

Connection Technology for Printed Circuit Boards Pitch 7.5 mm

WECO - making contact









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982-W



122-D-121



900-SH-7,5

Symbols on data sheets

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



These articles comply with the RoHS regulations.



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 conform 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.



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.



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.



The WECO Group



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.

www.wecogroup.com



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 colours!

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

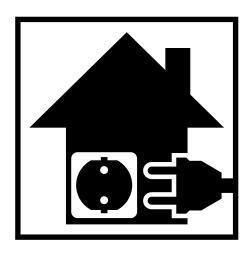
We designate products compliant with this tightened household appliance standard, if a specific variant compatible to the household appliance standard is available:

• 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".



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.

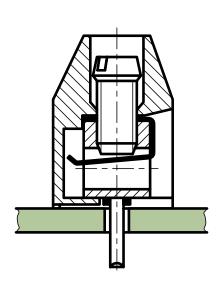
Even equipment manufacturers affected by this household appliance standard often are unaware of the standard's requirements and only find out that they ARE AFFECTED, when they submit their products at VDE and are denied approval because products do not meet the currently valid standards.

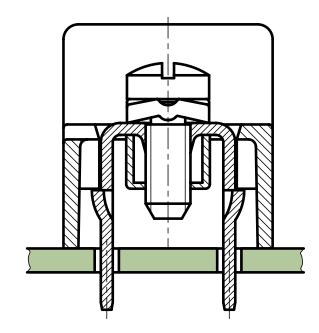
We at WECO Contact take technical support and service for our customers seriously. Therefore, we have compiled on our website a list of all manufacturer products affected by the household appliance standard. At a glance, our customers can now gather information on whether their appliances are affected 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.



PCB connectors





Thanks to their versatile design, WECO Contact PCB connectors offers a solution for every connection application. Here, you can find all 7,5 mm and 9,52 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.

"..-T"-versions are only available with 2 and 3 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.

All versions – except the series 982 – 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 marking according to customer requirement.



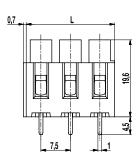
PCB connector 152-A-111

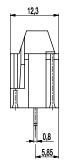
Screw connection, interlocking, with test holes











The PCB connector 152-A-111 with a pitch of 7,5 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.

Due to their large clearance and creepage distances, these PCB connectors are particularly suitable for higher voltages.

Lateral latching elements on the housing allow to latch 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 \emptyset 2.3 mm test plugs.

Part Numbers

No. of poles	152-A-111	Length	Pcs
2	10.801.762	15,00	200
3	10.801.763	22,50	100

General Information

Pitch	7,5 mm
No. of poles	2+3

Technical Data

Clamping Range	solid / flexible / A	WG	
	0,14 - 4 mm ² / 0,	14 - 2,5 mm² / 26	- 14 AWG
Rated Cross Section	2,5 mm²		
Wire Stripping Length	7,5 mm ± 0,5 mm	1	
Overvoltage Category	III	III	II
Pollution Severity Level	3	2	2
Rated Voltage	400 V	630 V	1000 V
Rated Impulse Voltage	6 kV	6 kV	6 kV
Rated Insulation Voltage	750 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	
71 ®	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-7,50
- · Version with empty poles
- Connected to larger number of poles



PCB connector

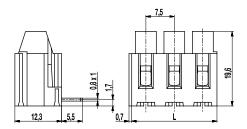
152-A-121

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









The PCB connector 152-A-111 is the horizontal version of 152-A-111 with a pitch of 7.5 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.

Due to their large clearance and creepage distances, these PCB connectors are particularly suitable for higher voltages.

Lateral latching elements on the housing allow to latch 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 Numbers

No. of poles	152-A-121	Length	Pcs
2	20.801.762	15,00	200
3	20.801.763	22,50	100

General Information

Pitch	7,5 mm
No. of poles	2 + 3

Technical Data

Clamping Range	solid / flexible / A	WG	
	0,14 - 4 mm ² / 0,	14 - 2,5 mm² / 26	- 14 AWG
Rated Cross Section	2,5 mm²		
Wire Stripping Length	7,5 mm ± 0,5 mm	1	
Overvoltage Category	III	III	II
Pollution Severity Level	3	2	2
Rated Voltage	400 V	630 V	1000 V
Rated Impulse Voltage	6 kV	6 kV	6 kV
Rated Insulation Voltage	750 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
Nickel plated brass
Copper alloy, tin plated
M3; zinc plated steel, blue passivated
1,0 x 0,8 mm; copper alloy, tin plated

Approvals

	Current	Voltage	Group	AWG	Nm	
71 ®	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-7,50
- · Version with empty poles
- Connected to larger number of poles



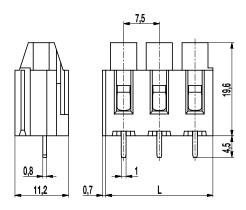
PCB connector 152-A-211

Screw connection, interlocking, with test pick-off









The PCB connector 152-A-211 with a pitch of 7,5 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.

Due to their large clearance and creepage distances, these PCB connectors are particularly suitable for higher voltages.

Lateral latching elements on the housing allow to latch 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 features one test pick-off per pole.

Part Numbers

No. of poles	152-A-211	Length	Pcs
2	10.801.702	15,00	200
3	10.801.703	22,50	100

General Information

Pitch	7,5 mm
No. of poles	2+3

Technical Data

AWG		
2,5 mm²		
II		
2		
1000 V		
6 kV		

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	
71 ®	20 [1] 10	300 300	B D	22-10 [2] 22-10 [2]	0,51 0,51	
(1) ®	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-7,50
- · Version with empty poles
- Connected to larger number of poles



PCB connector 152-A-221

Screw connection, wire entrance vertical to PCB, interlocking, with test pick-off







The PCB connector 152-A-221 is the horizontal version of 152-A-211 with a pitch of 7.5 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.

Due to their large clearance and creepage distances, these PCB connectors are particularly suitable for higher voltages.

Lateral latching elements on the housing allow to latch 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 features one test pick-off per pole.

Part Numbers

No. of poles	152-A-221	Length	Pcs
2	20.801.702	15,00	200
3	20.801.703	22,50	100

General Information

Pitch	7,5 mm
No. of poles	2 + 3

Technical Data

Clamping Range	solid / flexible / AWG 0,14 - 4 mm² / 0,14 - 2,5 mm² / 26 - 14 AWG			
Rated Cross Section	2,5 mm²			
Wire Stripping Length	7,5 mm ± 0,5 mm	1		
Overvoltage Category	III	III	Ш	
Pollution Severity Level	3	2	2	
Rated Voltage	400 V	630 V	1000 V	
Rated Impulse Voltage	6 kV	6 kV	6 kV	
Rated Insulation Voltage	750 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	
71 ®	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-7,50
- · Version with empty poles
- Connected to larger number of poles



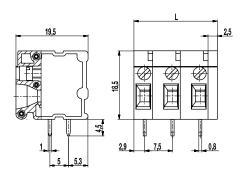
PCB connector 182-A-111

Screw connection









The PCB connector 182-A-111 features parallel entry for both conductor and screwdriver. It can also be used as printed circuit board termination with front panel penetration.

These PCB connectors are available in 7.5 mm pitch with up to 12 poles, but they can also be plugged together as longer terminal strips.

Each pole has a double solder termination with 5 mm pin spacing.

The wire entrance is parallel to the PCB.

Part Numbers

No. of poles	182-A-111	Length	Pcs
2	12.819.008	15,00	200
3	13.819.008	22,50	100
4	14.819.008	30,00	50
5	15.819.008	37,50	100
6	16.819.008	45,00	100
7	17.819.008	52,50	50
8	18.819.008	60,00	50
9	19.819.008	67,50	50
10	20.819.008	75,00	25
11	21.819.008	82,50	25
12	22.819.008	90,00	25

General Information

Pitch	7,5 mm
No. of poles	2 - 12
Areas of application	Particularly suitable for confined mounting space or only single-sided access.

Technical Data

Clamping Range	solid / flexible / A	solid / flexible / AWG			
	0,14 - 4 mm² / 0,14 - 2,5 mm² / 26 - 12 AWG				
Rated Cross Section	2,5 mm ²	2,5 mm ²			
Wire Stripping Length	9 mm ± 0,5 mm				
Overvoltage Category	III	III	II		
Pollution Severity Level	3	2	2		
Rated Voltage	500 V	630 V	1000 V		
Rated Impulse Voltage	6 kV	6 kV	6 kV		
Rated Insulation Voltage	750 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	
	20	300	В	24 - 12	0,4	
71 ®	20 10	150 300	C D	24 - 12 24 - 12	0,4 0,4	
®	20 10	300 300	B D, E	24 - 12 24 - 12	0,4 0,4	

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-7,50
- Connected to larger number of poles



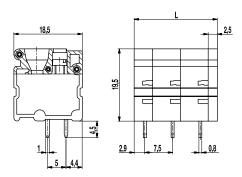
PCB connector 182-A-121

Screw connection, wire entrance vertical to PCB









The PCB connector 182-A-121 features parallel entry for both conductor and screwdriver. It can also be used as printed circuit board termination with front panel penetration.

These PCB connectors are available in 7.5 mm pitch with up to 12 poles, but they can also be plugged together as longer terminal strips.

Each pole has a double solder termination with 5 mm pin spacing.

The wire entrance is vertical to the PCB.

Part Numbers

No. of poles	182-A-121	Length	Pcs
2	12.819.007	15,00	200
3	13.819.007	22,50	100
4	14.819.007	30,00	50
5	15.819.007	37,50	100
6	16.819.007	45,00	100
7	17.819.007	52,50	50
8	18.819.007	60,00	50
9	19.819.007	67,50	50
10	20.819.007	75,00	50
11	21.819.007	82,50	50
12	22.819.007	90,00	50

General Information

Pitch	7,5 mm
No. of poles	2 - 12
Areas of application	Particularly suitable for confined mounting space or only single-sided access.

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 mm ²		
Wire Stripping Length	9 mm ± 0,5 mm		
Overvoltage Category	III	III	II
Pollution Severity Level	3	2	2
Rated Voltage	500 V	630 V	1000 V
Rated Impulse Voltage	6 kV	6 kV	6 kV
Rated Insulation Voltage	750 V acc. to EN	60998-1	
Rated Current	24 A		
Hole in PCB	ø 1,4 mm		
Torque	0,4 Nm		

Material

matorial	
Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	I
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	
	20	300	В	24 - 12	0,4	
$\mathcal{R}^{\mathbb{R}}$	20 10	150 300	C D	24 - 12 24 - 12	0,4 0,4	
(1) ®	20 10	300 300	B D, E	24 - 12 24 - 12	0,4 0,4	

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-7,50
- Connected to larger number of poles



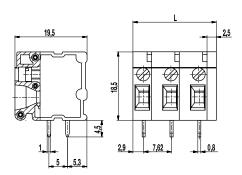
PCB connector 183-A-111

Screw connection









The PCB connector 183-A-111 features parallel entry for both conductor and screwdriver. It can also be used as printed circuit board termination with front panel penetration.

These PCB connectors are available in 7.62 mm pitch with up to 12 poles, but they can also be plugged together as longer terminal strips.

Each pole has a double solder termination with 5 mm pin spacing.

The wire entrance is parallel to the PCB.

Part Numbers

No. of poles	183-A-111	Length	Pcs
2	12.819.058	15,24	200
3	13.819.058	22,86	100
4	14.819.058	30,48	50
5	15.819.058	38,10	100
6	16.819.058	45,72	100
7	17.819.058	53,34	50
8	18.819.058	60,96	50
9	19.819.058	68,58	50
10	20.819.058	76,20	50
11	21.819.058	83,82	50
12	22.819.058	91,44	50

General Information

Pitch	7,62 mm
No. of poles	2 - 12
Areas of application	Particularly suitable for confined mounting space or only single-sided access.

Technical Data

Clamping Range	solid / flexible / A	WG	
	0,14 - 4 mm ² / 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	III	II
Pollution Severity Level	3	2	2
Rated Voltage	500 V	630 V	1000 V
Rated Impulse Voltage	6 kV	6 kV	6 kV
Rated Insulation Voltage	750 V acc. to EN	60998-1	
Rated Current	24 A		
Hole in PCB	ø 1,4 mm		
Torque	0,4 Nm		

Material

PA, grey, V-0
CTI ≥ 600
1
-40°C up to 100°C
Tin plated copper
M2,5; zinc plated steel, blue passivated
1,0 x 0,8 mm; tin plated copper
Zinc plated steel, blue passivated
Brass, bright

Approvals

	Current	Voltage	Group	AWG	Nm	
	20 20	300 150	B C	24 - 12 24 - 12	0,4 0,4	
	10	300	D	24 - 12 24 - 12	0,4	
⊕ ®	20 10	300 300	B D, E	24 - 12 24 - 12	0,4 0,4	
	10	300	D, E	24 - 12	0,4	

- Consecutive numbering
- Special marking according to drawing
- Connected to larger number of poles



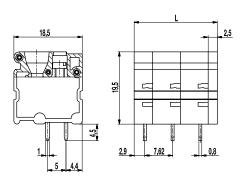
PCB connector 183-A-121

Screw connection, wire entrance vertical to PCB









The PCB connector 183-A-121 features parallel entry for both conductor and screwdriver. It can also be used as printed circuit board termination with front panel penetration.

These PCB connectors are available in 7.62 mm pitch with up to 12 poles, but they can also be plugged together as longer terminal strips.

Each pole has a double solder termination with 5 mm pin spacing. The wire entrance is vertical to the PCB.

Part Numbers

No. of poles	183-A-121	Length	Pcs
2	12.819.007	15,24	200
3	13.819.007	22,86	100
4	14.819.007	30,48	50
5	15.819.007	38,10	100
6	16.819.007	45,72	100
7	17.819.007	53,34	50
8	18.819.007	60,96	50
9	19.819.007	68,58	50
10	20.819.007	76,20	50
11	21.819.007	83,82	50
12	22.819.007	91,44	50

General Information

Pitch	7,62 mm
No. of poles	2 - 12
Areas of application	Particularly suitable for confined mounting space or only single-sided access.

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 mm ²		
Wire Stripping Length	9 mm ± 0,5 mm		
Overvoltage Category	III	III	II
Pollution Severity Level	3	2	2
Rated Voltage	500 V	630 V	1000 V
Rated Impulse Voltage	6 kV	6 kV	6 kV
Rated Insulation Voltage	750 V acc. to EN	60998-1	
Rated Current	24 A		
Hole in PCB	ø 1,4 mm		
Torque	0,4 Nm		

Material

matorial	
Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	I
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	
	20	300	В	24 - 12	0,4	
$\mathcal{R}^{\mathbb{R}}$	20 10	150 300	C D	24 - 12 24 - 12	0,4 0,4	
(1) ®	20 10	300 300	B D, E	24 - 12 24 - 12	0,4 0,4	

- Consecutive numbering
- Special marking according to drawing
- Connected to larger number of poles



PCB connector 876(-DR)

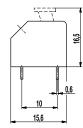
Spring clamp connection diagonal 45° to PCB

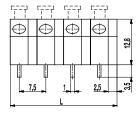












The PCB connectors 876 und 876-DR with spring clamp connection and a pitch of 7,5 mm, are available with 2 to 10 poles.

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 876 is operated by pressing a pusher inside the housing with a screwdriver whereas the spring clamp of version 876-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 Numbers

No. of poles	876	876-DR	Length	Pcs
2	72.812.001	82.812.001	15,00	200
3	73.812.001	83.812.001	22,50	100
4	74.812.001	84.812.001	30,00	100
5	75.812.001	85.812.001	37,50	100
6	76.812.001	86.812.001	45,00	50
7	77.812.001	87.812.001	52,50	50
8	78.812.001	88.812.001	60,00	50
9	79.812.001	89.812.001	67,50	50
10	80.812.001	90.812.001	75,00	50

General Information

Pitch	7,5 mm
No. of poles	2 - 10

Technical Data

Clamping Range	solid / flexible / A	WG	
	0,14 - 2,5 mm ² / 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	II
Pollution Severity Level	3	2	2
Rated Voltage	500 V	630 V	1000 V
Rated Impulse Voltage	6 kV	6 kV	6 kV
Rated Insulation Voltage	750 V acc. to EN	60998-1	
Rated Current	10 A		
Hole in PCB	ø 1,3 mm		

Material

Moulding	PA, red V-0
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
71 ®	10	300	В	22 - 16	
(1) ®	10	300	B, D, E	22 - 16	

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-7,50
- Other pitch
- Connected to larger number of poles



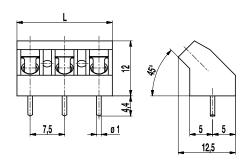
PCB connector 976(-DS)

Screw connection 45°-angle to PCB









The PCB connector 976, inclined version with a pitch of 7,5 mm is available with 2 and 3 poles and can be mounted side-by-side in the nominal pitch.

Due to their large clearance and creepage distances, these PCB connectors are particularly suitable for higher voltages.

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	976	976-DS	Length	Pcs
2	10.874.204	20.874.204	13,30	250
3	10.874.205	20.874.205	20,80	250

General Information

Pitch	7,5 mm
No. of poles	2 + 3

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 mm ² / 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	6,5 mm ± 0,5 mm	1		
Overvoltage Category	III	III	II	
Pollution Severity Level	3	2	2	
Rated Voltage	400 V	630 V	1000 V	
Rated Impulse Voltage	6 kV	6 kV	6 kV	
Rated Insulation Voltage	750 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
I
-40°C up to 100°C
Tin plated brass
M3; zinc plated steel, clear passivated
ø 1 mm; tin plated copper
Tin plated tin bronze

Approvals

	Current	Voltage	Group	AWG	Nm	
FU ®	15	300	В	22-12 [1]	0,51	
⊕ ®	20 10	300 300	B D, E	26 - 12 26 - 12	0,51 0,51	
	Current	Voltage	mm²			
\$	24	750	2,5			

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

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-7,50
- Longer P.C. pins up to 95 mm
- Special wire protector for very thin conductors
- Version with raised foot of 1,6 mm



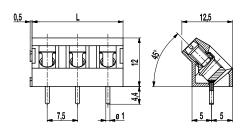
PCB connector 976-T(-DS)

Screw connection 45°-angle to PCB, interlocking









The PCB connector 976-T, inclined version with a pitch of 7,5 mm is available with 2 and 3 poles.

Lateral latching elements on the housing allow to latch the PCB connector to longer terminal strips without pole loss.

Due to their large clearance and creepage distances, these PCB connectors are particularly suitable for higher voltages.

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

Part Numbers

No. of poles	976-T	976-T-DS	Length	Pcs
2	10.874.232	20.874.232	15,00	250
3	10.874.233	20.874.233	22,50	250

General Information

Pitch	7,5 mm
No. of poles	2 + 3

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 mm²		
Wire Stripping Length	6,5 mm ± 0,5 mm	1		
Overvoltage Category	III	III	II	
Pollution Severity Level	3	2	2	
Rated Voltage	400 V	630 V	1000 V	
Rated Impulse Voltage	6 kV	6 kV	6 kV	
Rated Insulation Voltage	750 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, clear passivated
Solder pin	ø 1 mm; tin plated copper
Wire protector	Tin plated tin bronze

Approvals

	Current	Voltage	Group	AWG	Nm	
FU ®	15	300	В	22-12 [1]	0,51	
⊕ ®	20 10	300 300	B D, E	26 - 12 26 - 12	0,51 0,51	
	Current	Voltage	mm²			
\$	24	750	2,5			

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

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-7,50
- Longer P.C. pins up to 75 mm
- Special wire protector for very thin conductors



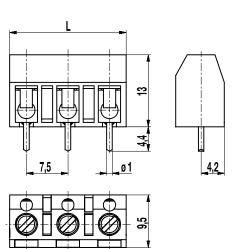
PCB connector 977(-DS)

Screw connection, with test holes









The PCB connector 977 with a pitch of 7,5 mm is available in 2- to 8-pole design and can be mounted side-by-side in the nominal pitch.

Due to their large clearance and creepage distances, these PCB connectors are particularly suitable for higher voltages.

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

The screws are secured against self-loosening.

This PCB connector has test holes for ø 2 mm test plugs.

Part Numbers

No. of poles	977	977-DS	Length	Pcs
2	10.872.302	20.872.302	13,50	250
3	10.872.303	20.872.303	21,00	250
4	10.872.304	20.872.304	28,50	200
5	10.872.305	20.872.305	36,00	100
6	10.872.306	20.872.306	43,50	100
7	10.872.307	20.872.307	51,00	100
8	10.872.308	20.872.308	58,50	100

General Information

Pitch	7,5 mm
No. of poles	2 - 8

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 mm ² / 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	7 mm ± 0,5 mm			
Overvoltage Category	III	III	II	
Pollution Severity Level	3	2	2	
Rated Voltage	400 V	630 V	1000 V	
Rated Impulse Voltage	6 kV	6 kV	6 kV	
Rated Insulation Voltage	450 V acc. to EN	60998-1		
Rated Current	24 A			
Hole in PCB	ø 1,3 mm			
Torque	0,5 Nm			

Material

Matorial	
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
71 ®	15	300	В	22-12 [1]	0,51
(1) ®	20 10	300 300	B D, E	26 - 12 26 - 12	0,51 0,51
	Current	Voltage	mm²		
(24	750	2,5		

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

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-7,50
- Longer P.C. pins up to 95 mm
- Version with larger clamping range



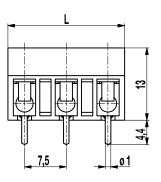
PCB connector 977-OP(-DS)

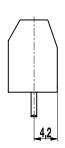
Screw connection

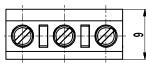












The PCB connector 977-OP with a pitch of 7,5 mm is available in 2- to 19-pole design and can be mounted side-by-side in the nominal pitch.

Due to their large clearance and creepage distances, these PCB connectors are particularly suitable for higher voltages.

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

The screws are secured against self-loosening.

Part Numbers

250
250
200
100
100
100
100
100
100
100
100
100
100
100
100
100
100
100

General Information

Pitch	7,5 mm
No. of poles	2 - 19

Technical Data

Clamping Range	solid / flexible / A	solid / flexible / AWG				
without wire protector	1 - 6 mm² / 1 - 2,	1 - 6 mm² / 1 - 2,5 mm² / 16 - 12 AWG				
with wire protector	0,75 - 4 mm ² / 0,7	- 12 AWG				
Rated Cross Section	2,5 mm²	2,5 mm²				
Wire Stripping Length	6,5 mm ± 0,5 mn	n				
Overvoltage Category	III	III	II			
Pollution Severity Level	3	2	2			
Rated Voltage	400 V (320 V)	630 V (500 V)	1000 V (500V)			
Rated Impulse Voltage	6 kV	6 kV	6 kV			
Rated Insulation Voltage	450 V acc. to EN	60998-1				
Rated Current	24 A					
Hole in PCB	ø 1,3 mm					
Torque	0,5 Nm					
Other specifications	Rated voltage in brackets applies to 9-19-pole connectors, "no-flame" according to glow wire test applies to 2-8-pole connectors.					
	applies to 2-0-po	ie connectors.				

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	2-8 poles: CTI ≥ 600; 9-19 poles: CTI 250
Insulating Group	2-8 poles: I; 9-19 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 ®	15	300	В	22-12 [1]	0,51	
® ®	20 10	300 300	B D, E	26 - 12 26 - 12	0,51 0,51	
	Current	Voltage	mm²			
Š	24	750	2,5			

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

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-7,50
- Longer P.C. pins up to 95 mm
- Version with larger clamping range



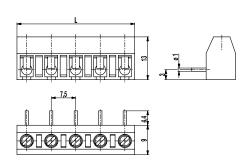
PCB connector 977-OPSG(-DS)

Screw connection, wire entrance vertical to PCB









The PCB screw connector 977-OPSG is the horizontal version of 977-OP with a pitch of 7,5 mm. It is available in 2- to 19-pole design and can be mounted side-by-side in the nominal pitch.

Due to their large clearance and creepage distances, these PCB connectors are particularly suitable for higher voltages.

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.

Part Numbers

No. of poles	977-OPSG	977-OPSG-DS	Length	Pcs
2	10.872.352	20.872.352	13,50	250
3	10.872.353	20.872.353	21,00	250
4	10.872.354	20.872.354	28,50	200
5	10.872.355	20.872.355	36,00	100
6	10.872.356	20.872.356	43,50	100
7	10.872.357	20.872.357	51,00	100
8	10.872.358	20.872.358	58,50	100
9	10.872.359	20.872.359	66,00	100
10	10.872.360	20.872.360	73,50	100
11	10.872.361	20.872.361	81,00	100
12	10.872.362	20.872.362	88,50	100
13	10.872.363	20.872.363	96,00	100
14	10.872.364	20.872.364	103,50	100
15	10.872.365	20.872.365	111,00	100
16	10.872.366	20.872.366	118,50	100
17	10.872.367	20.872.367	126,00	100
18	10.872.368	20.872.368	133,50	100
19	10.872.369	20.872.369	141,00	100

General Information

Pitch	7,5 mm
No. of poles	2 - 19

Technical Data

1 Commoun Butu	
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	5,5 mm
Overvoltage Category	III
Pollution Severity Level	3
Rated Voltage	400 V (320 V)
Rated Impulse Voltage	6 kV
Rated Insulation Voltage	450 V acc. to EN 60998-1
Rated Current	24 A
Hole in PCB	ø 1,3 mm
Torque	0,5 Nm
Other specifications	Rated voltage in brackets applies to 9-19-pole connectors, "no-flame" according to glow wire tes applies to 2-8-pole connectors.

Material

PA, grey, V-0
2-8 poles: CTI ≥ 600; 9-19 poles: CTI 250
2-8 poles: I; 9-19 poles: IIIa
-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	
71 ®	15	300	В	22-12 [1]	0,51	
®	20 10	300 300	B D, E	26 - 12 26 - 12	0,51 0,51	
	Current	Voltage	mm²			
Š	24	750	2,5			

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

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-7,50



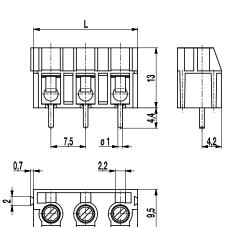
PCB connector 977-T(-DS)

Screw connection, with test holes, interlocking









The PCB connector 977-T with a pitch of 7,5 mm is available is available with 2 and 3 poles.

Lateral latching elements on the housing allow to latch the PCB connector to longer terminal strips without pole loss.

Due to their large clearance and creepage distances, these PCB connectors are particularly suitable for higher voltages.

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

The wire entrance is parallel to the PCB.

The screws are captive.

This PCB connector has test holes for ø 2,2 mm test plugs.

Part Numbers

No. of poles	977-T	977-T-DS	Length	Pcs
2	10.872.632	20.872.632	13,50	250
3	10.872.633	20.872.633	21,00	250

General Information

Pitch	7,5 mm
No. of poles	2 + 3

Technical Data

solid / flexible / AWG
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
7 mm
III
3
400 V
6 kV
450 V acc. to EN 60998-1
24 A
ø 1,3 mm
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	
71 ®	15	300	В	22-12 [1]	0,51	
(1) ®	20 10	300 300	B D, E	26 - 12 26 - 12	0,51 0,51	
	Current	Voltage	mm²			
\$	24	750	2,5			

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

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-7,50
- Longer P.C. pins up to 95 mm
- Version with larger clamping range



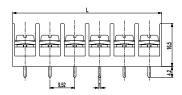
PCB connector 982-D

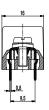
Screw connection, 2 solder pins per pole











The PCB connector 982-D in 9.52 mm pitch is available in 2- to 26-pole design and can be mounted side-by-side in the nominal pitch.

This version is equipped with two solder pins per pole.

The conductor terminal is of head contact design, whereby the screws and square washers are movably connected.

For easier connection, the non-rotably mounted square washers are automatically lifted when the screw is loosened.

Part Numbers

No. of poles	982-D	Length	Pcs
2	20.873.702	19,00	200
3	20.873.703	28,60	250
4	20.873.704	38,10	100
5	20.873.705	47,60	50
6	20.873.706	57,10	50
7	20.873.707	66,60	50
8	20.873.708	76,20	50
9	20.873.709	85,70	50
10	20.873.710	95,20	50
11	20.873.711	104,70	50
12	20.873.712	114,30	50
13	20.873.713	123,80	50
14	20.873.714	133,30	25
15	20.873.715	142,80	25
16	20.873.716	152,30	25
17	20.873.717	161,90	25
18	20.873.718	171,40	25
19	20.873.719	180,90	25
20	20.873.720	190,40	25
21	20.873.721	199,90	25
22	20.873.722	209,50	25
23	20.873.723	219,00	25
24	20.873.724	228,50	25
25	20.873.725	238,00	20
26	20.873.726	247,60	20

General Information

Pitch	9,52 mm	
No. of poles	2 - 26	

Technical Data

Clamping Range	solid / flexible / AWG
	0,75 - 2,5 mm² / 0,75 - 2,5 mm² / 18 - 12 AWG
Rated Cross Section	2,5 mm²
Wire Stripping Length	8,5 mm
Overvoltage Category	III
Pollution Severity Level	3
Rated Voltage	320 V
Rated Impulse Voltage	4 kV
Rated Insulation Voltage	450 V acc. to EN 60998-1
Rated Current	24 A at 30°C ambient temperature
Hole in PCB	ø 1,6 mm
Torque	0,8 Nm
Other specifications	Per pole two conductors of identical cross-section can be connected.

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	I
Temperature Range	-40°C up to 100°C
Pressure clamp	Tin plated brass
Screw	M3,5; zinc plated steel, blue passivated
Solder pin	0,8 x 1,0 mm; tin plated brass

Approvals

	Current	Voltage	Group	AWG	Nm	
71 ®	20	300	В	20 - 12	0,79	
®	20 10	300 300	B D, E	20 - 12 20 - 12	0,79 0,79	

- Consecutive numbering
- Special marking according to drawing
- Crosshead screws
- Cover cap 982-A
- Securing pins BEF-983
- Tab connections
- 10 mm pin length



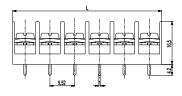
PCB connector 982-S

Screw connection, 1 solder pin per pole











The PCB connector 982-S in 9.52 mm pitch is available in 2- to 26-pole design and can be mounted side-by-side in the nominal pitch.

This version is equipped with one solder pin per pole.

The conductor terminal is of head contact design, whereby the screws and square washers are movably connected.

For easier connection, the non-rotably mounted square washers are automatically lifted when the screw is loosened.

Part Numbers

No. of poles	982-S	Length	Pcs
2	10.873.702	19,00	200
3	10.873.703	28,60	200
4	10.873.704	38,10	100
5	10.873.705	47,60	50
6	10.873.706	57,10	50
7	10.873.707	66,60	50
8	10.873.708	76,20	50
9	10.873.709	85,70	50
10	10.873.710	95,20	50
11	10.873.711	104,70	50
12	10.873.712	114,30	50
13	10.873.713	123,80	50
14	10.873.714	133,30	20
15	10.873.715	142,80	25
16	10.873.716	152,30	25
17	10.873.717	161,90	25
18	10.873.718	171,40	25
19	10.873.719	180,90	25
20	10.873.720	190,40	25
21	10.873.721	199,90	25
22	10.873.722	209,50	25
23	10.873.723	219,00	25
24	10.873.724	228,50	25
25	10.873.725	238,00	20
26	10.873.726	247,60	20

General Information

Pitch	9,52 mm
No. of poles	2 - 26

Technical Data

Clamping Range	solid / flexible / AWG		
	0,75 - 2,5 mm² / 0,75 - 2,5 mm² / 18 - 12 AWG		
Rated Cross Section	2,5 mm²		
Wire Stripping Length	8,5 mm		
Overvoltage Category	III		
Pollution Severity Level	3		
Rated Voltage	320 V		
Rated Impulse Voltage	4 kV		
Rated Insulation Voltage	450 V acc. to EN 60998-1		
Rated Current	20 A at 30°C ambient temperature		
Hole in PCB	ø 1,6 mm		
Torque	0,8 Nm		
Other specifications	Per pole two conductors of identical cross-section can be connected.		

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 brass
Screw	M3,5; zinc plated steel, blue passivated
Solder pin	0,8 x 1,0 mm; tin plated brass

Approvals

	Current	Voltage	Group	AWG	Nm	
71 ®	20	300	В	20 - 12	0,79	
(1) ®	20 10	300 300	B D, E	20 - 12 20 - 12	0,79 0,79	

- Consecutive numbering
- Special marking according to drawing
- Crosshead screws
- Cover cap 982-A
- Securing pins BEF-983
- Tab connections
- 10 mm pin length



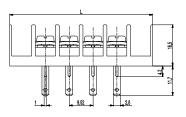
PCB connector 982-SMF-2,8/-4,8

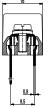
Screw connection, with solder pin and tab











982-SMF-2,8



982-SMF-4,8

The PCB connectors 982-SMF-2,8 and 982-SMF-4,8 with a pitch of 9.52 mm are available in 1- to 12-pole design and can be mounted side-by-side in the nominal pitch.

They are based on our series 982 terminal strips.

The conductor terminal is of head contact design with Screws M3.5, whereby the screws and square washers are movably connected.

For easier connection, the non-rotably mounted square washers are automatically lifted when the screw is loosened.

On the solder side and the plug-in side they feature one solder pin and one tab connection of 2.8 mm or 4.8 mm width per pole.

This allows current to flow to other components without having to use additional conductor paths.

Part Numbers

No. of poles	982-SMF-2,8	982-SMF-4,8	Length	Pcs
1	91.873.703	92.873.703	28,56	200
2	91.873.704	92.873.704	38,08	200
3	91.873.705	92.873.705	47,60	200
4	91.873.706	92.873.706	57,12	100
5	91.873.707	92.873.707	66,64	50
6	91.873.708	92.873.708	76,16	50
7	91.873.709	92.873.709	85,68	50
8	91.873.710	92.873.710	95,20	50
9	91.873.711	92.873.711	104,72	50
10	91.873.712	92.873.712	114,24	50
11	91.873.713	92.873.713	123,76	50
12	91.873.714	92.873.714	133,28	50

further number of poles on request

General Information

Pitch	9,52 mm
No. of poles	1 - 12

Technical Data

Clamping Range	solid / flexible / AWG		
	$0.75 - 2.5 \text{ mm}^2 / 0.75 - 2.5 \text{ mm}^2 / 18 - 12 \text{ AWG}$		
Rated Cross Section	2,5 mm²		
Wire Stripping Length	8,5 mm		
Overvoltage Category	III		
Pollution Severity Level	3		
Rated Voltage	320 V		
Rated Impulse Voltage	4 kV		
Rated Insulation Voltage	450 V acc. to EN 60998-1		
Rated Current	6 A: with receptacles 2,8; wire 1 mm² (16 AWG) 16 A: with receptacles 4,8; wire 2,5 mm² (14 AWG)		
Hole in PCB	ø 1,6 mm		
Torque	0,8 Nm		
Other specifications	Screw-fixing holes ø 3,2 mm. Per pole two wires of identical cross-section can be connected. Indicated rated voltage applies to applications with insulation receptacles.		

Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	I
Temperature Range	-40°C up to 100°C
Pressure clamp	Tin plated brass
Screw	M3,5; zinc plated steel, blue passivated
Solder pin	0,8 x 1,0 mm; tin plated brass

Approvals

	Current	Voltage	Group	AWG	Nm
71 ®	20	300	В	20 - 12	0,79
® ®	6 15 10	300 300 300	B, D, E B D, E	20 - 12 20 - 12 20 - 12	0,79 [1] 0,79 [2] 0,79 [2]

[1] for 982-SMF-2,8 [2] for 982-SMF-4,8

- Consecutive numbering
- Special marking according to drawing
- Crosshead screws
- Cover cap 982-A
- Securing pins BEF-983
- Fastening pole position can be freely selected
- Various versions of tabs instead of screw connections



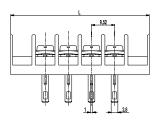
PCB connector 982-SML-2,8

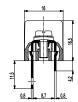
Screw connection, with solder pin and solder tag











The PCB connector 982-SML-2,8 with a pitch of 9.52 mm is available in 1- to 12-pole design and can be mounted side-by-side in the nominal pitch. They are based on our series 982 terminal strips.

The conductor terminal is of head contact design with screws M3.5, whereby the screws and square washers are movably connected.

For easier connection, the non-rotably mounted square washers are automatically lifted when the screw is loosened.

On the solder side and the plug-in side they feature one solder pin and one soldering tag of 2.8 mm width per pole.

This allows current to flow to other components without having to use additional conductor paths.

Part Numbers

No. of poles	982-SML-2,8	Length	Pcs
1	94.873.703	28,56	200
2	94.873.704	38,08	200
3	94.873.705	47,60	200
4	94.873.706	57,12	100
5	94.873.707	66,64	50
6	94.873.708	76,16	50
7	94.873.709	85,68	50
8	94.873.710	95,20	50
9	94.873.711	104,72	50
10	94.873.712	114,24	50
11	94.873.713	123,76	50
12	94.873.714	133,28	50

further number of poles on request

General Information

Pitch	9,52 mm
No. of poles	1 - 12

Technical Data

Clamping Range	solid / flexible / AWG		
	0,75 - 2,5 mm² / 0,75 - 2,5 mm² / 18 - 12 AWG		
Rated Cross Section	2,5 mm²		
Wire Stripping Length	8,5 mm		
Overvoltage Category	III		
Pollution Severity Level	3		
Rated Voltage	320 V		
Rated Impulse Voltage	4 kV		
Rated Insulation Voltage	450 V acc. to EN 60998-1		
Rated Current	17,5 A (wire 1.5 mm² in soldering tag area)		
Hole in PCB	ø 1,6 mm		
Torque	0,8 Nm		
Other specifications	Fixing holes ø 3,2 mm. Per pole two wires of identical cross-section can be connected.		

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 brass
Screw	M3,5; zinc plated steel, blue passivated
Solder pin	0,8 x 1,0 mm; tin plated brass

Approvals

	Current	Voltage	Group	AWG	Nm	
71 ®	20	300	В	20 - 12	0,79	
(1) ®	20 10	300 300	B D, E	20 - 12 20 - 12	0,79 0,79	

- Consecutive numbering
- Special marking according to drawing
- Cover cap 982-A
- Securing pins BEF-983
- Fastening pole position can be freely selected
- · Crosshead screws
- Various tab versions available instead of screw connections
- · Version without solder pin



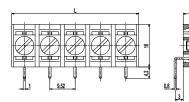
PCB connector 982-W

Screw connection, wire entrance vertical to PCB









The PCB screw connector 982-W in 9.52 mm pitch is available with 2- to 26-pole design and can be mounted side-by-side in the nominal pitch. This version is equipped with one solder pin per pole.

The conductor terminal, located vertical to the PCB, is of head contact design, whereby the screws and square washers are movably connected.

For easier connection, the non-rotably mounted square washers are automatically lifted when the screw is loosened.

Part Numbers

No. of poles	982-W	Length	Pcs
2	30.873.702	19,00	200
3	30.873.703	28,60	200
4	30.873.704	38,10	100
5	30.873.705	47,60	50
6	30.873.706	57,10	50
7	30.873.707	66,60	50
8	30.873.708	76,20	50
9	30.873.709	85,70	50
10	30.873.710	95,20	50
11	30.873.711	104,70	50
12	30.873.712	114,30	50

further number of poles on request

General Information

Pitch	9,52 mm
No. of poles	2 - 26

Technical Data

Clamping Range	solid / flexible / AWG
	0,75 - 2,5 mm² / 0,75 - 2,5 mm² / 18 - 12 AWG
Rated Cross Section	2,5 mm²
Wire Stripping Length	8,5 mm
Overvoltage Category	III
Pollution Severity Level	3
Rated Voltage	320 V
Rated Impulse Voltage	4 kV
Rated Insulation Voltage	450 V acc. to EN 60998-1
Rated Current	15 A
Hole in PCB	ø 1,6 mm
Torque	0,8 Nm
Other specifications	Per pole two conductors of identical cross-section can be connected.

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 brass
Screw	M3,5; zinc plated steel, blue passivated
Solder pin	0,8 x 1,0 mm; tin plated brass

Approvals

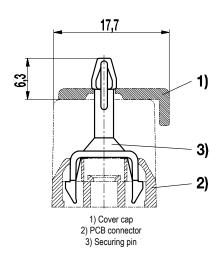
	Current	Voltage	Group	AWG	Nm	
71 ®	20	300	В	20 - 12	0,79	
(P ®	20 10	300 300	B D, E	20 - 12 20 - 12	0,79 0,79	

- Consecutive numbering
- Special marking according to drawing
- Crosshead screws
- Cover cap 982-A
- Securing pins BEF-983
- Tab connections



Cover cap 982-A





The 982-A cover cap is used as shock protection for series 982 PCB connectors. All cover caps have two \emptyset 3 mm fastening holes.

They are fastened after wiring the strips with two securing pins BEF-983, which are pressed into the first and the last empty pole compartment of the PCB connector.

When ordering series 982 PCB connectors, the two empty pole compartments on the far left and the far right must be specified because terminal pole numbers are only allocated to connected pole compartments.

The number of poles and the cover cap sizes stated herein are already configured according to the number of empty pole compartments, i.e. a 3-pole cover cap is suitable for a 3-pole PCB connector equipped with two additional empty pole compartments.

Part Numbers

No. of poles	982-A	Length	Pcs
1	13.891.202	28,50	200
2	14.891.202	38,00	100
3	15.891.202	47,60	100
4	16.891.202	51,10	100
5	17.891.202	66,60	100
6	18.891.202	76,10	100
7	19.891.202	85,70	100
8	20.891.202	95,20	100
9	21.891.202	104,70	100
10	22.891.202	114,30	100
11	23.891.202	123,80	100
12	24.891.202	133,30	100
13	25.891.202	142,80	100
14	26.891.202	152,40	100
15	27.891.202	161,90	100
16	28.891.202	171,40	100
18	30.891.202	190,50	100
20	32.891.202	209,50	100
22	34.891.202	228,60	100
24	36.891.202	247,60	100

further number of poles on request

General Information

No. of poles	1 - 24
Usable with	PCB connectors series 982

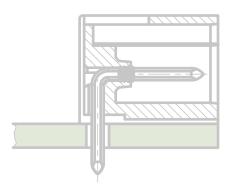
Material

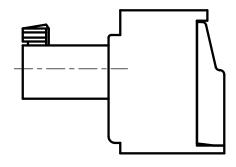
Moulding	ABS, transparent
Temperature Range	-30°C up to 80°C

- Fixing holes in different position
- Securing pins BEF-983



Plug connectors





This section lists our plug connectors with a pitch of $7.5 \, \text{mm}$.

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 122 plug connectors have standard grooves to accommodate coding keys. Plug connectors with such coded pin strips provide optimum protection against twisting and/or incorrect plugging.



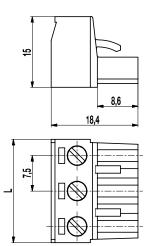
Plug connector 122-A-111

Screw connection









The plug connector 122-A-111 with a pitch of $7.5 \, \text{mm}$, is available in 2- to 12-pole design.

The large pitch allows connecting higher rated voltages under tough industrial conditions.

Interlocking plug connector with the pin strip results in optimum vibration resistance.

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

No. of poles	122-A-111	Length	Pcs
2	10.809.002	13,00	200
3	10.809.003	20,50	100
4	10.809.004	28,00	100
5	10.809.005	35,50	50
6	10.809.006	43,00	50
7	10.809.007	50,50	50
8	10.809.008	58,00	50
9	10.809.009	65,50	50
10	10.809.010	73,00	50
11	10.809.011	80,50	50
12	10.809.012	88,00	50
further number of poles on request			

General Information

Pitch	7,5 mm
No. of poles	2 - 12
Usable with	all pin strips of series 122

Technical Data

solid / flexible / AWG		
0,2 - 4 mm² / 0,2	- 2,5 mm² / 26 - 1	2 AWG
2,5 mm²		
$7 \text{ mm} \pm 0.5 \text{ mm}$		
III	III	II
3	2	2
400 V	630 V	1000 V
6 kV	6 kV	6 kV
450 V acc. to EN	60998-1	
12 A		
0,5 Nm		
	0,2 - 4 mm² / 0,2 2,5 mm² 7 mm ± 0,5 mm III 3 400 V 6 kV 450 V acc. to EN 12 A	0,2 - 4 mm² / 0,2 - 2,5 mm² / 26 - 1 2,5 mm² 7 mm ± 0,5 mm III

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	
71 ®	15 10	300 300	B D	26 - 12 26 - 12	0,51 0,51	
(1) ®	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-7,50
- Coding elements 120-K
- Connectors equipped with coding elements on request



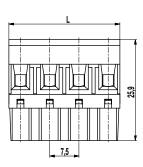
Plug connector 122-D-111

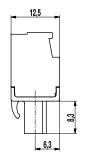
Screw connection, backside latching hooks











The plug connector 122-D-111 with a pitch of 7,5 mm, is available in 2- to 12-pole design.

The large pitch allows connecting higher rated voltages under tough industrial conditions.

Interlocking plug connector with the pin strip results in optimum vibration resistance.

On version 122-D-111, the wire entrance is located opposite to the latching hook side; on version 122-D-121, it is located on the same side. Plugging the plug connector on pin strips of series 122 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.

Part Numbers

No. of poles	122-D-111	Length	Pcs
2	10.809.402	13,00	200
3	10.809.403	20,50	100
4	10.809.404	28,00	100
5	10.809.405	35,50	50
6	10.809.406	43,00	50
7	10.809.407	50,50	50
8	10.809.408	58,00	50
9	10.809.409	65,50	50
10	10.809.410	73,00	50
11	10.809.411	80,50	50
12	10.809.412	88,00	50

General Information

Pitch	7,5 mm
No. of poles	2 - 12
Usable with	all pin strips of series 122

Technical Data

Clamping Range	solid / flexible / AWG 0,2 - 6 mm² / 0,2 - 4 mm² / 26 - 12 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	500 V	630 V	1000 V		
Rated Impulse Voltage	6 kV	6 kV	6 kV		
Rated Insulation Voltage	450 V acc. to EN	60998-1			
Rated Current	12 A				
Torque	0,5 Nm				

Material

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

Approvals

	Current	Voltage	Group	AWG	Nm	
71 ®	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	
VDE						

Options / Accessories

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-7,50
- Coding elements 120-K
- Connectors equipped with coding elements on request

further number of poles on request



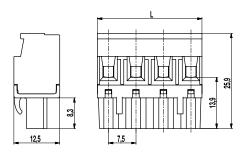
Plug connector 122-D-121

Screw connection









The plug connector 122-D-121 with a pitch of 7,5 mm, is available in 2- to 12-pole design.

The large pitch allows connecting higher rated voltages under tough industrial conditions.

Interlocking plug connector with the pin strip results in optimum vibration resistance.

On version 122-D-111, the wire entrance is located opposite to the latching hook side; on version 122-D-121, it is located on the same side. Plugging the plug connector on pin strips of series 122 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.

Part Numbers

No. of poles	122-D-121	Length	Pcs
2	20.809.402	13,00	200
3	20.809.403	20,50	100
4	20.809.404	28,00	100
5	20.809.405	35,50	50
6	20.809.406	43,00	50
7	20.809.407	50,50	50
8	20.809.408	58,00	50
9	20.809.409	65,50	50
10	20.809.410	73,00	50
11	20.809.411	80,50	50
12	20.809.412	88,00	50

General Information

Pitch	7,5 mm
No. of poles	2 - 12
Usable with	all pin strips of series 122

Technical Data

Clamping Range	solid / flexible / AWG 0,2 - 6 mm² / 0,2 - 4 mm² / 26 - 12 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	500 V	630 V	1000 V	
Rated Impulse Voltage	6 kV	6 kV	6 kV	
Rated Insulation Voltage	450 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	
71 ®	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	
VDE						

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-7,50
- Coding elements 120-K
- Connectors equipped with coding elements on request



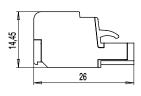
Plug connector 122-F-111

Spring clamp connection











The plug connector 122-F-111 series with screwless terminals and a pitch of 7,5 mm complements our "CONECTA"-Series. The large pitch allows connecting higher rated voltages under tough industrial conditions.

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 \emptyset 2 mm or \emptyset 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.

Interlocking plug connector with the pin strip results in optimum vibration resistance.

The plug connector can be operated by either a standard 3 mm blade screwdriver, terminal pliers or the built-in pusher, see 122-F-211.

Part Numbers

No. of poles	122-F-111	Length	Pcs
2	12.808.922	13,50	200
3	13.808.922	21,00	100
4	14.808.922	28,50	100
5	15.808.922	36,00	100
6	16.808.922	43,50	50
7	17.808.922	51,00	50
8	18.808.922	58,50	50
9	19.808.922	66,00	50
10	20.808.922	73,50	50
11	21.808.922	81,00	50
12	22.808.922	88,50	50

General Information

Pitch	7,5 mm
No. of poles	2 - 12
Usable with	all pin strips of series 122

Technical Data

Clamping Range	solid / flexible / AWG		
	0,2 - 4 mm² / 0,2 - 2,5 mm² / 24 - 12 AWG		
Rated Cross Section	2,5 mm²		
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	1
Temperature Range	-40°C up to 100°C
Pressure clamp	Copper alloy, tin plated
Tension spring	Stainless steel
Spring	Copper alloy, tin plated

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-7,50
- Coding elements 120-K
- Terminal pliers 120-F
- Connectors equipped with coding elements on request
- Higher number of poles



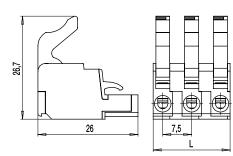
Plug connector 122-F-211

Spring clamp connection, with pusher









The plug connector 122-F-211 series with screwless terminals and a pitch of 7,5 mm complements our "CONECTA"-Series. The large pitch allows connecting higher rated voltages under tough industrial conditions.

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 \emptyset 2 mm or \emptyset 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.

Interlocking plug connector with the pin strip results in optimum vibration resistance

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

Part Numbers

No. of poles	122-F-211	Length	Pcs
2	12.808.925	13,50	200
3	13.808.925	21,00	100
4	14.808.925	28,50	100
5	15.808.925	36,00	100
6	16.808.925	43,50	50
7	17.808.925	51,00	50
8	18.808.925	58,50	50
9	19.808.925	66,00	50
10	20.808.925	73,50	50
11	21.808.925	81,00	50
12	22.808.925	88,50	50

General Information

Pitch	7,5 mm
No. of poles	2 - 12
Usable with	all pin strips of series 122

Technical Data

Clamping Range	solid / flexible / AWG 0,2 - 4 mm² / 0,2 - 2,5 mm² / 24 - 12 AWG		
Rated Cross Section	2,5 mm²		
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		

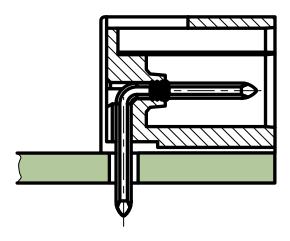
Material

Moulding	PA, grey, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C
Pressure clamp	Copper alloy, tin plated
Tension spring	Stainless steel
Spring	Copper alloy, tin plated

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-7,50
- Coding elements 120-K
- Connectors equipped with coding elements on request
- · Higher number of poles



Pin strips



In this section, you will find the series 122 male pin strips used for the corresponding female plug connectors.

They are available with 2 to 12 poles.

The user can choose from different designs with perpendicular or parallel plug direction to the PC board.

Series 121 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.



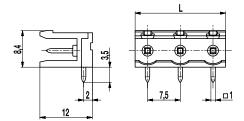
Pin strip 122-M-111/-211

Plug-in direction parallel to PCB

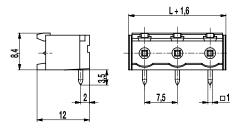








122-M-111 (without side wall)



122-M-211 (with side wall)

The pin strips 122-M-111 and 122-M-211 with a pitch of 7.5 mm are available in 2-to 12-pole design.

The ..-M-111 version is a pin strip without side wall. 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

No. of poles	122-M-111	122-M-211	Length	Pcs
2	10.807.002	10.807.017	13,00	200
3	10.807.003	10.807.018	20,50	100
4	10.807.004	10.807.019	28,00	100
5	10.807.005	10.807.020	35,50	50
6	10.807.006	10.807.021	43,00	50
7	10.807.007	10.807.022	50,50	50
8	10.807.008	10.807.023	58,00	50
9	10.807.009	10.807.024	65,50	50
10	10.807.010	10.807.025	73,00	50
11	10.807.011	10.807.026	80,50	50
12	10.807.012	10.807.027	88,00	50

General Information

Pitch	7,5 mm
No. of poles	2 - 12
Usable with	all plug connectors of series 122
Additonal Information	Ordering information:111: without side wall211: with side wall

Technical Data

Overvoltage Category	III	III	II
Pollution Severity Level	3	2	2
Rated Voltage	500 V	630 V	1000 V
Rated Impulse Voltage	6 kV	6 kV	6 kV
Rated Insulation Voltage	750 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
71 ®	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-7,50
- Coding elements 120-K
- Longer P.C. pins on request
- Connectors equipped with coding elements on request



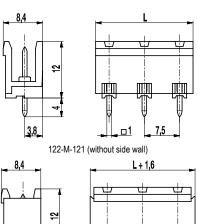
Pin strip 122-M-121/-221

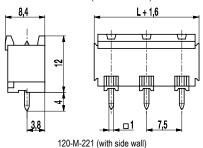
Plug-in direction vertical to PCB











The pin strips 122-M-121 and 122-M-221 with a pitch of 7,5 mm are available in 2-to 12-pole design.

The ..-M-121 version is a pin strip without side wall. The ..-M-221 version is a pin strip with side wall. For both designs, the plug direction for mating plug connectors 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	122-M-121	122-M-221	Length	Pcs
2	20.807.002	20.807.017	13,00	200
3	20.807.003	20.807.018	20,50	100
4	20.807.004	20.807.019	28,00	100
5	20.807.005	20.807.020	35,50	50
6	20.807.006	20.807.021	43,00	50
7	20.807.007	20.807.022	50,50	50
8	20.807.008	20.807.023	58,00	50
9	20.807.009	20.807.024	65,50	50
10	20.807.010	20.807.025	73,00	50
11	20.807.011	20.807.026	80,50	50
12	20.807.012	20.807.027	88,00	50

General Information

Pitch	7,5 mm
No. of poles	2 - 12
Usable with	all plug connectors of series 122
Additonal Information	Ordering information:121: without side wall221: with side wall

Technical Data

Overvoltage Category	III	III	II		
Pollution Severity Level	3	2	2		
Rated Voltage	500 V	630 V	1000 V		
Rated Impulse Voltage	6 kV	6 kV	6 kV		
Rated Insulation Voltage	750 V acc. to EN	750 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	

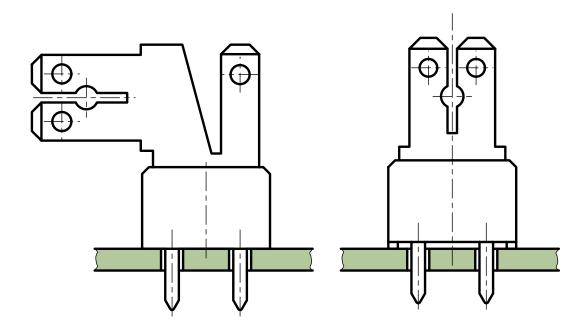
Approvals

	Current	Voltage	Group	AWG	Nm	
71 ®	15 10	300 300	B D			
(1) ®	15 10	300 300	B D, E			
VDE						

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-7,50
- Coding elements 120-K
- Longer P.C. pins on request
- Connectors equipped with coding elements on request



Tab connectors



On the following pages you can find our range of tab connectors with a pitch of 7.5 mm.

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 allows to plug on bare, partially or fully insulated tab receptacles according to DIN 46247.

For the insulation of the tabs, receptacles ISO-110 for 2.8 mm and ISO-25 for 6.3 mm or 2x 2.8 mm can be used (see accessories). When using double-spring contacts for 6.3 mm tab connectors, our insulation socket ISO-900 is best suitable.

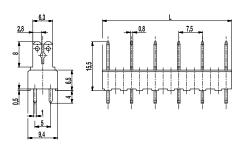


Tab connector 900-F-S-7,5

Tab 2x 2,8 mm / 1x 6,3 mm, with pegs







The tab connector 900-F-S-7,5 with a pitch of 7,5 mm is a raised 900-S-7,5 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. Insulation receptacles ISO-25 (see also ISO product data sheet) can be used to insulate 2,8 mm or 6,3 mm tab receptacles.

Insulation sockets are available for 6,3 mm tab connectors with double-spring contacts (see also ISO-900 product data sheet).

Part Numbers

further number of poles on request

No. of poles	900-F-S-7,5	Length	Pcs
3	75.870.704	18,50	200
5	75.870.707	33,50	100
6	75.870.709	43,50	100
9	75.870.713	63,50	100
10	75.870.715	73,50	100

Pitch	7,5 mm
No. of poles	2 - 17

Technical Data

General Information

- Common Data			
Overvoltage Category	III	III	II
Pollution Severity Level	3	2	2
Rated Voltage	500 V	630 V	1000 V
Rated Impulse Voltage	6 kV	6 kV	6 kV
Rated Insulation Voltage	750 V acc. to EN	60998-1	
Rated Current	6 A: with receptar 16 A: with receptar		
Hole in PCB	ø 1,6 mm		
Other specifications	Indicated rated vo	•	pplications with

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 0,8 mm; tin plated brass
Tab	2,8 x 0,8 mm; 6,3 x 0,8 mm: tin plated brass

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-7,50
- Insulation receptacles 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)

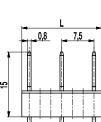


Tab connector 900-S-7,5

Tab 2x 2,8 mm / 1x 6,3 mm







6,3		1-0	L	
2,8		0,8	ļ -	7,5
œ	15			
9				
1 5 5	•			† <u> </u>
9,4				

The tab connector 900-S-7,5 with double solder termination and a pitch of 7,5 mm is designed for 1x 2,8 mm or 1x 6,3 mm tab connector receptacles.

Depending on the respective application, the tab connectors of series 900 allow 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. Insulation receptacles ISO-25 (see also ISO product data sheet) can be used to insulate 2,8 mm or 6,3 mm tab receptacles.

Insulation 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-7,5	Length	Pcs
2	75.870.903	13,50	250
3	75.870.904	18,50	200
4	75.870.906	28,50	100
5	75.870.907	33,50	100
6	75.870.909	43,50	100
7	75.870.910	48,50	100
8	75.870.912	58,50	100
9	75.870.913	63,50	100
10	75.870.915	73,50	100
11	75.870.916	78,50	100
12	75.870.918	88,50	100
13	75.870.919	93,50	100
14	75.870.921	103,50	100
15	75.870.922	108,50	100
16	75.870.924	118,50	50
17	75.870.925	123,50	50

General Information

Pitch	7,5 mm
No. of poles	2 - 17

Technical Data

Overvoltage Category	III	III	II
Pollution Severity Level	3	2	2
Rated Voltage	500 V	630 V	1000 V
Rated Impulse Voltage	6 kV	6 kV	6 kV
Rated Insulation Voltage	750 V acc. to EN	60998-1	
Rated Current	6 A: with recepta		
Hole in PCB	ø 1,6 mm		
Other specifications	Indicated rated vo	•	pplications with

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	
71 ®	15 15	300 150	B C			
(1) ®	15 10	300 300	B D, E			

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-7,50
- Insulation receptacles 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)

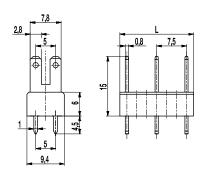


Tab connector 900-SH-7,5

Tab 2x 2,8 mm







The tab connector 900-SH-7,5 with double solder termination and a pitch of 7,5 mm is designed for 2x 2,8 mm tab connector receptacles.

Depending on the respective application, the tab connectors of series 900 allow 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. Insulation receptacles 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-7,5	Length	Pcs
2	37.870.903	13,50	250
3	37.870.904	18,50	200
4	37.870.906	28,50	100
5	37.870.907	33,50	100
6	37.870.909	43,50	100
7	37.870.910	48,50	100
8	37.870.912	58,50	100
9	37.870.913	63,50	100
10	37.870.915	73,50	100
11	37.870.916	78,50	100
12	37.870.918	88,50	100
13	37.870.919	93,50	100
14	37.870.921	103,50	100
15	37.870.922	108,50	100
16	37.870.924	118,50	50
17	37.870.925	123,50	50

General Information

Pitch	7,5 mm
No. of poles	2 - 17

Technical Data

Overvoltage Category	III	III	II
Pollution Severity Level	3	2	2
Rated Voltage	500 V	630 V	1000 V
Rated Impulse Voltage	6 kV	6 kV	6 kV
Rated Insulation Voltage	750 V acc. to EN	60998-1	
Rated Current	6 A: with receptacles 2,8; wire 1 mm² (16 AWG)		
Hole in PCB	ø 1,6 mm		
Other specifications	Indicated rated vo	· ·	pplications with

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	voitage	Group	AWG	NM	
AL ®	15	300	В			
77	15	150	С			
€P ®	15	300	В			
⊕ ®	10	300	D, E			

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-7,50
- Insulation receptacles ISO
- · Change of pitch
- Component mix of tab connector versions
- Tab connectors are also individually available (see single tabs GST-900)

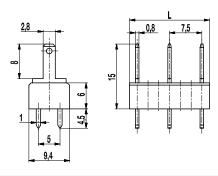


Tab connector 900-SUB-7,5

Tab 2,8 mm







The tab connector 900-SUB-7,5 with double solder termination and a pitch of 7,5 mm is designed for $2.8\,$ mm tab connector receptacles.

Depending on the respective application, the tab connectors of series 900 allow to plug in bare, partially or fully insulated tab receptacles according to DIN 46247. Insulation receptacles ISO-110 (see also ISO product data sheet) can be used to insulate 2,8 mm tab receptacles.

Insulation 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-7,5	Length	Pcs
2	12.870.903	13,50	250
3	12.870.904	18,50	200
4	12.870.906	28,50	100
5	12.870.907	33,50	100
6	12.870.909	43,50	100
7	12.870.910	48,50	100
8	12.870.912	58,50	100
9	12.870.913	63,50	100
10	12.870.915	73,50	100
11	12.870.916	78,50	100
12	12.870.918	88,50	100
13	12.870.919	93,50	100
14	12.870.921	103,50	100
15	12.870.922	108,50	100
16	12.870.924	118,50	50
17	12.870.925	123,50	50

General Information

Pitch	7,5 mm
No. of poles	2 - 17

Technical Data

Overvoltage Category	III	III	II
Pollution Severity Level	3	2	2
Rated Voltage	500 V	630 V	1000 V
Rated Impulse Voltage	6 kV	6 kV	6 kV
Rated Insulation Voltage	750 V acc. to EN	60998-1	
Rated Current	6 A: with receptacles 2,8; wire 1 mm² (16 AWG)		
Hole in PCB	ø 1,6 mm		
Other specifications	Indicated rated vo	· ·	pplications with

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; tin plated brass

Approvals

	Current	voitage	Group	AWG	NM	
AI ®	15	300	В			
74	15	150	С			
®	6	300	B, D, E			

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-7,50
- Insulation receptacles 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)

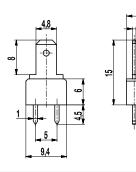


Tab connector 900-SUC-7,5

Tab 4,8 mm







The tab connector 900-SUC-7,5 with double solder termination and a pitch of 7,5 mm is designed for 4,8 mm tab connector receptacles.

Depending on the respective application, the tab connectors of series 900 allow to plug in bare, partially or fully insulated tab receptacles according to DIN 46247. Insulation receptacles ISO-187 (see also ISO product data sheet) can be used to insulate 4,8 mm tab receptacles.

Insulation 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-SUC-7,5	Length	Pcs
2	17.870.903	13,50	250
3	17.870.904	18,50	200
4	17.870.906	28,50	100
5	17.870.907	33,50	100
6	17.870.909	43,50	100
7	17.870.910	48,50	100
8	17.870.912	58,50	100
9	17.870.913	63,50	100
10	17.870.915	73,50	100
11	17.870.916	78,50	100
12	17.870.918	88,50	100
13	17.870.919	93,50	100
14	17.870.921	103,50	100
15	17.870.922	108,50	100
16	17.870.924	118,50	50
17	17.870.925	123,50	50

General Information

Pitch	7,5 mm
No. of poles	2 - 17

Technical Data

lli .	II	
2	2	
V 630	V 1000 V	
6 k\	6 kV	
750 V acc. to EN 60998-1		
16 A: with receptacles 4,8; wire 2,5 mm² (14 AWG)		
ø 1,6 mm		
•	er to applications with	
	V 630 V 6 kV to EN 60998-1 receptacles 4,8; v	

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	voitage	Group	AWG	NM
AL ®	15	300	В		
77	15	150	С		
SP ®	15	300	В		
Ø₽°	10	300	D, E		

- Consecutive numbering
- · Special marking according to drawing
- Self-adhesive marking strip BST-7,50
- Insulation receptacles 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)

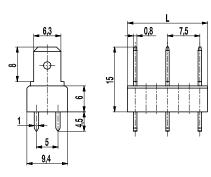


Tab connector 900-SUN-7,5

Tab 6,3 mm







The tab connector 900-SUN-7,5 with double solder termination and a pitch of 7,5 mm is designed for 6,3 mm tab connector receptacles.

Depending on the respective application, the tab connectors of series 900 allow to plug in bare, partially or fully insulated tab receptacles according to DIN 46247. Insulation receptacles ISO-25 and ISO-250 (see also ISO product data sheet) can be used to insulate 6,3 mm tab receptacles.

Insulation sockets are available for $6.3~\mathrm{mm}$ tab connectors with double-spring contacts (see also ISO-900 product data sheet).

Part Numbers

No. of poles	900-SUN-7,5	Length	Pcs
2	47.870.903	13,50	250
3	47.870.904	18,50	200
4	47.870.906	28,50	100
5	47.870.907	33,50	100
6	47.870.909	43,50	100
7	47.870.910	48,50	100
8	47.870.912	58,50	100
9	47.870.913	63,50	100
10	47.870.915	73,50	100
11	47.870.916	78,50	100
12	47.870.918	88,50	100
13	47.870.919	93,50	100
14	47.870.921	103,50	100
15	47.870.922	108,50	100
16	47.870.924	118,50	50
17	47.870.925	123,50	50

General Information

Pitch	7,5 mm
No. of poles	2 - 17

Technical Data

Overvoltage Category	III	III	II		
Pollution Severity Level	3	2	2		
Rated Voltage	500 V	630 V	1000 V		
Rated Impulse Voltage	6 kV	6 kV	6 kV		
Rated Insulation Voltage	750 V acc. to EN 60998-1				
Rated Current	16 A: with receptacles 6,3; wire 2,5 mm² (14 AWG)				
Hole in PCB	ø 1,6 mm				
Other specifications		Indicated rated voltages refer to applications with insulation 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	6,3 x 0,8 mm; tin plated brass

Approvals

	Current	voitage	Group	AWG	NM	
AL ®	15	300	В			
77	15	150	С			
€P ®	15	300	В			
⊕ ®	10	300	D, E			

- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-7,50
- Insulation receptacles 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)



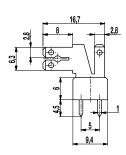
Tab connector 900-W-7,5

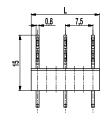
Tabs with 90° angle











The tab connector 900-W-7,5 with double solder termination and a pitch of 7,5 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 tab connectors of series 900 allow 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. Insulation receptacles ISO-25 and ISO-250 (see also ISO product data sheet) can be used to insulate 6,3 mm tab receptacles.

Part Numbers

No. of poles	900-W-7,5	Length	Pcs
2	27.870.903	13,50	250
3	27.870.904	18,50	200
4	27.870.906	28,50	100
5	27.870.907	33,50	100
6	27.870.909	43,50	100
7	27.870.910	48,50	100
8	27.870.912	58,50	100
9	27.870.913	63,50	100
10	27.870.915	73,50	50
11	27.870.916	78,50	50
12	27.870.918	88,50	50
13	27.870.919	93,50	50
14	27.870.921	103,50	50
15	27.870.922	108,50	50
16	27.870.923	118,50	50
17	27.870.924	123,50	50

General Information

Pitch	7,5 mm
No. of poles	2 - 17

Technical Data

- Common Data					
Overvoltage Category	III	III	II		
Pollution Severity Level	3	2	2		
Rated Voltage	500 V	630 V	1000 V		
Rated Impulse Voltage	6 kV	6 kV	6 kV		
Rated Insulation Voltage	750 V acc. to EN 60998-1				
Rated Current	6 A: with receptacles 2,8; wire 1 mm² (16 AWG) 16 A: with receptacles 6,3; wire 2,5 mm² (14 AWG)				
Hole in PCB	ø 1,6 mm				
Other specifications	Indicated rated voltages refer to applications with insulation 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	
71 ®	15 15	300 150	B C			
®	15 10	300 300	B D, E			

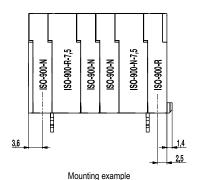
- Consecutive numbering
- Special marking according to drawing
- Self-adhesive marking strip BST-7,50
- Insulation receptacles ISO
- Change of pitch
- Component mix of tab connector versions
- Tab connectors are also individually available (see single tabs GST-900)



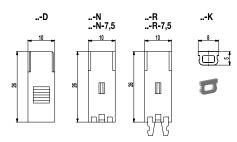
Insulation sockets ISO-900

Accessories





Versions



Version D: Cover
Version N: Standard insulation socket
Version R: Insulation socket with snap-fits
Version K: Coding keys to block empty chambers

ISO-900 insulation 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 insulation 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.

Insulation 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 insulation socket with latching hook is allocated, thus preventing incorrect connections.

Part Numbers

Type	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).

Material

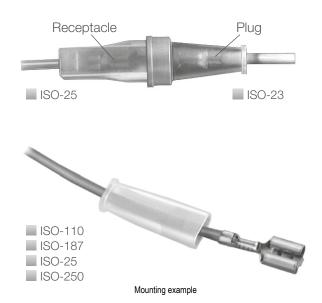
Moulding	PA, red, V-0
Comparative Tracking Index	CTI ≥ 600
Insulating Group	1
Temperature Range	-40°C up to 100°C

- Special marking according to drawing
- ISO-900 insulation sockets can be provided as multipole combinations. Please enclose a drawing.
- Spacer 2,5 mm (ISO-900-Z)



Insulation receptacles ISO

Accessories



Depending of their scope of application, insulation receptacles 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 insulation receptacles. 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.

General Information

Additional Information By means of using both ISO-23 (tab connector side) and ISO-25 insulation receptacles, 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
Comparative Tracking Index	CTI ≥ 600
Insulating Group	I
Temperature Range	PE: ca. 70 up to 80°C, short-time ca. 90°C PP: up to 80°C, short-time ca. 140°C

Options / Accessories

· Insulation receptacles in other colours

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 mm² (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 mm² (16 AWG)	21 x 8 x 4,5 mm	10.000
10.838.006	ISO-23-PEN	natural	6,3	up to 2,5 mm² (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 mm² (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 mm² (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.



Single tabs GST-900

Accessories

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 insulation receptecles.

Technical Data

Rated Current Tab 2,8: 6 A Tab 4,8: 16 A

Tab 6,3: 25 A please see DIN 46 249

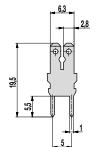
Material

Tab Tin plated brass, thickness 0,8 mm

Options / Accessories

• Tab GST-900-S with press-fit pins

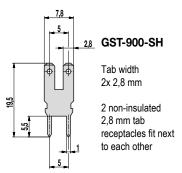
Versions

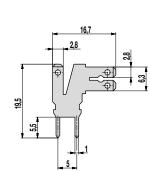


GST-900-S

Tab width 1x 6,3 mm / 2x 2,8 mm

For a non-insulated 2,8 mm or an insulated 6,3 mm tab receptacle

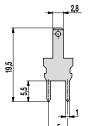




GST-900-W

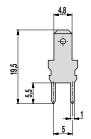
Tab width 1x 2,8 mm 1x 6,3 mm / 2x 2,8 mm

For a non-insulated 2,8 mm or an insulated 6,3 mm tab receptacle



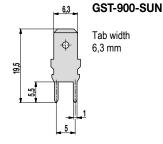
GST-900-SUB

Tab width 2,8 mm



GST-900-SUC-4,8

Tab width 4,8 mm



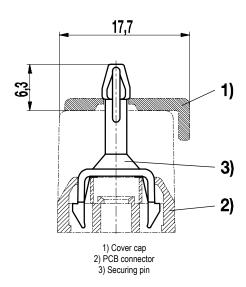
Part numbers

Туре	Part number	Pcs	
GST-900-S	10.351.107	1.000	
GST-900-SH	10.351.111	1.000	
GST-900-SUB	10.371.106	1.000	
GST-900-SUC-4,8	10.361.108	1.000	
GST-900-SUN	10.351.113	1.000	
GST-900-W	10.351.109	1.000	



Securing pin BEF-983

Accessories



The securing pins BEF-983 are used to attach the cover caps onto series 982 and 983 PCB connectors.

Both pins are pressed into the far end empty pole compartments of the series 982 and 983 PCB connectors.

Part Numbers

No. of poles	BEF-983	Length	Pcs
1	10.476.008		1.000

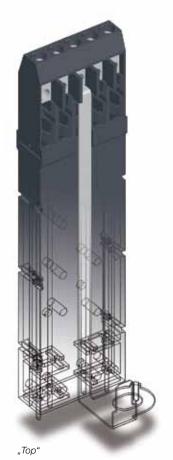
General Information

Usable with PCB connectors series 982 and 983, cover caps 982-A and 983-A

Material

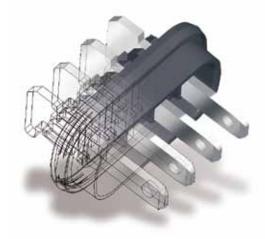
Moulding	PA, grey, V-0	
Temperature Range	-30°C up to 80°C	

Looking for a Customer Designed Solution?



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.

Our Product Information Centre will assist you with every technical inquiry.

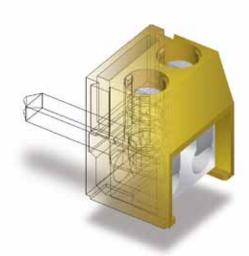
- Please, call us under +49 6181 105-151.
- Contact us via e-mail at products@wecogroup.com.
- You want us to pay you a visit? We are pleased to arrange an appointment.
- You would prefer a visit in Hanau?
 Of course, you are welcomed anytime.

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.



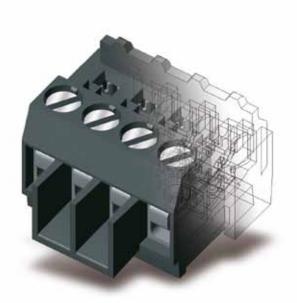
"Stable bridged"

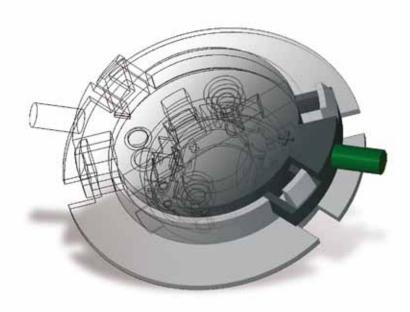
Terminal connector in 5 mm pitch with one potential but two screw connections and a plug connector at the back. This allows a connection to other terminals. For the customer the housing was made with buttercup yellow material (similar to RAL 1021).

"Long-ribbed"

A plug connector with a pitch of 3.5 mm, with a anti-twist peg and two extra-long quiding ribs.

yuiding ribs.
In the plug connection area, tabs and round plug pins could be contacted.



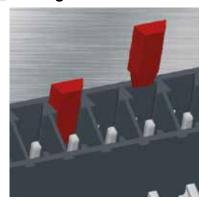


"Solar"

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.

Part number	Туре	Colour	Pcs
20.496.025	120-K/12 KODIEREL.	red	120
17.496.025	120-K/12 KODIEREL. LG	light grey	120

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
24.499.012	BST-7,50/19	7,50 mm	141 mm	3,5 mm	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

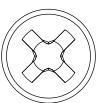


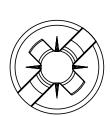
Our standard products are fitted with slotted screws.

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.





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 2000m 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)	P	ollution degre	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 4.3.3.4.2), 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

using electrical Energy 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

	torting								_			
			Minim	num creep	age dista	nces						
	Printed wir	ing material										
		Pollution degree										
Voltage	1	2	1		2			3				
r.m.s. 1)	All material groups	All material groups	All material groups	Material group	group	group	Material group	group	group			
	1	except IIIb	ĺ		l II	III		l II	III 2)			
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			

- - his voltage is for functional insulation, the working voltage, 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 F3a or Table F3b, 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 mains (see 4.3.2.2.2), the highest rms. voltage which can occur in the system, equipment or internal circuit wh 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 voltage of the supply system ¹⁾			Rated impu	se voltage 2)		
based on IEC		Overvoltage catagory 4)				
Three phase	Single phase] I II III IV				
V	V	V	V	٧	٧	
	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	

- See Annex B for application to existing different low-voltage mains and their nominal
- 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
- See 4.3.3.2.2 for an explanation of the overvoltage catagories.



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 = CTIInsulant II: 400 = CTI < 600Insulant IIIa: 175 = CTI < 400Insulant 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.

DIN EN 60999-1, table 1 (extract) Relation between rated connection abilities and wires

	Theoretical diameter of the largest conductor								
		metric			AWG				
	solid		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 ⁴	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 AWG 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].

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.

T2 DIN EN 60998-1, table 2 (extract)
Relation between rated connection abilities and testing current

Rated Cross-section	Load capacity
mm²	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
35	125

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 %



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^{* =} Pitch 7,62 mm

Catalogue overview

Electronic

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2: Pitch 5 mm

3: Pitch 5,08 mm

4: Pitch 7,5 mm

5: Pitch >10 mm

6: SMD & THR

982-W **

^{** =} Pitch 9,52 mm

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