

SEK-18 SV MA STD STR45PR-IN RKZ 50P AUS4

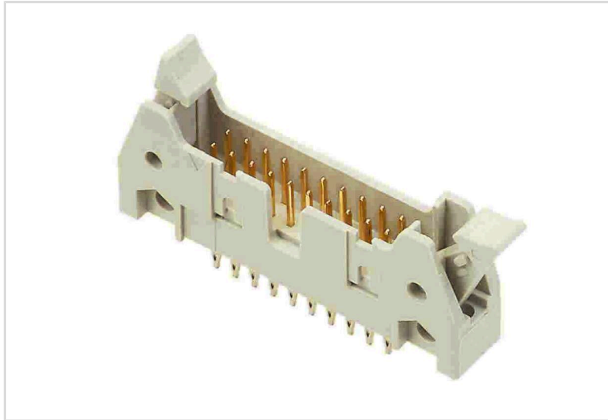


Image is for illustration purposes only. Please refer to product description.

| | |
|--------------------|---------------------------------------------------------------------------------------|
| Part number | 09 18 550 5919 |
| Specification | SEK-18 SV MA STD STR45PR-IN RKZ 50P AUS4 |
| HARTING eCatalogue | https://b2b.harting.com/09185505919 |

Identification

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

Version

| | |
|--------------------|----------------------|
| Termination method | Press-in termination |
| Connection type | PCB to cable |
| Number of contacts | 50 |
| Termination length | 4.5 mm |
| Locking type | With short levers |

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 | ≥ 250 |



Technical characteristics

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

Material properties

| | |
|-------------------------------------------|--------------------------------------------------------|
| Material (insert) | Thermoplastic resin (PBT) |
| Colour (insert) | Grey |
| Material (contacts) | Copper alloy |
| Surface (contacts) | Noble metal over Ni Mating side Ni Termination side |
| Layer thickness | ≥ 0.76 μ m |
| Layer thickness | ≥ 30 μ 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 |
| Fire protection on railway vehicles | EN 45545-2 (2020-08) |
| Requirement set with Hazard Levels | R26 |

Specifications and approvals

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

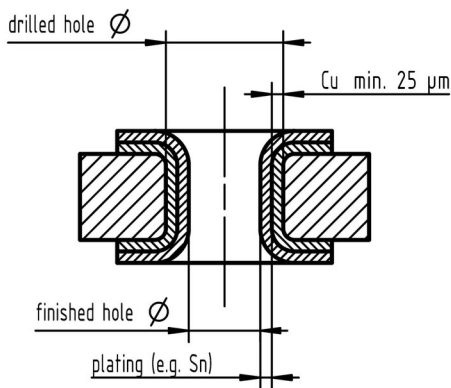
Commercial data

| | |
|--------------------------------|---------------|
| Packaging size | 1 |
| Net weight | 17.41 g |
| Country of origin | Czechia |
| European customs tariff number | 85366990 |
| GTIN | 5713140033955 |
| ETIM | EC002637 |

Commercial data

eCl@ss 27460201 PCB connector (board connector)

Recommended configuration of plated through holes



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