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DIN signal male connector with special contacts RoHS compliant				Soldering instructions The connectors should be protected when being soldered in a dip, flow or film soldering bath. 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. (3) We recommend to align special contacts during soldering. A mated dummy connector of the counterpart can be used to align the contacts to avoid misalignment due to angular deviations.																																																											
General information <table><tr><td>Design</td><td>IEC 60603-2</td><td>types: M male</td></tr><tr><td>No. of contacts</td><td colspan="2">78+2, 60+4, 42+6, 24+8, 6+10</td></tr><tr><td>Contact spacing</td><td>2,54 mm for signal contacts</td><td>7,62 mm for special contacts</td></tr><tr><td>Test voltage</td><td colspan="2">1000V</td></tr><tr><td>Contact resistance</td><td colspan="2">max. 20mOhm</td></tr><tr><td>Insulation resistance</td><td colspan="2">min. 10¹²Ohm</td></tr><tr><td>Working current</td><td colspan="2">2 A@20°C (see derating diagram) for signal contacts for special contacts refer to corresponding data sheet</td></tr><tr><td>Temperature range</td><td colspan="2">-55°C ... +125°C</td></tr><tr><td>Termination technology</td><td colspan="2">solder pins</td></tr><tr><td>Clearance & creepage distance</td><td colspan="2">min. 1,2 mm</td></tr><tr><td rowspan="3">Insertion and withdrawal force</td><td>6pol. max. 6N</td><td>60pol. max. 57N</td></tr><tr><td>24pol. max. 23N</td><td>78pol. max. 74N</td></tr><tr><td>42pol. max. 40N</td><td></td></tr><tr><td rowspan="3">Mating cycles</td><td colspan="2">- PL1 acc. to IEC 60603-2 => 500 mating cycles</td></tr><tr><td colspan="2">- PL2 acc. to IEC 60603-2 => 400 mating cycles</td></tr><tr><td colspan="2">- PL3 acc. to IEC 60603-2 => 50 mating cycles</td></tr><tr><td>UL file</td><td colspan="2">E102079</td></tr><tr><td>RoHS - compliant</td><td colspan="2">Yes</td></tr><tr><td>Leadfree</td><td colspan="2">Yes</td></tr><tr><td>Hot plugging</td><td colspan="2">No</td></tr></table>				Design	IEC 60603-2	types: M male	No. of contacts	78+2, 60+4, 42+6, 24+8, 6+10		Contact spacing	2,54 mm for signal contacts	7,62 mm for special contacts	Test voltage	1000V		Contact resistance	max. 20mOhm		Insulation resistance	min. 10 ¹² Ohm		Working current	2 A@20°C (see derating diagram) for signal contacts for special contacts refer to corresponding data sheet		Temperature range	-55°C ... +125°C		Termination technology	solder pins		Clearance & creepage distance	min. 1,2 mm		Insertion and withdrawal force	6pol. max. 6N	60pol. max. 57N	24pol. max. 23N	78pol. max. 74N	42pol. max. 40N		Mating cycles	- PL1 acc. to IEC 60603-2 => 500 mating cycles		- PL2 acc. to IEC 60603-2 => 400 mating cycles		- PL3 acc. to IEC 60603-2 => 50 mating cycles		UL file	E102079		RoHS - compliant	Yes		Leadfree	Yes		Hot plugging	No		Cross section of solder pins			
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Derating diagram acc. to IEC 60512-5 (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, non 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 60512-5																																																															
All rights reserved Department EC PD - DE HARTING Electronics GmbH D-32339 Espelkamp				All Dimensions in mm Original Size DIN A3	Scale 1:1	Free size tol.	Ref. Sub. DS 09031200202 / 500000076066 / 2014-09-10	Created by TADJE	Inspected by ELLERMANN	Standardisation HOFFMANN	Date 2015-11-17	State Final Release	Title DIN signal male connector with special contacts	Doc-Key / ECM-Nr. 100580373/UGD/000/B 500000097390	Type DS	Number 09031200202	Rev. B	Page 1/1																																													
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