



## General safety information for connectors and contacts

The suitability parameters for connectors and contacts are defined in the data sheets and catalogues. STOCKO products are designed to meet these specifications. To employ our products outside the specified parameters can be dangerous and neglecting the following information can have serious consequences.

### Properties of the materials employed

Materials used are thermoplastic insulation materials, contact materials based on copper or steel, and tin, nickel or gold surface finishes. Under special circumstances, like products to customers' specification, also other materials than those mentioned may be used. The selected materials for individual products can vary, being tuned according to application.

Provided connectors and contacts are used within the specified limits of the data sheets, the technical properties will remain stable over a long period of time. If, however, these limits are exceeded due to special circumstances or faulty production or due to exposure to extreme environmental conditions, the properties of the materials may change.

The faulty termination of contact and conductor with unsuitable tools, deformed or broken contacts, excessive current load, unfinished connections of connectors and contacts or badly soldered contacts can lead to exceeding the permissible temperature range of the connector or contact. In such event the insulating material may be impaired and, if touched, the danger of electric shock may exist.

Over-heating due to exceeding the specified temperature limits over a longer period will result in a reduction of the contact force of contacts and an oxide layer will build up on contacts and conductors. The contact resistance will increase and further temperature rises will result in damaging the insulating material with the danger of charring. Creeping or leakage currents can be formed owing to the thermal damaged insulation. This may cause combustion that ignites the surrounding inflammable material and may even start a fire.

A careful handling of connectors and contacts in all stages of transport, manufacture and application is absolutely important. Damaged components can create dangers. The products, therefore, should be examined before assembly and must not be further processed, if badly terminated or defective.

### Harness processing assembly

Carefully processed connectors and contacts alone will meet the technical requirements in usage. STOCKO assembly tools and machines are adjusted to the specific product properties. Test stations control the quality parameters to safeguard the quality in processing the connectors and contacts.

To assure the STOCKO-quality requirements on processing devices of other manufacturers the user has to take sole responsibility.

- Only trained personnel should process connectors and contacts.
- Processing connectors and contacts the STOCKO manufacturing specifications must be observed.
- Product specific quality parameters must be controlled in accordance with STOCKO instructions.
- Conductors used with the respective connector system or contact must be approved by STOCKO.
- Before switching on the electric current, make sure that the insulating properties of the connector are not compromised by low ohmic connections like metal shavings, conductive materials, loose wires or conductive impurities.

### Application of connectors and contacts

When in use make sure that connectors and contacts are applied according to specification.

- The pre-determined function of a connector assembly can only be guaranteed if the connection is assembled according to instruction.
- The permissible operating voltage is subject to application, the legal national specifications and any other applicable safety requirements. The mentioned operating voltage can only serve as a guidance and must be adjusted to national requirements.
- The temperature values indicated in the data sheets are border-line temperatures and must not be surpassed under operating conditions.
- Contaminated connectors and contacts must not exceed the permissible degree of contamination (see IEC 60 664). Conductive contaminations can lead to creepage currents. They can create combustions that inflame surrounding inflammable materials and start fires.
- Switched-on circuitry must not be interrupted by pulling the plug. The result may be electric arcs, ionisation and fires.
- Connector components with touchable contacts must not be used as mains connections as unplugged connections can endanger electric shocks.

### Further Information

The products can be changed due to improvements. Changes and alterations from descriptions, technical data and illustrations in the catalogues are possible. Every new catalogue will make all earlier published versions invalid.