

Number of contacts
 15, 16
 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 Type H15: ≥ 4.5 mm
 Type H3: ≥ 4.0 mm

Creepage Type H15: ≥ 8.0 mm
 Type H3: ≥ 3.7 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
 Connectors should not be mated under voltage

Test voltage $U_{r.m.s.}$ Type H15: ≥ 3.1 kV
 Type H3: ≥ 2.5 kV

Contact resistance ≤ 8 m Ω

Insulation resistance $\geq 10^{12}$ Ω for standard articles
 $\geq 10^{11}$ 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

Electrical termination
 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 $\varnothing 1.6 \pm 0.1$ mm DIN EN 60 097
 Cage clamp terminal 0.14-1.5 mm²

Insertion and withdrawal force
 Type H15: ≤ 90 N
 Type H3: ≤ 20 N

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

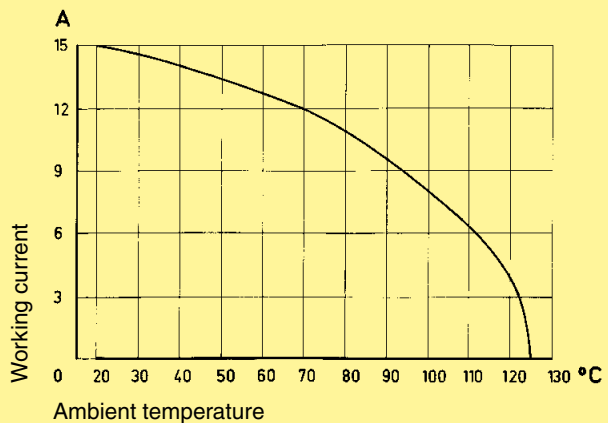
Contact surface
 Contact zone Hard silver plated or gold plated

Mating conditions see chapter 00
 Coding systems see chapter 00

Current carrying capacity

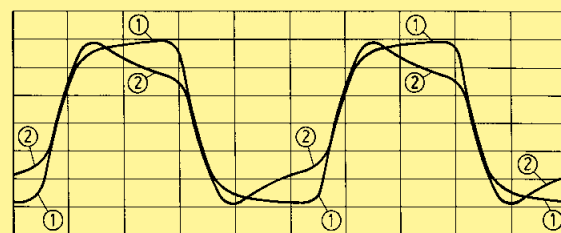
The current carrying capacity is limited by maximum temperature of materials for inserts and contacts including terminals. The current capacity curve is valid for continuous, non interrupted current loaded contacts of connectors when simultaneous power on all contacts is given, without exceeding the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

Control and test procedures according to DIN IEC 60 512



Low currents and voltages

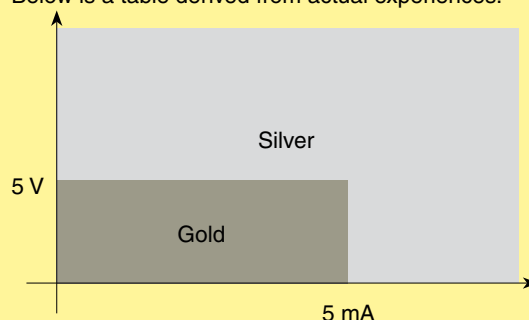
Type H standard contacts have a silver plated surface. This precious metal has excellent conductive properties. In the course of a contact's lifetime, the silver surface generates a black oxide layer due to its affinity to sulphur. This layer is smooth and very thin and is partly interrupted when the 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.



Changes to the transmitted signal after artificial ageing
 ① new contact ② after ageing

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.

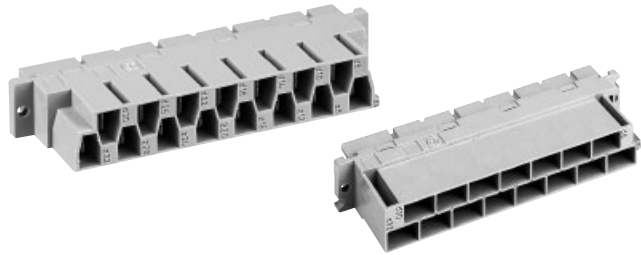
Below is a table derived from actual experiences.



Recommendation

Number of contacts

15



Female connectors

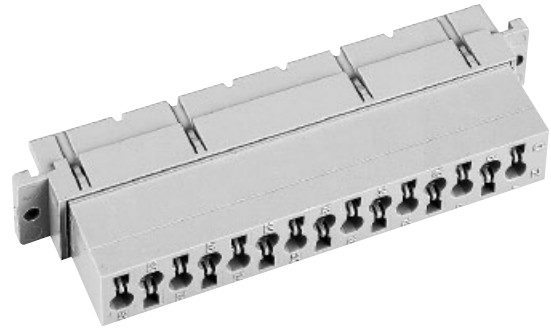
Identification	Number of contacts	Part No.	Drawing	Dimensions in mm
<p>Female connector for faston 6.3 x 2.5¹⁾</p> <p>Cannot be used in a shell housing</p>	15	<p>Performance level 1 acc. to IEC 60603-2</p> <p>09 06 215 2811</p>	<p>84,9</p> <p>10,1</p> <p>21</p> <p>84</p> <p>14 x 5,08 = 71,12</p> <p>6d 4z</p> <p>5,08</p> <p>8,17</p> <p>6,5</p> <p>2,8</p> <p>90</p> <p>95max.</p> <p>12,4</p> <p>2,9</p> <p>6,3 x 0,8</p> <p>0,3</p> <p>4,8</p> <p>71</p> <p>View from termination side</p> <p>..X"</p> <p>..X"</p> <p>D30</p> <p>D32</p> <p>D28</p> <p>D26</p> <p>D24</p> <p>D22</p> <p>D20</p> <p>D18</p> <p>D16</p> <p>D14</p> <p>D12</p> <p>D10</p> <p>D8</p> <p>D6</p> <p>D4</p> <p>Z32</p>	
<p>Female connector for faston 6.3 x 2.5¹⁾</p> <p>May be used in a shell housing</p>	15 15	<p>09 06 215 2871</p> <p>09 06 215 2871 222¹⁾</p>	<p>84,9</p> <p>10,1</p> <p>21</p> <p>84,5</p> <p>14 x 5,08 = 71,12</p> <p>6d 4z</p> <p>5,08</p> <p>8,17</p> <p>6,5</p> <p>90</p> <p>95max.</p> <p>12,4</p> <p>2,9</p> <p>6,3 x 0,8</p> <p>0,3</p> <p>4,8</p> <p>71</p> <p>View from termination side</p> <p>..X"</p> <p>..X"</p> <p>D30</p> <p>D32</p> <p>D28</p> <p>D26</p> <p>D24</p> <p>D22</p> <p>D20</p> <p>D18</p> <p>D16</p> <p>D14</p> <p>D12</p> <p>D10</p> <p>D8</p> <p>D6</p> <p>D4</p> <p>Z32</p>	
Panel cut out			<p>Shell housing see chapter 20</p> <p>M2,5 / 2,8</p> <p>85</p> <p>90 ± 0,1</p> <p>95,5</p> <p>7,5</p> <p>15,5</p> <p>7,5</p> <p>15,2</p>	

DIN Power up to 15 A

¹⁾ With shroud coding, see chapter 00
¹⁾ Railway classification NFF 16-101, Smoke index: F1, Flammability class: I2

Number of contacts

15



Female connectors

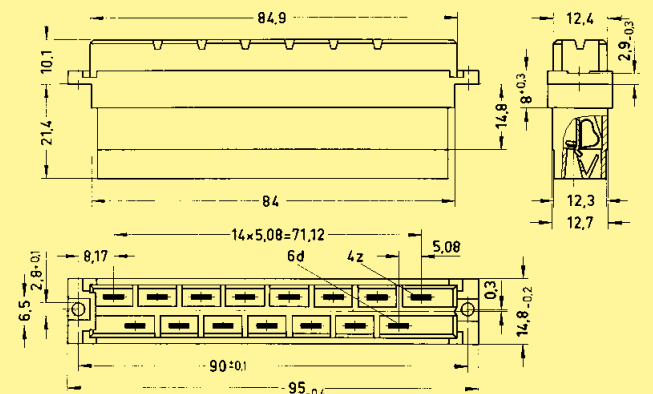
Identification	Number of contacts	Part No.	Drawing	Dimensions in mm
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Female connector with cage clamp
May be used in a shell housing

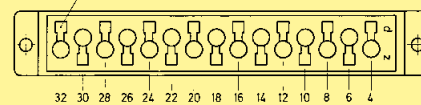
15

Performance level 1 acc. to IEC 60 603-2

09 06 015 2813¹⁾

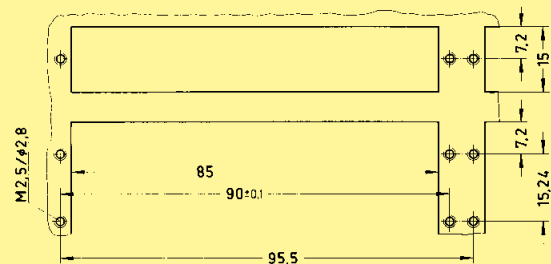


Contact arrangement View from termination side
Slot for screw driver

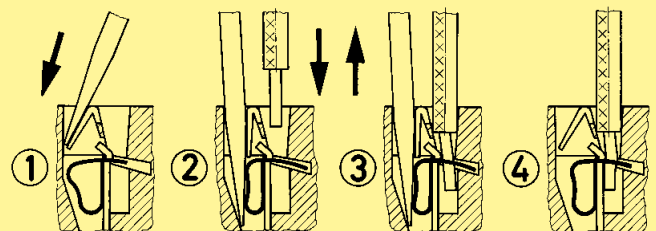


Shell housing see chapter 20

Panel cut out



Termination instructions



Screw driver width: 2.5 x 0.4 mm
Stripping length: 4 - 10 mm
Wire gauge: 0.14 - 1.5 mm² (AWG 26 - 16)

DIN Power up to 15 A

04 13

¹⁾ Railway classification NFF 16-101, Smoke index: F1, Flammability class: I2

Number of contacts

15



Female connectors

Identification	Number of contacts	Part No.	Drawing	Dimensions in mm						
Female connector "low profile" with solder pins ³⁾		Performance level 1 acc. to IEC 60 603-2								
2.7 mm	15	09 06 215 2812 ¹⁾								
4 mm	15	09 06 215 2821 ¹⁾ 09 06 215 2821 222 ¹⁾¹⁾ 09 06 215 2892 ²⁾ 09 06 215 2892 222 ²⁾¹⁾								
5.5 mm	15	09 06 215 2890 ²⁾		<table border="1"> <tr><td>a</td></tr> <tr><td>2.7</td></tr> <tr><td>4</td></tr> <tr><td>5.5</td></tr> <tr><td>7</td></tr> <tr><td>10</td></tr> </table>	a	2.7	4	5.5	7	10
a										
2.7										
4										
5.5										
7										
10										
7 mm	15	09 06 215 2831 ¹⁾ 09 06 215 2891 ²⁾								
10 mm	15	09 06 215 2841 ¹⁾	<p>Contact arrangement View from termination side</p>							
Board drillings Mounting side										

DIN Power
up to 15 A

¹⁾ Variant with silver plated contacts
²⁾ Variant with gold plated contacts
³⁾ With shroud coding, see chapter 00

¹⁾ Railway classification NFF 16-101, Smoke index: F1, Flammability class: I2

Number of contacts

15



Female connectors

Identification	Number of contacts	Part No.	Drawing	Dimensions in mm
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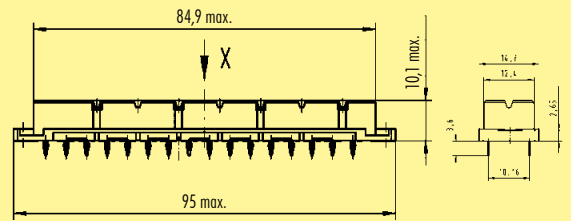
Female connector
"low profile"
with press-in pins
3.6 mm

Contact space
termination side
5.08 mm

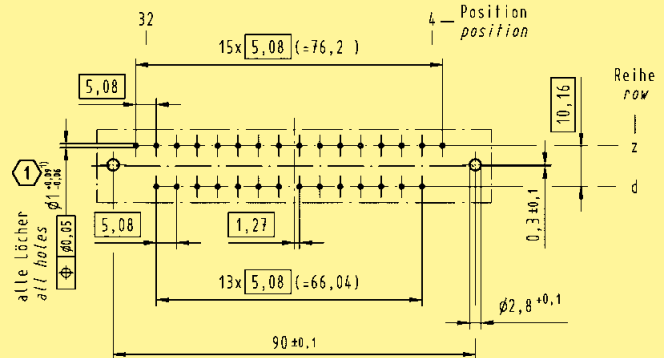
15

Performance level 1
acc. to IEC 60 603-2

09 06 215 2854
09 06 215 2854 222^{f)}



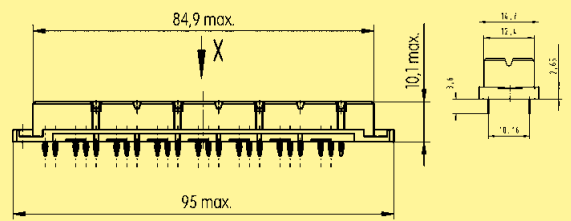
Board drillings
Mounting side



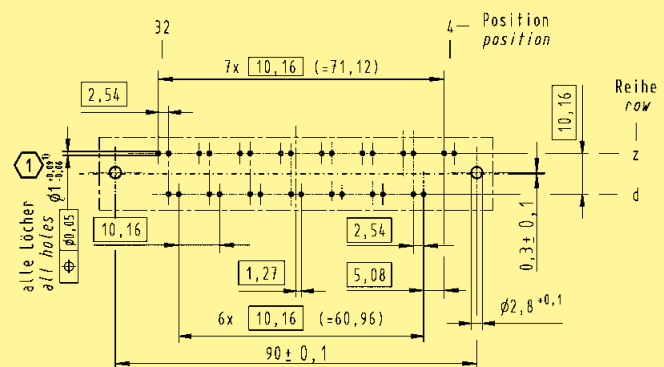
Contact space
termination side
2.54 mm

15

09 06 215 2856



Board drillings
Mounting side



DIN Power
up to 15 A

04
15

¹⁾ Refer to recommended configuration of pcb holes, see page 00.25
^{f)} Railway classification NFF 16-101, Smoke index: F1, Flammability class: I2