

# DIN-Signal R064MS-2,5C1-2-clip



Part number	09 73 364 6902
Specification	DIN-Signal R064MS-2,5C1-2-clip
HARTING eCatalogue	https://b2b.harting.com/09733646902

Image is for illustration purposes only. Please refer to product description.

### Identification

Category	Connectors
Series	DIN 41612
Identification	Type R
Element	Male connector
Description of the contact	Straight
Features	lead-free

#### Version

Termination method	Wave soldering termination
Connection type	Motherboard to daughtercard Mezzanine PCB to cable
Number of contacts	64
Contact configuration	Rows a and c, positions 1, 2, , 31, 32
Termination length	2.5 mm
Coding	Coding with loss of contacts
PCB fixing	With fixing flange With snap-in clip

## **Technical characteristics**

Contact rows	3
Contact spacing (termination side)	2.54 mm
Contact spacing (mating side)	2.54 mm
Rated current	2 A

Page 1 / 5 | Creation date 2023-12-19 | Please note that the data specified here were taken as extracts from the online catalogue. Please refer to the user documentation for the complete and up-to-date information and data. Please also note that the user is responsible for validating functionality, conformity with applicable laws and directives, as well as for the electrical safety in the particular application. HARTING Electronics GmbH | Marienwerderstraße 3 | 32339 Espelkamp | Germany Phone +49 5772 47-97200 | electronics@HARTING.com | www.HARTING.com Product data sheet 09 73 364 6902 DIN-Signal R064MS-2,5C1-2-clip



#### Technical characteristics

Rated current	Rated current measured at 20 °C, see derating curve for details
Clearance distance	≥1.2 mm
Creepage distance	≥1.2 mm
Insulation resistance	>10 <sup>12</sup> Ω
Contact resistance	≤20 mΩ
Limiting temperature	-55 +125 °C
Insertion and withdrawal force	≤60 N
Performance level	2 acc. to IEC 60603-2
Mating cycles	≥400
Test voltage U <sub>r.m.s.</sub>	1 kV
Isolation group	IIIa (175 ≤ CTI < 400)
PCB thickness	1.6 mm +2.4
Hot plugging	No
Material properties	
Material (insert)	Thermoplastic resin, glass-fibre filled
Material (insert) Colour (insert)	Thermoplastic resin, glass-fibre filled RAL 7032 (pebble grey)
Colour (insert)	RAL 7032 (pebble grey)
Colour (insert) Material (contacts)	RAL 7032 (pebble grey) Copper alloy Noble metal over Ni Mating side
Colour (insert) Material (contacts) Surface (contacts)	RAL 7032 (pebble grey) Copper alloy Noble metal over Ni Mating side Sn over Ni Termination side
Colour (insert) Material (contacts) Surface (contacts) Material flammability class acc. to UL 94	RAL 7032 (pebble grey) Copper alloy Noble metal over Ni Mating side Sn over Ni Termination side V-0
Colour (insert) Material (contacts) Surface (contacts) Material flammability class acc. to UL 94 RoHS	RAL 7032 (pebble grey) Copper alloy Noble metal over Ni Mating side Sn over Ni Termination side V-0 compliant
Colour (insert) Material (contacts) Surface (contacts) Material flammability class acc. to UL 94 RoHS ELV status	RAL 7032 (pebble grey)   Copper alloy   Noble metal over Ni Mating side   Sn over Ni Termination side   V-0   compliant   compliant
Colour (insert) Material (contacts) Surface (contacts) Material flammability class acc. to UL 94 RoHS ELV status China RoHS	RAL 7032 (pebble grey) Copper alloy Noble metal over Ni Mating side Sn over Ni Termination side V-0 compliant compliant
Colour (insert) Material (contacts) Surface (contacts) Material flammability class acc. to UL 94 RoHS ELV status China RoHS REACH Annex XVII substances	RAL 7032 (pebble grey)   Copper alloy   Noble metal over Ni Mating side   Sn over Ni Termination side   V-0   compliant   compliant   e   Not contained
Colour (insert) Material (contacts) Surface (contacts) Material flammability class acc. to UL 94 RoHS ELV status China RoHS REACH Annex XVII substances REACH ANNEX XIV substances	RAL 7032 (pebble grey)   Copper alloy   Noble metal over Ni Mating side   Sn over Ni Termination side   V-0   compliant   compliant   e   Not contained   Not contained
Colour (insert) Material (contacts) Surface (contacts) Material flammability class acc. to UL 94 RoHS ELV status ELV status China RoHS REACH Annex XVII substances REACH ANNEX XIV substances	RAL 7032 (pebble grey)   Copper alloy   Noble metal over Ni Mating side   Sn over Ni Termination side   V-0   compliant   compliant   e   Not contained   Not contained   Not contained
Colour (insert) Material (contacts) Surface (contacts) Material flammability class acc. to UL 94 RoHS ELV status ELV status China RoHS REACH Annex XVII substances REACH ANNEX XIV substances REACH SVHC substances	RAL 7032 (pebble grey)   Copper alloy   Noble metal over Ni Mating side   Sn over Ni Termination side   V-0   compliant   compliant   e   Not contained   Not contained   Yes   Antimony trioxide   Lead

Page 2 / 5 | Creation date 2023-12-19 | Please note that the data specified here were taken as extracts from the online catalogue. Please refer to the user documentation for the complete and up-to-date information and data. Please also note that the user is responsible for validating functionality, conformity with applicable laws and directives, as well as for the electrical safety in the particular application. HARTING Electronics GmbH | Marienwerderstraße 3 | 32339 Espelkamp | Germany Phone +49 5772 47-97200 | electronics@HARTING.com | www.HARTING.com



## Specifications and approvals

Specifications	IEC 60603-2
UL / CSA	UL 1977 ECBT2.E102079 CSA-C22.2 No. 182.3 ECBT8.E102079
Railway classification	F4/I3 acc. to NFF 16-101/102

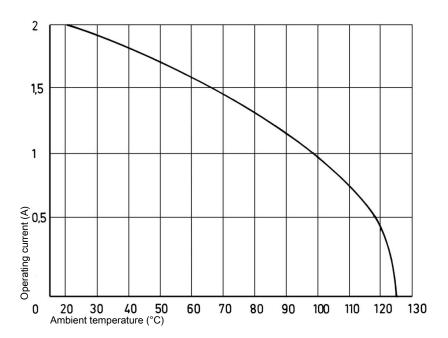
## Commercial data

Packaging size	20
Net weight	11.75 g
Country of origin	Romania
European customs tariff number	85366990
GTIN	5713140104266
ETIM	EC002637
eCl@ss	27460201 PCB connector (board connector)

#### Current carrying capacity

The current carrying capacity of the connectors is limited by the thermal load capability of the contact element material including the connections and the insulating parts. The derating curve is therefore valid for currents which flow constantly (nonintermittent) through each contact element of the connector evenly, without exceeding the allowed maximum temperature.

Measuring and testing techniques acc. to IEC 60512-5-2



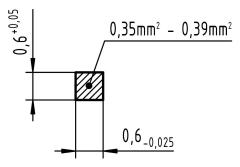
Page 3 / 5 | Creation date 2023-12-19 | Please note that the data specified here were taken as extracts from the online catalogue. Please refer to the user documentation for the complete and up-to-date information and data. Please also note that the user is responsible for validating functionality, conformity with applicable laws and directives, as well as for the electrical safety in the particular application. HARTING Electronics GmbH | Marienwerderstraße 3 | 32339 Espelkamp | Germany

Phone +49 5772 47-97200 | electronics@HARTING.com | www.HARTING.com

Product data sheet 09 73 364 6902 DIN-Signal R064MS-2,5C1-2-clip



Cross section of solder termination



Coding with loss of contacts

To avoid cross-plugging of adjacent connectors a coding system is required.

The coding is achieved by means of a code pin which is inserted into the selected chamber of the female connector (the contact cavity must be filled with a female contact!).

The opposite male contact must be removed with the help of the specially designed tool. It's recommended to use a number of code pins in relation to the total number of contacts per connector: 3 pins for 64 contacts, 7 pins for 160 contacts

Coding pin 09 02 000 9901

Removal tool for male contacts 09 99 000 0133

Soldering instructions

The connectors should be protected when being soldered. Otherwise, they might become contaminated as a result of soldering operations or deformed as a result of overheating.

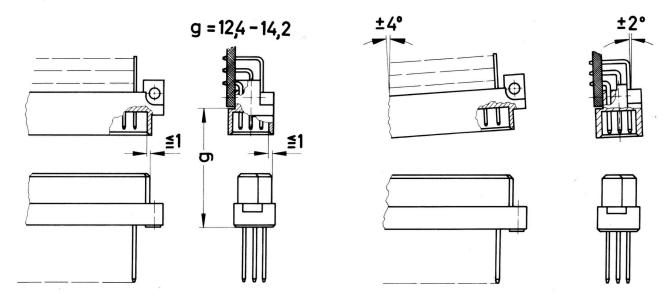
1) For prototypes and short runs protect the connectors with an industrial adhesive tape, e.g. Tesaband 4331 (www.tesa.de). Cover the underside of the connector moulding and the adjacent parts of the pcb as well as the open sides of the connector. This will prevent heat and gases of the soldering apparatus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

Product data sheet 09 73 364 6902 DIN-Signal R064MS-2,5C1-2-clip



#### Mating conditions



To ensure reliable connections and prevent unnecessary damage, please refer to the application data diagrams. These recommendations are set out in IEC 60603-2.

The connectors should not be coupled and decoupled under electrical load.

Page 5 / 5 | Creation date 2023-12-19 | Please note that the data specified here were taken as extracts from the online catalogue. Please refer to the user documentation for the complete and up-to-date information and data. Please also note that the user is responsible for validating functionality, conformity with applicable laws and directives, as well as for the electrical safety in the particular application. HARTING Electronics GmbH | Marienwerderstraße 3 | 32339 Espelkamp | Germany Phone +49 5772 47-97200 | electronics@HARTING.com | www.HARTING.com