

Number of contacts	15 14 + 1 leading contact (position z 32) 13 + 2 leading contacts (position z 4 und z 32) 3
Working current	15 A max. see current carrying capacity chart
Clearance	≥ 4.5 mm*
Creepage	≥ 8.0 mm*
Working voltage	according to the safety regulations of the equipment Explanations see chapter 00 Connectors should not be mated under voltage
Test voltage $U_{r.m.s.}$	3.1 kV*
Contact resistance	≤ 8 mΩ
Insulation resistance	≥ 10 ¹² Ω

Temperature range	- 55 °C ... + 125 °C
The higher temperature limit includes the local ambient and heating effects of the contacts under load	

Electrical termination	
Male connector	Connector with faston 6.3 x 2.5 (faston blade width x wire gauge) according to DIN 46 245 and DIN 46 247 Solder pins for pcb connections Ø 1.6 ± 0.1 mm DIN EN 60 097
Female connector	Connector for faston 6.3 x 2.5 (faston blade width x wire gauge) according to DIN 46 245 and DIN 46 247 Solder pins for pcb connections Ø 1.6 ± 0.1 mm DIN EN 60 097 Cage clamp terminal 0.14-1.5 mm ²

Insertion and withdrawal force	≤ 90 N
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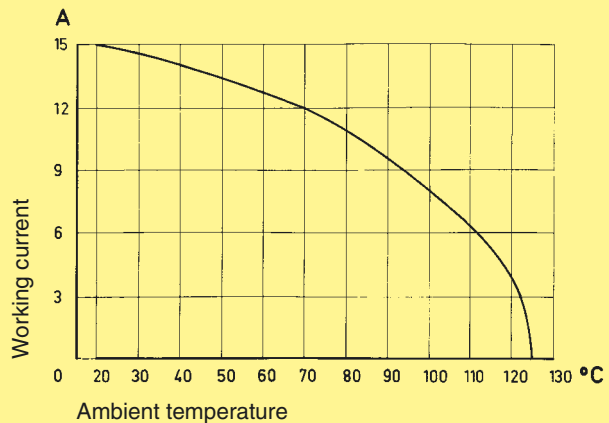
Materials	
Mouldings	Thermoplastic resin, glass-fibre filled, UL 94-V0
Contacts	Copper alloy
Contact surface	Hard silver plated, gold plated on request terminal ends of female connectors tinned

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

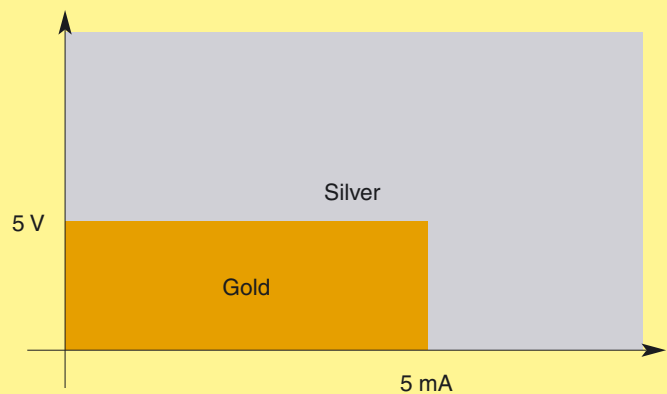


Low currents and voltages

Type H standard contacts have a silver plated surface. This precious metal has excellent conductive properties. In the course of a contact's lifetime, the silver surface generates a black oxide layer due to its affinity to sulphur. This layer is smooth and very thin and is partly interrupted when the contacts are mated and unmated, thus guaranteeing very low contact resistances. In the case of very low currents or voltages small changes to the transmitted signal may be encountered. This is illustrated below where an artificially aged contact representing a twenty year life is compared with a new contact.

In systems where such a change to the transmitted signal could lead to faulty functions and also in extremely aggressive environments, HARTING recommend the use of gold plated contacts.

Below is a table derived from actual experiences.



Recommendation

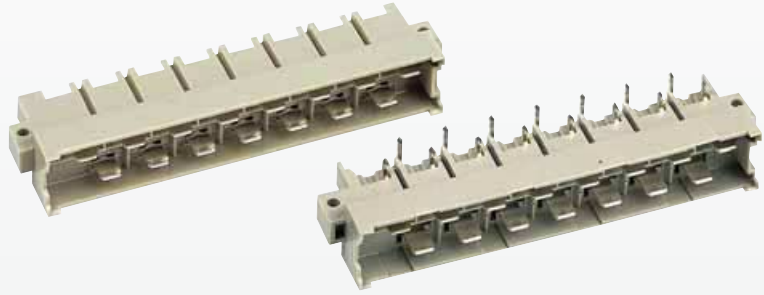
Types power to 15 A

* only valid for type H with 15 contacts

DIN 41 612 · Type H

Number of contacts

15



Male connectors

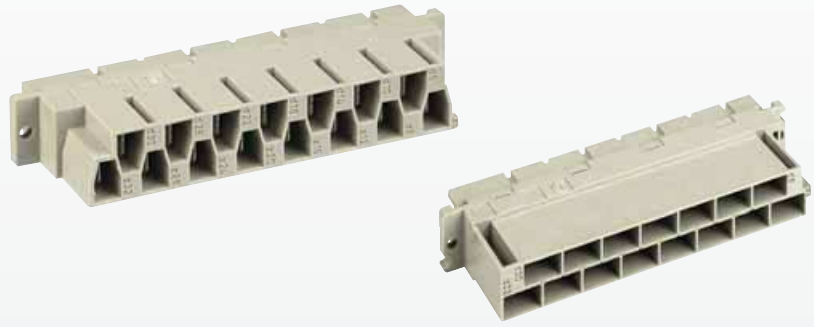
Identification	Number of contacts	Part No.	Drawing	Dimensions in mm
<p>Male connector* for faston 6.3 x 2.5</p>	15	Performance level 1 09 06 015 2912		
<p>1 leading contact (position z 32)</p>	14 + 1	09 06 015 2931		
<p>2 leading contacts (position z 4 + z 32)</p>	13 + 2	09 06 015 2922		
<p>Male connector* with angled solder pins</p>	15	Performance level 1 09 06 115 2911		
<p>1 leading contact (position z 32)</p>	14 + 1	09 06 115 2932		
<p>2 leading contacts (position z 4 + z 32)</p>	13 + 2	09 06 115 2921		
<p>Male connector* with straight solder pins</p>	15	Performance level 1 09 06 015 2913		
<p>1 leading contact (position z 32)</p>	14 + 1	09 06 015 2914		

Types
power to 15 A

* Gold plated contacts on request

Number of contacts

15



Female connectors

Identification	Number of contacts	Part No.	Drawing	Dimensions in mm
<p>Female connector for faston 6.3 x 2.5</p> <p>Cannot be used in a shell housing</p>	15	<p>Performance level 1</p> <p>09 06 215 2811</p>	<p>Contact arrangement View from termination side</p>	
<p>Female connector for faston 6.3 x 2.5</p> <p>May be used in a shell housing</p>	15	<p>Performance level 1</p> <p>09 06 215 2871</p>	<p>Contact arrangement View from termination side</p>	
<p>Panel cut out</p>				

Types power to 15 A

Number of contacts

15



Female connectors

Identification Number of contacts Part No. Drawing Dimensions in mm

Female connector* with solder pins "low profile"

15

Performance level 1

Drawing Dimensions in mm

2.7 mm

15

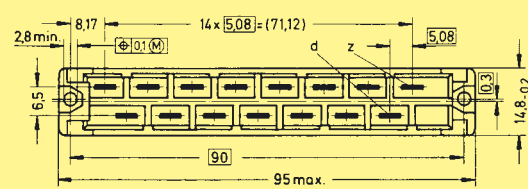
09 06 215 2812¹⁾



4 mm

15

09 06 215 2821¹⁾
09 06 215 2892²⁾



5.5 mm

15

09 06 215 2890²⁾

7 mm

15

09 06 215 2831¹⁾
09 06 215 2891²⁾

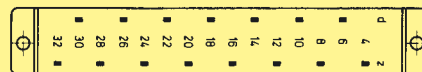
a
2.7
4
5.5
7
10

10 mm

15

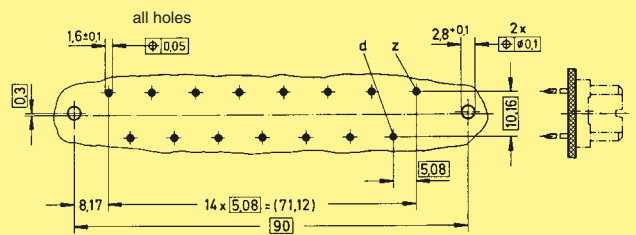
09 06 215 2841¹⁾

Contact arrangement View from termination side



Board drillings
Mounting side

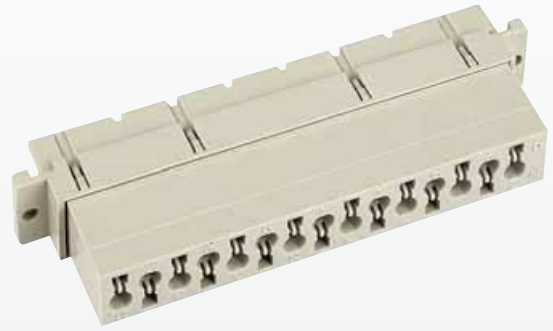
Drawing



¹⁾ Variant with silver plated contacts
²⁾ Variant with gold plated contacts

Number of contacts

15



Female connectors

Identification	Number of contacts	Part No.	Drawing	Dimensions in mm
<p>Female connector with cage clamp</p> <p>May be used in a shell housing</p>	<p>15</p>	<p>Performance level 1</p> <p>09 06 015 2813</p>	<p>84,9</p> <p>10,1</p> <p>21,4</p> <p>84</p> <p>14,8</p> <p>12,4</p> <p>2,9^{+0,3}</p> <p>12,3</p> <p>12,7</p> <p>14 × 5,08 = 71,12</p> <p>6d</p> <p>4z</p> <p>5,08</p> <p>8,17</p> <p>2,9^{+0,1}</p> <p>6,5</p> <p>90^{+0,1}</p> <p>95^{-0,4}</p> <p>14,8^{-0,2}</p> <p>0,3</p> <p>View from termination side</p> <p>Slot for screw driver</p> <p>32 30 28 26 24 22 20 18 16 14 12 10 8 6 4</p>	<p>Shell housing see chapter 20</p>
<p>Panel cut out</p>				
<p>Termination instructions</p>				<p>Screw driver width: 2.5 x 0.4 mm</p> <p>Stripping length: 4 - 7 mm</p> <p>Wire gauge: 0.14 - 1.5 mm² (AWG 26 - 16)</p>

Types power to 15 A

ELECTRONIC SECTION

Number of contacts	21, 24
Contact spacing (mm)	
Male connector	2.54 x 5.08
Female connector	5.08
Working current	6 A max. see current carrying capacity chart
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 Wrap posts 1 x 1 mm diagonal 1.34-1.45 mm
Female connector	Solder pins for pcb connection Ø 1 ± 0.1 mm acc. to IEC 60 326-3 Crimp terminal 0.09-1.5 mm ²

Contact surface	Contact zone: selectively plated according to performance level ¹⁾ Termination zone: tinned
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HEAVY DUTY SECTION*

Number of contacts	7
Working current	15 A max. see current carrying capacity chart
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
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BOTH PARTS

Insulation resistance	≥ 10 ¹² Ω
Temperature range	- 55 °C ... + 125 °C
The higher temperature limit includes the local ambient and heating effects of the contacts under load	

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

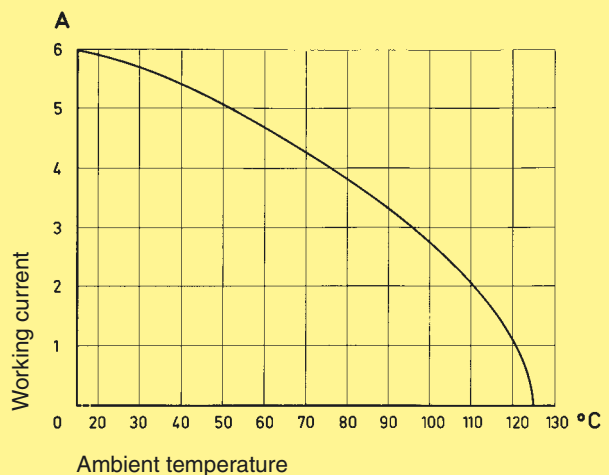
Coding systems see page 03.26

Current carrying capacity

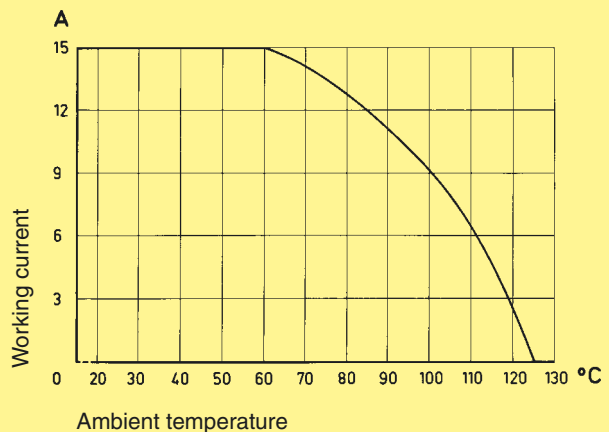
The current carrying capacity is limited by maximum temperature of materials for inserts and contacts including terminals. The current capacity curve is valid for continuous, non interrupted current loaded contacts of connectors when simultaneous power on all contacts is given, without exceeding the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

Control and test procedures according to DIN IEC 60 512

Electronic section



Heavy duty section

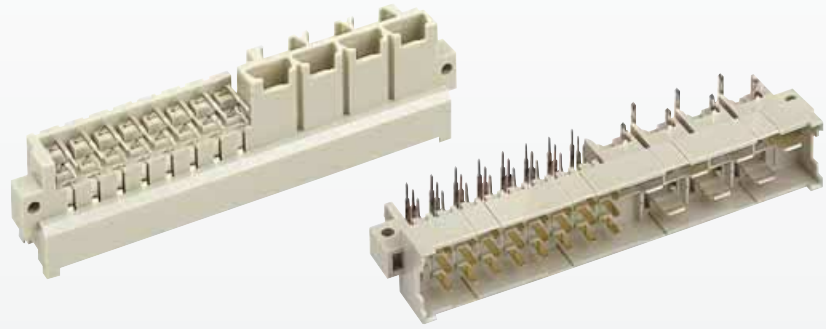


DIN 41 612 · complementary type MH



Number of contacts

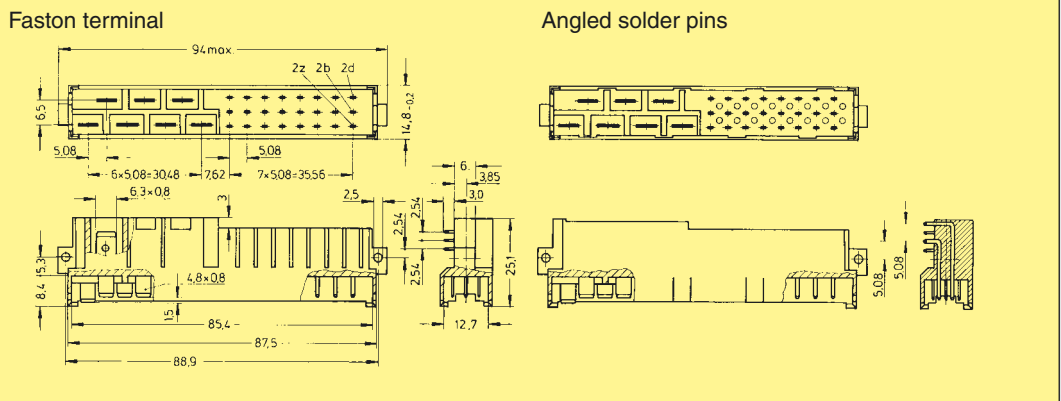
24 + 7
F + H



Male connectors

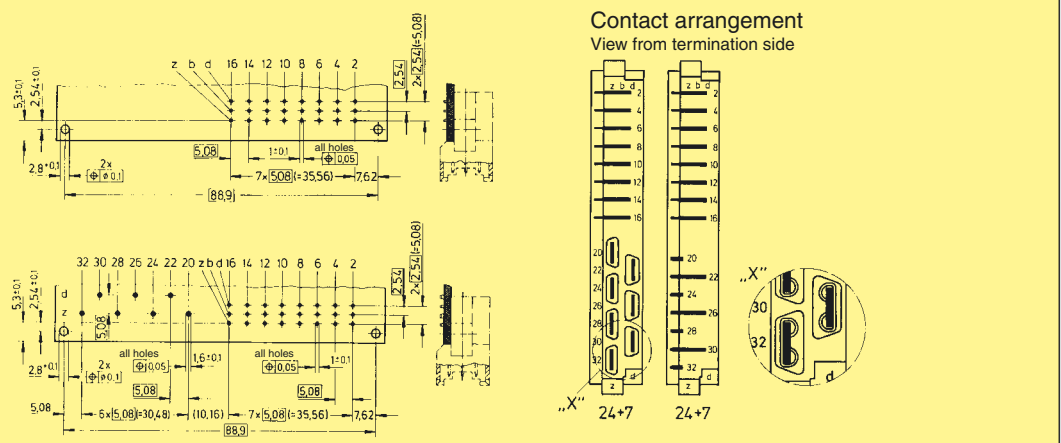
Identification	Number of contacts	Part No. 3	Performance levels according to DIN 41 612. Explanation chapter 00 2	1
Male connector for faston 6.3 x 2.5	1 leading contact (position z 32)		09 06 031 6921	09 06 031 2921
	2 leading contacts (position z 2 + z 32)		09 06 031 6923	
Male connector with angled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

Types power to 15 A



Board drillings

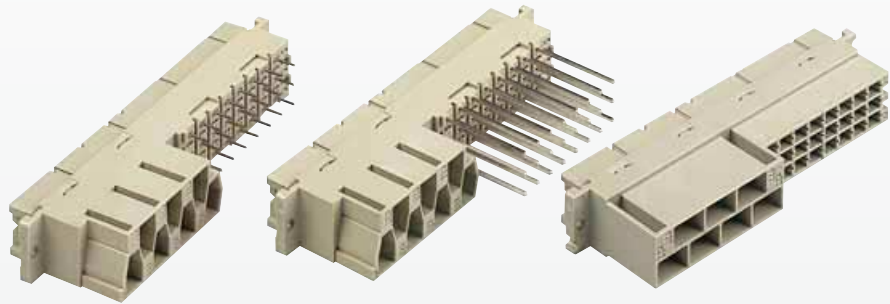
Mounting side



Number of contacts

24 + 7

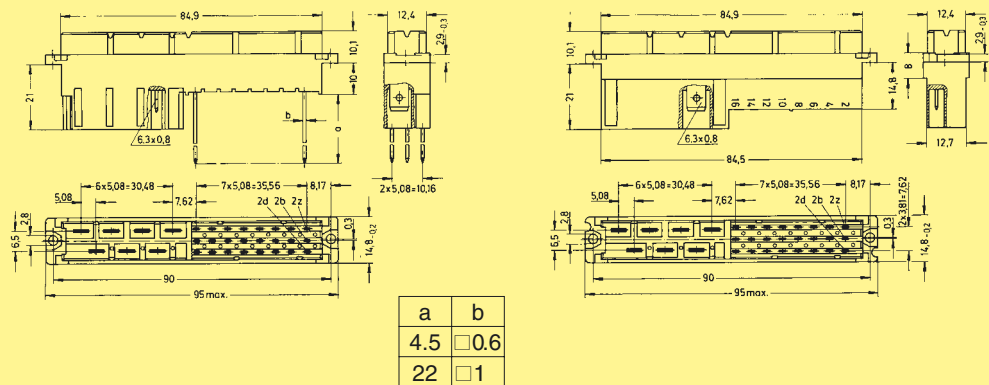
F + H



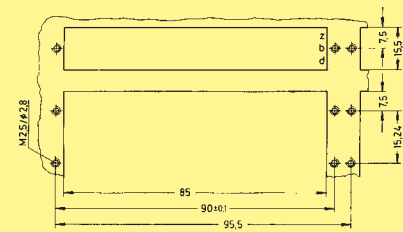
Female connectors

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

Types power to 15 A

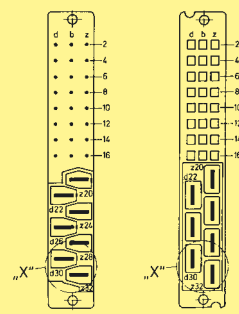


Panel cut out



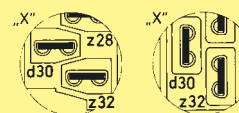
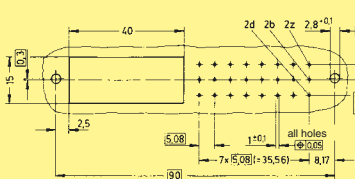
Contact arrangement

View from termination side



Board drillings

Mounting side



Shell housing for female connector with crimp contacts see chapter 20

Dimensions in mm