Spring-Loaded Contacts & Connectors
OEM Connectors & Probes

Whether it’s vibration, shock, rotation, wipe, water, salt, sand, dust, heat or the vacuum of space, you can depend on IDI to deliver products that will withstand adverse conditions and perform on demand. IDI harsh environment probes and connectors offer many other design features including:

- One-piece compression mount connector
- Consistently low resistance < 10 mΩ throughout hundreds of thousands of cycles
- 20 GHz @ -5db
- High density — .010 (0.25) pitch
- Short signal paths as low as 0.070"
- Blind mate
- Surface mount, through hole mount or cabled termination

IDI custom connectors ensure a reliable, fail-safe connection even in the harshest of environments. At the core of most IDI connectors is the spring contact probe, a connection technology inherently well suited to harsh environments.

**Shock and Vibration**

Spring contact probes provide a constant force against the mating contact surface, easily absorbing and compensating for movement seen during shock and vibration without contact interruption as defined by MIL-STD-810F.

**Water, Salt, Sand and Dust**

IDI utilizes various design features for ingress protection to IP68 and MIL-810F on our connectors. And IDI offers the world’s first and only Environmentally Sealed Probe (pg. 21) with ingress protection to IP68 and MIL-STD-810F.

**Rotation and Wipe**

The contact or plunger in the spring contact probe is free to rotate and slide within the housing or barrel of the probe. This inherent design characteristic makes spring probe connectors ideal for bayonet and sliding mate connector designs.

**Heat and Vacuum of Space**

IDI connectors and probes operate under a wide variety of temperature extremes. Most designs are rated from -55° C to 250° C. Alternate materials allow for even more aggressive temperature extremes.

**IDI Spring Probe Connectors**

Spring contact probes provide repeatable contact in the field for modular components, reduce costs, and eliminate cabled connections by providing a dependable direct connection in rotating or sliding joints.

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IDI is the world leader in spring contact probe design and the industry’s expert in applying spring probes as connector contacts. Embodied in IDI’s connector product lines, probes are an enabling technology that fundamentally change the capabilities of the products in which they are incorporated.

**EXCELLENT FOR BLIND MATE**
IDI connectors featuring spring contact probes are compliant on the surface of their mating half, rather than extending into it as with conventional pin and socket connectors. This grants them their unique blind-mate capabilities.

An IDI connector may be designed to engage at a 90° angle to its target, wiping into position to clear contaminants. Conversely, the IDI connector may be disengaged at that same at any angle, making probe technology the best approach to quick-disconnect applications.

**LOW PROFILE, HIGH COMPLIANCE RATIO**
IDI’s advanced spring contact probe technology permits a very high compliance-to-length ratio. This allows IDI to make connectors as compact as 2 mm, while maintaining 0.5 mm of compliance – low profile connectors have never been so practical or forgiving of mating conditions or vibration.

**HIGH FREQUENCY**
This short signal path, combined with IDI’s industry leading expertise, permits remarkable signal integrity for both analog and digital applications.

Speeds of 12 Gb/S and bandwidths of 20 GHz can be achieved with spring probe interposers, and coaxial arrays and contacts can be used to permit excellent isolation.

**LOW STABLE RESISTANCE**
Through IDI’s decades of probe design experience, our connectors feature several innovations for control of DC performance. Advanced biasing techniques provide excellent stability of contact resistance, even under conditions of heavy shock and vibration. Our connectors can be designed to withstand up to 30 Amps of current.

**HIGH INSERTION LIFE**
Connectors based on spring contact probes are capable of remarkable longevity. Our probes are driven by helical coil springs, which maintain a constant force of contact over millions of cycles. IDI’s plating and materials expertise combined with this engineering, delivers contacts that exceed the highest customer specifications for insertion life.

**ENVIRONMENTALLY SEALED**
IDI’s application expertise and the durable nature of our contacts, permits us to design connectors with excellent performance in harsh environments. IP68 and Mil810 requirements can be accommodated without sacrificing performance.

Contact IDI today to find out how we can make your interconnection possible.
The interposer, or contact array, is the heart of the connector. It is also IDI’s specialty – as the world’s leading spring contact probe manufacturer we are uniquely positioned to bring the advantages of this contact mechanism to life.

IDI is able to bring our customers the most benefit when providing a total solution, but we can provide our technology at any level. Loose contacts, simple interposers, cabled mating halves, and complex docking solutions are all within our portfolio.

Contact IDI today to find your own unique solution.

**INSERTION LIFE**

Spring contact probes are driven by helical coil springs. This, combined with IDI’s advanced materials and plating expertise, allows us to offer connectors which are capable of hundreds of thousands of insertions. In addition, wiping interconnects can be made to withstand millions of rotations.

**DC STABILITY**

Through innovative design features such as our patented Eccentric Drill, IDI’s interposers maintain low and consistent contact resistance through their long insertion lives.

Maintaining peak performance through the required life of the interposer requires a careful selection of biasing features. IDI maintains a staff of dedicated experts who can guide you to the optimal contact engine for your application.

Properly specified interposers can withstand the intense shock and vibration associated with aerospace and military applications, maintaining reliable contact without fail even when launched onboard munitions.

**SIGNAL INTEGRITY**

Bandwidths of 20 GHz and data rates of 12 Gb/S are possible with simple pin field interposers. This is due to IDI’s remarkably short contacts and our expertise in predicting their behavior in application.

IDI’s interposers can be designed to take advantage of spring contact probes’ surprising current carrying capacity. Individual contacts are capable of handling as much as 30 Amps in free air; combined with IDI’s advanced thermal analysis capabilities, connectors can be designed which can handle substantial amounts of power safely.
**Housings**

**Environmental Sealing**
The ruggedness and reliability of spring contact probes make them ideal for applications in harsh environments. IDI’s connectors have a wide array of available features which permit sealing to IP68 or Mil standards in either the mated or unmated condition.

Accomplishing a seal while mated is a process of combining gaskets with a latching mechanism reliable enough to prevent ingress, and IDI has several variations on that architecture to draw from.

Creating an unmated seal is more challenging, but IDI is equal to the task. Contacts may be selected which prevent ingress into the housing or even into the spring cavity. IDI’s experience is the key to our success – our experts can easily match your requirements to our product line.

**Quick Disconnect**
IDI capitalizes on the unique engagement of spring contact probes with our innovative quick disconnect connector designs.

Magnets may be used to draw the connector into engagement. This, combined with the blind mate characteristic of probes, allows the connector to be disengaged safely and instantly. Magnetic engagement features almost no wear of the engaging surfaces, and may be mated and demated repeatedly with no degradation in performance.

**Other Features**
Connectors can be created which feature metal housings for shielding. Special latching designs can be employed to overcome significant engagement or sealing forces. Bayonet designs which wipe the contacts across a field of targets are uniquely possible with spring contact probes.

Where magnets are impractical for reasons of engagement force, sealing, or other considerations, IDI can create special latching features which also permit a quick disconnection. These may be designed for a single break or for repeated disengagement, depending on the requirements of the application.
Mating Halves

IDI’s spring contact probe based connectors have the unique advantage of requiring only a flat pad as their target. This greatly simplifies the design of the complete connector. The mating halves for our connectors are often customer-created by simply exposing pads on a printed circuit board.

IDI can provide target pins, or can supply a complete mating half which accomplishes alignment and sealing functions.

PCB MATE
Simple gold-plated pads on a printed circuit board are a reliable, easy-to-implement, and very low profile target structure for a spring contact probe based connector; this is also often a nearly zero-cost option for our customers. IDI can provide design guidelines to help our customers easily integrate our mating half into their design.

BLIND MATE CAPABILITY
Spring contact probes contact only the surface of their target; they do not engage into the target in the manner of a pin and socket connector. This permits IDI’s connectors to mate at up to a 90° angle. Our connectors can rotate after the fashion of brush contacts for millions of cycles.

Critically, it is difficult to harm a spring probe based connector through mismating, and this makes our connector designs uniquely attractive in blind mate applications.

TARGET PINS
IDI can construct a plastic mating half for the connector with solid metal pins for target contacts. This allows for an extremely robust and repeatable interconnection, and is often a good way to extend the interconnection into the customer’s device in a manner which permits sealing and a short Z-axis transfer. A selection of pins is available from IDI for those customers who wish to create their own mating half.

ENVIRONMENTAL SEALING
The mating half of the connector can incorporate features which help to protect the customer’s device from the ingress of water and other contaminants. IDI has the experience in sealing target pins, and in providing gaskets and design guidelines to make customer applications safe for harsh environments.

A spring contact probe requires only a flat pad for its target. It will safely mate to that target if its tip strikes within the target’s diameter, and that diameter is only limited by the desired pitch of the connector. A probe-based connector is thus very forgiving of X-Y misalignment; and if the probe strikes off the pad, little harm comes to the connector and it may be safely re-engaged.
IDI’s extensive involvement in the semiconductor test industry provides us with a wellspring of expertise in the creation of spring contact interposers that are compliant from each side.

IDI’s compression-mount interposers feature highly developed contact designs. Our contacts, even when used in interposers having thousands of pins, mate faultlessly to their mounting PCB on the first insertion. They retain their excellent electrical characteristics through as much as 58G of shock and 9G RMS of vibration.

Through-hole contacts require no plastic body for the interposer; individual contacts may be populated directly into the PCB and soldered by hand. This is ideal for quick-turn, instantly implemented customized solutions.

Our surface mount contacts are supported by a plastic interposer body. IDI’s expertise in press fitting and insert molding contacts guarantees the user a reliable, trouble-free interposer.

When termination to cable is desired, IDI offers crimp tails and solder tails for its contacts. IDI is well equipped to supply cabling to meet customer requirements as well.

IDC offers termination options that are designed to preserve the many unique advantages of our connectors.

Our highly reliable compression mount technology offers a solderless solution that you can count on; our PCB termination options are refined to ensure manufacturability and keep our profile low; and our cabling options are robust and adaptable.
C Series Connectors

IDI’s C Series Connectors ensure a reliable, rugged connection in the harshest environments. Based on our C Series Probe technology, they provide:

- Standard pins offered in custom configurations to meet your applications exact footprint
- 0.100 (2.54) pitch
- Ground, Power & Signal options
- 6mm & 4mm lengths
- Up to 10 amps current rating
- Contact resistance < 10 mΩ typical
- Great for RF, high speed and mixed signal connectors
- Consistently low resistance through tens of thousands of connections
- Ground contacts mate first, break last to support hot swap applications.
- Power contacts probe design supports increased current carrying capacity

- Surface mount, thru hole and solder cup termination options
- Consistent performance throughout broad temperature ranges
- Blind mates
- Superior continuity in high shock and vibration environments
- Minimal insertion and return loss for signals up to 10 GHz
- Resistance to dust and a range of chemicals
- Ingress protection under the most stringent requirements
- Direction connections for rotating or sliding joints
**Series Specifications**

**Minimum Centers:** .100 (2.54)

**Current Rating:**
- CG Series: 10 amps continuous
- CP Series: 10 amps continuous
- CS Series: .5 amp continuous

(Individual probe in free air @ ambient temperature)

**Typical Resistances:**
- CG Series: < 10 mΩ
- CP Series: < 10 mΩ
- CS Series: < 60 mΩ

**Spring Force:**
- 3.1 oz. (88g) @ working travel for 4mm compressed length series
- 2.9 oz. (82g) @ working travel for 6mm compressed length series

**Overall Length**

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<td>CG-2.5-4</td>
<td>.197 (5.00)</td>
<td>.295 (7.50)</td>
<td>.295 (7.50)</td>
</tr>
<tr>
<td>CG-2.5-6</td>
<td>.335 (8.50)</td>
<td>.439 (11.00)</td>
<td>.439 (11.00)</td>
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<td>CP-2.5-4</td>
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<td>.283 (7.20)</td>
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<td>CP-2.5-6</td>
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<td>.413 (10.50)</td>
</tr>
<tr>
<td>CS-2.5-4</td>
<td>.185 (4.70)</td>
<td>.283 (7.20)</td>
<td>.283 (7.20)</td>
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<tr>
<td>CS-2.5-6</td>
<td>.315 (8.00)</td>
<td>.413 (10.50)</td>
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**Travel**

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<tr>
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<th>Maximum Travel</th>
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<td>CG-2.5-4</td>
<td>.039 (1.00)</td>
<td>.039 (1.00)</td>
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<tr>
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<td>.098 (2.50)</td>
<td>.098 (2.50)</td>
</tr>
<tr>
<td>CP-2.5-4</td>
<td>.028 (0.71)</td>
<td>.028 (0.71)</td>
</tr>
<tr>
<td>CP-2.5-6</td>
<td>.079 (2.00)</td>
<td>.079 (2.00)</td>
</tr>
<tr>
<td>CS-2.5-4</td>
<td>.028 (0.71)</td>
<td>.028 (0.71)</td>
</tr>
<tr>
<td>CS-2.5-6</td>
<td>.079 (2.00)</td>
<td>.079 (2.00)</td>
</tr>
</tbody>
</table>

**Materials**

- **Barrel:** Brass, gold plated
- **Spring:** Stainless steel
- **Plunger:**
  - CG Series: Brass, gold plated
  - CP Series: Brass, gold plated
  - CS Series: Brass, Duralloy® plated
- **Special Features:**
  - CG Series: Bias plunger design
  - CP Series: Bias plunger design
  - CS Series: Standard design
- **Recommendations:**
  - Mounting hole: .064/.065 (1.62/1.65)
  - Pad size for Surface Mount: .085 (2.20)
  - Wire gage for Solder Cup: 20 gage max.
  - Drill size for Thru Hole Tail: .035 (0.89)

**How to Order**

- **CS**
- **2.5**
- **4**
- **SM**

**Series:**
- CG: Ground Connector Probe
- CP: Power Connector Probe
- CS: Signal Connector Probe

**Pitch (mm):**
- 4: 4 mm
- 6: 6 mm

**Termination:**
- SM: Surface Mount
- TH: Thru Hole
- SC: Solder Cup

View updates of this information at www.idinet.com

Specifications subject to change without notice. Dimensions in inches (millimeters)
Battery and Connector Probes

**PROBE SPECIFICATIONS**

**101582 PROBE**

- **Minimum Centers:** .070 (1.78)
  - .050 (1.27) staggered rows
- **Current Rating:** 20 amps continuous
  - (Individual probe in free air @ ambient temperature)
- **Spring Force:** 1.7 oz. (48g) @ .030 (0.76) travel
- **Typical Resistance:** < 10 mΩ
- **Maximum Travel:** .030 (0.76)
- **Working Travel:** .030 (0.76)

**Materials**

- **Barrel:** Brass, gold plated
- **Spring:** Stainless steel
- **Plungers:** Beryllium copper, gold plated

**101438 PROBE**

- **Minimum Centers:** .080 (2.03)
  - .063 (1.60) staggered rows
- **Current Rating:** 1 amp continuous
  - (Individual probe in free air @ ambient temperature)
- **Spring Force:** 3.5 oz. (99g) @ .020 (0.51) travel
- **Typical Resistance:** < 10 mΩ
- **Maximum Travel:** .039 (0.99)
- **Working Travel:** .020 (0.51)

**Materials**

- **Barrel:** Brass, gold plated
- **Spring:** Stainless steel, gold plated
- **Plunger:** Beryllium copper, gold plated

**How to Order**

**101582-000**

**101438-000**

Specifications subject to change without notice. Dimensions in inches (millimeters)

Interconnect Devices, Inc. welcomes your e-mail at info@idinet.com
### Battery and Connector Probes

**100671 Probe**

**Probe Specifications**
- **Minimum Centers**: .175 (4.45)
- **Current Rating**: 3 amps continuous (Individual probe in free air @ ambient temperature)
- **Spring Force**: 5.1 oz. (145g) @ .027 (0.69) travel
- **Typical Resistance**: < 10 mΩ
- **Maximum Travel**: .040 (1.02)*
- **Working Travel**: .027 (0.69)

**Materials**
- **Barrel**: Nickel/silver, gold plated
- **Spring**: Stainless steel, gold plated
- **Plunger**: Beryllium copper, gold plated

* not recommended for use at maximum travel

**How to Order**
- **100671-000**

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**101111 Probe**

**Probe Specifications**
- **Minimum Centers**: .029 (0.75)
- **Current Rating**: 6 amps continuous (Individual probe in free air @ ambient temperature)
- **Spring Force**: 1.5 oz. (43g) @ .022 (0.55) travel
- **Typical Resistance**: < 50 mΩ
- **Maximum Travel**: .025 (0.58)
- **Working Travel**: .022 (0.55)

**Materials**
- **Barrel**: Phosphor bronze, gold plated
- **Spring**: Music wire, gold plated
- **Plunger**: Phosphor bronze, gold plated

**How to Order**
- **101111-008**

Specifications subject to change without notice. Dimensions in inches (millimeters).
Battery and Connector Probes

**PROBE SPECIFICATIONS**

**101506**

- Minimum Centers: 0.050 (1.27)
- Current Rating: 5 amps continuous
  (Individual probe in free air @ ambient temperature)
- Spring Force: 1.38 oz. (39g) @ 0.020 (0.51) travel
- Typical Resistance: < 20 mΩ
- Maximum Travel: 0.028 (0.71)
- Working Travel: 0.020 (0.51)

- Barrel: Nickel/silver, gold plated
- Spring: Stainless steel, gold plated
- Plunger: Beryllium copper, gold plated

**PROBE SPECIFICATIONS**

**101294 PROBE**

- Minimum Centers: 0.050 (1.27)
- Current Rating: 5 amps continuous
  (Individual probe in free air @ ambient temperature)
- Spring Force: 0.9 oz. (26g) @ 0.020 (0.51) travel
- Typical Resistance: < 20 mΩ
- Maximum Travel: 0.027 (0.69)
- Working Travel: 0.020 (0.51)

- Barrel: Nickel/silver, gold plated
- Spring: Stainless steel, gold plated
- Plunger: Beryllium copper, gold plated

**HOW TO ORDER**

**101506-000**

**101294-000**

Specifications subject to change without notice. Dimensions in inches (millimeters)

Interconnect Devices, Inc. welcomes your e-mail at info@idinet.com
Battery and Connector Probes

**100803 Probe**

- **Minimum Centers:** .050 (1.27)
- **Current Rating:** 5 amps continuous
  (Individual probe in free air @ ambient temperature)
- **Spring Force:** 1.2 oz. (34g) @ .050 (1.27) travel
- **Typical Resistance:** < 50 mΩ
- **Maximum Travel:** .060 (1.52)
- **Working Travel:** .050 (1.27)

- **Materials**
  - **Barrel:** Nickel/silver, gold plated
  - **Spring:** Stainless steel, gold plated
  - **Plunger:** Beryllium copper, gold plated

**101190 Probe**

- **Minimum Centers:** .100 (2.54)
- **Current Rating:** 15 amps continuous
  (Individual probe in free air @ ambient temperature)
- **Spring Force:** 2.6 oz. (74g) @ .067 (1.70) travel
- **Typical Resistance:** < 6 mΩ
- **Maximum Travel:** .100 (2.54)
- **Working Travel:** .067 (1.70)

- **Materials**
  - **Barrel:** Nickel/silver, gold plated
  - **Spring:** Stainless steel
  - **Plungers:** Beryllium copper, gold plated

**How to Order**

**100803-011**

**101190-002**

Specifications subject to change without notice. Dimensions in inches (millimeters)
Battery and Connector Probes

100606 Probe

**Probe Specifications**

- **Minimum Centers:** .175 (4.45)
- **Current Rating:** 15 amps continuous (Individual probe in free air @ ambient temperature)
- **Spring Force:** 6.2 oz. (176g) @ .060 (1.52) travel
- **Typical Resistance:** < 10 mΩ
- **Maximum Travel:** .090 (2.29)
- **Working Travel:** .060 (1.52)

**Materials**

- **Barrel:** Nickel/silver, gold plated
- **Spring:** Stainless steel, passivated
- **Plunger:** Beryllium copper, gold plated
- **Bias Ball:** Stainless steel

100891 Probe

**Probe Specifications**

- **Minimum Centers:** .175 (4.45)
- **Current Rating:** 15 amps continuous (Individual probe in free air @ ambient temperature)
- **Spring Force:** 9.0 oz. (256g) @ .067 (1.70) travel
- **Typical Resistance:** < 5 mΩ
- **Maximum Travel:** .100 (2.54)
- **Working Travel:** .067 (1.70)

**Materials**

- **Barrel:** Nickel/silver, gold plated
- **Spring:** Stainless steel, gold plated
- **Plunger:** Beryllium copper, gold plated

**How to Order**

100606-000

100891-002

Specifications subject to change without notice. Dimensions in inches (millimeters).
# Battery and Connector Probes

## Probe Specifications

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<th>Maximum Travel</th>
<th>Working Travel</th>
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<td>.175 (4.45)</td>
<td>15 amps continuous (Individual probe in free air @ ambient temperature)</td>
<td>6.2 oz. (176g) @ .060 (1.52) travel</td>
<td>.090 (2.29)</td>
<td>.060 (1.52)</td>
</tr>
<tr>
<td>101119 Probe</td>
<td>.175 (4.45)</td>
<td>15 amps continuous (Individual probe in free air @ ambient temperature)</td>
<td>6.2 oz. (176g) @ .060 (1.52) travel</td>
<td>.093 (2.36)</td>
<td>.060 (1.52)</td>
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## Materials

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<th>Spring</th>
<th>Plunger</th>
<th>Bias Ball</th>
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<tbody>
<tr>
<td>100410 Probe</td>
<td>Nickel/silver, gold plated</td>
<td>Stainless steel</td>
<td>Beryllium copper, gold plated</td>
<td>Stainless steel</td>
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<tr>
<td>101119 Probe</td>
<td>Nickel/silver, gold plated</td>
<td>Stainless steel</td>
<td>Beryllium copper, gold plated</td>
<td>Stainless steel</td>
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<td>101119-001</td>
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</tbody>
</table>

Specifications subject to change without notice. Dimensions in inches (millimeters).
Battery and Connector Probes

**101050 PROBE**

**Probe Specifications**
- Minimum Centers: .125 (3.18)
- Current Rating: 10 amps continuous
  (individual probe in free air @ ambient temperature)
- Spring Force: 2.3 oz. (65g) @ .060 (1.52) travel
- Typical Resistance: < 10 mΩ
- Maximum Travel: .090 (2.29)
- Working Travel: .060 (1.52)

**Materials**
- Barrel: Nickel/silver, gold plated
- Spring: Stainless steel, passivated
- Plunger: Beryllium copper, gold plated
- Ball: Stainless steel, gold plated

**How to Order**
101050-003 for .110 dia. flange
101050-005 for .077 dia. flange

Specifications subject to change without notice. Dimensions in inches (millimeters).

**101247 PROBE**

**Probe Specifications**
- Minimum Centers: .200 (5.08)
- Current Rating: 20 amps continuous
  (individual probe in free air @ ambient temperature)
- Spring Force: 11.7 oz. (256g) @ .147 (3.73) travel
- Typical Resistance: < 10 mΩ
- Maximum Travel: .180 (4.57)
- Working Travel: .147 (3.73)

**Materials**
- Barrel: Brass, gold plated
- Spring: Stainless steel, passivated
- Plunger: Beryllium copper, gold plated

**How to Order**
101247-001

Specifications subject to change without notice. Dimensions in inches (millimeters).
**Battery and Connector Probes**

### Probe Specifications

**101679 Probe**

- **Minimum Centers:** .055 (1.40) in.
- **Current Rating:** 3 amps continuous (Individual probe in free air @ ambient temperature)
- **Spring Force:** 1.3 oz. (37g) @ .023 (0.58) travel
- **Typical Resistance:** < 25 mΩ
- **Maximum Travel:** .023 (0.58) in.
- **Working Travel:** .023 (0.58) in.

**Materials**

- **Barrel:** Brass, gold plated
- **Spring:** Stainless steel
- **Plunger:** Brass, gold plated

### Probe Specifications

**101628 Probe**

- **Minimum Centers:** .125 (3.18) in.
- **Current Rating:** 25 amps continuous (Individual probe in free air @ ambient temperature)
- **Spring Force:** 5.3 oz. (150g) @ .040 (1.02) travel
- **Typical Resistance:** < 5 mΩ
- **Maximum Travel:** .040 (1.02) in.
- **Working Travel:** .040 (1.02) in.

**Materials**

- **Barrel:** Brass, gold plated
- **Spring:** Music wire, nickel plated
- **Plunger:** Beryllium copper, gold plated
- **Ball:** Stainless steel

### How to Order

**101679-000**

**101628-000**

Specifications subject to change without notice. Dimensions in inches (millimeters).

Interconnect Devices, Inc. • Tel: 913-342-5544 • Fax: 913-342-7043 • www.idinet.com
Battery and Connector Probes

101402 PROBE

**MINIMUM CENTERS**: .175 (4.45)
**CURRENT RATING**: 20 amps continuous (Individual probe in free air @ ambient temperature)
**SPRING FORCE**: 9.7 oz. (275g) @ .050 (1.27) travel
**TYPICAL RESISTANCE**: < 10 mΩ
**MAXIMUM TRAVEL**: .080 (2.03)
**WORKING TRAVEL**: .050 (1.27)

**MATERIALS**
- Barrel: Nickel silver, gold plated
- Spring: Stainless steel, passivated
- Plunger: Brass, Duralloy™

100804 PROBE

**MINIMUM CENTERS**: .250 (6.35)
**CURRENT RATING**: 30 amps continuous (Individual probe in free air @ ambient temperature)
**SPRING FORCE**: 8.9 oz. (252g) @ .054 (1.37) travel
**TYPICAL RESISTANCE**: < 5 mΩ
**MAXIMUM TRAVEL**: .082 (2.08)
**WORKING TRAVEL**: .054 (1.37)

**MATERIALS**
- Barrel: Brass, Duralloy™ plated
- Spring: Stainless steel, passivated
- Plunger: Brass, Duralloy™ plated

**HOW TO ORDER**
- 101402-000
- 100804-002

Specifications subject to change without notice. Dimensions in inches (millimeters).
**Battery and Connector Probes**

**101602 Environmentally Sealed Probe**

- **Minimum Centers:** .175 (4.44)
- **Current Rating:** 10 amps with 80°C rise (Individual probe in free air @ ambient temperature)
- **Typical Resistance:** < 10 mΩ
- **Spring Force:** 6.7 oz. (190 g) @ .070 (1.77) travel
- **Maximum Travel:** .100 (2.54)
- **Working Travel:** .070 (1.77)

**Materials**
- **Barrel:** Nickel silver, gold plated
- **Plunger:** Full-hard beryllium copper, gold plated
- **Spring:** Stainless steel
- **Bias Ball:** Stainless steel
- **O-ring:** Silicone
- **Cap & Plug:** Stainless steel, gold plated

**101549 Probe**

- **Minimum Centers:** .125 (3.18)
- **Current Rating:** 3 amps with 80°C rise (Individual probe in free air @ ambient temperature)
- **Typical Resistance:** < 50 mΩ
- **Spring Force:** 3.5 oz. (100 g) @ .039 (1.00) travel, each end
- **Maximum Travel:** .059 (1.50) travel, each end
- **Working Travel:** .039 (1.00) travel, each end

**Materials**
- **Barrel:** Nickel silver, gold plated
- **Plunger:** Full-hard beryllium copper, gold plated
- **Spring:** Stainless steel

**How to Order**

**101602-000**

**101549-000**

Specifications subject to change without notice. Dimensions in inches (millimeters).
### Mechanical Data

**GKS 941**
- **Working Stroke:** 3.2 mm (.126)
- **Maximum Stroke:** 4.0 mm (.157)
- **Spring Force at Work Stroke:** 0.8 N (2.9oz)
- **Current Rating:** 5 - 8 A

**GKS 064**
- **Working Stroke:** 1.4 mm (.055)
- **Maximum Stroke:** 1.7 mm (.067)
- **Spring Force at Work Stroke:** 0.4 N (1.4oz)
- **Current Rating:** 5 - 8 A

**GKS 986**
- **Working Stroke:** 3.0 mm (.118)
- **Maximum Stroke:** 5.0 mm (.197)
- **Spring Force at Work Stroke:** 0.2 N (0.7oz)
- **Current Rating:** 5 - 8 A

### Electrical Data

**GKS 941**
- **Rₗ typical:** <100 mΩ

**GKS 064**
- **Rₗ typical:** <100 mΩ

**GKS 986**
- **Rₗ typical:** <100 mΩ

### Materials

**GKS 941**
- **Plunger:** BeCu, gold- or rhodium-plated
- **Barrel:** Brass, gold-plated
- **Spring:** Steel, gold-plated

**GKS 064**
- **Plunger:** Brass, gold-plated
- **Barrel:** Brass, gold-plated
- **Spring:** Steel, gold-plated

**GKS 986**
- **Plunger:** Brass, gold-plated
- **Barrel:** Brass, gold-plated
- **Spring:** Steel, gold-plated

### Other Solderable Test Probes

- See GKS-913 and others on request

### Ordering Example

<table>
<thead>
<tr>
<th>Series</th>
<th>Tip Material</th>
<th>Tip Style</th>
<th>Tip Diameter (1/100 mm)</th>
<th>Plating</th>
<th>Spring Force (dN)</th>
<th>Collar Height (mm)</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>GKS</td>
<td>1 = Brass</td>
<td>05</td>
<td>10</td>
<td>A</td>
<td>0.66</td>
<td>1.91</td>
<td>L</td>
</tr>
<tr>
<td>GKS</td>
<td>2 = BeCu</td>
<td>05</td>
<td>10</td>
<td>R</td>
<td>0.08</td>
<td>0.50</td>
<td>L</td>
</tr>
</tbody>
</table>

**Test Probe with Terminal Post Ø 0.5 or 1.0 mm:**
- GKS 941: Ø 0.5 Ø 0.5 R 0.8 0.0 1 L
- GKS 064: Ø 0.5 Ø 1.93 A 0.4 0.0 1 L
- GKS 986: Ø 1.3 Ø 1.91 A 0.0 0.0 1 L

**Warning:** Soldering the Probes demands great care. High temperatures must not reach the inside of the barrel, because this could destroy the spring.

All specifications are subject to change without prior notification.
GKS 967
Short-stroke and Charging Test Probes

Mounting and Functional Dimensions

Available Tip Styles

<table>
<thead>
<tr>
<th>Material</th>
<th>Tip Style</th>
<th>Plating</th>
<th>Further Versions</th>
</tr>
</thead>
<tbody>
<tr>
<td>BeCu or steel, gold-plated</td>
<td>Ø 1.30 (0.051)</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Brass, gold-plated</td>
<td>Ø 1.30 (0.051)</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Steel, gold-plated</td>
<td>Ø 1.30 (0.051)</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Brass, gold-plated</td>
<td>Ø 1.30 (0.051)</td>
<td>A</td>
<td></td>
</tr>
</tbody>
</table>

Mechanical Data

- Working Stroke: 1,0 mm (.039)
- Maximum Stroke: 1,2 mm (.047)
- Spring Force at Work. Stroke: 2,0 N (7.2oz)
- alternative: 1,0 N (3.6oz)

Electrical Data

- Current Rating: 5 - 8 A
- R_i typical: < 10 mΩ

Materials

- Plunger: BeCu or steel, gold-plated
- Barrel: Brass, gold-plated
- Spring: Steel, gold-plated
- Receptacle: Brass, gold-plated

Testing Example

<table>
<thead>
<tr>
<th>Series</th>
<th>Tip Material</th>
<th>Tip Style</th>
<th>Tip Diameter (1/100 mm)</th>
<th>Plating</th>
<th>Spring Force (dN)</th>
<th>Collar Height (mm)</th>
<th>Typ3</th>
</tr>
</thead>
<tbody>
<tr>
<td>GKS</td>
<td>9 6 7</td>
<td>3 0 4 1 3 0</td>
<td>A 2 0 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KS-967</td>
<td>2 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note:
GKS-967 ... M will be screwed into Receptacle KS-967 60 35 M-R; using special tools (see Page 170/171).
Recommended Screw-in Torque:
Min.: 10 Ncm / Max.: 20 Ncm

All specifications are subject to change without prior notification
GKS 761 M

- **Ordering Example**: see Page 68

GKS 761 M

- **Working Stroke**: 1.0 mm (.039)
- **Maximum Stroke**: 1.2 mm (.047)
- **Spring Force at Work. Stroke**: 1.0 N (3.6oz)

**Materials**

- **Plunger**: BeCu, gold-plated
- **Barrel**: Brass, gold-plated
- **Spring**: Steel, gold-plated
- **Receptacle**: Brass, gold-plated

**Mounting Hole Size**

- in CEM1 and FR4 with KS-761 60 35 M-R: ø 2.00 - 2.02 mm (.0787 - .0866)

GKS 970

- **Recommended Stroke**: 1.0 mm (.039)

GKS 970

- **Working Stroke**: 1.0 mm (.039)
- **Maximum Stroke**: 1.3 mm (.051)
- **Spring Force at Work. Stroke**: 0.6 N (2.1oz)

**Materials**

- **Plunger**: BeCu, gold-plated
- **Barrel**: Brass, gold-plated
- **Spring**: Stainless Steel, gold-plated
- **Receptacle**: Brass, gold-plated

**Mounting Hole Size**

- in CEM1 and FR4 with Receptacle: ø 1.49 - 1.50 mm (.0587 - .0591)
- without Receptacle: ø 1.2 mm (.0472)

GKS 961

- **Recommended Stroke**: 1.0 mm (.039)

GKS 961

- **Working Stroke**: 1.0 mm (.039)
- **Maximum Stroke**: 1.3 mm (.051)
- **Spring Force at Work. Stroke**: 0.6 N (2.1oz)

**Materials**

- **Plunger**: BeCu, gold-plated
- **Barrel**: Brass, gold-plated
- **Spring**: Steel, gold-plated
- **Receptacle**: Brass, gold-plated

**Mounting Hole Size**

- in CEM1 and FR4 with Receptacle: ø 2.28 - 2.29 mm (.0898 - .0902)
- without Receptacle: ø 2.0 mm (.0787)

**Available Tip Styles**

- **GKS 761 M/GKS 970/GKS 961**

- **Recommended Screw-in Torque**: Min.: 3 Ncm / Max.: 5 Ncm

- **Grid**:
  - ≥ 2.54 mm
  - ≥ 100 Mil

- **Installation Height**: 2.6 mm (.102) resp. 2.8 mm (.110)

- **Recommended Stroke**: 1.0 mm (.039)

- **Available Tip Styles**

- **GKS 761 M**

- **GKS 970**

- **GKS 961**

All specifications are subject to change without prior notification.
Mounting and Functional Dimensions

<table>
<thead>
<tr>
<th>Metric</th>
<th>Stand.</th>
<th>Solderable</th>
<th>Short-stroke</th>
<th>Fixture</th>
<th>Probes</th>
<th>DK</th>
<th>SK</th>
<th>SP</th>
<th>PK</th>
<th>SH</th>
<th>FS</th>
<th>HS</th>
<th>SS</th>
</tr>
</thead>
</table>

Available Tip Styles

<table>
<thead>
<tr>
<th>Style</th>
<th>Tip Style</th>
<th>Further Versions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>02</td>
<td>ø2.3, 3.0 (0.091)</td>
<td>A, 3.5, 0.138</td>
</tr>
<tr>
<td>03</td>
<td>ø2.3, 3.0 (0.091)</td>
<td>A, 3.5, 0.138</td>
</tr>
<tr>
<td>05</td>
<td>ø2.3, 3.0 (0.091)</td>
<td>A, 3.5, 0.138</td>
</tr>
<tr>
<td>06*</td>
<td>ø2.3, 3.0 (0.091)</td>
<td>A, 3.5, 0.138</td>
</tr>
<tr>
<td>06</td>
<td>ø2.3, 3.0 (0.091)</td>
<td>A, 3.5, 0.138</td>
</tr>
<tr>
<td>08</td>
<td>ø2.3, 3.0 (0.091)</td>
<td>A, 3.5, 0.138</td>
</tr>
<tr>
<td>38</td>
<td>ø2.3, 3.0 (0.091)</td>
<td>A, 3.5, 0.138</td>
</tr>
</tbody>
</table>

Collar Height and Installation Height

The Installation Height of the Tip is defined by the Collar Height.

<table>
<thead>
<tr>
<th>Collar Height</th>
<th>Tip Style</th>
<th>Install. Height (without KS) in mm</th>
<th>max. Stroke mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>02</td>
<td>02/05/06</td>
<td>7.2 (2.83)</td>
<td>3.5 (1.38)</td>
</tr>
<tr>
<td>02</td>
<td>06</td>
<td>7.2 (2.83)</td>
<td>3.2 (1.26)</td>
</tr>
<tr>
<td>02</td>
<td>58**</td>
<td>8.7 (3.43)</td>
<td>3.3 (1.30)</td>
</tr>
</tbody>
</table>

Operating Temperature

Standard: -40° up to +80° C
** with Spec. Designation “C”: -100° up to +200° C (1.5 N)

For applications up to 24 A: HSS-520 (see Page 102).

Screw-in Versions see Page 134.

Tools: Insertion and Extraction Tools for GKS and KS see Page 112.

Ordering Example

Test Probe: G K S 9 1 3 3 0 8 2 3 0 R 1 5 0 2 1
Receptacles: K S - 9 1 3 3 5
GKS 913 M
Short-stroke Screw-in Test Probe

Mounting and Functional Dimensions

Available Tip Styles

<table>
<thead>
<tr>
<th>Material</th>
<th>Tip Style</th>
<th>Plating</th>
<th>Spring Force (dN)</th>
<th>Collar Height (mm)</th>
<th>Further Versions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>02</td>
<td>Ø 2,30</td>
<td>1,5 - 2,5 N</td>
<td>7,2 / 8,7 mm (.283 / .343)</td>
<td>3,50 R (.138)</td>
</tr>
<tr>
<td>3</td>
<td>03</td>
<td>Ø 2,30</td>
<td>A</td>
<td>7,2 mm (.283)</td>
<td>2,30 R (.091)</td>
</tr>
<tr>
<td>3</td>
<td>05</td>
<td>Ø 2,30</td>
<td>A</td>
<td>7,2 mm (.283)</td>
<td>2,30 R (.091)</td>
</tr>
<tr>
<td>3</td>
<td>06+</td>
<td>Ø 2,30</td>
<td>A</td>
<td>7,2 mm (.283)</td>
<td>2,30 R (.091)</td>
</tr>
<tr>
<td>3</td>
<td>06</td>
<td>Ø 2,30</td>
<td>R</td>
<td>7,2 mm (.283)</td>
<td>2,30 R (.091)</td>
</tr>
<tr>
<td>3</td>
<td>08</td>
<td>Ø 2,30</td>
<td>R</td>
<td>7,2 mm (.283)</td>
<td>2,30 R (.091)</td>
</tr>
<tr>
<td>3</td>
<td>58**</td>
<td>Ø 2,30</td>
<td>R</td>
<td>7,2 mm (.283)</td>
<td>2,30 R (.091)</td>
</tr>
</tbody>
</table>

Collar Height and Installation Height
The Installation Height of the Tip is determined by the Collar Height.

<table>
<thead>
<tr>
<th>Collar Height</th>
<th>Tip Style</th>
<th>Install. Height (without KS)</th>
<th>max. Stroke</th>
</tr>
</thead>
<tbody>
<tr>
<td>02</td>
<td>02/05/06/08</td>
<td>7,2 mm (.283)</td>
<td>3,5 mm (.138)</td>
</tr>
<tr>
<td>02</td>
<td>06 180*</td>
<td>7,2 mm (.283)</td>
<td>3,2 mm (.126)</td>
</tr>
<tr>
<td>02</td>
<td>58**</td>
<td>8,7 mm (.343)</td>
<td>3,3 mm (.130)</td>
</tr>
</tbody>
</table>

Mechanical Data
Working Stroke: 2,8 mm (.110)
Maximum Stroke: see Table
Spring Force at Work. Stroke: 1,5 N (5.4oz)
alternative: 0,8 N (2.9oz); 2,5 N (9.0oz)

Electrical Data
Current Rating: 5 - 8 A
Ri typical: < 20 mΩ (***> 100 mΩ)
**** Spring force < 1,5 N are not recommended for high-current applications

Operating Temperature
Standard: -40° up to +80° C
*** with Spec. Design. “C”:
-100° up to +200° C (1,5 N)

Ordering Example
Series | Tip Material | Tip Style | Tip Diameter (1/100 mm) | Plating | Spring Force (dB) | Collar Height (mm) | Typ M, MC |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 = Brass</td>
<td>02</td>
<td>Ø 2,30</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>3 = BeCu</td>
<td>03</td>
<td>Ø 2,30</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>05</td>
<td>Ø 2,30</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6+</td>
<td></td>
<td>06+</td>
<td>Ø 2,30</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>06</td>
<td>Ø 2,30</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>08</td>
<td>Ø 2,30</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>58**</td>
<td></td>
<td>58**</td>
<td>Ø 2,30</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note:
The Receptacle KS-913 35 M (-R) can only be combined with the Probe Type „GKS-913 ... M“

For applications up to 24 A: see HSS-520 on Page 106

Note:
GKS-913 ... M will be screwed into KS-913 35 M (-R) using special tools (see Page 170/171).

Recommended Screw-in Torque: Min.: 5 Ncm / Max.: 10 Ncm

Test Probe:
Receptacle:

Grid: ≥ 4,00 mm ≥ 160 Mil
Installation Height: 7,2 / 8,7 mm (.283 / .343)
Recommended Stroke: 2,8 mm (.110)

All specifications are subject to change without prior notification
HSS 520 / 520 M
Short-Stroke High-Current Probe up to 24 A

Mounting and Functional Dimensions

<table>
<thead>
<tr>
<th>Material Type</th>
<th>Tip Style</th>
<th>Tip Diameter (1/100 mm)</th>
<th>Plating</th>
<th>Spring Force (dN)</th>
<th>Collar Height (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 0</td>
<td></td>
<td>a 2.05 (0.081)</td>
<td>A</td>
<td>0.2</td>
<td>0.080</td>
</tr>
<tr>
<td>Type S</td>
<td></td>
<td>a 1.8 (0.071)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type Z</td>
<td></td>
<td>a 1.5 (0.059)</td>
<td>R</td>
<td>0.3</td>
<td>0.130</td>
</tr>
</tbody>
</table>

Materials

- **Plunger:** BeCu, gold-plated
- **Barrel:** Brass, gold-plated
- **Spring:** Stainless Steel
- **Receptacle:** Brass, gold-plated

Electrical Data

- **Current Rating:** 24 A
- **Ri typical:** < 20 mΩ

Mechanical Data

- **Working Stroke:** 2.8 mm (.110)
- **Maximum Hub:** 3.5 mm (.138)
- **Spring Force at Work. Stroke:** 1.5 N (5.4 oz)

Operating Temperature

- **Standard:** -100° up to +200° C

Note:

- **Type Version**
  - 0: End of Probe Barrel open
  - 1: End of Probe Barrel with solder terminal
  - M: End of Probe Barrel with thread M2 for KS-913 35 M (-R)
  - S: End of Probe Barrel closed; can be soldered into PCB
  - Z: End of Probe Barrel closed; can be soldered into PCB

Collar Height and Installation Height

<table>
<thead>
<tr>
<th>Collar Height</th>
<th>Installation Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>02</td>
<td>7.2 mm (.283)</td>
</tr>
</tbody>
</table>

Warning: Soldering the Probes demands great care. High temperatures must not reach the inside of the barrel, because this could destroy the spring.

The Receptacle KS-913 35 can only be combined with the Probe Types 0, S and Z. The Receptacle KS-913 35 M can only be combined with the Probe Type M.

Tools:

- Insertion and Extraction Tools for GKS and KS see Page 118.

Note:

- HSS-520 ... M will be screwed into Receptacle KS-913 35 M (-R), using special tools (see Page 170/171).

Recommended Screw-in Torque:

- Min.: 5 Ncm / Max.: 10 Ncm

Ordering Example

- **Series:** HSS 5
- **Material:** S = BeCu
- **Tip Style:** 5 2 0
- **Tip Diameter:** 3 0 6
- **Plating:** 2 3 0
- **Spring Force:** A
- **Collar Height:** 1 5
- **Type:** 02 M

- **Receptacles:** KS – 9 1 3 3 5 M – R

Ordering Example

- **Test Probe:**
- **Receptacles:**

All specifications are subject to change without prior notification.
GKS 364
Test Probe with continuous Plunger

Mounting and Functional Dimensions

Available Tip Styles

<table>
<thead>
<tr>
<th>Material</th>
<th>Tip Style</th>
<th>Further Versions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 01*</td>
<td>Ø 4,00</td>
<td>N (pack)</td>
</tr>
<tr>
<td>2 04</td>
<td>Ø 4,00</td>
<td>N</td>
</tr>
<tr>
<td>2 05</td>
<td>Ø 4,00</td>
<td>N</td>
</tr>
<tr>
<td>2 06</td>
<td>Ø 4,00</td>
<td>N</td>
</tr>
</tbody>
</table>

* Angle of Tip 60°

Mechanical Data

Working Stroke: 4,0 mm (.157)
Maximum Stroke: 5,0 mm (.197)
Spring Force at Work Stroke: 1,5 N (5.4oz)
alternative: 0,6 N (2.0oz); 3,0 N (10.8oz);
8,0 N (28.9oz)

Materials

Plunger: Steel, nickel-plated
Barrel: Brass, gold-plated
Spring: Steel, gold-plated
or Stainless Steel**
Receptacles: RKS-364 23: Brass, not plated
KS-364 125: Brass, gold-plated

Electrical Data

Current Rating, Conn. to Plunger: 15-20 A
Current Rating, Connection to KS: 5 - 8 A
Rₚ typical, Connection to Plunger: < 10 mΩ
Rₚ typical, Connection to KS: < 30 mΩ
(** > 100 mΩ)

Mounting Hole Size

with Receptacle: Ø 5,59 - 5,60 mm (.2201 - .2205)
without Receptacle: Ø 5,00 mm (.1969)

Operating Temperature

Standard: -40° up to +80° C
**with 1,5 and 3,0 N-Spring: -100° up to +200° C

Ordering Example

Test Probe: G K S 3 6 4 2 0 4 4 0 0 N 1 5 0 1
Receptacles: R K S – 3 6 4 2 3 K S – 3 6 4 1 2 5
Spacer for Receptacle: D S – 3 6 4 0 3
Lamellar Plug: (for plugging onto the end of the Plunger) S E – 5 0 3

Grid:
≥ 6,50 mm
≥ 260 Mil
Installation Height: 6,0 mm (.236)
Recommended Stroke: 4,0 mm (.157)

All specifications are subject to change without prior notification
Mounting and Functional Dimensions

**GKS 365**

**Mechanical Data**
- Working Stroke: 3.2 mm (.126)
- Maximum Stroke: 4.0 mm (.157)
- Spring Force at Work. Stroke: 0.6 N (2.2oz); 3.0 N (10.8oz), 4.0 N (14.4oz); 8.0 N (28.9oz)

**Materials**
- Plunger: Brass or Steel, gold- or nickel-plated
- Barrel: Brass, gold-plated
- Spring: Steel, gold-plated or Stainless Steel
- Receptacle for GKS-365:
  - RKS-365 23: Brass, not plated
  - KS-365 125: Brass, gold-plated
- Receptacle for GKS-366:
  - RKS-364 23: Brass, not plated
  - KS-364 125: Brass, gold-plated

**Operating Temperature**
- Standard: -40° up to +80° C
- **with 8,0 N-Spring**: -100° up to +200° C (GKS-365)

**Electrical Data**
- Current Rating: 5 - 8 A
- **R₁ typical**: < 30 mΩ (**) > 100 mΩ

**Note:**
- Other comparable Versions on request.
- Ordering Example: GKS-365 113 400 A xx01 S

**Mounting Hole Size**
- with Receptacle: Ø 5.59 - 5.60 mm (.2201 - .2205)
- without Receptacle for GKS-365: Ø 4.97 mm (.1957)
- without Receptacle for GKS-366: Ø 5.00 mm (.1969)

---

**GKS 366**

**Mechanical Data**
- Working Stroke: 8.0 mm (.315)
- Maximum Stroke: 10.0 mm (.394)
- Spring Force at Work. Stroke: 1.5 N (5.4oz); 3.0 N (10.8oz); 8.0 N (28.9oz)

**Materials**
- Plunger: Brass, not plated
- Barrel: Brass, gold-plated
- Receptacle for GKS-366:
  - RKS-364 23: Brass, not plated
  - KS-364 125: Brass, gold-plated

**Note:**
- Other comparable Versions on request.
- Ordering Example: GKS-366 113 400 A xx01 S

**Available Tip Styles GKS 365**

<table>
<thead>
<tr>
<th>Tip Style</th>
<th>Special Designation</th>
<th>Material</th>
<th>Tip Style</th>
<th>Plating</th>
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</thead>
<tbody>
<tr>
<td>1 04</td>
<td></td>
<td>G</td>
<td></td>
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</tr>
<tr>
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<td></td>
<td>G</td>
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<td>A</td>
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<tr>
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<td>A</td>
</tr>
<tr>
<td>1 13</td>
<td></td>
<td>G</td>
<td></td>
<td>N</td>
</tr>
<tr>
<td>1 13S</td>
<td></td>
<td>G</td>
<td></td>
<td>A</td>
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**Available Tip Styles GKS 366**

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<tr>
<th>Tip Style</th>
<th>Special Designation</th>
<th>Material</th>
<th>Tip Style</th>
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</thead>
<tbody>
<tr>
<td>1 05</td>
<td></td>
<td>G</td>
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<td>N</td>
</tr>
<tr>
<td>1 06</td>
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<td>A</td>
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<tr>
<td>1 56</td>
<td></td>
<td>G</td>
<td></td>
<td>A</td>
</tr>
</tbody>
</table>

**Ordering Example**
- Series: G K S 3 6 5
- Tip Material: 1 = Brass
- Tip Style: 1 0 5
- Tip Diameter (1/100 mm): 4 0 0
- Plating: A = Gold
- N = Nickel
- Spring Force (dN): Collar Height (mm): Special Designation "S"

Test Probe:
- Test Probe:
- Receptacles for GKS-365:
- Receptacles for GKS-366:
- Spacer for Receptacle:
**Target Contact**

<table>
<thead>
<tr>
<th>PI-5328</th>
<th>PI-5329</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Image of PI-5328" /></td>
<td><img src="image2.png" alt="Image of PI-5329" /></td>
</tr>
</tbody>
</table>

**PIN SPECIFICATIONS**

**PI-5328**
- Mounting Hole: .034 (0.86)

**PI-5329**
- Mounting Hole: .057 (1.45)

**MATERIALS**
- Material: Brass
- Plating: Gold over nickel

**HOW TO ORDER**
- PI-5328
- PI-5329

<table>
<thead>
<tr>
<th>PI-5327</th>
<th>PI-5330</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image3.png" alt="Image of PI-5327" /></td>
<td><img src="image4.png" alt="Image of PI-5330" /></td>
</tr>
</tbody>
</table>

**PIN SPECIFICATIONS**

**PI-5327**
- Mounting Hole: .057 (1.45)

**PI-5330**
- Mounting Hole: .084 (2.15)

**MATERIALS**
- Material: Brass
- Plating: Gold over nickel

**HOW TO ORDER**
- PI-5327
- PI-5330

Specifications subject to change without notice. Dimensions in inches (millimeters).
Contact Terminals with Collar Height:

3 mm (.118)

KT-254 W-E03 (wire-wrap)

KT-254 W3 E03 (wire-wrap)

KT-254 L-E03 (Solder)

KT-254 L3 E03 (Solder)

KT-120 L3 E02 - 30 (Solder) High-current Contact Terminal

KT-150 L3 E03 - M3 High-current Contact Terminal

Contact Terminals with Collar Height:

2 mm (.079)

KT-254 W-E02 (wire-wrap)

KT-254 W3 E02 (wire-wrap)

KT-254 L-E02 (Solder)

KT-254 L3 E02 (Solder)

KT-254 L3 E02 - 30 (Solder Connection)

KT-254 W-PL (wire-wrap)

Other Contact Terminals:

KT-254 W3 E12 (wire-wrap)
For assembly in INGUN-ZSK Transfer Field
(ZSK = Top-side Contacting Unit)

KT-158 02 (Order No. 9408)
Contacting Terminal for GenRad Interface

KT-158 (Order No. 3650)
Contacting Terminal for Zehntel Interface

KT-158 06 (Order No. 21814)
Contacting Terminals for general usage

KT-586 102 400 R
Contacting Terminals for gold-plated (to solder in)

KT-279 102 300
(Replaceable, Will be used with KS-112, see Page 50)

KT-112 143 215 E02
(Replaceable, Will be used with KS-112, see Page 50)

Mounting Hole Size *

for KT-254:
in CEM1: ø 1,98 - 2,00 mm (.0780 - .0787)
in FR4: ø 1,98 - 1,99 mm (.0780 - .0783)

for KT-158:
in CEM1 and FR4: ø 1,40 mm (.0551)

for KT-586:
in CEM1 and FR4: ø 2,55 - 2,57 mm (.1004 - .1012)

for KT-120:
in CEM1 and FR4: ø 3,00 - 3,02 mm (.1181 - .1189)

for KT-150:
in CEM1 and FR4: ø 4,00 - 4,02 mm (.1575 - .1583)

Electrical Data

Rj typical: < 5 mΩ

Materials

Contact Terminals: Brass, gold-plated
KT-586: Brass, rhodium-plated

Collar Height and Install. Height for KT-254
The Installation Height of the Contact Terminals is determined by the collar Height.

* Services: Customized Contact Blocks drilled according to customer demands (and matching certain INGUN Receptacles) are available from INGUN.
Dimension A:

CO.IM 2750/9.5 : A = 9.5 (.374)

CO.IM 2750 : A = 12 (.472)
1, rue de Terre Neuve
Bâtiment H
BP 144
91944 Courtabœuf cedex
FRANCE

Tél. : 01 69 28 05 06
Fax : 01 69 28 63 96

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