



# DIN Signal female connector



## General information

|                                |                                    |                            |                   |
|--------------------------------|------------------------------------|----------------------------|-------------------|
| Design                         | IEC 60603-2                        | types: B, C, 2C, 3C female |                   |
| No. of contacts                | max. 96                            |                            |                   |
| Contact spacing                | 2,54 mm                            |                            |                   |
| Test voltage                   | 1000V                              |                            |                   |
| Contact resistance             | max. 20mOhm                        |                            |                   |
| Insulation resistance          | min. 10 <sup>10</sup> Ohm          |                            |                   |
| Working current                | 2 A at 20°C (see derating diagram) |                            |                   |
| Temperature range              | -55°C ... +125°C                   |                            |                   |
| Termination technology         | crimp                              |                            |                   |
| Clearance & creepage distance  | 16pol. max. 15N                    |                            | 20pol. max. 20N   |
|                                | 30pol. max. 30N                    |                            | 32pol. max. 30N   |
|                                | 48pol. max. 45N                    |                            | 64pol. max. 60N   |
| Insertion and withdrawal force | - PL1 acc. to IEC 60603-2 =>       |                            | 500 mating cycles |
|                                | - PL2 acc. to IEC 60603-2 =>       |                            | 400 mating cycles |
|                                | - PL3 acc. to IEC 60603-2 =>       |                            | 50 mating cycles  |
| UL file                        | E102079                            |                            |                   |
| RoHS - compliant               | Yes                                |                            |                   |
| Leadfree                       | Yes                                |                            |                   |
| Hot plugging                   | No                                 |                            |                   |

## Insulator material

|                                    |  |
|------------------------------------|--|
| Material                           | PC (thermoplastics, glass fiber reinforcement 20%) |
| Colour                             | RAL 7032 (grey)                                    |
| UL classification                  | UL 94-V0   |
| Material group acc. to IEC 60664-1 | IIIa (175 ≤ CTI < 400)                             |
| NFF classification                 | I2, F1   |

## Contact material

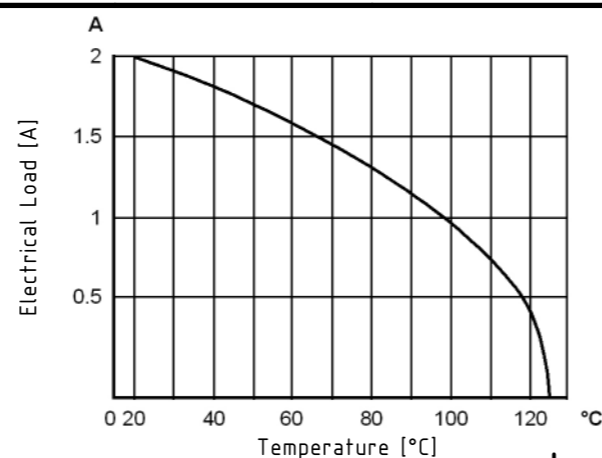
|                          |              |
|--------------------------|--------------|
| Contact material         | Copper alloy |
| Plating termination zone | Ni           |
| Plating contact zone     | Au over Ni   |

## Derating diagram acc. to IEC 60512-5 (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 60512-5



## Installation of crimp contacts

### Fitting the crimp contacts

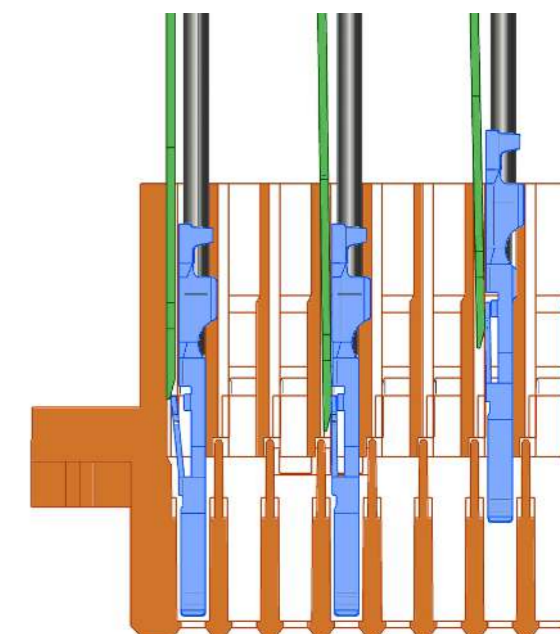
After crimping the wires onto the contacts with the help of a crimping tool or an automatic crimping machine the contacts should be correctly oriented and inserted into the cavities of the connector moulding in the required configuration. They snap into position and are firmly held in place. A light pull on the wire assures the correct tensile strength of the contact. When using stranded wires with a gauge below 0.37 mm<sup>2</sup> an insertion tool is necessary.

insertion tool part number: 09990000100

### Removing the crimp contacts

The removal tool is inserted into a slot on the side of the respective crimp cavity. This action compresses the contact retaining spring therefore the contact can then be easily withdrawn using a light pull on the wire. This action will cause no damage to the contact/wire which can be repositioned/refitted as necessary. The drawing demonstrates the crimp removal procedure (max. 5x).

removal tool part number: 09990000101



|   |                     |                                      |                         |  |                    |                        |
|---|---------------------|--------------------------------------|-------------------------|--|--------------------|------------------------|
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| HARTING Electronics GmbH<br>D-32339 Espelkamp |                     | Type<br>DS                           | Number<br>09032100801   |  | Rev.<br>C          | Page<br>1/1            |