# High-current multi-heads

# HCM-667-0012 C02-05000-02

Item HCM-667-0004





# Scaling of current carrying capacity using high-current multi-head solutions

# Contacting of battery cells with higher capacities



- Modular design enables scalability of current transmission using well-established INGUN products
- Increase in maximum current transmission thanks to cooling feature
- Optional cooling of contact surface using GKS-667
- Voltage monitoring via a central sense contact probe possible
- Temperature measurement of contact surface using TKS-667 is an optional addition
- Easy installation in plate or busbar via the threaded connection

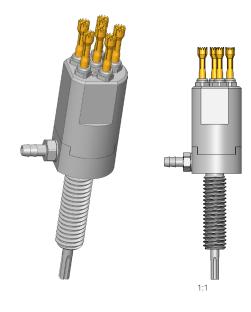
### **Application**

The HCMs were specially developed for the flexible scalability of high-current contacting. The modular design makes it possible to adapt the product characteristics to the application, and therefore always provide the right product for a high variable range of DUTs, as is the case with the contacting of battery cells.

## Construction

The HCMs each consist of a base body and several high-current test probes which create a parallel circuit. The functionality can be additionally extended using a centrally positioned sense contact probe or temperature measurement probe with integrated sense tap. Optional air-cooling probes, as an alternative to the current-transmitting test probes, are also available.





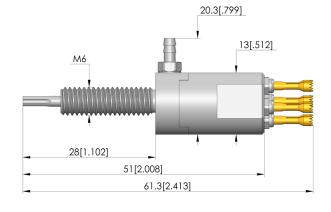
### Installation

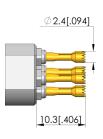
The HCMs can be installed in a corresponding hole on a probe plate using lock nuts or installed directly in a busbar via a corresponding threaded hole. If the HCM is installed in a non-conductive plate, for example, the current connection can be made at the threaded bolt via a cable lug. The optional sense contact probe, to be connected to the soldering recess provided, and the temperature sensor are dissipated centrally.

### Note

The base bodies are designed for either five or eight current-transmitting test probes from the HSS-120 and HSS-667 series with various tip styles, which can be freely configured in terms of both quantity and layout. By combining the modular high-current multi-head solution with HSS-667 probes, which were specifically developed for contacting battery cells with oxidised contact surfaces, it is possible to greatly reduce the power losses that occur during cell production.







# HIGH-CURRENT TEST PROBES

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### **General data**

Screw-in torque max.: 60 cNm [5.31 lbf·in] Standard HSS (screw-in) Product group: Sub-product group: Standard HSS (screw-in) Series: HCM-667 Grid: 15 mm [590 mil] Contacting from: Magnetic: Installation type: Screw-in

Quick-exchange system: Type of test probe connection: Thread connection Adjustable installation height: Non-rotating: Screw-in torque: 60 cNm [5.31 lbf·in]

Min. temperature: -100 °C [-148 °F] Max. temperature: 200 °C [392 °F] RoHS-compliant:

# Tip style data

Tip style: 68 expanding tip with front-facing pionts/cutting edges Tip diameter: 2.4 mm [.094 in] Tip style surface: A gold Tip style material: 3 CuBe

### **Electrical data**

Yes

No

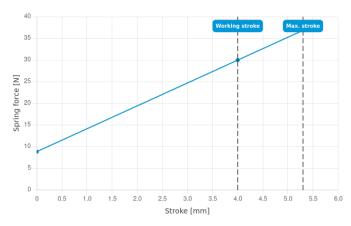
No

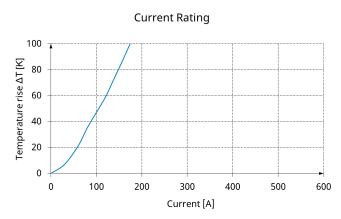
Yes

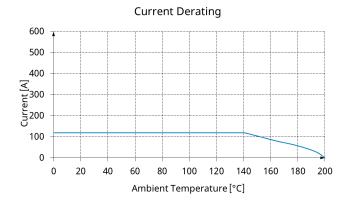
Current load capacity / rated current: 320 A Typical resistance (Ri), connection on plunger: 1 mOhm

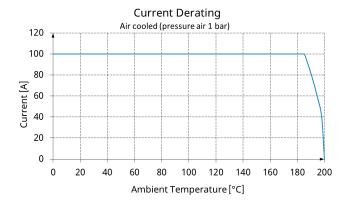
## **Mechanical data**

Total length: 61.3 mm [2.41 in] Barrel diameter: 14 mm [.551 in] Maximum stroke: 5.3 mm [.208 in] Spring pre-load: 8.88 N [31.9 ozf] Spring force at working stroke: 30 N [107 ozf] Recommended working stroke: 4 mm [.157 in]









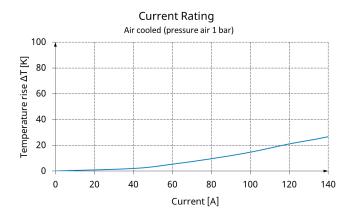
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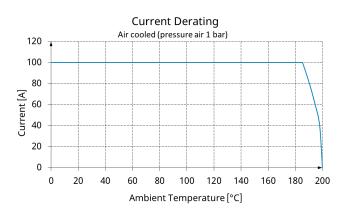
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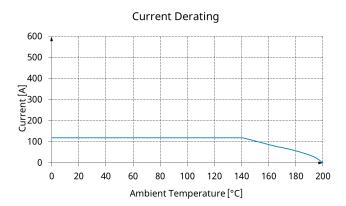
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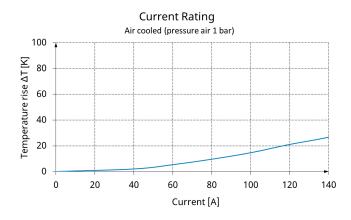


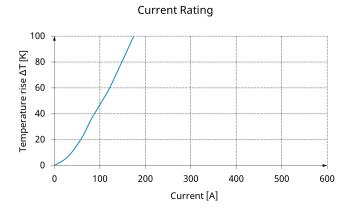












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Learn more about **High-current test probes** 

