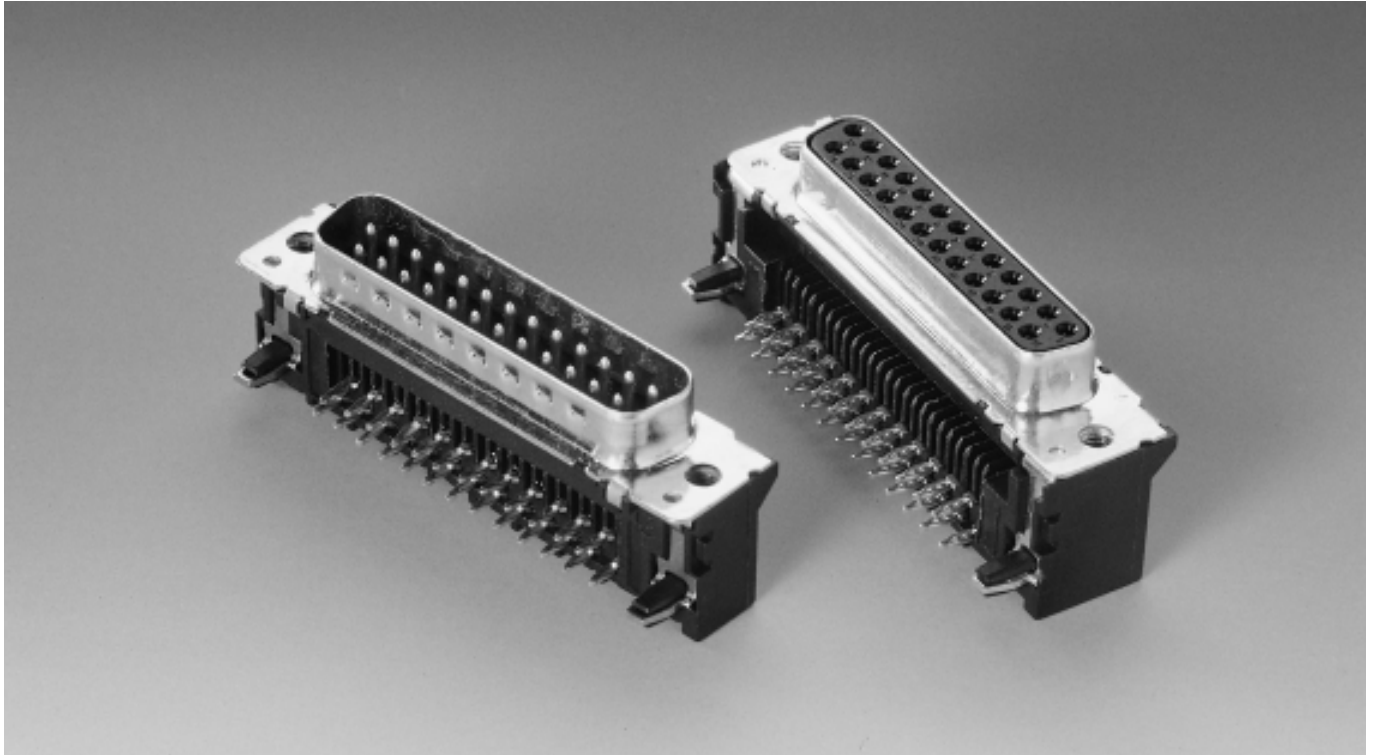


Right angle press-fit D-Sub connectors

Version in Standard and in Eurostyle



General

The new generation of right angle D-Sub connectors with press-fit termination of the TMC series are according to DIN 41 652, MIL-C-24308 and IEC 807-3.

These D-Sub connectors are specially designed for applications in PC Interface Cards and other plug-in cards with multi-layer PC Boards or SMT assembly. There you can use the benefits of the solderless press-in technology with its high reliability. A solid metal clip secures the fixing on the PC Board and no mating forces on to the contacts, e.g. of a cable connector, and excellent grounding.

The new right-angle D-Sub press-fit connectors are available in the version Standard or Eurostyle. Both versions can be delivered with 9, 15, 25 or 37 pins.

Main features

- Gas-tight, corrosion-proof and mechanically strong-connection
- Non-polluting due to no use of cleaning, flux or solder media
- No thermal stress on to the PC Board
- Female and male right angle connectors with press-fit termination
- Versions in Standard (assembly height: 7.3 mm) and Eurostyle (assembly height: 3.6 mm)
- Versions with M3 or #4-40
- Number of contacts: 9, 15, 25, 37
- Versions with threaded bolt M3 or #4-40
- Excellent grounding and fixing via integrated solid grounding clip, which has also a press-fit pin
- Short pin length of 3.2 mm (4 mm) for underlaying plug-in cards or other daughter boards
- For SMT and multilayer PC Boards with min. 1.6 mm thickness
- PC Board hole diameters of 1.0 mm according to the IEC specification
- Easy assembly of the connectors with standard flat press-in tools

Electrical and mechanical data

Type according to DIN 41 652, IEC 807-3		B
Termination style		press-fit pins right angle with compliant press-fit area
Number of contacts		9, 15, 25 and 37
Temperature range		-55°...+125° C
Permissible humidity		Annual average ≤ 80%, max. 100%
Creepage (Cr) and clearance (Cl) in mm	contact to contact	Cr
		Cl
	contact to ground	Cr
		Cl
Current rating at ambient temperature	A	
	+20° C (293 K)	2.8
	+70° C (343 K)	2.0
	+100° C (373 K)	1.2
Testvoltage, 50Hz, 1 min		
Contact/contact	V _{eff}	1000
Contact/ground	V _{eff}	1200
Contact resistance	mΩ	≤ 25
Insulation resistance	mΩ	10 ⁹ at 100 VDC
Impact and vibration proofness		No contact breakdown at 20g and 10...2000 Hz
Shock proofness		up to 50 g
Mating cycles		Performance level 2 ≥ 250 mating-cycles
Mating/unmating I force for fully mated connector		9 pins ≤ 30 / ≤ 20
		15 pins ≤ 50 / ≤ 33
		25 pins ≤ 83 / ≤ 56
		37 pins ≤ 123 / ≤ 82
Material of insulator		PBT/PCT
Flammability		UL 94 V-0
Colour		black
Material of metal front shell with plating		Steel with Sn over Ni
Material of contact		Ms
Plating of mating area		Au over Ni
Plating of termination area		Sn over Ni
Product approvals UL connector		E 84703

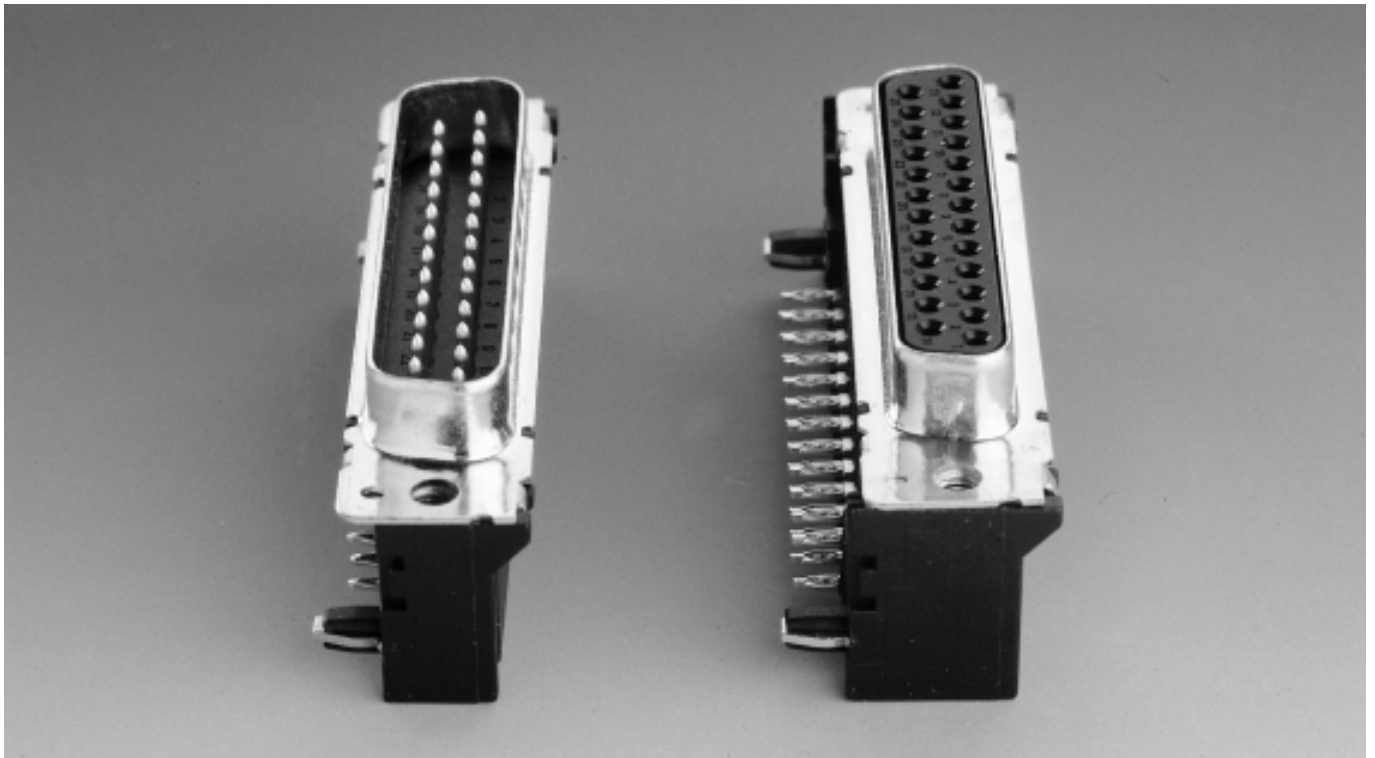
D-Sub 90° EE with 2 assembly heights

Eurostyle (assembly height 3.6 mm)

For front panels with modular spacing 3 TE (15.24 mm)

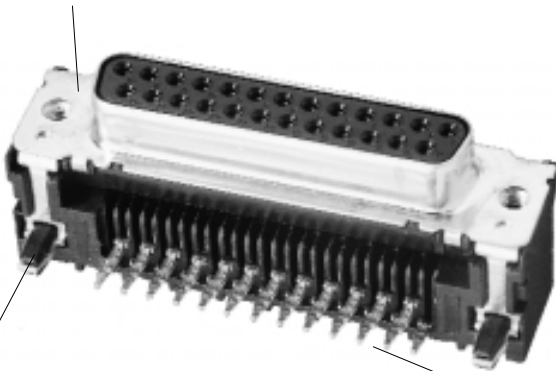
Standard (assembly height 7.3 mm)

For front panels with modular spacing 4 TE (20.32 mm)



Technical features

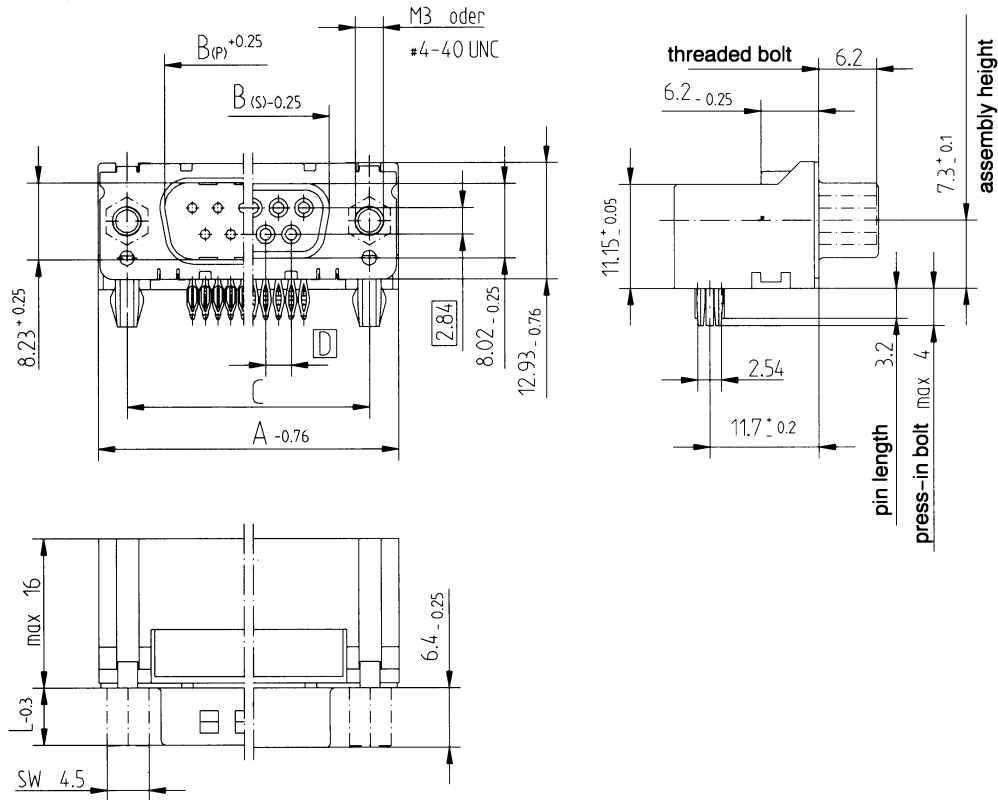
Metal front shell for good shield effectiveness



Solid press-in-clip for excellent grounding and fixing

Economical and reliable press-in termination with compliant press-in area

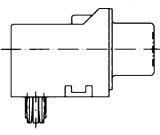
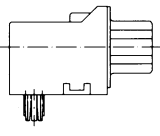
Dimensional drawing for Standard (assembly height 7.3 mm)



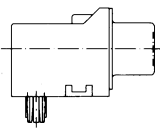
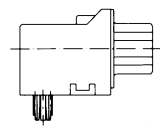
Dimension table

Number of pins	A	B (P)	B (S)	C	D	L
9	31.19	16.79	16.46	$25.0^{+0.12}_{-0.13}$	2.74	6.12
15	39.52	25.12	24.79	$33.3^{+0.15}_{-0.1}$	2.74	6.12
25	53.42	38.84	38.50	$47.04^{+0.13}$	2.76	5.99
37	69.70	55.30	54.96	$63.50^{+0.13}$	2.76	5.99

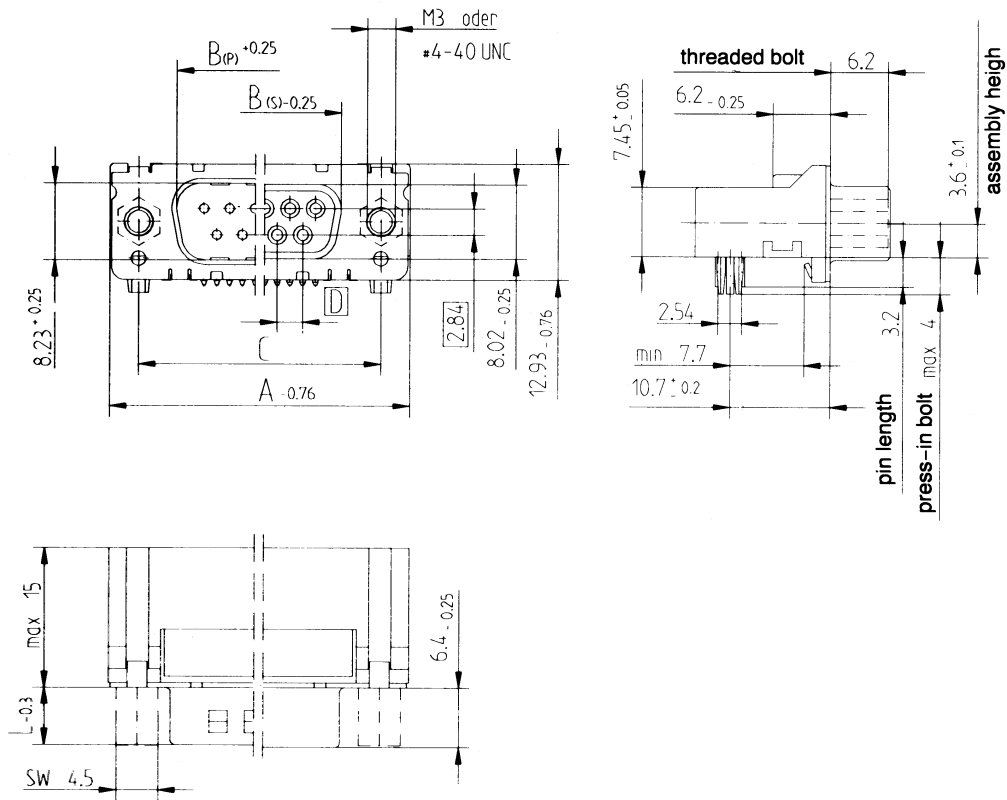
Ordering information for Male Connector

	Male Connector			
	TMC-P-....LPEE <i>Performance Level 207</i>			
Number of pins	09	15	25	37
Thread 	<i>Version with thread M3</i>			
	064840	064841	064842	064843
	<i>Version with thread #4/40</i>			
	064844	064845	064846	064847
Threaded bolt 	<i>Version with threaded bolt M3</i>			
	103766	103767	103768	103769
	<i>Version with threaded bolt #4/40</i>			
	103770	103771	103772	103773

Ordering information for Female Connector

	Female Connector			
	TMC-S-....LPEE <i>Performance Level 207</i>			
Number of pins	09	15	25	37
Thread 	<i>Version with thread M3</i>			
	064848	064849	064850	064851
	<i>Version with thread #4/40</i>			
	064852	064853	064854	064855
Threaded bolt 	<i>Version with threaded bolt M3</i>			
	103774	103775	103776	103777
	<i>Version with threaded bolt #4/40</i>			
	103778	103779	103780	103781

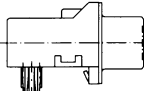
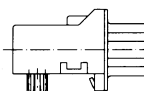
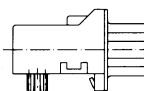
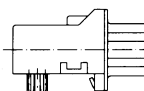
Dimensional drawing for Eurostyle (assembly height 3.6 mm)



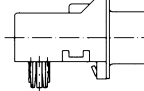
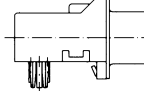
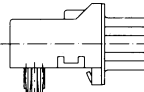
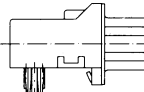
Dimension table

Number of pins	A	B (P)	B (S)	C	D	L
9	31.19	16.79	16.46	$25.0^{+0.12}_{-0.13}$	2.74	6.12
15	39.52	25.12	24.79	$33.3^{+0.15}_{-0.1}$	2.74	6.12
25	53.42	38.84	38.50	47.04 ± 0.13	2.76	5.99
37	69.70	55.30	54.96	63.50 ± 0.13	2.76	5.99

Ordering information for Male Connector

	Male Connector			
	TMC-P-....LPEE <i>Performance Level 207</i>			
Number of pins	09	15	25	37
Thread 	<i>Version with thread M3</i>			
	064856	064857	064858	064859
Threaded bolt 	<i>Version with thread #4/40</i>			
	064860	064861	064862	064863
Threaded bolt 	<i>Version with threaded bolt M3</i>			
	103782	103783	103784	103785
Threaded bolt 	<i>Version with threaded bolt #4/40</i>			
	103786	103787	103788	103789

Ordering information for Female Connector

	Female Connector			
	TMC-S-....LPEE <i>Performance Level 207</i>			
Number of pins	09	15	25	37
Thread 	<i>Version with thread M3</i>			
	064864	064865	064866	064867
Thread 	<i>Version with thread #4/40</i>			
	064868	064869	064870	064871
Threaded bolt 	<i>Version with threaded bolt M3</i>			
	103790	103791	103792	103793
Threaded bolt 	<i>Version with threaded bolt #4/40</i>			
	103794	103795	103796	103797

