

Design

No. of contacts

Contact spacing

Working current

Mating cycles

RoHS - compliant

UL file

Leadfree

Hot plugging

Insulation resistance

Temperature range Termination technology

Clearance & creepage distance

Insertion and withdrawal force

Test voltage Contact resistance

**General information** 

# DIN signal female connector

angled

IEC 60603-2

<u><</u> 20 mOhm

<u>></u> 10<sup>12</sup> Ohm

solder pins

32pol. ≤ 30N

64pol. ≤ 60N 96pol. ≤ 90N

E102079

Yes

Yes

No

-55℃ ... +125℃

min. 1,2 mm each

2 A@20°C (see derating diagram)

- PL1 acc. to IEC 60 603-2 =>

- PL2 acc. to IEC 60 603-2 =>

- PL3 acc. to IEC 60 603-2 =>

max. 96 2,54 mm

1000V



types: R, R(HE11) female

500 mating cycles

400 mating cycles

50 mating cycles

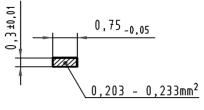
## Assembly and soldering instructions

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**



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 <u>&lt;</u> CTI < 400)	
NFF classification	I3, F4	

### **Contact material**

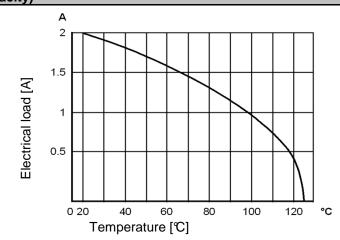
Contact material	Copper alloy	
Plating termination zone	Sn over Ni	
Plating contact zone	Au over Ni	

# 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



1 mte	
Name	
	mte HARTING

Technical data sheet
DIN signal female connector angled
DS 09 73 220 02 01