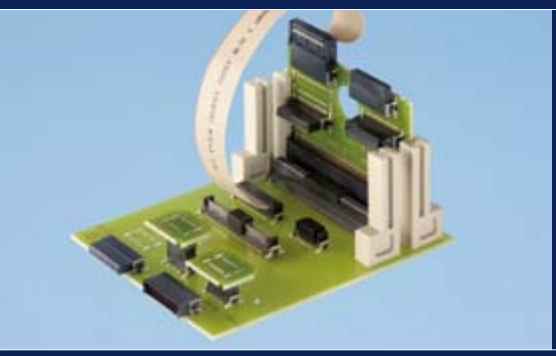

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| Catalog E 074473 | 12/08 | Edition 7e |

1.27 mm Connectors SMC

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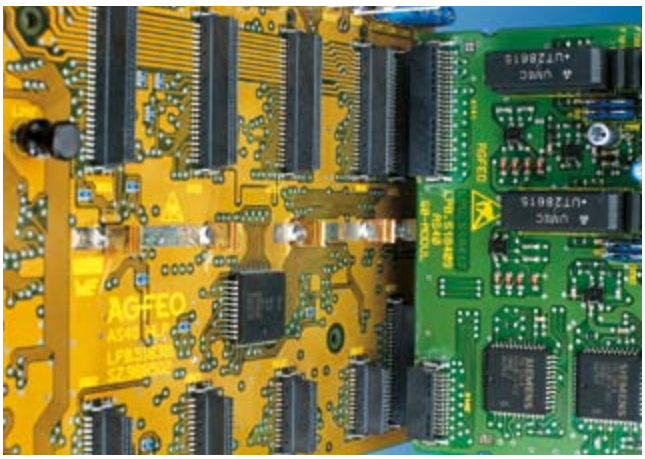
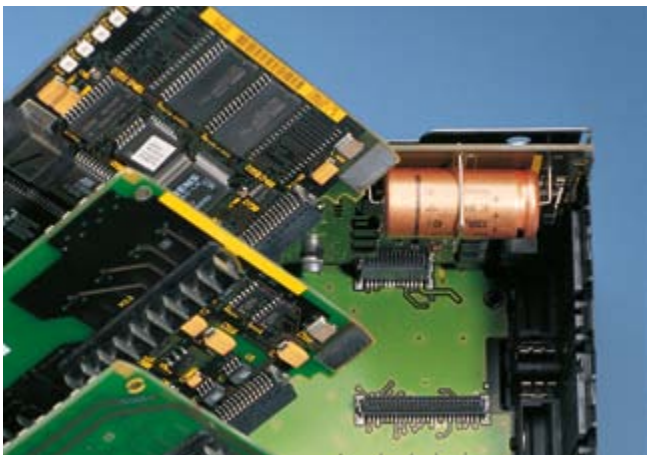
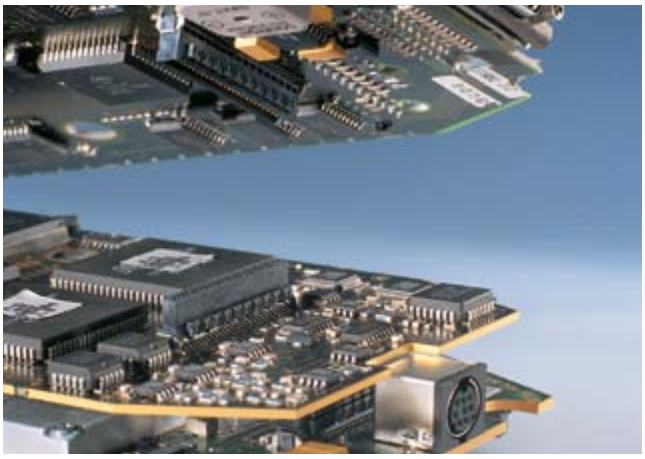


Motherboard to daughter card in an ISDN equipment

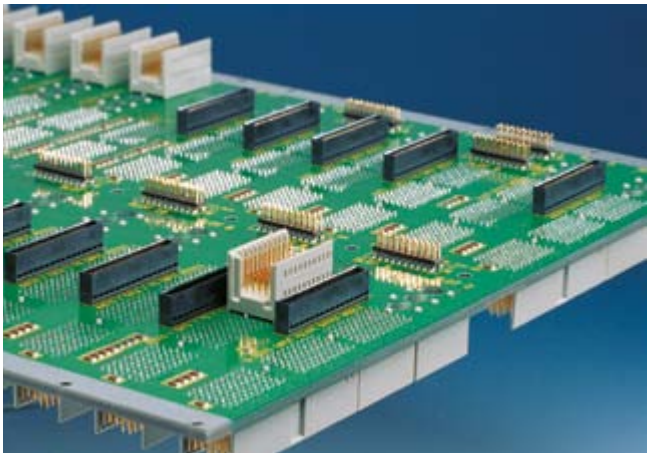


Motherboard to daughter card for industrial PLCs

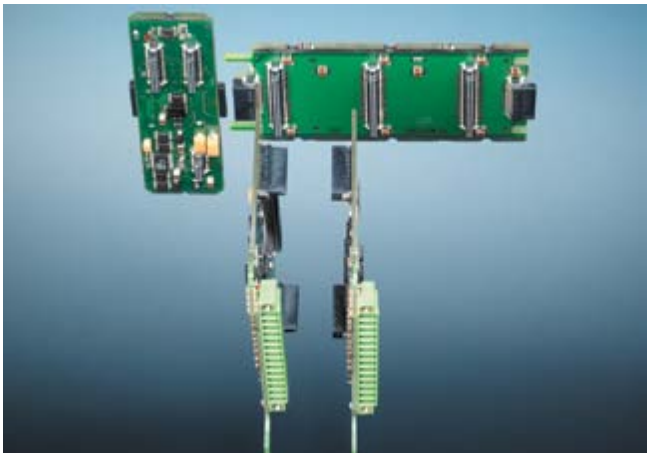


Mezzanine cards in mobile phone test equipment

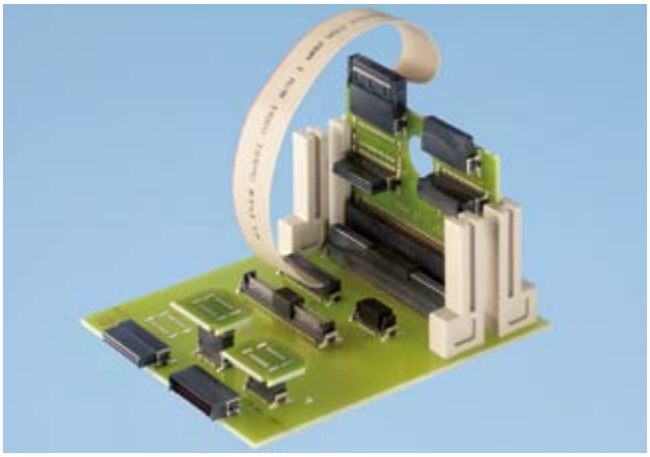
Mezzanine cards for industrial automation



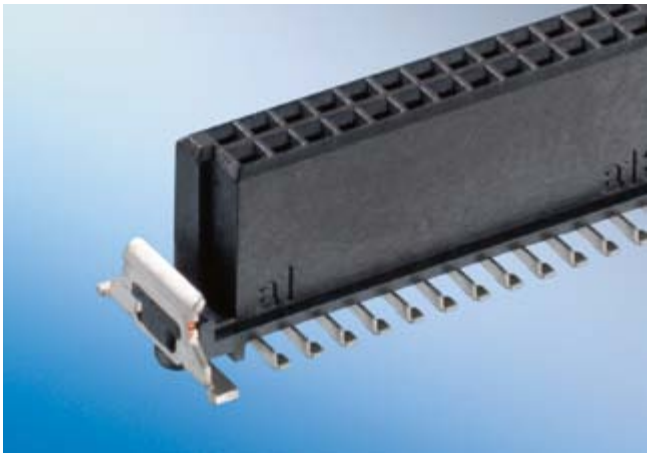
Board to cable for video coding backplane



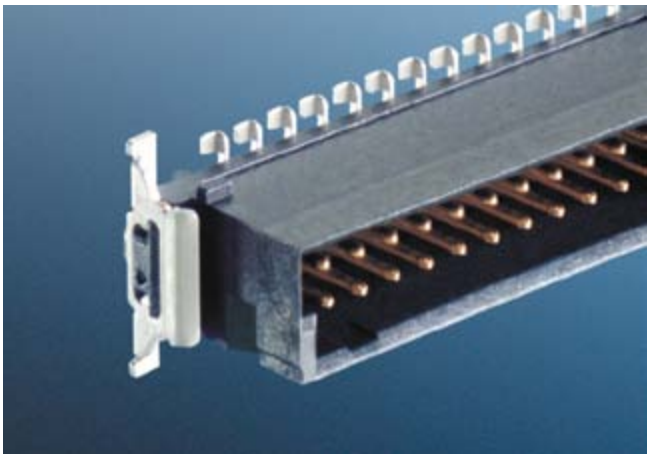
Versatile configurations in an industrial controller



Board-to-board and board-to-cable applications



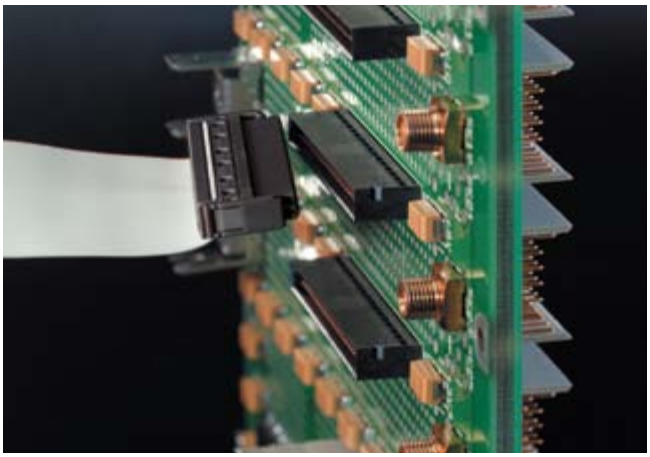
Wide entry area alignment tolerance



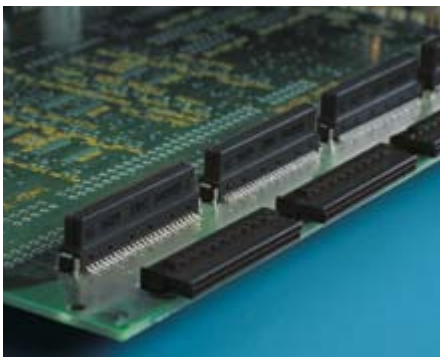
Polarization of the mating face

Guaranteed coplanarity

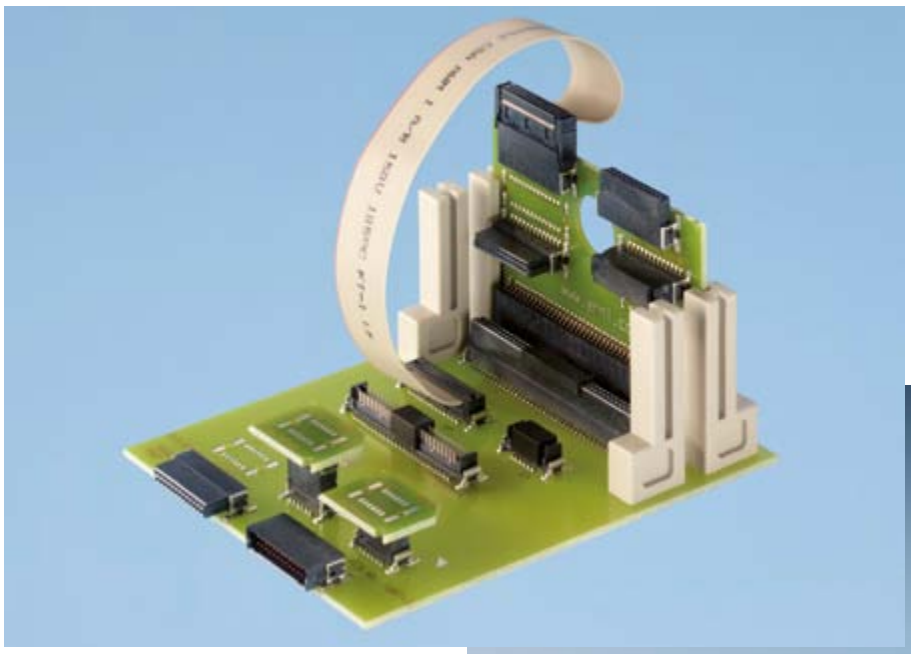
Various pin versions



Rear I/O pressfit connectors on backplanes

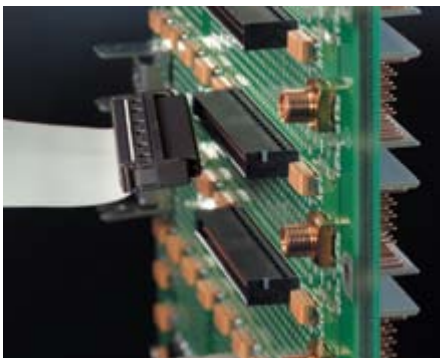


Subassembly Design - Flexibility in Application
Straight and right angle male and female connectors, and other available options permit many configurations and variations for maximum flexibility in designing modules and manufacturing boards.



Solution of Choice for Modern Subassembly Applications
Printed circuit board solutions for all kind of branches.

Variable Board-to-Board Height
Flexible Board-to-Board heights ranging from 8.0 mm to 20.0 mm for subassembly solutions.

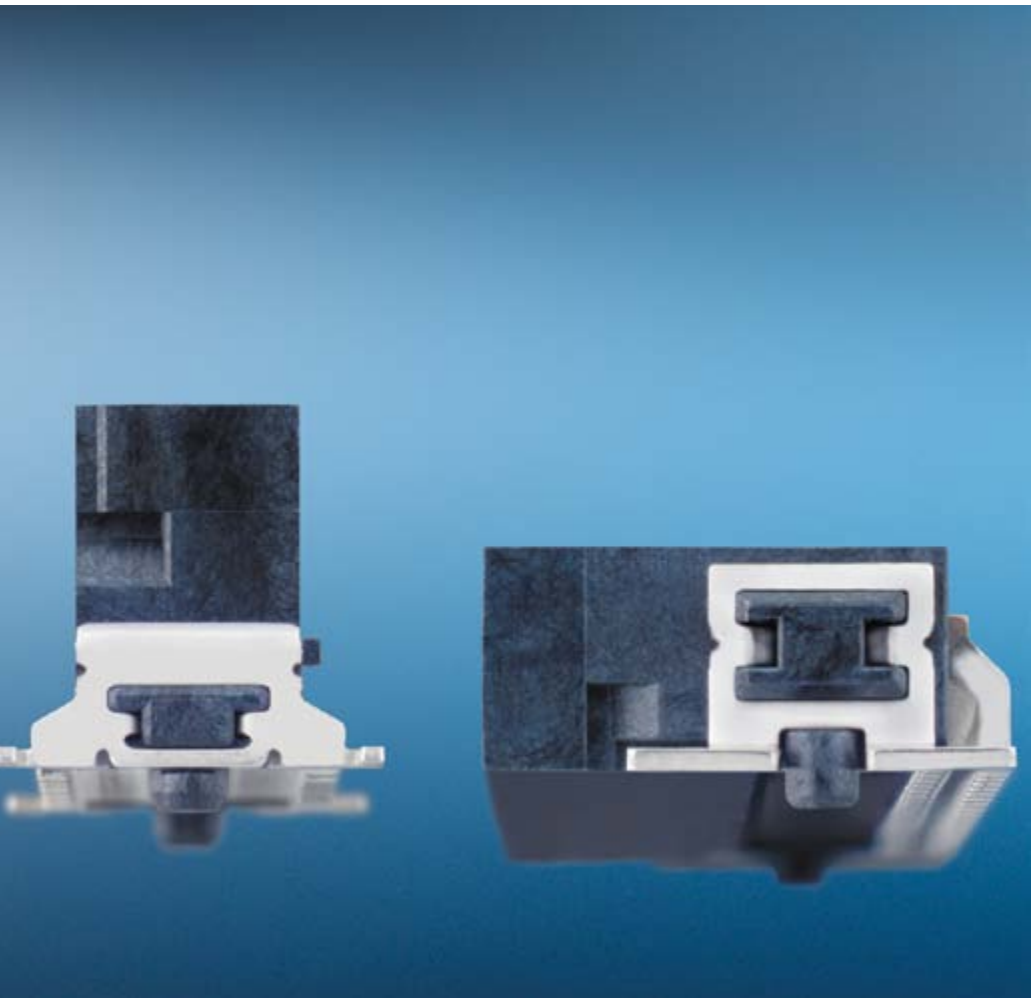


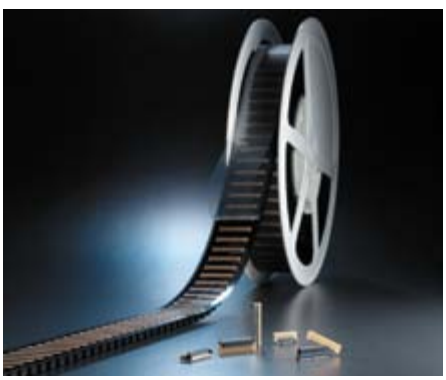
Rear I/O connector on Multi-layer Backplanes
The pressfit versions of the SMC male connectors are ideal for transferring I/O signals on the rear side of a backplane.

Simple I/O Signal Transfer with „Snap-Lock“ Female Cable Connector
The female IDC cable connectors with snap-lock feature make transferring I/O signals easy and also saves space by eliminating the need for ejector latches.

Completely Automated Manufacturing of SMC Connectors

SMC connectors are manufactured using controlled state of the art automated manufacturing equipment.



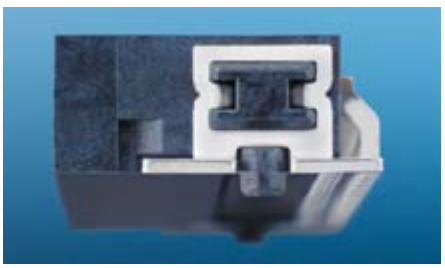


Safe Packaging for Fully Automated Assembly

The antistatic tape and reel packaging not only protects the high-precision contacts of our SMC connectors, but also permits placement of connectors by automated pick and place equipment.

Controlled SMT Reflow Soldering Process

The heat-resistant thermoplastic insulation body and precision coplanar contacts permit a controlled SMT soldering process.



Reliable Insertion and Removal

The metal SMT mounting clip ensures a reliable connection to the printed circuit board. As a result of its special design, it can handle high insertion and withdrawal forces. The integrated metal clips are soldered during the SMT process, thus eliminating the need for an additional operation such as rivets.

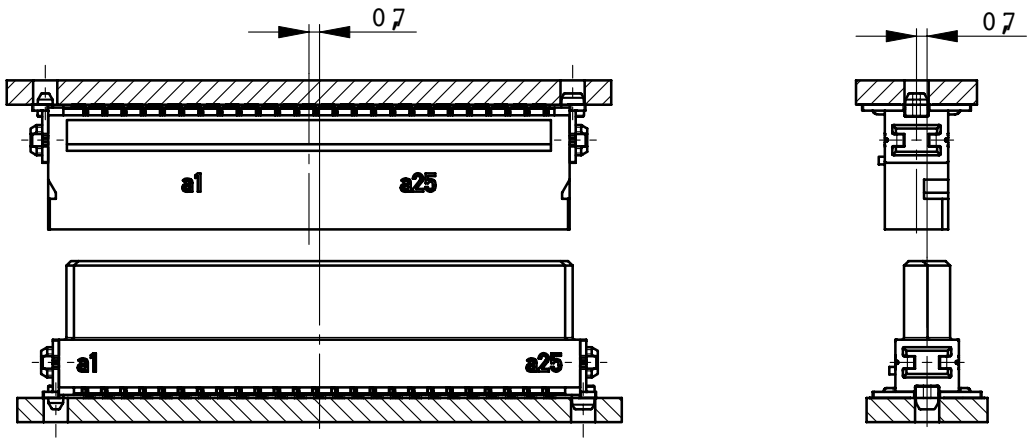
Quality Check

A full inspection of the female contact apertures and coplanarity of our SMC connectors guarantees maximum reliability for your printed circuit boards.

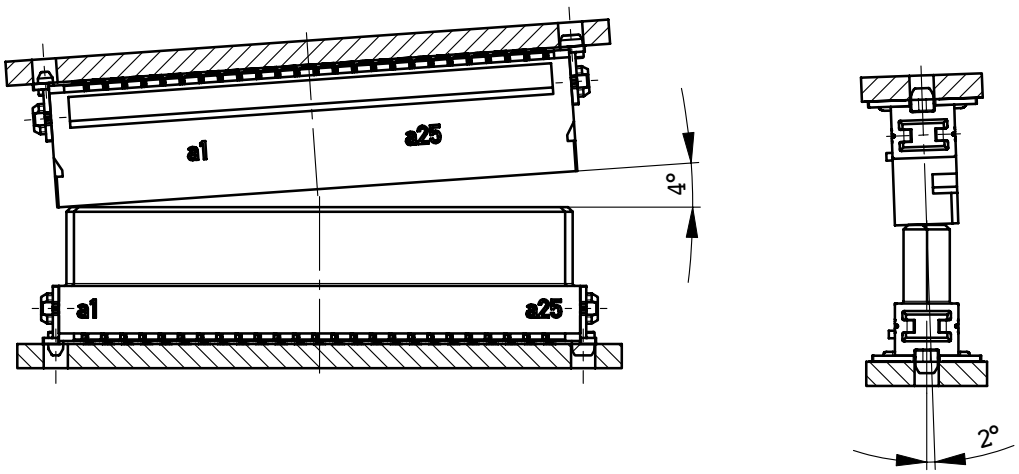
Easy Recognition and Secure Handling

The black insulation body ensures easy visual recognition by the automatic pick and place equipment.

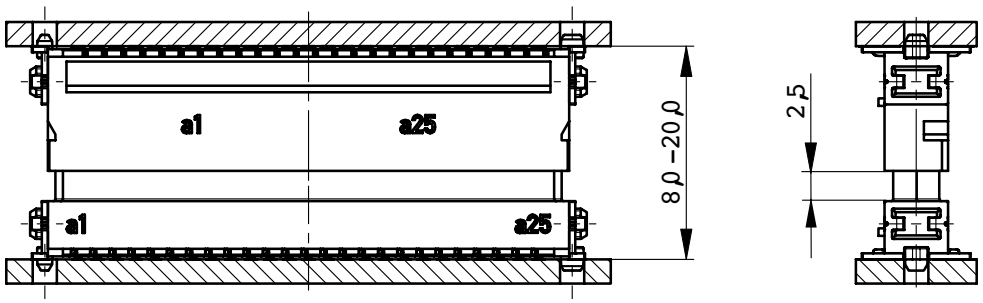
Allowed misalignment tolerances longitudinal and transverse axes: ±0.7 mm



Allowed angular inclination tolerances longitudinal: ±4°; transverse: ±2°



Wipe length max. 2.5 mm / Board-to-Board distance 8-20 mm

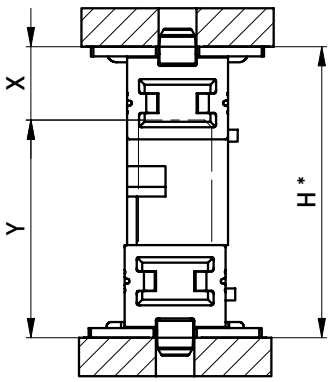


All dimensions in mm

1.27 mm Connectors SMC
Stacking Dimensions

Mezzanine

Messerleiste (Steckhöhe X)
Vertical Male (Stacking height X)



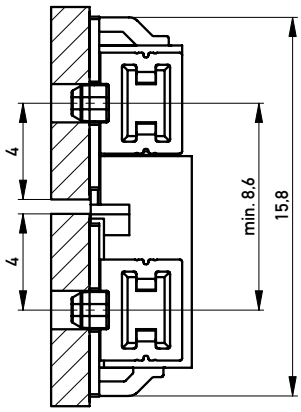
X	Y	H *
1,75	6,25	8,00 - 9,50
3,25	6,25	9,50 - 11,00
1,75	9,05	10,80 - 12,30
3,25	9,05	12,30 - 13,80
4,85	9,05	13,90 - 15,40
1,75	13,65	15,40 - 16,90
3,25	13,65	16,90 - 18,40
4,85	13,65	18,50 - 20,00

Federleiste (Steckhöhe Y)
Vertical Female (Stacking height Y)

* Maximum Board-to-Board height is achieved taking 1,5 mm wipe length in account.

Extender card

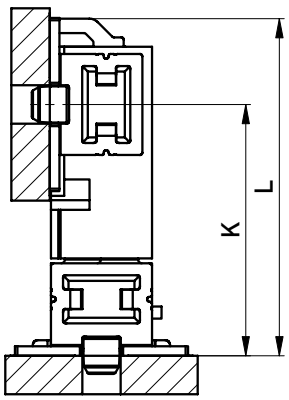
Abgewinkelte Federleiste
Right Angle Female



Abgewinkelte Messerleiste
Right Angle Male

Motherboard to daughter card

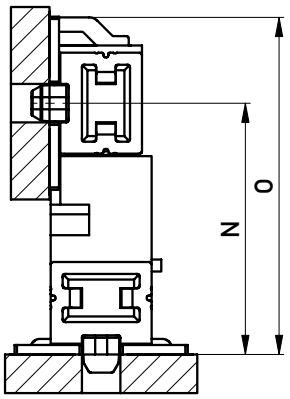
Abgewinkelte Messerleiste
Right Angle Male



Kmin.	L	Y
7,65	11,25	6,25
10,45	14,05	9,05
15,05	18,65	13,65

Federleiste (Steckhöhe Y)
Vertical Female (Stacking height Y)

Abgewinkelte Federleiste
Right Angle Female



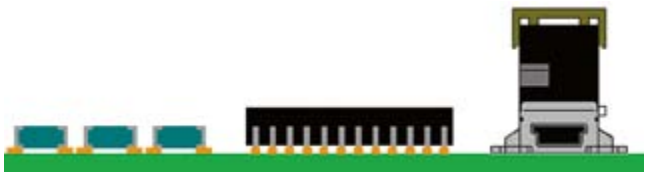
Nmin.	O	X
8,95	12,55	1,75
10,45	14,05	3,25
12,05	15,65	4,85

Messerleiste (Steckhöhe X)
Vertical Male (Stacking height X)

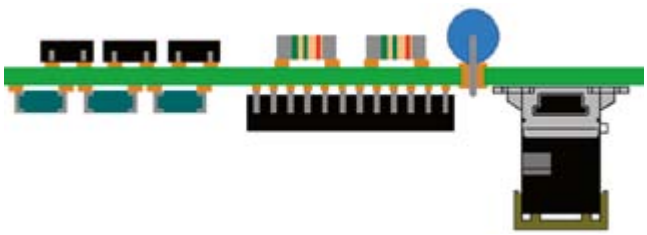
1.27 mm Connectors SMC
Overhead Soldering

For industrial solutions, PCBs today are almost always assembled on both sides. The circuits are often very complex and in most cases it is not possible to assemble large components, such as connectors exclusively on one side. This leads to an increase of the importance of overhead solder able components.
Overhead soldering does not imply to the often implicated gluing and dip soldering process of an SMT assembled backplane, instead it is a two sided reflow solder process without an additional gluing process.
ERNI SMC connectors apply to this demand and are therefore suitable for overhead SMT soldering. While soldering the 2nd side, SMT overhead connectors are found on the “solder” side, meaning on the upside down side, whereas this already soldered side is completely melted again. The components have to be held up by adhesion and cohesion forces of the liquid solder paste. The adhesion forces are very critical and they grow proportional with the size of the solder pad. Adjusting the size of the solder pad according to the weight of the connector, assures that the components will definitely stay in their position. This enables us to offer you an additional excellent option from our SMC family.

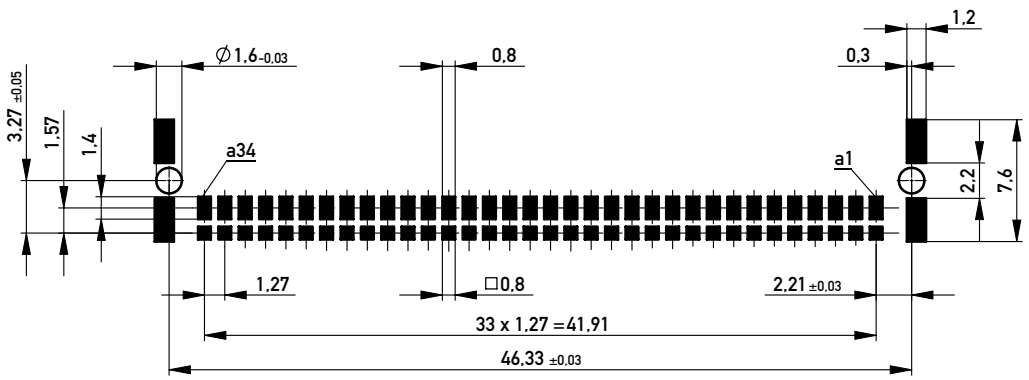
PCB side 1 Solder paste printing / Component assembly / Reflow solder process



PCB side 2 Solder paste printing / Component assembly / Reflow solder process



PCB Layout for Right Angle Connectors



Layout for vertical versions complies with the standard layout.

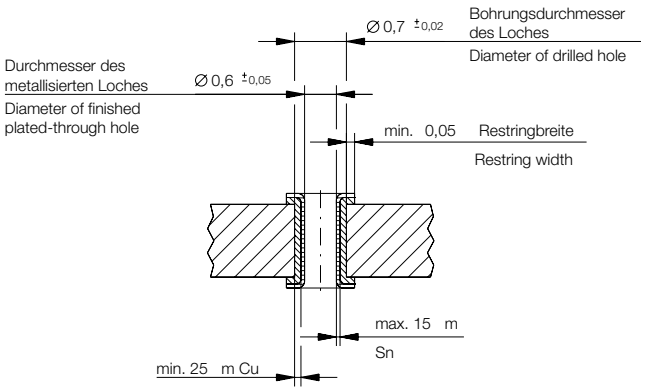
Ordering Information

Pressfit Tooling for Male Connectors

Design	Comment	Upper Tool Part Number	Lower Tool Part Number
Vertical Male 12 pin Pressfit Type Q	with Quick Change	**220160**	**220165**
Vertical Male 26 pin Pressfit Type Q	with Quick Change	**220162**	**220167**
Vertical Male 50 pin Pressfit Type Q	with Quick Change	**220164**	**220169**
Vertical Male 68 pin Pressfit Type Q	with Quick Change	**220644**	**220645**
Vertical Male 80 pin Pressfit Type Q	with Quick Change	**220646**	**220647**

Hole Design

Schichtaufbau im metallisierten Loch für EN*-Kontakt
Metal plating of plated-through hole for EN*-contact

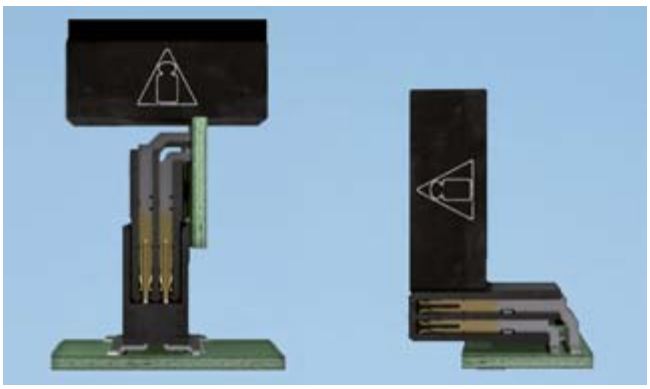


* EN = ERNI Nadelöhr / ERNI eye of the needle

1.27 mm Connectors SMC

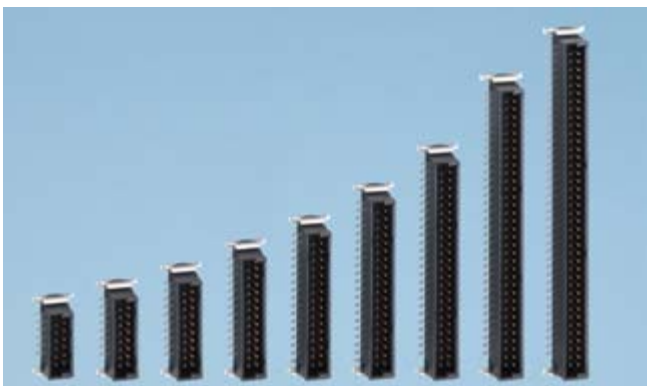
Advantages and benefits of 20-year development history

The ultra-reliable, dual-beam female contact, which mates on the bended, homogeneous surface, guarantees secure contact mating even in demanding environments.



The board anchors' outstanding retention forces minimize stress on the signal contacts while maximizing resistance to shock and vibration. The anchors guarantee a robust surface mount connection.
Documented shear force and tear-off force inspire confidence in surface mount connectors during their entire lifetime
Example SMC 50-pin:

- Shear force > 1000 N
- Tear-off force > 100 N



The closed insulation body allows male connectors to be backfilled on the PCB. This effectively prevents unwanted media to enter and enhances the excellent resistance against mechanical stress. Distortion-resistant, smooth contour of the insulation body assures mating reliability even after many years of use.

Geometrically different locating pegs for exact board placement allow best tolerance compensation for positive and negative tolerances.

	Standard	Type B, Type Q and IDC Assemblies	Board-on IDC with AWG30 flat ribbon cable 250 mm
Number of Pins		12, 26, 50, 68, 80	12, 26, 50
Technical Data			
Climate category	DIN EN 60068-1 test b	-55/125/56	-55/125/56
Temperature range		-55/125 °C -55/105 °C (IDC Assemblies)	-55/105 °C
Current rating per contact	IEC60512 test 5b	20°C 70°C 100°C 12pin 1.6 A 1.1 A 0.7 A 26pin 1.3 A 0.9 A 0.6 A 50pin 1.1 A 0.8 A 0.5 A 68pin 1.0 A 0.8 A 0.5 A 80pin 1.0 A 0.8 A 0.5 A	20°C 70°C 100°C 12pin 1.8 A 1.1 A 0.4 A 26pin 1.6 A 1.0 A 0.3 A 50pin 1.3 A 0.8 A 0.3 A
Air – and creepage distance		0.4 mm	0.4 mm
Operating voltage	IEC 60664	The permissible operating voltages depend on the customer application and on the applicable or specified safety requirements. Insulation coordination according to IEC 60664-1 has to be regarded for the complete electrical device. Therefore, the maximum creepage and clearance distances of the mated connectors are specified for consideration as a part of the whole current path. In practice, reductions in creepage or clearance distances may occur due to the conductive pattern of the printed board or the wiring used, and have to be taken into account separately. As a result the creepage and clearance distances for the application may be reduced compared to those of the connector.	
Dielectric strength	IEC 60512 test 4a	contact – contact 500 V_{rms}	contact – contact 500 V_{rms}
Contact resistance	IEC 60512 test 2a	< 25 mΩ < 10 mΩ (IDC clamp)	< 10 mΩ (IDC clamp)
Insulation resistance	IEC 60512 test 3a	> 10^4 MΩ	> 10^4 MΩ
Vibration, sine	IEC 60512 test 6d	10 – 2000 Hz 20g	10 – 2000 Hz 20g
Contact disturbance (while vibration test)	IEC 60512 test 2e	< 1 µs	< 1 µs
Shock, halfsine	IEC 60512 test 6c	50 g 11 ms	50 g 11 ms
Contact disturbance (while shock test)	IEC 60512 test 2e	< 1 µs	< 1 µs
Mechanical operation (mating cycles)	IEC 60512 test 9a	> 500 mating cycles	-
Insertion and withdrawal force	IEC 60512 test 13b	12pin: 6 N 68pin: 35 N 26pin: 13 N 80pin: 40 N 50pin: 26 N	-
Gauge retention force	IEC 60512 test 16e	0.1 N min.	-

1.27 mm Connectors SMC
Electrical and Mechanical Characteristics

	Standard	Type B, Type Q and IDC Assemblies	Board-on with AWG30 flat ribbon cable 250 mm
Number of Pins		12, 26, 50, 68, 80	12, 26, 50
Process-conditions			
Solder temperature max.	IEC 68-2-20		
Hand soldering temperature max.		3.5 s at 350 °C	3.5 s at 350 °C
Dip soldering temperature max.		10 s at 260 °C	10 s at 260 °C
Reflow soldering temperature max.	JEDEC J-STD-020C	20 - 40 s at 260 °C	20 - 40 s at 260 °C
Warning		soldering of pressfit connectors not to be recommended	-
Processing temperature (IDC connection)		0/55 °C	0/55 °C
Coplanarity		< 0.1 mm	< 0.1 mm
Housing Materials			
Plastic material		LCP	LCP
CTI value	IEC 112	CTI 175	CTI 175
UL flame rating		UL 94 V-0	UL 94 V-0
UL file		E 83005	E 83005
Contact Materials			
Base material		Cu alloy	Cu alloy
Mating area		gold plated	-
Termination area		Sn	Sn
Clip Materials			
Base material		Cu alloy	Cu alloy
Plating		Sn	Sn
Environment compatibility			
Recycling		no flame-retardent additives, no toxic additives allows easy recycling	
Product-approval			
UL		E 84703	E 84703

1.27 mm Connectors SMC

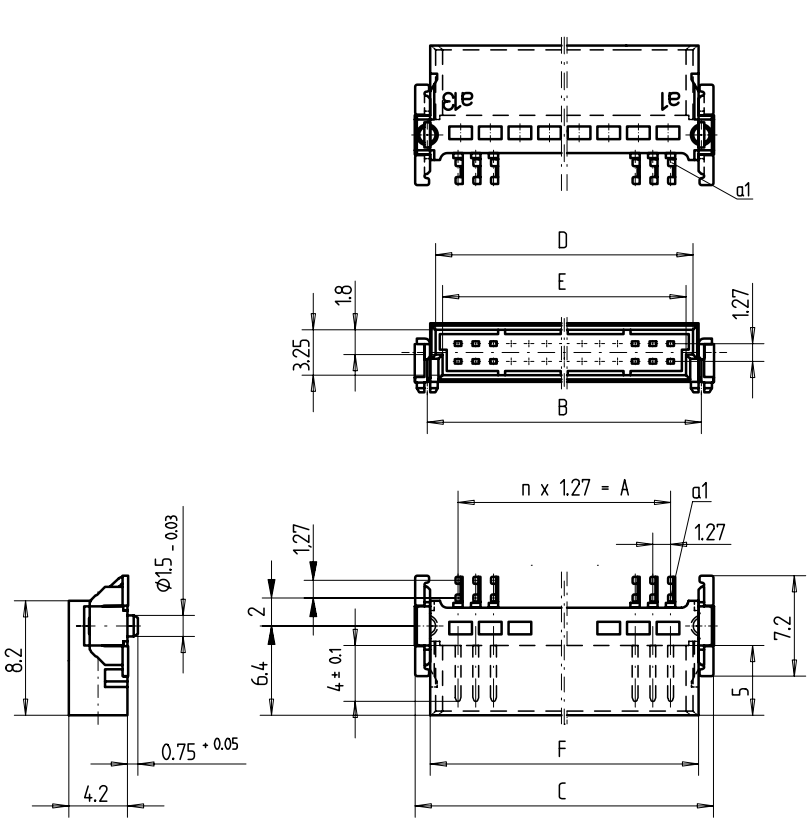
Electrical and Mechanical Characteristics

	Standard	Cable (PVC) for Cable Assemlies
Number of Pins		12, 26, 50, 68, 80
Cable Assembly		
Cross section		AWG30 / 7 / 0.06 mm^2
Conductor		Cu wire tin-plated
Marking	DIN 57207/ VDE 0207	Red
Insulation		PVC
Shore hardness		94 ±3 (Shore A)
Technical Data		
Temperature range		-20/105°C
Current rating		0.8 A at 20°C
Voltag rating		max. 150 V
Dielectric strength		1500 V_{rms}
Conductor resistance		≤ 350 Ω/km
Insulation resistance		≥ 100 MΩ x km at 20°C
Capacitance at 1 kHz		ground-signal-ground 60 pF/m
Inductance at 10 kHz		ground-signal-ground 0.5 µH/m
Impedance		ground-signal-ground 75 Ω
Crosstalk		Cable length 3 m: NE 2.6 / FE 3.8
Propagation delay		4.5 ns/m
UL flamability		UL 94 VW-1
Product-approval		
UL style		2678
CSA specification		AWM IA 105°, 150 V FT-1

1.27 mm Connectors SMC

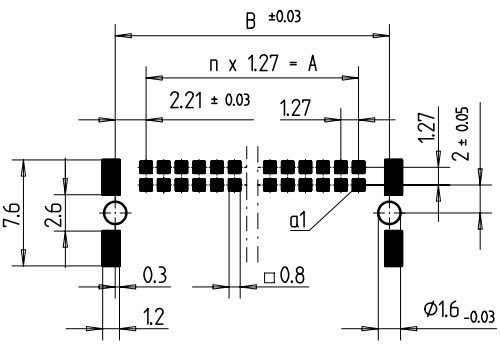
Right Angle Male Type B

Dimensional Drawings



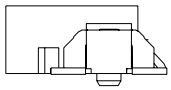
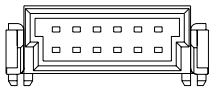
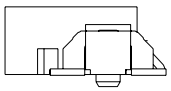
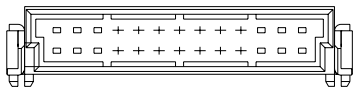
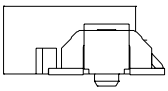
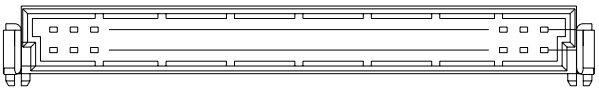
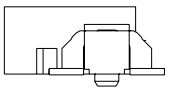
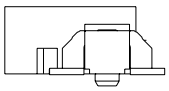
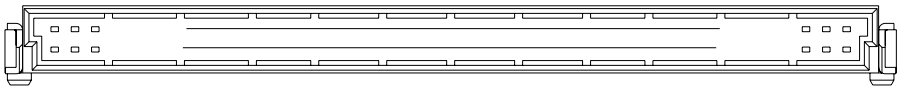
12	6.35	10.77	12.7	9.57	8.57	10.35
26	15.24	19.66	21.6	18.46	17.46	19.24
50	30.48	34.9	36.8	33.7	32.7	34.48
68	41.91	46.33	48.2	45.13	44.13	45.91
80	49.53	53.95	55.8	52.75	51.75	53.53
Polzahl *No. of contacts*	A	B	C	D	E	F

Leiterplatten-Layout Vorschlag für SMT
PCB-Layout Proposal for SMT



All dimensions in mm.

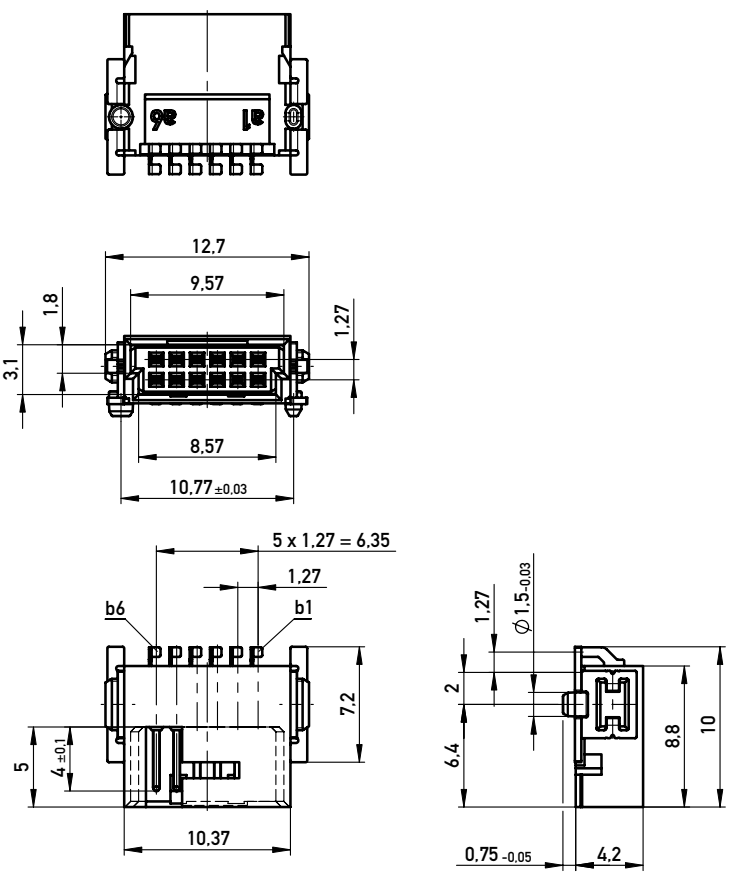
Ordering Information

Configuration	No. of Pins	Termination	Packaging	Part Number
				
Type B	12	SMT	Tape and reel/560 pcs	**054594**
				
Type B	26	SMT	Tape and reel/560 pcs	**054595**
				
Type B	50	SMT	Tape and reel/560 pcs	**054596**
				
Type B	68	SMT	Tape and reel/560 pcs	**114805**
				
Type B	80	SMT	Tape and reel/560 pcs	**114806**

1.27 mm Connectors SMC

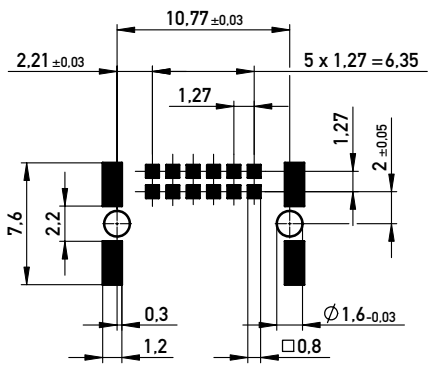
Right Angle Male Type B with Locking System

Dimensional Drawings



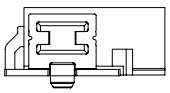
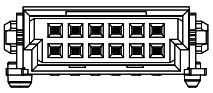
Leiterplatten-Layout Vorschlag für SMT

PCB-Layout Proposal for SMT



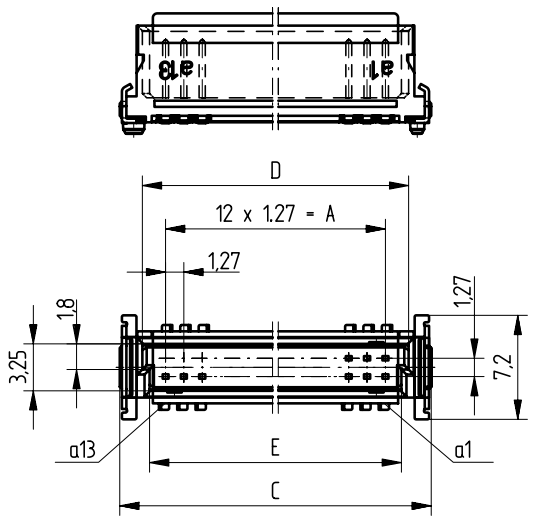
All dimensions in mm.

Ordering Information

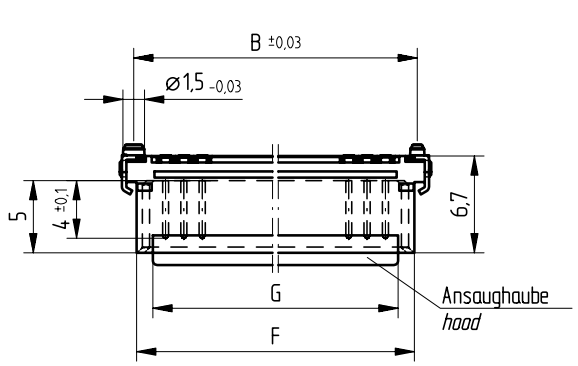
Configuration	No. of Pins	Termination	Packaging	Part Number
				
Type B	12	SMT	Tape and reel/560 pcs	**254273**

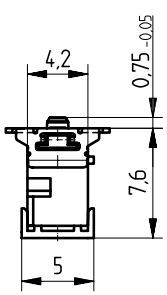
Dimensional Drawings

Connectors with Unmated Stacking Height 1.75 mm

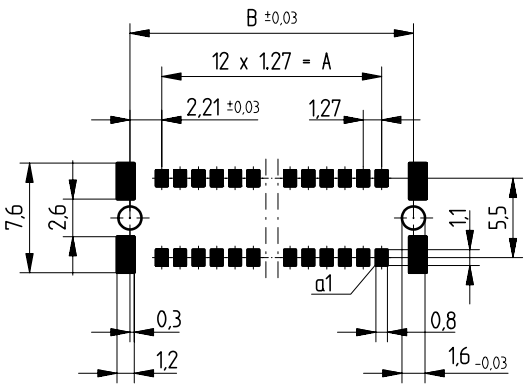


12	6.35	10.77	12.7	9.57	8.57	10.37	5.6
26	15.24	19.66	21.59	18.46	17.46	19.26	17
50	30.48	34.9	36.83	33.7	32.7	34.5	17
68	41.91	46.33	48.26	45.13	44.13	45.93	17
80	49.53	53.95	55.88	52.75	51.75	53.53	17
Polzahl *No. of contacts*	A	B	C	D	E	F	G





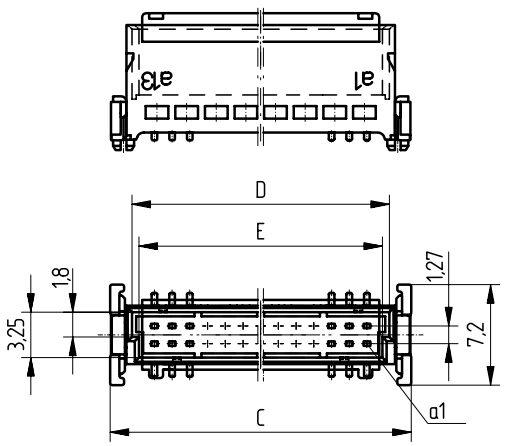
Leiterplatten-Layout Vorschlag für SMT
PCB-Layout Proposal for SMT

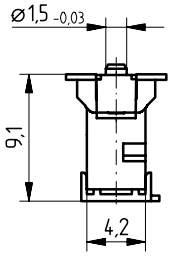


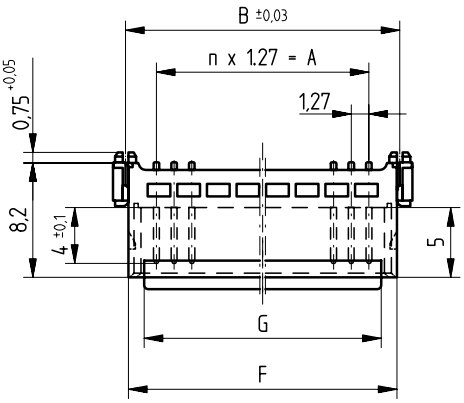
All dimensions in mm.

Dimensional Drawings

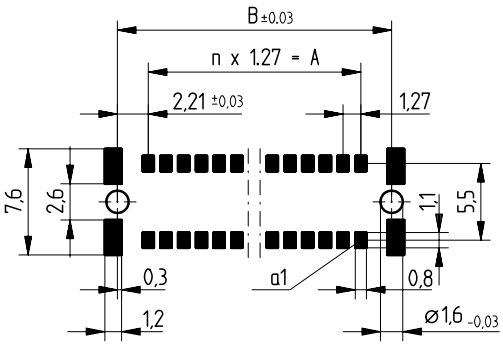
Connectors with Unmated Stacking Height 3.25 mm







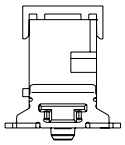
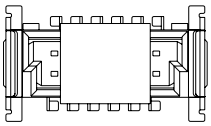
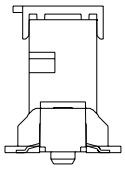
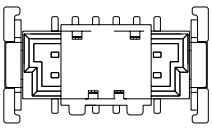
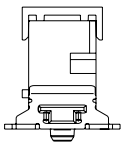
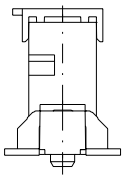
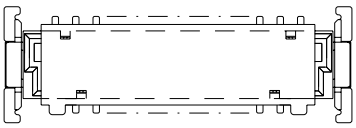
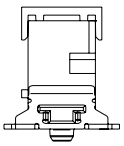
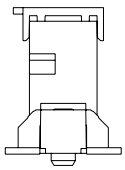
Leiterplatten-Layout Vorschlag für SMT
PCB-Layout Proposal for SMT



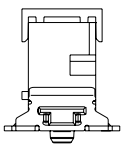
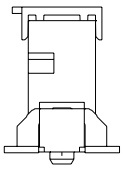
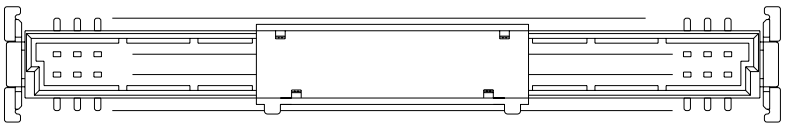
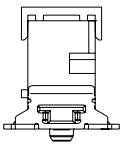
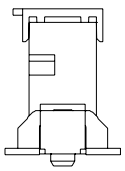
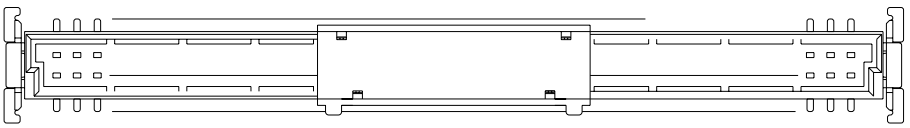
12	6.35	10.77	12.7	9.57	8.57	10.35	5.6
26	15.24	19.66	21.6	18.46	17.46	19.24	17
50	30.48	34.9	36.8	33.7	32.7	34.48	17
68	41.91	46.33	48.2	45.13	44.13	45.91	17
80	49.53	53.95	55.8	52.75	51.75	53.53	17
Polzahl *No. of contacts*	A	B	C	D	E	F	G

All dimensions in mm.

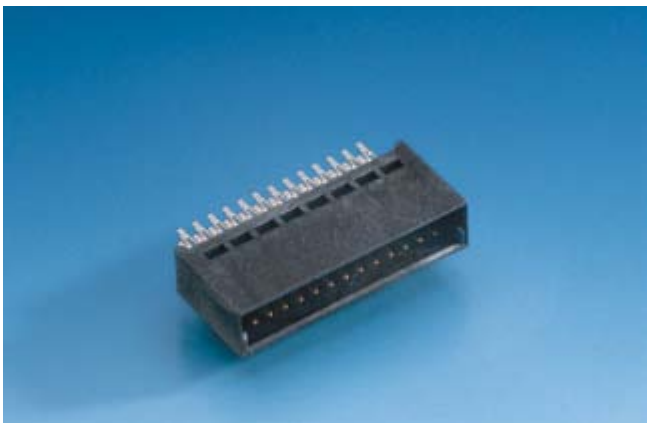
Ordering Information

Configuration	No. of Pins	Termination	Unmated Stacking Height	Packaging	Part Number
					
Type Q	12	SMT	1.75 mm	Tape and reel/280 pcs	**154818**
					
Type Q	12	SMT	3.25 mm	Tape and reel/280 pcs	**063179**
					
Type Q	26	SMT	1.75 mm	Tape and reel/280 pcs	**154819**
					
Type Q	26	SMT	3.25 mm	Tape and reel/280 pcs	**063209**
					
Type Q	50	SMT	1.75 mm	Tape and reel/280 pcs	**154820**
					
Type Q	50	SMT	3.25 mm	Tape and reel/280 pcs	**063210**

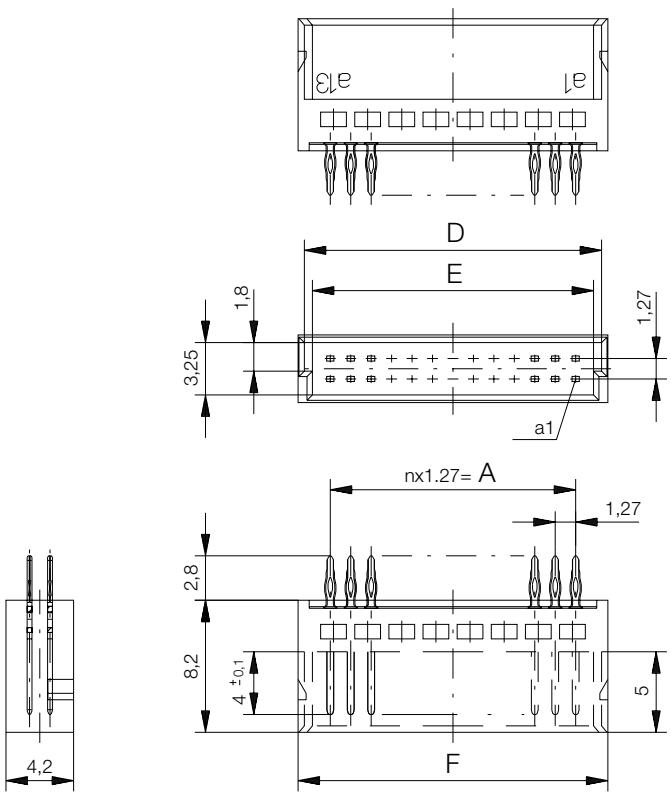
Ordering Information

Configuration	No. of Pins	Termination	Unmated Stacking Height	Packaging	Part Number
					
Type Q	68	SMT	1.75 mm	Tape and reel/280 pcs	**154821**
					
Type Q	68	SMT	3.25 mm	Tape and reel/280 pcs	**114807**
					
Type Q	80	SMT	1.75 mm	Tape and reel/280 pcs	**154822**
					
Type Q	80	SMT	3.25 mm	Tape and reel/280 pcs	**114808**

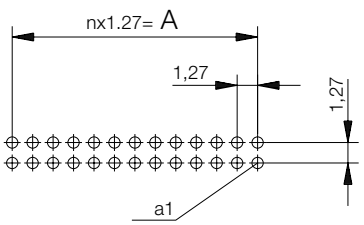
1.27 mm Connectors SMC
Vertical Male Pressfit Type Q



Dimensional Drawings



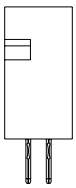
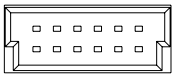
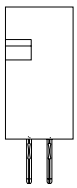
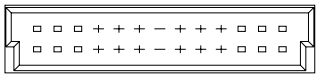
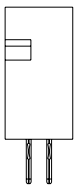
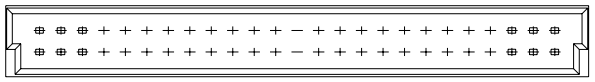
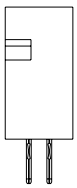
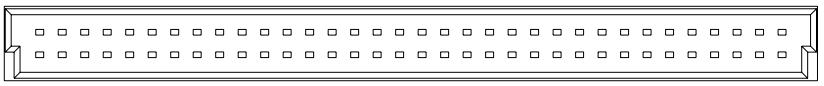
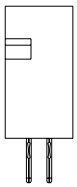
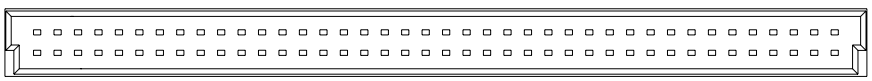
Lochbild für Leiterplatte
Board hole pattern



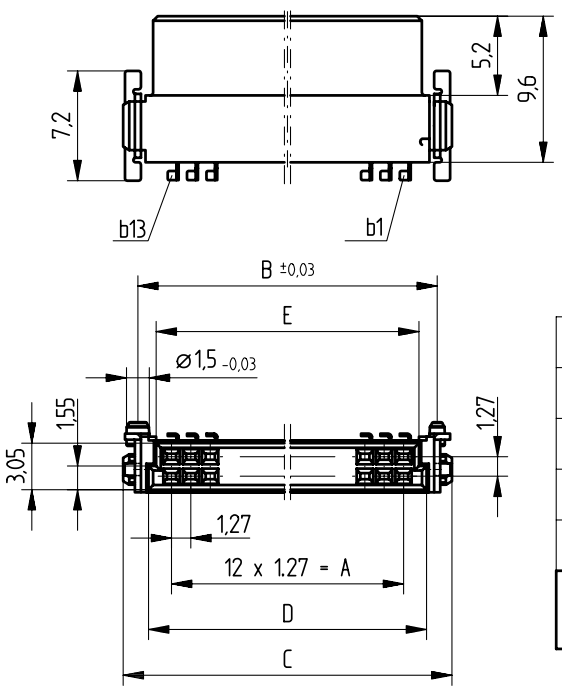
12	6.35	9.57	8.57	10.35
26	15.24	18.46	17.46	19.24
50	30.48	33.7	32.7	34.48
68	41.91	45.13	44.13	45.91
80	49.53	52.75	51.75	53.53
Polzahl No. of contacts	A	D	E	F

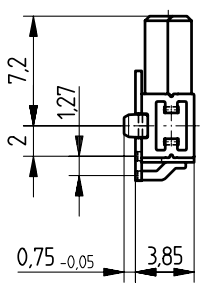
All dimensions in mm.

Ordering Information

Configuration	No. of Pins	Termination	Unmated Stacking Height	Packaging	Part Number
					
Type Q	12	Pressfit	3.25 mm	Tube/65 pcs	**064002**
					
Type Q	26	Pressfit	3.25 mm	Tube/35 pcs	**064003**
					
Type Q	50	Pressfit	3.25 mm	Tube/19 pcs	**064004**
					
Type Q	68	Pressfit	3.25 mm	Tube/14 pcs	**144183**
					
Type Q	80	Pressfit	3.25 mm	Tube/12 pcs	**144185**

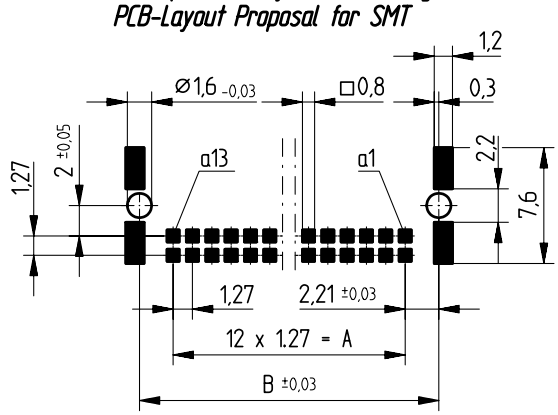
Dimensional Drawings





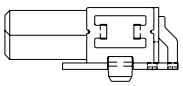
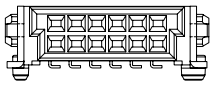
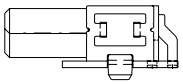
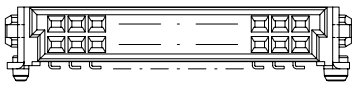
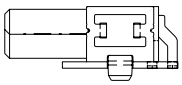
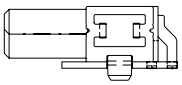
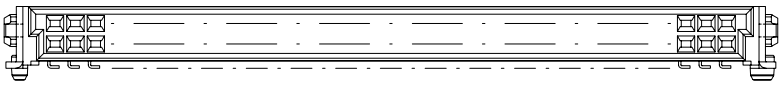
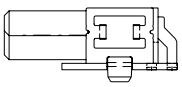
Polzahl *No. of contacts*	A	B	C	D	E
12	6.35	10.77	12.7	9.37	8.37
26	15.24	19.66	21.59	18.26	17.26
50	30.48	34.9	36.83	33.5	32.5
68	41.91	46.33	48.26	44.93	43.93
80	49.53	53.95	55.88	52.55	51.55

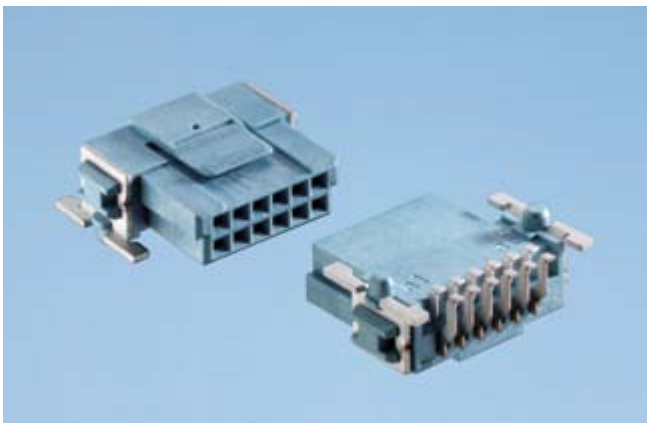
Leiterplatten-Layout Vorschlag für SMT
PCB-Layout Proposal for SMT



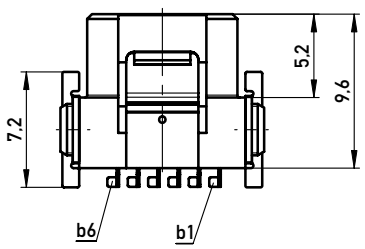
All dimensions in mm.

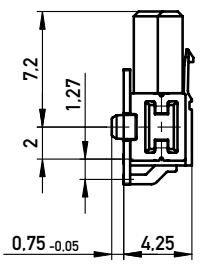
Ordering Information

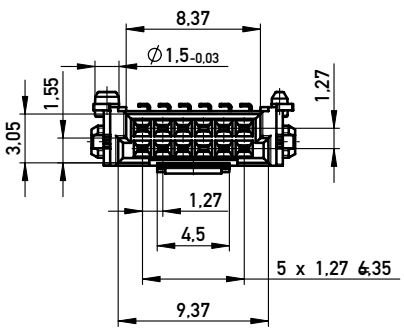
Configuration	No. of Pins	Termination	Packaging	Part Number
				
Type Q	12	SMT	Tape and reel/560 pcs	**154740**
				
Type Q	26	SMT	Tape and reel/560 pcs	**154741**
				
Type Q	50	SMT	Tape and reel/560 pcs	**154742**
				
Type Q	68	SMT	Tape and reel/560 pcs	**154743**
				
Type Q	80	SMT	Tape and reel/560 pcs	**154744**

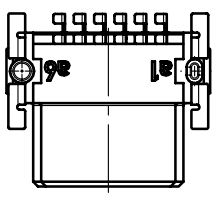


Dimensional Drawings

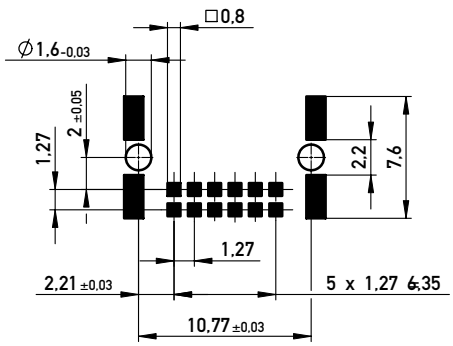






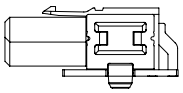
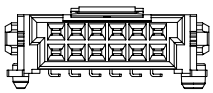


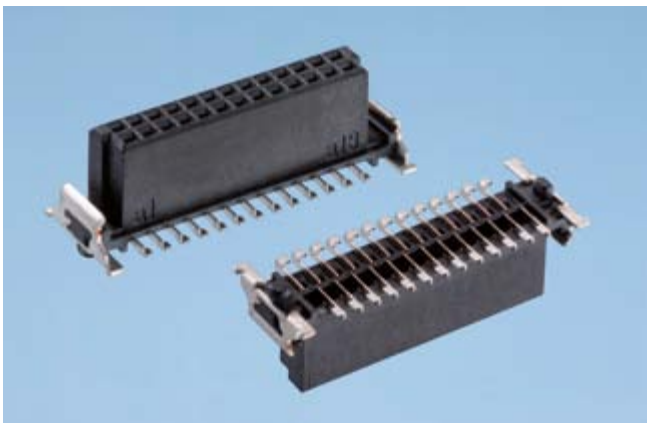
Leiterplatten-Layout Vorschlag für SMT
PCB-Layout Proposal for SMT



All dimensions in mm.

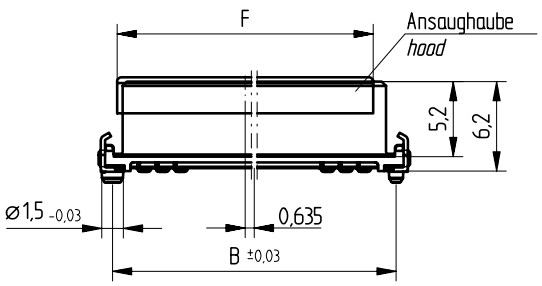
Ordering Information

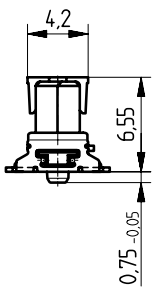
Configuration	No. of Pins	Termination	Packaging	Part Number
				
Type Q	12	SMT	Tape and reel/560 pcs	**254262**

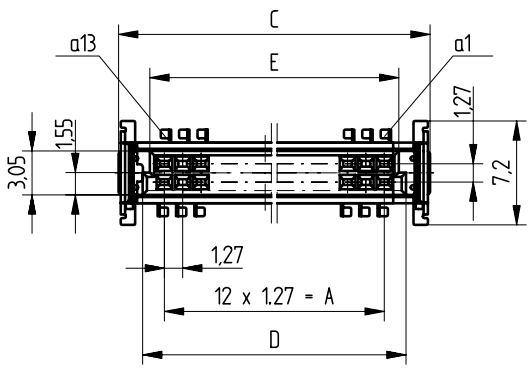


Dimensional Drawings

Connectors with Unmated Stacking Height 6.25 mm

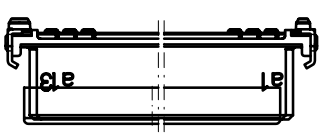


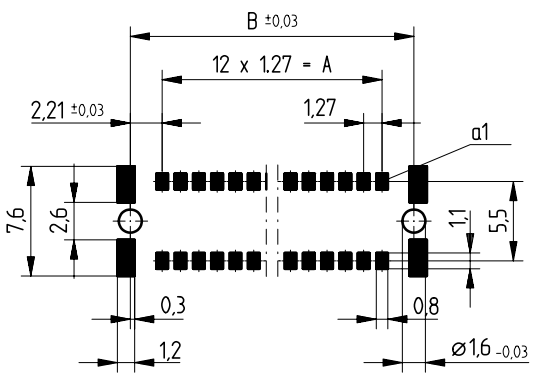




12	6.35	10.77	12.7	9.37	8.37	7.6
26	15.24	19.66	21.59	18.26	17.26	17.76
50	30.48	34.9	36.83	33.5	32.5	17.76
68	41.91	46.33	48.26	44.93	43.93	17.76
80	49.53	53.95	55.88	52.55	51.55	17.76
Polzahl *No. of contacts*	A	B	C	D	E	F

Leiterplatten-Layout Vorschlag für SMT
PCB-Layout Proposal for SMT

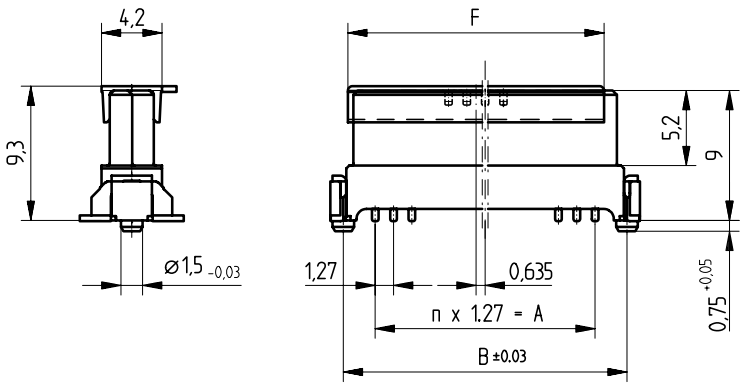




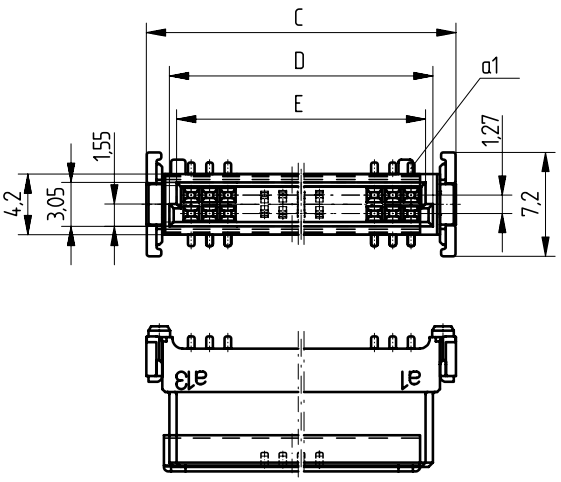
All dimensions in mm.

Dimensional Drawings

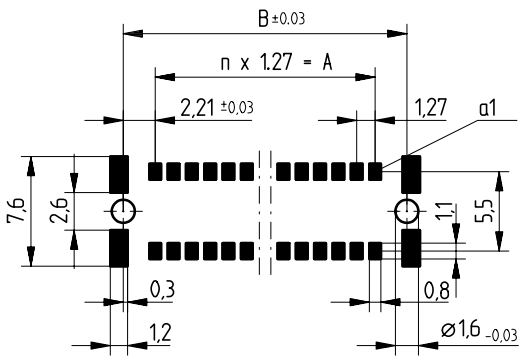
Connectors with Unmated Stacking Height 9.05 mm



Polzahl *No. of contacts*	A	B	C	D	E	F
12	6.35	10.77	12.7	9.37	8.37	7.6
26	15.24	19.66	21.6	18.26	17.26	17.76
50	30.48	34.9	36.8	33.5	32.5	17.76
68	41.91	46.33	48.2	44.93	43.93	17.76
80	49.53	53.95	55.8	52.55	51.55	17.76



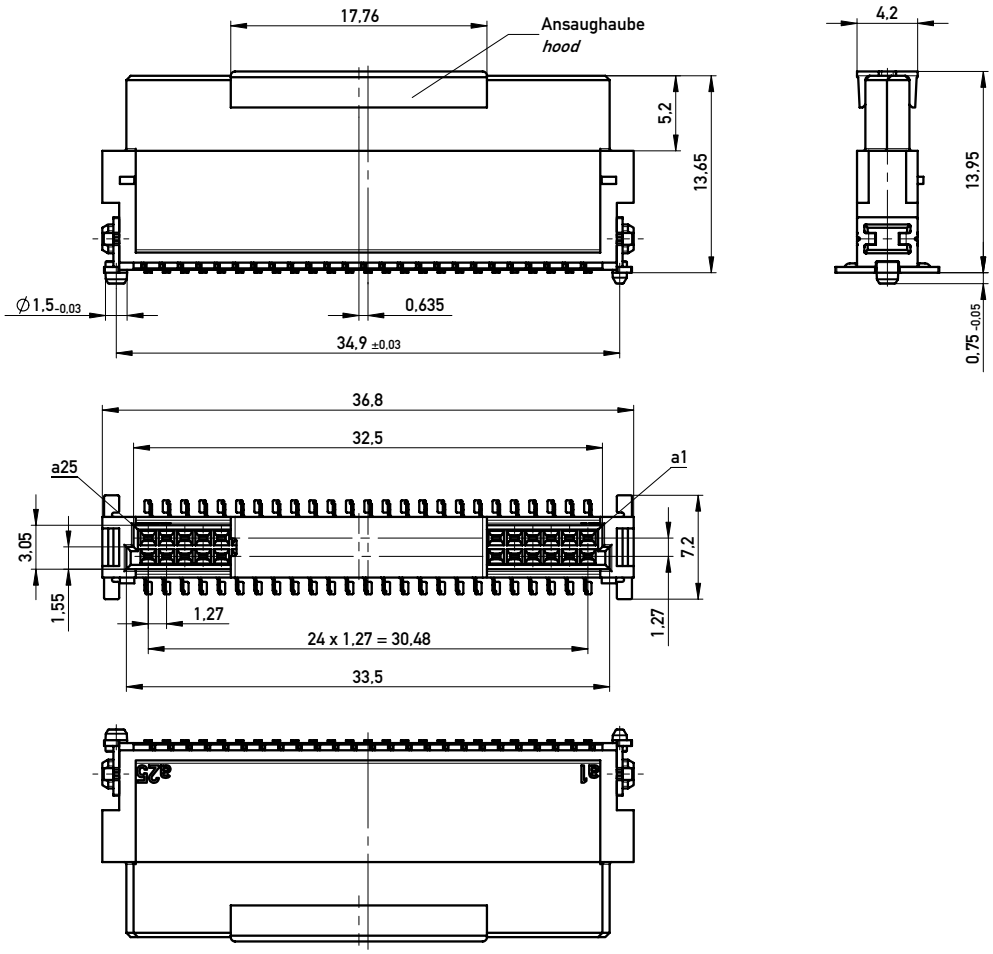
Leiterplatten-Layout Vorschlag für SMT
PCB-Layout Proposal for SMT



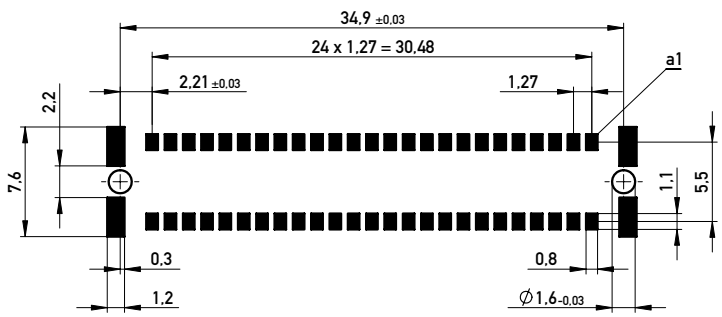
All dimensions in mm.

Dimensional Drawings

Connectors with Unmated Stacking Height 13.65 mm

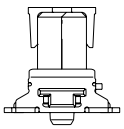
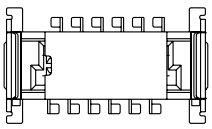
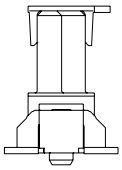
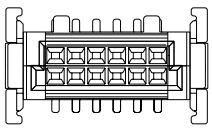
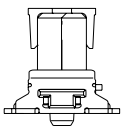
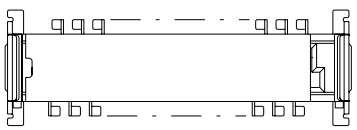
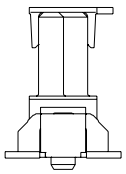
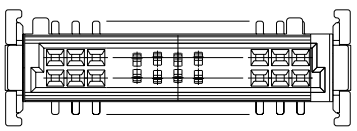
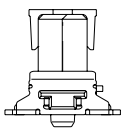
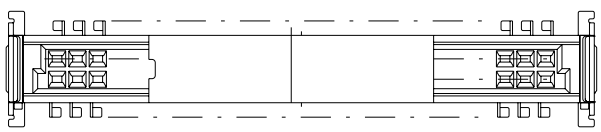
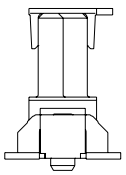
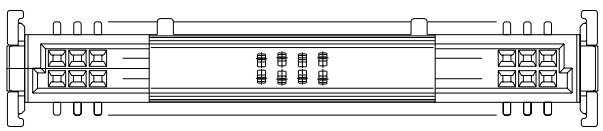


Leiterplatten-Layout Vorschlag für SMT
PCB-Layout Proposal for SMT

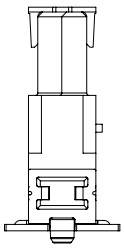
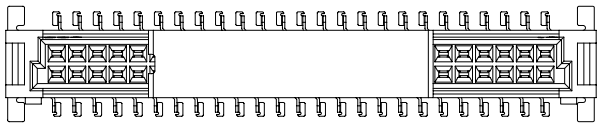
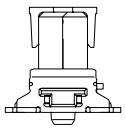
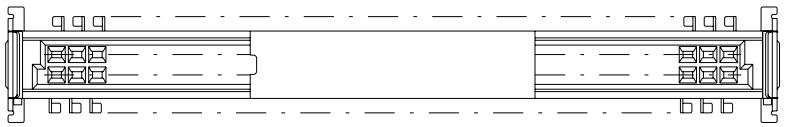
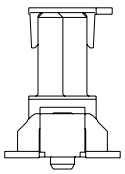
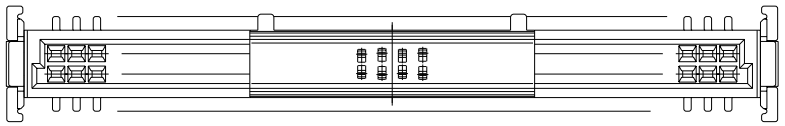
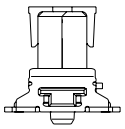
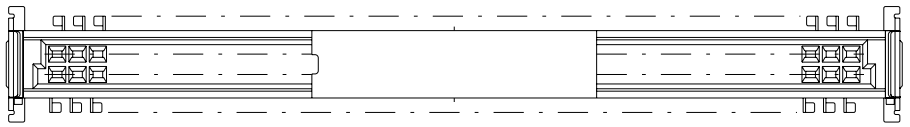
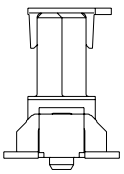
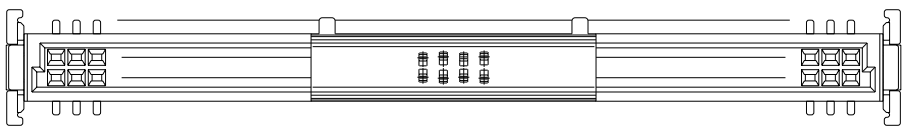


All dimensions in mm.

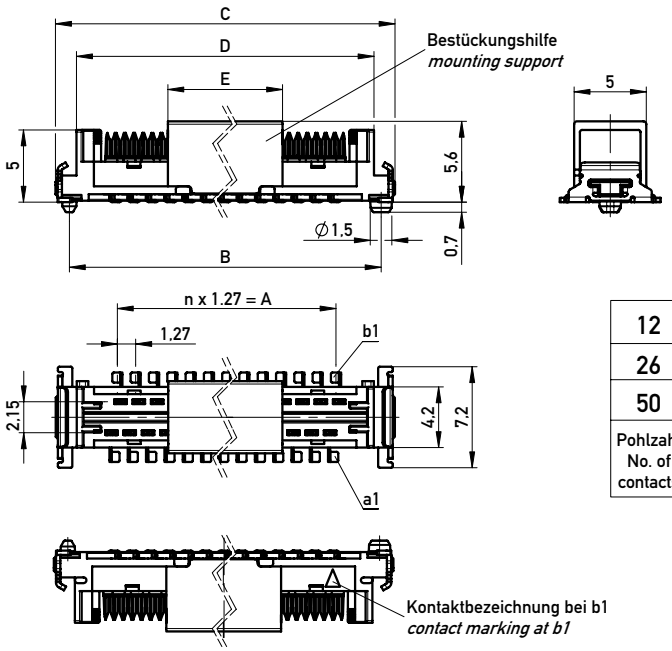
Ordering Information

Configuration	No. of Pins	Termination	Unmated Stacking Height	Packaging	Part Number
					
Type B	12	SMT	6.25 mm	Tape and reel/280 pcs	**154805**
					
Type B	12	SMT	9.05 mm	Tape and reel/280 pcs	**124043**
					
Type B	26	SMT	6.25 mm	Tape and reel/280 pcs	**154806**
					
Type B	26	SMT	9.05 mm	Tape and reel/280 pcs	**124044**
					
Type B	50	SMT	6.25 mm	Tape and reel/280 pcs	**154807**
					
Type B	50	SMT	9.05 mm	Tape and reel/280 pcs	**124045**

Ordering Information

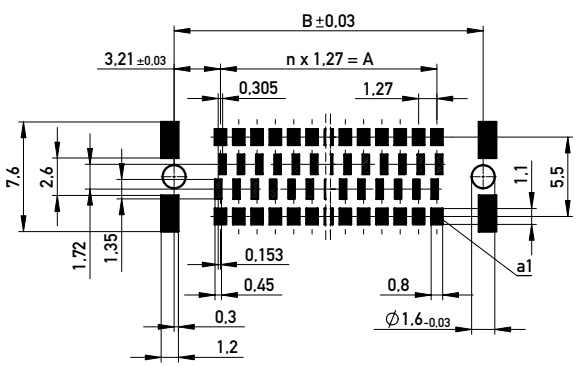
Configuration	No. of Pins	Termination	Unmated Stacking Height	Packaging	Part Number
 					
Type B	50	SMT	13.65 mm	Tape and reel/170 pcs	**234199**
 					
Type B	68	SMT	6.25 mm	Tape and reel/280 pcs	**154808**
 					
Type B	68	SMT	9.05 mm	Tape and reel/280 pcs	**114803**
 					
Type B	80	SMT	6.25 mm	Tape and reel/280 pcs	**154809**
 					
Type B	80	SMT	9.05 mm	Tape and reel/280 pcs	**114804**

Dimensional Drawings



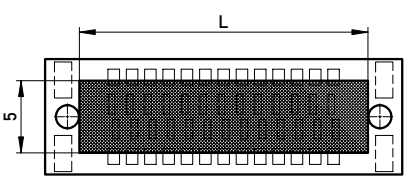
12	6,35	12,77	14,7	11,785	8	11
26	15,24	21,66	23,59	20,675	8	20
50	30,48	36,9	38,83	35,915	8	35
Pohlzahl No. of contacts	A	B	C	D	E	L

Leiterplatten-Layout Vorschlag für SMT
PCB-Layout Proposal for SMT



Sperrfläche
Restricted area

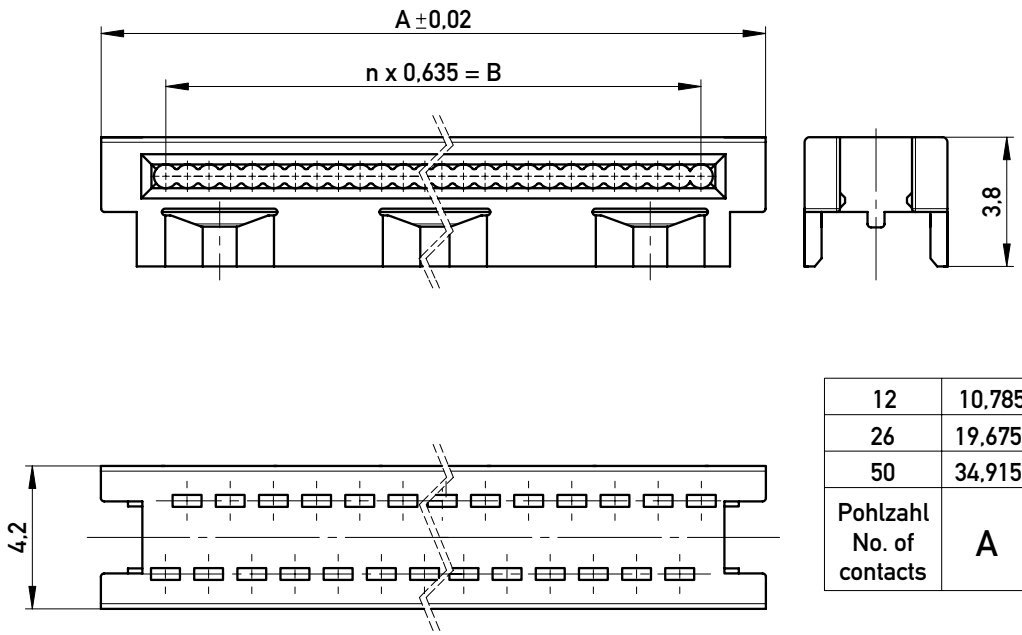
Leiterplatten-Layout Rückseite
PCB-Layout Back Side



Freifläche Lx 5mm auf der Leiterplatten-Unterseite für das Einpresswerkzeug. Keine Bauteile plazieren in diesem Bereich.
PCB back side space Lx5mm for press tool. Do not place any parts in this space.

All dimensions in mm.

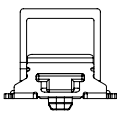
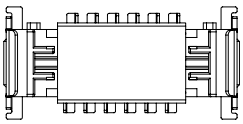
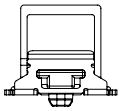
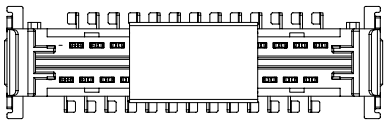
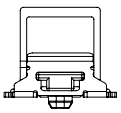
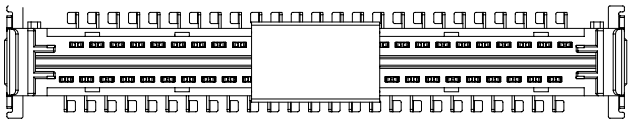
Dimensional Drawings



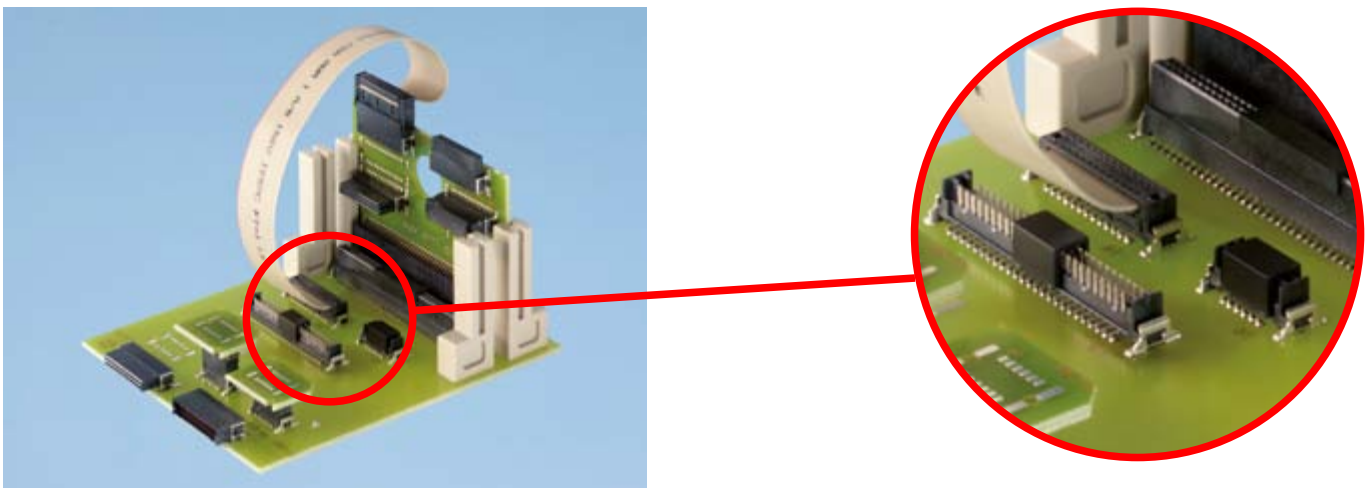
12	10,785	6,985
26	19,675	15,875
50	34,915	31,115
Pohlzahl No. of contacts	A	B

All dimensions in mm.

Ordering Information

Configuration	No. of Pins	Termination	Packaging	Part Number
				
Board-on IDC	12	SMT/IDC	Tape and reel/280 pcs	**244628**
Cable guide for 12 pin Board-on connector	–	–	Poly bag/280 pcs	**244631**
				
Board-on IDC	26	SMT/IDC	Tape and reel/280 pcs	**244629**
Cable guide for 26 pin Board-on connector	–	–	Poly bag/280 pcs	**244632**
				
Board-on IDC	50	SMT/IDC	Tape and reel/280 pcs	**244630**
Cable guide for 50 pin Board-on connector	–	–	Poly bag/280 pcs	**244633**

1.27 mm Connectors SMC
Board-on IDC Assembly Instructions

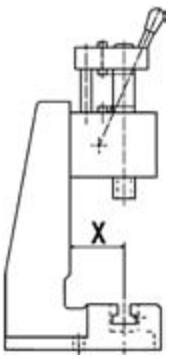


ERNI's Board-on IDC system offers the possibility to optimize cable connections in two ways. The compact size reduces the required area on the board and it is more cost effective than a conventional female – male connection.

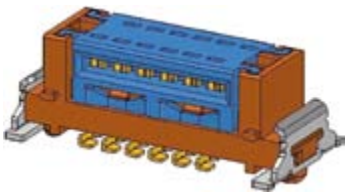
Note that the Board-on IDC connector is to be soldered to the PCB before assembling the cable.

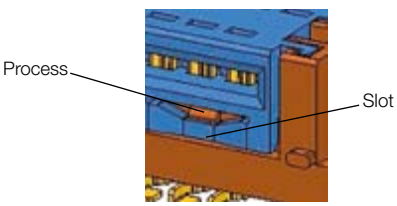
ERNI recommends the following:

- A layout proposal indicating the restricted area.
- Use upper and lower tooling to assemble the cable to the connector. Use a flat upper tool which covers the cable guide and is mounted to the press ram and a lower tool that completely supports the area beneath the connector assembly.
- Insert the entire PCB into a fixture for the best results so that one may concentrate on the operation of the press and holding the cable. The fixture should be fixed to the press base and have a method of aligning the PCB within the fixture using the perimeter of the PCB and/or alignment pins.
- Important consideration must be given to the assembly tools available. When using a hand lever press it must noted that the PCB outside edge (or the fixture edge) to the connector center is smaller than the distance from the throat of the press to the connector center (dimension 'X').

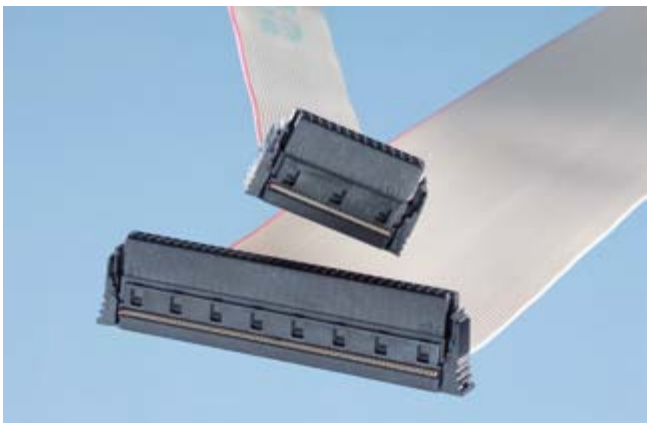


- Adjust the press shut height to 5 mm [.197"].
  Additional visual monitoring of a completed assembly is achieved when the recesses are visible and the slot between the cable guide and the connector is evenly shut.

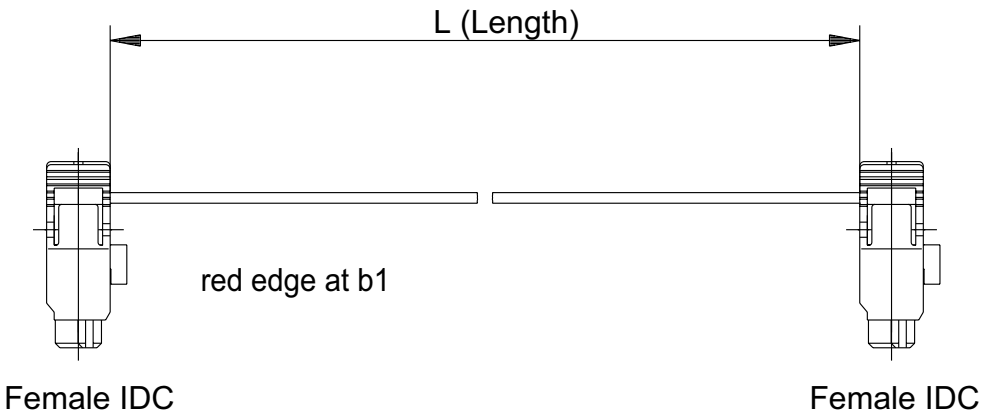




- Neither the PCB nor the components may be bent during the press-in process.
- The flat cable must be inserted in such a way that it protrudes on the end by 0-1 mm.
- The flat cable must be inserted 90° to the connector.



Dimensional Drawings



Ordering Information

No. of Pins	Length	Cable Size	Cable Type	Part Number
12	100 mm	AWG 30	PVC	**173799**
12	200 mm	AWG 30	PVC	**173800**
12	300 mm	AWG 30	PVC	**173801**
26	100 mm	AWG 30	PVC	**173796**
26	200 mm	AWG 30	PVC	**173797**
26	300 mm	AWG 30	PVC	**173798**
50	100 mm	AWG 30	PVC	**173793**
50	200 mm	AWG 30	PVC	**173794**
50	300 mm	AWG 30	PVC	**173795**
68	100 mm	AWG 30	PVC	**193888**
68	200 mm	AWG 30	PVC	**193889**
68	300 mm	AWG 30	PVC	**193890**
80	100 mm	AWG 30	PVC	**193891**
80	200 mm	AWG 30	PVC	**193892**
80	300 mm	AWG 30	PVC	**193893**

Notes

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