DIN signal male connector

General information

Design	IEC 60603-2	types: B, C male
No. of contacts	max. 96	
Contact spacing	2,54 mm	
Test voltage	1000V	
Contact resistance	≤ 20 mOhm	
Insulation resistance	≥ 10^{12} Ohm	
Working current	max. 2 A@20℃ (see derating diagram)	
Temperature range	-55℃ ... +125℃	
Termination technology	solder pins	
Clearance & creepage distance	min. 1,2 mm	
Insertion and withdrawal force	64pol. ≤ 60N	
	96pol. ≤ 90N	
Mating cycles	- PL1 acc. to IEC 60 603-2 =>	500 mating cycles
	- PL2 acc. to IEC 60 603-2 =>	400 mating cycles
	- PL3 acc. to IEC 60 603-2 =>	50 mating cycles
	- PL S4 surface treatment =>	min. 0,06µm Au over 0,7$^{+0,2}$µm PdNi
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

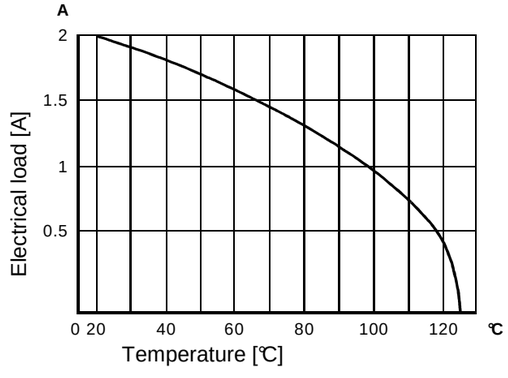
Contact material

Contact material	Copper alloy
Plating termination zone	Sn over Ni
Plating contact zone	Au over PdNi 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



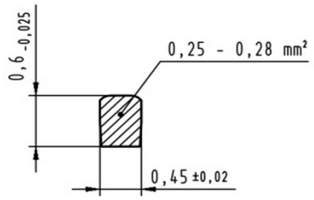
Soldering instructions

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.

Cross section of solder terminations



				Date	Name		Technical data sheet
			Detail.	08/06/11	mte	HARTING	*DIN signal male connector*
			Inspec.	08/06/11	TD		
EC01482			Stand.				DS 09 03 120 02 03
Mod.	**Date**	**Name**	**HARTING Electronics GmbH & Co. KG**				