

DIN-Power F032FS-3,0C1-2



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

| | |
|--------------------|---|
| Part number | 09 06 232 6846 |
| Specification | DIN-Power F032FS-3,0C1-2 |
| HARTING eCatalogue | https://b2b.harting.com/09062326846 |

Identification

| | |
|----------------------------|------------------|
| Category | Connectors |
| Series | DIN 41612 |
| Identification | Type F |
| Element | Female 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 |
| Coding | Hole coding |
| | Coding with loss of contacts |
| PCB fixing | With fixing flange |

Technical characteristics

| | |
|------------------------------------|---------|
| Contact rows | 3 |
| Contact spacing (termination side) | 5.08 mm |
| | 5.08 mm |
| Contact spacing (mating side) | 3.81 mm |
| | 5.08 mm |
| Rated current | 6 A |



Technical characteristics

| | |
|----------------------------------|---|
| 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 ¹² 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 _{r.m.s.} | 1.55 kV (contact-contact) |
| Isolation group | IIIa (175 ≤ CTI < 400) |
| Hot plugging | No |

Material properties

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|---|--|
| Material (insert) | Thermoplastic resin, glass-fibre filled |
| Colour (insert) | RAL 7032 (pebble grey) |
| Material (contacts) | Copper alloy |
| Surface (contacts) | Noble metal over Ni Mating side Sn over Ni Termination side |
| Material flammability class acc. to UL 94 | V-0 |
| RoHS | compliant |
| ELV status | compliant |
| China RoHS | e |
| REACH Annex XVII substances | Not contained |
| REACH ANNEX XIV substances | Not contained |
| REACH SVHC substances | Not contained |
| California Proposition 65 substances | Yes |
| California Proposition 65 substances | Nickel Antimony trioxide |

Specifications and approvals

| | |
|----------------|--|
| Specifications | IEC 60603-2 |
| UL / CSA | UL 1977 ECBT2.E102079 CSA-C22.2 No. 182.3 ECBT8.E102079 |



Pushing Performance

Specifications and approvals

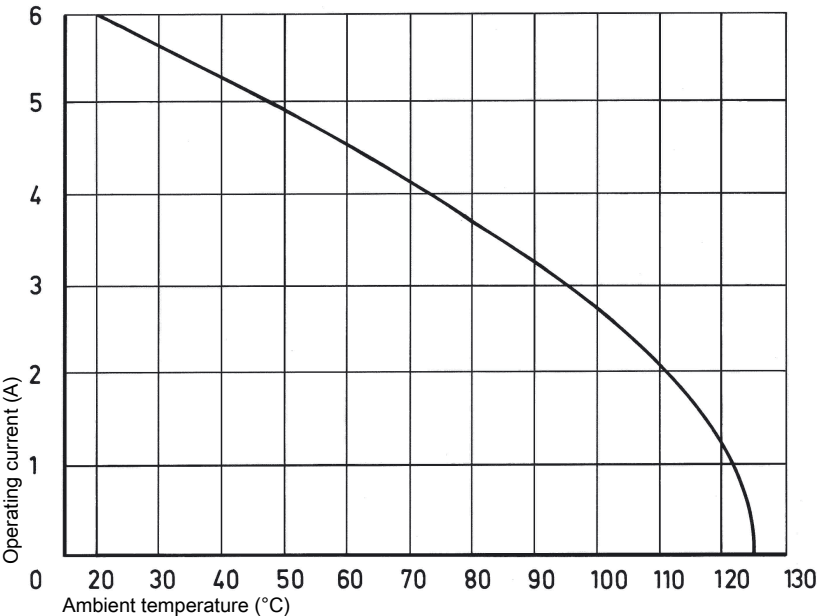
| | |
|------------------------|------------------------------|
| Railway classification | F4/I3 acc. to NFF 16-101/102 |
|------------------------|------------------------------|

Commercial data

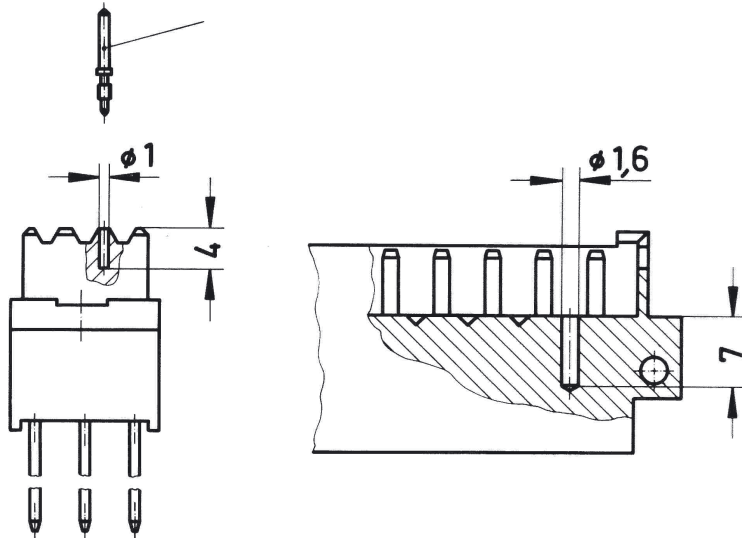
| | |
|--------------------------------|--|
| Packaging size | 20 |
| Net weight | 30 g |
| Country of origin | Germany |
| European customs tariff number | 85366990 |
| eCl@ss | 27460201 PCB connector (board connector) |

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 (non-intermittent) through each contact element of the connector evenly, without exceeding the allowed maximum temperature.
Measuring and testing techniques acc. to IEC 60512-5-2

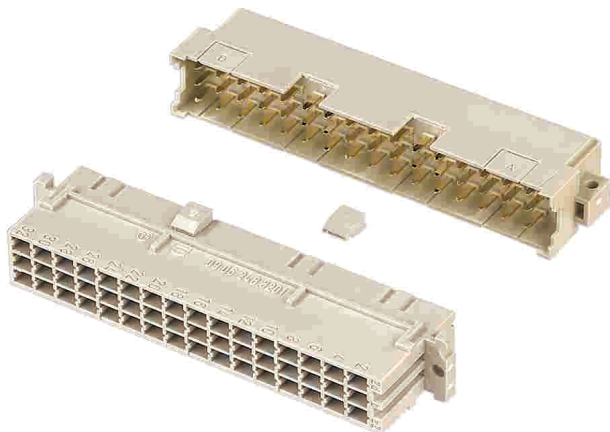


Hole coding (without loss of contact)



To avoid cross-plugging of adjacent connectors a coding system is required. With the aid of the marked indents between the contact rows of the male connector a hole has to be drilled at the desired position (also see drawing). The code pin can then be inserted into the corresponding cavity of the female connector by the means of the insertion tool.

Shroud coding (without loss of contact)



To avoid cross-plugging of adjacent connectors a coding system is required. Insert the code key 09 06 001 9919 into one of the keyways of the female connector as shown in the drawing. Break out the corresponding area of the male shroud. Connectors coded this way can only be applied in a minimum rack spacing of 20.32 mm.

Coding with loss of contacts

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

Coding pin 09 04 000 9908

Removal tool for male contacts 09 99 000 0038

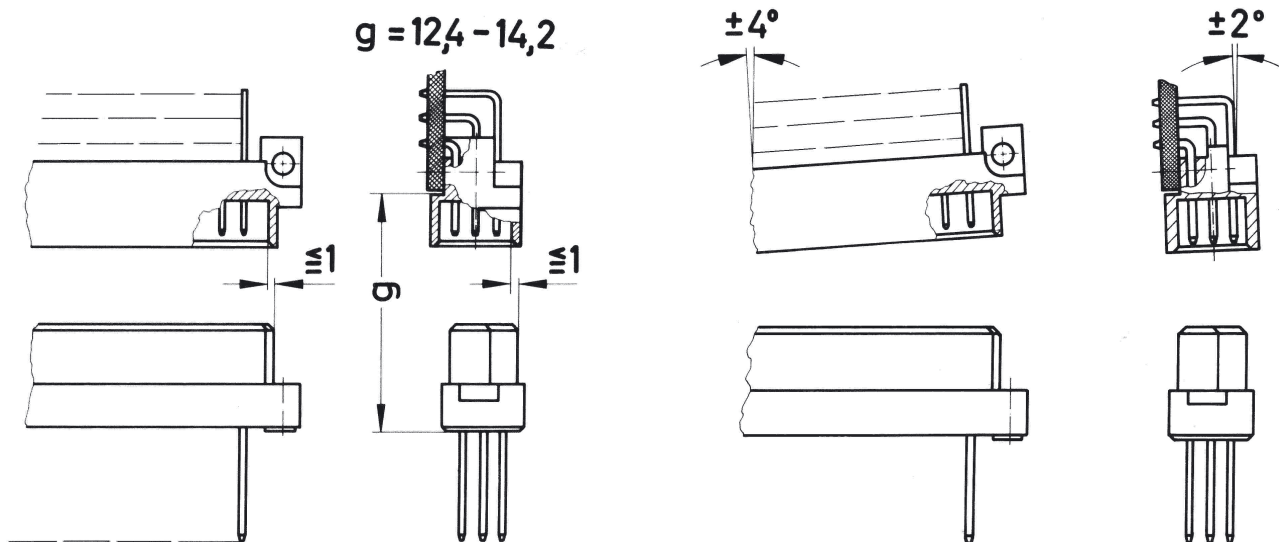
Soldering instructions

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 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.

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.