

D-Sub

Right Angle Pressfit Connectors RoHS Compliant



General

Today's printed circuit board designs demand flexible and economic connector concepts. For our customers, this means the availability of complete ranges with all termination technologies at an attractive price. For ERNI, this means the modularization of connector concepts according to the modular principle, right from design to manufacture.

The new right-angled D-Sub generation has been designed on this basis. The pressfit D-Sub connectors shown here are part of a comprehensive range. There are many reasons for using D-Sub connectors. Soldering or automatic fitting is not always possible, e.g. in the case of backplanes.

- Also, the installations of our customers are frequently not capable of fitting larger connectors fully automatically.

- The fitting of a printed circuit board into a housing can also make it necessary to fit the connector retrospectively and, at the same time, can save money.

- Or, the pressfit D-Sub connector can be pre-mounted in the housing and the board pressed onto it.

This is all made possible by the robust design, whereby the insertion forces are absorbed by the secure fit of the contacts in the insulating body. Fully automatic processing is also possible due to supply in trays. The

integral accessories are a unique feature.

The problem of screws or nuts turning when cable housings are used is finally a thing of the past.

Technical Features

- Configurations: 9, 15, 25 and 37 pin
- Assembly Heights:
Standard: 7.3 mm for 4HP Subunits
Eurostyle: 3.6mm for 3HP Subunits
- Design acc. to DIN 41652 and CECC 75301-802

Electrical And Mechanical Characteristics

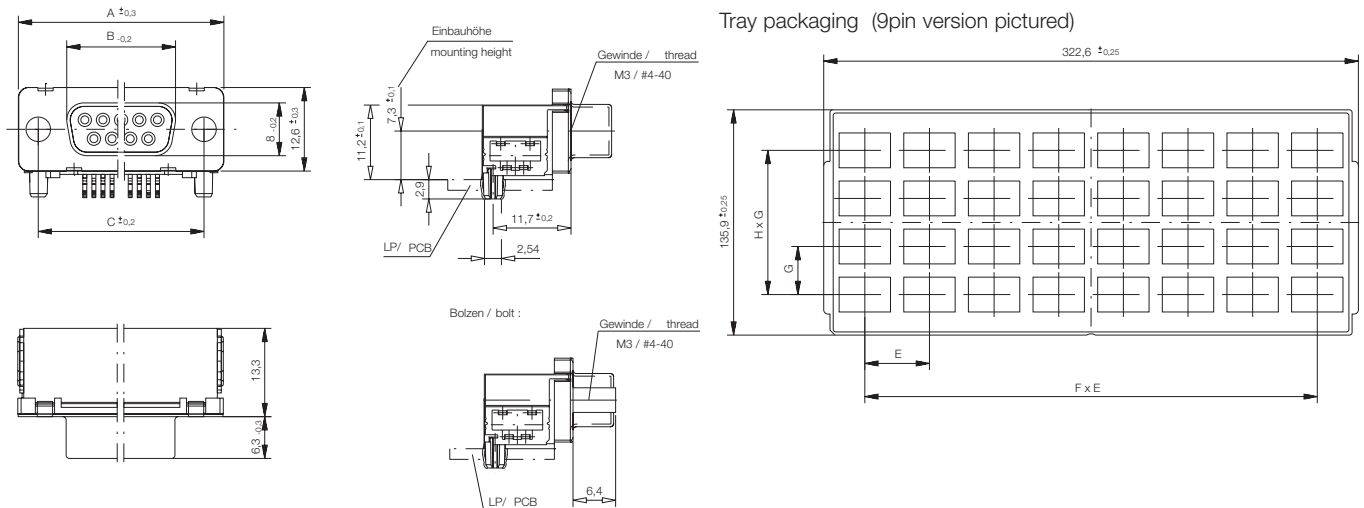
	Standard	Pressfit Male- and Female
Number of pins		9, 15, 25 and 37
Technical data		
Climate category	DIN EN 60068-1 test b	-55/125/56
Bearing and operating temperature area		-55/125 °C
Current rating	IEC60512 test 5b	By ambient temperature: 20 °C 3.5 A 70 °C 2.5 A 100 °C 1.5 A
Air- and creepage distance		1.2 mm
Comperative figure of voltage	IEC 112	CTI 250
Voltage rating	IEC 60664	Has to be determined according to client-specific using case (degree of environmental pollu- tion) according to IEC 60664
Dielectric strength	IEC 60512 test 4a	contact - contact 1000 V _{rms} contact - ground 1200 V _{rms}
Contact resistance	IEC 60512 test 2a	< 25 mΩ
Insulation resistance	IEC 60512 test 3a	> 5x10 ³ MΩ
Vibration, sine	IEC 60512 test 6d	10 – 2000 Hz 20 g
Contact disturbance (while vibration sine)	IEC 60512 test 2e	< 1 μs
Shock, halfsine	IEC 60512 test 6c	50 g 11 ms
Contact disturbance (while shock halfsine)	IEC 60512 test 2e	< 1 μs
Mechanical operation (mating cycles)	IEC 60512 test 9a	> 250 mating cycles
Insertion and withdrawal force	IEC 60512 test 13b	9 cont.: 30 N max. 15 cont.: 50 N max. 25 cont.: 83 N max. 37 cont.: 123 N max.
Gauge retention force	IEC 60512 test 16e	> 0.2 N

Electrical And Mechanical Characteristics

	Standard	Pressfit Male- and Female
Number of pins		9, 15, 25 and 37
Process-conditions		
Warning		Soldering of pressfit connectors not to be recommended.
Materials		
Housing: Plastic material (symbol)		PBT
CTI value	IEC 112	CTI 250
UL flame rating		UL 94 V-0
UL file		E47960
Contact		
Base material		Cu alloy
Mating area		Gold plated
Termination area		Sn lead-free
Metal shell		
Base material		St
Plating		Sn lead-free
Metal bracket		
Base material		Cu alloy
Plating		Sn lead-free
Environment compatibility		
Recycling		no flame-retardent additives, no toxic additives allow easy recycling
Product-approval		
UL		in preparation

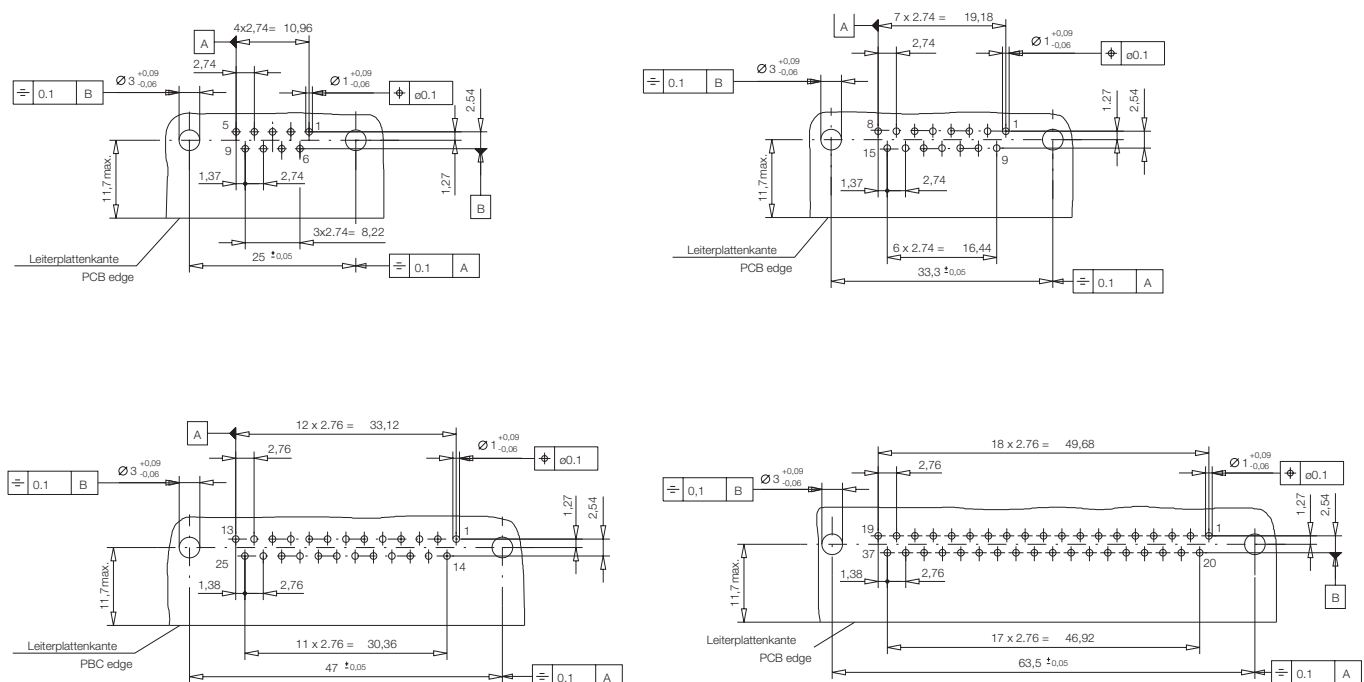
Right Angle Female Standard Pressfit Connectors

Dimensions



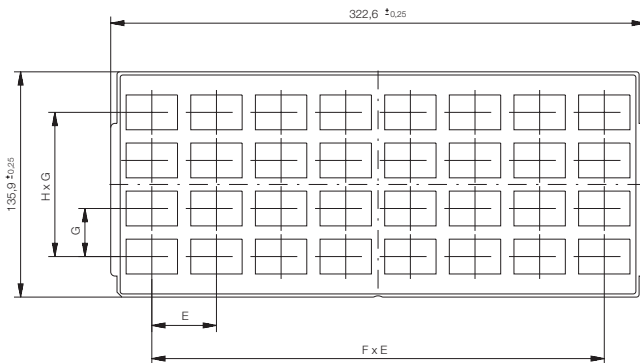
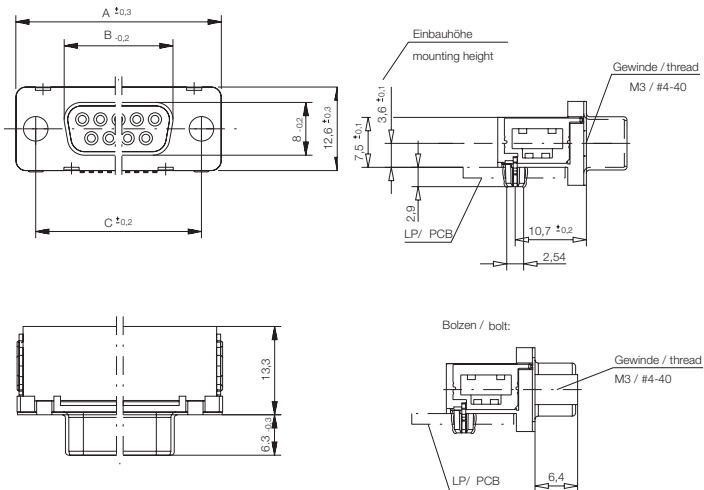
Dimension	Pin Configuration			
	9 pin	15 pin	25 pin	37 pin
A	30.8	39.1	53.0	69.3
B	16.8	25.1	38.9	55.3
C	25.0	33.3	47.0	63.5
E	36	44	58	73.5
F	7	5	4	3
G	28	28	28	28
H	3	3	3	3
Packaging unit	32	24	20	16

PCB Layouts



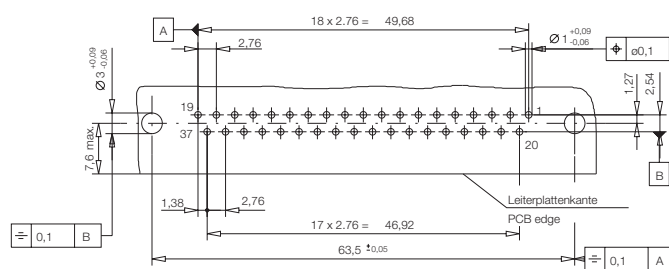
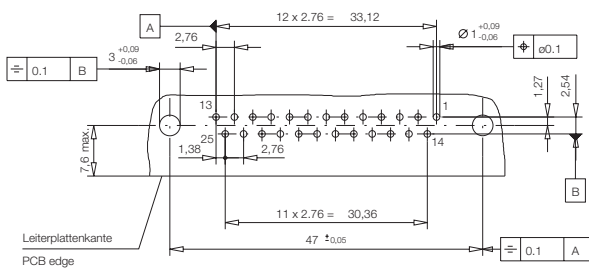
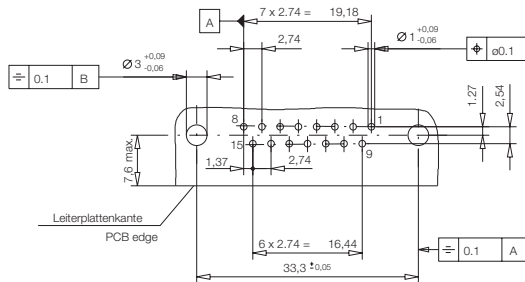
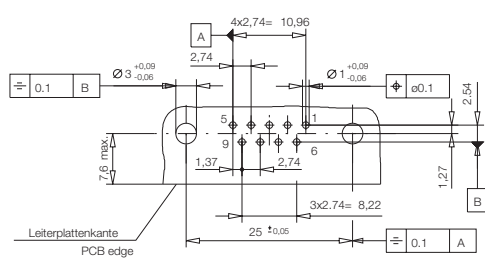
Right Angle Female Eurostyle Pressfit Connectors

Abmessungen



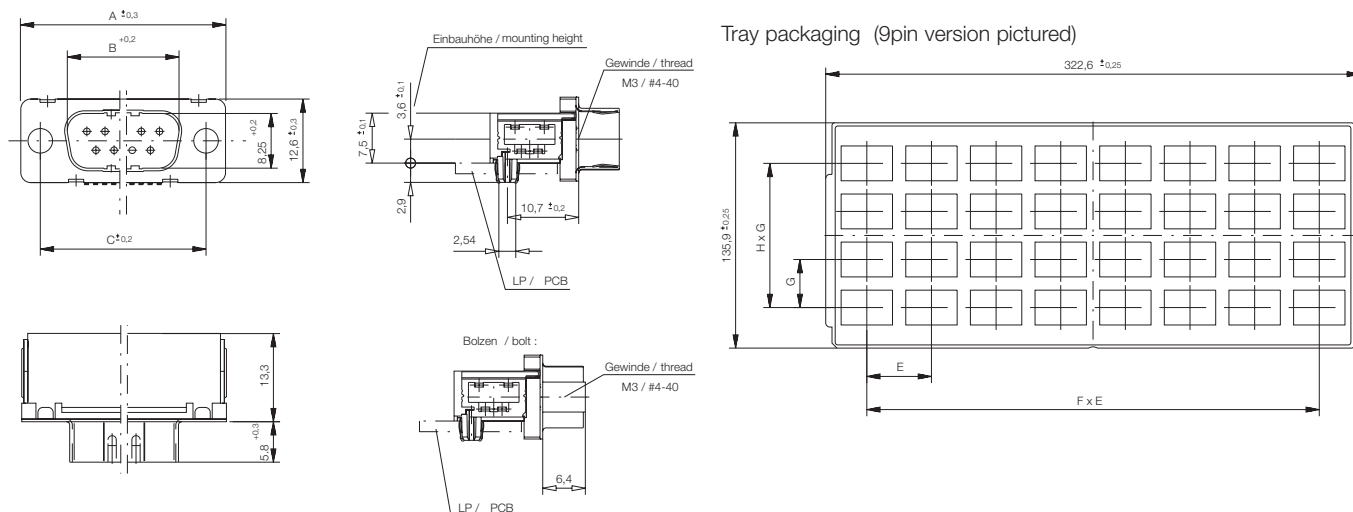
	Pin Configuration			
Dimension	9 pin	15 pin	25 pin	37 pin
A	30.8	39.1	53.0	69.3
B	16.8	25.1	38.9	55.3
C	25.0	33.3	47.0	63.5
E	36	44	58	73.5
F	7	5	4	3
G	28	28	28	28
H	3	3	3	3
Packaging unit	32	24	20	16

PCB Layout



Right Angle Male Eurostyle Pressfit Connectors

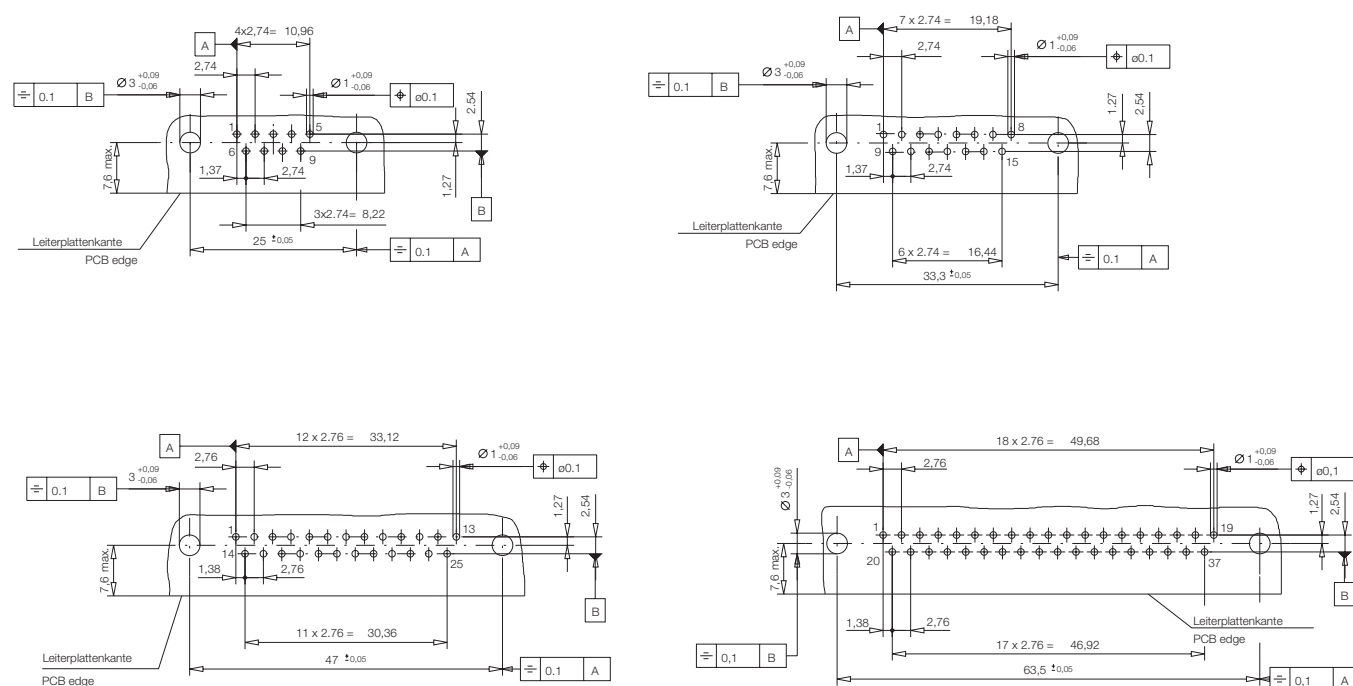
Dimensions



Tray packaging (9pin version pictured)

Dimension	Pin Configuration			
	9 pin	15 pin	25 pin	37 pin
A	30.8	39.1	53.0	69.3
B	16.8	25.1	38.9	55.3
C	25.0	33.3	47.0	63.5
E	36	44	58	73.5
F	7	5	4	3
G	28	28	28	28
H	3	3	3	3
Packaging unit	32	24	20	16

PCB Layout



Ordering Information

Standard (Assembly height 7.3 mm)

Pressfit Female Connectors

Number of Pins	Thread	Tray Packaged	Part Number
9	M3	32 pcs	154267
9	4-40#	32 pcs	154268
9	Bolt / M3	32 pcs	154269
9	Bolt / 4-40#	32 pcs	154270
9	without	32 pcs	174448
15	M3	24 pcs	154271
15	4-40#	24 pcs	154272
15	Bolt / M3	24 pcs	154273
15	Bolt / 4-40#	24 pcs	154274
15	without	24 pcs	174449
25	M3	20 pcs	154275
25	4-40#	20 pcs	154276
25	Bolt / M3	20 pcs	154277
25	Bolt / 4-40#	20 pcs	154278
25	without	20 pcs	174450
37	M3	16 pcs	154279
37	4-40#	16 pcs	154280
37	Bolt / M3	16 pcs	154281
37	Bolt / 4-40#	16 pcs	154282
37	without	16 pcs	174451

Pressfit Male Connectors

Number of Pins	Thread	Tray Packaged	Part Number
9	M3	32 pcs	154219
9	4-40#	32 pcs	154220
9	Bolt / M3	32 pcs	154221
9	Bolt / 4-40#	32 pcs	154222
9	without	32 pcs	174424
15	M3	24 pcs	154223
15	4-40#	24 pcs	154224
15	Bolt / M3	24 pcs	154225
15	Bolt / 4-40#	24 pcs	154226
15	without	24 pcs	174425
25	M3	20 pcs	154227
25	4-40#	20 pcs	154228
25	Bolt / M3	20 pcs	154229
25	Bolt / 4-40#	20 pcs	154230
25	without	20 pcs	174426
37	M3	16 pcs	154231
37	4-40#	16 pcs	154232
37	Bolt / M3	16 pcs	154233
37	Bolt / 4-40#	16 pcs	154234
37	without	16 pcs	174427

Eurostyle (Assembly height 3.6 mm)

Pressfit Female Connectors

Number of Pins	Thread	Tray Packaged	Part Number
9	M3	32 pcs	154171
9	4-40#	32 pcs	154172
9	Bolt / M3	32 pcs	154173
9	Bolt / 4-40#	32 pcs	154174
9	without	32 pcs	174436
15	M3	24 pcs	154175
15	4-40#	24 pcs	154176
15	Bolt / M3	24 pcs	154177
15	Bolt / 4-40#	24 pcs	154178
15	without	24 pcs	174437
25	M3	20 pcs	154179
25	4-40#	20 pcs	154180
25	Bolt / M3	20 pcs	154181
25	Bolt / 4-40#	20 pcs	154182
25	without	20 pcs	174438
37	M3	16 pcs	154183
37	4-40#	16 pcs	154184
37	Bolt / M3	16 pcs	154185
37	Bolt / 4-40#	16 pcs	154186
37	without	16 pcs	174439

Pressfit Male Connectors

Number of Pins	Thread	Tray Packaged	Part Number
9	M3	32 pcs	154123
9	4-40#	32 pcs	154124
9	Bolt / M3	32 pcs	154125
9	Bolt / 4-40#	32 pcs	154126
9	without	32 pcs	174412
15	M3	24 pcs	154127
15	4-40#	24 pcs	154128
15	Bolt / M3	24 pcs	154129
15	Bolt / 4-40#	24 pcs	154130
15	without	24 pcs	174413
25	M3	20 pcs	154131
25	4-40#	20 pcs	154132
25	Bolt / M3	20 pcs	154133
25	Bolt / 4-40#	20 pcs	154134
25	without	20 pcs	174414
37	M3	16 pcs	154135
37	4-40#	16 pcs	154136
37	Bolt / M3	16 pcs	154137
37	Bolt / 4-40#	16 pcs	154138
37	without	16 pcs	174415

Pressfit Toolings for Male and Female Connectors

Description	Number of Pins	Assembly Height	Part Number
Upper tool	9	Standard	220735
Upper tool	15	Standard	220736
Upper tool	25	Standard	220737
Upper tool	37	Standard	220738
Upper tool	9	Eurostyle	220739
Upper tool	15	Eurostyle	220740
Upper tool	25	Eurostyle	220741
Upper tool	37	Eurostyle	220742

Description	Number of Pins	Assembly Height	Part Number
Lower tool	9	Standard/Eurostyle	220743
Lower tool	15	Standard/Eurostyle	220744
Lower tool	25	Standard/Eurostyle	220745
Lower tool	37	Standard/Eurostyle	220746