ELECTRONIC SECTION

Number of contacts	21, 24
Contact spacing (mm)	
Male connector	2.54 x 5.08
Female connector	5.08
Working current see current carrying capacity chart	6 A max.
Clearance	≥ 1.6 mm
Creepage	≥ 3 mm
Working voltage The working voltage also depends on the clearance and creepage dimensions on the pcb itself, and the associated wiring	according to the safety regulations of the equipment. Explanations see chapter 00
Test voltage $U_{r.m.s.}$	1.55 kV
Contact resistance	≤ 15 mΩ wrap, solder termination ≤ 20 mΩ including crimp connection
Electrical termination	
Male connector	Solder pins for pcb connection Ø 1 ± 0.1 mm acc. to IEC 60 326-3
Female connector	Wrap posts 1 x 1 mm diagonal 1.34-1.45 mm Solder pins for pcb connection Ø 1 ± 0.1 mm acc. to IEC 60 326-3 Crimp terminal 0.09-1.5 mm²
Contact surface	Contact zone: selectively plated according to performance level[1)] Termination zone: tinned

HEAVY DUTY SECTION*

Number of contacts	7
Working current see current carrying capacity chart	15 A max.
Clearance	≥ 4.5 mm
Creepage	≥ 8.0 mm
Working voltage The working voltage also depends on the clearance and creepage dimensions on the pcb itself, and the associated wiring	according to the safety regulations of the equipment. Explanations see chapter 00
Test voltage $U_{r.m.s.}$	3.1 kV
Contact resistance	≤ 8 mΩ
Electrical termination	
Male and female connector	Connector for faston 6.3 x 2.5 (faston width x wire gauge) acc. to DIN 46 245 and DIN 46 247
Male connector	Solder pins for pcb connection Ø 1.6± 0.1 mm acc. to DIN EN 60 097
Contact surface	Hard silver plated terminal ends of the female connectors tinned

BOTH PARTS

Insulation resistance	≥ 10^{12} Ω
Temperature range The higher temperature limit includes the local ambient and heating effects of the contacts under load	– 65 °C … + 125 °C
Insertion and withdrawal force	≤ 85 N
Materials	
Mouldings	Thermoplastic resin, glass-fibre filled, UL 94-V0
Contacts	Copper alloy

* only for type MH 24 + 7

[1)] Explanation of performance levels see chapter 00

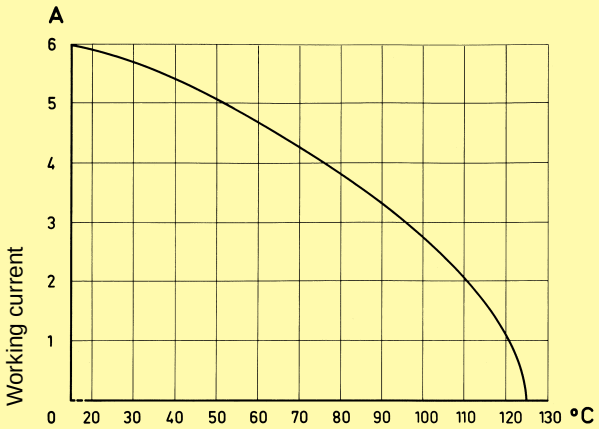
Mating conditions see chapter 00
Coding systems see page 03.26

Current carrying capacity

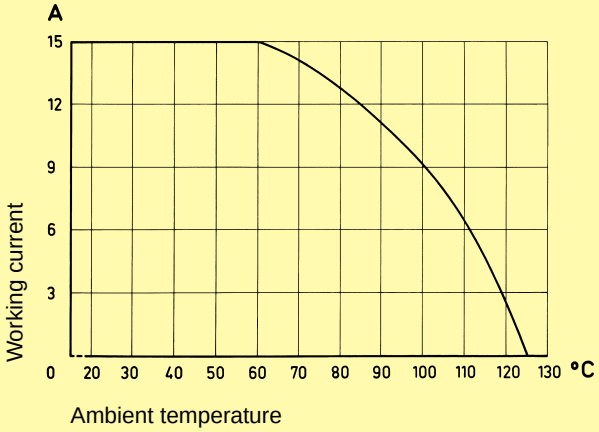
The current carrying capacity is limited by maximum temperature of materials for inserts and contacts including terminals. The current capacity curve is valid for continuous, non interrupted current loaded contacts of connectors when simultaneous power on all contacts is given, without exceeding the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

Control and test procedures according to DIN IEC 60 512

Electronic section



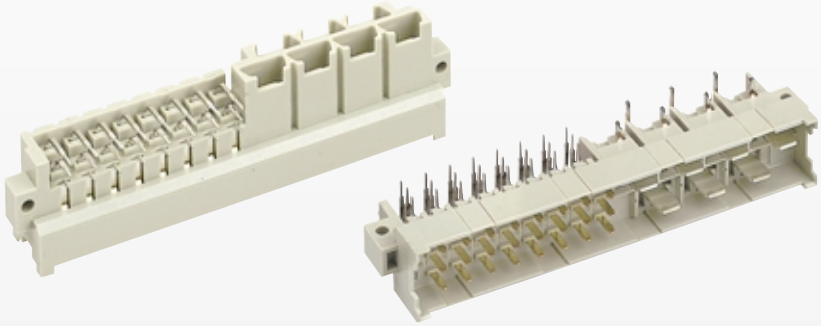
Heavy duty section



Number of contacts

24 + 7

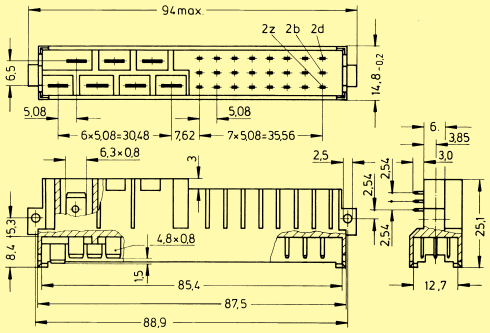
F + H



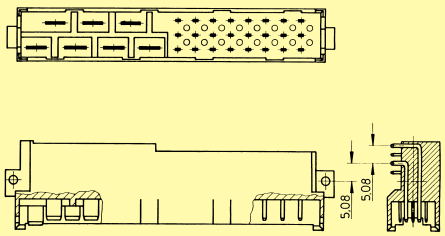
Male connectors

Identification	Number of contacts	Part No. 3	Performance levels according to DIN 41 612. Explanation chapter 00 2	1
Male connector for faston 6.3 x 2.5				
1 leading contact (position z 32)	24 + 7		09 06 031 6921	09 06 031 2921
2 leading contacts (position z 2 + z 32)	24 + 7		09 06 031 6923	
Male connector with angled solder pins				
1 leading contact (position z 32)	24 + 7		09 06 131 6922	
2 leading contacts (position z 2 + z 32)	24 + 7		09 06 131 6924	

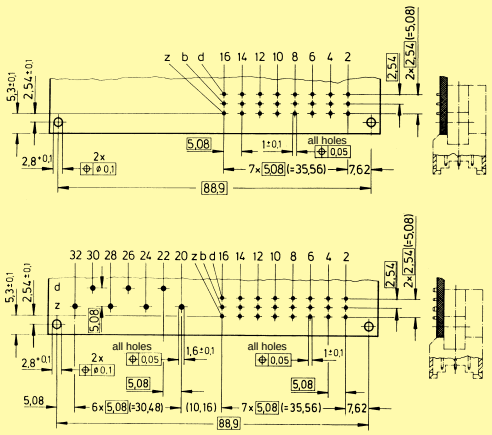
Faston terminal



Angled solder pins

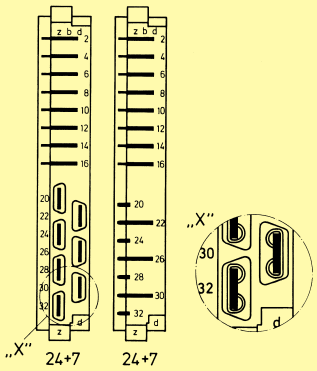


Board drillings



Contact arrangement

View from termination side



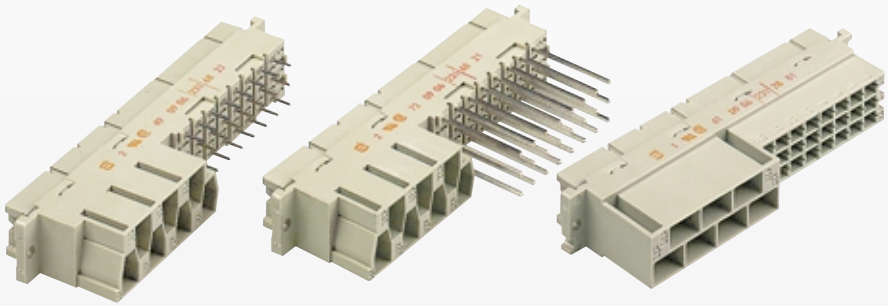
Dimensions in mm

Types power to 15 A

Number of contacts

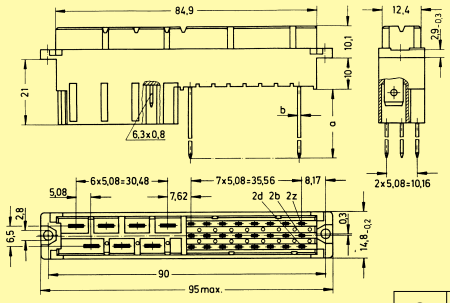
24 + 7

F + H

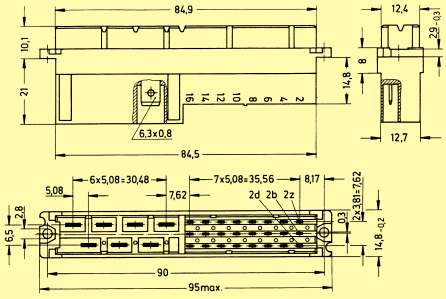


Female connectors

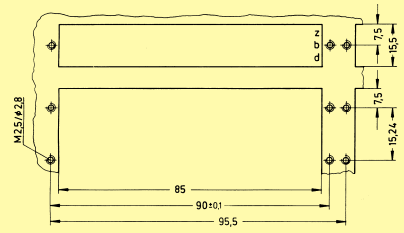
Identification	Number of contacts	Part No. 3	Performance levels according to DIN 41 612. Explanation chapter 00 2	1
Female connector with solder pins 4.5 mm	24 + 7		09 06 231 6822	09 06 231 2822
Female connector with wrap posts 1 x 1 mm	24 + 7		09 06 231 6821	09 06 231 2821
Female connector for crimp contacts Order contacts separately, see chapter 02	24 + 7			09 06 231 2881



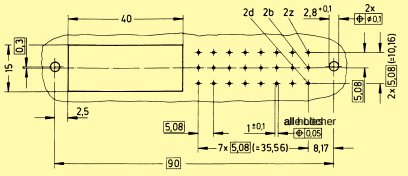
a	b
4.5	0.6
22	1



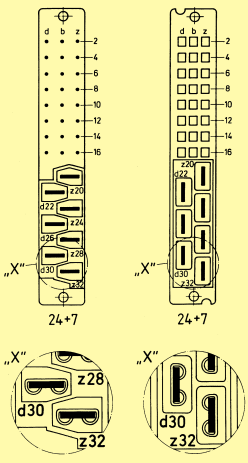
Panel cut out



Board drillings



Contact arrangement
View from termination side



Shell housing for female connector with crimp contacts
see chapter 20

Dimensions in mm

Types power to 15 A