

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

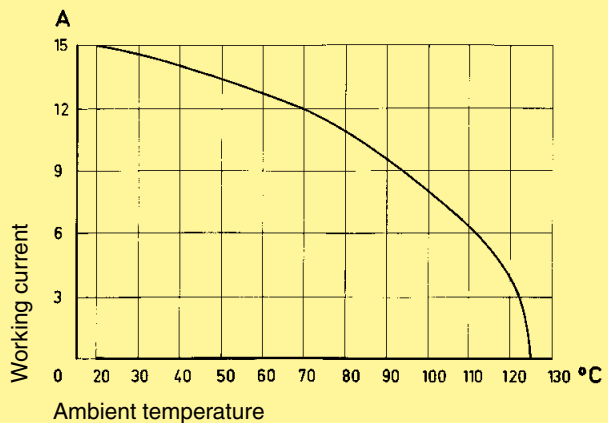
Contact surface
 Contact zone Hard silver plated or gold plated

Mating conditions see chapter 00
 Coding systems see chapter 00

Current carrying capacity

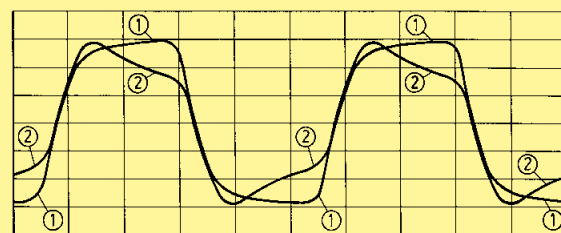
The current carrying capacity is limited by maximum temperature of materials for inserts and contacts including terminals. The current capacity curve is valid for continuous, non interrupted current loaded contacts of connectors when simultaneous power on all contacts is given, without exceeding the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

Control and test procedures according to DIN IEC 60 512



Low currents and voltages

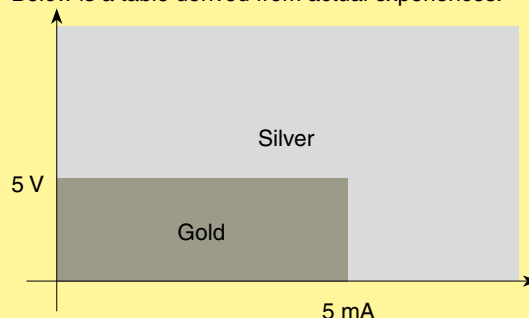
Type H standard contacts have a silver plated surface. This precious metal has excellent conductive properties. In the course of a contact's lifetime, the silver surface generates a black oxide layer due to its affinity to sulphur. This layer is smooth and very thin and is partly interrupted when the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