



DIN Signal female connector



General information

Design	IEC 60603-2, types: B, C, 2C			
No. of contacts	max. 96			
Contact spacing	2,54 mm			
Test voltage	1000V			
Contact resistance	max. 20mOhm			
Insulation resistance	min. 10 ¹⁰ Ohm			
Working current	2A at 20°C (see derating diagram)			
Temperature range	-55°C ... +125°C			
Termination technology	solder lugs, wirewrap, solder			
Clearance & creepage distance	min. 1,2 mm each			
Insertion and withdrawal force	32-pole max. 30N	48-pole max. 45N	64-pole max. 60N	96-pole max. 90N
Mating cycles	acc. to performance level, see table below			
UL file	E102079			
RoHS - compliant	Yes			
Leadfree	Yes			
Hot plugging	No			

Insulator material

Material	PBT (thermoplastics, glass fiber reinforcement 30%)
Color	RAL 7032 (grey)
UL classification	UL 94-V0
Material group acc. IEC 60664-1	IIIa (175 < CTI < 400)
NFF classification	I3, F4

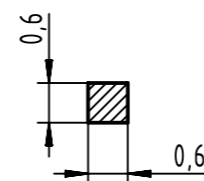
Contact material

Contact material	Copper alloy
Plating termination zone	Sn over Ni for solder, Ni for wirewrap
Plating contact zone	acc. to performance level, see table below

performance level	mating cycles		plating contact zone
	acc. to IEC 60603-2	complementary acc. to IEC 60603-2	
1	500		Au over Ni
2	400		Au over Ni
3	50		Au over Ni
NM30 (S4)		500	min. 0,76µm (30pinch) noble metal (alloy) over Ni
Au30		500	min. 0,76µm (30pinch) Au over Ni
Au50		500	min. 1,27µm (50pinch) Au over Ni
Au70		500	min. 1,60µm (70pinch) Au over Ni
Au90		500	min. 2,00µm (90pinch) Au over Ni

Standard plating options highlighted in bold, other plating options are available on request.

Cross section of solder and wire wrap termination



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.

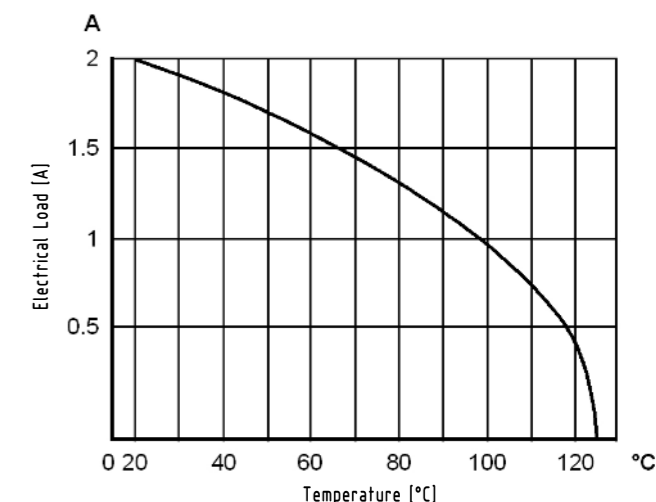
(2) For large series a jig is recommended. Its protective cover with a fast action mechanical locking device shields the connectors from gas and heat generated by the soldering apparatus. As an additional protection a foil can be used for covering the parts that should not be soldered.

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



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