



Pushing Performance  
Since 1945

# SEK-18 SV MA LP STR55 PR-IN 50P PLS4

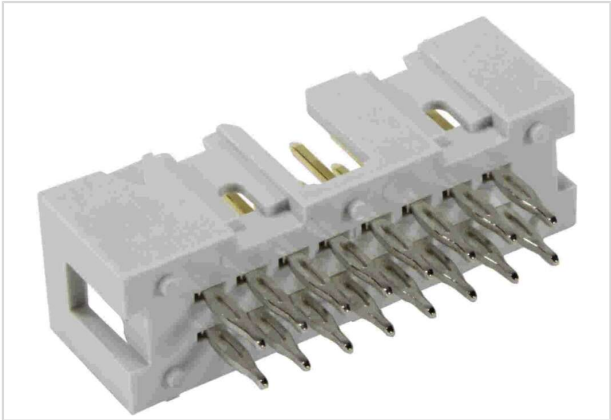


Image is for illustration purposes only. Please refer to product description.

|                    |                                                                               |
|--------------------|-------------------------------------------------------------------------------|
| Part number        | 09 18 550 5329                                                                |
| Specification      | SEK-18 SV MA LP STR55 PR-IN 50P PLS4                                          |
| HARTING eCatalogue | <a href="https://harting.com/09185505329">https://harting.com/09185505329</a> |

## 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<br>PCB to PCB |
| Number of contacts | 50                         |
| Termination length | 5.5 mm                     |

## Technical characteristics

|                                    |                           |
|------------------------------------|---------------------------|
| Contact rows                       | 2                         |
| Contact spacing (termination side) | 2.54 mm                   |
| Rated current                      | 1 A                       |
| Insulation resistance              | $>10^9 \Omega$            |
| Contact resistance                 | $\leq 20 \text{ m}\Omega$ |
| Limiting temperature               | -55 ... +105 °C           |
| Insertion force                    | $\leq 100 \text{ N}$      |
| Withdrawal force                   | $\leq 100 \text{ N}$      |
| Performance level                  | NM 30 (S4)                |
| Mating cycles                      | $\geq 250$                |



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## Technical characteristics

|                           |                               |
|---------------------------|-------------------------------|
| Test voltage $U_{r.m.s.}$ | 1 kV                          |
| Isolation group           | IIIa ( $175 \leq CTI < 400$ ) |
| PCB thickness             | 1.6 mm +1.6                   |

## Material properties

|                                           |                                                        |
|-------------------------------------------|--------------------------------------------------------|
| Material (insert)                         | Thermoplastic resin (PBT)                              |
| Colour (insert)                           | Grey                                                   |
| Material (contacts)                       | Copper alloy                                           |
| Surface (contacts)                        | Noble metal over Ni Mating side<br>Ni Termination side |
| Layer thickness                           | $\geq 0.76 \mu\text{m}$                                |
| Layer thickness                           | $\geq 30 \mu\text{inch}$                               |
| Material flammability class acc. to UL 94 | V-0                                                    |
| RoHS                                      | compliant                                              |
| ELV status                                | compliant                                              |
| China RoHS                                | e                                                      |
| REACH Annex XVII substances               | Not contained                                          |
| REACH ANNEX XIV substances                | Not contained                                          |
| REACH SVHC substances                     | Not contained                                          |
| California Proposition 65 substances      | Yes                                                    |
| California Proposition 65 substances      | Nickel                                                 |
| Fire protection on railway vehicles       | EN 45545-2 (2020-08) + A1 (2023-10)                    |
| Requirement set with Hazard Levels        | R26                                                    |

## 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                                                      |

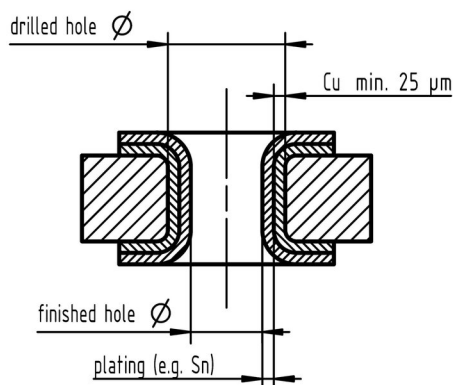
## Commercial data

|                                |          |
|--------------------------------|----------|
| Packaging size                 | 50       |
| Net weight                     | 9.68 g   |
| Country of origin              | Romania  |
| European customs tariff number | 85366990 |

## Commercial data

|             |                                          |
|-------------|------------------------------------------|
| GTIN        | 5713140033788                            |
| eCl@ss      | 27460201 PCB connector (board connector) |
| ETIM        | EC002637                                 |
| UNSPSC 24.0 | 39121415                                 |

## Recommended configuration of plated through holes



|                                            |                |                |
|--------------------------------------------|----------------|----------------|
| Tin plated PCB (HAL)<br>acc. to EN 60352-5 | Drilled hole Ø | 1,15-0,03 mm   |
|                                            | Cu             | min. 25 µm     |
|                                            | Sn             | max. 15 µm     |
|                                            | plated hole Ø  | 0,94 - 1,09 mm |
| Chemical tin plated<br>PCB                 | Drilled hole Ø | 1,15-0,03 mm   |
|                                            | Cu             | min. 25 µm     |
|                                            | Sn             | min. 0,8µm     |
|                                            | plated hole Ø  | 1,00 - 1,10 mm |
| Gold /Nickel plated<br>PCB                 | Drilled hole Ø | 1,15-0,03 mm   |
|                                            | Cu             | min. 25 µm     |
|                                            | 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   |
|                                            | Cu             | 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   |
|                                            | Cu             | 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.