

1.27 mm Connectors

Surface Mount Technology, Solderless Pressfit, IDC



SMC

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Catalog the web: <http://Connect.ERNI.com/SMC.ssi>

<http://Connect.ERNI.com/contact/>

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Applications



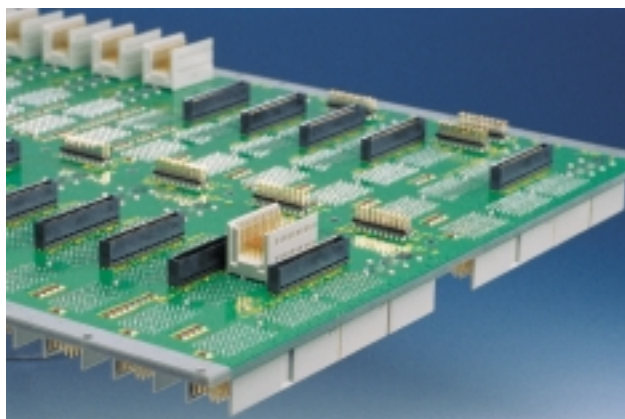
Male and Female connectors in ISDN equipment

TELECOM



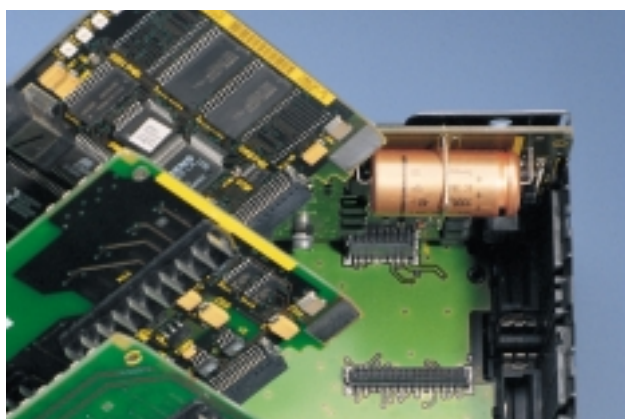
Female connectors in industrial automation

INDUSTRIAL
AUTOMATION



Male pressfit connectors in Video Coding System

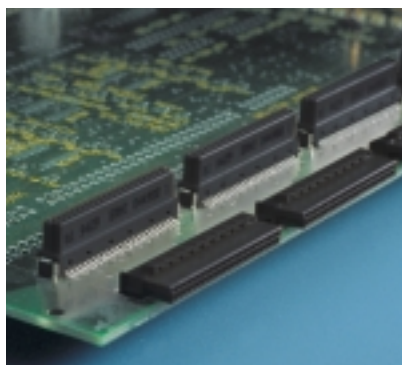
INDUSTRIAL
ELECTRONICS



Male and female connectors in PLC

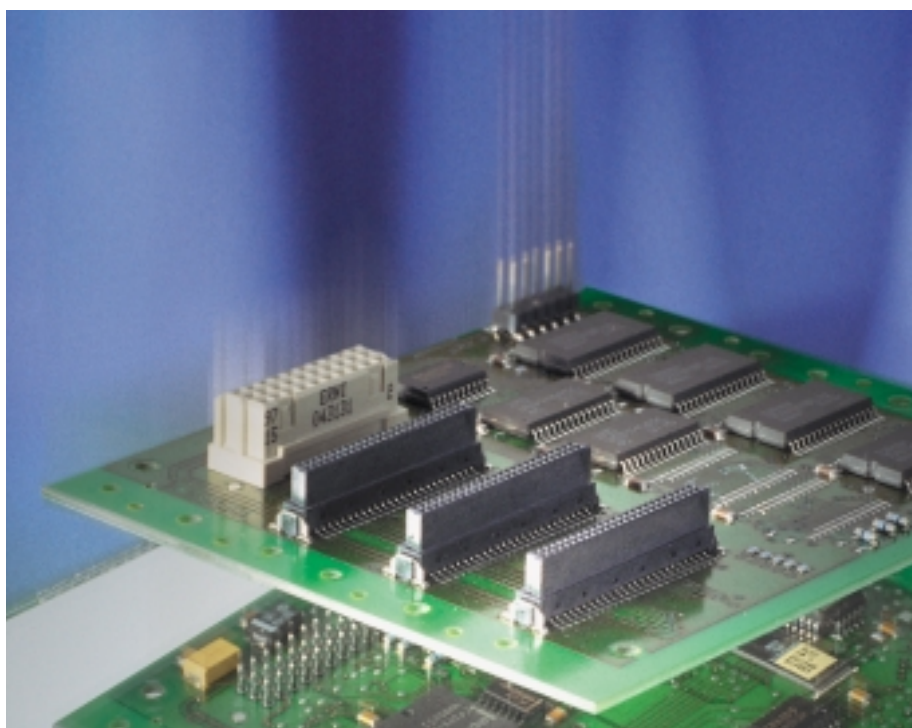
CONTROL
ENGINEERING

SMC At A Glance



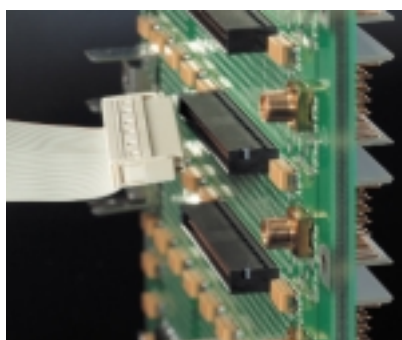
Flexible Subassembly Design Flexibility In Application

Straight and angled female and male connectors and other available options permit many configurations and shapes for maximum flexibility in designing modules



Solution of Choice for Modern Subassembly Applications

Exemplary application: printed circuit board in an automation solution



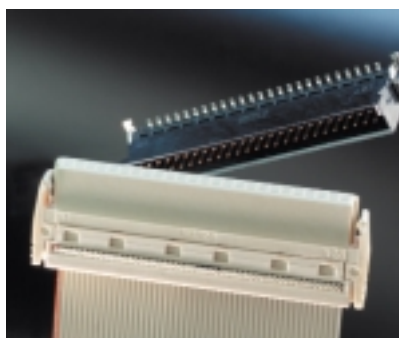
Rear I/O on Multilayer Backplane

The press-fit versions of the SMC male connectors are ideal for backplane applications to transfer I/O signals on the rear side of the backplane.



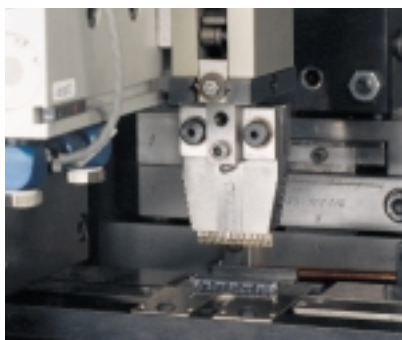
Variable Board-to-Board Height

Flexible board-to-board heights for printed circuit boards from 8.0 mm to 14.0 mm for customized subassembly solutions



Simple I/O Signal Transfer with New Snap-Lock Female Cable Connector

The new female IDC cable connectors with snap-lock make transferring I/O signals easy and also save space by eliminating the need for interlocking levers.

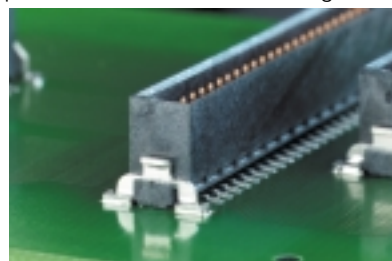


Full-Automated Manufacturing of SMC Connectors

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

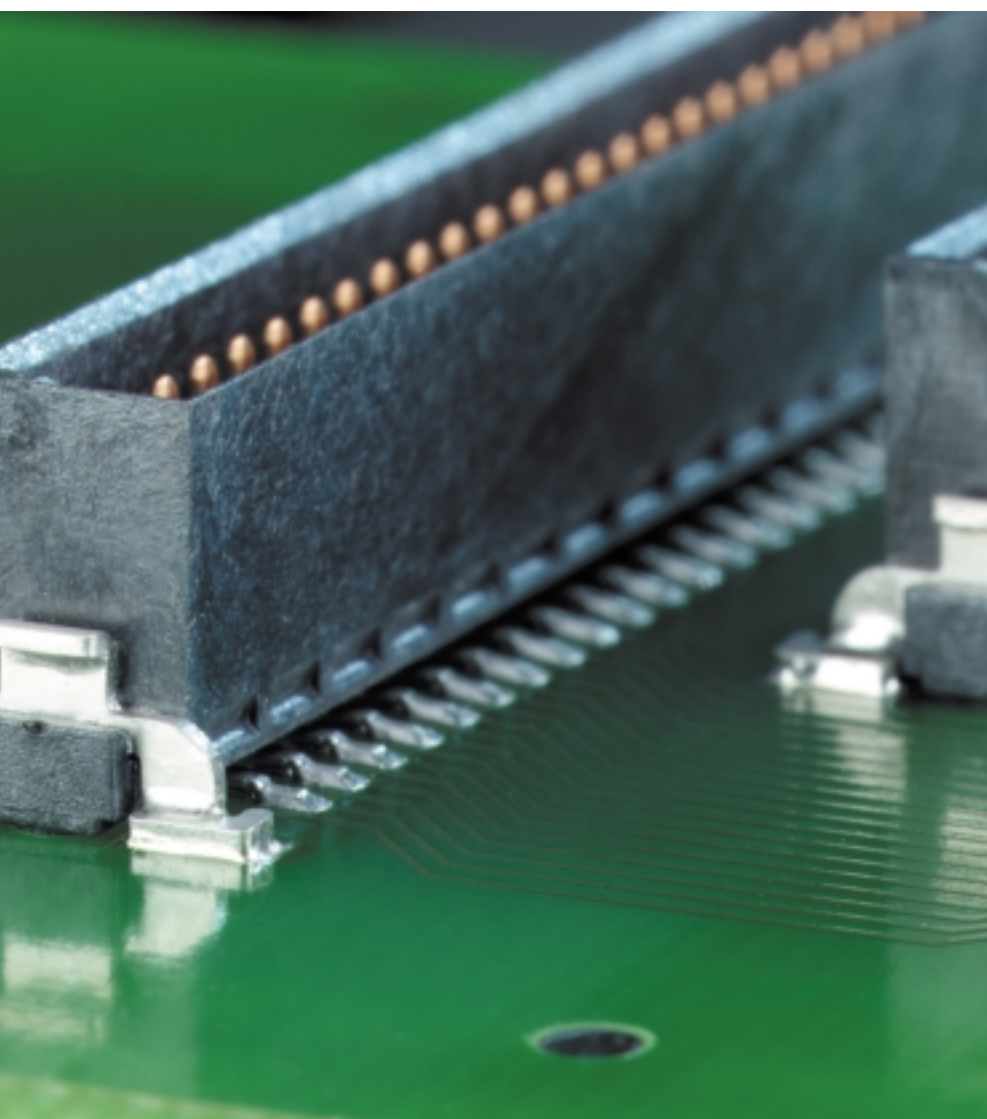
Controlled SMT Reflow Soldering Process Security In Production And Application

The heat-resistant thermoplastic insulator and precision coplanar contacts permit controlled SMT soldering



Reliable Insertion and Removal

The full-metal SMT clip ensures safe connection to the printed circuit board and can handle high insertion and withdrawal forces as a result of its special design. The metal SMT attachment clip is automatically positioned and soldered during the SMT process, thus eliminating the need for an additional workstep as in the case of other mounting accessories such as rivets.



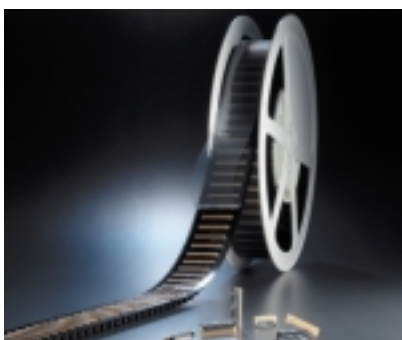
Quality Check

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



Easy Recognition and Safe Handling

The black insulator ensures easy visual recognition by the automatic pick and place equipment and allows for safe handling.

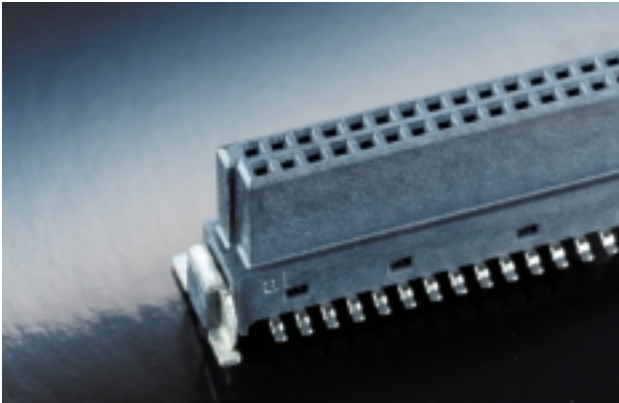


Safe Transport and Fully Automated Feed

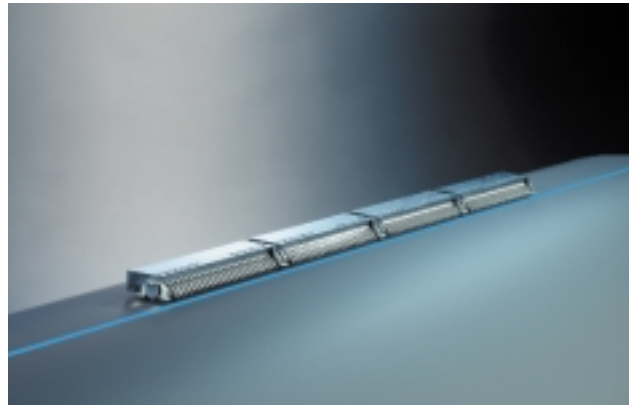
The antistatic tape-on-reel packaging not only protects the high-precision contacts and coplanarity of our SMC connectors, it permits fully automated placement of SMCs in an SMT component insertion system.

SMC Technical Features

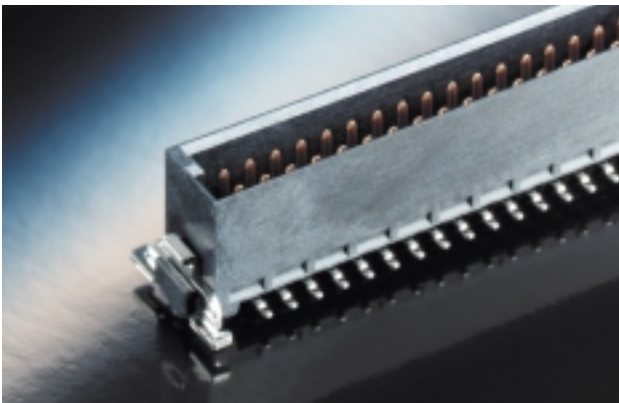
Preguiding



Coplanarity



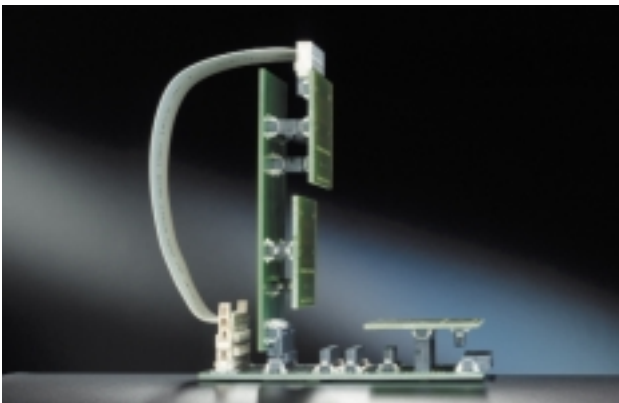
Polarization



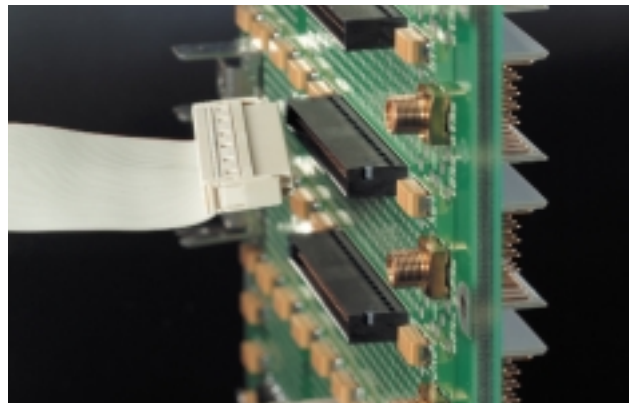
Pin Numbers



Board to Board and Board to Wire Applications



Rear I/O on Backplanes



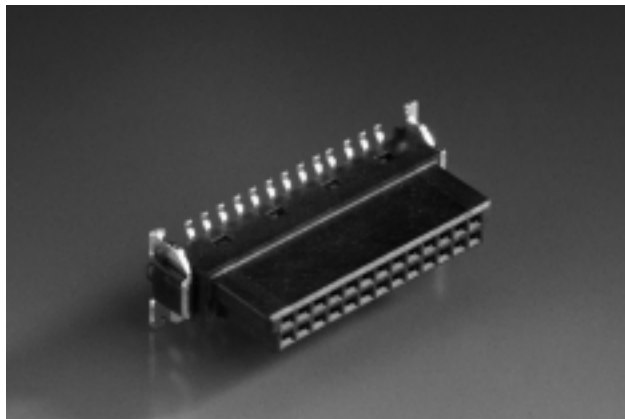
Electrical And Mechanical Characteristics

	Standard	Type B and IDC Assemblies	Type Q (inversed)
Number of Pins		12, 26, 50, 68 and 80	12, 26, 50, 68 and 80
Technical data			
Climate Category	DIN EN 60068-1 test b	-55/125/56 IDC Assembly (depends on cable)	-55/125/56
Bearing and operating temperature area		-55/125 °C IDC Assembly (depends on cable)	-55/125 °C
Current rating	IEC60512 test 5b	By ambient temperature: 20°C 1,2 A 70°C 0,9 A 100°C 0,6 A IDC Assembly (depends on cable)	By ambient temperature: 20°C 1,2 A 70°C 0,9 A 100°C 0,6 A
Air – and creepage distance		0,4mm	0,4mm
Comparative figure of voltage	IEC 112	CTI-150	CTI-150
Voltage rating	DIN VDE 0110	Has to be determined according to client-specific using case (degree of environmental pollution) according to VDE 0110	Has to be determined according to client-specific using case (degree of environmental pollution) according to VDE 0110
Dielectric strength	IEC 60512	contact – contact 500V IDC Assembly (depends on cable)	contact – contact 500V
Contact resistance	IEC 60512 test 2a	< 25 mΩ	< 25 mΩ
Insulation resistance	IEC 60512 test 3a	> 10 ⁴ MΩ IDC Assembly (depends on cable)	> 10 ⁴ MΩ
Vibration	IEC 60512 test 6d	10 – 2000 Hz 20g	10 – 2000 Hz 20g
Contact disturbance (while vibration sine)	IEC 60512 test 2e	< 1 μs	< 1 μs
Shock halfsine	IEC 60512 test 6c	50g 11 ms	50g 11 ms
Contact disturbance (while shock halfsine)	IEC 60512 test 2e	< 1 μs	< 1 μs
Mechanical operation (mating cycles)	IEC 60512 test 9a	> 500 mating cycles	> 500 mating cycles
Insertion and withdrawal force	IEC 60512 test 13b	12 cont.: 6 N max. 26 cont.: 13 N max. 50 cont.: 26 N max. 68 cont.: 35 N max. 80 cont.: 40 N max.	12 cont.: 6 N max. 26 cont.: 13 N max. 50 cont.: 26 N max. 68 cont.: 35 N max. 80 cont.: 40 N max.
Gauge retention force	IEC 60512 test 16e	0,10 N min.	0,10 N min.

Electrical And Mechanical Characteristics

	Standard	Type B and IDC Assemblies	Type Q (inversed)
Number of Pins		12, 26, 50, 68 and 80	12, 26, 50, 68 and 80
Process-conditions			
Solder temperature max.	IEC 68-2-20		
Hand soldering temperature max.		3,5s at 350°C	3,5s at 350°C
Dip soldering temperature max.		10s at 260°C	10s at 260°C
SMT-Reflow soldering temperature max.		10s at 260°C	10s at 260°C
Warning		soldering of press-fit connectors not to be recommended	soldering of press-fit connectors not to be recommended
Coplanarity		< 0,1mm	< 0,1mm
IDC (Insulation Displacement Connection)		0/55 °C	0/55 °C
Materials			
Housing: plastic material (symbol)		LCP	LCP
CTI value	IEC 112	CTI 150	CTI 150
UL flame rating		UL 94 V-0	UL 94 V-0
UL file		E 83005	E 83005
Contact and mating area			
Base material		Cu alloy	Cu alloy
Plating		Gold plated	Gold plated
Termination area			
Base material		Cu alloy	Cu alloy
Solder, press-fit and IDC-technology		Sn	Sn
Enviroment compatibility			
recycling		no flame-retardent additives, no toxic additives allow easy recycling	
Product-approval and customer specific tests			
UL		file E 84703	file E 84703
CSA		in preparation	in preparation

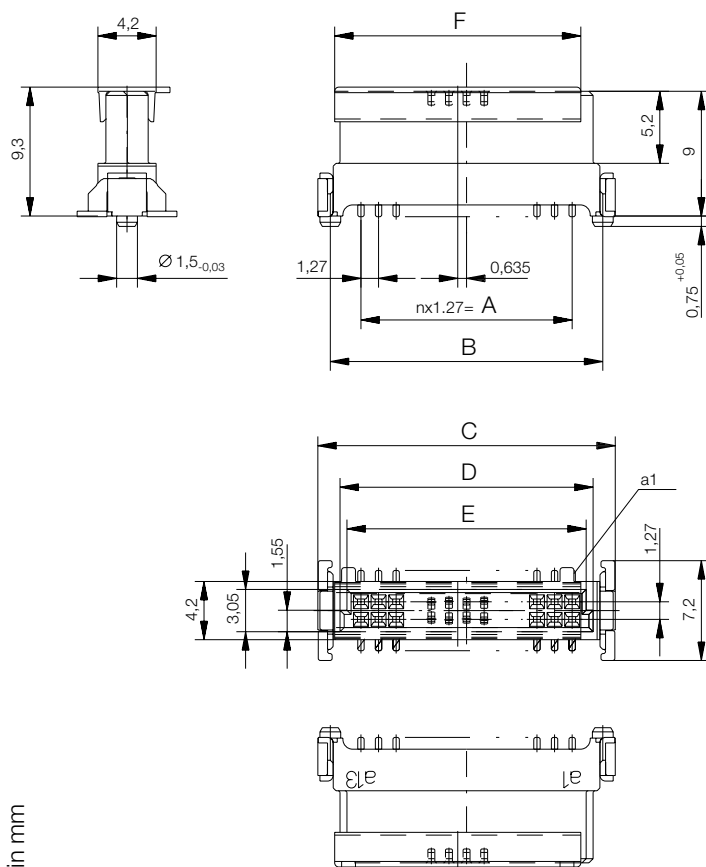
Vertical Female Connectors Type B Standard Assembly Height



The SMC Type B vertical male connector in pitch 1.27 mm is available with 12, 26, 50, 68 or 80 contacts. There is a very high flexibility for sandwich boards by combination of different connector heights (6.2 mm, 6.7 mm, 8.2 mm and 9 mm). The board to board distances are possible between 8.0 mm and 12.2 mm (wipe length 2.5 mm) or up to 14.0 mm (wipe length 0.7 mm).

Fully automatic assembly is possible by using tape on reel packaging. The black insulator ensures easy recognition for quick visual identification, and the pre-assembled pick and place cover provides a firm vacuum grip of the connector. Special contact lead design guarantees exact placement of the connectors on the PCB. A secure soldering process is guaranteed due to the coplanarity of the contacts and the high temperature insulator. The integrated solid metal SMT mounting bracket secures the seating of the connector on the PCB for reliable mating and unmating.

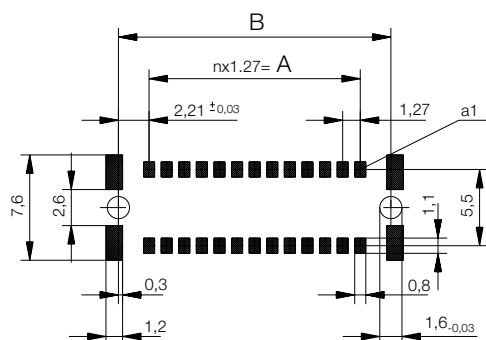
Dimensional drawing



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
Polzahl No. of contacts	A	B ± 0.03	C	D	E	F

Leiterplatten-Layout Vorschlag für SMT

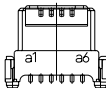
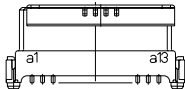
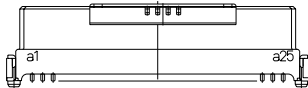
PCB-Layout Proposal for SMT



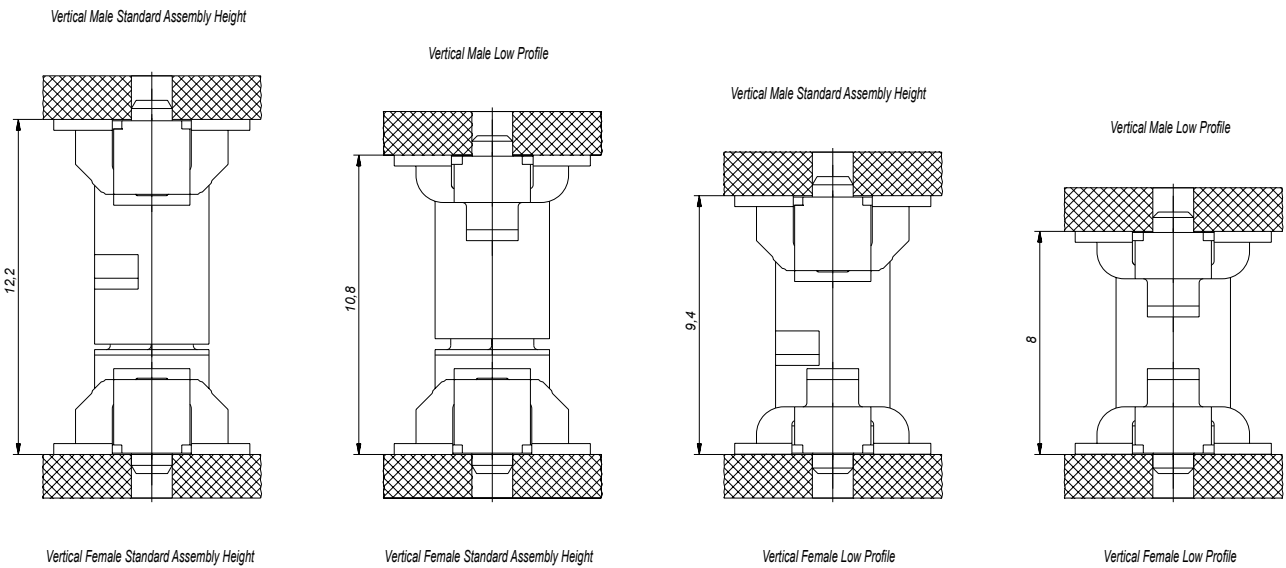
All dimensions in mm

Actual Versions: Vertical Female Connectors Type B
Standard Assembly Height (use for new designs)

Ordering Information

Configuration		Height	No. of Pins	Part Number	
Type B With Assembly Cap Tape On Reel Packaged 280 pcs			9 mm	12	124043
Type B With Assembly Cap Tape On Reel Packaged 280 pcs			9 mm	26	124044
Type B With Assembly Cap Tape On Reel Packaged 280 pcs			9 mm	50	124045

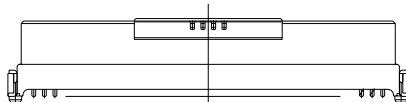
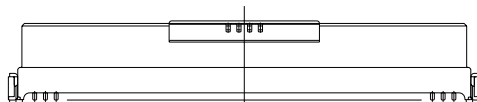
For smaller quantities or tube feeder please refer to the cross reference table on page 39.



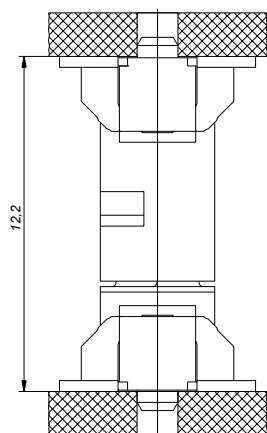
All dimensions in mm

Actual Versions: Vertical Female Connectors Type B Standard Assembly Height (use for new designs)

Ordering Information

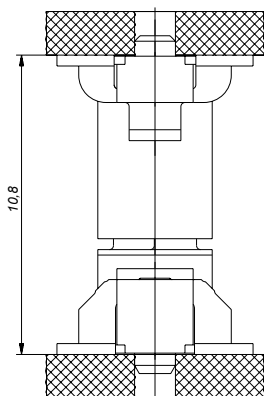
Configuration		Height	No. of Pins	Part Number	
Type B With Assembly Cap Tape On Reel Packaged 280 pcs			9 mm	68	114803
Type B With Assembly Cap Tape On Reel Packaged 280 pcs			9 mm	80	114804

Vertical Male Standard Assembly Height



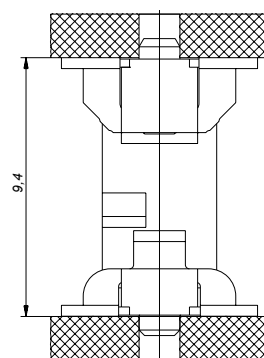
Vertical Female Standard Assembly Height

Vertical Male Low Profile



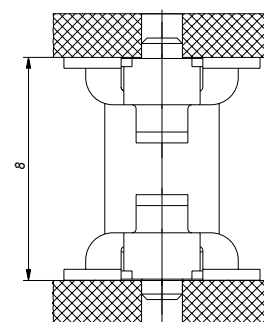
Vertical Female Standard Assembly Height

Vertical Male Standard Assembly Height



Vertical Female Low Profile

Vertical Male Low Profile



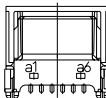
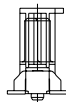
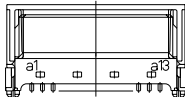
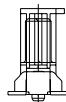
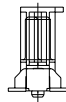
Vertical Female Low Profile

All dimensions in mm

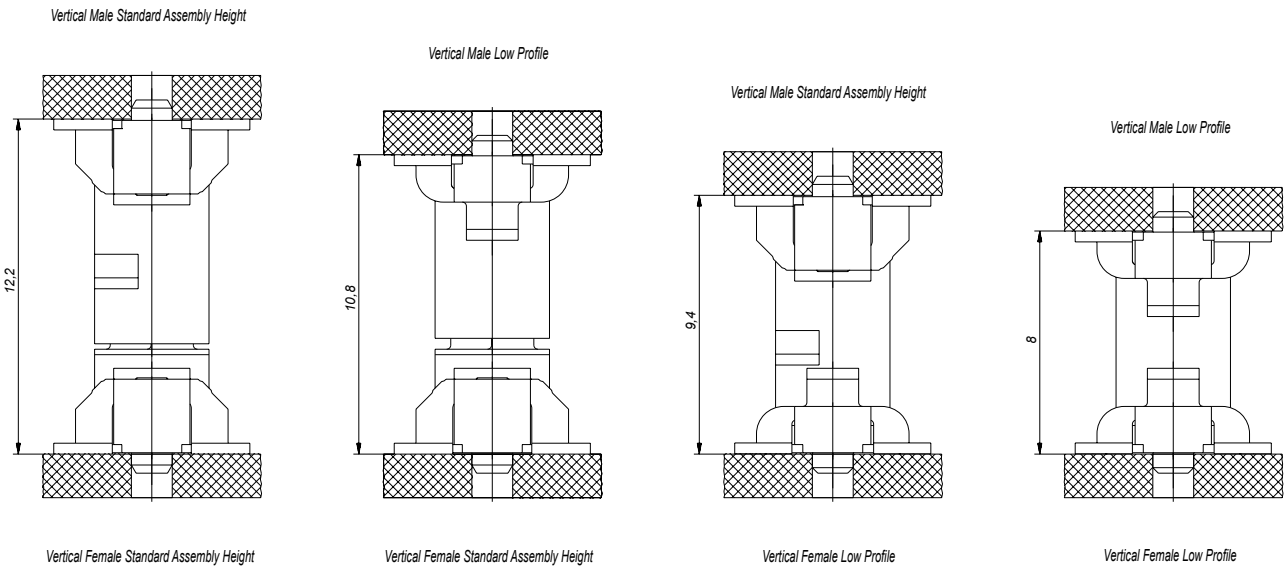
<http://Connect.ERNI.com/contact/>

Phase Out Versions: Vertical Female Connectors Type B
Standard Assembly Height (do not use for new designs)

Ordering Information

Configuration		Height	No. of Pins	Part Number	
Type B With Assembly Cap Tape On Reel Packaged 280 pcs			9 mm	12	054597 New Design: 124043
Type B With Assembly Cap Tape On Reel Packaged 280 pcs			9 mm	26	054598 New Design: 124044
Type B With Assembly Cap Tape On Reel Packaged 280 pcs			9 mm	50	054599 New Design: 124045

For smaller quantities or tube feeder please refer to the cross reference table on page 39.



All dimensions in mm

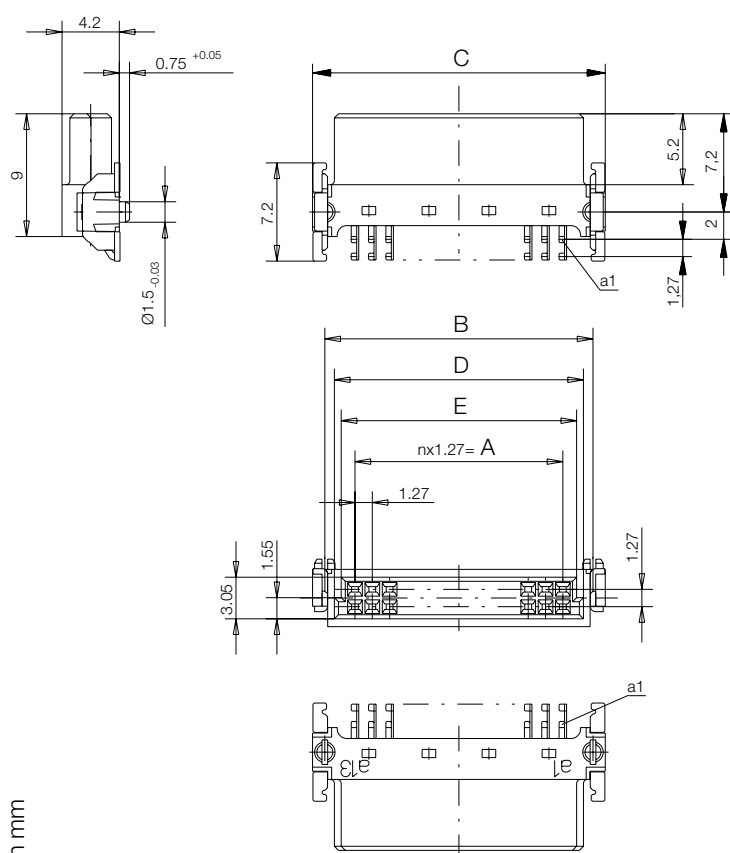
Right Angle Female Connectors Type Q Standard Assembly Height



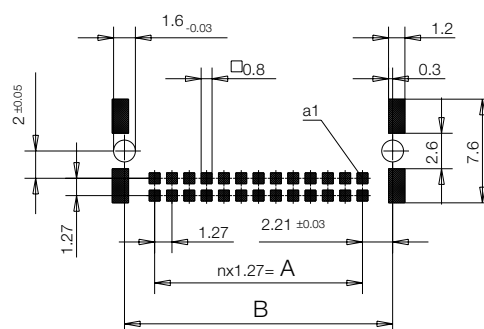
The SMC Type Q right angle female connector in pitch 1.27 mm is available with 12, 26 or 50 contacts. There is a very high flexibility for sandwich boards by combination of different connector heights (6.2 mm, 6.7 mm, 8.2 mm and 9 mm). The board to board distances are possible between 8.0 mm and 12.2 mm (wipe length 2.5 mm) or up to 14.0 mm (wipe length 0.7 mm).

Fully automatic assembly is possible by using tape on reel packaging. The black insulator ensures easy recognition for quick visual identification, and the pre-assembled pick and place cover provides a firm vacuum grip of the connector. Special contact lead design guarantees exact placement of the connectors on the PCB. A secure soldering process is guaranteed due to the coplanarity of the contacts and the high temperature insulator. The integrated solid metal SMT mounting bracket secures the seating of the connector on the PCB for reliable mating and unmating.

Dimensional drawing



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

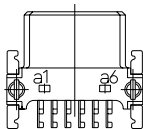
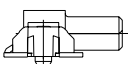
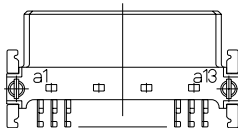
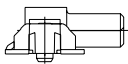
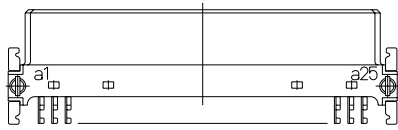
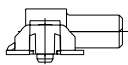


12	6.35	10.77	12.7	9.37	8.37
26	15.24	19.66	21.6	18.26	17.26
50	30.48	34.9	36.8	33.5	32.5
Polzahl No. of contacts	A	B ±0.03	C	D	E

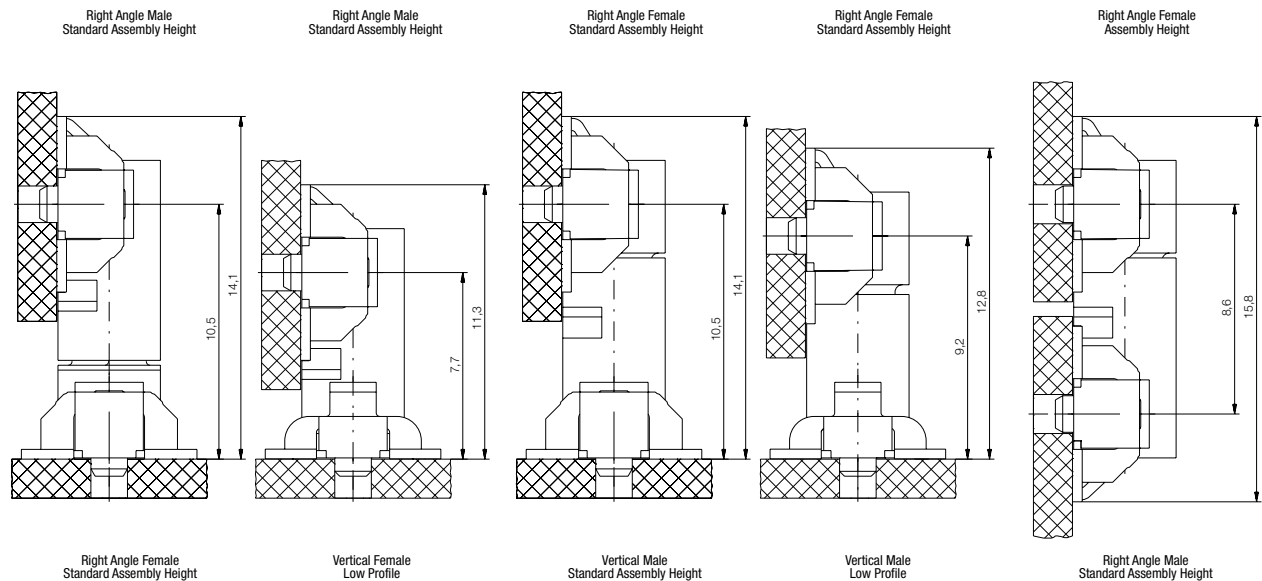
All dimensions in mm

Right Angle Female Connectors Type Q Standard Assembly Height

Ordering Information

Configuration	No. of Pins	Part Number
Type Q With Assembly Cap Tape On Reel Packaged 560 pcs		
 	12	104557
Type Q With Assembly Cap Tape On Reel Packaged 560 pcs		
 	26	104558
Type Q With Assembly Cap Tape On Reel Packaged 560 pcs		
 	50	104559

For smaller quantities or tube feeder please refer to the cross reference table on page 39.



All dimensions in mm

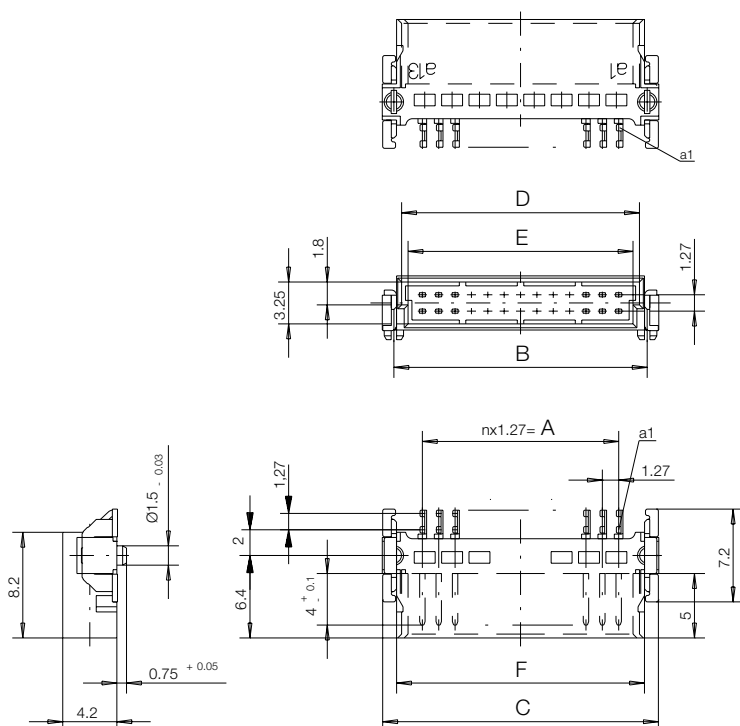
Right Angle Male Connectors Type B Standard Assembly Height



The SMC Type B right angle male connector in pitch 1.27 mm is available with 12, 26, 50, 68 or 80 contacts. There is a very high flexibility for sandwich boards by combination of different connector heights (6.2 mm, 6.7 mm, 8.2 mm and 9 mm). The board to board distances are possible between 8.0 mm and 12.2 mm (wipe length 2.5 mm) or up to 14.0 mm (wipe length 0.7 mm).

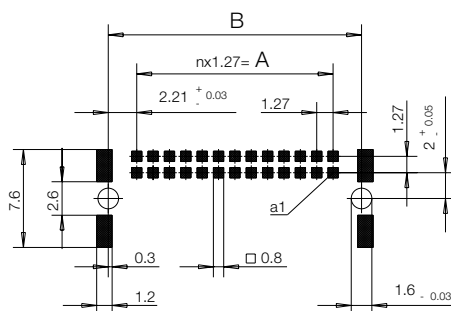
Fully automatic assembly is possible by using tape on reel packaging. The black insulator ensures easy recognition for quick visual identification, and the pre-assembled pick and place cover provides a firm vacuum grip of the connector. Special contact lead design guarantees exact placement of the connectors on the PCB. A secure soldering process is guaranteed due to the coplanarity of the contacts and the high temperature insulator. The integrated solid metal SMT mounting bracket secures the seating of the connector on the PCB for reliable mating and unmating.

Dimensional drawing



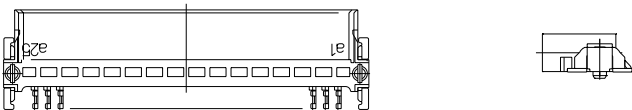
12	6.35	10.77	12.7	9.57	8.57	10.35
26	15.24	19.66	21.6	18.46	17.46	19.24
50	30.48	34.9	36.8	33.7	32.7	34.48
68	41.91	46.33	48.2	45.13	44.13	45.91
80	49.53	53.95	55.8	52.75	51.75	53.53
Polzahl No. of contacts	A	B ± 0.03	C	D	E	F

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

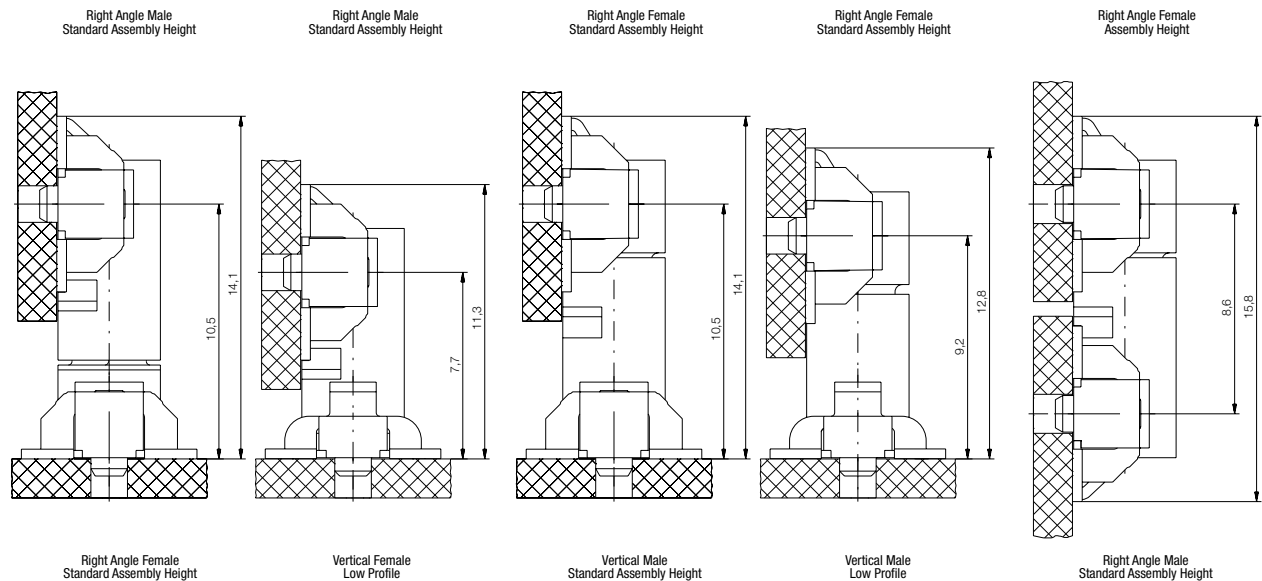


Right Angle Male Connectors Type B Standard Assembly Height

Ordering Information

Configuration	No. of Pins	Part Number
Type B With Assembly Cap Tape On Reel Packaged 560 pcs		
	12	054594
Type B With Assembly Cap Tape On Reel Packaged 560 pcs		
	26	054595
Type B With Assembly Cap Tape On Reel Packaged 560 pcs		
	50	054596

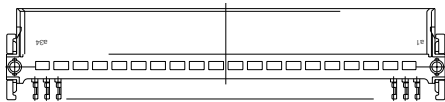
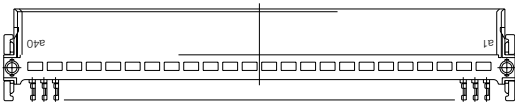
For smaller quantities or tube feeder please refer to the cross reference table on page 39.

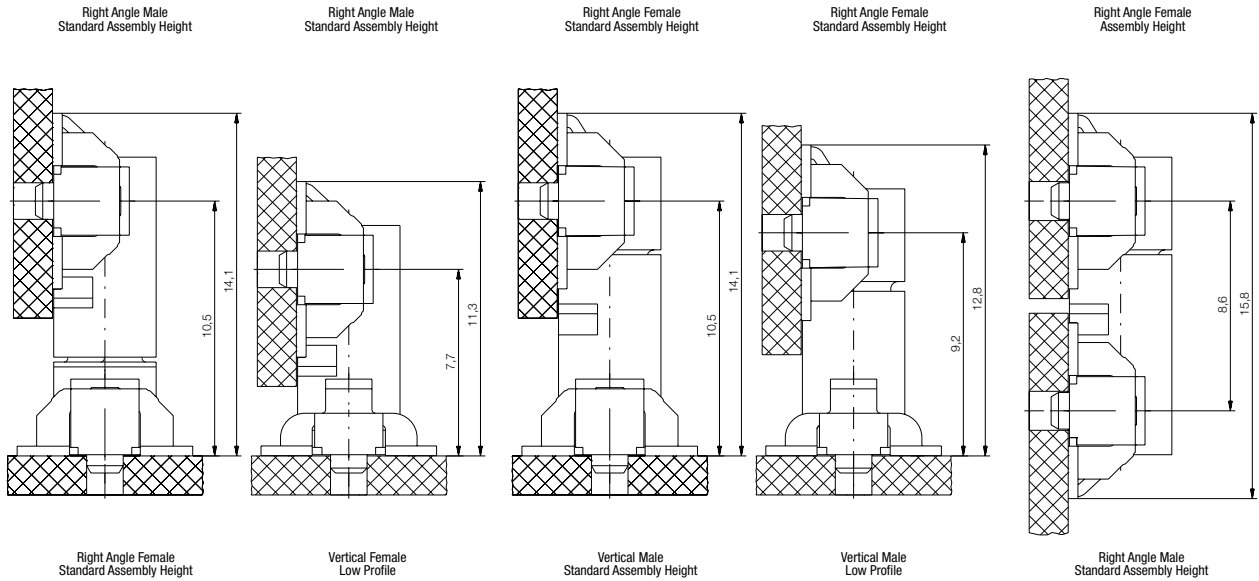


All dimensions in mm

Right Angle Male Connectors Type B Standard Assembly Height

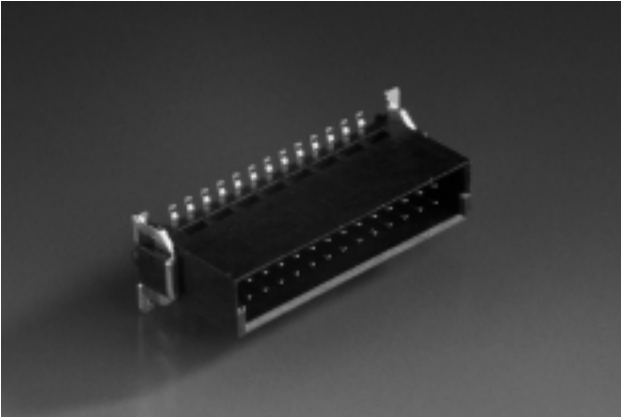
Ordering Information

Configuration	No. of Pins	Part Number
Type B With Assembly Cap Tape On Reel Packaged 560 pcs		
	68	114805
Type B With Assembly Cap Tape On Reel Packaged 560 pcs		
	80	114806



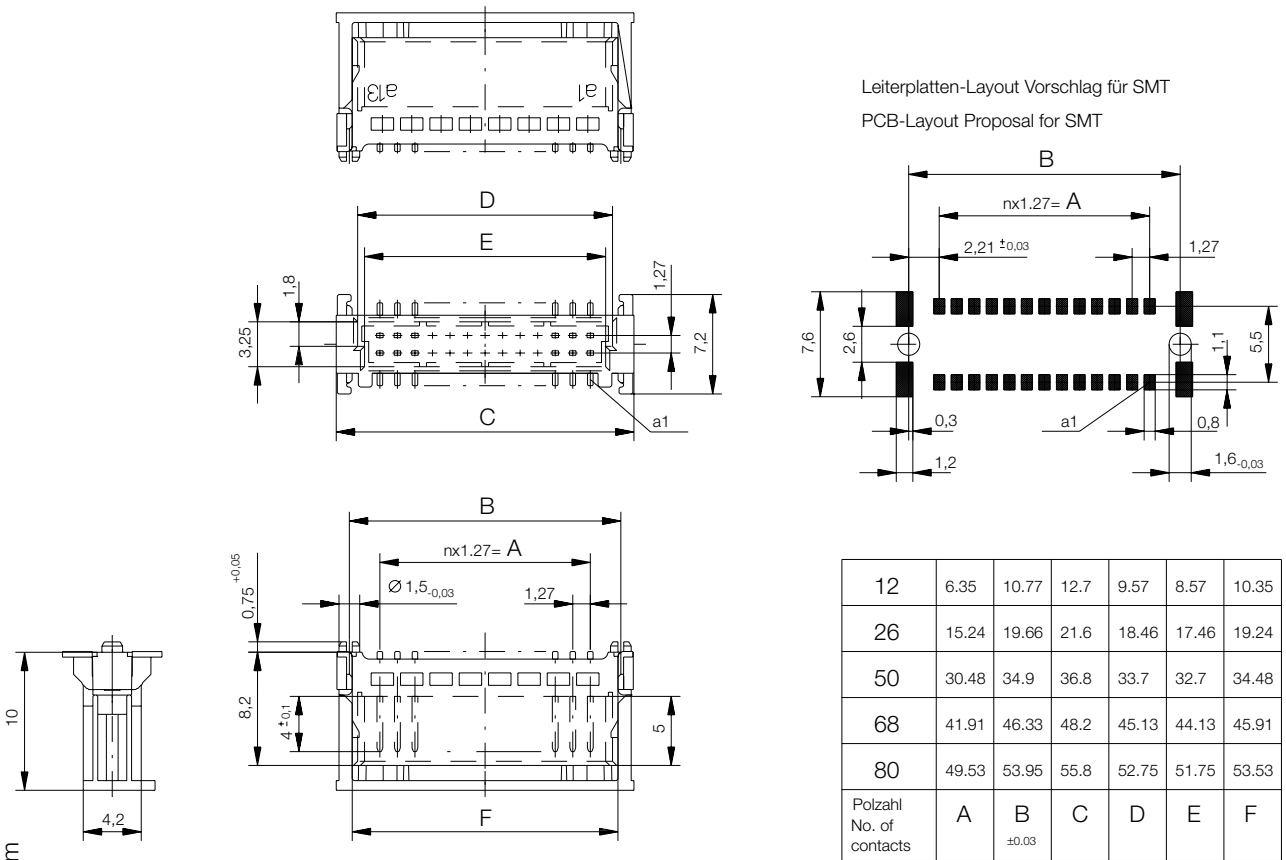
All dimensions in mm

Vertical Male Connectors Type Q Standard Assembly Height



The SMC Type Q vertical male connector in pitch 1.27 mm is available with 12, 26 or 50 contacts. There is a very high flexibility for sandwich boards by combination of different connector heights (6.2 mm, 6.7 mm, 8.2 mm and 9 mm). The board to board distances are possible between 8.0 mm and 12.2 mm (wipe length 2.5 mm) or up to 14.0 mm (wipe length 0.7 mm). Fully automatic assembly is possible by using tape on reel packaging. The black insulator ensures easy recognition for quick visual identification, and the pre-assembled pick and place cover provides a firm vacuum grip of the connector. Special contact lead design guarantees exact placement of the connectors on the PCB. A secure soldering process is guaranteed due to the coplanarity of the contacts and the high temperature insulator. The integrated solid metal SMT mounting bracket secures the seating of the connector on the PCB for reliable mating and unmating.

Dimensional drawing

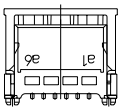
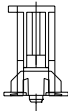
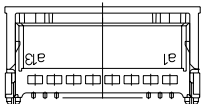
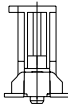
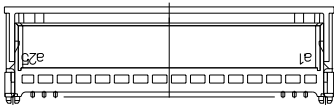
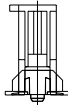


Leiterplatten-Layout Vorschlag für SMT
PCB-Layout Proposal for SMT

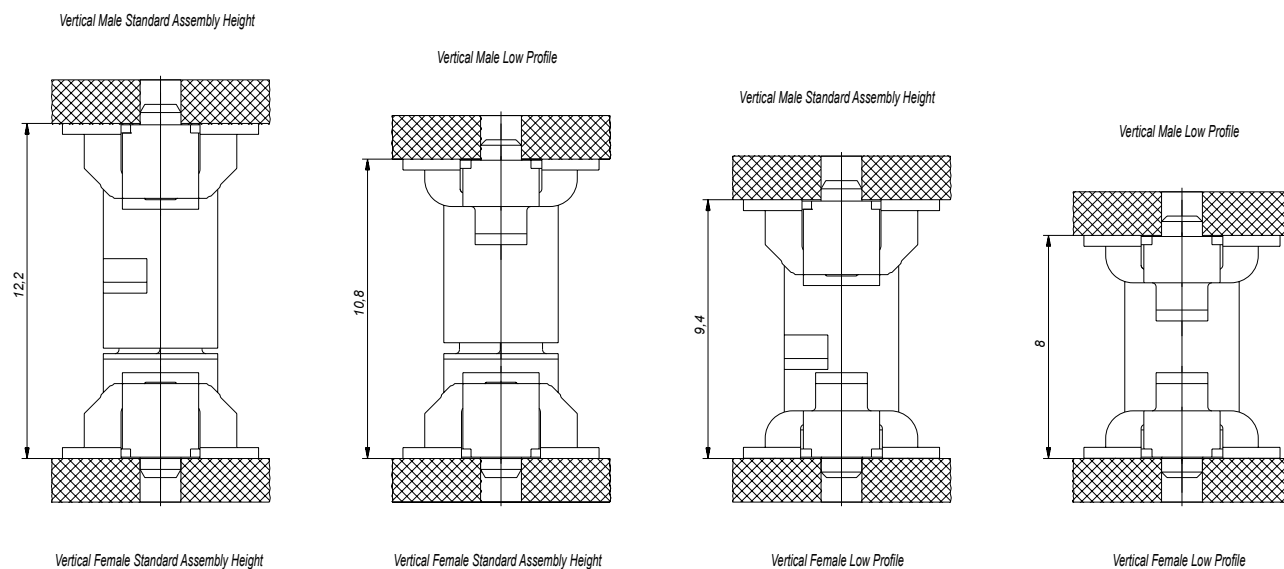
12	6.35	10.77	12.7	9.57	8.57	10.35
26	15.24	19.66	21.6	18.46	17.46	19.24
50	30.48	34.9	36.8	33.7	32.7	34.48
68	41.91	46.33	48.2	45.13	44.13	45.91
80	49.53	53.95	55.8	52.75	51.75	53.53
Polzahl No. of contacts	A	B ±0.03	C	D	E	F

Vertical Male Connectors Type Q Standard Assembly Height

Ordering Information

Configuration		Height	No. of Pins	Part Number
Type Q With Assembly Cap Tape On Reel Packaged 280 pcs	 	8,2 mm	12	063179
Type Q With Assembly Cap Tape On Reel Packaged 280 pcs	 	8,2 mm	26	063209
Type Q With Assembly Cap Tape On Reel Packaged 280 pcs	 	8,2 mm	50	063210

For smaller quantities or tube feeder please refer to the cross reference table on page 39.

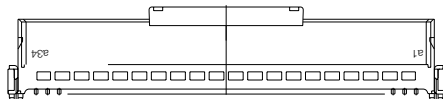
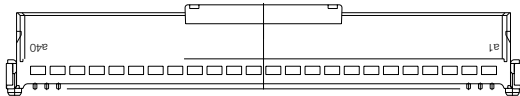
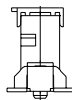


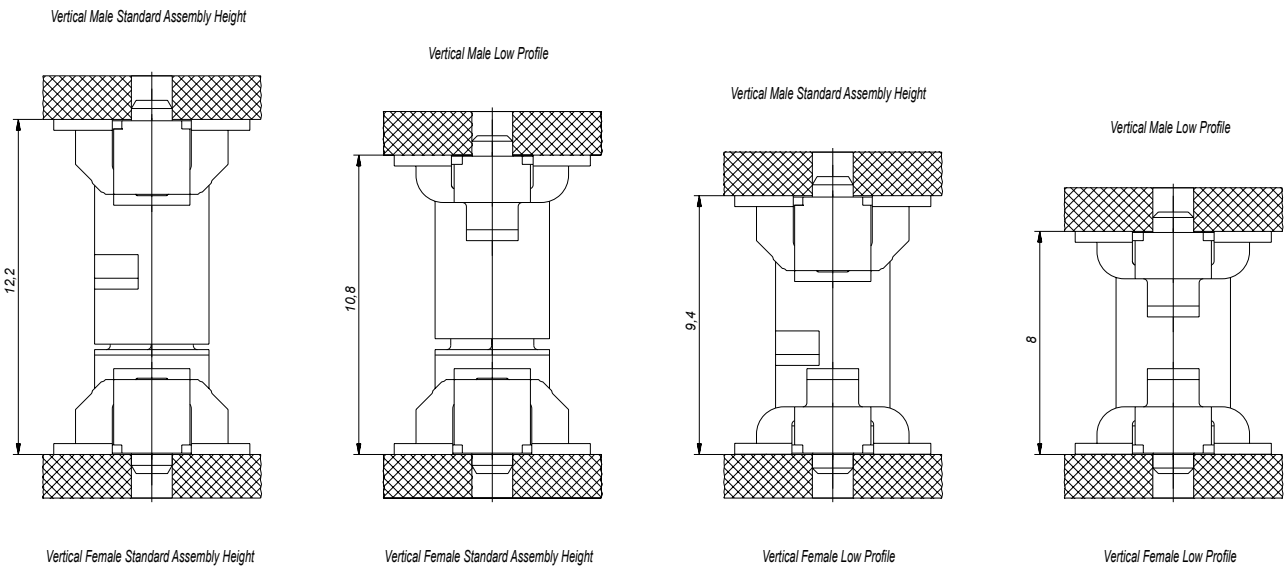
All dimensions in mm

<http://Connect.ERNI.com/contact/>

Vertical Male Connectors Type Q Standard Assembly Height

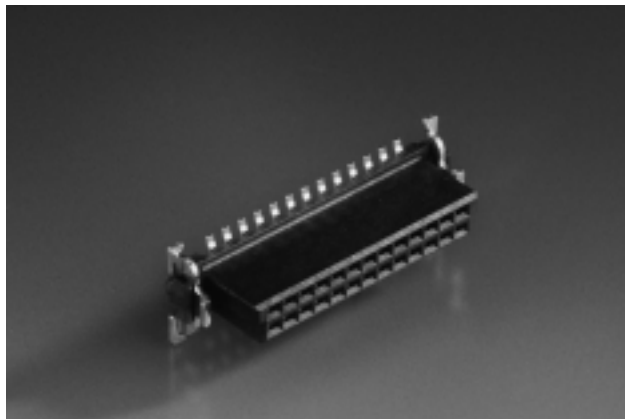
Ordering Information

Configuration		Height	No. of Pins	Part Number	
Type Q With Assembly Cap Tape On Reel Packaged 280 pcs			8,2 mm	68	114807
Type Q With Assembly Cap Tape On Reel Packaged 280 pcs			8,2 mm	80	114808



All dimensions in mm

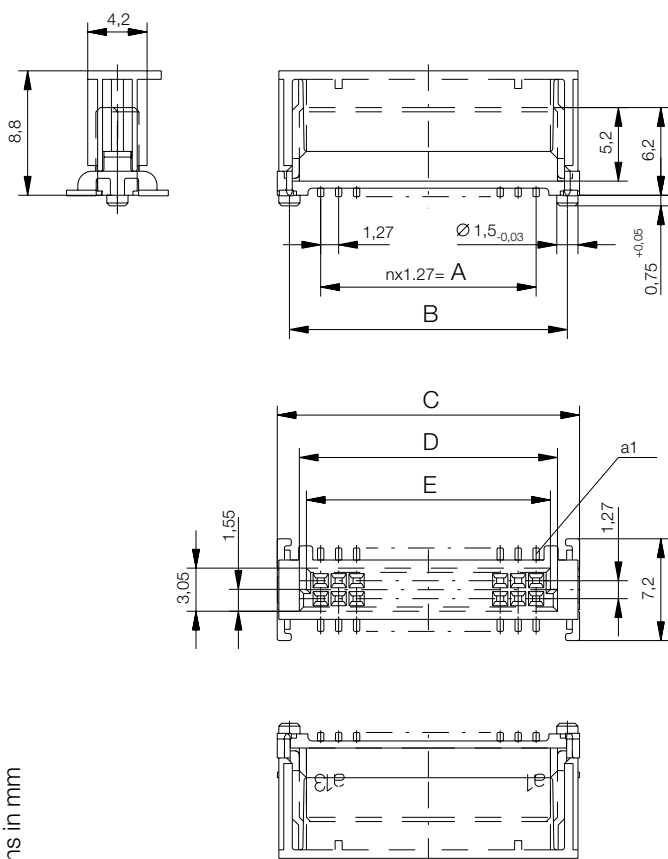
Vertical Female Connectors Type B Low Profile



The SMC Type B vertical female connector in pitch 1.27 mm is available with 12, 26 or 50 contacts. There is a very high flexibility for sandwich boards by combination of different connector heights (6.2 mm, 6.7 mm, 8.2 mm and 9 mm). The board to board distances are possible between 8.0 mm and 12.2 mm (wipe length 2.5 mm) or up to 14.0 mm (wipe length 0.7 mm).

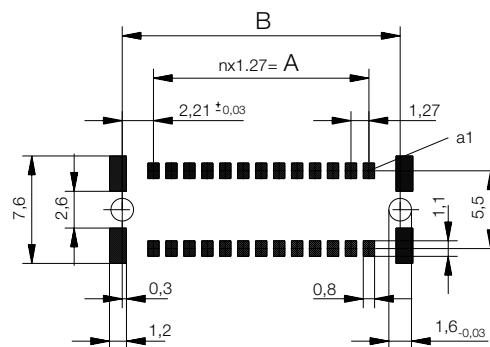
Fully automatic assembly is possible by using tape on reel packaging. The black insulator ensures easy recognition for quick visual identification, and the pre-assembled pick and place cover provides a firm vacuum grip of the connector. Special contact lead design guarantees exact placement of the connectors on the PCB. A secure soldering process is guaranteed due to the coplanarity of the contacts and the high temperature insulator. The integrated solid metal SMT mounting bracket secures the seating of the connector on the PCB for reliable mating and unmating.

Dimensional drawing



12	6.35	10.77	12.7	9.37	8.37
26	15.24	19.66	21.6	18.26	17.26
50	30.48	34.9	36.8	33.5	32.5
Polzahl No. of contacts	A	B ±0.03	C	D	E

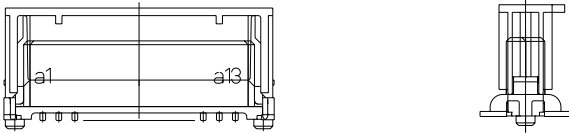
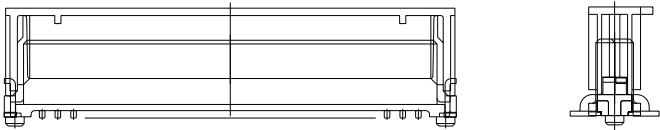
Leiterplatten-Layout Vorschlag für SMT
PCB-Layout Proposal for SMT



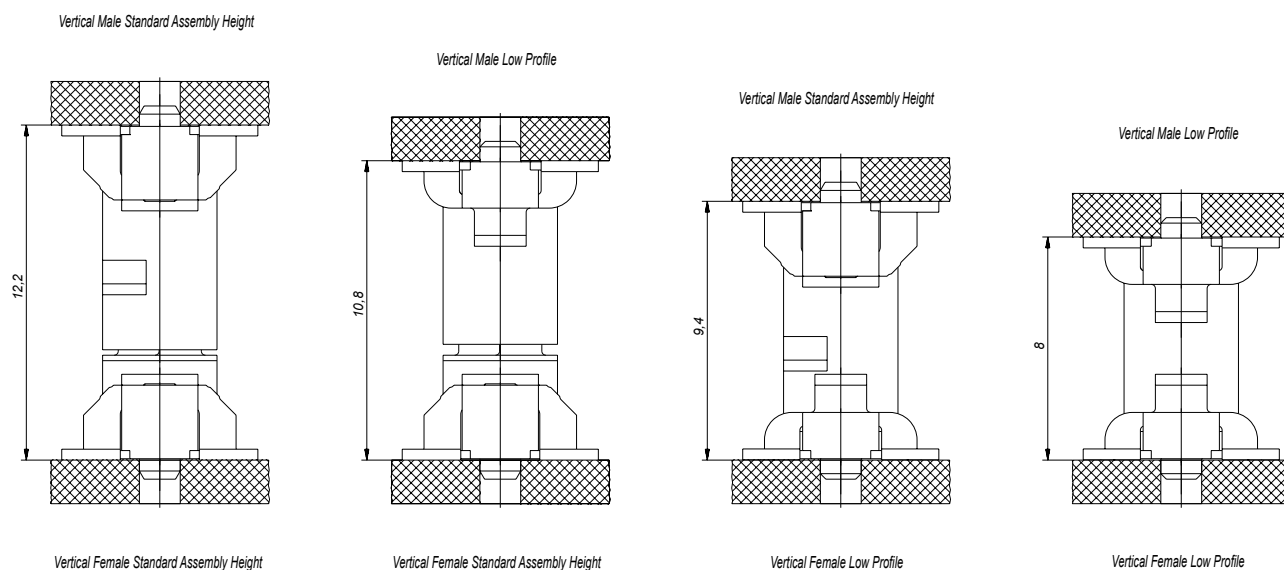
All dimensions in mm

Vertical Female Connectors Type B Low Profile

Ordering Information

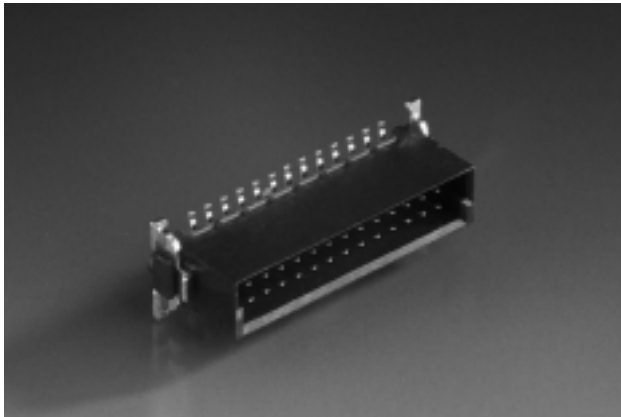
Configuration	Height	No. of Pins	Part Number
Type B With Assembly Cap Tape On Reel Packaged 280 pcs	6,2 mm	12	064318
			
Type B With Assembly Cap Tape On Reel Packaged 280 pcs	6,2 mm	26	064317
			
Type B With Assembly Cap Tape On Reel Packaged 280 pcs	6,2 mm	50	064316
			

For smaller quantities or tube feeder please refer to the cross reference table on page 39.



All dimensions in mm

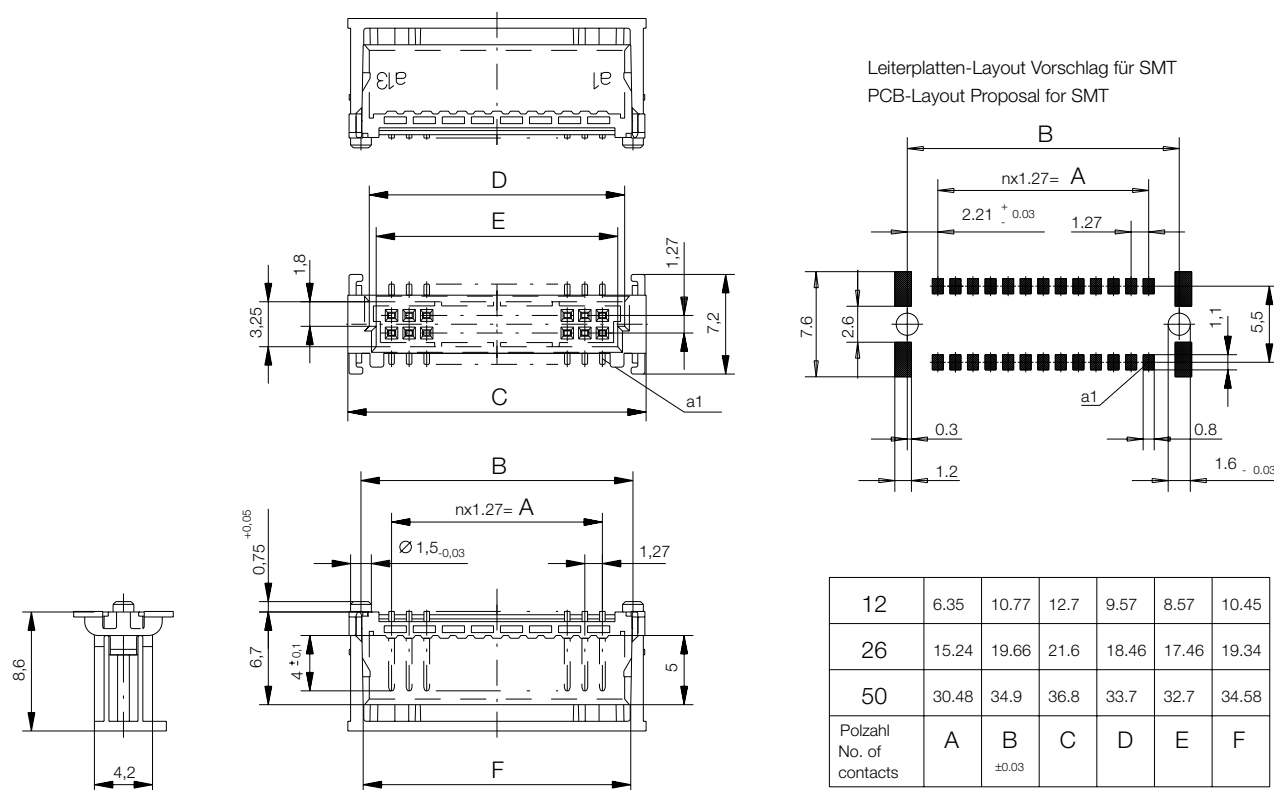
Vertical Male Connectors Type Q Low Profile



The SMC Type Q vertical male connector in pitch 1.27 mm is available with 12, 26 or 50 contacts. There is a very high flexibility for sandwich boards by combination of different connector heights (6.2 mm, 6.7 mm, 8.2 mm and 9 mm). The board to board distances are possible between 8.0 mm and 12.2 mm (wipe length 2.5 mm) or up to 14.0 mm (wipe length 0.7 mm).

Fully automatic assembly is possible by using tape on reel packaging. The black insulator ensures easy recognition for quick visual identification, and the pre-assembled pick and place cover provides a firm vacuum grip of the connector. Special contact lead design guarantees exact placement of the connectors on the PCB. A secure soldering process is guaranteed due to the coplanarity of the contacts and the high temperature insulator. The integrated solid metal SMT mounting bracket secures the seating of the connector on the PCB for reliable mating and unmating.

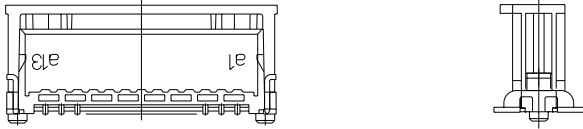
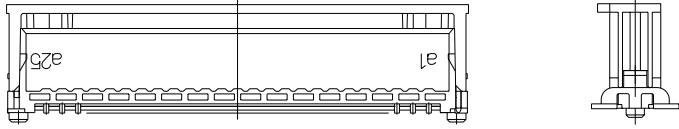
Dimensional drawing



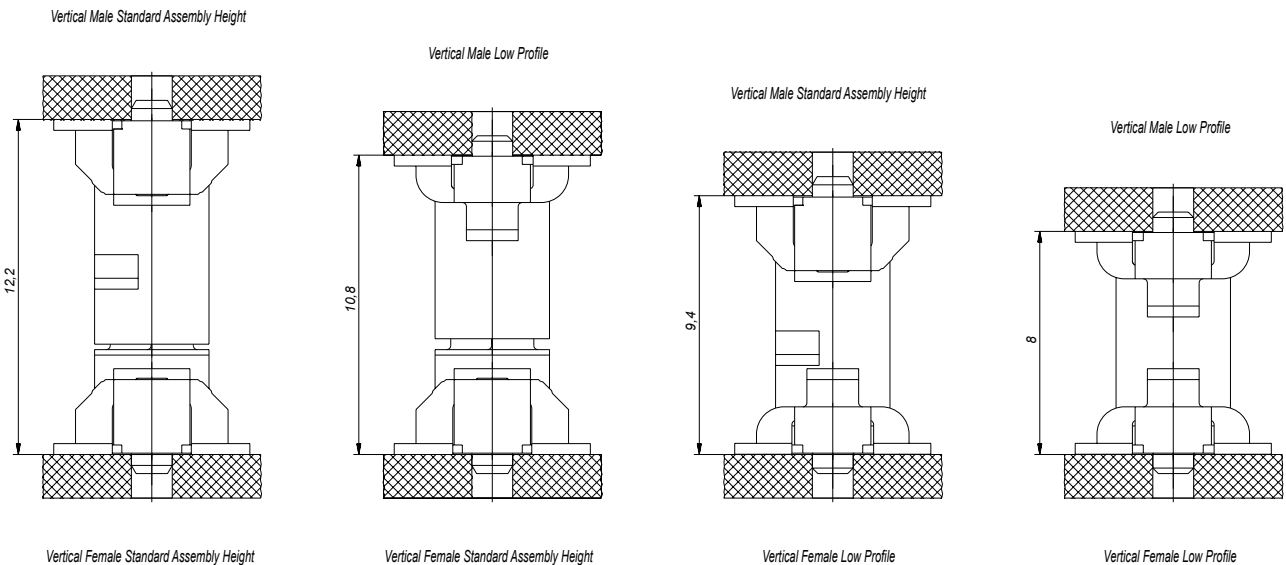
All dimensions in mm

Vertical Male Connectors Type Q Low Profile

Ordering Information

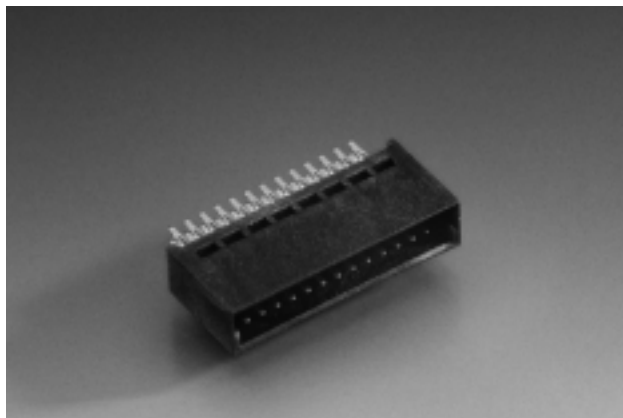
Configuration	Height	No. of Pins	Part Number
Type Q With Assembly Cap Tape On Reel Packaged 280 pcs 	6,7 mm	12	064321
Type Q With Assembly Cap Tape On Reel Packaged 280 pcs 	6,7 mm	26	064320
Type Q With Assembly Cap Tape On Reel Packaged 280 pcs 	6,7 mm	50	064319

For smaller quantities or tube feeder please refer to the cross reference table on page 39.



All dimensions in mm

Vertical Male Press-Fit Connectors Type Q Standard Assembly Height



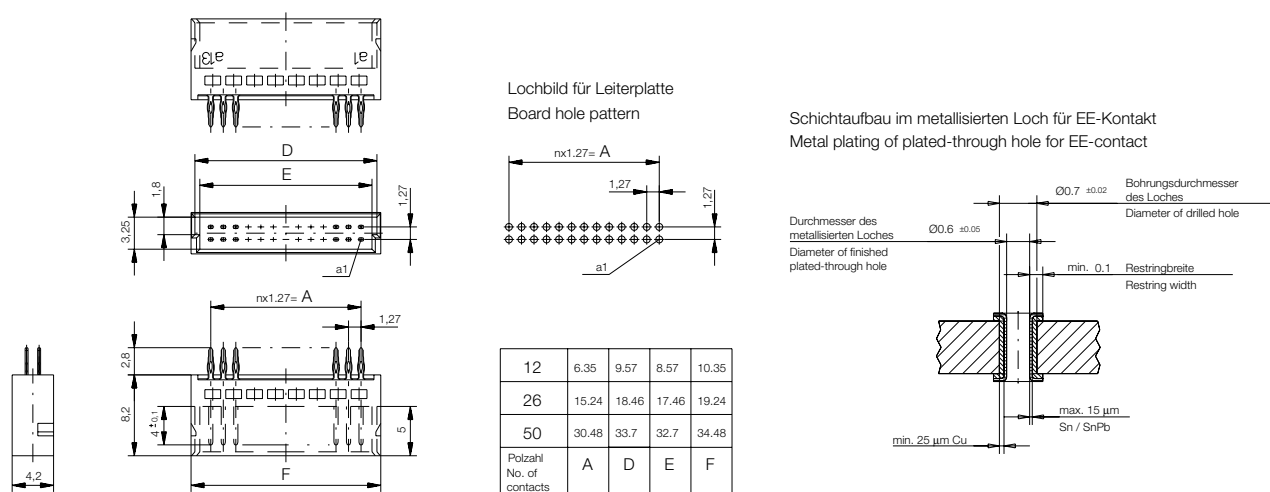
The SMC Type Q vertical male press-fit connector in pitch 1.27 mm is available 12, 26 or 50 contacts.

The type Q press-fit male connectors with the compliant ERNIPRESS area allow the design of board to board connections between BUS PC Boards (motherboard) with press-fit connectors and plug-in cards (daughter boards) with SMT assembly.

It is also ideal for rear I/O applications on backplanes, because mainly pressfit connectors are used on backplanes.

Both press-fit and SMT termination styles are available. The type Q connectors are tube packaged.

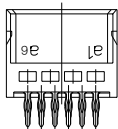
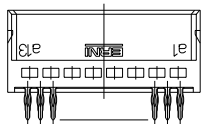
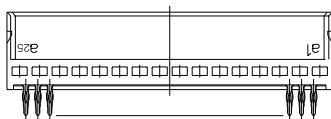
Dimensional drawing

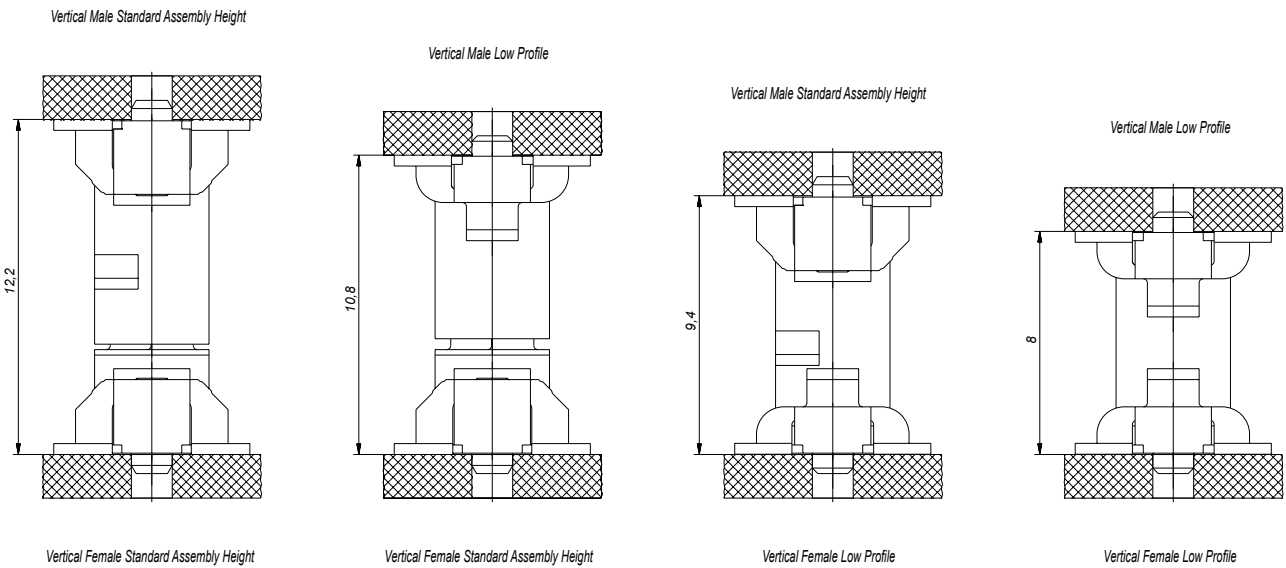


All dimensions in mm

Vertical Male Press-Fit Connectors Type Q Standard Assembly Height

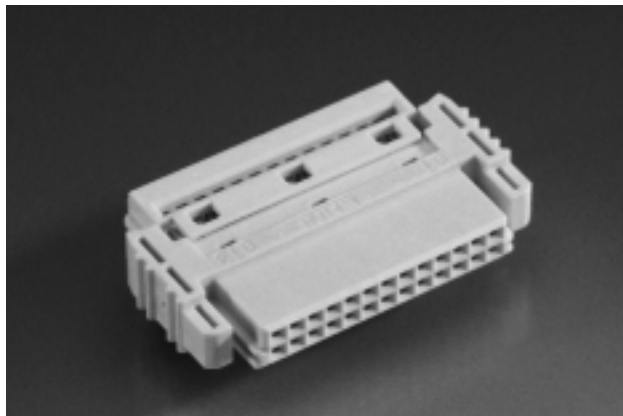
Ordering Information

Configuration		Height	No. of Pins	Part Number	
Type Q Without Assembly Cap Tube Packaged 65 pcs			8.2 mm	12	064002
Type Q Without Assembly Cap Tube Packaged 34 pcs			8.2 mm	26	064003
Type Q Without Assembly Cap Tube Packaged 19 pcs			8.2 mm	50	064004



All dimensions in mm

IDC Female Connectors Type B For Male Connectors With Locking And Ejector Latches

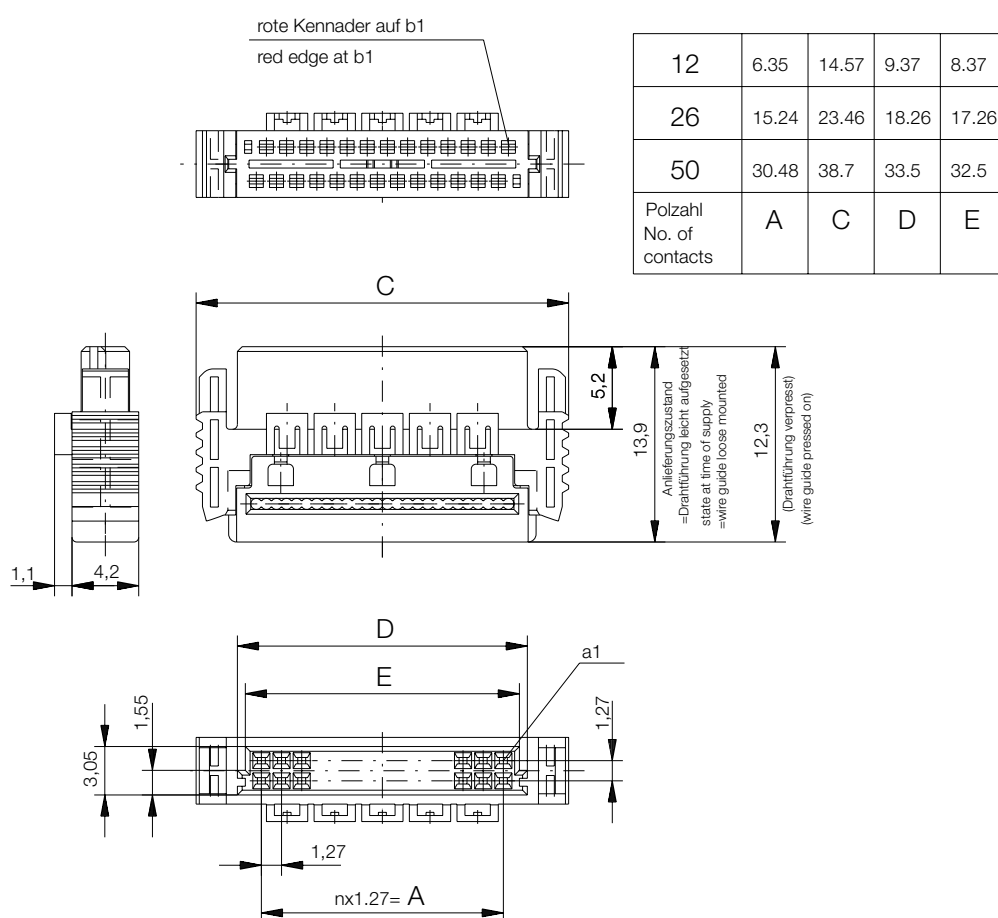


The SMC Type B IDC female connector in pitch 1.27 mm is available with 12, 26 or 50 contacts.

The IDC female connector type B with locking and ejector latches is suitable for the male connector type B and Q with locking and ejector latches standard assembly height.

The connectors are styrofoam packaged.

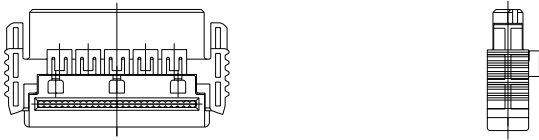
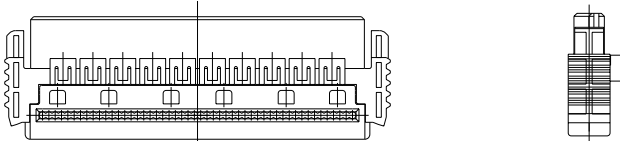
Dimensional drawing

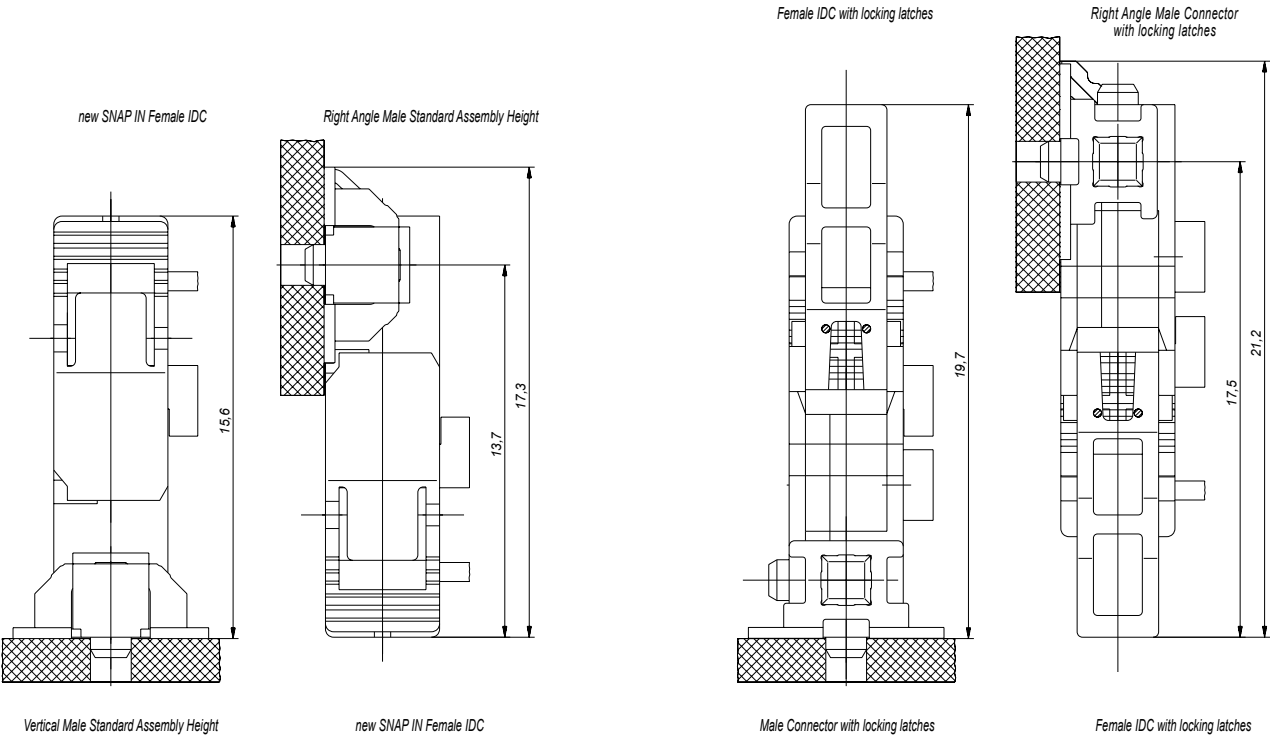


All dimensions in mm

IDC Female Connectors Type B For Male Connectors With Locking And Ejector Latches

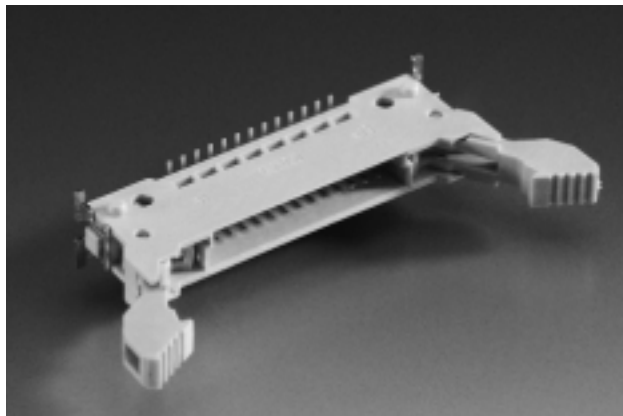
Ordering Information

Configuration	No. of Pins	Part Number
Type B Without Assembly Cap Without Coding Styrofoam Package 50 pcs	12	044663
		
Type B Without Assembly Cap With Coding Styrofoam Package 30 pcs	26	044658
		
Type B Without Assembly Cap With Coding Styrofoam Packaged 30 pcs	50	024403
		



All dimensions in mm

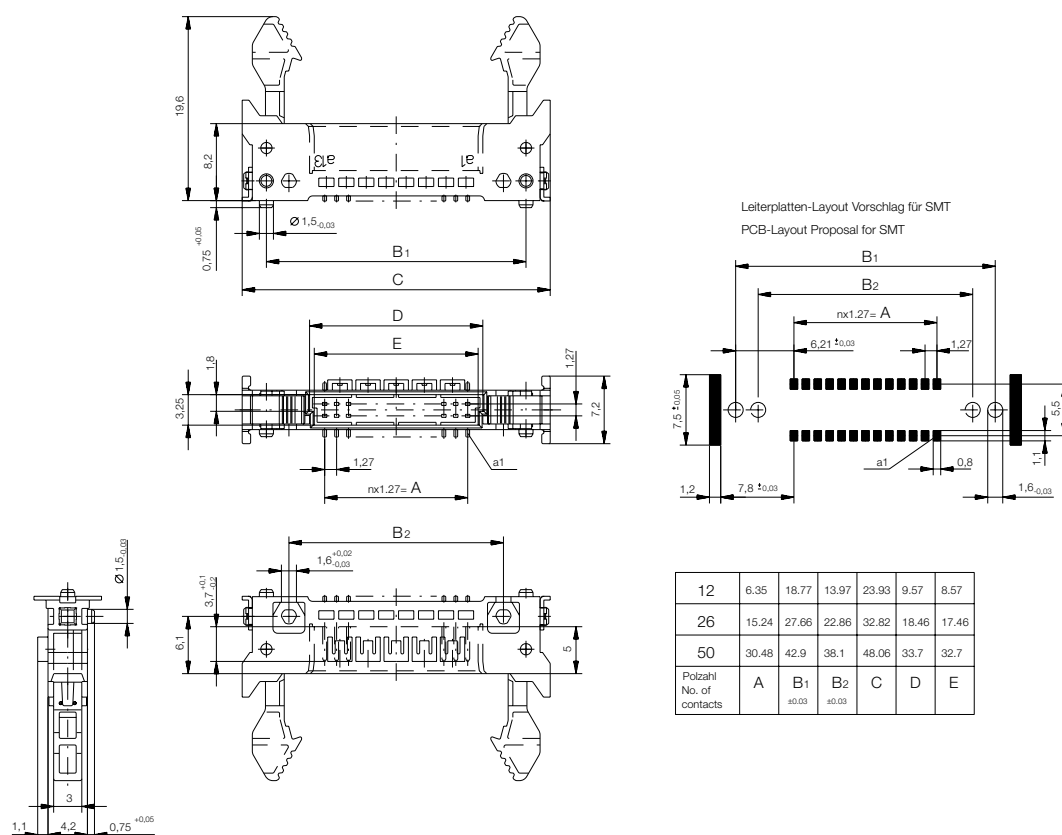
Male Connectors Type Q With Locking And Ejector Latches



The straight male type Q connector with locking latches is suitable for the female type B connector in IDC technique without latches.

The insulation bodies of the male connectors are assigned for a vertical or horizontal fixing. In order to leave the flange hole for the assembly the latches could be opened completely. But it should be kept in mind when mating the connector not to open them beyond the detent.

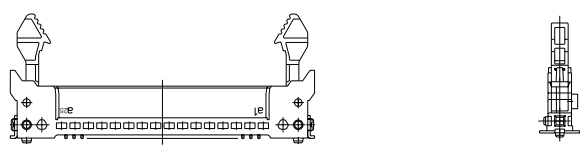
Dimensional drawing

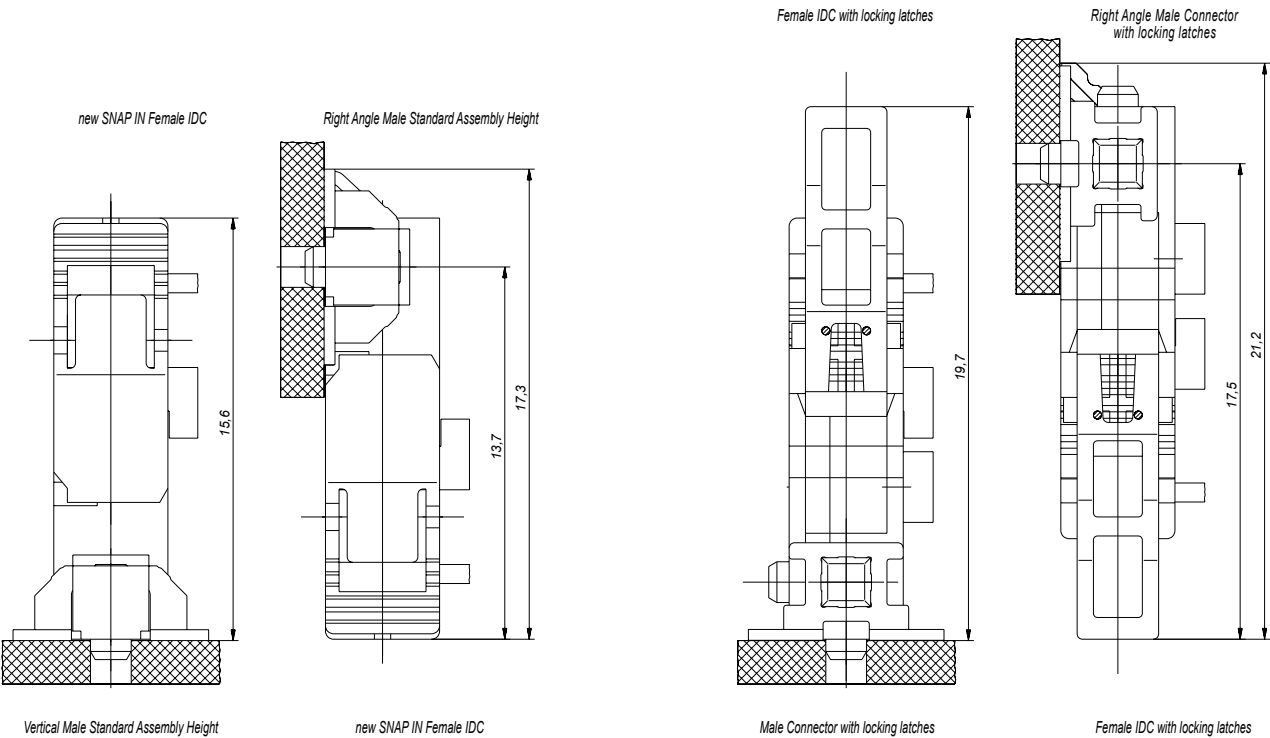


All dimensions in mm

Male Connectors Type Q With Locking And Ejector Latches

Ordering Information

Configuration	No. of Pins	Part Number
Type Q Without Assembly Cap Without Coding Styrofoam 50 pcs Package	12	103754
		
Type Q Without Assembly Cap With Coding Styrofoam Package 40 pcs	26	103755
		
Type Q Without Assembly Cap With Coding Styrofoam 30 pcs Package	50	103756
		



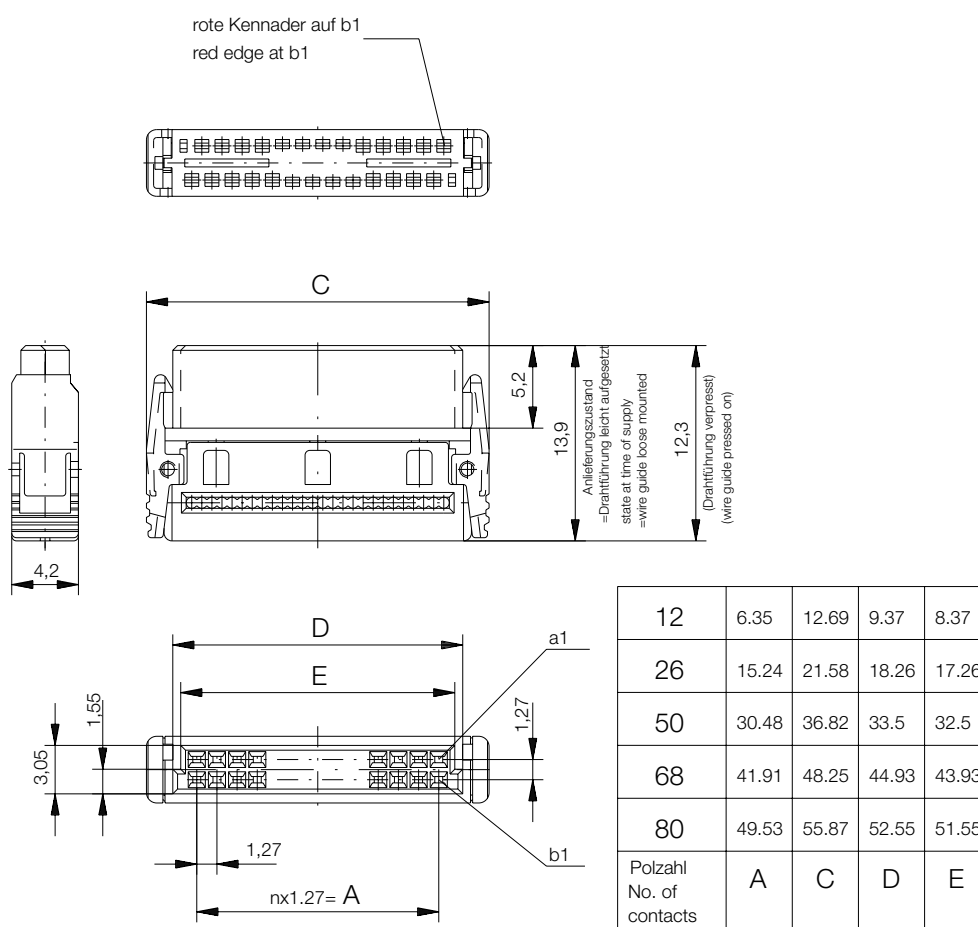
All dimensions in mm

IDC Female Connectors Type B With Locking Latches



The new IDC females are designed for a quick and space saving locking. This will be achieved by latches integrated already in the insulation body which will snap in the existing notches in the male connector. For the guiding of the ribbon cable the insulator body contains alignment guides for the exact positioning of each wire of the ribbon cable.

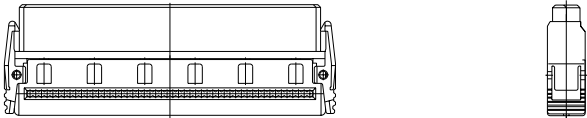
Dimensional drawing

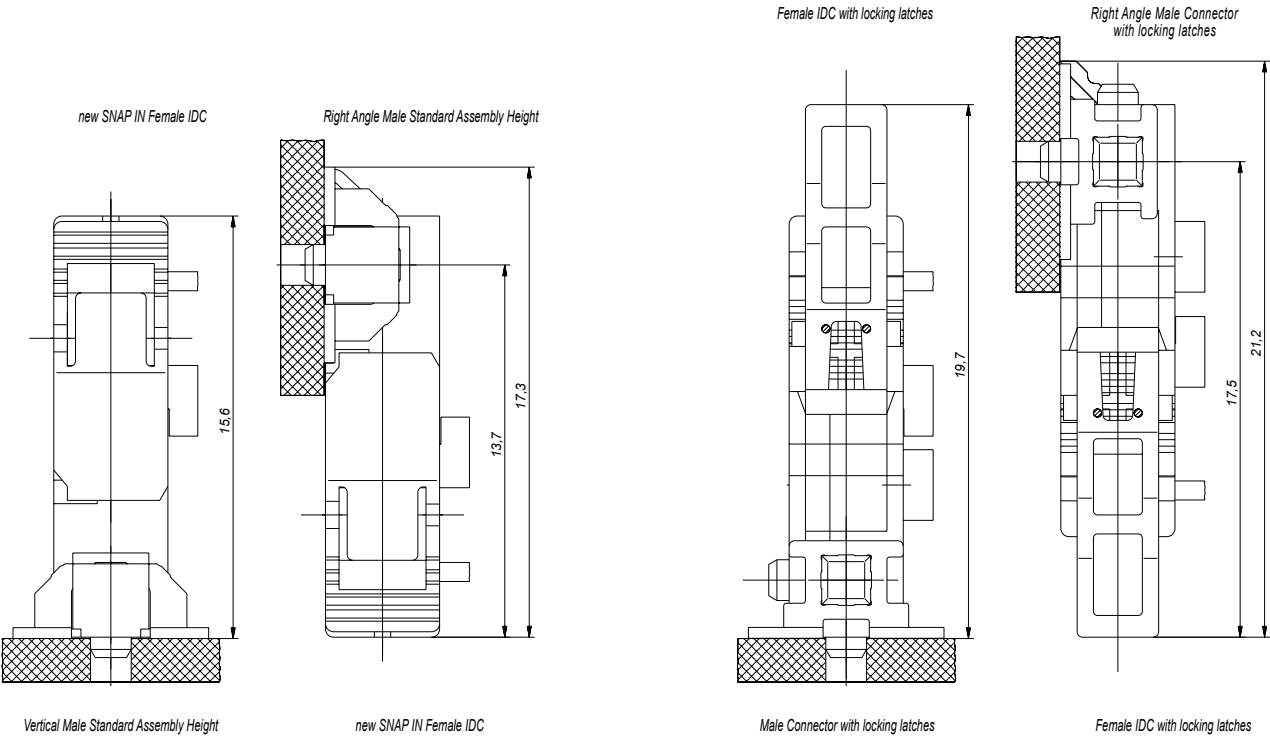


All dimensions in mm

Actual Versions: IDC Female Connectors Type B With Locking Latches
(use for new designs)

Ordering Information

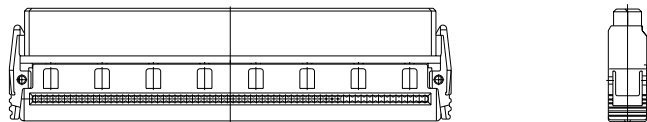
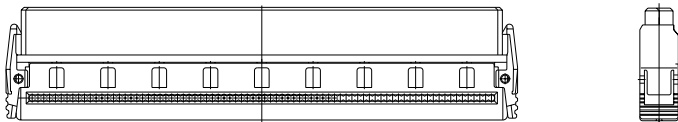
Configuration	Height	No. of Pins	Part Number
Type B Without Assembly Cap Without Coding Tray Package 480 pcs			
		12	124260
Type B Without Assembly Cap Without Coding Tray Package 250 pcs			
		26	124261
Type B Without Assembly Cap Without Coding Tray Package 150 pcs			
		50	124262

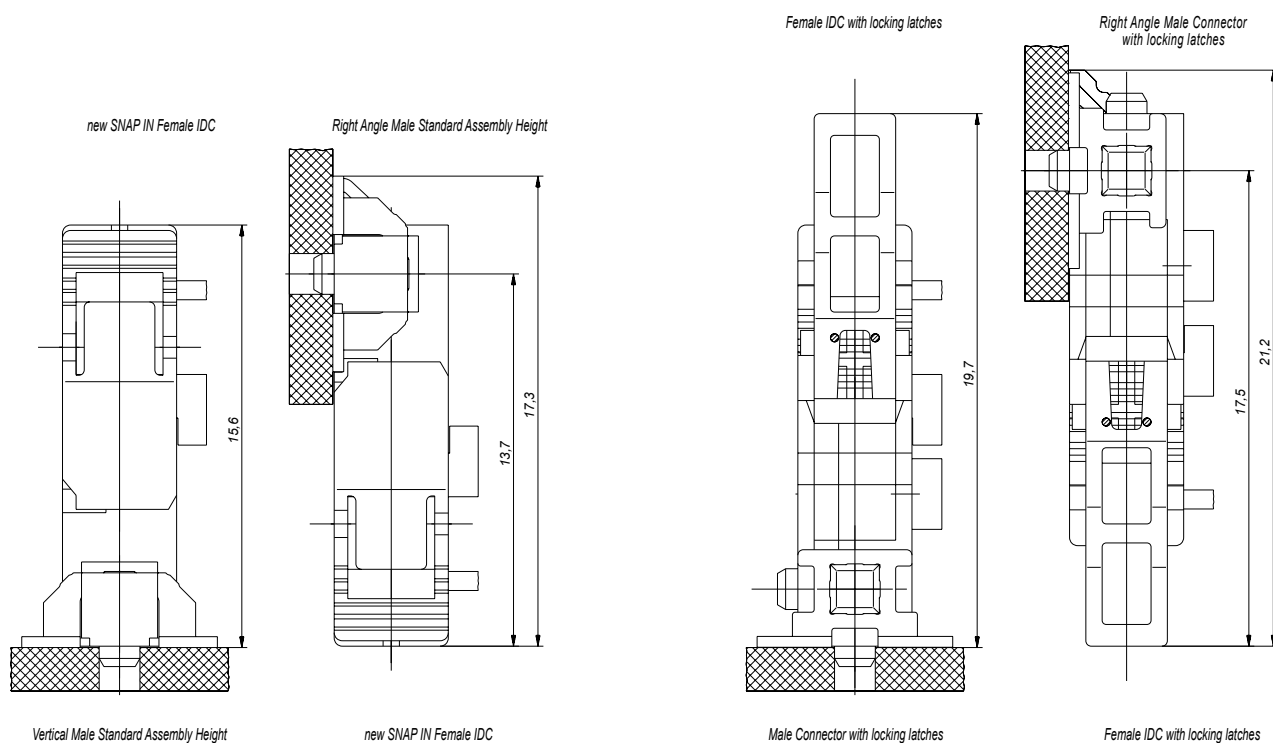


All dimensions in mm

Actual Versions: IDC Female Connectors Type B With Locking Latches (use for new designs)

Ordering Information

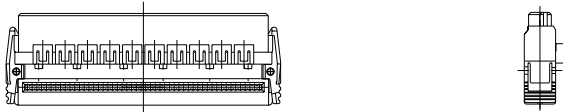
Configuration	Height	No. of Pins	Part Number
Type B Without Assembly Cap Without Coding Tray Package 100 pcs			
		68	124263
Type B Without Assembly Cap Without Coding Tray Package 100 pcs			
		80	124264

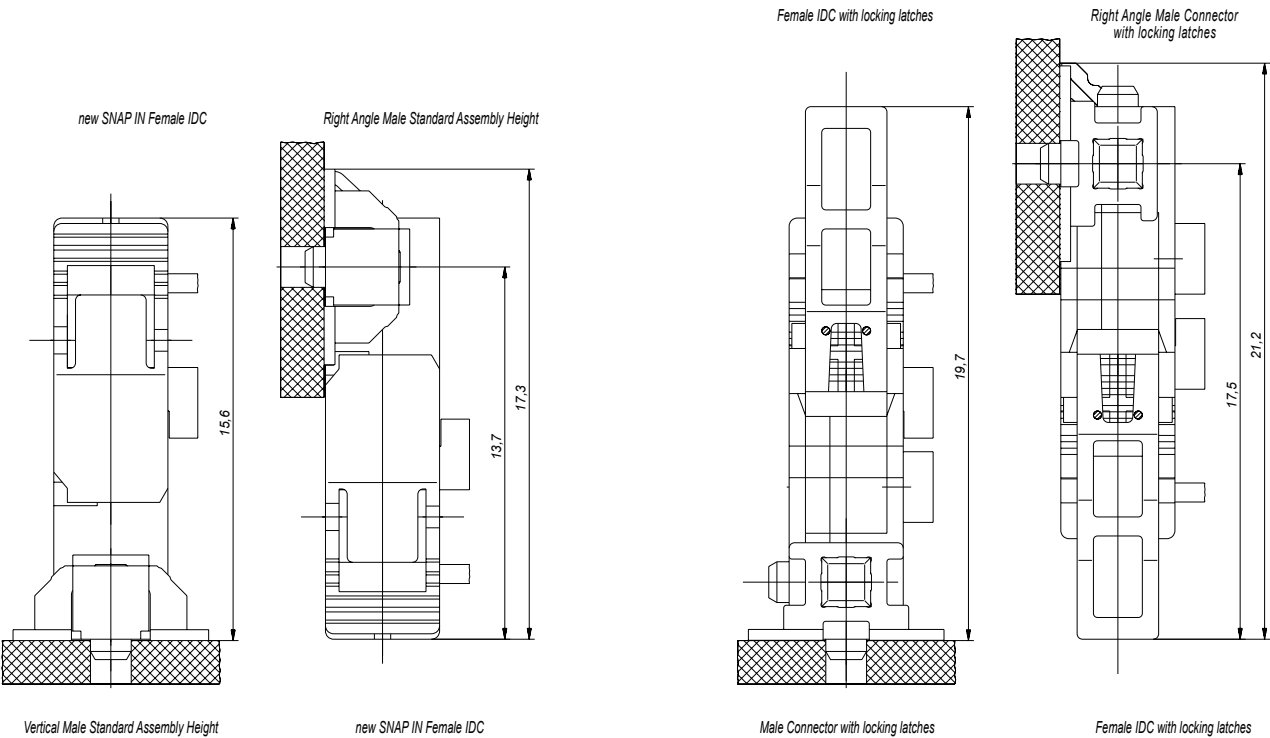


All dimensions in mm

Phase Out Versions: IDC Female Connectors Type B With Locking Latches
(do not use for new designs)

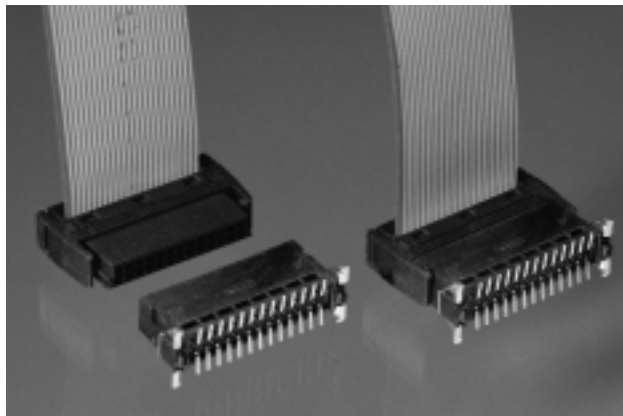
Ordering Information

Configuration	No. of Pins	Part Number
Type B Without Assembly Cap Without Coding Tray Package 480 pcs	12	103634 New Design: 124260
		
Type B Without Assembly Cap With Coding Tray Package 250 pcs	26	103633 New Design: 124261
		
Type B Without Assembly Cap With Coding Tray Package 150 pcs	50	103632 New Design: 124262
		



All dimensions in mm

Ribbon Cable for IDC Connectors

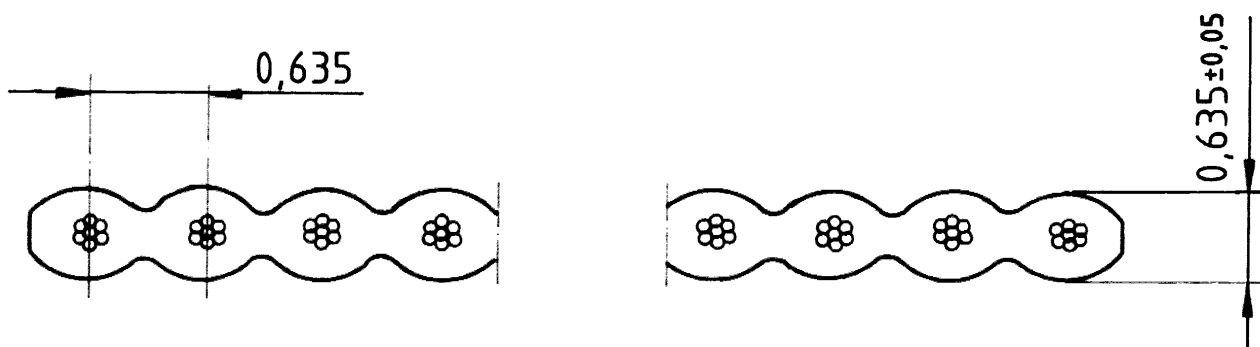


Specification for ribbon cable

Wire size:	AWG30, stranded, tin plated
Wire stranding:	7 * 0.102 (7/38")
Insulation:	PVC, flame retardent VW-1, red stripe
Conductor spacing:	0.635 mm (0.025")
Temperature range:	-20°C... + 105°C
Voltage rating:	150V
Test voltage:	1500Veff
Conductor resistance:	max. 354Ω/km
Capacitance at 1 kHz:	95 pF/m
Inductance at 10 kHz:	0.5μH/m
Insulation resistance:	min. 30MΩ x km
UL-Style:	E2678

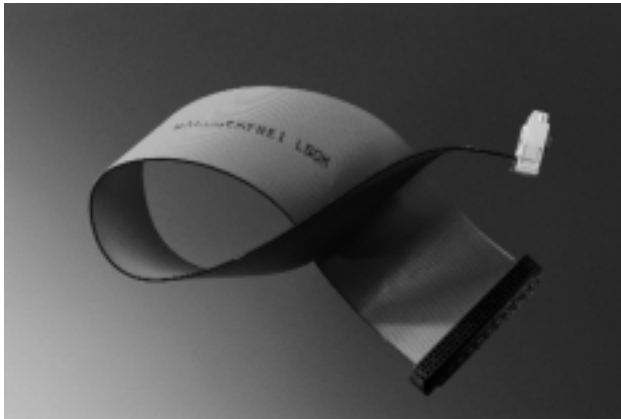
Ordering Information

No. of Pins	Length	Part Number
12	30.5 m	053786
26	30.5 m	053787
50	30.5 m	034575
68	30.5 m	134527
80	30.5 m	134528



All dimensions in mm

Ribbon Cable Halogen Free For IDC Connectors

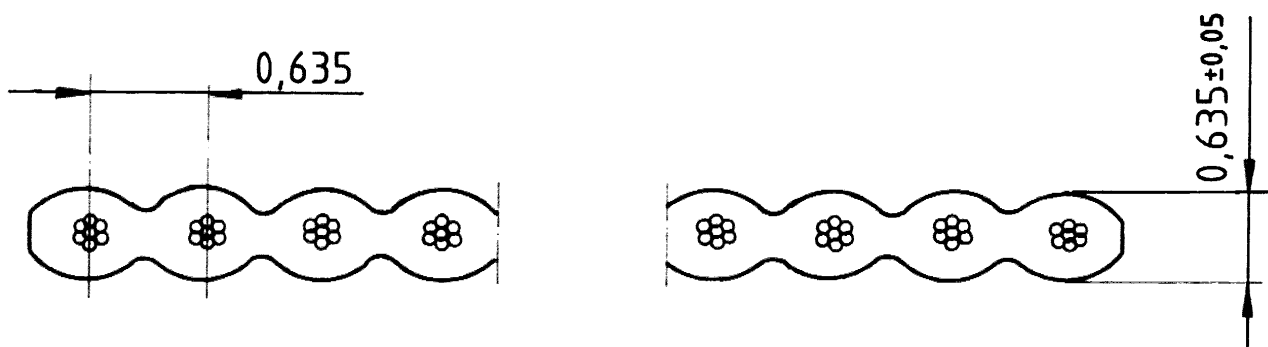


Specification for ribbon cable

Wire size:	AWG 30, stranded, tin plated
Wire Stranding:	7*0.102 mm
Insulation:	TPE/halide free
Conductor spacing:	0.635 mm
Temperatur range:	-20°C...+90°C
Voltage rating:	150V
Test voltage:	1500Veff
Conductor resistance:	max. $\leq 354\Omega/\text{km}$
Insulation resistance:	$\geq 20\text{M}\Omega \times \text{km}$
UL-Style:	E 2678

Ordering Information

No. of Pins	Length	Part Number
12	30.5 m	823822
26	30.5 m	823823
50	30.5 m	823824
68	30.5 m	134529
80	30.5 m	134530



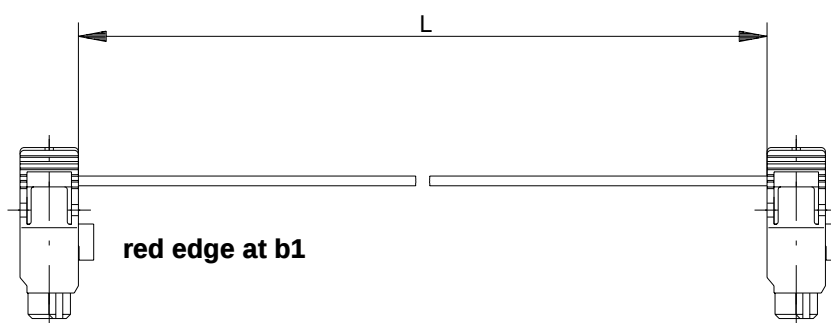
All dimensions in mm

Cable Assemblies

Ordering Information

Configuration	Length (L)	Part Number
IDC Female Connector SMC-B, 12 pin without Coding with Locking Latches (ERNI Part-Nr.: 124260).	300mm	173801
	200mm	173800
	100mm	173799
IDC Female Connector SMC-B, 26 pin without Coding with Locking Latches (ERNI Part-Nr.: 124261).	300mm	173798
	200mm	173797
	100mm	173796
IDC Female Connector SMC-B, 50 pin without Coding with Locking Latches (ERNI Part-Nr.: 124262).	300mm	173795
	200mm	173794
	100mm	173793
IDC Female Connector SMC-B, 68 pin without Coding with Locking Latches (ERNI Part-Nr.: 124263).	300mm	193890
	200mm	193889
	100mm	193888
IDC Female Connector SMC-B, 80 pin without Coding with Locking Latches (ERNI Part-Nr.: 124264).	300mm	193893
	200mm	193892
	100mm	193891

Drawing



Press In Tools For The Male Connectors

Ordering Information

Design	Type	Comment	Upper Tool Part Number	Lower Tool Part Number
Vertical Male 12-Pin Pressfit	Q Standard Assembly Height	With Quick Change	220160	220165
Vertical Male 26-Pin Pressfit	Q Standard Assembly Height	With Quick Change	220162	220167
Vertical Male 50-Pin Pressfit	Q Standard Assembly Height	With Quick Change	220164	220169

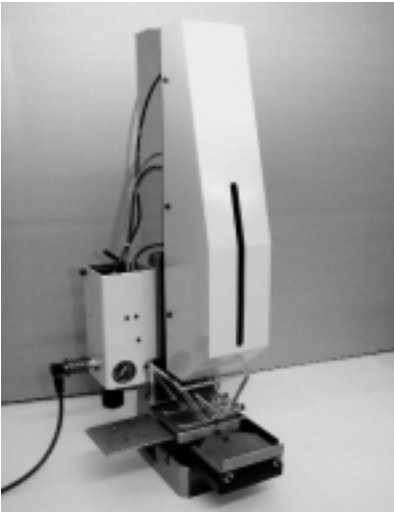
Tools For IDC Assemblies



Cable Cutting Tool



Hand Crimp Tool



Bench Press



Hand Lever Press

Ordering Information

Description	Part Number
Cable Cutting Tool	134296
Hand Crimp Tool	053283
Hand Lever Press	134297

Description	Part Number
Bench Press	134298
Toolset	134299

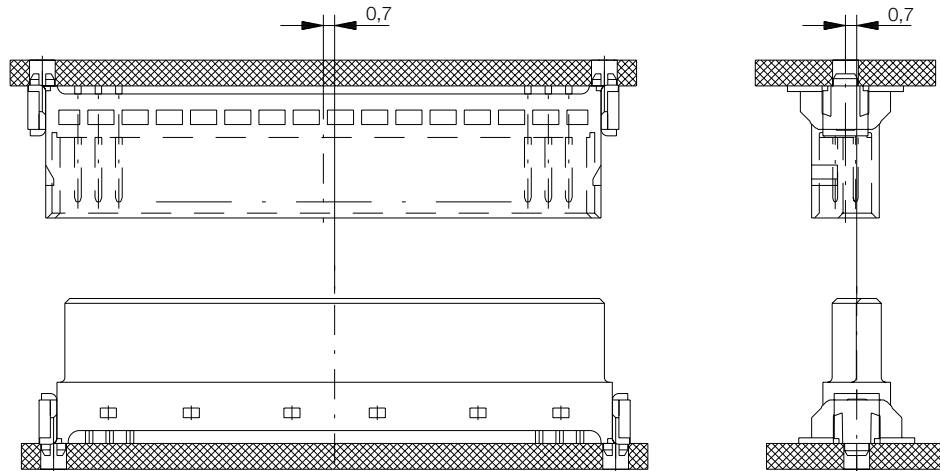
SMT Cross Reference List Tape on Reel/Tube packaging

	Tape on reel Packaging SMT Termination	Tube packaging SMT Termination with assembly hood	Tube packaging SMT Termination without assembly hood
Number of Pins	Female connector type B (phase out versions)	Female connector type B (phase out versions)	Female connector type B (phase out versions)
12pin	Part No. 054597	Part No. 053217	Part No. 044984
26pin	Part No. 054598	Part No. 053218	Part No. 044986
50pin	Part No. 054599	Part No. 054028	Part No. 054020
Number of Pins	Female connector type B (actual versions)	Female connector type B (actual versions)	Female connector type B (actual versions)
12pin	Part No. 124043	Part No. 104941	
26pin	Part No. 124044	Part No. 104942	
50pin	Part No. 124045	Part No. 104943	
Number of Pins	Female connector type B low profile (8mm height)	Female connector type B low profile (8mm height)	Female connector type B low profile (8mm height)
12pin	Part No. 064318	Part No. 063653	
26pin	Part No. 064317	Part No. 063651	
50pin	Part No. 064316	Part No. 063652	
Number of Pins	Female connector type Q	Female connector type Q	Female connector type Q
12pin	Part No. 104557		Part No. 103523
26pin	Part No. 104558		Part No. 103524
50pin	Part No. 104559		Part No. 103525
Number of Pins	Male connector type B	Male connector type B	Male connector type B
12pin	Part No. 054594		Part No. 044985
26pin	Part No. 054595		Part No. 044987
50pin	Part No. 054596		Part No. 063197
Number of Pins	Male connector type Q	Male connector type Q	Male connector type Q
12pin	Part No. 063179	Part No. 054088	Part No. 053261
26pin	Part No. 063209	Part No. 063208	Part No. 063319
50pin	Part No. 063210	Part No. 054029	Part No. 054021
Number of Pins	Male connector type Q low profile (8mm height)	Male connector type Q low profile (8mm height)	Male connector type Q low profile (8mm height)
12pin	Part No. 064321	Part No. 063656	
26pin	Part No. 064320	Part No. 063655	
50pin	Part No. 064319	Part No. 063654	

Mating Conditions for SMC-Systems

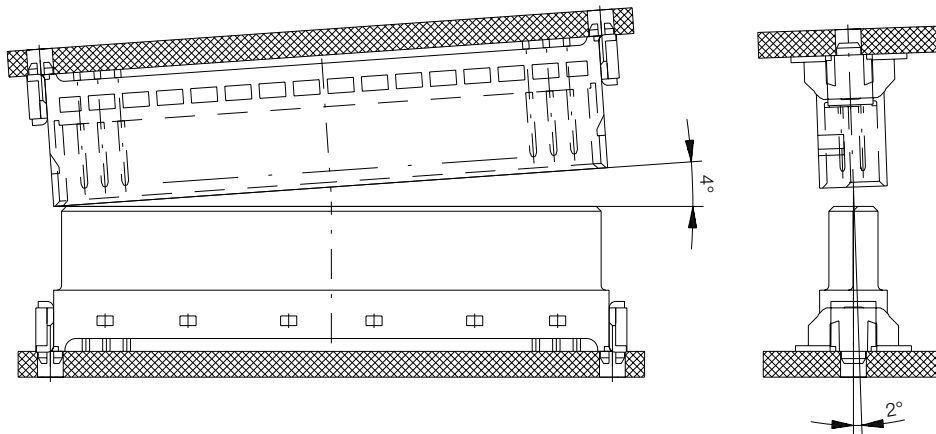
zulässiger Mittenversatz in Längs und Querrichtung jeweils $\pm 0,7\text{mm}$

Allowed misalignment in longitudinal and transverse axes $\pm 0,7\text{mm}$



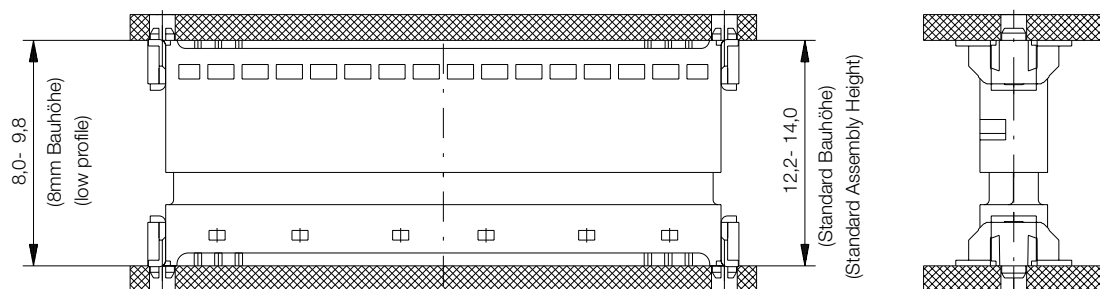
zulässiger Winkelversatz längs: $\pm 4^\circ$, quer: $\pm 2^\circ$

Allowed angular Inclination longitudinal: $\pm 4^\circ$, transverse: $\pm 2^\circ$



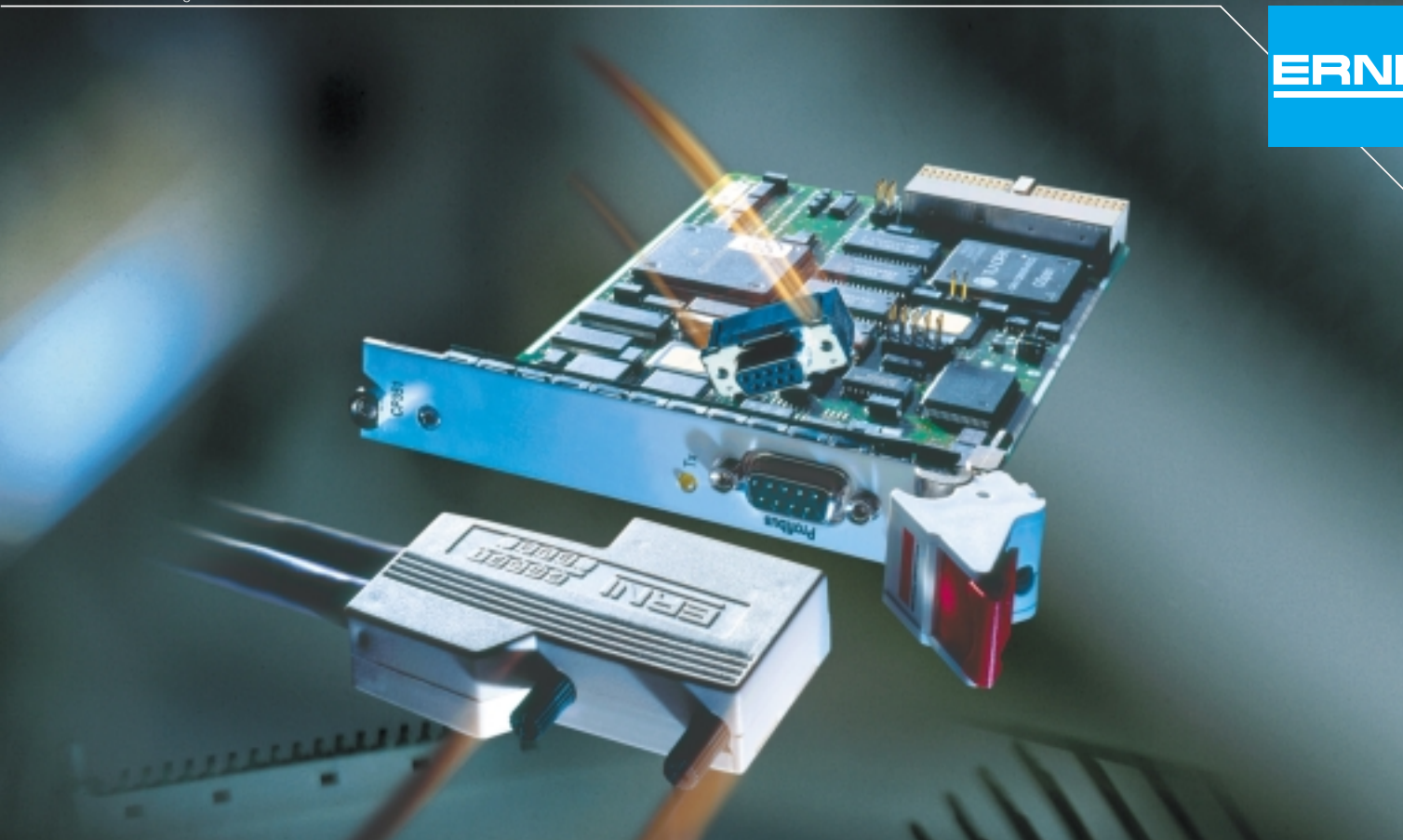
Maximaler "Board to Board" Abstand für sichere Kontaktgabe: 12,2-14,0mm (Standard Bauhöhe) / 8,0-9,8 (8mm Bauhöhe)

Maximum "Board to Board" distance for secure mating: 12,2-14,0 (Standard Assembly Height) / 8,0-9,8 (low profile)



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Sometimes the best ideas fail due to the hard facts of reality. To ensure what is feasible doesn't lag behind what is desirable, you need a system with high flexibility and convincing performance: the 2.0 mm H.M. System ERmet for safe CompactPCI connections between edgecard and backplane as well as the angled Pressfit D-Sub from the TMC series plus the ERbic Bus Interface Connector System for safe field bus coupling.

- ERbic:**
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 - ❑ Unmistakable coding as bus node or termination
 - ❑ Standard or reversed with D-Sub mating area turned round by 180°
 - ❑ Horizontal or vertical cable entry and optional 2nd D-Sub for programming
- D-Sub:**
 - ❑ Angled female and male connectors in economical pressfit technique
 - ❑ Solid pressfit clip ensures low-resistance grounding
 - ❑ Assembly heights 7.3 mm (Standard) and 3.6 mm (Eurostyle)
- ERmet:**
 - ❑ Very good RF characteristics due to special spring contact design
 - ❑ Functionally safe mating of shielded female connectors by special shield plate design
 - ❑ Complete CompactPCI range A, B and AB as well as HotSwap and monoblock modules

No doubt you still have questions. Give us a call.

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ERNI Manufactures a Wide Range of World-Class Quality Interconnect Products

DIN 41612/IEC 60603-2 Connectors

Wide Range of Standard and Inverse Pressfit and Solder DIN Connectors
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Right-Angle Pressfit Connectors
Type M Hybrid Connectors for Signal, Power and Coax
Female Crimp Connectors
IDC Receptacle Connectors
Cable Housings (covers)
Eurocard Center Connectors



2.54 mm IDC Connector System



ERmet® 2mm Hard Metric Connectors

2 mm Hard Metric Connectors

ERmet® 7 and 10 Row Connectors
ERmet® Connectors for cPCI and VME-64x Applications
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Shielded and Unshielded Connectors
Shrouds
AB Connectors and Shrouds
Monoblock Connectors



D SUB Pressfit Connectors



SMC .050" (1.27 mm) SMT Connector System

D-Subminiature Connectors

Pressfit Connectors
Filtered Connectors
Right-Angle Pressfit Connectors
High Power Connectors
IDC Connectors



LDG-A Miniature Enclosures



Wide range of DIN 41612 / IEC 60603-2 Connectors

Cable Housings

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ERbic® Bus Interface Connectors
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Shrouded Headers (.100")
Coaxial Cable PCB Connectors
2.54 mm IDC Connector System



Cable Housings



ERbic® Bus Interface Connector System

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