



DIN power female connector - NFF



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.

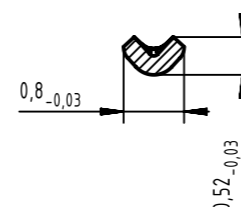
(1) For prototypes and short runs protect the connectors with an industrial adhesive tape, e.g. Tesaband 4331 (www.tesa.de). Cover the underside of the connector moulding and the adjacent parts of the pcb as well as the open sides of the connector. This will prevent heat and gases of the soldering apparatus 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.

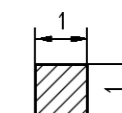
General information

Design	IEC 60603-2	types: F female
No. of contacts	max. 48	
Contact spacing	5,08 mm	3,81mm between rows
Test voltage	1550V contact/contact	2500V contact/ground
Contact resistance	max. 15mOhm for wirewrap and solder	
Insulation resistance	min. 10 ¹⁰ Ohm	
Working current	6A at 20°C (see derating diagram)	
Temperature range	-55°C ... +125°C	
Termination technology	solder pins, solder lugs, wirewrap	
Clearance	min. 1,6 mm	
Creepage	min. 3,0 mm	
Insertion and withdrawal force	24pole max. 37N	32pole max. 50N
	45pole max. 70N	48pole max. 75N
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	
RoHS - compliant	Yes	
Leadfree	Yes	
Hot plugging	No	

Cross section of solder pins



Cross section of wirewrap posts



Insulator material

Material	PA (thermoplastics, glass fiber reinforcement 25%)
Colour	RAL 7035 (light grey)
UL classification	UL 94-V0
Material group acc. to IEC 60664-1	II (400 ≤ CTI < 600)
NFF classification	I2, F1

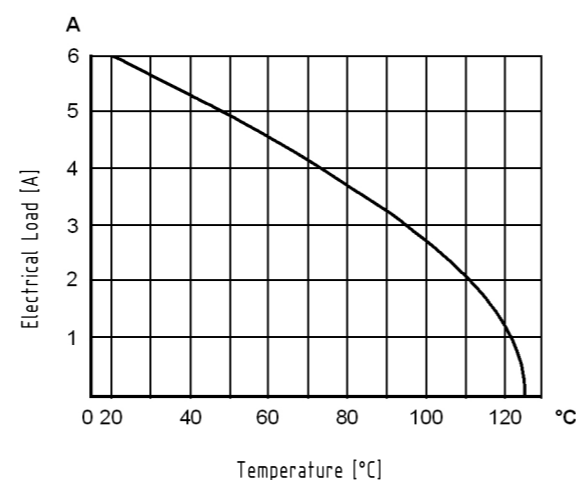
Contact material

Contact material	Copper alloy
Plating termination zone	Sn over Ni for solder, Ni for wirewrap
Plating contact zone	Au over Ni

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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