

# SEK-18 SV MA LP STR55 PR-IN 16P PLS4



| Part number        | 09 18 516 5329                          |
|--------------------|---|
| Specification      | SEK-18 SV MA LP STR55 PR-IN 16P<br>PLS4 |
| HARTING eCatalogue | https://b2b.harting.com/09185165329     |

Image is for illustration purposes only. Please refer to product description.

## Identification

| Category                   | Connectors      |
|----------------------------|-----------------|
| Series                     | SEK Low-profile |
| Element                    | Male connector  |
| Description of the contact | Straight        |

#### Version

| Termination method | Press-in termination |
|--------------------|----------------------|
| Connection type    | PCB to cable         |
| Number of contacts | 16                   |
| Termination length | 5.5 mm               |
| Performance level  | 1                    |
|                    | NM 30 (S4)           |

# Technical characteristics

| Contact rows                       | 2                      |
|------------------------------------|------------------------|
| Contact spacing (termination side) | 2.54 mm                |
| Rated current                      | 1 A                    |
| Insulation resistance              | >10 <sup>9</sup> Ω     |
| Contact resistance                 | ≤20 mΩ                 |
| Limiting temperature               | -55 +105 °C            |
| Insertion and withdrawal force     | ≤32 N                  |
| Test voltage U <sub>r.m.s.</sub>   | 1 kV                   |
| Isolation group                    | IIIa (175 ≤ CTI < 400) |
|                                    |                        |



## Technical characteristics

PCB thickness 1.6 mm +1.6

# Material properties

| Material (insert)                         | Thermoplastic resin (PBT)                                |
|---|--|
| Colour (insert)                           | Grey   |
| Material (contacts)                       | Copper alloy   |
| Surface (contacts)                        | Nickel plated Termination side Au over Pd/Ni Mating side |
| Material flammability class acc. to UL 94 | V-0  |
| RoHS                                      | compliant  |
| ELV status                                | compliant  |
| China RoHS                                | е  |
| REACH Annex XVII substances               | No   |
| REACH ANNEX XIV substances                | No   |
| REACH SVHC substances                     | No   |

# Specifications and approvals

| Specifications         | IEC 60603-13   |
|------------------------|--|
| UL / CSA               | UL 1977 ECBT2.E102079<br>CSA-C22.2 No. 182.3 ECBT8.E102079 |
| Railway classification | F3/I3  |

#### Commercial data

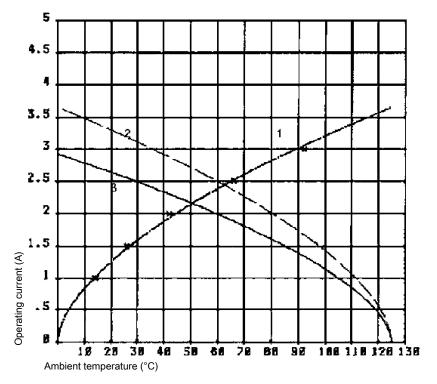
| Packaging size                 | 100                    |
|--------------------------------|------------------------|
| Net weight                     | 3.57 g                 |
| Country of origin              | Switzerland            |
| European customs tariff number | 85366990               |
| eCl@ss                         | 27440402 PCB connector |



#### 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.

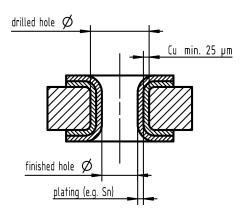
Measuring and testing techniques acc. to IEC 60512-5-2



- ① Temperature raise
- ② Derating curve
- 3 Derating curve 80%



## Recommended configuration of plated through holes



| Tin plated PCB (HAL)<br>acc. to EN 60352-5 | Drilled hole Ø | 1,15-0,03 mm   |
|--|----------------|----------------|
|  | Си             | min. 25 μm     |
|  | Sn             | max. 15 μm     |
|  | plated hole Ø  | 0,94 - 1,09 mm |
|  | Drilled hole Ø | 1,15-0,03 mm   |
| Chemical tin plated                        | Си             | min. 25 μm     |
| PCB  | Sn             | min. 0,8µm     |
|  | plated hole Ø  | 1,00 - 1,10 mm |
|  | Drilled hole Ø | 1,15-0,03 mm   |
|  | Си             | min. 25 μm     |
| Gold /Nickel plated PCB                    | Ni             | 3 – 7 µm       |
|  | Au             | 0,05 - 0,12 µm |
|  | plated hole Ø  | 1,00 - 1,10 mm |
| Silver plated PCB                          | Drilled hole Ø | 1,15-0,03 mm   |
|  | Си             | min. 25 μm     |
|  | Ag             | 0,1 - 0,3 µm   |
|  | plated hole Ø  | 1,00 - 1,10 mm |
| Copper plated<br>PCB (OSP)                 | Drilled hole Ø | 1,15-0,03 mm   |
|  | Си             | min. 25 μm     |
|  | plated hole Ø  | 1,00 - 1,10 mm |

In addition to the hot-air-level (HAL) other pcb surfaces are getting more important. Due to their different properties, such as mechanical strength and coefficient of friction we recommend the above mentioned configuration of pcb through holes.