



IDC thin wire terminal connectors



TSG Omega develops connectors for terminals with different applications. They proved that with their IDC solutions with thin magnetic wire the reliability of the electrical connection can be increased by more than 20% compared to welding solutions.

Scope

Overcoming classic IDC technical limits and MW application range by extending IDC application to thin magnet wire (e.g. MW \varnothing 0,030 mm #48AWG)

The solution is to wind the MW at the beginning and at the end of the winding process onto a central pin in the pocket. When the terminal is inserted in the pocket, it slides over the enameled MW and allows electrical contact with a wide copper area.

Advantages

Cost reduction: The mechanical electrical connection eliminates any cost related to the soldering/welding and skiving processes.

Reliability: TSG terminals cover a wide range of MW diameters. Considering a MW \varnothing 0,045 mm #45AWG, the TSG terminal connection may increase the electrical connection reliability more than 20% compared to welding solutions.
→ Possible overmolding process.

Environment friendly: The process is clean since no soldering/welding processes are involved.