

# DIN-Power F032MS-3,0C1-2-V1



Part number	09 06 132 6921
Specification	DIN-Power F032MS-3,0C1-2-V1
HARTING eCatalogue	https://b2b.harting.com/09061326921

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

# Identification

Category	Connectors
Series	DIN 41612
Identification	Туре F
Element	Male connector
Description of the contact	Angled
Features	lead-free
Version	
Termination method	Wave soldering termination
Connection type	Motherboard to daughtercard Extender card PCB to cable
Number of contacts	32
Contact configuration	Rows z and b, positions 2, 4, , 30, 32
Leading contact	z32
Coding	Hole coding Shroud coding Coding with loss of contacts D20 coding
PCB fixing	With fixing flange
Technical characteristics	
Contact rows	3

Contact rows	3
Contact spacing (termination side)	2.54 mm
	5.08 mm

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# **Technical characteristics**

	3.81 mm
Contact spacing (mating side)	5.08 mm
Rated current	6 A
Rated current	Rated current measured at 20 °C, see derating curve for details
Clearance distance	≥1.6 mm
Creepage distance	≥3 mm
Insulation resistance	>10 <sup>12</sup> Ω
Contact resistance	≤15 mΩ
Limiting temperature	-55 +125 °C
Insertion and withdrawal force	≤50 N
Performance level	2 acc. to IEC 60603-2
Mating cycles	≥400
Test voltage U <sub>r.m.s.</sub>	1.55 kV (contact-contact) 2.5 kV (contact-ground)
Isolation group	IIIa (175 ≤ CTI < 400)
Hot plugging	No
	No
Material properties	
Material properties Material (insert)	Thermoplastic resin, glass-fibre filled
Material properties	
Material properties Material (insert)	Thermoplastic resin, glass-fibre filled
Material properties Material (insert) Colour (insert)	Thermoplastic resin, glass-fibre filled RAL 7032 (pebble grey)
Material properties Material (insert) Colour (insert) Material (contacts)	Thermoplastic resin, glass-fibre filled RAL 7032 (pebble grey) Copper alloy Noble metal over Ni Mating side
Material properties Material (insert) Colour (insert) Material (contacts) Surface (contacts)	Thermoplastic resin, glass-fibre filled RAL 7032 (pebble grey) Copper alloy Noble metal over Ni Mating side Sn over Ni Termination side
Material properties Material (insert) Colour (insert) Material (contacts) Surface (contacts) Material flammability class acc. to UL 94	Thermoplastic resin, glass-fibre filled   RAL 7032 (pebble grey)   Copper alloy   Noble metal over Ni Mating side   Sn over Ni Termination side   V-0
Material properties Material (insert) Colour (insert) Material (contacts) Surface (contacts) Material flammability class acc. to UL 94 RoHS	Thermoplastic resin, glass-fibre filledRAL 7032 (pebble grey)Copper alloyNoble metal over Ni Mating sideSn over Ni Termination sideV-0compliant
Material properties Material (insert) Colour (insert) Material (contacts) Surface (contacts) Material flammability class acc. to UL 94 RoHS ELV status	Thermoplastic resin, glass-fibre filledRAL 7032 (pebble grey)Copper alloyNoble metal over Ni Mating side Sn over Ni Termination sideV-0v-0compliantcompliant
Material properties Material (insert) Colour (insert) Material (contacts) Surface (contacts) Material flammability class acc. to UL 94 RoHS ELV status China RoHS	Thermoplastic resin, glass-fibre filledRAL 7032 (pebble grey)Copper alloyNoble metal over Ni Mating side Sn over Ni Termination sideV-0v-0compliantcompliante
Material propertiesMaterial (insert)Colour (insert)Material (contacts)Surface (contacts)Material flammability class acc. to UL 94RoHSELV statusChina RoHSREACH Annex XVII substances	Thermoplastic resin, glass-fibre filled   RAL 7032 (pebble grey)   Copper alloy   Noble metal over Ni Mating side   Sn over Ni Termination side   V-0   compliant   compliant   e   No

California Proposition 65 substances Lead Antimony trioxide

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# 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	19.46 g
Country of origin	Germany
European customs tariff number	85366990

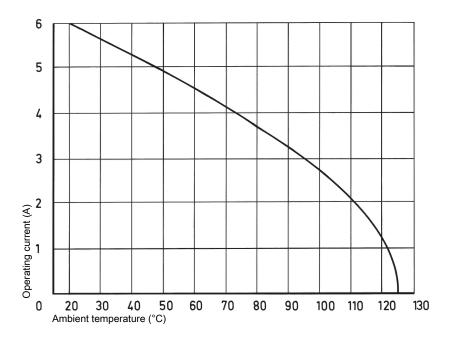
#### eCl@ss

#### 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



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### Soldering instructions

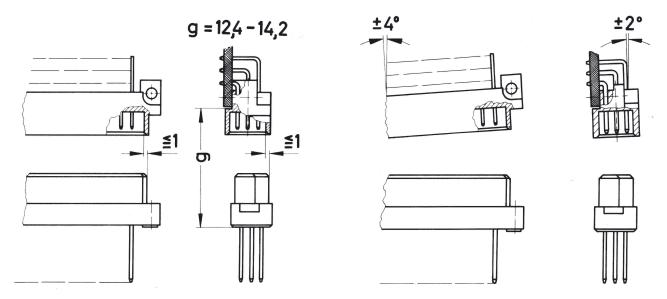
The connectors should be protected when being soldered. Otherwise, they might become contaminated as a result of soldering operations or deformed as a result of overheating.

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.

3) For prototypes and short runs the protection described under point 1) can be replaced by a solder protection cap. This cap can be ordered under the part no. 09 02 000 9935.

## 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.