin plated brass

Approvals

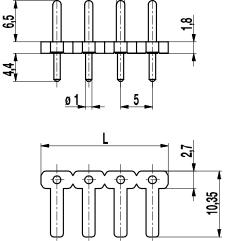
N [®] 10 300 B		Current	Voltage	Group	AWG	Nm	
	GN®			•			
	()	10	300	в			

Options / Accessories

Pitch of 10 mm for larger clearance and creepage distances

• Other pin lengths on request

• Other P.C. pin surfaces on request

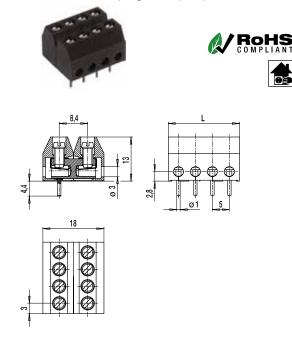


Part	Numb	ers
i uit	Tunio	013

No. of poles	971-SLW	Length	Pcs
2	12.893.603	10,00	1000
3	13.893.603	15,00	500
4	14.893.603	20,00	250
5	15.893.603	25,00	250
6	16.893.603	30,00	250
7	17.893.603	35,00	250
8	18.893.603	40,00	100
9	19.893.603	45,00	100
10	20.893.603	50,00	100
11	21.893.603	55,00	100
12	22.893.603	60,00	100
13	23.893.603	65,00	100
14	24.893.603	70,00	100
15	25.893.603	75,00	100
16	26.893.603	80,00	100
17	27.893.603	85,00	100
18	28.893.603	90,00	100
19	29.893.603	95,00	100
20	30.893.603	100,00	100
21	31.893.603	105,00	100
22	32.893.603	110,00	100
23	33.893.603	115,00	100
24	34.893.603	120,00	100

971-DOPG(-DS)

Screw connection, 2 clamping units per pole



The 971-DOP terminal is based on our well known 970 terminals.

However, it has 2 clamping units positioned behind one another. This is a space efficient terminal solution. The versions with solder pin (called -DOPG) are used for direct application onto the printed circuit board.

The terminal 971-DOPG-TX contains a one piece terminal body for all connections. This means all wires have the same potential.

Combinations of WECO standard terminals with a single clamping unit per pole are possible. Therefore is the 2 and 3 pole version also available with dovetail feature.

Part Numbers

No. of poles	971-DOPG	971-DOPG-DS	Length	Pcs
2	84.872.102	94.872.102	11,00	100
3	84.872.103	94.872.103	16,00	100
4	84.872.104	94.872.104	21,00	300
5	84.872.105	94.872.105	26,00	50
6	84.872.106	94.872.106	31,00	50
8	84.872.108	94.872.108	41,00	50

further number of poles on request

General Information

Pitch	5 mm
No. of poles	2 - 8

Technical Data

Clamping Range	solid / flexible / A	NG		
without wire protector	1 - 1,5 mm² / 1 - 1,5 mm² / 16 AWG			
with wire protector	0,75 - 1,5 mm² / 0	0,75 - 1,5 mm² / 0,75 - 1,5 mm² / 18 - 16 AWG		
Rated Cross Section	1,5 mm²			
Wire Stripping Length	6,5 mm ± 0,5 mm	1		
Overvoltage Category	III	Ш	II	
Pollution Severity Level	3	2	2	
Rated Voltage	250 V	320 V	630 V	
Rated Impulse Voltage	4 kV	4 kV	4 kV	
Rated Insulation Voltage	250 V acc. to EN	60998-1		
Rated Current	17,5 A			
Hole in PCB	ø 1,3 mm			
Torque	0,5 Nm			

Material

PA, grey, V-0
CTI ≥ 600
I
-40°C up to 100°C
Tin plated brass
M3, zinc plated steel, blue passivated
ø 1 mm; tin plated copper
Tin plated tin bronze

Approvals

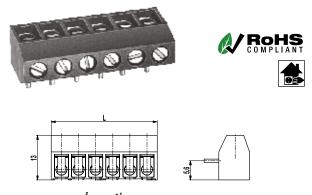
	Current	Voltage	Group	AWG	Nm	
FL ®	20 10	300 300	B D	22-12 [1] 22-12 [1]	0,51 0,51	
S₽ °	20 10	300 300	B D, E	26 - 12 26 - 12	0,51 0,51	

[1] Min No. 26 AWG for factory-wiring only

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 5,08 mm or 7,5 mm for larger clearance and creepage distances
- Other P.C. pin lengths on request
- Available without or with two solder pins
- Double clamping units to be combined with single clamping units
- 1 pole version with 4 clamping units (971-DOPG-TX2) on request

971-HG(-DS)

Screw connection, wire entrance vertical to PCB, extended insertion length



The PCB connector 971-HG with a pitch of 5 mm is available in 2- to 32-pole design and can be mounted side-by-side without pole loss.

On this PCB connector the copper solder pin is welded on top of the socket bore. This expands the insertion length to series 970 socket depth and allows to use extra-long solder pins.

Wire protection in DS-design reliably prevents damage to stranded wires by the screw. The wire entrance is vertical to the PCB.

Part Nu	umbers			
No. of	971-HG	971-HG-DS	Length	Pcs
poles				
2	10.872.512	20.872.512	10,00	250
3	10.872.513	20.872.513	15,00	250
4	10.872.514	20.872.514	20,00	200
5	10.872.515	20.872.515	25,00	100
6	10.872.516	20.872.516	30,00	100
7	10.872.517	20.872.517	35,00	100
8	10.872.518	20.872.518	40,00	100
9	10.872.519	20.872.519	45,00	100
10	10.872.520	20.872.520	50,00	100
11	10.872.521	20.872.521	55,00	100
12	10.872.522	20.872.522	60,00	100
13	10.872.523	20.872.523	65,00	100
14	10.872.524	20.872.524	70,00	100
15	10.872.525	20.872.525	75,00	100
16	10.872.526	20.872.526	80,00	100
17	10.872.527	20.872.527	85,00	100
18	10.872.528	20.872.528	90,00	100
19	10.872.529	20.872.529	95,00	100
20	10.872.530	20.872.530	100,00	100
21	10.872.531	20.872.531	105,00	100
22	10.872.532	20.872.532	110,00	100
23	10.872.533	20.872.533	115,00	100
24	10.872.534	20.872.534	120,00	100
25	10.872.535	20.872.535	125,00	100
26	10.872.536	20.872.536	130,00	100
27	10.872.537	20.872.537	135,00	100
28	10.872.538	20.872.538	140,00	100
29	10.872.539	20.872.539	145,00	100
30	10.872.540	20.872.540	150,00	100
31	10.872.541	20.872.541	155,00	100
32	10.872.542	20.872.542	160,00	100

General Information		
Pitch	5 mm	
No. of poles	2 - 32	

Technical Data

	G		
1 - 6 mm² / 1 - 2,5 mm² / 16 - 12 AWG			
0,75 - 4 mm² / 0,75 - 2,5 mm² / 18 - 12 AWG			
2,5 mm²			
6,5 mm ± 0,5 mm	6,5 mm ± 0,5 mm		
III	Ш	I	
3	2	2	
250 V (200 V)	320 V	630 V (320 V)	
4 kV	4 kV	4 kV	
250 V acc. to EN 60	0998-1		
24 A			
ø 1,3 mm			
0,5 Nm			
•			
	0,75 - 4 mm ² / 0,75 2,5 mm ² 6,5 mm ± 0,5 mm III 3 250 V (200 V) 4 kV 250 V acc. to EN 60 24 A Ø 1,3 mm 0,5 Nm Voltage data in brat types. 2-8 poles typ	0,75 - 4 mm² / 0,75 - 2,5 mm² / 1 2,5 mm² 6,5 mm ± 0,5 mm III III 3 2 250 V (200 V) 320 V 4 kV 4 kV 250 V acc. to EN 60998-1 24 A Ø 1,3 mm 0,5 Nm Voltage data in brackets are valitypes. 2-8 poles types are "no-flated of the stated of the st	

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	2-8 poles: CTI ≥ 600; 9-32 poles: CTI 250
Insulating Group	2-8 poles: I; 9-32 poles: Illa
Temperature Range	-40°C up to 100°C
Terminal body	Tin plated brass
Screw	M3; zinc plated steel, blue passivated
Solder pin	ø 1 mm; tin plated copper
Wire protector	Tin plated tin bronze

Approvals

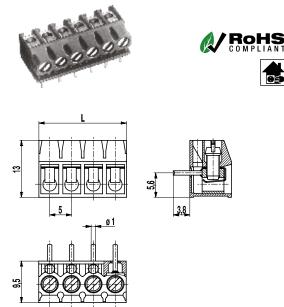
	Current	Voltage	Group	AWG	Nm
AI ®	20 10	300 300	B D	22-12 [1] 22-12 [1]	0,51 0,51
()	20 10	300 300	B D, E	26 - 12 26 - 12	0,51 0,51
	Current	Voltage	mm²		
(\$)	24	400	2,5		

[1] Min No. 26 AWG for factory-wiring only

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Longer P.C. pins up to 75 mm
- Version with extended wire entrance
- Version with larger clamping range
- Double wire protector as bridge
- With test holes, see 971-HM(-DS)

971-HM(-DS)

Screw connection, wire entrance vertical to PCB, extended insertion length, with test holes



The PCB connector 971-HM with a pitch of 5 mm is available in 2- to 24-pole design and can be mounted side-by-side without pole loss.

Wire protection in DS-design reliably prevents damage to stranded wires by the screw. The wire entrance is vertical to the PCB.

The screws are secured against self-loosening. For the connection to the grid, these PCB connectors are equipped with a M3 thread.

Part N	Part Numbers				
No. of poles	971-HM	971-HM-DS	Length	Pcs	
2	10.872.252	20.872.252	10,00	250	
3	10.872.253	20.872.253	15,00	250	
4	10.872.254	20.872.254	20,00	200	
5	10.872.255	20.872.255	25,00	100	
6	10.872.256	20.872.256	30,00	100	
7	10.872.257	20.872.257	35,00	100	
8	10.872.258	20.872.258	40,00	100	
9	10.872.259	20.872.259	45,00	100	
10	10.872.260	20.872.260	50,00	100	
11	10.872.261	20.872.261	55,00	100	
12	10.872.262	20.872.262	60,00	100	
13	10.872.263	20.872.263	65,00	100	
14	10.872.264	20.872.264	70,00	100	
15	10.872.265	20.872.265	75,00	100	
16	10.872.266	20.872.266	80,00	100	
17	10.872.267	20.872.267	85,00	100	
18	10.872.268	20.872.268	90,00	100	
19	10.872.269	20.872.269	95,00	100	
20	10.872.270	20.872.270	100,00	100	
21	10.872.271	20.872.271	105,00	100	
22	10.872.272	20.872.272	110,00	100	
23	10.872.273	20.872.273	115,00	100	
24	10.872.274	20.872.274	120,00	100	

General Information

Pitch	5 mm	
No. of poles	2 - 24	

ECO

Technical Data

Clamping Range	solid / flexible / AW	G		
without wire protector	1 - 6 mm² / 1 - 2,5 mm² / 16 - 12 AWG			
with wire protector	0,75 - 4 mm² / 0,75	0,75 - 4 mm² / 0,75 - 2,5 mm² / 18 - 12 AWG		
Rated Cross Section	2,5 mm²	2,5 mm ²		
Wire Stripping Length	7 mm			
Overvoltage Category	III	Ш	I	
Pollution Severity Level	3	2	2	
Rated Voltage	250 V (200 V)	320 V	630 V (320 V)	
Rated Impulse Voltage	4 kV	4 kV	4 kV	
Rated Insulation Voltage	250 V acc. to EN 6	0998-1		
Rated Current	24 A			
Hole in PCB	ø 1,3 mm	ø 1,3 mm		
Torque	0,5 Nm			
Other specifications	Voltage data in bra types. 2-8 poles typ glow-wire test.			

Material

Moulding	PA. grey, V-0
Comparative Tracking Index	2-8 poles: CTI ≥ 600; 9-32 poles: CTI 250
Insulating Group	2-8 poles: I; 9-32 poles: Illa
Temperature Range	-40°C up to 100°C
Terminal body	Tin plated brass
Screw	M3; zinc plated steel, blue passivated
Solder pin	ø 1 mm; tin plated copper
Wire protector	Tin plated tin bronze

Approvals

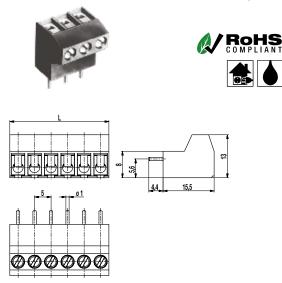
	Current	Voltage	Group	AWG	Nm
AI ®	20 10	300 300	B D	22-12 [1] 22-12 [1]	0,51 0,51
€₽ °	20 10	300 300	B D, E	26 - 12 26 - 12	0,51 0,51
	Current	Voltage	mm²		
(\$)	24	400	2,5		

[1] Min No. 26 AWG for factory-wiring only

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Longer P.C. pins up to 75 mm
- Version with extended wire entrance
- Double wire protector as bridge

971-LH(-DS)

Screw connection, wire entrance vertical to PCB, pottable



The 971-LH series PCB screw connector with a pitch of 5 mm is particularly suited for potting printed circuits. For such potting applications, the solder pin is sealed at the housing opening against seeping casting resin. This PCB screw connector is available in 2- to 12-pole design and can be mounted side-by-side without pole loss.

Wire protection in DS-design reliably prevents damage to stranded wires by the screw.

The wire entrance is located vertical to the PCB - the casting resin surface is also vertical to the wire entrance. Version 970-LH alternatively provides wire entrance parallel to the PCB.

971-LH-DS

Length

Pcs

No. of 971-LH poles

poico				
2	15.873.402	25.873.402	10,00	100
3	15.873.403	25.873.403	15,00	100
4	15.873.404	25.873.404	20,00	100
5	15.873.405	25.873.405	25,00	100
6	15.873.406	25.873.406	30,00	100
7	15.873.407	25.873.407	35,00	100
8	15.873.408	25.873.408	40,00	100
9	15.873.409	25.873.409	45,00	50
10	15.873.410	25.873.410	50,00	50
11	15.873.411	25.873.411	55,00	50
12	15.873.412	25.873.412	60,00	50

General Information

Pitch	5 mm
No. of poles	2 - 12

ECO

Technical Data

Clamping Range	solid / flexible / A	WG	
without wire protector	1 - 6 mm² / 1 - 2,5	5 mm² / 16 - 12 A	WG
with wire protector	0,75 - 4 mm² / 0,7	75 - 2,5 mm² / 18	- 12 AWG
Rated Cross Section	2,5 mm²		
Wire Stripping Length	8 mm ± 0,5 mm		
Overvoltage Category	III	Ш	II
Pollution Severity Level	3	2	2
Rated Voltage	250 V	320 V	630 V
Rated Impulse Voltage	4 kV	4 kV	4 kV
Rated Insulation Voltage	250 V acc. to EN	60998-1	
Rated Current	24 A		
Hole in PCB	ø 1,3 mm		
Torque	0,5 Nm		

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C
Terminal body	Tin plated brass
Screw	M3; zinc plated steel, blue passivated
Solder pin	ø 1 mm; tin plated brass
Wire protector	Tin plated tin bronze

Approvals

	Current	Voltage	Group	AWG	Nm	
AI ®	20 10	300 300	B D	22-12 [1] 22-12 [1]	0,51 0,51	
€ ₽°	20 10	300 300	B D, E	26 - 12 26 - 12	0,51 0,51	
	Current	Voltage	mm²			
(\$)	24	400	2,5			

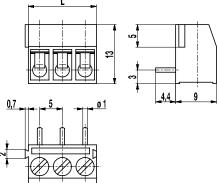
[1] Min No. 26 AWG for factory-wiring only

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Other P.C. pin lengths on request
- Version with extended wire entrance
- Version with larger clamping range
- Double wire protector as bridge

971-T(-DS)

Screw connection, wire entrance vertical to PCB, interlocking





The PCB screw connector 971-T with a pitch of 5 mm is available with 2 and 3 poles.

Wire protection in DS-design reliably prevents damage to stranded wires by the screw. The wire entrance is vertical to the PCB.

The screws are secured against self-loosening. For the connection to the grid, these PCB connectors are equipped with a M3 thread.

Lateral latching elements allow to link this type of screw connector to terminal strips of any length.

Part Numbers

No. of poles	971-T	971-T-DS	Length	Pcs
2	10.872.612	20.872.612	10,00	250
3	10.872.613	20.872.613	15,00	250

General Information		General	Information
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Pitch	5 mm
No. of poles	2 + 3

ECO

Technical Data

Clamping Range	solid / flexible / A	WG	
without wire protector	1 - 6 mm² / 1 - 2,5	5 mm² / 16 - 12 A	WG
with wire protector	0,75 - 4 mm² / 0,7	75 - 2,5 mm² / 18	- 12 AWG
Rated Cross Section	2,5 mm²		
Wire Stripping Length	5,5 mm ± 0,5 mn	ı	
Overvoltage Category	III	III	II
Pollution Severity Level	3	2	2
Rated Voltage	250 V	320 V	630 V
Rated Impulse Voltage	4 kV	4 kV	4 kV
Rated Insulation Voltage	250 V acc. to EN	60998-1	
Rated Current	24 A		
Hole in PCB	ø 1,3 mm		
Torque	0,5 Nm		

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C
Terminal body	Tin plated brass
Screw	M3; zinc plated steel, blue passivated
Solder pin	ø 1 mm; tin plated brass
Wire protector	Tin plated tin bronze

Approvals

	Current	Voltage	Group	AWG	Nm	
FL ®	20 10	300 300	B D	22-12 [1] 22-12 [1]	0,51 0,51	
S ₽°	20 10	300 300	B D, E	26 - 12 26 - 12	0,51 0,51	
	Current	Voltage	mm²			
(\$)	24	400	2,5			

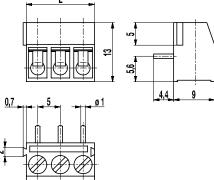
[1] Min No. 26 AWG for factory-wiring only

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Version with extended wire entrance
- Double wire protector as bridge
- With test holes, see 971-THM(-DS)

971-THG(-DS)

Screw connection, wire entrance vertical to PCB, interlocking, extended insertion length





The PCB screw connector 971-THG with a pitch of 5 mm is available with 2 and 3 poles. Welding the solder pin on top of the socket bore expands the insertion length to series 970 socket depth and allows to use extra-long solder pins.

Wire protection in DS-design reliably prevents damage to stranded wires by the screw. The wire entrance is vertical to the PCB.

Lateral latching elements allow to link this type of screw connector to terminal strips of any length.

Part Nu	mbers		
No. of poles	971-THG	971-THG-DS	Length

2	10.872.502	20.872.502	10,00	250
3	10.872.503	20.872.503	15.00	250

General Information

Pitch	5 mm				
No. of poles	2 + 3				

ECO

Technical Data

Clamping Range	solid / flexible / A	WG			
without wire protector	1 - 6 mm² / 1 - 2,5	1 - 6 mm² / 1 - 2,5 mm² / 16 - 12 AWG			
with wire protector	0,75 - 4 mm² / 0,7	0,75 - 4 mm² / 0,75 - 2,5 mm² / 18 - 12 AWG			
Rated Cross Section	2,5 mm²				
Wire Stripping Length	6,5 mm ± 0,5 mm	ı			
Overvoltage Category	III	Ш	Ш		
Pollution Severity Level	3	2	2		
Rated Voltage	250 V	320 V	630 V		
Rated Impulse Voltage	4 kV	4 kV	4 kV		
Rated Insulation Voltage	250 V acc. to EN	60998-1			
Rated Current	24 A				
Hole in PCB	ø 1,3 mm				
Torque	0,5 Nm				

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C
Terminal body	Tin plated brass
Screw	M3; zinc plated steel, blue passivated
Solder pin	ø 1 mm; tin plated copper
Wire protector	Tin plated tin bronze

Approvals

Pcs

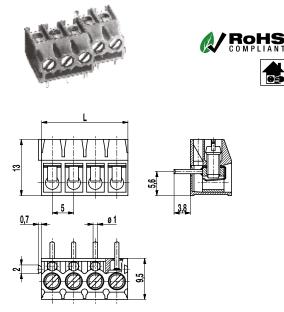
	Current	Voltage	Group	AWG	Nm
AD ®	20 10	300 300	B D	22-12 [1] 22-12 [1]	0,51 0,51
€ ₽°	20 10	300 300	B D, E	26 - 12 26 - 12	0,51 0,51
	Current	Voltage	mm²		
(\$)	24	400	2,5		

[1] Min No. 26 AWG for factory-wiring only

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Other P.C. pin lengths on request
- Version with extended wire entrance
- Version with larger clamping range
- Double wire protector as bridge
- With test holes, see 971-THM(-DS)

971-THM(-DS)

Screw connection, wire entrance vertical to PCB, interlocking, extended insertion length, with test holes



The PCB screw connector 971-THM with test hole, 5 mm pitch, is available with 2 and 3 poles. Welding the solder pin on top of the socket bore expands the insertion length to series 970 socket depth and allows to use extra-long solder pins.

Wire protection in DS-design reliably prevents damage to stranded wires by the screw. The wire entrance is vertical to the PCB.

The screws are secured against self-loosening. For the connection to the grid, these PCB connectors are equipped with a M3 thread.

Lateral locking elements allow to link this type of screw connector to terminal strips of any length.

Part Numbers

No. of poles	971-THM	971-THM-DS	Length	Pcs	
2	10.872.282	20.872.282	10,00	250	
3	10.872.283	20.872.283	15,00	250	

General Information

Pitch	5 mm
No. of poles	2 + 3

ECO

Technical Data

Clamping Range	solid / flexible / A	NG			
without wire protector	1 - 6 mm² / 1 - 2,5	1 - 6 mm² / 1 - 2,5 mm² / 16 - 12 AWG			
with wire protector	0,75 - 4 mm² / 0,7	0,75 - 4 mm² / 0,75 - 2,5 mm² / 18 - 12 AWG			
Rated Cross Section	2,5 mm²				
Wire Stripping Length	7 mm ± 0,5 mm				
Overvoltage Category	III	Ш	II		
Pollution Severity Level	3	2	2		
Rated Voltage	250 V	320 V	630 V		
Rated Impulse Voltage	4 kV	4 kV	4 kV		
Rated Insulation Voltage	250 V acc. to EN	60998-1			
Rated Current	24 A				
Hole in PCB	ø 1,3 mm				
Torque	0,5 Nm				

Material

, blue passivated
opper

Approvals

	Current	Voltage	Group	AWG	Nm
AI ®	20 10	300 300	B D	22-12 [1] 22-12 [1]	0,51 0,51
€₽ °	20 10	300 300	B D, E	26 - 12 26 - 12	0,51 0,51
	Current	Voltage	mm²		
(\$)	24	400	2,5		

[1] Min No. 26 AWG for factory-wiring only

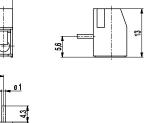
- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Longer P.C. pins up to 75 mm
- Version with extended wire entrance
- Double wire protector as bridge

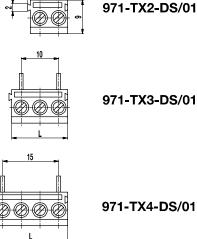
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971-TX..(-DS)

Screw connection, wire entrance vertical to PCB, 2 to 4 screw connections at only one pole, interlocking







The PCB screw connector 971-TX with a "pitch" of 5 mm has 2 to 4 screw connections at only one pole and can be used e.g. as potential distributors. This allows to loop through earth conductors easily.

Lateral latching elements allow to latch this type of screw connector to terminal strips of any length.

Wire protection in DS-design reliably prevents damage to stranded wires by the screw.

The wire entrance is vertical to the PCB.

A not latchable version with 2 to 12 screw connections at one pole is available as type 971-X..

NOTE:

The pole numbers indicated in the article number do not designate the actual number of poles but the number of screw connections instead!

Part Numbers

No. of poles	971-TX	971-TXDS	Length	Pcs
2	10.872.692	20.872.692	10,00	250
3	10.872.693	20.872.693	15,00	250
4	10.872.694	20.872.694	20,00	200

General Information

Pitch	5 mm	
No. of poles	1	

ECO

Technical Data

Clamping Range	solid / flexible / A	NG		
without wire protector	1 - 6 mm² / 1 - 2,5	1 - 6 mm² / 1 - 2,5 mm² / 16 - 12 AWG		
with wire protector	0,75 - 4 mm² / 0,7	0,75 - 4 mm² / 0,75 - 2,5 mm² / 18 - 12 AWG		
Rated Cross Section	2,5 mm²	2,5 mm ²		
Wire Stripping Length	6,5 mm ± 0,5 mm	1		
Overvoltage Category	III	Ш	I	
Pollution Severity Level	3	2	2	
Rated Voltage	250 V	320 V	630 V	
Rated Impulse Voltage	4 kV	4 kV	4 kV	
Rated Insulation Voltage	250 V acc. to EN	60998-1		
Rated Current	24 A	24 A		
Hole in PCB	ø 1,3 mm	ø 1,3 mm		
Torque	0,5 Nm			

Material

PA, grey, V-0
CTI ≥ 600
-40°C up to 100°C
Tin plated brass
M3; zinc plated steel, blue passivated
ø 1 mm; tin plated brass
Tin plated tin bronze

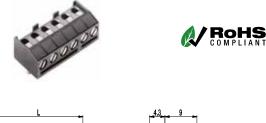
Approvals

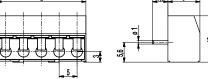
	Current	Voltage	Group	AWG	Nm	
€ ₽°	20 10	300 300	B D, E	26 - 12 26 - 12	0,51 0,51	
	Current	Voltage	mm²			
(‡)	24	400	2,5			

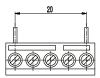
- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Other P.C. pin lengths on request
- P.C. pins with different lengths between each other
- Other position of P.C. pins
- Version with extended wire entrance

971-X..(-DS)

Screw connection, wire entrance vertical to PCB, 2 to 12 screw connections at only one pole







The PCB screw connector 971-X with a "pitch" of 5 mm has 2 to 12 screw connections at only one pole and can be used e.g. as potential distributors. This allows to loop through earth conductors easily.

Wire protection in DS-design reliably prevents damage to stranded wires by the screw.

The wire entrance is vertical to the PCB.

A latchable version with 2 to 4 screw connections at one pole is available as type 971-TX.

NOTE:

The pole numbers indicated in the article number do not designate the actual number of poles but the number of screw connections instead!

Part Numbers

No. of poles	971-X	971-XDS	Length	Pcs
5	10.872.555	20.872.555	25,00	100
6	10.872.556	20.872.556	30,00	100
7	10.872.557	20.872.557	35,00	100
8	10.872.558	20.872.558	40,00	100
9	10.872.559	20.872.559	45,00	100
10	10.872.560	20.872.560	50,00	100
11	10.872.561	20.872.561	55,00	100
12	10.872.562	20.872.562	60,00	100

further number of poles on request

General Information

Pitch	5 mm
No. of poles	1

EC

Technical Data

Clamping Range	solid / flexible / A	WG			
without wire protector	1 - 6 mm² / 1 - 2,5	1 - 6 mm² / 1 - 2,5 mm² / 16 - 12 AWG			
with wire protector	0,75 - 4 mm² / 0,7	0,75 - 4 mm² / 0,75 - 2,5 mm² / 18 - 12 AWG			
Rated Cross Section	2,5 mm²	2,5 mm ²			
Wire Stripping Length	6,5 mm ± 0,5 mm	ı			
Overvoltage Category	III	Ш	II		
Pollution Severity Level	3	2	2		
Rated Voltage	250 V	320 V	630 V		
Rated Impulse Voltage	4 kV	4 kV	4 kV		
Rated Insulation Voltage	250 V acc. to EN	60998-1			
Rated Current	24 A	24 A			
Hole in PCB	ø 1,3 mm	ø 1,3 mm			
Torque	0,5 Nm				

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	
Temperature Range	-40°C up to 100°C
Terminal Body	Tin plated brass
Screw	M3; zinc plated steel, blue passivated
Solder pin	ø 1 mm; tin plated brass
Wire protector	Tin plated tin bronze

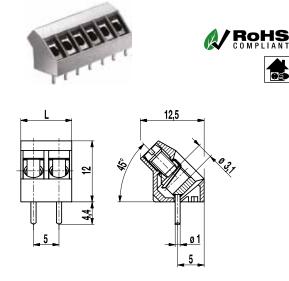
Approvals

	Current	Voltage	Group	AWG	Nm	
SP °	20 10	300 300	B D, E	26 - 12 26 - 12	0,51 0,51	
	Current	Voltage	mm²			
(\$)	24	400	2,5			

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Other P.C. pin lengths on request
- P.C. pins with different lengths between each other
- Other position of P.C. pins
- Version with extended wire entrance

974(-DS)

Screw connection 45°-angle to PCB



The PCB connector 974, inclined version with a pitch of 5 mm is available with 2 to 26 poles.

The wire entrance is in a 45° angle diagonal to the PC board. Therefore, this PCB connector is ideal for the assembly in the center of PCBs. The design of this PCB connector allows space-saving arrangement of consecutive rows of terminals.

Wire protection in DS-design reliably prevents damage to stranded wires by the screw.

Part N	umbers			
No. of poles	974	974-DS	Length	Pcs
2	10.874.002	20.874.002	10,00	250
3	10.874.003	20.874.003	15,00	250
4	10.874.004	20.874.004	20,00	200
5	10.874.005	20.874.005	25,00	100
6	10.874.006	20.874.006	30,00	100
7	10.874.007	20.874.007	35,00	100
8	10.874.008	20.874.008	40,00	100
9	10.874.009	20.874.009	45,00	100
10	10.874.010	20.874.010	50,00	100
11	10.874.011	20.874.011	55,00	100
12	10.874.012	20.874.012	60,00	100
13	10.874.013	20.874.013	65,00	100
14	10.874.014	20.874.014	70,00	50
15	10.874.015	20.874.015	75,00	50
16	10.874.016	20.874.016	80,00	50
17	10.874.017	20.874.017	85,00	50
18	10.874.018	20.874.018	90,00	50
19	10.874.019	20.874.019	95,00	50
20	10.874.020	20.874.020	100,00	50
21	10.874.021	20.874.021	105,00	50
22	10.874.022	20.874.022	110,00	50
23	10.874.023	20.874.023	115,00	50
24	10.874.024	20.874.024	120,00	50
25	10.874.025	20.874.025	125,00	50
26	10.874.026	20.874.026	130,00	50

General Information

Pitch	5 mm
No. of poles	2 - 26

ECO

Technical Data

Clamping Range	solid / flexible / AWG			
without wire protector	1 - 6 mm² / 1 - 2,5 mm² / 16 - 12 AWG			
with wire protector	0,75 - 4 mm² / 0,75 - 2,5 mm² / 18 - 12 AWG			
Rated Cross Section	2,5 mm²			
Wire Stripping Length	6,5 mm ± 0,5 mm	1		
Overvoltage Category	III	Ш	II	
Pollution Severity Level	3	2	2	
Rated Voltage	250 V	320 V	630 V	
Rated Impulse Voltage	4 kV	4 kV	4 kV	
Rated Insulation Voltage	250 V acc. to EN	60998-1		
Rated Current	24 A			
Hole in PCB	ø 1,3 mm			
Torque	0,5 Nm			

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	
Temperature Range	-40°C up to 100°C
Terminal body	Tin plated brass
Screw	M3; zinc plated steel, clear passivated
Solder pin	ø 1 mm; tin plated copper
Wire protector	Tin plated tin bronze

Approvals

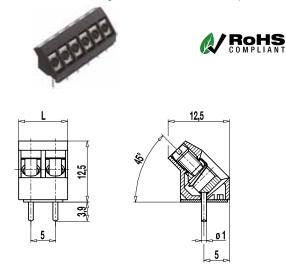
	Current	Voltage	Group	AWG	Nm
AI ®	20 10	300 300	B D	22-12 [1] 22-12 [1]	0,51 0,51
€ ₽°	20 10	300 300	B D, E	26 - 12 26 - 12	0,51 0,51
	Current	Voltage	mm²		
(\$)	24	250	2,5		

[1] Min No. 26 AWG for factory-wiring only

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Longer P.C. pins up to 95 mm
- Special wire protector for very thin conductors
- Version with raised foot of 1,6 mm
- With base plate, see 974-BP
- With extended screw guide (974-C)

974-BP(-DS)

Screw connection 45°-angle to PCB, with base plate



The PCB connector 974-BP, inclined version with base plate and a pitch of 5 mm is available with 2 to 12 poles. It was particularly designed for PCBs with encapsulated printed circuits.

The base plate, ultrasound-welded to the bottom of the standard series 974 PCB connector, offers extra protection against casting resin penetrating the solder pin area.

The wire entrance is in a 45° angle diagonal to the PC board. Therefore, this PCB connector is ideal for the assembly in the center of PCBs. The design of this PCB connector allows space-saving arrangement of consecutive rows of terminals.

Wire protection in DS-design reliably prevents damage to stranded wires by the screw.

Part Numbers

No. of poles	974-BP	974-BP-DS	Length	Pcs
2		97.874.002	10,00	250
further number of	f			

further number of poles on request

General Information

Pitch	5 mm
No. of poles	2 - 12

ECO

Technical Data

Clamping Range	solid / flexible / A	NG				
without wire protector	1 - 6 mm² / 1 - 2,5	1 - 6 mm² / 1 - 2,5 mm² / 16 - 12 AWG				
with wire protector	0,75 - 4 mm² / 0,7	0,75 - 4 mm² / 0,75 - 2,5 mm² / 18 - 12 AWG				
Rated Cross Section	2,5 mm²					
Wire Stripping Length	6,5 mm ± 0,5 mm	1				
Overvoltage Category	III	Ш	Ш			
Pollution Severity Level	3	2	2			
Rated Voltage	250 V	320 V	630 V			
Rated Impulse Voltage	4 kV	4 kV	4 kV			
Rated Insulation Voltage	250 V acc. to EN	60998-1				
Rated Current	15 A					
Hole in PCB	ø 1,3 mm					
Torque	0,5 Nm					

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C
Terminal body	Tin plated brass
Screw	M3; zinc plated steel, clear passivated
Solder pin	ø 1 mm; tin plated copper
Wire protector	Tin plated tin bronze

Approvals

	Current	Voltage	mm²	
(\$)	24	250	2,5	

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00

PCB connector for SMD 974-D-SMD-DS

974-D-3NID-D3

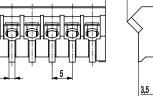
Screw connection 45°-angle to PCB



3.8

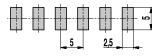
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10





PCB Layout



Solder pad thickness: 0,2 - 0,25 mm

By creating the 974-D-SMD-DS, WECO offers a PCB terminal for the reflow soldering process with a pitch of 5 mm in true surface mount technology. The wire entry has a connection angle of 45° to the PCB. This offers the advantage that terminal rows can be located space savingly one behind the other. The housing material consists of high temperature resistant plastic and is specially designed in order to assure a good hot-air circulation during the reflow soldering process in the convection oven. The wire entry side of the terminal has to be placed in flowing direction.

The screw connector 974-D-SMD-DS are standardly equipped with captive screws and wire protectors and initially available in 2 to 12 pole versions.

For the automatic assembling the connector has a flat roof design in order to create a flat surface for the vacuum pipette.

Part N	lumbers		
No. of poles	974-D-SMD-DS	Length	Pcs
2	20.874.402	11,5	250
3	20.874.403	16,5	250
4	20.874.404	21,5	200
5	20.874.405	26,5	100
6	20.874.406	31,5	100
8	20.874.408	41,5	100
10	20.874.410	51,5	100
12	20.874.412	61,5	100
further num	har of polos on request		

further number of poles on request

General Information

Pitch	5 mm
No. of poles	2 - 12

Technical Data

Clamping Range	solid / flexible / A	solid / flexible / AWG			
	0,75 - 4 mm² / 0,7	75- 2,5 mm² / 18	- 12 AWG		
Rated Cross Section	2,5 mm²				
Wire Stripping Length	6 mm ± 0,5 mm				
Overvoltage Category	III	III	II		
Pollution Severity Level	3	2	2		
Rated Voltage	250 V	320 V	630 V		
Rated Impulse Voltage	4 kV	4 kV	4 kV		
Rated Insulation Voltage	250 V acc. to EN	60998-1			
Rated Current	24 A				
Torque	0,4 Nm				

Material

PA HT, black, V-0
CTI ≥ 600
[
-40°C up to 150°C; Reflow solder temperature (Peak) max. 260°C (15-30 s)
Tin plated brass
M3; zink plated steel, clear passivated
Tin plated tin bronze

Approvals

	Current	Voltage	Group	AWG	Nm	
RI ®	20 10	300 300	B D	18 - 12 18 - 12	0,4 0,4	
€₽ ®	20 10	300 300	B D	18 - 12 18 - 12	0,4 0,4	

Options / Accessories

- · Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00 [1]

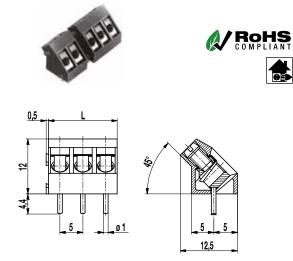
Part Numbers: Tape-on-Reel

No. of poles	974-D-SMD-DS	Tape Width	Tape Height	Pcs
2	20.874.402.A00	56 mm	14,7 mm	250
3	20.874.403.A00	56 mm	14,7 mm	250
4	20.874.404.A00	56 mm	14,7 mm	250
5	20.874.405.A00	56 mm	14,7 mm	250
6	20.874.406.A00	56 mm	14,7 mm	250

[1] To be fitted after reflow soldering process

974-T(-DS)

Screw connection 45°-angle to PCB, interlocking



The PCB connector 974-T inclines version with a pitch of 5 mm is available in 2 and 3 poles.

The wire entrance is in a 45° angle diagonal to the PC board. Therefore, this PCB connector is ideal for the assembly in the center of PCBs. The design of this PCB connector allows space-saving arrangement of consecutive rows of terminals.

Wire protection in DS-design reliably prevents damage to stranded wires by the screw.

Lateral latching elements allow to link this type of screw connector to terminal strips of any length.

Part Numbers						
	lo. of oles	974-T	974-T-DS	Length	Pcs	
	2	10.874.602	20.874.602	10,00	250	
	3	10.874.603	20.874.603	15,00	250	

General Information

Pitch	5 mm
No. of poles	2 + 3

ECO

Technical Data

Clamping Range	solid / flexible / A	WG				
without wire protector	1 - 6 mm² / 1 - 2,5	1 - 6 mm² / 1 - 2,5 mm² / 16 - 12 AWG				
with wire protector	0,75 - 4 mm² / 0,7	75 - 2,5 mm² / 18	- 12 AWG			
Rated Cross Section	2,5 mm²					
Wire Stripping Length	6,5 mm ± 0,5 mm	ı				
Overvoltage Category	111	III	II			
Pollution Severity Level	3	2	2			
Rated Voltage	250 V	320 V	630 V			
Rated Impulse Voltage	4 kV	4 kV	4 kV			
Rated Insulation Voltage	250 V acc. to EN	60998-1				
Rated Current	24 A					
Hole in PCB	ø 1,3 mm					
Torque	0,5 Nm					

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C
Terminal body	Tin plated brass
Screw	M3; zinc plated steel, clear passivated
Solder pin	ø 1 mm; tin plated copper
Wire protector	Tin plated tin bronze

Approvals

	Current	Voltage	Group	AWG	Nm
RI ®	20 10	300 300	B D	22-12 [1] 22-12 [1]	0,51 0,51
€₽ °	20 10	300 300	B D, E	26 - 12 26 - 12	0,51 0,51
	Current	Voltage	mm²		
(t)	24	250	2,5		

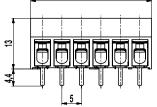
[1] Min No. 26 AWG for factory-wiring only

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Longer P.C. pins up to 75 mm
- Special wire protector for very thin conductors

978(-DS)

Screw connection, large conductor space







Part Numbers					
No. of poles	978	978-DS	Length	Pcs	
2	30.872.002	40.872.002	11,00	250	
3	30.872.003	40.872.003	16,00	250	
4	30.872.004	40.872.004	21,00	200	
5	30.872.005	40.872.005	26,00	100	
6	30.872.006	40.872.006	31,00	100	
7	30.872.007	40.872.007	36,00	100	
8	30.872.008	40.872.008	41,00	100	
9	30.872.009	40.872.009	46,00	100	
10	30.872.010	40.872.010	51,00	100	
11	30.872.011	40.872.011	56,00	100	
12	30.872.012	40.872.012	61,00	100	
13	30.872.013	40.872.013	66,00	100	
14	30.872.014	40.872.014	71,00	100	
15	30.872.015	40.872.015	76,00	100	
16	30.872.016	40.872.016	81,00	100	
17	30.872.017	40.872.017	86,00	100	
18	30.872.018	40.872.018	91,00	100	
19	30.872.019	40.872.019	96,00	100	
20	30.872.020	40.872.020	101,00	100	
21	30.872.021	40.872.021	106,00	100	
22	30.872.022	40.872.022	111,00	100	
23	30.872.023	40.872.023	116,00	100	
24	30.872.024	40.872.024	121,00	100	
25	30.872.025	40.872.025	126,00	100	
26	30.872.026	40.872.026	131,00	100	
27	30.872.027	40.872.027	136,00	100	
28	30.872.028	40.872.028	141,00	100	
29	30.872.029	40.872.029	146,00	100	
30	30.872.030	40.872.030	151,00	100	
31	30.872.031	40.872.031	156,00	100	
32	30.872.032	40.872.032	161,00	100	

General Information

Pitch	5 mm
No. of poles	2 - 32

R

ECO

Technical Data

Clamping Range	solid / flexible / AWG					
without wire protector	0,75 - 6 mm² / 0,75 - 4 mm² / 18 - 10 AWG					
with wire protector	0,34 - 6 mm² / 0,3	0,34 - 6 mm² / 0,34 - 4 mm² / 22 - 10 AWG				
Rated Cross Section	2,5 mm²					
Wire Stripping Length	6,5 mm ± 0,5 mm	I				
Overvoltage Category						
Pollution Severity Level	3	2	2			
Rated Voltage	250 V (200 V)	320 V (320 V)	630 V (400 V)			
Rated Impulse Voltage	4 kV	4 kV	4 kV			
Rated Insulation Voltage	250 V acc. to EN	60998-1				
Rated Current	24 A					
Hole in PCB	ø 1,3 mm					
Torque	0,5 Nm					
Other specifications	Voltage data in brackets are valid for 9-32 poles types. 2-8 poles types are "no-flame" acc. to glow-wire test.					

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	2-8 poles: CTI ≥ 600; 9-32 poles: CTI 400
Insulating Group	2-8 poles: I; 9-32 poles: II
Temperature Range	-40°C up to 100°C
Terminal body	Tin plated brass
Screw	M3; zinc plated steel, blue passivated
Solder pin	ø 1 mm, tin plated copper
Wire protector	Tin plated tin bronze

Approvals

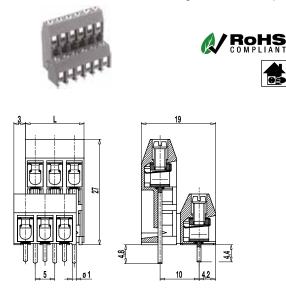
	Current	Voltage	Group	AWG	Nm
AI ®	20 10	300 300	B D	22-12 [1] 22-12 [1]	0,51 0,51
€₽ ®	20 10	300 300	B D, E	26 - 12 26 - 12	0,51 0,51
	Current	Voltage	mm²		
(\$)	24	400	4,0		

[1] Min No. 26 AWG for factory-wiring only

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Longer P.C. pins up to 95 mm
- Version with extended wire entrance
- With test holes, see 970-MP(-DS)

978-EN(-DS)

Screw connection, two-tier version, large conductor space



The PCB connector 978-EN, a two-tier version with larger terminal space and a pitch of 5 mm is available with 4 to 24 poles.

This connector is a combination of the 978-HEN with the 978 version. The rear latching hook on the 978 series locks both terminals to one unit. This configuration allows application-specific locking combinations.

Wire protection in DS-design reliably prevents damage to stranded wires by the screw.

Part Numbers						
No. of poles	978-EN	978-EN-DS	Length	Pcs		
4	30.872.962	40.872.962	10,00	100		
6	30.872.963	40.872.963	15,00	50		
8	30.872.964	40.872.964	20,00	50		
10	30.872.965	40.872.965	25,00	50		
12	30.872.966	40.872.966	30,00	50		
14	30.872.967	40.872.967	35,00	25		
16	30.872.968	40.872.968	40,00	25		
18	30.872.969	40.872.969	45,00	25		
20	30.872.970	40.872.970	50,00	25		
22	30.872.971	40.872.971	55,00	25		
24	30.872.972	40.872.972	60,00	25		

General Information

Pitch	5 mm
No. of poles	4 - 24

ECO

Technical Data

Clamping Range	solid / flexible / AWG				
without wire protector	0,75 - 6 mm² / 0,7	0,75 - 6 mm² / 0,75 - 4 mm² / 18 - 10 AWG			
with wire protector	0,34 - 6 mm² / 0,3	0,34 - 6 mm² / 0,34 - 4 mm² / 22 - 10 AWG			
Rated Cross Section	2,5 mm²	2,5 mm ²			
Wire Stripping Length	6,5 mm ± 0,5 mm	ı			
Overvoltage Category	III	111	I		
Pollution Severity Level	3	2	2		
Rated Voltage	250 V	320 V	630 V		
Rated Impulse Voltage	4 kV	4 kV	4 kV		
Rated Insulation Voltage	250 V acc. to EN	60998-1			
Rated Current	24 A	24 A			
Hole in PCB	ø 1,3 mm	ø 1,3 mm			
Torque	0,5 Nm				

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	
Temperature Range	-40°C up to 100°C
Terminal body	Tin plated brass
Screw	M3; zinc plated steel, blue passivated
Solder pin	ø 1 mm; tin plated copper
Wire protector	Tin plated tin bronze

Approvals

	Current	Voltage	Group	AWG	Nm	
FL ®	20 10	300 300	B D	22-12 [1] 22-12 [1]	0,51 0,51	
S ₽°	20 10	300 300	B D, E	26 - 12 26 - 12	0,51 0,51	
	Current	Voltage	mm²			
(\$)	24	250	4,0			

[1] Min No. 26 AWG for factory-wiring only

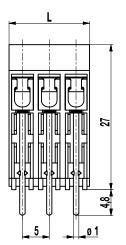
- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Other P.C. pin lengths on request
- Double wire protector as bridge
- Cover for the solder pins for additional misplacing and contact protection
- Two-Tier version with the rear row offset to the left
- · Special combination of the front and rear row of the two-tier version

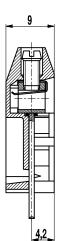
978-HEN(-DS)

Screw connection, tall version, large conductor space









The PCB connector 978-HEN, a tall version with larger terminal space and a pitch of 5 mm is available with 2 to 12 poles.

This tall version is particularly designed for encapsulating PCBs whose mounting location shall provide connection outside the housing.

Wire protection in DS-design reliably prevents damage to stranded wires by the screw.

Connecting the two PCB connectors 978 and 978-EN yields the two-tier version 970-EN.

Part Numbers

i art i ui	libers			
No. of poles	978-HEN	978-HEN-DS	Length	Pcs
2	37.872.962	47.872.962	10,00	250
3	37.872.963	47.872.963	15,00	200
4	37.872.964	47.872.964	20,00	100
5	37.872.965	47.872.965	25,00	100
6	37.872.966	47.872.966	30,00	50
7	37.872.967	47.872.967	35,00	50
8	37.872.968	47.872.968	40,00	50
9	37.872.969	47.872.969	45,00	50
10	37.872.970	47.872.970	50,00	50
11	37.872.971	47.872.971	55,00	50
12	37.872.972	47.872.972	60,00	50

General Information

Pitch	5 mm
No. of poles	2 - 12

ECO

Technical Data

Clamping Range	solid / flexible / AWG				
without wire protector	0,75 - 6 mm² / 0,7	0,75 - 6 mm² / 0,75 - 4 mm² / 18 - 10 AWG			
with wire protector	0,34 - 6 mm² / 0,3	0,34 - 6 mm² / 0,34 - 4 mm² / 22 - 10 AWG			
Rated Cross Section	2,5 mm²	2,5 mm²			
Wire Stripping Length	6,5 mm ± 0,5 mm	ı			
Overvoltage Category	III	III	II		
Pollution Severity Level	3	3	2		
Rated Voltage	250 V	320 V	630 V		
Rated Impulse Voltage	4 kV	4 kV	4 kV		
Rated Insulation Voltage	250 V acc. to EN	60998-1			
Rated Current	24 A				
Hole in PCB	ø 1,3 mm	ø 1,3 mm			
Torque	0,5 Nm				

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C
Terminal body	Tin plated brass
Screw	M3; zinc plated steel, blue passivated
Solder pin	ø 1 mm; tin plated copper
Wire protector	Tin plated tin bronze

Approvals

	Current	Voltage	Group	AWG	Nm
AD ®	20 10	300 300	B D	22-12 [1] 22-12 [1]	0,51 0,51
€ ₽°	20 10	300 300	B D, E	26 - 12 26 - 12	0,51 0,51
	Current	Voltage	mm²		
(\$)	24	250	4,0		

[1] Min No. 26 AWG for factory-wiring only

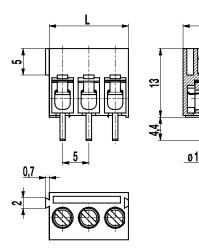
- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Other P.C. pin lengths on request
- Double wire protector as bridge
- Cover for the solder pins for additional misplacing and contact protection

978-T(-DS)

Screw connection, interlocking, large conductor space



4.2



Part Numbers

No. of poles	978-T	978-T-DS	Length	Pcs
2	10.872.632	20.872.632	10,00	250
3	10.872.633	20.872.633	15,00	250

General Information

Pitch	5 mm
No. of poles	2 + 3

R

ECO

Technical Data

Clamping Range	solid / flexible / AWG				
without wire protector	0,75 - 6 mm² / 0,7	0,75 - 6 mm² / 0,75 - 4 mm² / 18 - 10 AWG			
with wire protector	0,34 - 6 mm² / 0,3	0,34 - 6 mm² / 0,34 - 4 mm² / 22 - 10 AWG			
Rated Cross Section	2,5 mm²	2,5 mm ²			
Wire Stripping Length	6,5 mm ± 0,5 mm	1			
Overvoltage Category	III	Ш	II		
Pollution Severity Level	3	2	2		
Rated Voltage	250 V	320 V	630 V		
Rated Impulse Voltage	4 kV	4 kV	4 kV		
Rated Insulation Voltage	250 V acc. to EN	60998-1			
Rated Current	24 A	24 A			
Hole in PCB	ø 1,3 mm	ø 1,3 mm			
Torque	0,5 Nm				

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C
Terminal body	Tin plated brass
Screw	M3; zinc plated steel, blue passivated
Solder pin	ø 1 mm; tin plated copper
Wire protector	Tin plated tin bronze

Approvals

	Current	Voltage	Group	AWG	Nm
91 ®	20 10	300 300	B D, E	22-12 [1] 22-12 [1]	0,51 0,51
€₽ °	20 10	300 300	B D, E	26 - 12 26 - 12	0,51 0,51
	Current	Voltage	mm²		
(t)	24	400	4,0		

[1] Min No. 26 AWG for factory-wiring only

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Longer P.C. pins up to 95 mm
- 2 P.C. pins per pole, please see 978-TY
- Version with extended wire entrance
- Version with test hole, compare 970-MP, 970-TMP

<u>0,7</u>

ø

2,9

978-TY(-DS)

Screw connection, 2 P.C. pins per pole, interlocking, large conductor space





2.2

2,5



General Information		
Pitch	5 mm	
No. of poles	2 + 3	

R

ECO

Technical Data

Clamping Range	solid / flexible / A	WG				
without wire protector	0,75 - 6 mm² / 0,75 - 4 mm² / 18 - 10 AWG					
with wire protector	0,34 - 6 mm² / 0,7	0,34 - 6 mm² / 0,75 - 4 mm² / 22 - 10 AWG				
Rated Cross Section	2,5 mm²					
Wire Stripping Length	6,5 mm ± 0,5 mm	ı				
Overvoltage Category	III	III	II			
Pollution Severity Level	3	2	2			
Rated Voltage	250 V	320 V	630 V			
Rated Impulse Voltage	4 kV	4 kV	4 kV			
Rated Insulation Voltage	250 V acc. to EN	60998-1				
Rated Current	24 A					
Hole in PCB	ø 1,3 mm					
Torque	0,5 Nm					

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C
Terminal body	Tin plated brass
Screw	M3; zinc plated steel, blue passivated
Solder pin	ø 1 mm; tin plated copper
Wire protector	Tin plated tin bronze

Approvals

	Current	Voltage	Group	AWG	Nm	
FL ®	20 10	300 300	B D	22-12 [1] 22-12 [1]	0,51 0,51	
S₽ °	20 10	300 300	B D, E	26 - 12 26 - 12	0,51 0,51	
	Current	Voltage	mm²			
(t)	24	400	4			

[1] Min No. 26 AWG for factory-wiring only

Options / Accessories

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Longer P.C. pins up to 95 mm
- Version with extended wire entrance
- Double wire protector as bridge



5

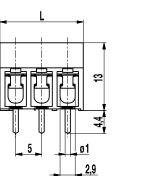
Part Numbers

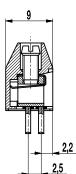
No. of poles	978-TY	978-TY-DS	Length	Pcs
2	30.872.622	40.872.622	10,00	250
3	30.872.623	40.872.623	15,00	250

978-Y(-DS)

Screw connection, 2 P.C. pins per pole, large conductor space







ROHS

Part N	umbers			
No. of poles	978-Y	978-Y-DS	Length	Pcs
2	30.872.802		11,00	250
4	30.872.804		21,00	200
5	30.872.805		26,00	100
6	30.872.806		31,00	100
7	30.872.807		36,00	100
8	30.872.808	39.872.808	41,00	100

further number of poles on request

General Information

Pitch	5 mm
No. of poles	2 - 32

R

VECO

Technical Data

Clamping Range	solid / flexible / AWG				
without wire protector	0,75 - 6 mm² / 0,75 - 4 mm² / 18 - 10 AWG 0,34 - 6 mm² / 0,34 - 4 mm² / 22 - 10 AWG				
with wire protector					
Rated Cross Section	2,5 mm ²				
Wire Stripping Length	6,5 mm ± 0,5 mm				
Overvoltage Category	III	Ш	II		
Pollution Severity Level	3	2	2		
Rated Voltage	250 V (200 V)	320 V	630 V (400 V)		
Rated Impulse Voltage	4 kV	4 kV	4 kV		
Rated Insulation Voltage	250 V acc. to EN 60	0998-1			
Rated Current	24 A				
Hole in PCB	ø 1,3 mm				
Torque	0,5 Nm				
Other specifications	Voltage data in brac types. 2-8 poles typ glow-wire test.		•		

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	2-8 poles: CTI ≥ 600; 9-2 poles: CTI 400
Insulating Group	2-8 poles: I; 9- 32 poles: II
Temperature Range	-40°C up to 100°C
Terminal body	Tin plated brass
Screw	M3; zinc plated steel, blue passivated
Solder pin	ø 1 mm; tin plated copper
Wire protector	Tin plated tin bronze

Approvals

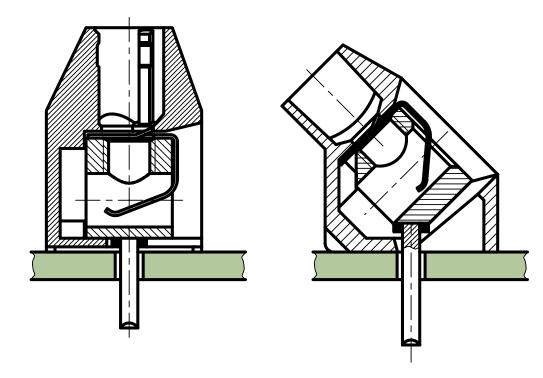
	Current	Voltage	Group	AWG	Nm	
FL®	20 10	300 300	B D	22-12 [1] 22-12 [1]	0,51 0,51	
SP °	20 10	300 300	B D, E	26 - 12 26 - 12	0,51 0,51	
	Current	Voltage	mm²			
(t)	24	400	2,5			

[1] Min No. 26 AWG for factory-wiring only

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Longer P.C. pins up to 95 mm
- Version with extended wire entrance
- Double wire protector as bridge
- With test holes, see 970-MP



Socket terminal strips



This section features the range of our socket terminal strips with a pitch of 5 mm. In combination with their mating plug connector strips, they are extremely reliable plug-in connections

For PCB assembly, socket terminal strip and plug connector systems offer a variety of benefits:

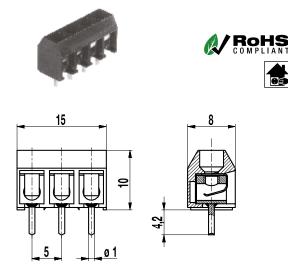
- decentralized component production,
- prevention of wiring errors,
- easy disconnection for service and main-
- tenance purposes
- easy connection in confined space.

The contact pressure is achieved by means of a stainless steel spring with extralong spring deflection.

Just like plug connectors, socket terminal strips can be mounted side-by-side.

Socket terminal strip 950-FB

Plug connection



The socket terminal strip 950-FB with a pitch of 5 mm is available in 2- to 32-pole design and can be mounted side-by-side without pole loss.

It is suitable to connect two PCBs using male pin strips of the series 971-SLR, -SLS oder -SLW. For this version, the plug direction for mating connectors is parallel to the PCB.

The contact pressure is achieved by means of a stainless steel spring with extra-long spring deflection.

For longer clearance and creepage distances, socket terminal strips are also available in a larger pitch.

Part Numbers 950-FB No. of Length Pcs poles 2 80.871.006 10,00 250 250 15,00 3 80.871.053 4 80.871.054 20,00 100 5 80.871.055 25,00 100 6 80.871.056 30,00 100 7 35.00 100 80 871 001 8 80.871.008 40,00 100 9 80.871.009 45,00 100 10 80.871.010 50.00 100 11 80.871.011 55,00 100 12 80.871.062 60,00 100 80.871.063 65.00 13 100 14 80.871.064 70,00 100 15 80.871.065 75,00 100 16 80.871.066 80,00 100 17 80.871.067 85,00 100 18 80.871.068 90,00 100 19 80.871.069 95,00 100 20 80.871.070 100,00 100 21 80.871.071 105.00 100 22 80.871.072 110,00 100 23 80.871.073 115,00 100 24 80.871.074 120,00 100 25 80.871.075 125,00 100 26 130,00 80.871.076 100 27 80.871.077 135,00 100 28 80.871.078 140,00 100 29 80.871.079 145,00 100

General Information

Pitch	5 mm
No. of poles	2 - 32
Usable with	plug connector 951-SV

ECO

Technical Data

Overvoltage Category	III	III	II		
Pollution Severity Level	3	2	2		
Rated Voltage	160 V	160 V	320 V		
Rated Impulse Voltage	2,5 kV	2,5 kV	2,5 kV		
Rated Insulation Voltage	130 V acc. to EN 60998-1				
Rated Current	6 A				
Hole in PCB	ø 1,3 mm				
Other specifications	2-8 poles types are "no-flame" acc. to glow-wire test				

Material

PA, grey, V-0
2-8 poles: CTI ≥ 600; 9-32 poles: CTI 400
2-8 poles: I; 9-32 poles: II
-40°C up to 100°C
Tin plated brass
ø 1 mm; tin plated copper
Stainless strip steel

Approvals

Appior	alo				
	Current	Voltage	Group	AWG	Nm
۶V®	7	300	В		
S₽ °	7	300	В		
	Current	Voltage	mm²		
(\$)	13,5	250			

Options / Accessories

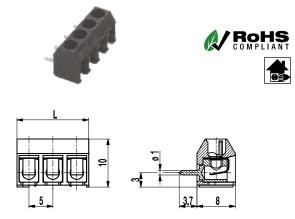
- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Longer P.C. pins up to 75 mm
- Version with lateral latching elements

further number of poles on request

Socket terminal strip

951-FB

Plug connection, plug-in direction vertical to PCB



The socket terminal strip 951-FB with a pitch of 5 mm is available in 2- to 32-pole design and can be mounted side-by-side without pole loss.

It is suitable to connect two PCBs using male pin strips of the series 971-SLR, -SLS oder -SLW. For this version, the plug direction for mating connectors is vertical to the PCB.

The contact pressure is achieved by means of a stainless steel spring with extra-long spring deflection.

For longer clearance and creepage distances, socket terminal strips are also available in a larger pitch.

General Information

Pitch	5 mm
No. of poles	2 - 32
Usable with	plug connector 951-SV

ECO

Technical Data

Overvoltage Category	III	III	II		
Pollution Severity Level	3	2	2		
Rated Voltage	160 V	160 V	320 V		
Rated Impulse Voltage	2,5 kV	2,5 kV	2,5 kV		
Rated Insulation Voltage	130 V acc. to EN	60998-1			
Rated Current	6 A	6 A			
Hole in PCB	ø 1,3 mm				
Other specifications	2-8 poles types a test	2-8 poles types are "no-flame" acc. to glow-wire test			

Material	
Moulding	PA, grey, V-0
Comparative Tracking Index	2-8 poles: CTI ≥ 600; 9-32 poles: CTI 400
Insulating Group	2-8 poles: I; 9-32 poles: II
Temperature Range	-40°C up to 100°C
Terminal body	Tin plated brass
Solder pin	ø 1 mm; tin plated brass
Spring	Stainless strip steel

Part N	umbers		
No. of	951-FB	Length	Pcs
poles			
2	85.871.012	10,00	250
3	85.871.083	15,00	250
4	85.871.084	20,00	200
5	85.871.085	25,00	100
6	85.871.086	30,00	100
7	85.871.022	35,00	100
8	85.871.018	40,00	100
9	85.871.019	45,00	100
10	85.871.020	50,00	100
11	85.871.021	55,00	100
12	85.871.082	60,00	100
13	85.871.023	65,00	100
14	85.871.024	70,00	100
15	85.871.025	75,00	100
16	85.871.026	80,00	100
17	85.871.027	85,00	100
18	85.871.028	90,00	100
19	85.871.029	95,00	100
20	85.871.030	100,00	100
21	85.871.031	105,00	100
22	85.871.032	110,00	100
23	85.871.039	115,00	100
24	85.871.040	120,00	100
25	85.871.041	125,00	100
26	85.871.042	130,00	100
27	85.871.037	135,00	100
28	85.871.088	140,00	100
29	85.871.089	145,00	100
30	85.871.090	150,00	100
31	85.871.091	155,00	100
32	85.871.092	160,00	100

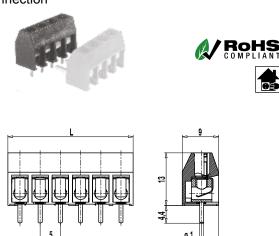
Approvals

	alo				
	Current	Voltage	Group	AWG	Nm
AI ®	7	300	В		
S₽ °	7	300	В		
	Current	Voltage	mm²		
(\$)	13,5	250			

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Version with lateral latching elements

Socket terminal strip 970-FB

Plug connection



The socket terminal strip 970-FB with a pitch of 5 mm is available with 2 to 32 poles. In order to achieve higher housing strength, these socket terminal strips cannot be mounted side-by-side without pole loss.

It is suitable for a perpendicular connection of two PCBs when using male pin strips of the series 971-SLR, -SLS oder –SLW. For this version, the plug direction for mating connectors is parallel to the PCB.

The contact pressure is achieved by means of a stainless steel spring with extra-long spring deflection. Due to the high spring forces, it is advisable to select socket terminal strips with only up to 8 poles.

For longer clearance and creepage distances, socket terminal strips are also available in a larger pitch.

The socket terminal strip 970-FB only differs from the smaller 950-FB version by the M3 screws and longer clearance and creepage distances. It is fully compatible to versions 951-SV, 97..-FBW and -FBS.

Part Numbers

i aitin	unibers		
No. of poles	970-FB	Length	Pcs
2	80.872.052	11,00	250
3	80.872.053	16,00	250
4	80.872.054	21,00	200
5	80.872.055	26,00	100
6	80.872.056	31,00	100
7	80.872.057	36,00	100
8	80.872.058	41,00	100
9	80.872.059	46,00	100
10	80.872.060	51,00	100
11	80.872.061	56,00	100
12	80.872.062	61,00	100
13	80.872.063	66,00	100
14	80.872.064	71,00	100
15	80.872.065	76,00	100
16	80.872.066	81,00	100
17	80.872.067	86,00	100
18	80.872.068	91,00	100
20	80.872.070	101,00	100
22	80.872.072	111,00	100
24	80.872.074	121,00	100
26	80.872.076	131,00	100
28	80.872.078	141,00	100
further num	ber of poles on request		

General Information

Pitch	5 mm
No. of poles	2 - 32
Usable with	plug connector 971-SV

Technical Data

Overvoltage Category	III	III	II		
Pollution Severity Level	3	2	2		
Rated Voltage	250 V (200 V)	320 V	630 V (400 V)		
Rated Impulse Voltage	4 kV	4 kV	4 kV		
Rated Insulation Voltage	250 V acc. to EN 60	250 V acc. to EN 60998-1			
Rated Current	6 A				
Hole in PCB	ø 1,3 mm				
Other specifications	Voltage data in brac types. 2-8 poles typ glow-wire test.				

Material

PA, grey, V-0
2-8 poles: CTI ≥ 600; 9-32 poles: CTI 400
2-8 poles: I; 9-32 poles: II
-40°C up to 100°C
Tin plated brass
ø 1 mm; tin plated copper
Stainless strip steel

Approvals

	Current	Voltage	Group	AWG	Nm
AI ®	20 10	300 300	B D		
S₽ °	20 10	300 300	B D, E		
	Current	Voltage	mm²		
(\$)	17,5	250			

Options / Accessories

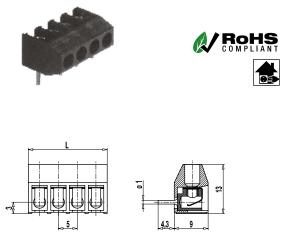
- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- · Pitch of 10 mm for larger clearance and creepage distances
- Longer P.C. pins up to 95 mm
- Version with lateral latching elements

further number of poles on request

Socket terminal strip

971-FB

Plug connection, plug-in direction vertical to PCB



The socket terminal strip 971-FB with a pitch of 5 mm is available with 2 to 32 poles. In order to achieve a higher housing strength, these socket terminal strips cannot be mounted side-by-side without pole loss.

It is suitable for a parallel connection of two PCBs, when using male pin strips of the series 971-SLR, -SLS oder -SLW. For this version, the plug direction for mating connectors is vertical to the PCB.

The contact pressure is achieved by means of a stainless steel spring with extra-long spring deflection. Due to the high spring forces, it is advisable to select the socket terminal strip with only up to 8 poles.

For longer clearance and creepage distances, socket terminal strips are also available in a larger pitch.

The socket terminal strip 971-FB only differs from the smaller 951-FB version by the M3 screws and longer clearance and creepage distances. It is fully compatible to versions 951-SV, 97..-FBW and -FBS.

Part Numbers

i art Numbers				
No. of poles	971-FB	Length	Pcs	
2	85.872.152	11,00	250	
3	85.872.153	16,00	250	
4	85.872.154	21,00	200	
5	85.872.155	26,00	100	
6	85.872.156	31,00	100	
7	85.872.157	36,00	100	
8	85.872.158	41,00	100	
9	85.872.159	46,00	100	
10	85.872.160	51,00	100	
11	85.872.161	56,00	100	
12	85.872.162	61,00	100	
13	85.872.163	66,00	100	
14	85.872.164	71,00	100	
15	85.872.165	76,00	100	
16	85.872.166	81,00	100	
17	85.872.167	86,00	100	
18	85.872.168	91,00	100	
20	85.872.170	101,00	100	
22	85.872.172	111,00	100	
24	85.872.174	121,00	100	
26	85.872.176	131,00	100	
28	85.872.178	141,00	100	
furthor num	her of poles on request			

General Information

Pitch	5 mm
No. of poles	2 - 32
Usable with	plug connector 971-SV

Technical Data

Overvoltage Category	III	Ш	II	
Pollution Severity Level	3	2	2	
Rated Voltage	250 V	320 V	630 V (500 V)	
Rated Impulse Voltage	4 kV	4 kV	4 kV	
Rated Insulation Voltage	250 V acc. to EN 60998-1			
Rated Current	6 A			
Hole in PCB	ø 1,3 mm			
Other specifications	Voltage data in bi types. 2-8 poles t glow-wire test.			

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	2-8 poles: CTI ≥ 600; 9-32 poles: CTI 400
Insulating Group	2-8 poles: I; 9-32 poles: II
Temperature Range	-40°C up to 100°C
Terminal body	Tin plated brass
Solder pin	ø 1 mm; tin plated brass
Spring	Stainless strip steel

Approvals

	Current	Voltage	Group	AWG	Nm
AI ®	20 10	300 300	B D		
S₽ °	20 10	300 300	B D, E		
	Current	Voltage	mm²		
(\$)	17,5	250			

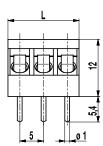
- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- · Pitch of 10 mm for larger clearance and creepage distances
- Other P.C. pin lengths on request
- Version with lateral latching elements

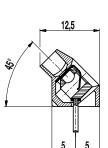
Socket terminal strip

974-FB

Plug connection 45°-angle to PCB







Part Numbers				
974-FB	Length	Pcs		
90.874.032	10,00	250		
90.874.033	15,00	250		
90.874.034	20,00	200		
90.874.035	25,00	100		
90.874.036	30,00	100		
90.874.037	35,00	100		
90.874.038	40,00	100		
90.874.039	45,00	100		
90.874.040	50,00	100		
90.874.041	55,00	100		
90.874.042	60,00	100		
90.874.043	65,00	100		
90.874.044	70,00	50		
90.874.045	75,00	50		
90.874.046	80,00	50		
90.874.047	85,00	50		
90.874.048	90,00	50		
90.874.049	95,00	50		
90.874.050	100,00	50		
90.874.051	105,00	50		
90.874.052	110,00	50		
90.874.053	115,00	50		
90.874.054	120,00	50		
90.874.055	125,00	50		
90.874.056	130,00	50		
	974-FB 90.874.032 90.874.033 90.874.033 90.874.035 90.874.035 90.874.037 90.874.037 90.874.038 90.874.039 90.874.040 90.874.041 90.874.042 90.874.042 90.874.044 90.874.045 90.874.045 90.874.051 90.874.053 90.874.055	974-FB Length 90.874.032 10,00 90.874.033 15,00 90.874.033 15,00 90.874.034 20,00 90.874.035 25,00 90.874.036 30,00 90.874.037 35,00 90.874.038 40,00 90.874.039 45,00 90.874.040 50,00 90.874.041 55,00 90.874.042 60,00 90.874.043 65,00 90.874.044 70,00 90.874.045 75,00 90.874.046 80,00 90.874.047 85,00 90.874.048 90,00 90.874.049 95,00 90.874.050 100,00 90.874.051 105,00 90.874.052 110,00 90.874.053 115,00 90.874.054 120,00 90.874.055 125,00		

General Information

Pitch	5 mm
No. of poles	2 - 26
Usable with	plug connector 951-SV

R

NECO

Technical Data

Overvoltage Category	III	III	II
Pollution Severity Level	3	2	2
Rated Voltage	160 V	160 V	320 V
Rated Impulse Voltage	2,5 kV	2,5 kV	2,5 kV
Rated Insulation Voltage	130 V acc. to EN 60998-1		
Rated Current	6 A		
Hole in PCB	ø 1,3 mm		
Other specifications	Rated voltage ad	apted to counterp	part 951-SV(-DS)

Material

PA, grey, V-0
CTI ≥ 600
1
-40°C up to 100°C
Tin plated brass
ø 1 mm; tin plated copper
Stainless strip steel

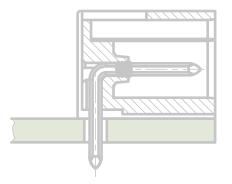
Approvals

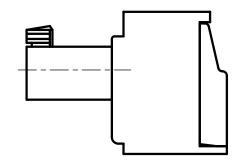
	Current	Voltage	Group	AWG	Nm
RI ®	20 10	300 300	B D		
€ ₽°	20 10	300 300	B D, E		
	Current	Voltage	mm²		
(\$)	13,5	250			

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Other P.C. pin lengths on request
- Version with lateral latching elements
- With base plate, please see 974-BP









This section lists our plug connectors with a pitch of 5 mm.

In combination with mating socket terminal strips and pin strips, plug connectors offer a variety of benefits:

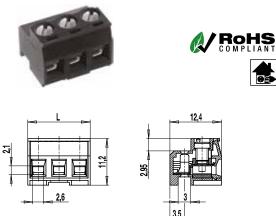
- decentralized part/component assembly,prevention of wiring errors
- easy disconnection for service and maintenance purposes
- easy connection in confined space.

In addition to the screw version, the plug connector assortment also features solutions with tension spring technology. The screws of these plug connectors are secured against self-loosening. Our plug connectors can also be mounted side-by-side without pole loss.

Series 120 plug connectors (except for SMD- and THR-products) have standard grooves to accommodate coding keys. Plug connectors with such coded pin strips provide optimum protection against twisting and/or incorrect plugging.

Plug connector 115-F-111

Screw connection





This series was specially designed for space-critical applications and offers in spite of its small design a spacious clamping area. Equipped with screw clamps in elevator clamping style, this plug-in connector guarantees highest clamping security for many years.

The plug-in connector 115-F can be mounted in housing and a PCBoard can subsequently be inserted from above or below, when provided with a WECO pin strip.

Especially the possibility to insert pin strips displaced either from above and below, enables two PCBoards to be connected via one terminal block.

When using pin strips with overlong pins (available on request) in the direction of insertion, two plug connectors can be inserted one on top of the other (stacked) in order to produce a parallel circuit.

Part N	Part Numbers			
No. of poles	115-F-111	Length	Pcs	
2	10.816.002	10,00	250	
3	10.816.003	15,00	250	
4	10.816.004	20,00	250	
5	10.816.005	25,00	100	
6	10.816.006	30,00	100	
8	10.816.008	40,00	100	
10	10.816.010	50,00	50	
12	10.816.012	60,00	50	
further num	har of polos on request			

further number of poles on request

General Information

Pitch	5 mm
No. of poles	2 - 12
Usable with	all ø 1,3 mm pin strips series 971-SLR, 971-SLR-THR, 971-SLR-SMD
Areas of application	Building and telecommunication technology, particularly for mass-production applications where space is limited.

ECO

Technical Data

Clamping Range	solid / flexible / A	WG	
	0,14 - 2,5 mm² / (),14 - 1,5 mm² / 2	26 - 14 AWG
Rated Cross Section	1,5 mm²		
Wire Stripping Length	6 mm ± 0,5 mm		
Overvoltage Category	III	III	I
Pollution Severity Level	3	2	2
Rated Voltage	250 V	320 V	630 V
Rated Impulse Voltage	4 kV	4 kV	4 kV
Rated Insulation Voltage	250 V acc. to EN	60998-1	
Rated Current	10 A		
Torque	0,5 Nm		

Material

PA, grey, V-0
CTI ≥ 600
1
-40°C up to 100°C
Nickel plated brass
Copper alloy, tin plated
M3; zinc plated steel, blue passivated
Copper alloy, tin plated

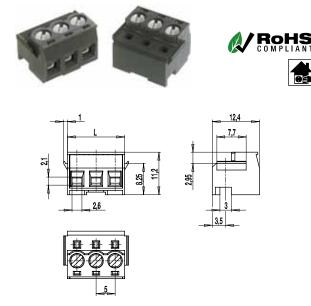
Approvals

	Current	Voltage	Group	AWG	Nm
۶V®	12	300	B	26 - 14	0,23
	10	300	D	26 - 14	0,23
S₽ °	12	300	B	26 - 14	0,22
	10	300	D, E	26 - 14	0,22

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00

115-F-118

Screw connection, with lateral ribs



The plug connectors of this series were particularly designed for applications where space is limited. However, they offer generous terminal space despite their small dimensions. Equipped with lift-system screw terminals, this plug connector guarantees highest clamping safety over many years.

Series 115-F-118 features lateral ribs on both sides, which snap-in the housing's latching hook, thus ensuring optimum tight fit. PCBs are usually connected with the pin strips from above.

Application example - thermostat housing:

The plug connectors are snapped in the basic housing and their leads are wired externally. Subsequently, the control panel, equipped with corresponding pin strips, is connected from above.

Part Numbers

No. of poles	115-F-118	Length	Pcs
2	10.816.052	10,00	250
3	10.816.053	15,00	250
4	10.816.054	20,00	250
5	10.816.055	25,00	100
6	10.816.056	30,00	100
8	10.816.058	40,00	100
10	10.816.060	50,00	50
12	10.816.062	60,00	50
further numb	or of poloo on request		

further number of poles on request

General Information

Pitch	5 mm
No. of poles	2 - 12
Usable with	all ø 1,3 mm pin strips series 971-SLR, 971-SLR-THR, 971-SLR-SMD
Areas of application	Building and telecommunication technology, particularly for mass-production applications where space is limited.

ECO

Technical Data

Clamping Range	solid / flexible / A	WG	
	0,14 - 2,5 mm² / (),14 - 1,5 mm² / 2	26 - 14 AWG
Rated Cross Section	1,5 mm ²		
Wire Stripping Length	6 mm ± 0,5 mm		
Overvoltage Category	111	III	I
Pollution Severity Level	3	2	2
Rated Voltage	250 V	320 V	630 V
Rated Impulse Voltage	4 kV	4 kV	4 kV
Rated Insulation Voltage	250 V acc. to EN	60998-1	
Rated Current	10 A		
Torque	0,5 Nm		

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	
Temperature Range	-40°C up to 100°C
Terminal body	Nickel plated brass
Pressure clamp	Copper alloy, tin plated
Screw	M3; zinc plated steel, blue passivated
Spring	Copper alloy, tin plated

Approvals

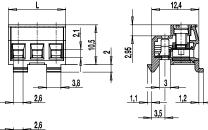
	Current	Voltage	Group	AWG	Nm	
۶L®	12 10	300 300	B D	26 - 14 26 - 14	0,23 0,23	
S₽ °	12 10	300 300	B D, E	26 - 14 26 - 14	0,22 0,22	

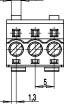
- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00

115-F-211

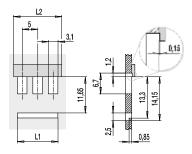
Screw connection, with snap-on foots







L1 = (Number of Poles x Pitch) - 1,9L2 = (Number of Poles x Pitch) + 0,5



The plug connectors of this series were particularly designed for applications where space is limited. However, they offer generous terminal space despite their small dimensions. Equipped with lift-system screw terminals, this plug connector guarantees highest clamping safety over many years.

Plug connector version 115-F-211 has a snap-on foot and is designed for appropriately shaped base plates. PCBs are usually connected with the pin strips from above.

Part Numbers					
No. of poles	115-F-211	Length	Pcs		
2	10.816.026	10,00	250		
3	10.816.027	15,00	250		
4	10.816.028	20,00	250		
5	10.816.029	25,00	100		
6	10.816.030	30,00	100		
8	10.816.032	40,00	100		
10	10.816.034	50,00	50		
12	10.816.036	60,00	50		

further number of poles on request

General Information

Pitch	5 mm
No. of poles	2 - 12
Usable with	all ø 1,3 mm pin strips series 971-SLR, 971-SLR-THR, 971-SLR-SMD
Areas of application	Building and telecommunication technology, particularly for mass-production applications where space is limited.

ECO

Technical Data

Clamping Range	solid / flexible / A	solid / flexible / AWG 0,14 - 2,5 mm² / 0,14 - 1,5 mm² / 26 - 14 AWG				
	0,14 - 2,5 mm² / (
Rated Cross Section	1,5 mm²					
Wire Stripping Length	6 mm ± 0,5 mm					
Overvoltage Category	III	III	П			
Pollution Severity Level	3	2	2			
Rated Voltage	250 V	320 V	630 V			
Rated Impulse Voltage	4 kV	4 kV	4 kV			
Rated Insulation Voltage	250 V acc. to EN	60998-1				
Rated Current	10 A					
Torque	0,5 Nm					

Material

PA, grey, V-0
CTI ≥ 600
-40°C up to 100°C
Nickel plated brass
Copper alloy, tin plated
M3; zinc plated steel, blue passivated
Copper alloy, tin plated

Approvals

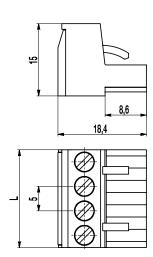
	Current	Voltage	Group	AWG	Nm
FL ®	12	300	B	26 - 14	0,23
	10	300	D	26 - 14	0,23
S₽ °	12	300	B	26 - 14	0,22
	10	300	D, E	26 - 14	0,22

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00

120-A-111

Screw connection





The plug connector 120-A-111, with a pitch of 5 mm, is available in 2- to 24-pole design and can be mounted side-by-side without pole loss.

For each pole the plug connector has one trapezoidal coding slot in which the coding elements 120-K can be inserted. The wire entrance is parallel to the plug direction.

The screws are captive.

Part Numbers

Part N	umpers		
No. of poles	120-A-111	Length	Pcs
2	10.808.002	10,00	200
3	10.808.003	15,00	200
4	10.808.004	20,00	100
5	10.808.005	25,00	100
6	10.808.006	30,00	100
7	10.808.007	35,00	50
8	10.808.008	40,00	50
9	10.808.009	45,00	50
10	10.808.010	50,00	50
11	10.808.011	55,00	50
12	10.808.012	60,00	50
13	10.808.013	65,00	50
14	10.808.014	70,00	50
15	10.808.015	75,00	50
16	10.808.016	80,00	50
17	10.808.017	85,00	50
18	10.808.018	90,00	50
19	10.808.019	95,00	50
20	10.808.020	100,00	50
21	10.808.021	105,00	50
22	10.808.022	110,00	50
23	10.808.023	115,00	50
24	10.808.024	120,00	50

General Information

R

05

conecta

ROHS

Pitch	5 mm
No. of poles	2 - 24
Usable with	all pin strips of series 120-M

R

ECO

Technical Data

Clamping Range	solid / flexible / A	solid / flexible / AWG				
	0,2 - 4 mm² / 0,2	0,2 - 4 mm² / 0,2 - 2,5 mm² / 26 - 12 AWG				
Rated Cross Section	2,5 mm²	2,5 mm²				
Wire Stripping Length	7 mm ± 0,5 mm					
Overvoltage Category	III	III	11			
Pollution Severity Level	3	2	2			
Rated Voltage	250 V	320 V	630 V			
Rated Impulse Voltage	4 kV	4 kV	4 kV			
Rated Insulation Voltage	250 V acc. to EN	60998-1				
Rated Current	12 A					
Torque	0,5 Nm					

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	
Temperature Range	-40°C up to 100°C
Terminal body	Nickel plated brass
Pressure clamp	Tin plated tin bronze
Screw	M3; zinc plated steel, blue passivated
Spring	Tin plated tin bronze

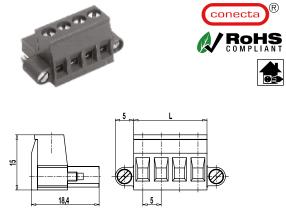
Approvals

	Current	Voltage	Group	AWG	Nm
۶L®	15	300	B	26 - 12	0,51
	10	300	D	26 - 12	0,51
()	15	300	B	26 - 12	0,51
	10	300	D, E	26 - 12	0,51

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Coding elements 120-K
- · Connectors equipped with coding elements on request
- Version with extended wire entrance
- Strain relief

120-A-115

Screw connection, with connecting flanges



The plug connector 120-A-115, with connecting flanges and a pitch of 5 mm, is available in 2- to 24-pole design and can be mounted side-by-side.

For each pole the plug connector has one trapezoidal coding slot in which the coding elements 120-K can be inserted. The wire entrance is parallel to the plug direction.

The wire connection screws are captive.

Part Numbers

No. of poles	120-A-115	Length	Pcs
2	15.808.077	10,00	100
3	15.808.078	15,00	100
4	15.808.079	20,00	100
5	15.808.080	25,00	50
6	15.808.081	30,00	50
7	15.808.082	35,00	50
8	15.808.083	40,00	50
9	15.808.084	45,00	50
10	15.808.085	50,00	50
11	15.808.086	55,00	50
12	15.808.087	60,00	50
13	15.808.088	65,00	50
14	15.808.089	70,00	50
15	15.808.090	75,00	50
16	15.808.091	80,00	50
17	15.808.092	85,00	50
18	15.808.093	90,00	50
19	15.808.094	95,00	50
20	15.808.095	100,00	50
21	15.808.096	105,00	50
22	15.808.097	110,00	50

General Information

Pitch	5 mm
No. of poles	2 - 22
Usable with	all pin strips of series 120

R

ECO

Technical Data

n² / 0,2 - 2	2,5 mm² / 26 - 1	12 AWG	
	2,5 mm ²		
,5 mm			
	III	II	
	2	2	
V	320 V	630 V	
V	4 kV	4 kV	
. to EN 6	0998-1		
	V V V	III 2 V 320 V	

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C
Terminal body	Nickel plated brass
Pressure clamp	Tin plated tin bronze
Screw	M3; zinc plated steel, blue passivated
Spring	Tin plated tin bronze

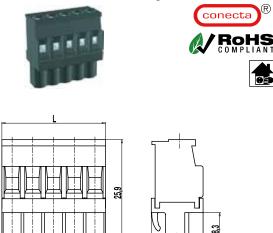
Approvals

	Current	Voltage	Group	AWG	Nm	
۶V®	15 10	300 300	B D	26 - 12 26 - 12	0,51 0,51	
S₽ °	15 10	300 300	B D, E	26 - 12 26 - 12	0,51 0,51	
VDE						

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Coding elements 120-K
- · Connectors equipped with coding elements on request
- Version with extended wire entrance

120-D-111

Screw connection, backside latching hooks



63 12,5

The plug connector 120-D-111, with a pitch of 5 mm, is available in 2- to 24-pole design and can be mounted side-by-side without pole loss.

On version 120-D-111, the wire entrance is located opposite to the latching hook side; on version 120-D-121, it is located on the same side. Plugging the plug connector on pin strips of series 120 therefore results in inverted plug-in configurations.

For each pole the plug connector has one trapezoidal coding slot in which the coding elements 120-K can be inserted. The wire entrance is vertical to the plug direction.

The screws are captive.

5

Part Numbers

No. of poles	120-D-111	Length	Pcs
2	10.808.402	10,00	100
3	10.808.403	15,00	100
4	10.808.404	20,00	100
5	10.808.405	25,00	100
6	10.808.406	30,00	100
7	10.808.407	35,00	50
8	10.808.408	40,00	50
9	10.808.409	45,00	50
10	10.808.410	50,00	50
11	10.808.411	55,00	50
12	10.808.412	60,00	100
13	10.808.413	65,00	50
14	10.808.414	70,00	50
15	10.808.415	75,00	50
16	10.808.416	80,00	50
17	10.808.417	85,00	50
18	10.808.418	90,00	50
19	10.808.419	95,00	50
20	10.808.420	100,00	50
21	10.808.421	105,00	50
22	10.808.422	110,00	50
23	10.808.423	115,00	50
24	10.808.424	120,00	50

General Information

Pitch	5 mm
No. of poles	2 - 24
Usable with	all pin strips of series 120

ECO

Technical Data

Clamping Range	solid / flexible / AWG 0,2 - 4 mm² / 0,2 - 2,5 mm² / 26 - 12 AWG			
Rated Cross Section	2,5 mm ²			
Wire Stripping Length	7 mm ± 0,5 mm			
Overvoltage Category	III	III	II	
Pollution Severity Level	3	2	2	
Rated Voltage	250 V	320 V	630 V	
Rated Impulse Voltage	4 kV	4 kV	4 kV	
Rated Insulation Voltage	250 V acc. to EN	60998-1		
Rated Current	12 A			
Torque	0,5 Nm			

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C
Terminal body	Nickel plated brass
Pressure clamp	Tin plated tin bronze
Screw	M3; zinc plated steel, blue passivated
Spring	Tin plated tin bronze

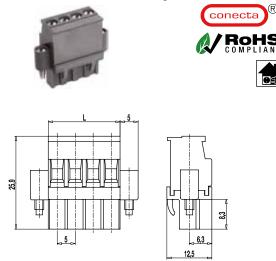
Approvals

	Current	Voltage	Group	AWG	Nm	
FL ®	15 10	300 300	B D	26 - 12 26 - 12	0,51 0,51	
S₽ °	15 10	300 300	B D, E	26 - 12 26 - 12	0,51 0,51	

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Coding elements 120-K
- · Connectors equipped with coding elements on request
- · Strain relief

120-D-115

Screw connection, backside latching hooks, with connecting flanges



The plug connector 120-D-115, with connecting flanges and a pitch of 5 mm, is available in 2- to 22-pole design and can be mounted side-by-side.

The plug connector has connecting flanges on left and right side which are equipped with M2.5 screws. By means of those screws, the plug connector can be screwed together with mating pin strips of series 120.

On version 120-D-115, the wire entrance is located opposite to the latching hook side; on version 120-D-125, it is located on the same side. Plugging the plug connector on pin strips of series 120 therefore results in inverted plug-in configurations.

For each pole the plug connector has one trapezoidal coding slot in which the coding elements 120-K can be inserted. The wire entrance is vertical to the plug direction.

The wire connection screws are captive.

Part Numbers

Part N	umbers		
No. of poles	120-D-115	Length	Pcs
2	15.808.402	10,00	100
3	15.808.403	15,00	100
4	15.808.404	20,00	100
5	15.808.405	25,00	100
6	15.808.406	30,00	50
7	15.808.407	35,00	50
8	15.808.408	40,00	50
9	15.808.409	45,00	50
10	15.808.410	50,00	50
11	15.808.411	55,00	50
12	15.808.412	60,00	50
13	15.808.413	65,00	50
14	15.808.414	70,00	50
15	15.808.415	75,00	50
16	15.808.416	80,00	50
17	15.808.417	85,00	50
18	15.808.418	90,00	50
19	15.808.419	95,00	50
20	15.808.420	100,00	50
21	15.808.421	105,00	50
22	15.808.422	110,00	50

General Information			
Pitch	5 mm		
No. of poles	2 - 22		
Usable with	all pin strips of series 120		

ECO

Technical Data

Clamping Range	solid / flexible / AWG			
	0,2 - 4 mm² / 0,2 - 2,5 mm² / 26 - 12 AWG			
Wire Stripping Length	7 mm ± 0,5 mm			
Overvoltage Category	III		I	
Pollution Severity Level	3	2	2	
Rated Voltage	250 V	320 V	630 V	
Rated Impulse Voltage	4 kV	4 kV	4 kV	
Rated Insulation Voltage	250 V acc. to EN	60998-1		
Rated Current	12 A 0,5 Nm			
Torque				

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	
Temperature Range	-40°C up to 100°C
Terminal body	Nickel plated brass
Pressure clamp	Tin plated tin bronze
Screw	M3; zinc plated steel, blue passivated
Spring	Tin plated tin bronze

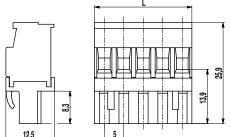
Approvals

	Current	Voltage	Group	AWG	Nm
۶V®	15	300	B	26 - 12	0,51
	10	300	D	26 - 12	0,51
S₽ °	15	300	B	26 - 12	0,51
	10	300	D, E	26 - 12	0,51

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Coding elements 120-K
- · Connectors equipped with coding elements on request
- Strain relief

Plug connector 120-D-121 Screw connection





The plug connector 120-D-121, with a pitch of 5 mm, is available in 2- to 24-pole design and can be mounted side-by-side without pole loss.

On version 120-D-111, the wire entrance is located opposite to the latching hook side; on version 120-D-121, it is located on the same side. Plugging the plug connector on pin strips of series 120 therefore results in inverted plug-in configurations.

For each pole the plug connector has one trapezoidal coding slot in which the coding elements 120-K can be inserted. The wire entrance is vertical to the plug direction.

The screws are captive.

20

21

22

23

24

Part N	umbers	
No. of poles	120-D-121	Length
2	20.808.402	10,00
3	20.808.403	15,00
4	20.808.404	20,00
5	20.808.405	25,00
6	20.808.406	30,00
7	20.808.407	35,00
8	20.808.408	40,00
9	20.808.409	45,00
10	20.808.410	50,00
11	20.808.411	55,00
12	20.808.412	60,00
13	20.808.413	65,00
14	20.808.414	70,00
15	20.808.415	75,00
16	20.808.416	80,00
17	20.808.417	85,00
18	20.808.418	90,00
19	20.808.419	95,00

General Information

Pitch	5 mm
No. of poles	2 - 24
Usable with	all pin strips of series 120

ECO

Technical Data

Clamping Range	solid / flexible / AWG 0,2 - 4 mm² / 0,2 - 2,5 mm² / 26 - 12 AWG			
Wire Stripping Length	7 mm ± 0,5 mm			
Overvoltage Category	111	III	Ш	
Pollution Severity Level	3	2	2	
Rated Voltage	250 V	320 V	630 V	
Rated Impulse Voltage	4 kV	4 kV	4 kV	
Rated Insulation Voltage	250 V acc. to EN	60998-1		
Rated Current	12 A			
Torque	0,5 Nm			

Material

Pcs

100

100

100

100

100

50 50 50

50

50 100

50

50

50

50

50

50 50

50

50

50

50

50

100,00

105,00

110,00

115,00

120,00

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C
Terminal body	Nickel plated brass
Pressure clamp	Tin plated tin bronze
Screw	M3; zinc plated steel, blue passivated
Spring	Tin plated tin bronze

Approvals Voltage AWG Current Group Nm 15 300 В 26 - 12 0,51 **GL®** 10 300 D 26 - 12 0,51 15 300 В 26 - 12 0,51 **S** 10 300 D, E 26 - 12 0,51

Options / Accessories

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Coding elements 120-K
- · Connectors equipped with coding elements on request
- Strain relief

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20.808.420

20.808.421

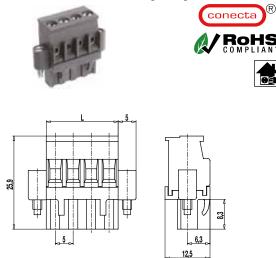
20.808.422

20.808.423

20.808.424

120-D-125

Screw connection, with connecting flanges



The plug connector 120-D-125, with connecting flanges and a pitch of 5 mm, is available in 2- to 22-pole design and can be mounted side-by-side.

The plug connector has connecting flanges on left and right side which are equipped with M2.5 screws. By means of those screws, the plug connector can be screwed together with mating pin strips of series 120.

On version 120-D-115, the wire entrance is located opposite to the latching hook side; on version 120-D-125, it is located on the same side. Plugging the plug connector on pin strips of series 120 therefore results in inverted plug-in configurations.

For each pole the plug connector has one trapezoidal coding slot in which the coding elements 120-K can be inserted. The wire entrance is vertical to the plug direction.

The wire connection screws are captive.

Part Numbers

Part N	umbers		
No. of poles	120-D-125	Length	Pcs
2	25.808.402	10,00	100
3	25.808.403	15,00	100
4	25.808.404	20,00	100
5	25.808.405	25,00	100
6	25.808.406	30,00	50
7	25.808.407	35,00	50
8	25.808.408	40,00	50
9	25.808.409	45,00	50
10	25.808.410	50,00	50
11	25.808.411	55,00	50
12	25.808.412	60,00	50
13	25.808.413	65,00	50
14	25.808.414	70,00	50
15	25.808.415	75,00	50
16	25.808.416	80,00	50
17	25.808.417	85,00	50
18	25.808.418	90,00	50
19	25.808.419	95,00	50
20	25.808.420	100,00	50
21	25.808.421	105,00	50
22	25.808.422	110,00	50

General Information

Pitch	5 mm
No. of poles	2 - 22
Usable with	all pin strips of series 120

ECO

Technical Data

Clamping Range	solid / flexible / AWG 0,2 - 4 mm² / 0,2 - 2,5 mm² / 26 - 12 AWG			
Rated Cross Section	2,5 mm²	2,5 mm²		
Wire Stripping Length	7 mm ± 0,5 mm			
Overvoltage Category	III	III	II	
Pollution Severity Level	3	2	2	
Rated Voltage	250 V	320 V	630 V	
Rated Impulse Voltage	4 kV	4 kV	4 kV	
Rated Insulation Voltage	250 V acc. to EN	60998-1		
Rated Current	12 A	12 A		
Torque	0,5 Nm			

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C
Terminal body	Nickel plated brass
Pressure clamp	Tin plated tin bronze
Screw	M3; zinc plated steel, blue passivated
Spring	Tin plated tin bronze

Approvals

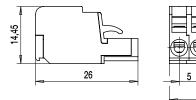
	Current	Voltage	Group	AWG	Nm	
۶L®	15 10	300 300	B D	26 - 12 26 - 12	0,51 0,51	
()	15 10	300 300	B D, E	26 - 12 26 - 12	0,51 0,51	

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Coding elements 120-K
- · Connectors equipped with coding elements on request
- Strain relief

Plug connector 120-F-111

Spring clamp connection





The plug connector 120-F series with screwless terminals complements our "CONECTA"-Series.

The rated cross-section of 2,5 mm² is geared towards screw-connector variants. This plug connector can be used with single-core copper conductors and fine-stranded wires (2,5 mm²), but also with pin cable sockets or crimped ferrules. For crimped ferrules, the cross-section must be reduced accordingly. All other rated data is identical with the screw-connector variants.

Test ports for ø 2 mm or ø 2,3 mm test plugs or for spring test pins are accessible from the upper side of the clamp. The plug connector consists of individual poles and can be manufactured to any required pole configuration at our factory.

For each pole the plug connector has one trapezoidal coding groove in which the coding elements 120-K can be inserted.

The plug connector can be operated by either a standard 3 mm blade screwdriver, terminal pliers or the built-in pusher, see 120-F-211.

Part Numbers

No. of poles	120-F-111	Length	Pcs
2	12.808.901	10,00	200
3	13.808.901	15,00	200
4	14.808.901	20,00	100
5	15.808.901	25,00	100
6	16.808.901	30,00	100
7	17.808.901	35,00	50
8	18.808.901	40,00	50
9	19.808.901	45,00	50
10	20.808.901	50,00	50
11	21.808.901	55,00	50
12	22.808.901	60,00	50

General Information

Pitch	5 mm
No. of poles	2 - 12
Usable with	all pin strips of series 120

ECO

Technical Data

solid / flexible / AWG		
0,2 - 4 mm² / 0,2 - 2,5 mm² / 24 - 12 AWG		
2,5 mm²		
8,5 mm ± 0,5 mm		
II		
2		
320 V		
2,5 kV		
250 V acc. to EN 60998-1		
12 A		

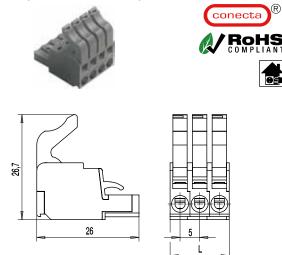
Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	
Temperature Range	-40°C up to 100°C
Pressure clamp	Copper alloy, tin plated
Tension spring	Stainless strip steel
Spring	Copper alloy, tin plated

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Coding elements 120-K
- · Connectors equipped with coding elements on request
- Strain relief
- Terminal pliers 120-F

120-F-211

Spring clamp connection, with pusher



The plug connector 120-F series with screwless terminals complements our "CONECTA"-Series.

The rated cross-section of 2,5 mm² is geared towards screw-connector variants. This plug connector can be used with single-core copper conductors and fine-stranded wires (2,5 mm²), but also with pin cable sockets or crimped ferrules. For crimped ferrules, the cross-section must be reduced accordingly. All other rated data is identical with the screw-connector variants.

Test ports for ø 2 mm or ø 2,3 mm test plugs or for spring test pins are accessible from the top of the clamp. The plug connector consists of individual poles and can be manufactured to any required pole configuration at our factory.

For each pole the plug connector has one trapezoidal coding groove in which the coding elements 120-K can be inserted.

The plug connector is operated by the built-in pusher.

Part Numbers

No. of poles	120-F-211	Length	Pcs
2	12.808.905	10,00	200
3	13.808.905	15,00	200
4	14.808.905	20,00	100
5	15.808.905	25,00	100
6	16.808.905	30,00	100
7	17.808.905	35,00	50
8	18.808.905	40,00	50
9	19.808.905	45,00	50
10	20.808.905	50,00	50
11	21.808.905	55,00	50
12	22.808.905	60,00	50

General Information

Pitch	5 mm
No. of poles	2 - 12
Usable with	all pin strips of series 120

ECO

Technical Data

Clamping Range	solid / flexible / AWG		
	0,2 - 4 mm² / 0,2 - 2,5 mm² / 24 - 12 AWG		
Rated Cross Section	2,5 mm ²		
Wire Stripping Length	8,5 mm ± 0,5 mm		
Overvoltage Category	II		
Pollution Severity Level	2		
Rated Voltage	320 V		
Rated Impulse Voltage	2,5 kV		
Rated Insulation Voltage	250 V acc. to EN 60998-1		
Rated Current	12 A		

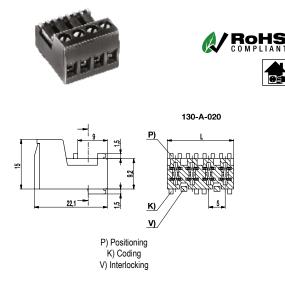
Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	
Temperature Range	-40°C up to 100°C
Pressure clamp	Copper alloy, tin plated
Tension spring	Stainless strip steel
Spring	Copper alloy, tin plated

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Coding elements 120-K
- · Connectors equipped with coding elements on request
- Strain relief

Plug connector 130-A

Screw connection



This plug connector was developed according to "White Goods Standard RAST 5 (Plug-Connection-Technology with a pitch of 5 mm). Due to its diverse coding possibilities, it offers maximum safety against incorrect plugging.

For the coded version, a corresponding drawing or description of the desired positioning (P), coding (K) and interlocking (V) is to be provided by the customer.

The technical drawing shows an example of a 4-pole plug connector with all data on positioning, coding and interlocking location 1/2 and 3/4.

The article numbers stated below refer to 2- to 12-pole plug connectors with exemplary coding design, which are further described on a supplementary data sheet.

Other coded versions (P,K,V) are available upon request.

Part Numbers

No. of poles	130-A	Length	Pcs
2	21.802.120	10,00	100
3	21.802.130	15,00	100
4	21.802.140	20,00	100
5	21.802.151	25,00	50
6	21.802.161	30,00	50
7	21.802.171	35,00	50
8	23.802.181	40,00	50
9	21.802.191	45,00	50
10	21.802.100	50,00	50
11	21.802.111	55,00	50
12	21.802.122	60,00	50

General Information

Pitch	5 mm
No. of poles	2 - 12
Usable with	Tab connectors 130-K, 900-SUN-5

ECO

Technical Data

Clamping Range	solid / flexible / AWG				
	0,2 - 4 mm² / 0,2 - 2,5 mm² / 26 - 14 AWG				
Rated Cross Section	2,5 mm²	2,5 mm ²			
Wire Stripping Length	7 mm ± 0,5 mm	7 mm ± 0,5 mm			
Overvoltage Category		III	Ш		
Pollution Severity Level	3	2	2		
Rated Voltage	250 V	320 V	630 V		
Rated Impulse Voltage	4 kV	4 kV	4 kV		
Torque	0,5 Nm				

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C
Terminal body	Nickel plated brass
Pressure clamp	Tin plated tin bronze
Screw	M3, zinc plated steel, blue passivated
Spring	Tin plated tin bronze

Approvals

	Current	Voltage	Group	AWG	Nm	
AI ®	22 10	300 300	B D	26 - 10 26 - 10	0,51 0,51	
€₽ °	22 10	300 300	B D, E	26 - 10 26 - 10	0,51 0,51	

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Version with extended wire entrance

130-A ADDITION: Overview coding versions

2a 2b 3a 1a 1b 3b 4b 4a Π Π \square Π 1 i E 2 3 4 d20 03c d30 04c d40 01c d10 02c ...

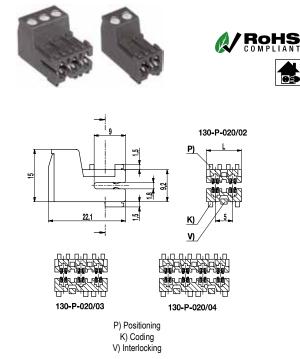
Type / Part number	Positioning (P)	Coding (K)	Interlocking (V)
130-A-021/02 21.802.120	1b, 2a	01c, d20	1/2
130-A-021/03 21.802.130	1b	01c, d20	1/2
130-A-021/04 21.802.140	1b	03c, d40	1/2, 3/4
130-A-121/05 21.802.151	1a, 5b	01c, d30	1/2, 2/3
130-A-121/06 21.802.161	1b	03c, d60	1/2, 4/5
130-A-121/07 21.802.171	none	03c, d40, 07c	1/2, 5/6
130-A-123/08 23.802.181	8b	02c, d30, 07c	2/3, 7/8
130-A-121/09 21.802.191	1b	03c	5/6
130-A-021/10 21.802.100	1b	03c	5/6
130-A-121/11 21.802.111	1b, 11b	03c	5/6
130-A-121/12 21.802.122	1b, 7a, 8b, 12b	d10, 06c, 09c, d100, d120	2/3, 11/12

R

WECO

130-P

Screw connection, direct contacting with the PCB



This tab connector was developed according to "White Goods Standard RAST 5 (Plug-Connection-Technology with a pitch of 5 mm). Due to its diverse coding possiblities, it offers maximum safety against incorrect plugging.

The tab connector strips are manufactured specifically according to the respective coding application.

A corresponding drawing or description of the desired positioning (P), coding (K) and interlocking (V) is to be provided by the customer.

The technical drawing shows an example of a 4-pole version in three different views, and the coding of a 2- and 3-pole design with the corresponding article designations. The corresponding article numbers are listed below.

Other coded versions (P,K,V) are available upon request.

Part Numbers					
No. of poles	130-P	Length	Pcs		
2	20.802.220	10,00	100		
3	20.802.230	15,00	100		
4	20.802.240	20,00	100		
fthe and second	have final an in manual				

further number of poles on request

General Information

Pitch	5 mm	
No. of poles	2 - 12	
Usable with	PC Boards	

ECO

Technical Data

Clamping Range	solid / flexible / AWG					
	0,2 - 4 mm² / 0,2	0,2 - 4 mm² / 0,2 - 2,5 mm² / 26 - 14 AWG				
Rated Cross Section	2,5 mm²					
Wire Stripping Length	7 mm ± 0,5 mm					
Overvoltage Category	III	III	II			
Pollution Severity Level	3	2	2			
Rated Voltage	200 V	320 V	500 V			
Rated Impulse Voltage	4 kV	4 kV	4 kV			
Rated Insulation Voltage	250 V acc. to EN	60998-1				
Rated Current	6 A					
PCB thickness	1,6 mm					
Torque	0,5 Nm					

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	I
Temperature Range	-40°C up to 100°C
Terminal body	Nickel plated brass
Pressure clamp	Tin plated tin bronze
Screw	M3; zinc plated steel, blue passivated
Spring	Tin plated tin bronze

Approvals

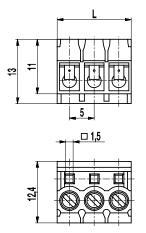
	Current	Voltage	Group	AWG	Nm	
FL ®	16 10	300 300	B D	26 - 12 26 - 12	0,51 0,51	
€₽ °	15	300	B, D, E	26 - 14	0,51	

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- · Closed side wall, on one or both sides
- Coding elements 130-CP
- · Version with extended wire entrance

Plug connector 950-FL-DS

Screw connection





The plug connector 950-FL-DS is designed to be joined with pin strips of the series 971 from either the top or the bottom side. Through the use of oversized pins (available upon request) a parallel connection can be made with stacked connectors.

Among other things these plug connector, which produced with a nominal centre to centre spacing can be placed adjacently on pin strips without pole loss.

The use of these components provides also a number of other advantages such as ease of isolation for service, the decentralized production of components or the ease of connection in confined space.

Part Numbers

No. of poles	950-FL-DS	Length	Pcs
2	20.871.732	10,00	250
3	20.871.733	15,00	250
4	20.871.734	20,00	250
5	20.871.735	25,00	100
6	20.871.736	30,00	100
7	20.871.737	35,00	100
8	20.871.738	40,00	100
9	20.871.739	45,00	100
10	20.871.740	50,00	50
11	20.871.741	55,00	50
12	20.871.742	60,00	50
13	20.871.743	65,00	50
14	20.871.744	70,00	50
15	20.871.745	75,00	50
16	20.871.746	80,00	50
17	20.871.747	85,00	50
18	20.871.748	90,00	50
19	20.871.749	95,00	25
20	20.871.750	100,00	25
21	20.871.751	105,00	25
22	20.871.752	110,00	25
23	20.871.753	115,00	25
24	20.871.754	120,00	25

General Information

Pitch	5 mm
No. of poles	2 - 24
Usable with	pin strips of series 971

ECO

Technical Data

ROHS

$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Clamping Range	solid / flexible / AWG 0,34 - 2,5 mm² / 0,34 - 1,5 mm² / 22 - 14 AWG				
Wire Stripping Length 6 mm ± 0,5 mm Overvoltage Category III III II Pollution Severity Level 3 2 2 Rated Voltage 320 V 320 V 630 V Rated Impulse Voltage 4 kV 4 kV 4 kV Rated Insulation Voltage 250 V acc. to EN 60998-1 Rated Current 6 A Torque 0,4 Nm 0,4 Nm 0.4 Nm 0.4 Nm						
Overvoltage Category III III III Pollution Severity Level 3 2 2 Rated Voltage 320 V 320 V 630 V Rated Impulse Voltage 4 kV 4 kV 4 kV Rated Insulation Voltage 250 V acc. to EN 60998-1 Rated Current 6 A Torque 0,4 Nm Other specifications 2-12 poles types are "no-flame" acc. to glow-wind	Rated Cross Section	1,5 mm²				
Pollution Severity Level322Rated Voltage320 V320 V630 VRated Impulse Voltage4 kV4 kV4 kVRated Insulation Voltage250 V acc. to EN 60998-1Rated Current6 ATorque0,4 NmOther specifications2-12 poles types are "no-flame" acc. to glow-wind	Wire Stripping Length	6 mm ± 0,5 mm				
Rated Voltage 320 V 320 V 630 V Rated Impulse Voltage 4 kV 4 kV 4 kV Rated Insulation Voltage 250 V acc. to EN 60998-1 Rated Current 6 A Torque 0,4 Nm Other specifications 2-12 poles types are "no-flame" acc. to glow-wire	Overvoltage Category	III	III	II		
Rated Impulse Voltage 4 kV 4 kV 4 kV Rated Insulation Voltage 250 V acc. to EN 60998-1 Rated Current 6 A Torque 0,4 Nm Other specifications 2-12 poles types are "no-flame" acc. to glow-wind	Pollution Severity Level	3	2	2		
Rated Insulation Voltage 250 V acc. to EN 60998-1 Rated Current 6 A Torque 0,4 Nm Other specifications 2-12 poles types are "no-flame" acc. to glow-wire	Rated Voltage	320 V	320 V	630 V		
Rated Current 6 A Torque 0,4 Nm Other specifications 2-12 poles types are "no-flame" acc. to glow-wirr	Rated Impulse Voltage	4 kV	4 kV	4 kV		
Torque 0,4 Nm Other specifications 2-12 poles types are "no-flame" acc. to glow-wire	Rated Insulation Voltage	250 V acc. to EN	60998-1			
Other specifications 2-12 poles types are "no-flame" acc. to glow-wire	Rated Current	6 A				
1 1 31 6	Torque	0,4 Nm				
	Other specifications	2-12 poles types are "no-flame" acc. to glow-wire test.				

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	2-12 poles: CTI ≥ 600; 13-2 4 poles: CTI 400
Insulating Group	2-12 poles: I; 13-24 poles: II
Temperature Range	-40°C up to 100°C
Terminal body	Nickel plated brass
Screw	M2,6; zinc plated steel, blue passivated
Wire protector	Tin plated tin bronze
Spring	Tin plated tin bronze

Approvals

	Current	Voltage	Group	AWG	Nm
RI ®	10	300	В	26 - 14	0,4
S₽ °	10	300	В	26 - 14	0,4

Options / Accessories

Consecutive numbering

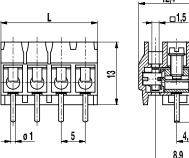
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances

Plug connector 950-GFL-DS

Screw connection, with solder pin



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Application example - thermostat housing:

The plug connectors are soldered in the basic housing and their leads are wired externally. Subsequently, the control panel, equipped with corresponding pin strips, is slotted in from above and then connected.

Part N	umbers		
No. of poles	950-GFL-DS	Length	Pcs
2	20.871.952	10,00	250
3	20.871.953	15,00	250
4	20.871.954	20,00	250
5	20.871.955	25,00	100
6	20.871.956	30,00	100
7	20.871.957	35,00	100
8	20.871.958	40,00	100
9	20.871.959	45,00	100
10	20.871.960	50,00	50
11	20.871.961	55,00	50
12	20.871.962	60,00	50
13	20.871.963	65,00	50
14	20.871.964	70,00	50
15	20.871.965	75,00	50
16	20.871.966	80,00	50
17	20.871.967	85,00	50
18	20.871.968	90,00	50
19	20.871.969	95,00	25
20	20.871.970	100,00	25
21	20.871.971	105,00	25
22	20.871.972	110,00	25
23	20.871.973	115,00	25
24	20.871.974	120,00	25

General Information

Pitch	5 mm
No. of poles	2 - 24
Usable with	pin strips of series 971

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VECO

Technical Data

solid / flexible / AW	'G	
0,34 - 2,5 mm² / 0,3	34 - 2,5 mm²	/ 22 - 14 AWG
1,5 mm²		
6 mm ± 0,5 mm		
III	Ш	II
3	2	2
250 V (200 V)	320 V	630 V (400 V)
4 kV	4 kV	4 kV
250 V acc. to EN 6	0998-1	
6 A		
0,4 Nm		
0		
	0,34 - 2,5 mm ² / 0,3 1,5 mm ² 6 mm ± 0,5 mm III 3 250 V (200 V) 4 kV 250 V acc. to EN 6 6 A 0,4 Nm Voltage data in bra types. 2-12 pole typ	6 mm ± 0,5 mm III III 3 2 250 V (200 V) 320 V 4 kV 4 kV 250 V acc. to EN 60998-1 6 A 0,4 Nm Voltage data in brackets are vall types. 2-12 pole types are "no-fl

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	2-12 poles: CTI ≥ 600; 13-24 poles: CTI 400
Insulating Group	2-12 poles: I; 13-24 poles: II
Temperature Range	-40°C up to 100°C
Terminal body	Nickel plated brass
Screw	M2,6; zinc plated steel, blue passivated
Wire protector	Tin plated tin bronze
Spring	Tin plated tin bronze

Approvals

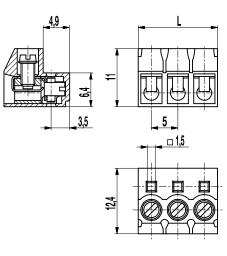
	Current	Voltage	Group	AWG	Nm
AI ®	10	300	В	26 - 14	0,4
€₽ °	10	300	В	26 - 14	0,4

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances

Plug connector 950-NAF-DS

Screw connection, low profile





Part Numbers

No. of poles	950-NAF-DS	Length	Pcs
2	20.871.722	10,00	250
3	20.871.723	15,00	250
4	20.871.724	20,00	250
5	20.871.725	25,00	100
6	20.871.786	30,00	100
7	20.871.787	35,00	100
8	20.871.788	40,00	100
9	20.871.789	45,00	100
10	20.871.790	50,00	50
11	20.871.791	55,00	50
12	20.871.792	60,00	50

General Information

Pitch	5 mm
No. of poles	2 - 12
Usable with	pin strips of series 971
Additonal Information	The screws are captive and secured against self-loosening.

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WECO

Technical Data

Clamping Range	solid / flexible / A	WG	
	0,34 - 2,5 mm² / (),34 - 1,5 mm² / 2	22 - 14 AWG
Rated Cross Section	1,5 mm²		
Wire Stripping Length	6 mm ± 0,5 mm		
Overvoltage Category	III	III	II
Pollution Severity Level	3	2	2
Rated Voltage	320 V	320 V	630 V
Rated Impulse Voltage	4 kV	4 kV	4 kV
Rated Insulation Voltage	250 V acc. to EN	60998-1	
Rated Current	6 A		
Torque	0,4 Nm		
Other specifications	By use with pins	LST-1,3: III-3-160)V-2,5 kV

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	
Temperature Range	-40°C up to 100°C
Terminal body	Nickel plated brass
Screw	M2,6; zinc plated steel, blue passivated
Wire protector	Tin plated tin bronze
Spring	Tin plated tin bronze

Approvals

	Current	Voltage	Group	AWG	Nm
AI ®	10	300	В	26 - 14	0,4
S ₽®	10	300	В	26 - 14	0,4

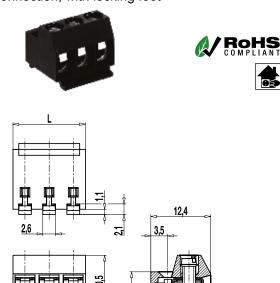
Options / Accessories

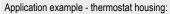
- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances

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Plug connector 950-NLFL-DS

Screw connection, with locking foot





The plug connectors are snapped in the basic housing and their leads are wired externally. Subsequently, the control panel, equipped with corresponding pin strips, is connected from above.

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14,7

ø 2,8

Part I	Part Numbers				
No. of poles	950-NLFL-DS	Length	Pcs		
2	20.871.772	10,00	250		
3	20.871.773	15,00	250		
4	20.871.774	20,00	100		
5	20.871.775	25,00	100		
6	20.871.776	30,00	100		
7	20.871.777	35,00	100		
8	20.871.778	40,00	100		
9	20.871.779	45,00	100		
10	20.871.780	50,00	50		
11	20.871.781	60,00	50		
12	20.871.782	65,00	50		

General Information

Pitch	5 mm
No. of poles	2 - 12
Usable with	pin strips of series 971

R

ECO

Technical Data

4 AWG
П
2
630 V
4 kV
5 kV

Material

PA, black, V-0
CTI ≥ 600
-40°C up to 100°C
Nickel plated brass
M2,6; zinc plated steel, blue passivated
Tin plated tin bronze
Tin plated tin bronze

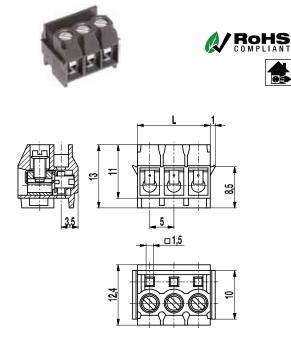
Approvals

	Current	Voltage	Group	AWG	Nm	
FL ®	10	300	В	26 - 14	0,4	
€₽ °	10	300	В	26 - 14	0,4	

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances

950-RFL-DS

Screw connection, with locking device on the sides



Application example - thermostat housing: The plug connectors are snapped in the basic housing and their leads are wired externally. Subsequently, the control panel, equipped with corresponding pin strips, is connected from above.

Part N	umbers		
No. of poles	950-RFL-DS	Length	Pcs
2	20.871.760	10,00	250
3	20.871.758	15,00	250
4	20.871.762	20,00	250
5	20.871.763	25,00	100
6	20.871.756	30,00	100
7	20.871.759	35,00	100
8	20.871.755	40,00	300
9	20.871.761	45,00	50
10	20.871.757	50,00	50
11	20.871.764	55,00	50
12	20.871.765	60,00	50

General Information

Pitch	5 mm
No. of poles	2 - 12
Usable with	pin strips of series 971

R

VECO

Technical Data

Clamping Range	solid / flexible / AWG			
	0,34 - 2,5 mm² / (),34 - 1,5 mm² / 2	2 - 14 AWG	
Rated Cross Section	1,5 mm²			
Wire Stripping Length	6 mm ± 0,5 mm			
Overvoltage Category		III	11	
Pollution Severity Level	3	2	2	
Rated Voltage	320 V	320 V	630 V	
Rated Impulse Voltage	4 kV	4 kV	4 kV	
Rated Insulation Voltage	250 V acc. to EN	60998-1		
Rated Current	6 A			
Torque	0,4 Nm			
Other specifications	By use with pins	LST-1,3: III-3-160)V-2,5 kV	

Material

PA, grey, V-0
CTI ≥ 600
-40°C up to 100°C
Nickel plated brass
M2,6; zinc plated steel, blue passivated
Tin plated tin bronze
Tin plated tin bronze

Approvals

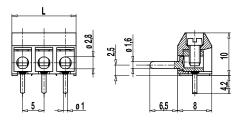
1 .1.	Current	Voltage	Group	AWG	Nm
71 °) 10	300	В	26 - 14	0,4
€₽ °	10	300	В	26 - 14	0,4

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances

950-SVG

Screw connection, with solder pin





Part N	umbers		
No. of poles	950-SVG	Length	Pcs
2	90.871.012	10,00	200
3	90.871.083	15,00	100
4	90.871.084	20,00	100
5	90.871.085	25,00	100
6	90.871.086	30,00	50
7	90.871.022	35,00	50
8	90.871.018	40,00	50
9	90.871.019	45,00	50
10	90.871.020	50,00	50
11	90.871.021	55,00	50
12	90.871.082	60,00	50
13	90.871.023	65,00	25
14	90.871.024	70,00	25
15	90.871.025	75,00	25
16	90.871.026	80,00	25
17	90.871.027	85,00	25
18	90.871.028	90,00	25
19	90.871.029	95,00	25
20	90.871.030	100,00	25
21	90.871.031	105,00	25
22	90.871.032	110,00	25
23	90.871.039	115,00	25
24	90.871.040	120,00	25
25	90.871.041	125,00	25
26	90.871.042	130,00	25
27	90.871.037	135,00	25
28	90.871.088	140,00	20
29	90.871.089	145,00	20
30	90.871.090	150,00	20
31	90.871.091	155,00	20
32	90.871.092	160,00	20

General Information

Pitch	5 mm
No. of poles	2 - 32
Usable with	plug connector 971-FBS
Additonal Information	Can be used as a three-way contact

R

VECO

Technical Data

Clamping Range	solid / flexible / AV	VG	
	0,75 - 4 mm² / 0,75	5 - 2,5 mm² / 18	- 12 AWG
Rated Cross Section	1,5 mm²		
Wire Stripping Length	5 mm ± 0,5 mm		
Overvoltage Category	III		II
Pollution Severity Level	3	2	2
Rated Voltage	160 V	160 V	320 V
Rated Impulse Voltage	2,5 kV	2,5 kV	2,5 kV
Rated Insulation Voltage	130 V acc. to EN 6	60998-1	
Rated Current	6 A		
Hole in PCB	ø 1,3 mm		
Torque	0,4 Nm		
Other specifications	2-8 poles types are "no-flame" acc. to glow-wire test.		

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	2-8 poles: CTI ≥ 600; 9-32 poles: CTI 400
Insulating Group	2-8 poles: I; 9-32 poles: II
Temperature Range	-40°C up to 100°C
Terminal body	Tin plated brass
Screw	M2,6; zinc plated steel, blue passivated
Solder pin	ø 1 mm; tin plated copper
Plug	ø 1,6 mm; tin plated brass

Approvals

1.00		N / - 11	0.0		N	
	Current	Voltage	Group	AWG	Nm	
FL ®	7	300	В	26 - 14	0,4	
€ ₽°	7	300	В	26 - 14	0,4	

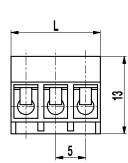
- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Longer P.C. pins up to 75 mm

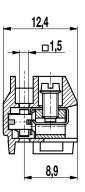
950-TFL-DS

Screw connection, interlocking









Part Numbers				
No. of poles	950-TFL-DS	Length	Pcs	
2	20.871.702	10,00	250	
3	20.871.703	15,00	250	
8	20.871.708	40,00	100	

General Information

Pitch	5 mm
No. of poles	2, 3, 8
Usable with	pin strips of series 971

R

WECO

Technical Data

Clamping Range	solid / flexible / AWG				
	0,34 - 2,5 mm² / (),34 - 1,5 mm² / 2	22 - 14 AWG		
Rated Cross Section	1,5 mm²	1,5 mm²			
Wire Stripping Length	6 mm ± 0,5 mm				
Overvoltage Category	III	III	I		
Pollution Severity Level	3	2	2		
Rated Voltage	320 V	320 V	630 V		
Rated Impulse Voltage	4 kV	4 kV	4 kV		
Rated Insulation Voltage	250 V to EN 6099	98-1			
Rated Current	6 A				
Torque	0,4 Nm				
Other specifications	By use with pins	LST-1,3: III-3-160)V-2,5 kV		

Material

PA, grey, V-0
CTI ≥ 600
-40°C up to 100°C
Nickel plated brass
M2,6; zinc plated steel, blue passivated
Tin plated tin bronze
Tin plated tin bronze

Approvals

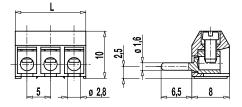
	Current	Voltage	Group	AWG	Nm	
RI ®	10	300	В	26 - 14	0,4	
SP [®]	10	300	В	26 - 14	0,4	

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances

951-SV(-DS)

Screw connection, pin ø 1,6 mm





Part N	umbers			
No. of poles	951-SV	951-SV-DS	Length	Pcs
2	80.871.012	86.871.012	10,00	250
3	80.871.083	86.871.083	15,00	250
4	80.871.084	86.871.084	20,00	200
5	80.871.085	86.871.085	25,00	100
6	80.871.086	86.871.086	30,00	100
7	80.871.022	86.871.022	35,00	100
8	80.871.018	86.871.018	40,00	100
9	80.871.019	86.871.019	45,00	100
10	80.871.020	86.871.020	50,00	100
11	80.871.021	86.871.021	55,00	100
12	80.871.082	86.871.082	60,00	100
13	80.871.023	86.871.023	65,00	100
14	80.871.024	86.871.024	70,00	50
15	80.871.025	86.871.025	75,00	50
16	80.871.026	86.871.026	80,00	100
17	80.871.027	86.871.027	85,00	50
18	80.871.028	86.871.028	90,00	50
19	80.871.029	86.871.029	95,00	50
20	80.871.030	86.871.030	100,00	50
21	80.871.031	86.871.031	105,00	25
22	80.871.032	86.871.032	110,00	25
23	80.871.039	86.871.039	115,00	25
24	80.871.040	86.871.040	120,00	25
25	80.871.041	86.871.041	125,00	25
26	80.871.042	86.871.042	130,00	25
27	80.871.037	86.871.037	135,00	25
28	80.871.088	86.871.088	140,00	25
29	80.871.089	86.871.089	145,00	25
30	80.871.090	86.871.090	150,00	25
31	80.871.091	86.871.091	155,00	25
32	80.871.092	86.871.092	160,00	25

General Information

Pitch	5 mm
No. of poles	2 - 32
Usable with	plug connectors 950-FS, 951-FB

R

WECO

Technical Data

Clamping Range	solid / flexible / A	WG		
without wire protector	0,75 - 4 mm² / 0,75 - 2,5 mm² / 18 - 12 AWG			
with wire protector	0,34 - 2,5 mm² / 0),34 - 2,5 mm² / 2	22 - 14 AWG	
Rated Cross Section	1,5 mm²			
Wire Stripping Length	5 mm ± 0,5 mm			
Overvoltage Category	III	Ш	II	
Pollution Severity Level	3	2	2	
Rated Voltage	160 V	160 V	320 V	
Rated Impulse Voltage	2,5 kV	2,5 kV	2,5 kV	
Rated Insulation Voltage	130 V acc. to EN	60998-1		
Rated Current	6 A			
Torque	0,4 Nm			
Other specifications	2-8 poles types a test.	re "no-flame" acc	c. to glow-wire	

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	2-8 poles: CTI ≥ 600; 9-32 poles: CTI 400
Insulating Group	2-8 poles: I; 9-32 poles: II
Temperature Range	-40°C up to 100°C
Terminal body	Tin plated brass
Screw	M2,6; zinc plated steel, blue passivated
Wire protector	Tin plated tin bronze
Plug	ø 1,6 mm; tin plated brass

Approvals

	Current	Voltage	Group	AWG	Nm
FI ®	7	300	В	26 - 14	0,4
€₽ °	7	300	В	26 - 14	0,4
	Current	Voltage	mm²		
(t)	13,5	250	1,5		

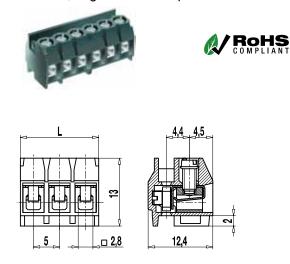
Options / Accessories

Consecutive numbering

- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Version with lateral latching elements

Plug connector 958-FL-DS

Screw connection, large conductor space



The PCB plug connector 958-FL-DS with a pitch of 5 mm is available in 2- to 8-pole design and can be plugged side-by-side on a pin strip without pole loss. The terminal space is of rectangular design. The rectangular shape offers ample space for the wire insertion of stranded wires with a maximum cross-section of 2,5 mm². This special terminal body can be used for all versions of the comprehensive 950-F... series.

This plug connector is designed to plug on pin strips of series 971 both from the top and the bottom. When using pin strips with extra-long pins (available upon request), two plug connectors can be pushed one on top of the other (stacked) thus achieving a parallel connection.

The use of these plug connectors offer a great variety of other benefits, such as easy disconnection for service purposes, decentralized component production or simply easy connection in confined space.

Part Numbers

No. of poles	958-FL-DS	Length	Pcs	
2	40.871.732	10,00	250	
3	40.871.733	15,00	250	
4	40.871.734	20,00	250	
5	40.871.735	25,00	100	
6	40.871.736	30,00	100	
7	40.871.737	35,00	100	
8	40.871.738	40,00	100	
further number of poles on request				

further number of poles on request

General Information

Pitch	5 mm
No. of poles	2 - 8
Usable with	pin strips of series 971

ECO

Technical Data

Clamping Range	solid / flexible / A	WG	
	0,34 - 2,5 mm² / (),34 - 2,5 mm² / 2	22 - 14 AWG
Rated Cross Section	1,5 mm²		
Wire Stripping Length	6 mm ± 0,5 mm		
Overvoltage Category	111	III	II
Pollution Severity Level	3	3	2
Rated Voltage	320 V	320 V	630 V
Rated Impulse Voltage	4 kV	4 kV	4 kV
Rated Insulation Voltage	250 V acc. to EN	60998-1	
Rated Current	6 A		
Torque	0,4 Nm		
Other specifications	By use with pins	LST-1,3: III-3-160)V-2,5 kV

Material

PA, grey, V-0
CTI ≥ 600
1
-40°C up to 100°C
Nickel plated brass
M2,6; zinc plated steel, blue passivated
Tin plated tin bronze
Tin plated tin bronze

Approvals

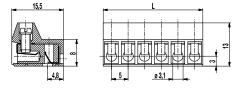
	Current	Voltage	Group	AWG	Nm
FL ®	10	300	В	26 - 14	0,4
€ ₽°	10	300	В	26 - 14	0,4

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00

970-FBW(-DS)

Screw connection, plugable from the bottom





The PCB plug connector 970-FBW with a pitch of 5 mm is available in 2- to 24-pole design and can be mounted side-by-side without pole loss.

The connector can be plugged on pin strips, such as the 971-SLW series. The long ribs of the pin strip offer optimum supporting surface for the socket terminal strip.

The screws are secured against self-loosening.

Upon request, the 970-FBW series is also available with additional ribs on the wire entrance side, which increase clearance and creepage distances.

Part N	umbers			
No. of poles	970-FBW	970-FBW-DS	Length	Pcs
2	30.873.102	40.873.102	10,00	200
3	30.873.103	40.873.103	15,00	200
4	30.873.104	40.873.104	20,00	100
5	30.873.105	40.873.105	25,00	100
6	30.873.106	40.873.106	30,00	50
7	30.873.107	40.873.107	35,00	50
8	30.873.108	40.873.108	40,00	50
9	30.873.109	40.873.109	45,00	50
10	30.873.110	40.873.110	50,00	50
11	30.873.111	40.873.111	55,00	50
12	30.873.112	40.873.112	60,00	50
13	30.873.113	40.873.113	65,00	50
14	30.873.114	40.873.114	70,00	50
15	30.873.115	40.873.115	75,00	50
16	30.873.116	40.873.116	80,00	50
17	30.873.117	40.873.117	85,00	50
18	30.873.118	40.873.118	90,00	50
19	30.873.119	40.873.119	95,00	50
20	30.873.120	40.873.120	100,00	50
21	30.873.121	40.873.121	105,00	50
22	30.873.122	40.873.122	110,00	50
23	30.873.123	40.873.123	115,00	50
24	30.873.124	40.873.124	120,00	50

General Information

Pitch	5 mm
No. of poles	2 - 24
Usable with	pin strips 971-FBWP, 971-SLW, single pins LST-1,3-6,5

ECO

Technical Data

Clamping Range	solid / flexible / AWG	
without wire protector	1 - 6 mm² / 1 - 4 mm² / 16 - 10 AWG	
with wire protector	0,75 - 4 mm² / 0,75 - 2,5 mm² / 18 - 12 AWG	
Rated Cross Section	2,5 mm²	
Wire Stripping Length	5,5 mm	
Overvoltage Category	III	
Pollution Severity Level	3	
Rated Voltage	250 V (200 V)	
Rated Impulse Voltage	4 kV	
Rated Current	6 A	
Torque	0,5 Nm	
Other specifications	Voltage data in brackets are valid for 13-24 poles types. 2-12 poles types are "no-flame" acc. to glow-wire test.	

Material

PA, grey, V-0
2-12 poles: CTI ≥ 600; 13-24 poles: CTI 250
2-12 poles: I; 13-24 poles: Illa
-40°C up to 100°C
Tin plated brass
M3; zinc plated steel, blue passivated
Tin plated tin bronze
Stainless strip steel

Approvals

	Current	Voltage	Group	AWG	Nm
FL ®	20 10	300 300	B D	22-12 [1] 22-12 [1]	0,51 0,51
S ₽®	20 10	300 300	B B, D	26 - 12 26 - 12	0,51 0,51
	Current	Voltage	mm²		
(\$)	13,5	250	2,5		

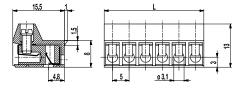
[1] Min No. 26 AWG for factory-wiring only

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Version with extended wire entrance
- Double wire protector as bridge
- Plug connector 971-RFBS(-DS) with ribs at wire entry and fitting locking plate

Plug connector 970-NFBW(-DS)

Screw connection, with latch nose





The PCB plug connector 970-NFBW with a pitch of 5 mm is available in 2- to 12-pole design and can be mounted side-by-side without pole loss.

The connector can be plugged on pin strips, such as the 971-SLW series. The long ribs of the pin strip offer optimum supporting surface for the socket terminal strip. The 970-NFBW series has an additional rear latch nose. Plugging the 970-NFBW series on the mating pin strip 971-FBWP provides a vibration-proof connection.

The screws are secured against self-loosening.

Part N	umbers			
No. of poles	970-NFBW	970-NFBW-DS	Length	Pcs
2	30.873.142	40.873.142	10,00	200
3	30.873.143	40.873.143	15,00	200
4	30.873.144	40.873.144	20,00	100
5	30.873.145	40.873.145	25,00	100
6	30.873.146	40.873.146	30,00	50
7	30.873.147	40.873.147	35,00	50
8	30.873.148	40.873.148	40,00	50
9	30.873.149	40.873.149	45,00	50
10	30.873.150	40.873.150	50,00	50
11	30.873.151	40.873.151	55,00	50
12	30.873.152	40.873.152	60,00	50

General Information

Pitch	5 mm
No. of poles	2 - 12
Usable with	pin strip 971-FBWP, 971-SLW, single pins LST-1,3x6,5

ECO

Technical Data

Clamping Range	solid / flexible / AWG
without wire protector	1 - 6 mm² / 1 - 4 mm² / 16 - 10 AWG
with wire protector	0,75 - 4 mm² / 0,75 - 2,5 mm² / 18 - 12 AWG
Rated Cross Section	2,5 mm²
Wire Stripping Length	5,5 mm
Overvoltage Category	III
Pollution Severity Level	3
Rated Voltage	250 V
Rated Impulse Voltage	4 kV
Rated Insulation Voltage	250 V acc. to EN 60998-1
Rated Current	6 A
Torque	0,5 Nm

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	
Temperature Range	-40°C up to 100°C
Terminal body	Tin plated brass
Screw	M3; zinc plated steel, blue passivated
Wire protector	Tin plated tin bronze
Spring	Stainless strip steel

Approvals

	Current	Voltage	Group	AWG	Nm
RI ®	20 10	300 300	B D	22-12 [1] 22-12 [1]	0,51 0,51
€₽ °	20 10	300 300	B D, E	26 - 12 26 - 12	0,4 0,4
	Current	Voltage	mm²		
(\$)	13,5	250	2,5		

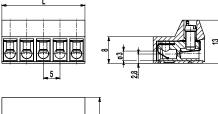
[1] Min No. 26 AWG for factory-wiring only

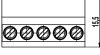
- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Version with extended wire entrance
- Double wire protector as bridge

971-FBS(-DS)

Screw connection, plugable from backside







Part Numbers							
No. of poles	971-FBS	971-FBS-DS	Length	Pcs			
2	10.873.102	20.873.102	10,00	200			
3	10.873.103	20.873.103	15,00	200			
4	10.873.104	20.873.104	20,00	100			
5	10.873.105	20.873.105	25,00	100			
6	10.873.106	20.873.106	30,00	50			
7	10.873.107	20.873.107	35,00	50			
8	10.873.108	20.873.108	40,00	50			
9	10.873.109	20.873.109	45,00	50			
10	10.873.110	20.873.110	50,00	50			
11	10.873.111	20.873.111	55,00	50			
12	10.873.112	20.873.112	60,00	50			
13	10.873.113	20.873.113	65,00	50			
14	10.873.114	20.873.114	70,00	50			
15	10.873.115	20.873.115	75,00	50			
16	10.873.116	20.873.116	80,00	50			
17	10.873.117	20.873.117	85,00	50			
18	10.873.118	20.873.118	90,00	50			
19	10.873.119	20.873.119	95,00	50			
20	10.873.120	20.873.120	100,00	50			
21	10.873.121	20.873.121	105,00	50			
22	10.873.122	20.873.122	110,00	50			
23	10.873.123	20.873.123	115,00	50			
24	10.873.124	20.873.124	120,00	50			

General Information

Pitch	5 mm
No. of poles	2 - 24
Usable with	plug connectors 950-SVG, 971-FBSP

R

VECO

Technical Data

Clamping Range	solid / flexible / AWG					
without wire protector	1 - 6 mm² / 1 - 4 mm² / 16 - 10 AWG					
with wire protector	0,75 - 4 mm² / 0,75	0,75 - 4 mm² / 0,75 - 2,5 mm² / 18 - 12 AWG				
Rated Cross Section	2,5 mm²					
Wire Stripping Length	5,5 mm ± 0,5 mm					
Overvoltage Category		Ш	П			
Pollution Severity Level	3	2	2			
Rated Voltage	250 V (200 V)	320 V	630 V (320 V)			
Rated Impulse Voltage	4 kV	4 kV	4 kV			
Rated Insulation Voltage	250 V acc. to EN 60	0998-1				
Rated Current	6 A					
Torque	0,5 Nm					
Other specifications	Voltage data in brackets are valid for 13-24 poles types. 2-12 poles types are "no-flame" acc. to glow-wire test.					

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	2-12 poles: CTI ≥ 600; 13-24 poles: CTI 250
Insulating Group	2-12 poles: I; 13-24 poles: Illa
Temperature Range	-40°C up to 100°C
Terminal body	Tin plated brass
Screw	M3; zinc plated steel, blue passivated
Wire protector	Tin plated tin bronze
Spring	Stainless strip steel

Approvals

	Current	Voltage	Group	AWG	Nm
AI ®	20 10	300 300	B D	22-12 [1] 22-12 [1]	0,51 0,51
S₽ ®	20 10	300 300	B D, E	26 - 12 26 - 12	0,4 0,4
	Current	Voltage	mm²		
(\$)	13,5	250	2,5		

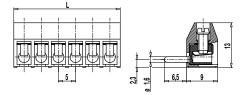
[1] Min No. 26 AWG for factory-wiring only

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Version with extended wire entrance
- Double wire protector as bridge

971-SV(-DS)

Screw connection, pin ø 1,6 mm





Numbers			
971-SV	971-SV-DS	Length	Pcs
80.872.152	86.872.152	11,00	250
80.872.153	86.872.153	16,00	250
80.872.154	86.872.154	21,00	200
80.872.155	86.872.155	26,00	100
80.872.156	86.872.156	31,00	100
80.872.157	86.872.157	36,00	100
80.872.158	86.872.158	41,00	100
80.872.159	86.872.159	46,00	100
80.872.160	86.872.160	51,00	100
80.872.161	86.872.161	56,00	100
80.872.162	86.872.162	61,00	100
80.872.163	86.872.163	66,00	100
80.872.164	86.872.164	71,00	100
80.872.165	86.872.165	76,00	100
80.872.166	86.872.166	81,00	100
80.872.167	86.872.167	86,00	100
80.872.168	86.872.168	91,00	100
80.872.169	86.872.169	96,00	100
80.872.170	86.872.170	101,00	100
80.872.171	86.872.171	106,00	100
80.872.172	86.872.172	111,00	100
80.872.173	86.872.173	116,00	100
80.872.174	86.872.174	121,00	100
80.872.175	86.872.175	126,00	100
80.872.176	86.872.176	131,00	100
80.872.177	86.872.177	136,00	100
80.872.178	86.872.178	141,00	100
80.872.179	86.872.179	146,00	100
80.872.180	86.872.180	151,00	100
80.872.181	86.872.181	156,00	100
80.872.182	86.872.182	161,00	100
	971-SV 80.872.152 80.872.153 80.872.153 80.872.155 80.872.155 80.872.155 80.872.157 80.872.157 80.872.159 80.872.160 80.872.161 80.872.162 80.872.163 80.872.164 80.872.165 80.872.166 80.872.166 80.872.168 80.872.170 80.872.171 80.872.171 80.872.172 80.872.173 80.872.175 80.872.175 80.872.175 80.872.176 80.872.177 80.872.177 80.872.178 80.872.179 80.872.179 80.872.180	971-SV 971-SV-DS 80.872.152 86.872.152 80.872.153 86.872.153 80.872.154 86.872.153 80.872.155 86.872.155 80.872.156 86.872.155 80.872.157 86.872.156 80.872.158 86.872.157 80.872.159 86.872.158 80.872.159 86.872.159 80.872.159 86.872.159 80.872.160 86.872.160 80.872.161 86.872.161 80.872.162 86.872.162 80.872.163 86.872.163 80.872.164 86.872.164 80.872.165 86.872.166 80.872.166 86.872.167 80.872.167 86.872.167 80.872.168 86.872.169 80.872.169 86.872.169 80.872.170 86.872.170 80.872.171 86.872.171 80.872.172 86.872.173 80.872.173 86.872.173 80.872.174 86.872.174 80.872.175 86.872.175 80.	971-SV 971-SV-DS Length 80.872.152 86.872.152 11,00 80.872.153 86.872.152 11,00 80.872.153 86.872.153 16,00 80.872.154 86.872.154 21,00 80.872.155 86.872.155 26,00 80.872.156 86.872.155 26,00 80.872.157 86.872.156 31,00 80.872.158 86.872.157 36,00 80.872.159 86.872.158 41,00 80.872.159 86.872.160 51,00 80.872.161 86.872.162 61,00 80.872.162 86.872.162 61,00 80.872.163 86.872.164 71,00 80.872.164 86.872.165 76,00 80.872.165 86.872.166 81,00 80.872.168 86.872.168 91,00 80.872.170 86.872.170 101,00 80.872.171 86.872.172 111,00 80.872.172 86.872.173 116,00 80.872.173 86.872.174 121,00 </td

General Information

Pitch	5 mm
No. of poles	2 - 32
Usable with	socket terminal strips 970-FB, 971-FB

R

ECO

Technical Data

Clamping Range	solid / flexible / AWG					
without wire protector	1 - 6 mm² / 1 - 4 mm² / 16 - 10 AWG					
with wire protector	0,75 - 4 mm² / 0,75	0,75 - 4 mm² / 0,75 - 2,5 mm² / 18 - 12 AWG				
Rated Cross Section	2,5 mm²					
Wire Stripping Length	5,5 mm ± 0,5 mm					
Overvoltage Category		Ш	II			
Pollution Severity Level	3	2	2			
Rated Voltage	250 V (200 V)	320 V	630 V (400 V)			
Rated Impulse Voltage	4 kV	4 kV	4 kV			
Rated Insulation Voltage	250 V acc. to EN 60	0998-1				
Rated Current	6 A					
Torque	0,5 Nm					
Other specifications	Voltage data in brackets are valid for 9-32 poles types. 2-8 poles types are "no-flame" acc. to glow-wire test.					

Material

PA, grey , V-0
2-8 poles: CTI ≥ 600; 9-32 poles: CTI 400
2-8 poles: I; 9-32 poles: II
-40°C up to 100°C
Tin plated brass
M3; zinc plated steel, blue passivated
Tin plated tin bronze
ø 1,6 mm; tin plated brass

Approvals

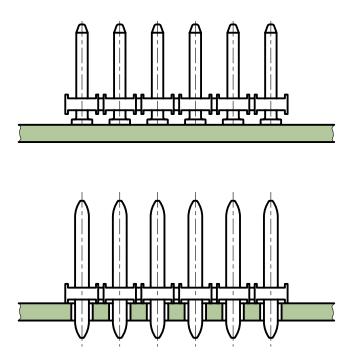
	Current	Voltage	Group	AWG	Nm
AI ®	20 10	300 300	B D	22-12 [1] 22-12 [1]	0,51 0,51
()	20 10	300 300	B D, E	26 - 12 26 - 12	0,51 0,51
	Current	Voltage	mm²		
(\$)	17,5	250	2,5		

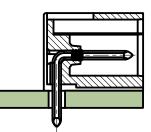
[1] Min No. 26 AWG for factory-wiring only

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Version with extended wire entrance
- Version with lateral latching elements
- Double wire protector as bridge









Here, you can find the male pin strips of series 120 for the female socket terminal strips.

Depending on their design, pin strips are available with 2 to 24 poles, as flange versions with 2 to 22 poles and as two-tier versions with 4 to 48 poles.

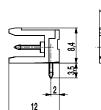
The user can choose from different designs with perpendicular, parallel or diagonal (45°) plug direction to the PC board.

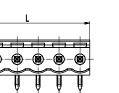
Series 120 pin strips as well as socket terminal strips feature grooves to accomodate coding elements. Laterally attached dovetail expansions on the housings reliably prevent offset plugging of the socket terminal strips. Two-tier versions and versions with connecting flanges widen the range of applications considerably.

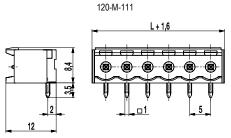
Male pin strips of series 971 without enclosing housing plug in female socket terminal strips of the 950-..-FL and 970/971-FB series. This comprehensive assortment of pin strips without housing is optimally suited for SMD- and THR-applications. Pin strip 120-M-111/-211

Plug-in direction parallel to PCB









120-M-211

The pin strips 120-M-111 und 120-M-211 with a pitch of 5 mm are available in 2- to 24-pole design.

The ..-M-111 version is a pin strip without side wall and can be mounted side-by-side without pole loss. The ..-M-211 version is a pin strip with side wall. For both designs, the plug direction for mating plug connectors is parallel to the PCB.

For each pole, the pin strip has one trapezoidal coding slot in which the coding elements 120-K can be inserted.

Part Numbers

. are rear				
No. of poles	120-M-111	120-M-211	Length	Pcs
2	10.806.002	10.806.026	10,00	200
3	10.806.003	10.806.027	15,00	200
4	10.806.004	10.806.028	20,00	100
5	10.806.005	10.806.029	25,00	100
6	10.806.006	10.806.030	30,00	100
7	10.806.007	10.806.031	35,00	50
8	10.806.008	10.806.032	40,00	50
9	10.806.009	10.806.033	45,00	50
10	10.806.010	10.806.034	50,00	50
12	10.806.012	10.806.036	60,00	50
14	10.806.014	10.806.038	70,00	50
16	10.806.016	10.806.040	80,00	50
18	10.806.018	10.806.042	90,00	50
20	10.806.020	10.806.044	100,00	50
22	10.806.022	10.806.046	110,00	50
24	10.806.024	10.806.048	120,00	50

further number of poles on request

General Information

Pitch	5 mm
No. of poles	2 - 24
Usable with	all plug connectors of series 120
Additonal Information	Ordering information: 111: without side wall 211: with side wall, pottable

ECO

Technical Data

Overvoltage Category	III	III	ll
Pollution Severity Level	3	2	2
Rated Voltage	250 V	320 V	630 V
Rated Impulse Voltage	4 kV	4 kV	4 kV
Rated Insulation Voltage	250 V acc. to EN	60998-1	
Rated Current	12 A		
Hole in PCB	ø 1,4 mm		

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C
Solder pin	1,0 x 1,0 mm; tin plated brass

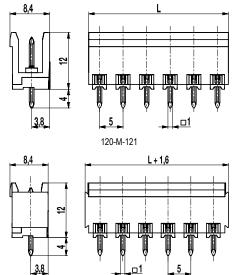
Approvals

	Current	Voltage	Group	AWG	Nm
AI ®	15 10	300 300	B D		
<u>ج</u>	15 10	300 300	B D, E		
VDE					

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Other P.C. pin lengths on request
- Coding elements 120-K
- Connectors equipped with coding elements on request
- Pin strips with fastening flanges, see 120-M-217
- Pin strips with connecting flanges, see 120-M-215

Pin strip 120-M-121/-221 Plug-In direction vertical to PCB





The pin strips 120-M-121 and 120-M-221 with a pitch of 5 mm are available in 2- to 24-pole design.

120-M-221

The ..-M-121 version is a pin strip without side walls. It can be mounted side-by-side without pole loss. The ..-M-221 version is a pin strip with side wall. For both versions, the plug direction for mating pin strips is vertical to the PCB.

For each pole, the pin strip has one trapezoidal coding slot in which the coding elements 120-K can be inserted.

Part Numbers

No. of poles	120-M-121	120-M-221	Length	Pcs
2	20.806.002	20.806.026	10,00	200
3	20.806.003	20.806.027	15,00	200
4	20.806.004	20.806.028	20,00	100
5	20.806.005	20.806.029	25,00	100
6	20.806.006	20.806.030	30,00	100
7	20.806.007	20.806.031	35,00	50
8	20.806.008	20.806.032	40,00	50
9	20.806.009	20.806.033	45,00	50
10	20.806.010	20.806.034	50,00	50
11	20.806.011	20.806.035	55,00	50
12	20.806.012	20.806.036	60,00	50
24	20.806.024	20.806.048	120,00	50

further number of poles on request

General Information

Pitch	5 mm
No. of poles	2 - 24
Usable with	all plug connectors of series 120
Additonal Information	Ordering information: 121: without side wall, not pottable 221: with side wall, pottable

ECO

Technical Data

Overvoltage Category	III	III	II
Pollution Severity Level	3	2	2
Rated Voltage	250 V	320 V	630 V
Rated Impulse Voltage	4 kV	4 kV	4 kV
Rated Insulation Voltage	250 V acc. to EN	60998-1	
Rated Current	12 A		
Hole in PCB	ø 1,4 mm		

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	I
Temperature Range	-40°C up to 100°C
Solder pin	1,0 x 1,0 mm; tin plated brass

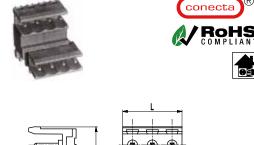
Approvals

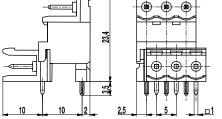
	Current	Voltage	Group	AWG	Nm
FL ®	15 10	300 300	B D		
S ₽°	15 10	300 300	B D, E		
VDE					

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Other P.C. pin lengths on request
- Coding elements 120-K
- · Connectors equipped with coding elements on request
- Pin strips with fastening flanges, see 120-M-227
- Pin strips with connecting flanges, see 120-M-225

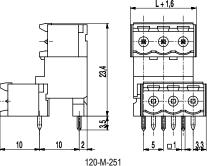
Pin strip

120-M-151/-251 Plug-in direction parallel to PCB, two-tier version









The pin strips 120-M-151 und 120-M-251, as two-tier version with a pitch of 5 mm are available in 4- to 48-pole design.

The ..-M-151 version is a pin strip without side walls. It can be mounted side-by-side without pole loss. The ..-M-251 version has pin strips with a side wall. For both versions, the plug direction for mating plug connectors is parallel to the PCB.

For each pole, the pin strip has one trapezoidal coding slot in which the coding elements 120-K can be inserted.

Part Numbers					
No. of poles	120-M-151	120-M-251	Length	Pcs	
4	10.806.052	10.806.076	20,00	100	
6	10.806.053	10.806.077	30,00	100	
8	10.806.054	10.806.078	40,00	50	
10	10.806.055	10.806.079	50,00	50	
12	10.806.056	10.806.080	60,00	50	
14	10.806.057	10.806.081	70,00	50	
16	10.806.058	10.806.082	80,00	25	
18	10.806.059	10.806.083	90,00	25	
20	10.806.060	10.806.084	100,00	25	
22	10.806.061	10.806.085	110,00	25	
24	10.806.062	10.806.086	120,00	25	

further number of poles on request

General Information

Pitch	5 mm
No. of poles	4 - 48
Usable with	all plug connectors of series 120
Additonal Information	Ordering information: 111: without side wall 211: with side wall, pottable

ECO

Technical Data

Overvoltage Category	III	III	II	
Pollution Severity Level	3	2	2	
Rated Voltage	250 V	320 V	630 V	
Rated Impulse Voltage	4 kV	4 kV	4 kV	
Rated Insulation Voltage	250 V acc. to EN 60998-1			
Rated Current	12 A			
Hole in PCB	ø 1,4 mm			

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C
Solder pin	1,0 x 1,0 mm; tin plated brass

Approvals

	Current	Voltage	Group	AWG	Nm	
AI ®	15 10	300 300	B D			
()	15 10	300 300	B D, E			

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Coding elements 120-K
- · Connectors equipped with coding elements on request
- Two-tier version with front PCB connector offset to the left
- Special arrangements of front- and rear row of the floor version.

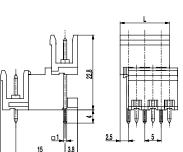
Pin strip 120-M-161/-261

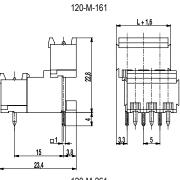
Plug-in direction vertical to PCB, two-tier version



23.4







120-M-261

The pin strips 120-M-161 und 120-M-261, as two-tier versions with a pitch of 5 mm are available in 4- to 48-pole design.

The ..-M-161 versions is a pin strip without side walls. It can be mounted side-by-side without pole loss. The ..-M-261 version has pin strips with a side wall. For both versions, the plug direction for mating pin strips is vertical to the PCB.

For each pole, the pin strip has one trapezoidal coding slot in which the coding elements 120-K can be inserted.

Part Numbers							
No. of poles	120-M-161	120-M-261	Length	Pcs			
4	30.806.052	30.806.072	20,00	100			
6	30.806.053	30.806.073	30,00	100			
8	30.806.054	30.806.074	40,00	50			
10	30.806.055	30.806.075	50,00	50			
12	30.806.056	30.806.076	60,00	50			
14	30.806.057	30.806.077	70,00	50			
16	30.806.058	30.806.078	80,00	25			
18	30.806.059	30.806.079	90,00	25			
20	30.806.060	30.806.080	100,00	25			
22	30.806.061	30.806.081	110,00	25			
24	30.806.062	30.806.082	120,00	25			

further number of poles on request

General Information

Pitch	5 mm
No. of poles	4 - 48
Usable with	all plug connectors of series 120
Additonal Information	Ordering information: 161: without side wall 261: with side wall, pottable

ECO

Technical Data

Overvoltage Category	III	III	II
Pollution Severity Level	3	2	2
Rated Voltage	250 V	320 V	630 V
Rated Impulse Voltage	4 kV	4 kV	4 kV
Rated Insulation Voltage	250 V acc. to EN	60998-1	
Rated Current	12 A		
Hole in PCB	ø 1,4 mm		

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C
Solder pin	1,0 x 1,0 mm; tin plated brass

Approvals

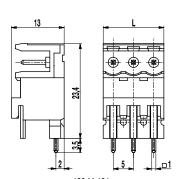
	Current	Voltage	Group	AWG	Nm
AI ®	15 10	300 300	B D		
€₽ ®	15 10	300 300	B D, E		

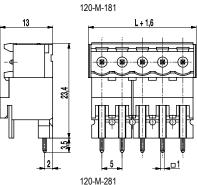
- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Coding elements 120-K
- · Connectors equipped with coding elements on request
- Two-tier version with front PCB connector offset to the left
- Special arrangements of front- and rear row of the floor version.

Pin strip 120-M-181/-281

Plug-in direction parallel to PCB, tall version







The pin strips 120-M-181 und 120-M-281, tall version with a pitch of 5 mm, are available in 2- to 24-pole design.

The ..-M-181 version is a pin strip without side walls. It can be mounted side-by-side without pole loss. The ..-M-281 version is a pin strip with side wall. For both versions, the plug direction for mating plug connectors is parallel to the PCB.

For each pole, the pin strip has one trapezoidal coding slot in which the coding elements 120-K can be inserted.

Part Numbers				
No. of poles	120-M-181	120-M-281	Length	Pcs
2	25.806.052	25.806.076	10,00	200
3	25.806.053	25.806.077	15,00	100
4	25.806.054	25.806.078	20,00	100
5	25.806.055	25.806.079	25,00	100
6	25.806.056	25.806.080	30,00	100
7	25.806.057	25.806.081	35,00	50
8	25.806.058	25.806.082	40,00	50
9	25.806.059	25.806.083	45,00	50
10	25.806.060	25.806.084	50,00	50
11	25.806.061	25.806.085	55,00	50
12	25.806.062	25.806.086	60,00	50

further number of poles on request

General Information

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Pitch	5 mm
No. of poles	2 - 24
Usable with	all plug connectors of series 120
Additonal Information	Ordering information: 181: without side wall 281: with side wall

ECO

Technical Data

Overvoltage Category	III	III	ll
Pollution Severity Level	3	2	2
Rated Voltage	250 V	250 V	630 V
Rated Impulse Voltage	4 kV	4 kV	4 kV
Rated Insulation Voltage	250 V acc. to EN	60998-1	
Rated Current	12 A		
Hole in PCB	ø 1,4 mm		

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C
Solder pin	1,0 x 1,0 mm; tin plated brass

Approvals

	Current	Voltage	Group	AWG	Nm	
AI ®	15 10	300 300	B D			
()	15 10	300 300	B D, E			

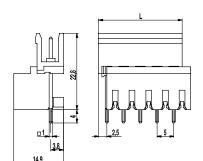
- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Coding elements 120-K
- · Connectors equipped with coding elements on request

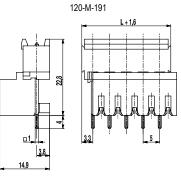
Pin strip 120-M-191/-291

Plug-in direction vertical to PCB, tall version









120-M-291

The pin strips 120-M-191 und 120-M-291, tall version with a pitch of 5 mm are available in 2- to 24-pole design.

The ..-M-191 version is a pin strip without side walls. It can be mounted side-by-side without pole loss. The ..-M-291 version is a pin strip with side wall. For both versions, the plug direction for mating pin strips is vertical to the PCB.

For each pole, the pin strip has one trapezoidal coding slot in which the coding elements 120-K can be inserted.

Part Numbers				
No. of poles	120-M-191	120-M-291	Length	Pcs
2	25.806.002	25.806.026	10,00	200
3	25.806.003	25.806.027	15,00	100
4	25.806.004	25.806.028	20,00	100
5	25.806.005	25.806.029	25,00	100
6	25.806.006	25.806.030	30,00	100
7	25.806.007	25.806.031	35,00	50
8	25.806.008	25.806.032	40,00	50
9	25.806.009	25.806.033	45,00	50
10	25.806.010	25.806.034	50,00	50
11	25.806.011	25.806.035	55,00	50
12	25.806.012	25.806.036	60,00	50

further number of poles on request

General Information

Pitch	5 mm
No. of poles	2 - 24
Usable with	all plug connectors of series 120
Additonal Information	Ordering information: 191: without side wall 291: with side wall

ECO

Technical Data

Overvoltage Category	III	III	II
Pollution Severity Level	3	2	2
Rated Voltage	250 V	320 V	630 V
Rated Impulse Voltage	4 kV	4 kV	4 kV
Rated Insulation Voltage	250 V acc. to EN	60998-1	
Rated Current	12 A		
Hole in PCB	ø 1,4 mm		

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C
Solder pin	1,0 x 1,0 mm; tin plated brass

Approvals

	Current	Voltage	Group	AWG	Nm
FL ®	15 10	300 300	B D		
S₽ ®	15 10	300 300	B D, E		

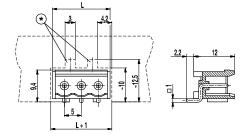
- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Coding elements 120-K
- · Connectors equipped with coding elements on request

Pin strip for SMD

120-M-211-SMD

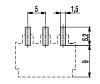
Plug-in direction parallel to PCB, with side walls





(*) Please plan for two gaps in the measures of 3 x 2.5 mm in the cut-out of the control panel for the snap-in device of the counterpart

PCB Layout



Solder paste thickness: 0,2 mm

L-shape exposed leads confer an extremely reliable retention force to PCB. This characteristics allows reliable soldering to PCB approaching zero defects for this characteristic and its effects. The top surface of the connector ensures automated Pick&Place-ability for both odd and even pole versions.

Material will handle reflow temperatures well without deforming or melting.

Product shall be mounted on PCB to expose connector entry in the cut-off window of the metal or plastic enclosure. This installation mode prevents vertical peel-off stress against the L-shape solder joints during plug-in installation test. Standoffs underneath the molding ensure that connector housing keeps its horizontal position relative to PCB plane.

Packed in magazines, this genuine SMD terminal is suitable for the automatic assembly.

Part Numbers

	o. of oles	120-M-211-SMD	Length	Pcs
	2	30.806.352	12,00	774
	3	30.806.353	17,00	540
	4	30.806.354	22,00	414
	5	30.806.355	27,00	342
	6	30.806.356	32,00	288
	8	30.806.358	42,00	216
6.0				

further number of poles on request

General Information

Pitch	5 mm
No. of poles	2 - 12
Usable with	all plug connectors of series 120

Technical Data

Overvoltage Category	III	III	II
Pollution Severity Level	3	2	2
Rated Voltage	250 V	320 V	630 V
Rated Impulse Voltage	4 kV	4 kV	4 kV
Rated Insulation Voltage	250 V acc. to EN 60998-1		
Rated Current	12 A		
Soldering process	Reflow solder		

Material

Moulding	PA HT, black, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	I
Temperature Range	-40°C up to 150°C; reflow solder temperature (Peak) max. 260°C (15-30 s)
Solder pin	1,0 x 1,0 mm; tin plated brass

Approvals

	Current	Voltage	Group	AWG	Nm	
FL®	15 10	300 300	B D, E			
SP °	15 10	300 300	B D, E			

Options / Accessories

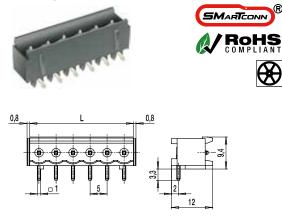
- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00 [1]
- Tape-on-Reel on request

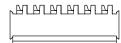
[1] To be fitted after reflow soldering process

Pin strip for THR

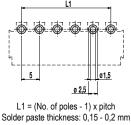
120-M-211-THR

Plug-in direction parallel to PCB, with side walls





PCB Layout



Solder pad diameter: ø 2,5 mm

The products based on our established 120 series (Conecta) have been designed for the soldering process in Through-Hole-Reflow technology.

The soldering paste is applied to the plated through holes and the pins are placed in the circuit board and soldered by a reflow oven.

The terminal mouldings are made of heat-resistant material. The stand-offs on the base ensures there is enough room for the soldering paste and facilitates good heat circulation for optimum soldering and enables the soldering joint to be visually inspected.

The solder pin projects very slightly with a circuit board thickness of 1,6 mm, creates a solder point on both sides, and thus guarantees a secure mounting. The position of the solder pins enables an equally minimal allocation area on the circuit board as with wave soldering.

Part N	Part Numbers				
No. of poles	120-M-211-THR	Length	Pcs		
2	10.806.352	10,00	200		
3	10.806.353	15,00	200		
4	10.806.354	20,00	100		
5	10.806.355	25,00	100		
6	10.806.356	30,00	100		
8	10.806.358	40,00	50		
10	10.806.360	50,00	50		
12	10.806.362	60,00	50		
£					

further number of poles on request

General Information

Pitch	5 mm
No. of poles	2 - 12
Usable with	all plug connectors of series 120
Additonal Information	The 120-M-THR headers are, like the conventional products, available with straight or angled soldering pins for vertical or parallel plugging of the mating parts, whereby all plugs of the Conecta series 120-A, -D, and -F can be used.

ECO

Technical Data

Overvoltage Category	III	III	II
Pollution Severity Level	3	2	2
Rated Voltage	250 V	320 V	630 V
Rated Impulse Voltage	4 kV	4 kV	4 kV
Rated Insulation Voltage	250 V acc. to EN	60998-1	
Rated Current	12 A		
Soldering process	Wave solder & re	flow solder	
Hole in PCB	ø 1,5 mm		
PCB thickness	Wave solder max	. 1,6 mm; reflow	solder 1,6 - 3,2

Material

Moulding	PA HT, black, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	
Temperature Range	-40°C up to 150°C; reflow solder temperature (Peak) max. 260°C (15-30 s)
Solder pin	1,0 x 1,0 mm; tin plated brass

Approvals

	Current	Voltage	Group	AWG	Nm
AI ®	15 10	300 300	B D		
€₽ °	15 10	300 300	B D, E		

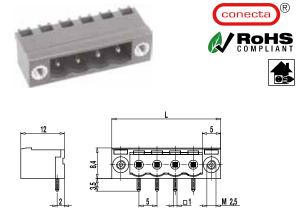
Options / Accessories

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00 [1]
- Special packaging on request: Tape-on-Reel Tray Tube magazine

[1] To be fitted after reflow soldering process

120-M-215

Plug-in direction parallel to PCB, with connecting flanges



The pin strip 120-M-215, with connecting flanges and a pitch of 5 mm is available in 2- to 22-pole design and can be mounted side-by-side.

Thread insert in the connecting flanges allow to screw the pinstrips together with the plug connectors 120-A-115, 120-D-115 and 120-D-125. In addition, these connecting flanges can also be used to mount the pin strip to a housing wall. The plug direction for mating pin strips is parallel to the PCB.

For each pole, the pin strip has one trapezoidal coding slot in which the coding elements 120-K can be inserted.

Part Numbers

Faitin	unibers		
No. of poles	120-M-215	Length	Pcs
2	15.806.202	20,00	100
3	15.806.203	25,00	100
4	15.806.204	30,00	100
5	15.806.205	35,00	50
6	15.806.206	40,00	50
7	15.806.207	45,00	50
8	15.806.208	50,00	50
9	15.806.209	55,00	50
10	15.806.210	60,00	50
11	15.806.211	65,00	50
12	15.806.212	70,00	50
13	15.806.213	75,00	50
14	15.806.214	80,00	50
15	15.806.215	85,00	50
16	15.806.216	90,00	50
17	15.806.217	95,00	50
18	15.806.218	100,00	50
19	15.806.219	105,00	50
20	15.806.220	110,00	50
21	15.806.221	115,00	50
22	15.806.222	120,00	50

General Information

Pitch	5 mm
No. of poles	2 - 22
Usable with	all plug connectors of series 120

ECO

Technical Data

Overvoltage Category	III	III	II
Pollution Severity Level	3	2	2
Rated Voltage	250 V	320 V	630 V
Rated Impulse Voltage	4 kV	4 kV	4 kV
Rated Insulation Voltage	ge 250 V acc. to EN 60998-1		
Rated Current	12 A		
Hole in PCB	ø 1,4 mm		

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C
Solder pin	1,0 x 1,0 mm; tin plated brass

Approvals

	Current	Voltage	Group	AWG	Nm
FL®	15 10	300 300	B D		
S₽ °	15 10	300 300	B D, E		
VDE					

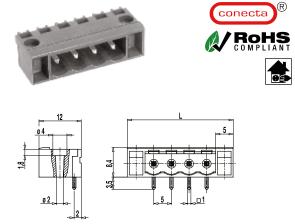
Options / Accessories

Consecutive numbering

- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Other P.C. pin lengths on request
- Coding elements 120-K
- · Connectors equipped with coding elements on request

120-M-217

Plug-in direction parallel to PCB, with fastening flanges



The pin strip 120-M-217, with fastening flanges and a pitch of 5 mm, is available in 2- to 22-pole design and can be mounted side-by-side.

By means of the lh and rh fastening flanges, this pin strip can be mounted on a PCB with M2 x 10 and M2 nuts, self-tapping screws or rivets without any additional soldering. The plug direction for mating pin strips is parallel to the PCB.

For each pole, the pin strip has one trapezoidal coding slot in which the coding elements 120-K can be inserted.

Part Numbers

	No. of poles	120-M-217	Length	Pcs
	2	15.806.227	20,00	100
	3	15.806.228	25,00	100
	4	15.806.229	30,00	100
	5	15.806.230	35,00	50
	6	15.806.231	40,00	50
	7	15.806.232	45,00	50
	8	15.806.233	50,00	50
	9	15.806.234	55,00	50
	10	15.806.235	60,00	50
	11	15.806.236	65,00	50
	12	15.806.237	70,00	50
	13	15.806.238	75,00	50
	14	15.806.239	80,00	50
	15	15.806.240	85,00	50
	16	15.806.241	90,00	50
	17	15.806.242	95,00	50
	18	15.806.243	100,00	50
	19	15.806.244	105,00	50
	20	15.806.245	110,00	50
	21	15.806.246	115,00	50
	22	15.806.247	120,00	50

General Information

Pitch	5 mm
No. of poles	2 - 22
Usable with	all plug connectors of series 120

ECO

Technical Data

Overvoltage Category	III	III	II
Pollution Severity Level	3	2	2
Rated Voltage	250 V	320 V	630 V
Rated Impulse Voltage	4 kV	4 kV	4 kV
Rated Insulation Voltage	250 V acc. to EN	60998-1	
Rated Current	12 A		
Hole in PCB	ø 1,4 mm		

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C
Solder pin	1,0 x 1,0 mm; tin plated brass

Approvals

	Current	Voltage	Group	AWG	Nm
RL ®	15 10	300 300	B D		
S₽ °	15 10	300 300	B D, E		

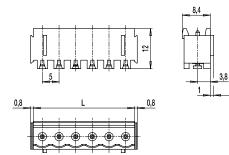
- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Other P.C. pin lengths on request
- Coding elements 120-K
- Connectors equipped with coding elements on request
- M2x10 screw and M2 nut

Pin strip for SMD

120-M-221-SMD

Plug-in direction vertical to PCB, with side walls





PCB Layout

Solder paste thickness: 0,15 - 0,2 mm Solder pad diameter: ø 2,8 mm

The PCB terminals for surface mounting comprise several types for reflow-soldering processes.

Housings out of temperature resistant plastic material and solder pins in round shape with soldering foot form the pin strips of the series of 120-M-221-SMD. The pins are movable in vertical direction and this ensures plane positioning of the

soldering feet on the soldering pads. Thus, 100% coplanarity is guaranteed. For the automatic assembling process, all pin strip versions are packed Tape-on-Reel and are equipped with high temperature resistant Pick Caps, which can comfortably be removed after the soldering process.

Part Numbers

	No. of poles	120-M-221-SMD	Length	Pcs
	2	40.806.352	10,00	200
	3	40.806.353	15,00	200
	4	40.806.354	20,00	100
	5	40.806.355	25,00	100
	6	40.806.356	30,00	100
	8	40.806.358	40,00	50
	10	40.806.360	50,00	50
	12	40.806.362	60,00	50
4				

further number of poles on request

General Information

Pitch	5 mm
No. of poles	2 - 12
Usable with	all plug connectors of series 120

ECO

Technical Data

Overvoltage Category	III	III	11
Pollution Severity Level	3	2	2
Rated Voltage	160 V	160 V	250 V
Rated Impulse Voltage	2,5 kV	2,5 kV	2,5 kV
Rated Insulation Voltage	130 V acc. to EN	60998-1	
Rated Current	12 A		
Soldering process	Reflow solder		

Material

Moulding	PA HT, black, V-0
Comparative Tracking Index	CTI 250
Insulating Group	Illa
Temperature Range	-40°C up to 105°C; reflow solder temperature (Peak) max. 250°C (15-30 s)
Solder pin	ø 1,1 mm (plug-in area); tin plated brass

Approvals

	Current	Voltage	Group	AWG	Nm	
AI ®	15 10	300 300	B D			
€₽ ®	15 10	300 300	B D, E			

Options / Accessories

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00 [1]

Part Numbers: Tape-on-Reel

No. of poles	120-M-221-SMD	Tape Width	Tape Height	Pcs		
2	40.806.352.A00	32 mm	17,4 mm	225		
3	40.806.353.A00	32 mm	17,4 mm	225		
4	40.806.354.A00	56 mm	17,4 mm	225		
5	40.806.355.A00	56 mm	17,4 mm	225		
6	40.806.356.A00	56 mm	17,4 mm	225		
7	40.806.357.A00	56 mm	17,4 mm	225		
further	further number of poles on request					

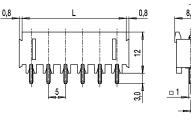
[1] To be fitted after reflow soldering process

Pin strip for THR

120-M-221-THR

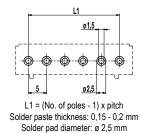
Plug-in direction vertical to PCB, with side walls







PCB Layout



The products based on our established 120 series (Conecta) have been designed for the soldering process in Through-Hole-Reflow technology.

The soldering paste is applied to the plated through holes and the pins are placed in the circuit board and soldered by a reflow oven.

The terminal mouldings are made of heat-resistant material. The stand-offs on the base ensures there is enough room for the soldering paste and facilitates good heat circulation for optimum soldering and enables the soldering joint to be visually inspected.

The solder pin projects very slightly with a circuit board thickness of 1,6 mm, creates a solder point on both sides, and thus guarantees a secure mounting. The position of the solder pins enables an equally minimal allocation area on the circuit board as with wave soldering.

The 120-M-THR headers are, like the conventional products, available with straight or angled soldering pins for vertical or parallel plugging of the mating parts, whereby all plugs of the Conecta series 120-A, -D, and -F can be used.

Part Numbers

No. of poles	120-M-221-THR	Length	Pcs
2	20.806.352	10,00	200
3	20.806.353	15,00	200
4	20.806.354	20,00	100
6	20.806.356	30,00	100
8	20.806.358	40,00	50
10	20.806.360	50,00	50
12	20.806.362	60,00	50

further number of poles on request

General Information

Pitch	5 mm
No. of poles	2 - 12
Usable with	all plug connectors of series 120
Additonal Information	For the automatic assembling process, all pin strip versions are packed Tape-on-Reel and are equipped with high temperature resistant Pick Caps, which can comfortably be removed after the soldering process.

Technical Data

Overvoltage Category	III	III	Ш
Pollution Severity Level	3	2	2
Rated Voltage	250 V	320 V	630 V
Rated Impulse Voltage	4 kV	4 kV	4 kV
Rated Insulation Voltage	250 V acc. to EN		
Rated Current	12 A		
Soldering process	Wave solder & re	flow solder	
Hole in PCB	ø 1,5 mm		
PCB thickness	Wave solder max. 1,6 mm; reflow solder 1,6 mm		

Material

Moulding	PA HT, black, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 150°C; reflow solder temperature (Peak) max. 260°C (15-30 s)
Solder pin	1,0 x 1,0 mm; tin plated brass

Approvals

	Current	Voltage	Group	AWG	Nm	
FL ®	15 10	300 300	B D			
S ₽°	15 10	300 300	B D, E			

Options / Accessories

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00 [1]

Part Numbers: Tape-on-Reel

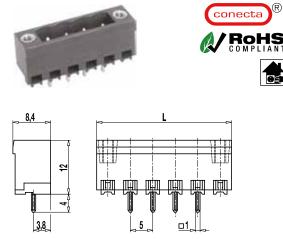
No. of poles	120-M-221-THR	Tape Width	Tape Height	Pcs		
2	20.806.352.A00	32 mm	17,4 mm	225		
3	20.806.353.A00	32 mm	17,4 mm	225		
4	20.806.354.A00	56 mm	17,4 mm	225		
5	20.806.355.A00	56 mm	17,4 mm	225		
6	20.806.356.A00	56 mm	17,4 mm	225		
7	20.806.357.A00	56 mm	17,4 mm	225		
further number of poles on request						

further number of poles on request

[1] To be fitted after reflow soldering process

120-M-225

Plug-in direction vertical to PCB, with connecting flanges



The pin strip 120-M-225, with connecting flanges and a pitch of 5 mm, is available in 2- to 22-pole design and can be mounted side-by-side.

Thread insert in the connecting flanges allow to screw the pin strips together with the plug connectors 120-A-115, 120-D-115 and 120-D-125. In addition, these connecting flanges can also be used to mount the pin strip to a housing panel. The plug direction for mating pin strips is vertical to the PCB.

For each pole, the pin strip has one trapezoidal coding slot in which the coding elements 120-K can be inserted.

Part Numbers					
No. of poles	120-M-225	Length	Pcs		
2	20.806.202	20,00	100		
3	20.806.203	25,00	100		
4	20.806.204	30,00	100		
5	20.806.205	35,00	50		
6	20.806.206	40,00	50		
7	20.806.207	45,00	50		
8	20.806.208	50,00	50		
9	20.806.209	55,00	50		
10	20.806.210	60,00	50		
11	20.806.211	65,00	50		
12	20.806.212	70,00	50		
13	20.806.213	75,00	50		
14	20.806.214	80,00	50		
15	20.806.215	85,00	50		
16	20.806.216	90,00	50		
17	20.806.217	95,00	50		
18	20.806.218	100,00	50		
19	20.806.219	105,00	50		
20	20.806.220	110,00	50		
21	20.806.221	115,00	50		
22	20.806.222	120,00	50		

General Information

Pitch	5 mm
No. of poles	2 - 22
Usable with	all plug connectors of series 120
Additonal Information	In addition, the pin strip can be mounted to the PCB by means of self-tapping screws K 15x8.

ECO

Technical Data

Overvoltage Category	III		II
Pollution Severity Level	3	2	2
Rated Voltage	250 V	320 V	630 V
Rated Impulse Voltage	4 kV	4 kV	4 kV
Rated Insulation Voltage	250 V acc. to EN	60998-1	
Rated Current	12 A		
Hole in PCB	ø 1,4 mm		

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C
Solder pin	1,0 x 1,0 mm; tin plated brass

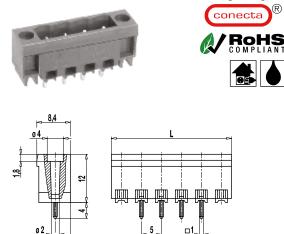
Approvals

	Current	Voltage	Group	AWG	Nm
AI ®	15 10	300 300	B D		
S₽ °	15 10	300 300	B D, E		

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Other P.C. pin lengths on request
- Coding elements 120-K
- Connectors equipped with coding elements on request

120-M-227

Plug-in direction vertical to PCB, with fastening flanges



The pin strip 120-M-227, with connecting flanges and a pitch of 5 mm, is available in 2- to 22-pole design and can be mounted side-by-side.

By means of the lh and rh connecting flanges, this pin strip can be mounted on a PCB with M2x14 and M2 nuts, self-tapping screws or rivets without any additional soldering. The plug direction for mating pin strips is parallel to the PCB.

For each pole, the pin strip has one trapezoidal coding slot in which the coding elements 120-K can be inserted.

Part Numbers						
No. of poles	120-M-227	Length	Pcs			
2	20.806.252	20,00	100			
3	20.806.253	25,00	100			
4	20.806.254	30,00	100			
5	20.806.255	35,00	50			
6	20.806.256	40,00	50			
7	20.806.257	45,00	50			
8	20.806.258	50,00	50			
9	20.806.259	55,00	50			
10	20.806.260	60,00	50			
11	20.806.261	65,00	50			
12	20.806.262	70,00	50			
13	20.806.263	75,00	50			
14	20.806.264	80,00	50			
15	20.806.265	85,00	50			
16	20.806.266	90,00	50			
17	20.806.267	95,00	50			
18	20.806.268	100,00	50			
19	20.806.269	105,00	50			
20	20.806.270	110,00	50			
21	20.806.271	115,00	50			
22	20.806.272	120,00	50			

further number of poles on request

General Information

Pitch	5 mm
No. of poles	2 - 22
Usable with	all plug connectors of series 120

ECO

Technical Data

Overvoltage Category	III	III	II
Pollution Severity Level	3	2	2
Rated Voltage	250 V	320 V	630 V
Rated Impulse Voltage	4 kV	4 kV	4 kV
Rated Insulation Voltage	ted Insulation Voltage 250 V acc. to EN 60998-1		
Rated Current	12 A		
Hole in PCB	ø 1,4 mm		

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C
Solder pin	1,0 x 1,0 mm; tin plated brass

Approvals

	Current	Voltage	Group	AWG	Nm
AI ®	15 10	300 300	B D		
S₽ ®	15 10	300 300	B D, E		

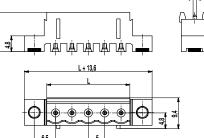
- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Other P.C. pin lengths on request
- Coding elements 120-K
- · Connectors equipped with coding elements on request
- M2x14 screw and M2 nut

Pin strip for SMD

120-M-227-SMD

Plug-in direction vertical to PCB, with solder flanges





PCB Layout



Solder paste thickness: 0,15 - 0,2 mm

120-M-227-SMD is a pin strip with a pitch of 5 mm for surface mount technology and suitable for all plugs of the plug connector system of series of 120 and available in lengths from 2 to 22 poles.

The solder retention devices (SMT anchors) on either side of the terminal housing provide an exceptionally high retention force for the terminal block to the PCB.

The most significant benefit of this design is the protection it provides to the solder joints against stresses encountered in field-installations. The product eliminates completely CTE mismatch (Coefficient of thermal expansion) and provide total coplanarity by the position adapting pins.

For the automatic assembling process, all pin strip versions are packed Tape on Reel and are equipped with high temperature resistant pick caps, which can comfortably be removed after the soldering process.

Plug-In direction vertical to PCB and wire entrance parallel to PCB when plugged with 120-D-111, 120-D-121

Plug-In direction and wire entrance vertical to PCB when plugged with 120-A-111.

Part N	Part Numbers			
No. of poles	120-M-227-SMD	Length	Pcs	
2	27.498.104	10,00	100	
5	50.494.001	25,00	100	
further number of poles on request				

General Information

Pitch	5 mm	
No. of poles	2 - 22	
Usable with	all plug connectors of series 120	

Technical Data

Overvoltage Category			II
Pollution Severity Level	3	2	2
Rated Voltage	160 V	160 V	250 V
Rated Impulse Voltage	2,5 kV	2,5 kV	2,5 kV
Rated Insulation Voltage 130 V acc. to EN 60998-1			
Rated Current	12 A		
Soldering process	Reflow solder		

Material

Moulding	PA HT, grey, V-0
Comparative Tracking Index	CTI 250
Insulating Group	Illa
Temperature Range	-40°C up to 105°C; reflow solder temperature (Peak) max. 250°C (15-30 s)
Solder pin	ø 1,1 mm (plug-in area); tin plated brass

Approvals

	Current	Voltage	Group	AWG	Nm
AI ®	15 10	300 300	B D		
S₽ °	15 10	300 300	B D, E		

Options / Accessories

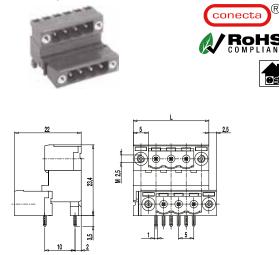
Consecutive numbering

- Special marking according to drawing
- Self-adhesive marking strip BST-5,00 [1]
- Special packaging on request: Tape-on-Reel Tray Tube magazine

[1] To be fitted after reflow soldering process

120-M-255

Plug-in direction parallel to PCB, two-tier version, with connecting flanges



The pin strip 120-M-255, two-tier version with connecting flanges and a pitch of 5 mm, is available in 4- to 44-pole design and can be mounted side-by-side.

Thread insert in the connecting flanges allow to screw the pin strips together with the plug connectors 120-A-115, 120-D-115 and 120-D-125. The plug direction for mating pin strips is parallel to the PCB.

For each pole, the pin strip has one trapezoidal coding slot in which the coding elements 120-K can be inserted.

Part Numbers				
No. of poles	120-M-255	Length	Pcs	
4	15.806.652	20,00	50	
6	15.806.653	25,00	50	
8	15.806.654	30,00	50	
10	15.806.655	35,00	50	
12	15.806.656	40,00	25	
14	15.806.657	45,00	25	
16	15.806.658	50,00	25	
18	15.806.659	55,00	25	
20	15.806.660	60,00	25	
22	15.806.661	65,00	25	
24	15.806.662	70,00	25	
26	15.806.663	75,00	25	
28	15.806.664	80,00	25	
30	15.806.665	85,00	25	
32	15.806.666	90,00	25	
34	15.806.667	95,00	25	
36	15.806.668	100,00	25	
38	15.806.669	105,00	25	
40	15.806.670	110,00	10	
42	15.806.671	115,00	10	
44	15.806.672	120,00	10	

0	0	
Gener	al Infor	nati

General Information		
Pitch	5 mm	
No. of poles	4 - 44	
Usable with all plug connectors of series 120		

ECO

Technical Data

Overvoltage Category	III	III	II
Pollution Severity Level	3	2	2
Rated Voltage	250 V	320 V	630 V
Rated Impulse Voltage	4 kV	4 kV	4 kV
Rated Insulation Voltage	250 V acc. to EN	60998-1	
Rated Current	12 A		
Hole in PCB	ø 1,4 mm		

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	
Temperature Range	-40°C up to 100°C
Solder pin	1,0 x 1,0 mm; tin plated brass

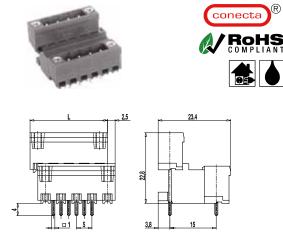
Approvals

	Current	Voltage	Group	AWG	Nm
RI ®	15 10	300 300	B D		
()	15 10	300 300	B D, E		
VDE					

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Coding elements 120-K
- · Connectors equipped with coding elements on request
- Two-tier version with front PCB connector offset to the left
- Special combinations of the front and rear row of the two-tier version.

120-M-265

Plug-in direction vertical to PCB, two-tier version, with connecting flanges



The pin strip 120-M-265, two-tier version with connecting flanges and a pitch of 5 mm, is available in 4- to 44-pole design and can be mounted side-by-side.

Thread insert in the connecting flanges allow to screw the pin strips together with the plug connectors 120-A-115, 120-D-115 and 120-D-125. The plug direction for mating pin strips is vertical to the PCB.

For each pole, the pin strip has one trapezoidal coding slot in which the coding elements 120-K can be inserted.

Part Numbers

i uit ii			
No. of poles	120-M-265	Length	Pcs
4	30.806.652	20,00	100
6	30.806.653	25,00	100
8	30.806.654	30,00	50
10	30.806.655	35,00	50
12	30.806.656	40,00	50
14	30.806.657	45,00	50
16	30.806.658	50,00	25
18	30.806.659	55,00	25
20	30.806.660	60,00	25
22	30.806.661	65,00	25
24	30.806.662	70,00	25
26	30.806.663	75,00	25
28	30.806.664	80,00	25
30	30.806.665	85,00	25
32	30.806.666	90,00	25
34	30.806.667	95,00	25
36	30.806.668	100,00	25
38	30.806.669	105,00	25
40	30.806.670	110,00	25
42	30.806.671	115,00	10
44	30.806.672	120,00	10

General Information		
Pitch	5 mm	
No. of poles	4 - 44	
Usable with	all plug connectors of series 120	

ECO

Technical Data

Overvoltage Category	III	III	II
Pollution Severity Level	3	2	2
Rated Voltage	250 V	320 V	630 V
Rated Impulse Voltage	4 kV	4 kV	4 kV
Rated Insulation Voltage	250 V acc. to EN	60998-1	
Rated Current	12 A		
Hole in PCB	ø 1,4 mm		

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C
Solder pin	1,0 x 1,0 mm; tin plated brass

Approvals

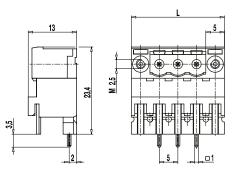
	Current	Voltage	Group	AWG	Nm
FL ®	15 10	300 300	B D		
S ₽°	15 10	300 300	B D, E		

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Coding elements 120-K
- Connectors equipped with coding elements on request
- Two-tier version with front PCB connector offset to the left
- Special combinations of the front and rear row of the two-tier version.

120-M-285

Plug-in direction parallel to PCB, tall version, with connecting flanges





The pin strip 120-M-285, tall version with connecting flanges and a pitch of 5 mm, is available in 2- to 22-pole design and can be mounted side-by-side.

Thread insert in the connecting flanges allow to screw the pin strips together with the plug connectors 120-A-115, 120-D-115 and 120-D-125. The plug direction for mating pin strips is parallel to the PCB.

For each pole, the pin strip has one trapezoidal coding slot in which the coding elements 120-K can be inserted.

Part N	umbers		
No. of poles	120-M-285	Length	Pcs
2	25.806.652	20,00	100
3	25.806.653	25,00	100
4	25.806.654	30,00	100
5	25.806.655	35,00	50
6	25.806.656	40,00	50
7	25.806.657	45,00	50
8	25.806.658	50,00	50
9	25.806.659	55,00	50
10	25.806.660	60,00	50
11	25.806.661	65,00	50
12	25.806.662	70,00	25
13	25.806.663	75,00	25
14	25.806.664	80,00	25
15	25.806.665	85,00	25
16	25.806.666	90,00	25
17	25.806.667	95,00	25
18	25.806.668	100,00	25
19	25.806.669	105,00	25
20	25.806.670	110,00	25
21	25.806.671	115,00	25
22	25.806.672	120,00	25

General Information		
Pitch	5 mm	
No. of poles	2 - 22	
Usable with	all plug connectors of series 120	

ECO

Technical Data

Overvoltage Category	III	III	11
Pollution Severity Level	3	2	2
Rated Voltage	250 V	320 V	630 V
Rated Impulse Voltage	4 kV	4 kV	4 kV
Rated Insulation Voltage	250 V acc. to EN	60998-1	
Rated Current	12 A		
Hole in PCB	ø 1,4 mm		

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C
Solder pin	1,0 x 1,0 mm; tin plated brass

Approvals

	Current	Voltage	Group	AWG	Nm	
AI ®	15 10	300 300	B D			
€ ₽°	15 10	300 300	B D, E			
VDE						

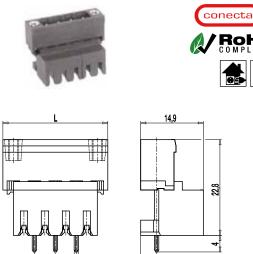
Options / Accessories

Consecutive numbering

- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Coding elements 120-K
- · Connectors equipped with coding elements on request

120-M-295

Plug-in direction vertical to PCB, tall version, with connecting flanges



The pin strip 120-M-295, tall version with connecting flanges and a pitch of 5 mm, is available in 2- to 22-pole design and can be mounted side-by-side.

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Thread insert in the connecting flanges allow to screw the pin strips together with the plug connectors 120-A-115, 120-D-115 and 120-D-125. The plug direction for mating pin strips is vertical to the PCB.

For each pole, the pin strip has one trapezoidal coding slot in which the coding elements 120-K can be inserted.

Part Numbers				
No. of poles	120-M-295	Length	Pcs	
2	25.806.202	20,00	100	
3	25.806.203	25,00	100	
4	25.806.204	30,00	100	
5	25.806.205	35,00	50	
6	25.806.206	40,00	50	
7	25.806.207	45,00	50	
8	25.806.208	50,00	50	
9	25.806.209	55,00	50	
10	25.806.210	60,00	50	
11	25.806.211	65,00	50	
12	25.806.212	70,00	25	
13	25.806.213	75,00	25	
14	25.806.214	80,00	25	
15	25.806.215	85,00	25	
16	25.806.216	90,00	25	
17	25.806.217	95,00	25	
18	25.806.218	100,00	25	
19	25.806.219	105,00	25	
20	25.806.220	110,00	25	
21	25.806.221	115,00	25	
22	25.806.222	120,00	25	

General Information		
Pitch	5 mm	
No. of poles	2 - 22	
Usable with	all plug connectors of series 120	

ECO

Technical Data

Overvoltage Category	III	III	II
Pollution Severity Level	3	2	2
Rated Voltage	250 V	320 V	630 V
Rated Impulse Voltage	4 kV	4 kV	4 kV
Rated Insulation Voltage	250 V acc. to EN	60998-1	
Rated Current	12 A		
Hole in PCB	ø 1,4 mm		

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C
Solder pin	1,0 x 1,0 mm; tin plated brass

Approvals

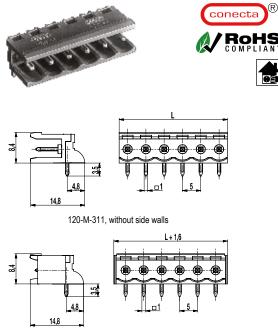
	Current	Voltage	Group	AWG	Nm
FL ®	15 10	300 300	B D		
()	15 10	300 300	B D, E		

Options / Accessories

Consecutive numbering

- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances
- Coding elements 120-K
- Connectors equipped with coding elements on request

120-M-311/-411 Plug-in direction parallel to PCB, with support



120-M-411, with side walls

The pin strips 120-M-311 and 120-M-411, with support and a pitch of 5 mm, is available in 2- to 22-pole design and can be mounted side-by-side.

The ..-M-311 version is a pin strip without side walls. It can be mounted side-by-side without pole loss. The ..-M-411 version is a pin strip with closed side wall. Both versions have a rear support. For both versions, the plug direction for mating plug connectors is parallel to the PCB.

For each pole, the pin strip has one trapezoidal coding slot in which the coding elements 120-K can be inserted.

Part Numbers No. of 120-M-311 120-M-411 Length Pcs poles 2 10.806.402 10.806.426 10,00 200 3 10.806.403 10.806.427 15.00 200 4 10.806.404 10.806.428 20,00 100 5 10.806.405 10.806.429 25,00 100 10.806.406 10.806.430 6 30,00 100 10.806.407 10.806.431 35,00 7 50 8 10.806.408 10.806.432 40,00 50 10.806.409 10.806.433 45,00 9 50 10.806.410 10.806.434 10 50,00 50 11 10.806.411 10.806.435 55,00 50 10.806.436 60,00 12 10.806.412 50

further number of poles on request

General Information

Pitch	5 mm
No. of poles	2 - 24
Usable with	all plug connectors of series 120
Additonal Information	Ordering information 311: With support and without side wall 411: With support and with side wall

ECO

Technical Data

III	III	II
3	2	2
250 V	320 V	630 V
4 kV	4 kV	4 kV
250 V acc. to EN	60998-1	
12 A		
ø 1.4 mm		
	3 250 V 4 kV 250 V acc. to EN 12 A	3 2 250 V 320 V 4 kV 4 kV 250 V acc. to EN 60998-1 12 A

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C
Solder pin	1,0 x 1,0 mm; tin plated brass

Approvals

	Current	Voltage	Group	AWG	Nm
AI ®	15 10	300 300	B D		
S ₽°	15 10	300 300	B D, E		
VDE					

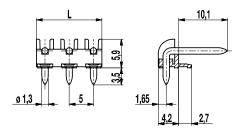
- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- · Pitch of 10 mm for larger clearance and creepage distances
- Other P.C. pin lengths on request
- Coding elements 120-K
- · Connectors equipped with coding elements on request
- Pin strips with fastening flanges, see 120-M-217
- Pin strips with connecting flanges, see 120-M-215

Pin Strip

950-SLS

Plug-in direction parallel to PCB





Part Numbers				
No. of poles	950-SLS	Length	Pcs	
2	12.893.101	8,50	1000	
3	13.893.101	13,50	500	
4	14.893.101	18,50	250	
5	15.893.101	23,50	250	
6	16.893.101	28,50	250	
7	17.893.101	33,50	250	
8	18.893.101	38,50	100	
9	19.893.101	43,50	100	
10	20.893.101	48,50	100	
11	21.893.101	53,50	100	
12	22.893.101	58,50	100	
13	23.893.101	63,50	100	
14	24.893.101	68,50	100	
15	25.893.101	73,50	100	
16	26.893.101	78,50	100	
17	27.893.101	83,50	100	
18	28.893.101	88,50	100	
19	29.893.101	93,50	100	
20	30.893.101	98,50	100	
21	31.893.101	103,50	100	
22	32.893.101	108,50	100	
23	33.893.101	113,50	100	
24	34.893.101	118,50	100	

General Information

Pitch	5 mm
No. of poles	2 - 24

R

WECO

Technical Data

Overvoltage Category	III	III	II
Pollution Severity Level	3	2	2
Rated Voltage	250 V	320 V	500 V
Rated Impulse Voltage	4 kV	4 kV	4 kV
Rated Insulation Voltage	250 V acc. to EN	60998-1	
Rated Current	6 A		
Hole in PCB	ø 1,6 mm		

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI 400
Insulating Group	ll
Temperature Range	-40°C up to 100°C
Solder pin	ø 1,3 mm; tin plated brass

Approvals

	Current	Voltage	Group	AWG	Nm	
FL®	10	300	В			
S₽ °	10	300	В			

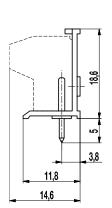
- Pitch of 10 mm for larger clearance and creepage distances
- Other pin lengths on request
- Other pin surfaces on request

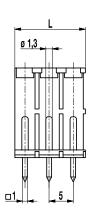
971-FBSP

Plug-in area ø 1,3 mm, with locking plate









Part Numbers

No. of poles	971-FBSP	Length	Pcs
2	12.893.412	10,00	200
3	13.893.412	15,00	200
4	14.893.412	20,00	100
5	15.893.412	25,00	100
6	16.893.412	30,00	100
7	17.893.412	35,00	100
8	18.893.412	40,00	100
9	19.893.412	45,00	50
10	20.893.412	50,00	50
11	21.893.412	55,00	50
12	22.893.412	60,00	50

General Information

Pitch	5 mm
No. of poles	2 - 12
Usable with	plug connector 971-FBS

R

WECO

Technical Data

Overvoltage Category	III	III	II
Pollution Severity Level	3	2	2
Rated Voltage	160 V	160 V	320 V
Rated Impulse Voltage	2,5 kV	2,5 kV	2,5 kV
Rated Insulation Voltage	130 V acc. to EN	60998-1	
Rated Current	6 A		
Hole in PCB	ø 1,5 mm		

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	
Temperature Range	-40°C up to 100°C
Solder pin	ø 1,3 mm (plug-in area) / 1,0 x 1,0 mm (soldering area); tin plated brass

Approvals

	Current	Voltage	Group	AWG	Nm	
RL ®	20 10	300 300	B D			
€₽ °	20 10	300 300	B D, E			

Options / Accessories

Consecutive numbering

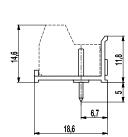
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Pitch of 10 mm for larger clearance and creepage distances

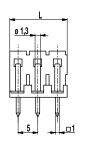
971-FBWP

Plug-in area ø 1,3 mm, with locking plate









Part N	umbers		
No. of poles	971-FBWP	Length	Pcs
2	32.893.412	10,00	200
3	33.893.412	15,00	200
4	34.893.412	20,00	100
5	35.893.412	25,00	100
6	36.893.412	30,00	100
7	37.893.412	35,00	100
8	38.893.412	40,00	100
9	39.893.412	45,00	50
10	40.893.412	50,00	50
11	41.893.412	55,00	50
12	42.893.412	60,00	50

General Information

Pitch	5 mm
No. of poles	2 - 12
Usable with	plug connector 970-NFBW

R

WECO

Technical Data

Overvoltage Category	III	III	I
Pollution Severity Level	3	2	2
Rated Voltage	160 V	160 V	320 V
Rated Impulse Voltage	2,5 kV	2,5 kV	2,5 kV
Rated Insulation Voltage	130 V acc. to EN	60998-1	
Rated Current	6 A		
Hole in PCB	ø 1,6 mm		

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	I
Temperature Range	-40°C up to 100°C
Solder pin	ø 1,3 mm (plug-in area) / 1,0 x 1,0 mm (soldering area); tin plated brass

Approvals

	Current	Voltage	Group	AWG	Nm	
FL®	20 10	300 300	B D			
()	20 10	300 300	B D, E			

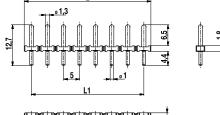
Options / Accessories

• Pitch of 10 mm for larger clearance and creepage distances

Pin strip 971-SLR

Soldering area ø 1 mm; plug-in area ø 1,3 mm





L1 = (number of poles - 1) x pitch

Part N	Numbers		
No. of poles	971-SLR	Length	Pcs
2	12.893.811	9,50	1.000
3	13.893.811	14,50	500
4	14.893.811	19,50	500
5	15.893.811	24,50	250
6	16.893.811	29,50	250
7	17.893.811	34,50	250
8	18.893.811	39,50	250
9	19.893.811	44,50	250
10	20.893.811	49,50	100
11	21.893.811	54,50	100
12	22.893.811	59,50	100

further number of poles on request

General Information

Pitch	5 mm
No. of poles	2 - 12
Usable with	plug connector of series 115-F, 950-FL-DS, 950-TFL-DS, 950-NAF-DS, 950-GFL-DS, 950-NLFL-DS, 950-RFL-DS
Additonal Information	Pin strip is suitable for reflow soldering

R

ECO

Technical Data

Overvoltage Category	III	III	II		
Pollution Severity Level	3	2	2		
Rated Voltage	250 V	320 V	630 V		
Rated Impulse Voltage	4 kV	4 kV	4 kV		
Rated Insulation Voltage	250 V acc. to EN	60998-1			
Rated Current	10 A				
Soldering process	Wave solder & re	flow solder			
Hole in PCB	ø 1,3 mm				
PCB thickness	Wave solder max. 1,6 mm; reflow solder 1,6 - 3,2 mm				

Material

Moulding	PA HT, black, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 150°C; reflow solder temperature (Peak) max. 260°C (15-30 s)
Solder pin	ø 1,3 mm (plug-in area) / ø 1,0 mm (soldering area); tin plated brass

Approvals

	Current	Voltage	Group	AWG	Nm	
AI ®	10 [1]	300	В			
S ₽°	10 [1]	300	В			

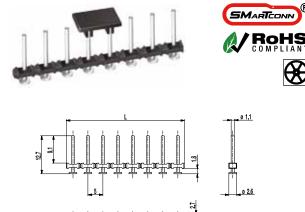
[1] By using 115-F current of 12 A possible

- Other plug pin lengths on request
- Other P.C. pin surfaces on request

Pin strip for SMD

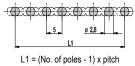
971-SLR-SMD-1,1

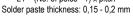
Plug-in area ø 1,1 mm



-**⋳**∲∭∲∭∲∭∲∭∲∭∲∰∲₩

PCB Layout





971-SLR-SMD is a pin strip with a pitch of 5 mm for the application in a reflow soldering process. In contrary to the well-known pin rows 971-SLR and 971-SLR-THR, for which holes in the PCB are necessary, the SMD types of WECO base on true surface assembly. Soldering expanses at the end of the pins guarantee optimal retention force on the printed circuit board.

The pin strip 971-SLR-SMD-1,1 comes with a constant pin ø of 1,1 mm at the plug-in area and is usable with WECO plug connectors (see general information); but not with the plug-in connectors of the series 115-F. Furthermore we recommend this pin strip for higher numbers of poles, in order to minimize the plug-in and withdrawal forces here.

Just like all THR versions of WECO also the housings of the SMD series are made out of high temperature resistant plastic material and exhibit a very high CTI value. For the automatic assembling all pin strips of this series are packed in Tape-on-Reel and equipped with high temperature resistant Pick Caps, which can easily be removed after the soldering process.

Part N	lumbers		
No. of poles	971-SLR-SMD-1,1	Length	Pcs
2	12.893.822	9,50	1.000
3	13.893.822	14,50	500
4	14.893.822	19,50	500
5	15.893.822	24,50	250
6	16.893.822	29,50	250
10	20.893.822	49,50	100
12	22.893.822	59,50	100
furthor nur	nhar of poloo on request		

further number of poles on request

General Information

Pitch	5 mm
No. of poles	2 - 12
Usable with	plug connectors of series 950-FL-DS, 950-TFL-DS, 950-NAF-DS, 950-GFL-DS, 950-NLFL-DS, 950-RFL-DS
Additonal Information	Also, please take into consideration the pin strips 971-SLR for wave soldering and 971-SLR-THR for Through-Hole-Reflow.

ECO

Technical Data

Overvoltage Category	III	III	II
Pollution Severity Level	3	2	2
Rated Voltage	160 V	160 V	320 V
Rated Impulse Voltage	2,5 kV	2,5 kV	2,5 kV
Rated Insulation Voltage	130 V acc. to EN	60998-1	
Rated Current	10 A		
Soldering process	Reflow solder		

Material

Moulding	PA HT, black, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	
Temperature Range	-40°C up to 150°C; reflow solder temperature (Peak) max. 260°C (15-30 s)
Solder pin	ø 1,1 mm (plug-in area); tin plated brass

Approvals

	Current	Voltage	Group	AWG	Nm
۶L®	10	300	В		
S ₽°	10	300	В		

Options / Accessories

• Other plug pin lengths on request

• Other P.C. pin surfaces on request

Part Numbers: Tape-on-Reel

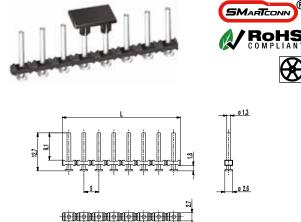
No. of poles	971-SLR-SMD-1,1	Tape Width	Tape Height	Pcs
2	12.893.822.A00	32 mm	15,9 mm	500
3	13.893.822.A00	32 mm	15,9 mm	500
4	14.893.822.A00	56 mm	15,9 mm	500
5	15.893.822.A00	56 mm	15,9 mm	500
6	16.893.822.A00	56 mm	15,9 mm	500
7	17.893.822.A00	56 mm	15,9 mm	500
8	18.893.822.A00	72 mm	14,9 mm	500
9	19.893.822.A00	72 mm	14,9 mm	500
10	20.893.822.A00	72 mm	14,9 mm	500
11	21.893.822.A00	88 mm	15,8 mm	500
12	22.893.822.A00	88 mm	15,8 mm	500
e 11				

further number of poles on request

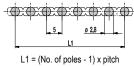
Pin strip for SMD

971-SLR-SMD-1,3

Plug-in area ø 1,3 mm



PCB Layout



Solder paste thickness: 0,15 - 0,2 mm

971-SLR-SMD is a pin strip with a pitch of 5 mm for the application in a reflow soldering process. In contrary to the well-known pin rows 971-SLR and 971-SLR-THR, for which holes in the PCB are necessary, the SMD types of WECO base on true surface assembly. Soldering expanses at the end of the pins guarantee optimal retenion force on the printed circuit board.

The pin strip 971-SLR-SMD-1,3 with the pin diameter of 1,3 mm at the plug-in area, is rather suitable for the small numbers of poles of the plug connector (see general information). The obtained plug-in and pull-out forces are comfortable.

Just like all THR versions of WECO also the housings of the SMD series are made out of high temperature resistant plastic material and exhibit a very high CTI value. For the automatic assembling all pin strips of this series are packed in Tape-on-Reel and equipped with high temperature resistant Pick Caps, which can easily be removed after the soldering process.

Part Numbers

	No. of poles	971-SLR-SMD-1,3	Length	Pcs	
	2	12.893.821	9,50	1.000	
	3	13.893.821	14,50	500	
	4	14.893.821	19,50	500	
	5	15.893.821	24,50	250	
	6	16.893.821	29,50	250	
	10	20.893.821	49,50	100	
	12	22.893.821	59,50	100	

further number of poles on request

General Information

Pitch	5 mm
No. of poles	2 - 12
Usable with	plug connectors of series 115-F, 950-FL-DS, 950-TFL-DS, 950-NAF-DS, 950-GFL-DS, 950-NLFL-DS, 950-RFL-DS
Additonal Information	Also, please take into consideration the pin strips 971-SLR for wave soldering and 971-SLR-THR for Through-Hole-Reflow.

ECO

Technical Data

€

Overvoltage Category	III	III	II
Pollution Severity Level	3	2	2
Rated Voltage	160 V	160 V	320 V
Rated Impulse Voltage	2,5 kV	2,5 kV	2,5 kV
Rated Insulation Voltage	130 V acc. to EN	60998-1	
Rated Current	10 A		
Soldering process	Reflow solder		

Material

Moulding	PA HT, black, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	
Temperature Range	-40°C up to 150°C; reflow solder temperature (Peak) max. 260°C (15-30 s)
Solder pin	ø 1,3 mm (plug-in area); tin plated brass

Approvals

	Current	Voltage	Group	AWG	Nm
FL ®	10 [1]	300	В		
	10 [1]	300	В		

(1) By using 115-F current of 12 A possible

Options / Accessories

- Other plug pin lengths on request
- · Other P.C. pin surfaces on request

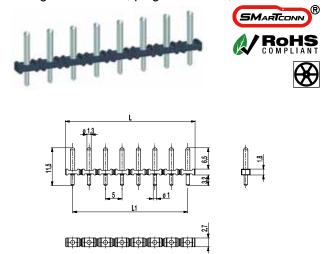
Part Numbers: Tape-on-Reel

No. of poles	971-SLR-SMD-1,3	Tape Width	Tape Height	Pcs
2	12.893.821.A00	32 mm	15,9 mm	500
3	13.893.821.A00	32 mm	15,9 mm	500
4	14.893.821.A00	56 mm	15,9 mm	500
5	15.893.821.A00	56 mm	15,9 mm	500
6	16.893.821.A00	56 mm	15,9 mm	500
7	17.893.821.A00	56 mm	15,9 mm	500
8	18.893.821.A00	72 mm	14,9 mm	500
9	19.893.821.A00	72 mm	14,9 mm	500
10	20.893.821.A00	72 mm	14,9 mm	500
e				

further number of poles on request

Pin strip for THR 971-SLR-THR

Soldering area ø 1 mm; plug-in area ø 1,3 mm



PCB Layout

<u> </u>
L1 = (No. of poles - 1) x pitch
Solder paste thickness: 0,15 - 0,2 mm
Solder pad diameter: ø 2,2 mm

971-SLR-THR is a pin strip with a pitch of 5 mm for the application in a reflow soldering process. The high temperature resistant plastic housing has a very high CTI value and is equipped with spacers, so-called "Stand-offs", which ensure a better hot-air circulation during the reflow soldering process in the convection oven. Beyond this, they assure an improved optical control of the solder joints.

The pin strips of the series 971-SLR-THR comes with a stepped pin, \emptyset of 1,3 mm in the plug-in area and \emptyset of 1,0 mm in the soldering area, and is usable with all WECO plug connectors (see general information). Furthermore we recommend this pin strip for small numbers of poles and for the series of 115-F for all numbers of poles. The obtained plug-in and pullout forces are comfortable. For the automatic assembling all pin strips of this series are packed in Tape-on-Reel and equipped with high temperature resistant Pick Caps, which can easily be removed after the soldering process.

Part Numbers						
No. of poles	971-SLR-THR	Length	Pcs			
2	12.893.801	9,50	1.000			
3	13.893.801	14,50	500			
4	14.893.801	19,50	500			
5	15.893.801	24,50	250			
6	16.893.801	29,50	250			
8	18.893.801	39,50	250			
10	20.893.801	49,50	100			
12	22.893.801	59,50	100			

further number of poles on request

General Information

Pitch	5 mm
No. of poles	2 - 12
Usable with	plug connectors of series 115-F, 950-FL-DS, 950-TFL-DS, 950-NAF-DS, 950-GFL-DS, 950-NLFL-DS, 950-RFL-DS
Additonal Information	Also, please take into consideration the pin strips 971-SLR for wave soldering and 971-SLR-SMD in genuine surface mount technology.

Technical Data

Overvoltage Category	III	Ш	П
Pollution Severity Level	3	2	2
Rated Voltage	250 V	320 V	630 V
Rated Impulse Voltage	4 kV	4 kV	4 kV
Rated Insulation Voltage	250 V acc. to EN	60998-1	
Rated Current	10 A		
Soldering process	Wave solder & re	flow solder	
Hole in PCB	ø 1,3 mm		
PCB thickness	Wave solder max. 1,6 mm; reflow solder 1,6 - 3,2 mm		

Material

Moulding	PA HT, black, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	I
Temperature Range	-40°C up to 150°C; reflow solder temperature (Peak) max. 260°C (15-30 s)
Solder pin	ø 1,3 mm (plug-in area) / ø 1,0 mm (soldering area); tin plated brass

Approvals

	Current	Voltage	Group	AWG	Nm	
FL®	10 [1]	300	В			
S₽ °	10 [1]	300	В			

[1] By using 115-F current of 12 A possible

Options / Accessories

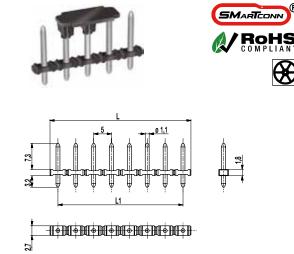
- Other plug pin lengths on request
- Other P.C. pin surfaces on request

Part Numbers: Tape-on-Reel

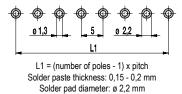
No. of poles	971-SLR-THR	Tape Width	Tape Height	Pcs		
2	12.893.801.A00	32 mm	15,9 mm	500		
3	13.893.801.A00	32 mm	15,9 mm	500		
4	14.893.801.A00	56 mm	15,9 mm	500		
6	16.893.801.A00	56 mm	15,9 mm	500		
7	17.893.801.A00	56 mm	15,9 mm	500		
8	18.893.801.A00	72 mm	14,9 mm	500		
10	20.893.801.A00	72 mm	14,9 mm	500		
furthor	further number of poles on request					

further number of poles on request

Pin strip for THR 971-SLR-THR-1,1 Soldering/plug-in area ø 1,1 mm



PCB Layout



971-SLR-THR-1,1 is a pin strip with a pitch of 5 mm for the application in a reflow soldering process. The high temperature resistant plastic housing has a very high CTI value and is equipped with spacers, so-called "Stand-offs", which ensure a better hot-air circulation during the reflow soldering process in the convection oven. Beyond this, they assure an improved optical control of the solder joints.

The pin strip 971-SLR-THR-1,1 comes with a constant pin ø of 1,1 mm and is usable with all WECO plug connectors (see general information); but not with the plug-in connectors of the series 115-F. Furthermore we recommend this pin strip for higher numbers of poles, in order to minimize the plug-in and withdrawal forces here.

For the automatic assembling all pin strips of this series are packed in Tape-on-Reel and equipped with high temperature resistant Pick Caps, which can easily be removed after the soldering process.

Part Numbers					
No. of poles	971-SLR-THR-1,1	Length	Pcs		
2	12.893.802	9,50	1.000		
3	13.893.802	14,50	500		
4	14.893.802	19,50	500		
6	16.893.802	29,50	250		
8	18.893.802	39,50	250		
12	22.893.802	59,50	100		
e					

further number of poles on request

General Information

Pitch	5 mm
No. of poles	2 - 12
Usable with	plug connectors 950-FL-DS, 950-TFL-DS, 950-NAF-DS, 950-GFL-DS, 950-NLFL-DS, 950-RFL-DS
Additonal Information	Also please consider the pin strips 971-SLR for wave soldering and 971-SLR-SMD in genuine surface mount technology.

Technical Data

Overvoltage Category	III	Ш	II
Pollution Severity Level	3	2	2
Rated Voltage	250 V	320 V	630 V
Rated Impulse Voltage	4 kV	4 kV	4 kV
Rated Insulation Voltage	250 V acc. to EN	60998-1	
Rated Current	10 A		
Soldering process	Wave solder & re	flow solder	
Hole in PCB	ø 1,3 mm		
PCB thickness	Wave solder max. 1,6 mm; reflow solder 1,6 - 3,2 mm		

Material

Moulding	PA HT, black, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	l
Temperature Range	-40°C up to 150°C; reflow solder temperature (Peak) max. 260°C (15-30 s)
Solder pin	ø 1,1 mm; tin plated brass

Approvals

	Current	Voltage	Group	AWG	Nm
RJ®	10	300	В		
€ ₽°	10	300	В		

Options / Accessories

- Other plug pin lengths on request
- Other P.C. pin surfaces on request

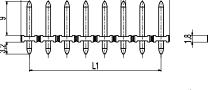
Part Numbers: Tape-on-Reel

No. of poles	971-SLR-THR-1,1	Tape Width	Tape Height	Pcs
8	18.893.802.A00	72 mm	14,9 mm	500
further number of poles on request				

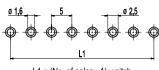
Pin strip for THR 971-SLR-THR-1,3 Soldering/plug-in area ø 1,3 mm



2.7



PCB Layout



L1 = (No. of poles - 1) x pitch Solder paste thickness: 0,15 - 0,2 mm Solder pad diameter: ø 2,5 mm

971-SLR-THR-1,3 is a pin strip with a pitch of 5 mm for the application in a reflow soldering process. The high temperature resistant plastic housing has a very high CTI value and is equipped with spacers, so-called "Stand-offs", which ensure a better hot-air circulation during the reflow soldering process in the convection oven. Beyond this, they assure an improved optical control of the solder joints.

The pin strips of the series 971-SLR-THR-1,3 comes with a constant pin ø of 1,3 mm and is usable with all WECO plug connectors (see general information). Furthermore we recommend this pin strip for small numbers of poles and for the series of 115-F for all numbers of poles. The obtained plug-in and pull-out forces are comfortable. For the automatic assembling all pin strips of this series are packed in Tape-on-Reel and equipped with high temperature resistant Pick Caps, which can easily be removed after the soldering process.

Part Numbers						
No. of poles	971-SLR-THR-1,3	Length	Pcs			
2	12.893.805	9,50	1.000			
3	13.893.805	14,50	500			
4	14.893.805	19,50	500			
5	15.893.805	24,50	250			
6	16.893.805	29,50	250			
8	18.893.805	39,50	250			
10	20.893.805	49,50	100			
11	21.893.805	54,50	100			
12	22.893.805	59,50	100			

General Information

R

Pitch	5 mm
No. of poles	2 - 12
Usable with	plug connectors of series 115-F, 950-FL-DS, 950-TFL-DS, 950-NAF-DS, 950-GFL-DS, 950-NLFL-DS, 950-RFL-DS
Additonal Information	Also please consider the pin strips 971-SLR for wave soldering and 971-SLR-SMD in genuine surface mount technology.

ECO

Technical Data

Overvoltage Category	III	III	П
Pollution Severity Level	3	2	2
Rated Voltage	250 V	320 V	630 V
Rated Impulse Voltage	4 kV	4 kV	4 kV
Rated Insulation Voltage	250 V acc. to EN	60998-1	
Rated Current	10 A		
Soldering process	Wave solder & re	flow solder	
Hole in PCB	ø 1,6 mm		
PCB thickness	Wave solder max. 1,6 mm; reflow solder 1,6 - 3,2 mm		

Material

Moulding	PA HT, black, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	
Temperature Range	-40°C up to 150°C; reflow solder temperature (Peak) max. 260°C (15-30 s)
Solder pin	ø 1,3 mm; tin plated brass

Approvals

	Current	Voltage	Group	AWG	Nm	
RJ®	10 [1]	300	В			
€₽ °	10 [1]	300	В			

[1] By using 115-F current of 12 A possible

Options / Accessories

- Other plug pin lengths on request
- Other P.C. pin surfaces on request

Part Numbers: Tape-on-Reel

No. of poles	971-SLR-THR-1,3	Tape Width	Tape Height	Pcs	
2	12.893.805.A00	32 mm	15,9 mm	500	
3	13.893.805.A00	32 mm	15,9 mm	500	
4	14.893.805.A00	56 mm	15,9 mm	500	
5	15.893.805.A00	56 mm	15,9 mm	500	
6	16.893.805.A00	56 mm	15,9 mm	500	
7	17.893.805.A00	56 mm	15,9 mm	500	
10	20.893.805.A00	72 mm	15,9 mm	500	
12	22.893.805.A00	88 mm	15,9 mm	500	
further number of polos on request					

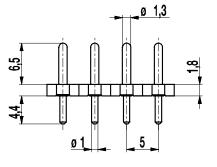
further number of poles on request

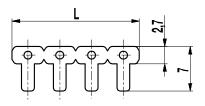
971-SLS

Soldering area ø 1 mm; plug-in area ø 1,3 mm, with support

COMPLIANT







Part Numbers					
No. of poles	971-SLS	Length	Pcs		
2	12.893.602	10,00	500		
3	13.893.602	15,00	500		
4	14.893.602	20,00	250		
5	15.893.602	25,00	250		
6	16.893.602	30,00	250		
7	17.893.602	35,00	250		
8	18.893.602	40,00	100		
9	19.893.602	45,00	100		
10	20.893.602	50,00	100		
11	21.893.602	55,00	100		
12	22.893.602	60,00	100		
13	23.893.602	65,00	100		
14	24.893.602	70,00	100		
15	25.893.602	75,00	100		
16	26.893.602	80,00	100		
17	27.893.602	85,00	100		
18	28.893.602	90,00	100		
19	29.893.602	95,00	100		
20	30.893.602	100,00	100		
21	31.893.602	105,00	100		
22	32.893.602	110,00	100		
23	33.893.602	115,00	100		
24	34.893.602	120,00	100		

Pitch	5 mm
No. of poles	2 - 24
Usable with	all sockets and plugs of series 95-FB und 97-FB, 97-FBW, 97-FBS
Additonal Information	Application tip: In combination with 95-FB or 97-FB series socker connectors, printed circuit boards can be directly connected.

R

WECO

Technical Data

Overvoltage Category	111	III	II
Pollution Severity Level	3	2	2
Rated Voltage	200 V	320 V	320 V
Rated Impulse Voltage	4 kV	4 kV	4 kV
Rated Insulation Voltage	250 V acc. to EN	60998-1	
Rated Current	6 A		
Hole in PCB	ø 1,3 mm		

Material

Moulding	PBTP, black, V-0
Comparative Tracking Index	CTI 175
Insulating Group	llla
Temperature Range	-40°C up to 100°C
Solder pin	ø 1,3 mm (plug-in area) / ø 1,0 mm (soldering area); tin plated brass

Approvals

	Current	Voltage	Group	AWG	Nm	
۶L®	10	300	В			
€ ₽°	10	300	В			

Options / Accessories

Pitch of 10 mm for larger clearance and creepage distances

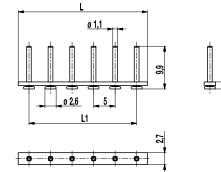
• Other pin lengths on request

• Other P.C. pin surfaces on request

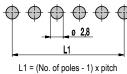
Pin strip for SMD 971-SLT-SMD-1,1 Low profile







PCB Layout



Solder paste thickness: 0,15 - 0,2 mm

971-SLT-SMD is a pin strip with a pitch of 5 mm for the application in a reflow soldering process with low profile for space critical applications. Contrary to the well-known pin strips of 971-SLR and 971-SLR-THR, for which holes in the PCB are necessary, the SMD types of WECO base on true surface assembly. Soldering expanses at the end of the pins guarantee optimal retention force on the printed circuit board.

The pin strip 971-SLT-SMD comes with a constant pin ø of 1,1 mm at the plug-in area. Plug-in direction perpendicular to PCB and wire entrance parallel to PCB when plugged with WECO plug connectors (see general information); but not with the plug-in connectors of the series 115-F. Furthermore, we recommend this pin strip for higher numbers of poles, in order to minimize the plug-in and withdrawal forces here.

Just like all THR versions of WECO, also the housings of the SMD series are made out of high temperature resistant plastic material.

For the automatic assembling all pin strips of this series are packed in Tape-on-Reel and equipped with high temperature resistant Pick Caps, which can easily be removed after the soldering process.

Part Numbers

No. of poles	971-SLT-SMD-1,1	Length	Pcs
2	12.893.656	10,00	1.000
6	16.893.656	30,00	250
£	when of voloo an volumet		

further number of poles on request

General Information

Pitch	5 mm
No. of poles	2 - 12
Usable with	plug connectors of series 950-FL-DS, 950-TFL-DS, 950-NAF-DS, 950-GFL-DS, 950-NLFL-DS, 950-RFL-DS
Additonal Information	Also, please take into consideration the pin strips 971-SLR for wave soldering and 971-SLR-THR for Through-Hole-Reflow.

Technical Data

Overvoltage Category	III	III	II
Pollution Severity Level	3	2	2
Rated Voltage	160 V	160 V	250 V
Rated Impulse Voltage	2,5 kV	2,5 kV	2,5 kV
Rated Insulation Voltage	130 V acc. to EN	60998-1	
Rated Current	10 A		
Soldering process	Reflow solder		

Material

Moulding	PA HT, black, V-0
Comparative Tracking Index	CTI ≥ 250
Insulating Group	Illa
Temperature Range	-40°C up to 105°C; reflow solder temperature (Peak) max. 250°C (15-30 s)
Solder pin	ø 1,1 mm (plug-in area); tin plated brass

Approvals

	Current	Voltage	Group	AWG	Nm
S ₽°	10	300	В		

Options / Accessories

• Other plug pin lengths on request

• Other P.C. pin surfaces on request

Part Numbers: Tape-on-Reel

No. of poles	971-SLT-SMD-1,1	Tape Width	Tape Height	Pcs
2	12.893.656.A00	32 mm	16,1 mm	500
6	16.893.656.A00	44 mm	15,0 mm	500
further number of poles on request				

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971-SLW

Soldering area ø 1 mm; plug-in area ø 1,3 mm, with long support

ø 1,3





Pitch	5 mm
No. of poles	2 - 24
Usable with	all sockets and plugs of series 95-FB und 97-FB, 97-FBW, 97-FBS
Additonal Information	Application tip: In combination with 95-FB or 97-FB series socket connectors, printed circuit boards can be directly connected.

R

WECO

Technical Data

II.
2
320 V
4 kV

Material

Moulding	PBTP, black , V-0
Comparative Tracking Index	CTI 175
Insulating Group	Illa
Temperature Range	-40°C up to 100°C
Solder pin	ø 1,3 mm (plug-in area) / ø 1,0 mm (soldering area); tin plated brass

Approvals

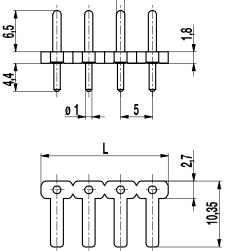
N [®] 10 300 B		Current	Voltage	Group	AWG	Nm	
	GN®			•			
	()	10	300	в			

Options / Accessories

• Pitch of 10 mm for larger clearance and creepage distances

• Other pin lengths on request

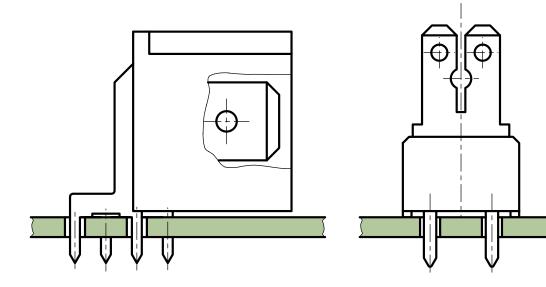
• Other P.C. pin surfaces on request



	Part	Num	bers
--	------	-----	------

Fartin	unibers		
No. of poles	971-SLW	Length	Pcs
2	12.893.603	10,00	1000
3	13.893.603	15,00	500
4	14.893.603	20,00	250
5	15.893.603	25,00	250
6	16.893.603	30,00	250
7	17.893.603	35,00	250
8	18.893.603	40,00	100
9	19.893.603	45,00	100
10	20.893.603	50,00	100
11	21.893.603	55,00	100
12	22.893.603	60,00	100
13	23.893.603	65,00	100
14	24.893.603	70,00	100
15	25.893.603	75,00	100
16	26.893.603	80,00	100
17	27.893.603	85,00	100
18	28.893.603	90,00	100
19	29.893.603	95,00	100
20	30.893.603	100,00	100
21	31.893.603	105,00	100
22	32.893.603	110,00	100
23	33.893.603	115,00	100
24	34.893.603	120,00	100

Tab connectors



On the following pages you can find our range of tab connectors.

The Series 900 of our tab connector assortment can be flexibly used on various pitches. The tab connectors with double solder termination are designed for 2,8 mm, 4,8 mm, 6,3 mm tab receptacles.

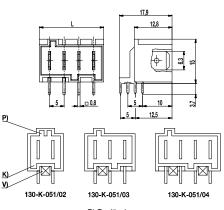
Depending on the respective application, the series 900-W-5 allows to plug on bare, partially or fully insulated tab receptacles according to DIN 46247. For the insulation of tab receptacles, insulating sleeves ISO-110 for 2.8 mm and ISO-25 for 6.3 mm or 2x2.8 can be used (see accessories). When using doublespring contacts for 6.3 mm tab connectors, our insulating socket ISO-900 is best suitable.

R

WECO

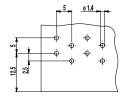
Tab connector 130-K





P) Positioning K) Coding V) Interlocking

PCB Layout



This plug connector was developed according to "White Goods Standard RAST 5 (Plug-Connection-Technology with a pitch of 5 mm). Due to its diverse coding possiblities, it offers maximum safety against incorrect plugging.

The tab connector strips are manufactured specifically according to the respective coding application.

A corresponding drawing or description of the desired positioning (P), coding (K) and interlocking (V) is to be provided by the customer.

The technical drawing shows an example of a 4-pole version in three different views, and the coding of a 2- and 3-pole design with the corresponding article designations. The corresponding article numbers are listed below.

Other coded versions (P,K,V) are available upon request.

Part N	umbers		
No. of poles	130-К	Length	Pcs
2	51.803.320	12,00	100
3	51.803.330	17,00	100
4	51.803.340	22,00	100
further num	har of palas on request		

further number of poles on request

General Information

Pitch	5 mm
No. of poles	2 - 12
Usable with	Plug connectors 130-A, 130-P

ECO

Technical Data

Overvoltage Category	III
Pollution Severity Level	3
Rated Voltage	250 V
Rated Impulse Voltage	4 kV
Rated Insulation Voltage	250 V acc. to EN 60998-1
Rated Current	12 A
Hole in PCB	ø 1,4 mm

Material

Moulding	PBT, natural, V-0
Comparative Tracking Index	CTI ≥ 275
Insulating Group	Illa
Temperature Range	-40°C up to 130°C
Solder pin	0,8 x 0,8 mm, Tin plated brass
Tab	6,3 x 0,8 mm, Tin plated brass

Approvals

	Current	Voltage	Group	AWG	Nm
AI ®	22 10	300 300	B D		
S₽ °	22 10	300 300	B D, E		

Options / Accessories

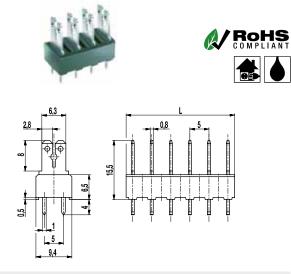
• Pitch of 10 mm for larger clearance and creepage distances

• Tab for solder brige

Tab connector

900-F-S-5

Tab 2x 2,8 mm / 1x 6,3 mm, with pegs



The tab connector 900-F-S-5 with a pitch of 5 mm is a raised 900-S-5 version and designed for tab receptacles of 1x 2.8 mm or 1x 6.3 mm.

The tab connector housing of series 900-F was raised for this special variant. The enormous variety of different tab connector designs and their mixed mounting increase the versatility of this series. When potting the tab connector moulding, the casting resin can penetrate between the raised feet from below without affecting the blade connection area.

Depending on the respective application, the series 900-F allows to plug in bare, partially or fully insulated tab receptacles according to DIN 46247. Also non-insulated 2.8 mm or 6.3 mm tab receptacles can be plugged on these tab connectors. Insulating sleeve ISO-25 (see also ISO product data sheet) can be used to insulate 2.8 mm or 6.3 mm tab receptacles.

Insulating sockets are available for 6.3 mm tab connectors with double-spring contacts (see also ISO-900 product data sheet).

	Part N	umbers		
	No. of poles	900-F-S-5	Length	Pcs
	5	50.870.710	23,50	100
further number of poles on request				

General Information

Pitch	5 mm	
No. of poles	2 - 25	

ECO

Technical Data

Overvoltage Category	III	III	II
Pollution Severity Level	3	2	2
Rated Voltage	320 V	320 V	630 V
Rated Impulse Voltage	4 kV	4 kV	4 kV
Rated Insulation Voltage	450 V acc. to EN 60998-1		
Rated Current	6 A: with receptacles 2,8; wire 1 mm ² (16 AWG) 16 A: with receptacles 6,3; wire 2,5 mm ² (14 AWG)		
Hole in PCB	ø 1,6 mm		
Other specifications	Rated voltage with insulated receptacles		

Material

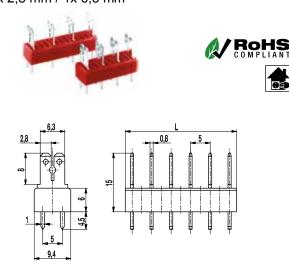
Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	I
Temperature Range	-40°C up to 100°C
Solder pin	1,0 x 0,8 mm; tin plated brass
Tab	2,8 x 0,8 mm; 6,3 x 0,8 mm: tin plated brass

Options / Accessories

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Insulation sleeves ISO
- Insulation sockets ISO-900
- Change of pitch
- Component mix of tab connector versions
- Tab connectors are also individually available (see single tabs GST-900)

Tab connector 900-S-5

Tab 2x 2,8 mm / 1x 6,3 mm



The tab connector 900-S-5 with double solder termination and a pitch of 5 mm is designed for 1x 2.8 mm or 1x 6.3 mm tab connector receptacles.

Depending on the respective application, the series 900-F allows to plug in bare, partially or fully insulated tab receptacles according to DIN 46247. Also non-insulated 2.8 mm or 6.3 mm tab receptacles can be plugged on these tab connectors. Insulating sleeves ISO-25 (see also ISO product data sheet) can be used to insulate 2.8 mm or 6.3 mm tab receptacles.

Insulating sockets are available for 6.3 mm tab connectors with double-spring contacts (see also ISO-900 product data sheet).

Part Numbers			
No. of poles	900-S-5	Length	Pcs
2	50.870.902	8,50	250
3	50.870.903	13,50	250
4	50.870.904	18,50	200
5	50.870.905	23,50	100
6	50.870.906	28,50	100
7	50.870.907	33,50	100
8	50.870.908	38,50	100
9	50.870.909	43,50	100
10	50.870.910	48,50	100
11	50.870.911	53,50	100
12	50.870.912	58,50	100
13	50.870.913	63,50	100
14	50.870.914	68,50	100
15	50.870.915	73,50	100
16	50.870.916	78,50	100
17	50.870.917	83,50	100
18	50.870.918	88,50	100
19	50.870.919	93,50	100
20	50.870.920	98,50	100
21	50.870.921	103,50	100
22	50.870.922	108,50	100
23	50.870.923	113,50	100
24	50.870.924	118,50	50
25	50.870.925	123,50	50

further number of poles on request

General Information

Pitch	5 mm
No. of poles	2 - 25

ECO

Technical Data

Overvoltage Category	III	III	II
Pollution Severity Level	3	2	2
Rated Voltage	320 V	320 V	630 V
Rated Impulse Voltage	4 kV	4 kV	4 kV
Rated Insulation Voltage	450 V acc. to EN 60998-1		
Rated Current	6 A: with receptacles 2,8; wire 1 mm ² (16 AWG) 16 A: with receptacles 6,3; wire 2,5 mm ² (14 AWG)		
Hole in PCB	ø 1,6 mm		
Other specifications	Rated voltage with insulated receptacles		

Material

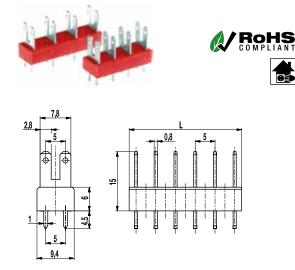
Moulding	PA, red, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C
Solder pin	1,0 x 0,8 mm; tin plated brass
Tab	2,8 x 0,8 mm; 6,3 x 0,8 mm: tin plated brass

Approvals

	Current	Voltage	Group	AWG	Nm
۶L®	15	125	В		
()	15 10	300 300	B D, E		

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Insulation sleeves ISO
- Insulation sockets IS0-900
- Change of pitch
- Component mix of tab connector versions
- Tab connectors are also individually available (see single tabs GST-900)

Tab connector 900-SH-5 Tab 2x 2,8 mm



The tab connector 900-SH-5 with double solder termination and a pitch of 5 mm is designed for 2x 2.8 mm tab connector receptacles.

Depending on the respective application, the series 900-F allows to plug in bare, partially or fully insulated tab receptacles according to DIN 46247. On tab connectors of this series, two non-insulated 2.8 mm tab receptacles can be plugged in parallel. Insulating sleeves ISO-110 (see also ISO product data sheet) can be used to insulate 2.8 mm tab receptacles.

Part Numbers			
No. of poles	900-SH-5	Length	Pcs
2	35.870.902	8,50	250
3	35.870.903	13,50	250
4	35.870.904	18,50	200
5	35.870.905	23,50	100
6	35.870.906	28,50	100
7	35.870.907	33,50	100
8	35.870.908	38,50	100
9	35.870.909	43,50	100
10	35.870.910	48,50	100
11	35.870.911	53,50	100
12	35.870.912	58,50	100
13	35.870.913	63,50	100
14	35.870.914	68,50	100
15	35.870.915	73,50	100
16	35.870.916	78,50	100
17	35.870.917	83,50	100
18	35.870.918	88,50	100
19	35.870.919	93,50	100
20	35.870.920	98,50	100
21	35.870.921	103,50	100
22	35.870.922	108,50	100
23	35.870.923	113,50	100
24	35.870.924	118,50	50
25	35.870.925	123,50	50

further number of poles on request

General Information

Pitch	5 mm
No. of poles	2 - 25

ECO

Technical Data

Overvoltage Category			II
Pollution Severity Level	3	2	2
Rated Voltage	320 V	320 V	630 V
Rated Impulse Voltage	4 kV	4 kV	4 kV
Rated Insulation Voltage	450 V acc. to EN 60998-1		
Rated Current	6 A: with receptacles 2,8; wire 1 mm ² (16 AWG)		
Hole in PCB	ø 1,6 mm		
Other specifications	Rated voltage with insulated receptacles		

Material

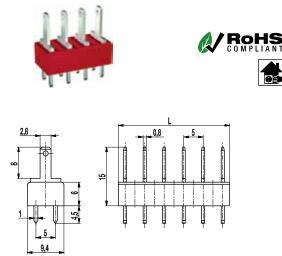
Moulding	PA, red, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C
Solder pin	1,0 x 0,8 mm; tin plated brass
Tab	2,8 x 0,8 mm: tin plated brass

Approvals

	Current	Voltage	Group	AWG	Nm	
FL ®	15	125	В			
€ ₽°	15 10	300 300	B D, E			

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Insulation sleeves ISO
- Change of pitch
- Component mix of tab connector versions
- Tab connectors are also individually available (see single tabs GST-900)

Tab connector 900-SUB-5 Tab 2,8 mm



The tab connector 900-SUB-5 with double solder termination and a pitch of 5 mm is designed for 2.8 mm tab connector receptacles.

Depending on the respective application, the series 900-SUB-5 allows to plug in bare, partially or fully insulated tab receptacles according to DIN 46247. Insulating sleeves ISO-110 (see also ISO product data sheet) can be used to insulate 2.8 mm tab receptacles.

Insulating sockets are available for 6.3 mm tab connectors with double-spring contacts (see also ISO-900 product data sheet).

Part Numbers				
No. of poles	900-SUB-5	Length	Pcs	
2	11.870.902	8,50	250	
3	11.870.903	13,50	250	
4	11.870.904	18,50	200	
5	11.870.905	23,50	100	
6	11.870.906	28,50	100	
7	11.870.907	33,50	100	
8	11.870.908	38,50	100	
9	11.870.909	43,50	100	
10	11.870.910	48,50	100	
11	11.870.911	53,50	100	
12	11.870.912	58,50	100	
13	11.870.913	63,50	100	
14	11.870.914	68,50	100	
15	11.870.915	73,50	100	
16	11.870.916	78,50	100	
17	11.870.917	83,50	100	
18	11.870.918	88,50	100	
19	11.870.919	93,50	100	
20	11.870.920	98,50	100	
21	11.870.921	103,50	100	
22	11.870.922	108,50	100	
23	11.870.923	113,50	100	
24	11.870.924	118,50	50	
25	11.870.925	123,50	50	

further number of poles on request

General Information

Pitch	5 mm
No. of poles	2 - 25

ECO

Technical Data

Overvoltage Category	III	III	I		
Pollution Severity Level	3	2	2		
Rated Voltage	320 V	320 V	630 V		
Rated Impulse Voltage	4 kV	4 kV	4 kV		
Rated Insulation Voltage	450 V acc. to EN	60998-1			
Rated Current	6 A: with recepta	6 A: with receptacles 2,8; wire 1 mm ² (16 AWG)			
Hole in PCB	ø 1,6 mm	ø 1,6 mm			
Other specifications	Rated voltage wit	Rated voltage with insulated receptacles			

Material

Moulding	PA, red, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C
Solder pin	1,0 x 0,8 mm; tin plated brass
Tab	2,8 x 0,8 mm: tin plated brass

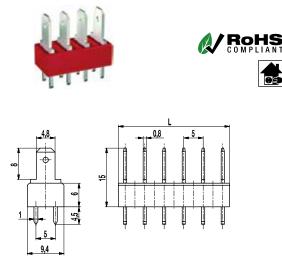
Approvals

	Current	Voltage	Group	AWG	Nm
FU ®	15	125	В		
	6	300	B, D, E		

Options / Accessories

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Insulation sleeves ISO
- Insulation sockets ISO-900
- Change of pitch
- Component mix of tab connector versions
- Tab connectors are also individually available (see single tabs GST-900)

Tab connector 900-SUC-5 Tab 4,8 mm



The tab connector 900-SUC-5 with double solder termination and a pitch of 5 mm is designed for 4.8 mm tab connector receptacles.

Depending on the respective application, the series 900-SUC-5 allows to plug in bare, partially or fully insulated tab receptacles according to DIN 46247. Insulating sleeves ISO-187 (see also ISO product data sheet) can be used to insulate 4.8 mm tab receptacles.

Insulating sockets are available for 6.3 mm tab connectors with double-spring contacts (see also ISO-900 product data sheet).

Part N	umbers		
No. of poles	900-SUC-5	Length	Pcs
2	15.870.902	8,50	250
3	15.870.903	13,50	250
4	15.870.904	18,50	200
5	15.870.905	23,50	100
6	15.870.906	28,50	100
7	15.870.907	33,50	100
8	15.870.908	38,50	100
9	15.870.909	43,50	100
10	15.870.910	48,50	100
11	15.870.911	53,50	100
12	15.870.912	58,50	100
13	15.870.913	63,50	100
14	15.870.914	68,50	100
15	15.870.915	73,50	100
16	15.870.916	78,50	100
17	15.870.917	83,50	100
18	15.870.918	88,50	100
19	15.870.919	93,50	100
20	15.870.920	98,50	100
21	15.870.921	103,50	100
22	15.870.922	108,50	100
23	15.87.923	113,50	100
24	15.870.924	118,50	50
25	15.870.925	123,50	50

further number of poles on request

General Information

Pitch	5 mm
No. of poles	2 - 25

EC

Technical Data

Overvoltage Category	III	III		
Pollution Severity Level	3	2	2	
Rated Voltage	320 V	320 V	630 V	
Rated Impulse Voltage	4 kV	4 kV	4 kV	
Rated Insulation Voltage	450 V acc. to EN	60998-1		
Rated Current	16 A: with recepta	16 A: with receptacles 4,8; wire 2,5 mm ² (14 AWG)		
Hole in PCB	ø 1,6 mm			
Other specifications	Rated voltage wit	h insulated recep	otacles	

Material

Moulding	PA, red, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C
Solder pin	1,0 x 0,8 mm; tin plated brass
Tab	4,8 x 0,8 mm: tin plated brass

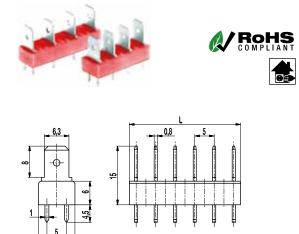
Approvals

	Current	Voltage	Group	AWG	Nm
AI ®	15	125	В		
€ ₽°	15 10	300 300	B D, E		

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Insulation sleeves ISO
- Insulation sockets IS0-900
- Change of pitch
- Component mix of tab connector versions
- Tab connectors are also individually available (see single tabs GST-900)

Tab connector 900-SUN-5

Tab 6,3 mm



The tab connector 900-SUN-5 with double solder termination and a pitch of 5 mm is designed for 6.3 mm tab connector receptacles.

Depending on the respective application, the series 900-SUN-5 allows to plug in bare, partially or fully insulated tab receptacles according to DIN 46247. Insulating sleeves ISO-25 and ISO-250 (see also ISO product data sheet) can be used to insulate 6.3 mm tab receptacles.

Insulating sockets are available for 6.3 mm tab connectors with double-spring contacts (see also ISO-900 product data sheet).

Part N	umbers		
No. of poles	900-SUN-5	Length	Pcs
2	45.870.902	8,50	250
3	45.870.903	13,50	250
4	45.870.904	18,50	200
5	45.870.905	23,50	100
6	45.870.906	28,50	100
7	45.870.907	33,50	100
8	45.870.908	38,50	100
9	45.870.909	43,50	100
10	45.870.910	48,50	100
11	45.870.911	53,50	100
12	45.870.912	58,50	100
13	45.870.913	63,50	100
14	45.870.914	68,50	100
15	45.870.915	73,50	100
16	45.870.916	78,50	100
17	45.870.917	83,50	100
18	45.870.918	88,50	100
19	45.870.919	93,50	100
20	45.870.920	98,50	100
21	45.870.921	103,50	100
22	45.870.922	108,50	100
23	45.87.923	113,50	100
24	45.870.924	118,50	50
25	45.870.925	123,50	50
•			

further number of poles on request

General Information

Pitch	5 mm
No. of poles	2 - 25

Technical Data

Overvoltage Category	III		II
Pollution Severity Level	3	2	2
Rated Voltage	320 V	320 V	630 V
Rated Impulse Voltage	4 kV	4 kV	4 kV
Rated Insulation Voltage	450 V acc. to EN	60998-1	
Rated Current	16 A: with recepta	acles 6,3; wire 2,	5 mm² (14 AWG)
Hole in PCB	ø 1,6 mm		
Other specifications	Rated voltage wit	th insulated recept	otacles

Material

Moulding	PA, red, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	
Temperature Range	-40°C up to 100°C
Solder pin	1,0 x 0,8 mm; tin plated brass
Tab	6,3 x 0,8 mm: tin plated brass

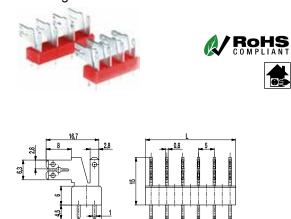
Approvals

	Current	Voltage	Group	AWG	Nm	
AI ®	15	125	В			
€ ₽°	15 10	300 300	B D, E			

Options / Accessories

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Insulation sleeves ISO
- Insulation sockets IS0-900
- Change of pitch
- Component mix of tab connector versions
- Tab connectors are also individually available (see single tabs GST-900)

Tab connector 900-W-5 Tabs with 90° angle



The tab connector 900-W-5 with double solder termination and a pitch of 5 mm is designed for 1x 2.8 mm and 1x 2.8 mm/1x 6.3 mm tab connector receptacles.

Depending on the respective application, the series 900-W-5 allows to plug in bare, partially or fully insulated tab receptacles according to DIN 46247. A non-insulated 2.8 mm or a 6.3 mm (optionally also insulated) tab connector receptacle can be plugged in the angled plug-in area of the tab connector. To the vertical tab connector, a non-insulated 2.8 mm tab connector receptacle can be also be connected. Insulating sleeves ISO-25 and ISO-250 (see also ISO product data sheet) can be used to insulate 6.3 mm tab receptacles.

Part N	umbers		
No. of poles	900-W-5	Length	Pcs
2	25.870.902	8,50	250
3	25.870.903	13,50	250
4	25.870.904	18,50	200
5	25.870.905	23,50	100
6	25.870.906	28,50	100
7	25.870.907	33,50	100
8	25.870.908	38,50	100
9	25.870.909	43,50	100
10	25.870.910	48,50	100
11	25.870.911	53,50	100
12	25.870.912	58,50	100
13	25.870.913	63,50	100
14	25.870.914	68,50	50
15	25.870.915	73,50	50
16	25.870.916	78,50	50
17	25.870.917	83,50	50
18	25.870.918	88,50	50
19	25.870.919	93,50	50
20	25.870.920	98,50	50
21	25.870.921	103,50	50
22	25.870.922	108,50	50
23	25.87.923	113,50	50
24	25.870.924	118,50	50
25	25.870.925	123,50	50

further number of poles on request

General Information

Pitch	5 mm
No. of poles	2 - 25

ECO

Technical Data

Overvoltage Category	III	III	II
Pollution Severity Level	3	2	2
Rated Voltage	320 V	320 V	630 V
Rated Impulse Voltage	4 kV	4 kV	4 kV
Rated Insulation Voltage	450 V acc. to EN	60998-1	
Rated Current 6 A: with receptacles 2 16 A: with receptacles			
Hole in PCB	ø 1,6 mm		
Other specifications	Rated voltage wit	h insulated recep	otacles

Material

Moulding	PA, red, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	I
Temperature Range	-40°C up to 100°C
Solder pin	1,0 x 0,8 mm; tin plated brass
Tab	2,8 x 0,8 mm; 6,3 x 0,8 mm: tin plated brass

Approvals

	Current	Voltage	Group	AWG	Nm
۶L®	15	125	В		
()	15 10	300 300	B D, E		

Options / Accessories

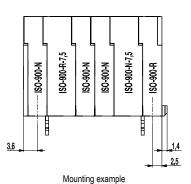
- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-5,00
- Insulation sleeves ISO
- Change of pitch
- Component mix of tab connector versions
- Tab connectors are also individually available (see single tabs GST-900)

Insulating sockets

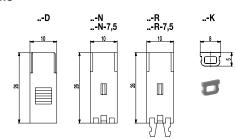
ISO-900

Accessories





Versions



Version D: Cover Version N: Standard Insulation housing Version R: Insulation housing with snap-fits Version K: Coding keys to block empty chambers

ISO-900 insulating sockets are used to insulate double spring contacts. They are single pole and can be mounted side-by-side in 5 mm and 7.5 mm pitch. Apart from the standard insulating sockets ISO-900-N und ISO-900-N-7.5, type ISO-900-R and ISO-900-R-7.5 with a latching hook are available to provide additional locking strength against accidental withdrawal. These latching hooks snap in the empty receptacles of tab connectors 900-S and 900-SUN. The cover ISO-900-D is used as contact protection for the last pole. Insulating sockets with latching hooks and ISO-900-K coding keys allow contacting the sockets. They are inserted into the empty slots of the tab connector, in which no insulating socket with latching hook is allocated, thus preventing incorrect connections.

Part Numbers

Туре	Part Numbers	Length	Pcs
ISO-900-D	25.838.106		1000
ISO-900-N	10.838.104		1000
ISO-900-N-7,5	10.838.105		1000
ISO-900-R	20.838.107		1000
ISO-900-R-7,5	10.838.108		1000
ISO-900-K	10.496.021		1000

General Information

Pitch	5 mm / 7,5 mm
Usable with	Tab connectors 900-S, 900-SUN and 900-SUC
Additonal Information	When accurately positioned in the socket, the double-spring contacts audibly snap into place. These metal parts are not part of our product range. They can be used e.g. for TYCO timer contacts (no. 925598-1).

WECO

Material

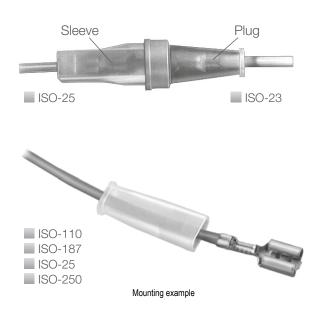
Moulding	PA, red, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	
Temperature Range	-40°C up to 100°C

Options / Accessories

- Special marking according to drawing
- ISO-900 insulation housings can be provided as multipole combinations. Please enclose a drawing.
- Spacer 2,5 mm (ISO-900-Z)

Insulating sleeves ISO

Accessories



Depending of their scope of application, insulating sleeves are made of either polyethylene (..-PE) or polypropylene V-0 (..-PPV0) and are available in various colours and sizes. Tab receptables according to DIN 46 247 are fully insulated (including the crimped point) with insulating sleeves. Prior to crimping, they are pushed onto the wire end, and are therefore captive. They can also be used to insulate crimped plug-in receptacles and cable sockets.

Part numbers

Part numbers	Туре	Colour	Nom. size	Cross-section	Length x width x height	Pcs
10.838.001	ISO-110-PEN	natural	2,8	up to 1 mm ² (16 AWG)	19,5 x 5,5 x 3,5 mm	10.000
10.838.031	ISO-110-PEG	yellow	2,8	up to 1 mm ² (16 AWG)	19,5 x 5,5 x 3,5 mm	10.000
10.838.034	ISO-110-PER	red	2,8	up to 1 mm ² (16 AWG)	19,5 x 5,5 x 3,5 mm	10.000
10.838.021	ISO-110-PES	black	2,8	up to 1 mm ² (16 AWG)	19,5 x 5,5 x 3,5 mm	10.000
10.838.032	ISO-110-PPV0	nature	2,8	up to 1 mm ² (16 AWG)	19,5 x 5,5 x 3,5 mm	10.000
10.838.011	ISO-187-PEN	natural	4,8	up to 1,5 mm ² (16 AWG)	21 x 8 x 4,5 mm	10.000
10.838.005	ISO-187-PEG	yellow	4,8	up to 1,5 mm ² (16 AWG)	21 x 8 x 4,5 mm	10.000
10.838.035	ISO-187-PER	red	4,8	up to 1,5 mm ² (16 AWG)	21 x 8 x 4,5 mm	10.000
10.838.036	ISO-187-PES	black	4,8	up to 1,5 mm ² (16 AWG)	21 x 8 x 4,5 mm	10.000
10.838.044	ISO-187-PPV0	nature	4,8	up to 1,5 mm ² (16 AWG)	21 x 8 x 4,5 mm	10.000
10.838.006	ISO-23-PEN	natural	6,3	up to 2,5 mm ² (14 AWG)	23 x 12,5 x 8,5 mm	10.000
10.838.007	ISO-23-PEG	yellow	6,3	up to 2,5 mm ² (14 AWG)	23 x 12,5 x 8,5 mm	10.000
10.838.017	ISO-23-PES	black	6,3	up to 2,5 mm ² (14 AWG)	23 x 12,5 x 8,5 mm	10.000
10.838.046	ISO-23-PPV0	nature	6,3	up to 2,5 mm ² (14 AWG)	23 x 12,5 x 8,5 mm	10.000
10.838.013	ISO-25-PEN	natural	6,3	up to 2,5 mm ² (14 AWG)	25 x 9,5 x 5 mm	10.000
10.838.014	ISO-25-PEG	yellow	6,3	up to 2,5 mm ² (14 AWG)	25 x 9,5 x 5 mm	10.000
10.838.016	ISO-25-PES	black	6,3	up to 2,5 mm ² (14 AWG)	25 x 9,5 x 5 mm	10.000
10.838.045	ISO-25-PPV0	nature	6,3	up to 2,5 mm ² (14 AWG)	25 x 9,5 x 5 mm	10.000
10.838.009	ISO-250-PEN	natural	6,3	up to 4 mm ² (12 AWG)	25 x 9,5 x 6 mm	10.000
10.838.010	ISO-250-PEG	yellow	6,3	up to 4 mm ² (12 AWG)	25 x 9,5 x 6 mm	10.000
10.838.018	ISO-250-PES	black	6,3	up to 4 mm ² (12 AWG)	25 x 9,5 x 6 mm	10.000
10.838.048	ISO-250-PPV0	nature	6,3	up to 4 mm ² (12 AWG)	25 x 9,5 x 6 mm	10.000

* Since cable diameters vary, cross-sections are only reference values.

Additional Information	By means of using both ISO-23 (tab connector side) and ISO-25 insulating sleeves, a 6.3 mm cross-section cable connection can be completely insulated (see figure).
Material	
Moulding	PE = Polyethylene (see table for colours) PP = Polypropylene, nature, V-0
	CTI ≥ 600
Comparative Tracking Index	011 - 000

R

WECO

• Insulation sleeves in other colours

Single Tabs **GST-900** Accessories

Versions

This tabs for printed circuits with a thickness of 0,8 mm are used to connect tab receptacles, size 2.8. 4.8 and 6.3 according to DIN 46 247.

Depending on their scope of application they are available with vertical and/or parallel outgoing wires.

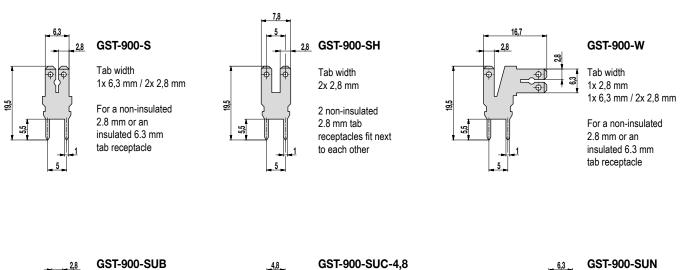
Tabs can be insulated with our ISO-insulating sleeves.

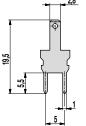
Rated Current	Tab 2,8:	6 A
	Tab 4,8:	16 A
	Tab 6,3:	25 A
	please see DIN	N 46 249
Material		
		s, thickness 0,8 mm

R

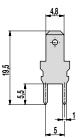
WECO

• Tab GST-900-S with press-fit pins



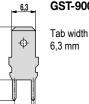


Tab width 2,8 mm



GST-900-SUC-4,8

Tab width 4,8 mm



19.5

Part numbers

Part number	Pcs	
10.351.107	1.000	
10.351.111	1.000	
10.371.106	1.000	
10.361.108	1.000	
10.351.113	1.000	
10.351.109	1.000	
	10.351.107 10.351.111 10.371.106 10.361.108 10.351.113	10.351.107 1.000 10.351.111 1.000 10.371.106 1.000 10.361.108 1.000 10.351.113 1.000

Locking plate 974-P

47

7

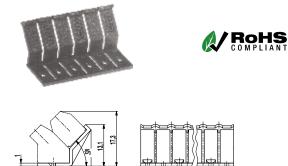
8

9

10

11

12



ø1 5_ 16,8 Part Numbers No. of 974-P Length poles 2 12.893.142 10,00 3 13.893.142 15,00 20,00 4 14.893.142 5 15.893.142 25,00 6 16.893.142 30,00

17.893.142

18.893.142

19.893.142

20.893.142

21.893.142

22.893.142

General Information

Pitch	5 mm
No. of poles	2 - 12
Usable with	socket terminal strip 974-FB + plug connector 951-SV

R

WECO

Material

Pcs

500

500

500

500

250

250

250

250

250

250

250

35,00

40,00

45,00

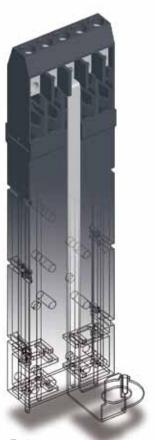
50,00

55,00

60,00

Moulding	PA, grey, V-2
Comparative Tracking Index	CTI ≥ 600
Insulating Group	I
Temperature Range	-40°C up to 100°C

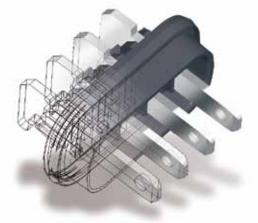
Looking for a Customer Designed Solution?



"Тор"

Version of a terminal our series 970 in 5 mm pitch.

In order to achieve a distance of 100 mm from the PCB, a housing was constructed, which not only does protect the pins but also positions them in a special arrangement. In the terminal area are also placed elongated ribs.



"Sealed"

With a pitch of 3.5 mm, this insert with four tabs 2.8 x 0.8 mm was designed to seal the contacts, for an application which required the protection class IP54.

WECO

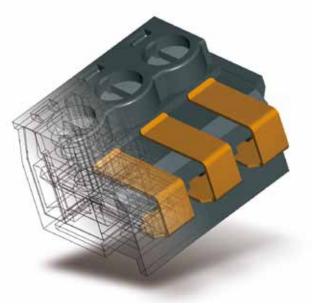
Our Product Information Centre will assist you with every technical inquiry.

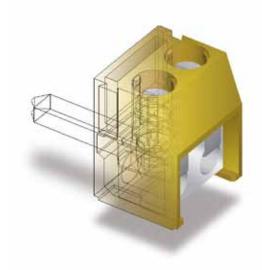
- Please, call us under +49 6181 105-151.
- Contact us via e-mail at products@wecogroup.com.
- You want us to pay you a visit? We are pleased to arrange an appointment.
- You would prefer a visit in Hanau? Of course, you are welcomed anytime.

We are looking forward to your call.

"Well Contacted"

This plug connector with the pitch of 5 mm is designed with outer gold-plated contact surfaces. Additionally, the side walls provide ribs for receiving a corresponding locking hook.



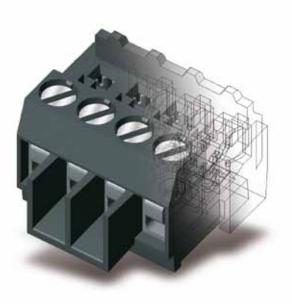


"Stable bridged"

Terminal connector in 5 mm pitch with one potential but two screw connections and a plug connector at the back. This allows a connection to other terminals. For the customer the housing was made with buttercup yellow material (similar to RAL 1021).

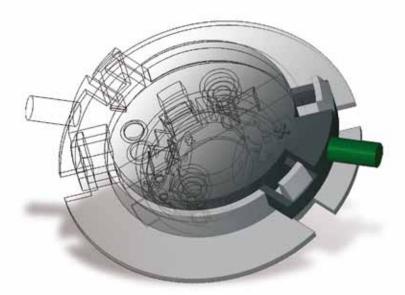
"Long-ribbed"

A plug connector with a pitch of 3.5 mm, with a anti-twist peg and two extra-long guiding ribs. In the plug connection area, tabs and round plug pins could be contacted.



R

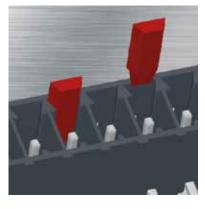
WECO



"Solar" Draft for a photovoltaic-module connection.

Accessories / Options

Coding Elements



This coding element is applicable for the Conecta Series of 110, 120, 121 and 122. For coding, all pin strips and plug connectors of this series are equipped with a trapezoidal slot per pole into which the coding elements can easily be inserted. With this, simple solution error free plugging is ensured. In the standard version the coding elements have a bright red colour, making them clearly

visible in mated condition. Alternatively, they are also available in light grey. 12 of each coding element are related to a strip.

The coding elements are not reflow solderable and for SMD & THR products they can only be used after the soldering process.

The coding elements 130-CP are anthracite and loose in a bag.

Part number	Туре	Pcs
20.496.025	120-K/12 KODIEREL.	120
17.496.025	120-K/12 KODIEREL. LIGHTGREY	120
10.496.030	130-CP KODIERPLAETTCHEN	100

WECO

Marking Strips



These marking strips are made of polyester with black print on a silver background. They have a scratch resistant mylar surface.

Numbering begins with 1, the specified pole number is the last digit respectively. The marking strips withstand printed circuit board cleaning agents containing water and soap, freon, fluorinated or chlorinated ingredients; they are not suitable for reflow soldering procedures.

They are supplied on adhesive cards each containing ten strips.

Part number	Туре	Pitch	Length (L)	Width (a)	Pcs
24.499.009	BST-5,00/12	5,00	60	3,5	100
24.499.010	BST-5,00/32	5,00	160	3,5	100

Marking



Alternatively to the self-adhesive marking strips, we offer a special marking to meet almost any special and individual marking requirement. The printing is carried out on pre-designed marking areas.

Depending upon the housing colour, the numbers are imprinted in white or in black. Other printing colours are possible on request.

Accessories / Options

Colours



WECO offers a wide range of housing colours.

Besides our standard housing colours, you can choose between many other colours. Please contact us for further information.

Screws

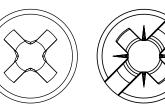


Our standard products are fitted with slotted screws.

On enquiry and customer's request, we also offer screws with Philips/Pozidrive or +/- screw heads.

Further materials:

Standard screws are made of steel; also screws out of various materials, e.g. brass, are available on request.



WECO)

Packaging: Card board boxes, Tape-on-Reel, Magazines



According to standard, we pack our products in pollution free folding boxes from card board and from corrugated board. Besides, we offer transfer tubes (magazines) as packing for the use with feeders and dispensers for automated insertion machinery. Transfer tubes offer the advantage of a better transportation facility and a simple withdrawal over the cardboards.

Our SMD and THR products are packed in "Tape-on-Reel" for the automated assembly process in pick and place machines. Please find data sheet information about products packed on Tape-on-Reel on our website.

Technical Information

Rating of Clearance and Creepage Distances according to DIN EN 60664-1 (VDE 0110-1)

The rating of clearance and creepage distances depends on the expected electrical surge, the characteristic values

of the electronic protection measures as well as the contamination at the place of installation.

Clearanece distances are dimensioned in accordance with the rated impulse voltage table F.1, which results out of the overvoltage category and phase-to-earth voltage.

The minimum clearance in air is stated at altitudes of less than 2000 m above sea level and ascertained in accordance with the impulse voltage and the contamination level, table 2.

Creepage distances are measured by the operating voltage, the characteristic of the insulants (CTI value), the expected contamination level as well as the preventive measures against contamination. Basis of the creepage distance is the rated voltage derived from the operating and / or system voltage.

The minimum creepage distance (depending on the respective degree of contamination) are assigned to the rated voltage, see table F.4.

Overvoltage categories

Overvoltage category IV:

Electrical equipments for the use at the connection point of the installation e.g. electricity meter and primary over-current protection devices.

Overvoltage category III:

Electrical equipment in firm installations and for such cases in which special demands are made against the reliability and the availability

DIN EN 60664-1 (VDE 0110-1), table F.2 (extract) Clearance for transient

overvoltages							
	Mimimum clearence in air up to 2 000 m above sea level Case A Inhomogeneous field (see 3,15)						
Required impulse withstand							
voltage 1) 5)	F	Pollution degree	e				
	1	2	3				
kV	mm	mm	mm				
1,2	0,25	0,25	0,8 4)				
1,5 ²⁾	0,5	0,5	0,0 "				
2,0	1,0	1,0	1,0				
2,5 2)	1,5	1,5	1,5				
3,0	2,0	2,0	2,0				
4,0 ²⁾	3,0	3,0	3,0				
5,0	4,0	4,0	4,0				
6,0 ²⁾	5,5	5,5	5,5				
8,0 ²⁾	8,0	8,0	8,0				

This voltage is

- for functional insulation, the maximum impulse voltage expected to occur accross the clearence (see 5.1.5), for basic insulation directly exposed to or significantly
- influenced by transient overvoltages from the low-voltage mains (see 4.3.3.3, 4.3.3.4.1 and 5.1.6), the rated impulse voltage of the equipment for other basic insulation (see 43.3.4.2), the highest impulse voltage that can occur in the circuit. Prefered values as specified in 4.2.3.
- The minimum clearences given for pollution degrees 2 and 3 are based on the reduced withstand characteristics of the associated creepage distance under humidity conditions (see IEC 60664-5).
- For parts or circuits within equipment subject to impulse voltages according to 4.3.3.4.2, interpolation of values is allowed. However, standardization is achieved by using the preferred series of impulse voltage values in 4.2.3.

of the electrical equipment, e.g. switches in firm installations and devices for industrial use with continuing connection to the firm installation.

Overvoltage category II:

Energy using electrical equipment, which is energised by a firm installation e.g. household appliances, portable tools and other domestic appliances as well as similar devices.

Overvoltage category I:

Electrical equipment for the connection to electric circuits, in which measures are taken for the delimitation of the transient overvoltages to a suitable low value, e.g. devices with electronic circuits and appropriate protection level.

DIN EN 60664-1 (VDE 0110-1), table F.4 (extract) Creepage distance for the avoidance of the failure by tracking

ECO

			Minim	um creep	age dista	nces			
	Printed wir	ing material							
			Pollution degree						
Valkana	1	2	1		2			3	
Voltage r.m.s. ¹⁾	All material groups	All material groups except IIIb	All material groups	Material group	Material group	Material group	Material group	Material group	Material group
v	mm	mm	mm	mm	mm	mm	mm	mm	mm
25	0,025	0,040	0,125	0,500	0,500	0,500	1,250	1,250	1,250
32	0,025	0,040	0,14	0,53	0,53	0,53	1,30	1,30	1,30
40	0,025	0,040	0,16	0,56	0,80	1,10	1,40	1,60	1,80
50	0,025	0,040	0,18	0,60	0,85	1,20	1,50	1,70	1,90
63	0,040	0,063	0,20	0,63	0,90	1,25	1,60	1,80	2,00
80	0,063	0,100	0,22	0,67	0,95	1,30	1,70	1,90	2,10
100	0,100	0,160	0,25	0,71	1,00	1,40	1,80	2,00	2,20
125	0,160	0,250	0,28	0,75	1,05	1,50	1,90	2,10	2,40
160	0,250	0,400	0,32	0,80	1,10	1,60	2,00	2,20	2,50
200	0,400	0,630	0,42	1,00	1,40	2,00	2,50	2,80	3,20
250	0,560	1,000	0,56	1,25	1,80	2,50	3,20	3,60	4,00
320	0,75	1,60	0,75	1,60	2,20	3,20	4,00	4,50	5,00
400	1,0	2,0	1,0	2,0	2,8	4,0	5,0	5,6	6,3
500	1,3	2,5	1,3	2,5	3,6	5,0	6,3	7,1	8,0
630	1,8	3,2	1,8	3,2	4,5	6,3	8,0	9,0	10,0
800	2,4	4,0	2,4	4,0	5,6	8,0	10,0	11,0	12,5
1000	3,2	5,0	3,2	5,0	7,1	10,0	12,5	14,0	16,0

in vortage is for functional insulation, the working voltage, for basic and supplementary insulation of the circuit energized directly from the supply mains (see 4.3.2.2.1), the voltage rationalized through Table F.3a or Table F.3b, based on the rated voltage of the equipment, or the rated insulation voltage

for basic and supplementary insulation of systems, equipment and internal circuits not energized directly from the supplied at rated voltage and under the most onerous combination of conditions of operation within equipment or internal supplied at rated voltage and under the most onerous combination of conditions of operation within equipment

rating. Material group IIIb is no not recommended for application in pollution degree 3 above 630 V.

Degree of contamination

The micro environment determines the influence of the contamination on the isolation.

However the macro environment must be considered with the view of the micro environment

Resources to achieve a reduction of the contamination on the regarded isolation can be planned by the effective employment of casings (housings), encapsulations or hermetic sealings.

The influence of the contamination is considered with the calculation of air and creepage distances by degrees of pollution.

DIN EN 60664-1 (VDE 0110-1), table F.1 (extract)
Rated impulse voltages for electrical equipments, which are
energised directly by a low-voltage system

Nominal volta	Rated impulse voltage ²⁾ Overvoltage catagory ⁴⁾						
the supply sys based on IEC 6							
Three phase	Single phase	1	I	ш	l IV		
V	V	V	V	V	V		
	120-240	800	1 500	2 500	4 000		
230/400 277/480		1 500	2 500	4 000	6 000		
400/690		2 500	4 000	6 000	8 000		
1 000		4 000	6 000	8 000	12 000		
 voltages. Equipment with t accordance with The / mark indica voltage line-to-ne value is indicated line-to-line. 	Equipment with these rated impulse voltages can be used in installations in accordance with IEC 60364-4-44. The / mark indicates a four-wire three-phase distribution system. The lower value is the voltage line-to-neutral, while the higher value is the voltage line-to-line. Where only one value is indicated, it refers to three-wire, three-phase systems and specifies the value						

Technical Information

Four degrees of contamination levels are defined for the micro environment:

Contamination level 1

No contamination or only dry, non-conductive contamination occurs. The contamination has no influence.

Contamination level 2

Only non-conductive contamination occurs. However, occasional temporary conductivity must be expected as a result of moisture condensation.

Contamination level 3

Conductive contamination occurs; dry, non-conductive contamination which becomes conductive as a result of moisture condensation may also occur.

Contamination level 4

Impurities in the form of conductive dust, rain or humidity result in permanent conductivity.

Insulant

DIN EN 60664-1 (VDE 0110-1) divides the insulants according to their CTI values in four groups. These are:

Insulant I:	600 = CTI
Insulant II:	400 = CTI < 600
Insulant IIIa:	175 = CTI < 400
Insulant IIIb:	100 = CTI < 175

The check numbers of the tracking must be determined according to IEC 60112 at an examination body using test solution A. The check number of the tracking is used as a proof of the creepage characteristics of insulants.

Rated cross section

The current carrying capacity depends not only on the terminal design, but also on the application of the terminals. The appropriate specifications for the devices, e.g. DIN EN 60335-1 (VDE 0700-1), should be taken into account.

According to DIN EN 60999-1/VDE 0609 part 1, the current cross section and respectively the rated connection ability of a connection referres to the wire cross section indicated by the manufacturer, to which determined thermal, mechanical and electrical requirements apply to.

The relationship between rated connection abilities and diameters of the wires is represented in table 1.

If nothing else is specified in the product standard, each connection point must be able to take up not only its rated cross section (rated connection ability) but also the next two lower cross sections.

Connecting points must be able to take up unprepared wires. Regarded as unprepared wires are all cables stripped at their ends, whose form is adjusted before insertion or whose wires are twisted for the purpose of the solidification. **1** DIN EN 60999-1, table 1 (extract) Relation between rated connection abilities and wires

		argest con	luctor				
		metric		AWG			
	sc	lid	flexible		solid	flexible	
Rated cross section					b)	b) Class B	c) Class I, K, M
	single wire	multi- stranded wire			single wire	multi- stranded wire	multi- stranded wire
mm²	mm	mm	mm	No.	mm	mm	mm
0,2	0,51	0,53	0,61	24	0,54	0,61	0,64
0,34	0,63	0,66	0,8	22	0,68	0,71	0,80
0,5	0,9	1,1	1,1	20	0,85	0,97	1,02
0,75	1,0	1,2	1,3	18	1,07	1,23	1,28
1,0	1,2	1,4	1,5	-	-	-	-
1,5	1,5	1,7	1,8	16	1,35	1,55	1,60
2,5	1,9	2,2	2,3 *	14	1,71	1,95	2,08
4,0	2,4	2,7	2,9 *	12	2,15	2,45	2,70
6,0	2,9	3,3	3,9 ª	10	2,72	3,09	3,36
10,0	3,7	4,2	5,1	8	3,34	3,89	4,32
16,0	4,6	5,3	6,3	6	4,32	4,91	5,73
25,0	-	6,6	7,8	4	5,45	6,18	7,26
35	-	7,9	9,2	2	6,87	7,78	9,02
NOTE The diameter of the largest solid and flexible wire is based on Table 1 according to IEC 60228A and IEC 60344 and for AVG conductors on ASTM B 172-71 [4], ICEA-Publication S-19-81 [5], ICEA-Publication S-66-524 [6] and ICEA-Publication S-66-516 [7].							
 Information only for flexible wires in class 5 of IEC 60228A. Nominal + 5 %. Largest diameter for each of the three classes I, K, M + 5 %. 							

In the USA and Canada an identification is used by leader sizes (AWG) instead of the cross section indicated in mm².

Current carrying capacity

Current carrying capacity In the technical data a current carrying capacity is shown, with which no thermal damage and no disturbance of the function arise under consideration of the rated cross section and the ambient temperature.

testing currents according to DIN EN 60998-1 (VDE 0613 part 1) are assigned to the rated cross sections in table 2.

With the testing currents the heating up of energized parts of the connecting point may not exceed 45 K.

The permitted carrying capacity not only depends on the terminal construction, but also on the use of the terminal.

The appropriate technical regulations for devices, e.g. DIN EN 60335-1 (VDE 0700-1) should be taken into consideration.

DIN EN 60998-1, table 2 (extract)

Relation between rated connection abilities and testing current

Rated Cross-section	Load capacity
mm ²	А
0,2	4
0,34	5
0,5	6
0,75	9
1	13,5
1,5	17,5
2,5	24
4	32
6	41
10	57
16	76
25	101
25	125

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120-F-111	85	150-A-121	20	970	38		
120-F-211	86	150-B-111	21	970-EN	39	978	63
120-K	152	150-B-151/-153	22	970-FB	72	978-EN	64
120-M-111/-211	104	150-C-111	23	970-FBW	99	978-HEN	65
120-M-121/-221	105			970-HEN	40	978-T	66
120-M-151/-251	106	180-A-111	24	970-LH	41	978-TY	67
120-M-161/-261	107	180-A-211	25	970-MP	42	978-Y	68
120-M-181/-281	108			970-NFBW	100		
120-M-191/-291	109	874	26	970-T	43	BST-5,00	152
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120-M-227	117	900-W-5	145	971-FB	73		
120-M-227-SMD	118			971-FBS	101		
120-M-255	119	950	27	971-FBSP	125		
120-M-265	120	950-A-SMD	28	971-FBWP	126		
120-M-285	121	950-D-SMD-DS	29	971-HG	51		
120-M-295	122	950-FB	70	971-HM	52		
120-M-311/-411	123	950-FL-DS	90	971-LH	53		
		950-GFL-DS	91	971-SLR	127		
130-A	87/88	950-LH	30	971-SLR-SMD-1,3	129		
130-CP	152	950-NAF-DS	92	971-SLR-SMD-1,1	128		
130-K	138	950-NLFL-DS	93	971-SLR-THR	130	Catalogue overv	/iew
130-P	89	950-RFL-DS	94	971-SLR-THR-1,1	131		
		950-SLS	124	971-SLR-THR-1,3	132	Electronic	
140-A-111	6	950-SVG	95	971-SLS	133	# 1: Pitch 3,5 mm	
140-A-121	7	950-T	31	971-SLT-SMD	134	# 2: Pitch 5 mm	
140-A-126-SMD	9	950-TFL-DS	96	971-SLW	135	# 3: Pitch 5,08 mm	
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140-B-111	10			971-T	54	# 5: Pitch >10 mm	
140-B-151/-153	11			971-THG	55	# 6: SMD & THR	

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