

# **Features**

- Solder free PCB termination
- PCB contact with locking element
- · Stamped contact element
- · Automatic crimping process compatible
- · For use with different Han® connectors
- · Cost-effective
- · Easy handling
- · Fast assembly to PCB
- · Contacts with pin
  - Locking directly on the PCB
- · Contacts without pin
  - Fast positioning with plastic adapter

# Technical characteristics

### Contacts

Material Copper alloy

Surface

- Hard-silver plated  $3 \mu m Ag$  Contact resistance  $< 2 m\Omega$ 

Direction Straight or angled

### Locking

Material Copper alloy
Surface finish Passivation
Current 10 mm² stranded wire 60 A

Voltage Clearance and creepage

distances have to be

considered

Board density t = 1.6 - 3.2 mm

# Description

The new connection of wires to the PCB offers optimized PCB design, combined with outstanding contact qualities. The Han-Fast® Lock is flexible and allows a fast and simple PCB connection. The PCB has one drilled hole and a pad. The inner surface of the plated drilled hole serves as the interface.

The Han-Fast® Lock is simply inserted into the plated through contact hole. The locking pin is pushed in and hence locks the contact into position. The solder free connection technique is easy to handle and to operate. Maintenance has been made simple with the facility to detach the contact.

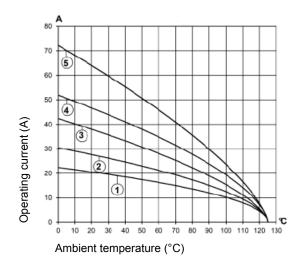
Han-Fast® Lock also supports SMD assembly of the PCB.

- Current up to 60 Amps
- Standard drilled hole with pad
- Position independent of connector
- Solder free PCB termination
- Easy locking solution
- Straight and angled version

# Current carrying capacity

The current carrying capacity of the connectors is limited by the thermal load capability of the contact element material including the connections and the insulating parts. The derating curve is therefore valid for currents which flow constantly (non-intermittent) through each contact element of the connector evenly, without exceeding the allowed maximum temperature.

Measuring and testing techniques according to DIN EN 60 512-5  $\,$ 



① Wire gauge: 1.5 mm²
② Wire gauge: 2.5 mm²
③ Wire gauge: 4 mm²
④ Wire gauge: 6 mm²

⑤ Wire gauge: 10 mm²

# Han-Fast® Lock

Identification	Part number	Drawing	Dimensions in mm
Contacts with pin on a reel 2300 piece  1.5 to 2.5 mm <sup>2</sup>	09 08 000 6122		1
Contacts without pin on a reel 2300 piece  1.5 to 2.5 mm²  Further plated surfaces on request	09 08 000 6922	9.5- 98.6-	X X X X X X X X X X X X X X X X X X X
Single contacts with pin		1 (	
1.5 to 2.5 mm <sup>2</sup>	09 08 000 7122	-94.5 - 26	PC3 lop-end Finished hala
Single contacts with pin		<b>→</b> Ø8.6 <b>←</b> .	99,5—
1.5 to 2.5 mm²	09 08 000 7922	912	
Further plated surfaces on request		- Ø4,5 Ø8,6	
Single contacts with pin angled		f	FCB 1ay-out / Finalized hale
1.5 to 2,5 mm <sup>2</sup>	09 08 000 7222		Ø9,5 —
4.0 to 6.0 mm <sup>2</sup>	09 08 000 7223		·
10.0 mm²	09 08 000 7224		
Further plated surfaces on request			



# Technical characteristics

### Components

Contacts

Material Copper alloy

Surface Hard silver plated, 3 µm Ag

 $\begin{array}{lll} \text{Resistance} & < 2 \text{ m}\Omega \\ \text{Stripping length 1.5 - 2.5 mm}^2 & 7.5 \text{ mm} \\ \text{Stripping length 4 - 6 mm}^2 & 7.5 \text{ mm} \\ \text{Stripping length 10 mm}^2 & 7.5 \text{ mm} \\ \end{array}$ 

Locking

Material Copper alloy
Surface Surface passivation

Current 10 mm<sup>2</sup> wire 60 A

Voltage Please consider clearance and creepage distances when ordering

the printed cicuit board

Recommended termination cycles 10 x

Limiting temperatures -40 °C ... +105 °C

**PCB** 

PCB thickness t = 1.6 - 3.2 mm

Construction PCB Depending on the required current carrying capacity

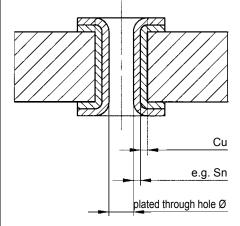
Recommended configuration of plated through holes acc. to DIN EN 60352-5

for PCBs

Diameter plated through hole

≥ 1.6 mm

d = 4.4 mm +0.05 mm / -0.04 mm



Chem. Sn PCB	Plated through hole Ø	4.4 mm
	Cu	min. 25 µm
	Sn	min. 0.7 μm

Au/Ni PCB	Plated through hole Ø	4.4 mm
	Cu	min. 25 µm
	Ni	min. 3 µm
	Au	min. 0.05 µm

Ag PCB	Plated through hole Ø	4.4 mm
	Cu	min. 25 µm
	Ag	min. 0.1 μm

## Vibration

Vibration test DIN EN 60 068-2-6

10 ... 500 Hz
0.35 mm, 50 ms²
2 h per axis

Shock DIN EN 61 373

· Category 1b

• 5g

• 30 ms, 3 shocks per axis

Random vibration DIN EN 61 373

· Category 1b

• ASD-level 1.857 (m/s $^2$ ) $^2$ /Hz (a<sub>eff</sub> : 7.9m/s $^2$ )

Test criteria No disconnection >1  $\mu s$