Number of contacts	16-96
Contact spacing (mm)	2.54
Working current	2 A max.
see current carrying capacity chart	1 A with insulation displacement 40 A max. type M
Clearance	≥ 1.2 mm
Creepage	≥ 1.2 mm
Working voltage	
The working voltage also depends on the clearance and creepage dimensions of the pcb itself, and the associated wiring	according to the safety regulations of the equipment Explanations see chapter 00
Test voltage $U_{r.m.s.}$	1 kV
Contact resistance	≤ 20 mΩ
Insulation resistance	≥ 10^{12} Ω for standard articles ≥ 10^{11} Ω for special NFF articles (with part-no. ending 222)
Temperature range	– 55 °C … + 125 °C
The higher temperature limit includes the local ambient and heating effects of the contacts under load	– 40 °C … + 105 °C for press-in connector
During reflow soldering	max. + 240 °C for 15 s for SMC connectors
Degree of protection for crimp terminal according to DIN 40 050	IP 20

Electrical termination

Male and female connector	Solder pins for pcb connections Ø 1.0 ± 0.1 mm according to IEC 60 326-3 wrap posts 0.6 x 0.6 mm diagonal 0.79-0.86 mm Crimp terminal 0.09-0.5 mm² Insulation displacement connection AWG 28/7
Compliant press-in terminations	
PCB thickness	≥ 1.6 mm
Recommended PCB holes for press-in technology	See recommendation page 00.25 in acc. to EN 60 352-5

Insertion and withdrawal force	16way ≤ 15 N 20way ≤ 20 N 30way ≤ 30 N 32way ≤ 30 N 48way ≤ 45 N 64way ≤ 60 N 96way ≤ 90 N

Materials

Mouldings	Thermoplastic resin, glass-fibre filled, UL 94-V0
Contacts	Copper alloy

Contact surface

Contact zone	Selectively plated according to performance level[1)]

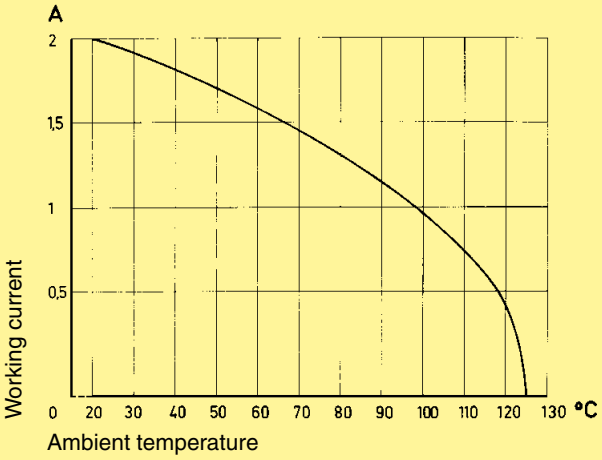
[1)] Explanation performance levels see chapter 00

Mating conditions see chapter 00

Current carrying capacity

The current carrying capacity is limited by maximum temperature of materials for inserts and contacts including terminals. The current capacity curve is valid for continuous, non interrupted current loaded contacts of connectors when simultaneous power on all contacts is given, without exceeding the maximum temperature.

Control and test procedures according to DIN IEC 60 512



Pin shroud for male and female connectors with 0.6 x 0.6 mm pins

A secure interfacing system for signals from the rear of 19" racks to connectors with wrap posts 0.6 x 0.6 mm is possible with the use of a pin shroud.

The pin shroud protects the wrap posts on the rear side of the rack and can be screwed to the printed circuit board (screw fixing) or can be pressed onto the pins (press-in fixing).

After assembly the rear ends of the wire wrap posts become the mating areas of a type C resp. type 2C male connector.

This system can now accept:

- female connectors type C
- female connectors type 2C
- female connectors type R
- female connectors type 2R

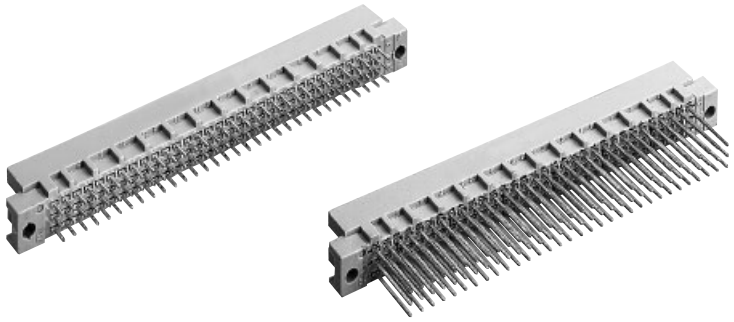
The locking levers provide security for the mated connectors. Fast and simple disconnection is possible (see application examples, pages 01.64 ff).

Fitting and removing crimp contacts

see technical characteristics chapter 03

Number of contacts

96, 64



Male connectors

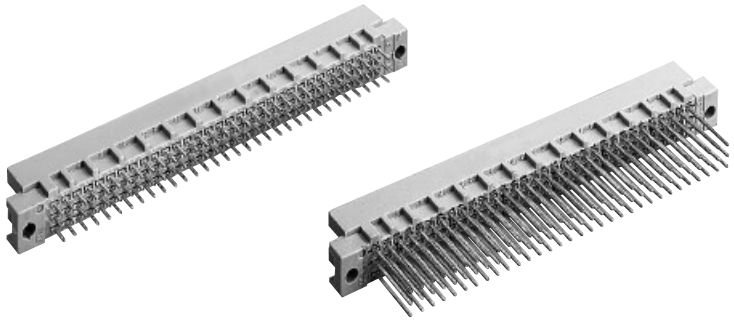
Identification	Number of contacts	Contact arrangement	Part No.	Performance levels according to IEC 60603-2. Explanation chapter 00	
			3	2	1
Male connector with solder pins 2.5 mm	96		09 73 196 7902	09 73 196 6902 09 73 396 6902[b] 09 73 696 6902[c]	09 73 196 2902
SMC	96			09 73 196 6519[d]	
	64		09 73 164 7902	09 73 164 6902 09 73 364 6902[b]	09 73 164 2902 09 73 364 2902[b]
Male connector with solder pins 4.0 mm	96 94 + 2▲		09 73 196 7903	09 73 196 6903 09 73 196 6903 222[f] 09 73 396 6903[b] 09 73 196 6953	09 73 196 2903
SMC	96			09 73 196 6520[d]	
	64		09 73 164 7903	09 73 164 6903 09 73 364 6903[b]	09 73 164 2903
Male connector with solder pins 13 mm	96			09 73 196 6577	09 73 196 2577
SMC	96			09 73 196 6521[d]	
	64			09 73 164 6577	
Male connector with wrap posts[1] 13 mm	96		09 73 196 7907	09 73 196 6907 09 73 696 6947●[c]	09 73 196 2907
	64		09 73 164 7907	09 73 164 6907 09 73 164 6947● 09 73 664 6947●[c]	09 73 164 2907
Male connector with press-in pins 5.0 mm	96 94 + 2▲		09 73 196 7904	09 73 196 6904 09 73 696 6904[c] 09 73 196 6954	09 73 196 2904
	64		09 73 164 7904	09 73 164 6904	09 73 164 2904
Male connector with press-in pins 13 mm	96 94 + 2▲		09 73 196 7974●	09 73 196 6985[w] 09 73 196 6974● 09 73 196 6995[w]	Performance level 1 on request
	64			09 73 164 6985[w] 09 73 164 6974●	

▲ Male connectors with 2 leading contacts [(0.8 mm) pos. a1 and a32]
● Wrap posts for interfacing selectively gold plated (performance level 3)
[f] Railway classification NFF 16-101, Smoke index: F1, Flammability class: I2
[1] To be used only for wire wrap termination

[b] Connectors with snap-in clips see chapter 00
[c] Connectors with coding see chapter 00
[d] CTI > 400
[w] Wrap posts not for interfacing, no performance level

Number of contacts

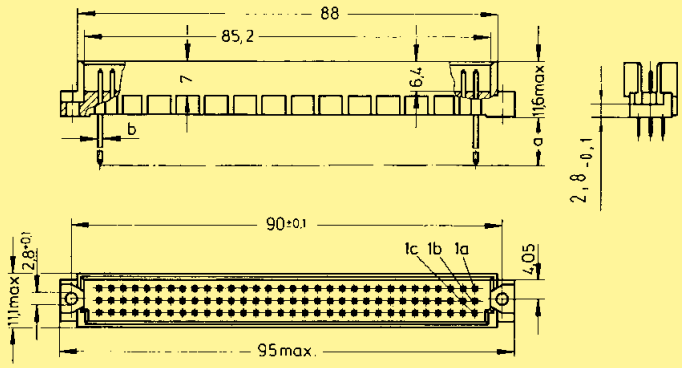
96, 64



Male connectors

Identification | Drawing | Dimensions in mm

Dimensions

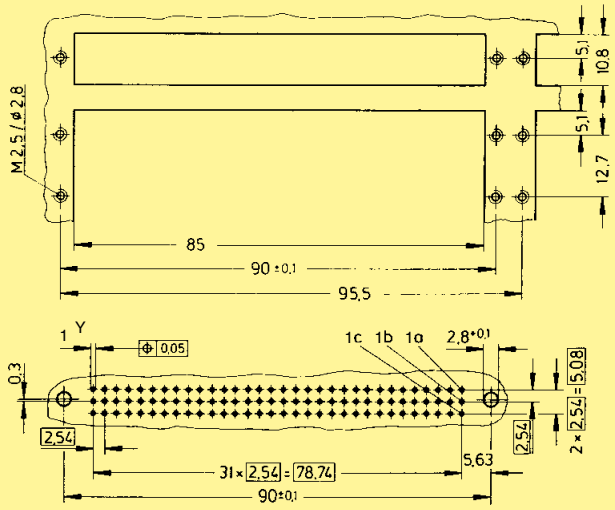


a	b	
2.5	ø 0.7	Solder pins
4		
13	□0.6	
13	□0.6	Wrap posts
5	–	
13	–	Press-in pins

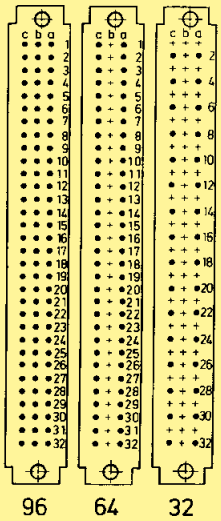
Panel cut out

Board drillings

Mounting side

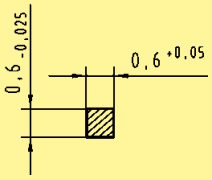


	Y
Solder	1 ± 0.1
Press-in	see recommendation page 00.25



Contact arrangement
View from termination side

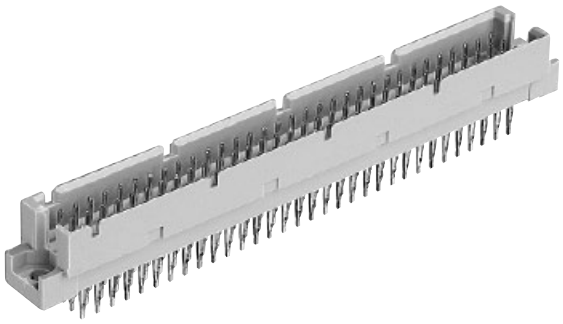
Cross section of solder terminations



Cross area (A) of contacts row a, b, c: A = 0.35 - 0.39 mm²

Number of contacts

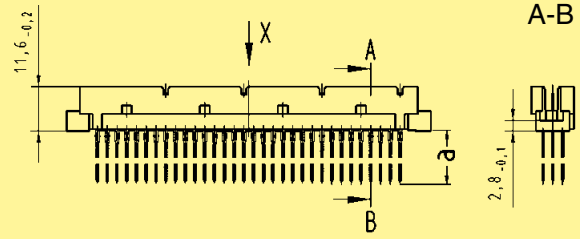
96, 64



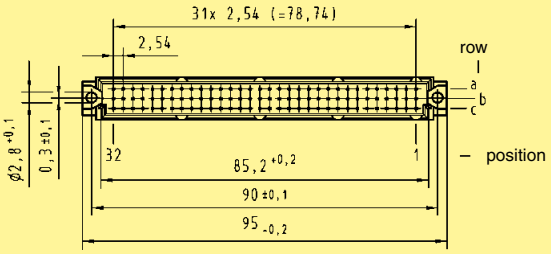
Male connectors

Identification	Number of contacts	Contact arrangement	Part No.	Performance levels according to IEC 60 603-2. Explanation chapter 00		
			3	2	1
Male connector with press-in terminations 5.0 mm	96		Performance level 3 on request	Performance level 2 on request	09 79 196 2950
	64				09 79 164 2950
13 mm	96				09 79 196 2961*

Dimensions

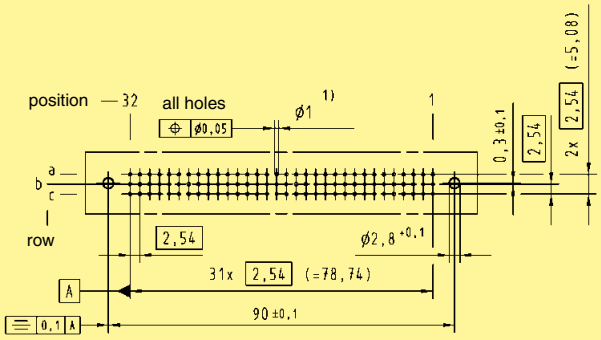


a
5
13



Board drillings

Mounting side



Dimensions in mm

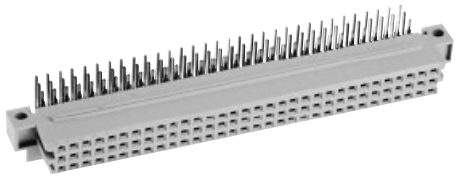
* Wrap posts for interfacing selectively gold plated (performance level 1)

[1] refer to recommended configuration of pcb holes, see page 00.25

Other contact arrangements also with lagging pins on request

Number of contacts

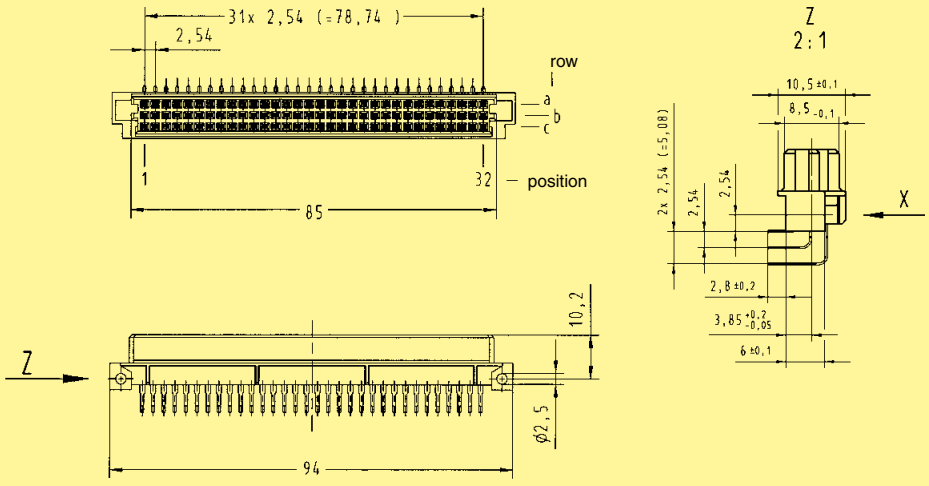
96, 64, 32



Female connectors

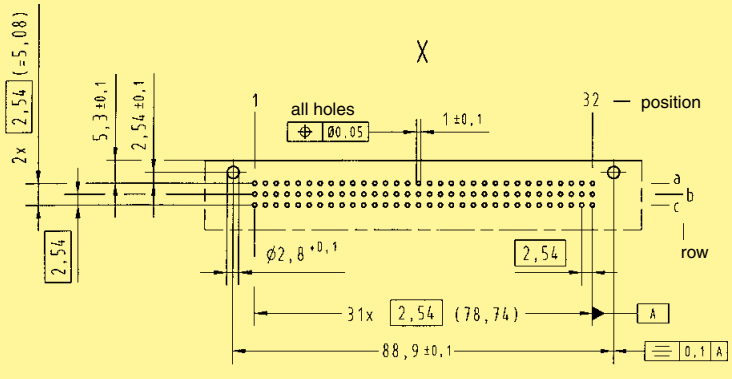
Identification	Number of contacts	Contact arrangement	Part No.	Performance levels according to IEC 60603-2. Explanation chapter 00	
			3	2	1
Female connector with angled solder pins	96		09 73 296 7801 09 73 496 7801[b]	09 73 296 6801 09 73 296 6801 222[f] 09 73 496 6801[b] 09 73 796 6801[c]	09 73 296 2801
SMC	96			09 73 296 6804[d] 09 73 496 6804[b][d]	09 73 496 2804[b][d]
	64		09 73 264 7801 09 73 464 7801[b]	09 73 264 6801 09 73 464 6801[b]	09 73 264 2801
SMC	64			09 73 264 6804[d] 09 73 464 6804[b][d]	09 73 264 2804[d] 09 73 464 2804[b][d]
	32		09 73 232 7801	09 73 232 6801	09 73 232 2801
	32			09 73 232 6811	

Dimensions

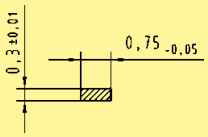


Board drillings

Mounting side



Cross section of solder terminations



Cross area (A) of contacts row a, b, c: A = 0.20 - 0.23 mm²

Dimensions in mm

Other contact arrangements on request

[b] Connectors with snap-in clips see chapter 00

[c] Connectors with coding see chapter 00

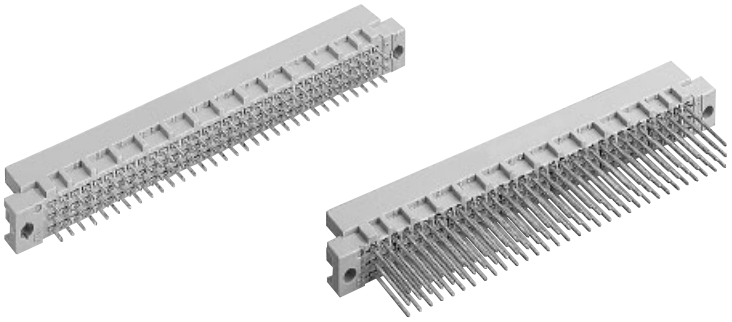
[d] CTI > 400

[f] Railway classification NFF 16-101, Smoke index: F1, Flammability class: I2

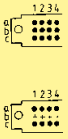
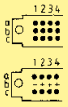
DIN 41 612 · complementary to type R (HE 11)

Number of contacts

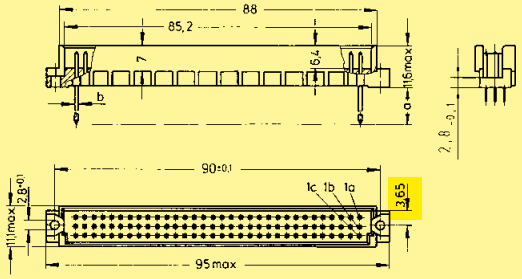
96, 64



Male connectors

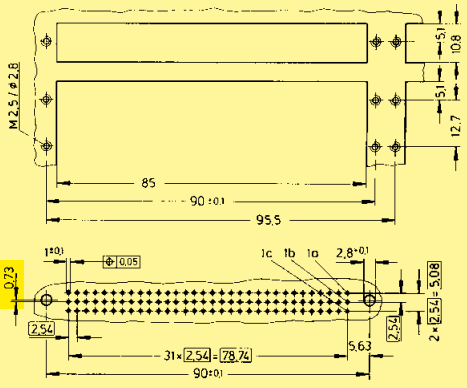
Identification	Number of contacts	Contact arrangement	Part No.	Performance levels according to IEC 60603-2. Explanation chapter 00	
				3	2	1
Male connector with solder pins 2.5 mm	96		Performance level 3 on request		09 79 196 6902	Performance level 1 on request
Male connector with solder pins 4.0 mm	96 64				09 79 196 6903 09 79 396 6903[b] 09 79 164 6903 09 79 364 6903[b]	
Male connector with wrap posts[1] 13 mm	96 64				09 79 196 6907 09 79 164 6907	

Dimensions



a	b	
2.5 4	ø 0.7	Solder pins
a	b	
13	□0.6	Wrap posts

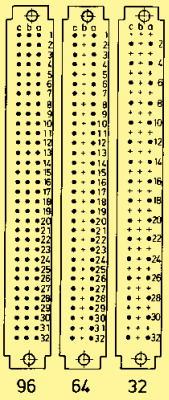
Panel cut out



Board drillings

Mounting side

Contact arrangement
View from termination side



Dimensions in mm

Other contact arrangements on request

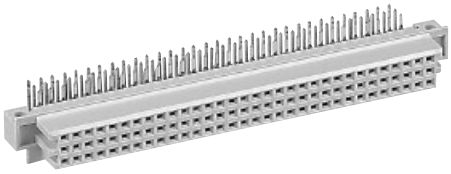
= deviating dimensions from standard male connectors (see page 01.46f)

[b] Connectors with snap-in clips see chapter 00

[1] To be used only for wire wrap termination

Number of contacts

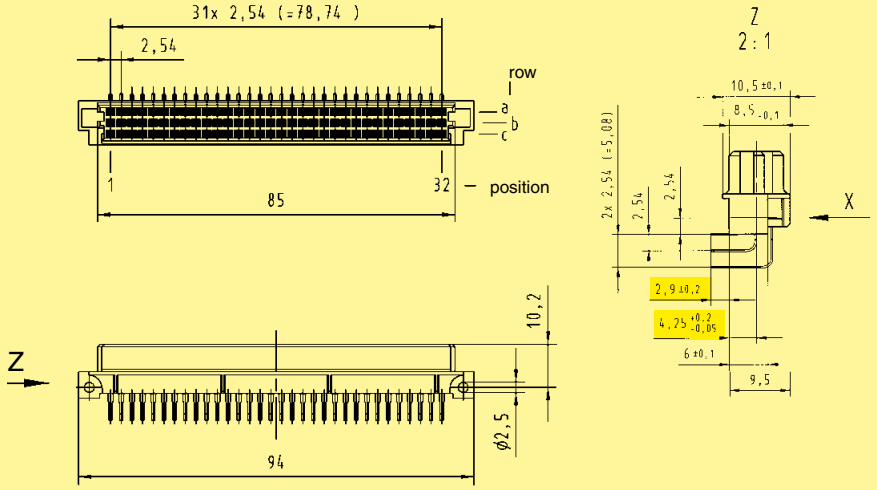
96, 64



Female connectors

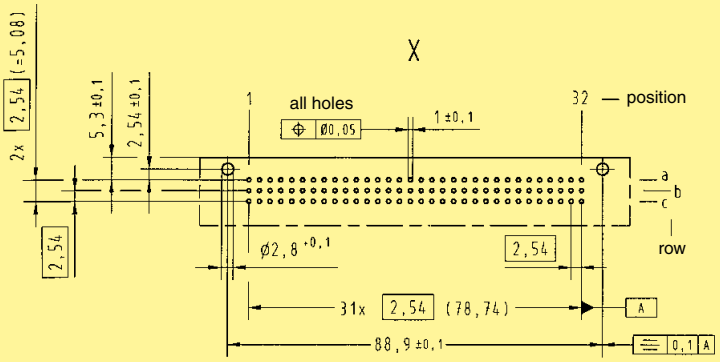
Identification	Number of contacts	Contact arrangement	Part No.	Performance levels according to IEC 60603-2. Explanation chapter 00		
			3	2	1
Female connector with angled solder pins	96		09 79 296 7801	09 79 296 6801 09 79 496 6801[b)]	Performance level 1 on request
	64		09 79 264 7801	09 79 264 6801 09 79 464 6801[b)]	

Dimensions



Board drillings

Mounting side



Dimensions in mm

Other contact arrangements on request

= deviating dimensions from standard female connectors (see page 01.49)

[b)] Connectors with snap-in clips see chapter 00