Connector Technical Data

Plugs & Receptacles (Male & Female Inserts) Overview

The male and female inserts are the receptacles for the male (pins) and female (sockets) contacts respectively, and are the interface for the electrical connection. Cable is terminated to the contacts. Inserts provide the electrical insulation.

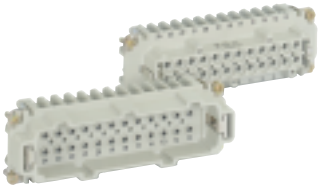
SCREW TERMINATED PLUGS & RECEPTACLES

This simple type of termination is distinguished by its ease of maintenance. No special tool is required, just a screwdriver to undo and tighten up the terminal screws.

Screw connection technology (as per DIN EN 60999):

Conductor section (mm2)	1	1.5	2.5	4	5	10
Screw Thread	M 2.6	M 3	M 3	M 3.5	M 4	M 4
Recommended Ncm	40.7	50	50	80	120	120

CRIMP TERMINATED PLUGS & RECEPTACLES



The purpose of crimping is to produce a good mechanical, electrical, and gas-tight connection. This should remain unchanged with regard to quality in the long-term, and should thus be reliable. Crimping also reduces termination time and allows the designer to achieve more connections than screw termination would permit in the same space.

Hand operated tools or crimping machines can be used to assemble crimp contacts. The following points must be followed in order to obtain the ideal crimping result:

- Cross section dimension/ gauge size and structure of the cable
- Contact type and size
- Tool and tool setting

Stamped & Formed Contacts

There are two different crimp contact types: machined and stamped and formed. These two types of contacts have differing characteristics in terms of quality and how the termination is made.

Stamped & Formed Contacts: The crimping sleeve allows a wider range of wire gauges to be crimped. This guarantees reliable crimping quality. Furthermore, the insertion and extraction force is usually lower with stamped pin and socket contacts. This is achieved by the large contact area and the spring characteristics of the stamped contact's material. Stamped contacts can be supplied reeled for use with automatic feed crimping tools.

Machined Contacts

Machined Contacts: With this popular type of contact, the suitable contact size is matched to the wire gauge of the cable. The correct crimping tool or dies must be used.

SCREWLESS SPRING CAGE CLAMP INSERTS

This type of termination is noted for its ease and speed of fitting without an additional tool. The compensating effect of the cage clamp enables good contact to be maintained in the long term.

MODULAR SERIES

7 Module Frame in a Hood

The Modular series inserts provide flexibility. A combination of 2 or up to 14 Modules can be combined into one connector housing. The available modules include coax, high voltage, cage clamp and crimp terminated.

# of Contacts: 2 up to 280