

Circular Connectors M 16 HC instead of M 23 Same performance, less space required

The trend towards miniaturisation in automation continues. As a result, the installation space on the applications is decreasing more and more. This affects all connection components - including connectors.

Challenge

The same performance with even smaller installation space - that is increasingly the challenge for connection technology. Motors are getting smaller, but the performance requirements remain the same. The specific requirement: The performance requirements of an M23 connector including UL approval are to be reproduced in the smaller M16 format.

Solution

The contacts are decisive. Only if the smaller M16 contacts have a significantly higher conductivity than the larger M23 contacts is a solution feasible. Thus, the focus is on the contact material. With a newly developed alloy, it was finally possible to realise the M16 High Current connector and UL approval was also achieved. Extensive test series on conductivity and heat generation show that the M16 contacts are up to the high demands.

Advantages

The M16 HC connector has almost the same power transmission as its counterpart from the M23 series

- // High power transmission
- // Less space required
- // Cost-optimised assembly directly on the PCB
- // UL approval

M 16 HC

| | Signal | Power |
|------------------------|-------------|-------|
| Number of contacts | 4 | 4 |
| Contact-Ø [mm] | 0,8 | 1,6 |
| AWG [mm ²] | 0,08 - 0,34 | 2,5 |
| Nominal current | 5 A | 24 A |
| Nominal voltage | 48 V | 48 V |



Reduced connector size with the same power density.
The HUMMEL connector M16 HC meets this challenge.

Photo: HUMMEL AG