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SEK 18 male low profile solder and press-in RoHS compliant				Recommended configuration of plated through holes for press-in termination 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 following configuration of PCB through holes. <table><tr><td rowspan="3">Tin plated PCB (HAL) acc. to EN 60352-5</td><td>Drilled hole Ø</td><td>1,15-0,03 mm</td></tr><tr><td>Cu</td><td>min. 25 µm</td></tr><tr><td>Sn</td><td>max. 15 µm</td></tr><tr><td rowspan="3">Chemical tin plated PCB</td><td>plated hole Ø</td><td>0,94 - 1,09 mm</td></tr><tr><td>Drilled hole Ø</td><td>1,15-0,03 mm</td></tr><tr><td>Cu</td><td>min. 25 µm</td></tr><tr><td rowspan="5">Gold /Nickel plated PCB</td><td>Sn</td><td>min. 0,8µm</td></tr><tr><td>plated hole Ø</td><td>1,00 - 1,10 mm</td></tr><tr><td>Drilled hole Ø</td><td>1,15-0,03 mm</td></tr><tr><td>Cu</td><td>min. 25 µm</td></tr><tr><td>Ni</td><td>3 - 7 µm</td></tr><tr><td rowspan="4">Silver plated PCB</td><td>Au</td><td>0,05 - 0,12 µm</td></tr><tr><td>plated hole Ø</td><td>1,00 - 1,10 mm</td></tr><tr><td>Drilled hole Ø</td><td>1,15-0,03 mm</td></tr><tr><td>Cu</td><td>min. 25 µm</td></tr><tr><td rowspan="3">Copper plated PCB (OSP)</td><td>plated hole Ø</td><td>1,00 - 1,10 mm</td></tr><tr><td>Drilled hole Ø</td><td>1,15-0,03 mm</td></tr><tr><td>Cu</td><td>min. 25 µm</td></tr></table>				Tin plated PCB (HAL) acc. to EN 60352-5	Drilled hole Ø	1,15-0,03 mm	Cu	min. 25 µm	Sn	max. 15 µm	Chemical tin plated PCB	plated hole Ø	0,94 - 1,09 mm	Drilled hole Ø	1,15-0,03 mm	Cu	min. 25 µm	Gold /Nickel plated PCB	Sn	min. 0,8µm	plated hole Ø	1,00 - 1,10 mm	Drilled hole Ø	1,15-0,03 mm	Cu	min. 25 µm	Ni	3 - 7 µm	Silver plated PCB	Au	0,05 - 0,12 µm	plated hole Ø	1,00 - 1,10 mm	Drilled hole Ø	1,15-0,03 mm	Cu	min. 25 µm	Copper plated PCB (OSP)	plated hole Ø	1,00 - 1,10 mm	Drilled hole Ø	1,15-0,03 mm	Cu	min. 25 µm	Assembly instructions It is highly recommended to use HARTING press-in tools to ensure a reliable press-in process. Please refer to the catalogue for tools, machines and further information about the press-in process. Soldering instructions The connectors should be protected when being soldered in a dip, flow or film soldering baths. Otherwise, they might become contaminated as a result of soldering operations or deformed as a result of overheating. (1) For prototypes and short runs protect the connectors with an industrial adhesive tape, e.g. Tesaband 4331 (www.tesa.de). Cover the underside of the connector moulding and the adjacent parts of the pcb as well as the open sides of the connector. This will prevent heat and gases of the soldering apparatus from damaging the connector. About 140 + 5 mm of the tape should suffice. (2) For large series a jig is recommended. Its protective cover with a fast action mechanical locking device shields the connectors from gas and heat generated by the soldering apparatus. As an additional protection a foil can be used for covering the parts that should not be soldered.																																																								
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Derating diagram acc to IEC 60512-2 (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, not 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. 1) Temperature rise 2) Derating 3) Derating curve at I max x 0.8(IEC 60512-2)				All rights reserved Department EC PD - DE HARTING Electronics GmbH D-32339 Espelkamp Scale 1:1 Free size tol. Created by STORCK Inspected by LEHNERT Standardisation HOFFMANN Date 2016-09-05 State Final Release Title SEK 18 male low profile solder and press-in Doc-Key / ECM-Nr. 100554984/UGD/001/F 5000001017692 Type DS Number 09181100001 Rev. F Page 1/1																																																																																																					
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