

# SEK-18 SV MA LP STR55 PR-IN 50P PL2



Part number	09 18 550 6329
Specification	SEK-18 SV MA LP STR55 PR-IN 50P PL2
HARTING eCatalogue	https://b2b.harting.com/09185506329

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 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 <sup>9</sup> Ω
Contact resistance	≤20 mΩ
Limiting temperature	-55 +105 °C
Insertion and withdrawal force	≤100 N
Performance level	2 acc. to IEC 60603-13
Mating cycles	≥250



## Technical characteristics

Test voltage U <sub>r.m.s.</sub>	1 kV
Isolation group	IIIa (175 ≤ 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 Ni Termination side
Material flammability class acc. to UL 94	V-0
RoHS	compliant
ELV status	compliant
China RoHS	е
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	Antimony trioxide Nickel
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

50
6.64 g
Romania
85366990
5713140210967



### Commercial data

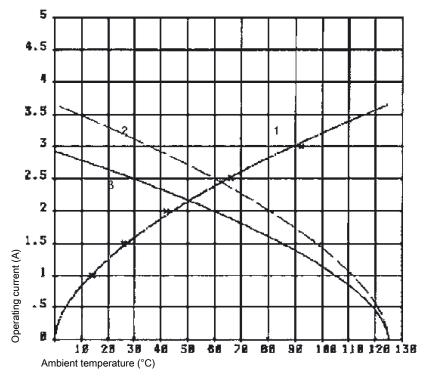
eCl@ss

27460201 PCB connector (board 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.

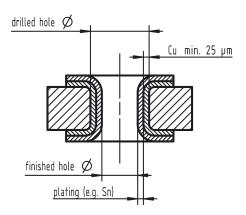
Measuring and testing techniques acc. to IEC 60512-5-2



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



# Recommended configuration of plated through holes



Tin plated PCB (HAL) 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
РСВ	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 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.