

Keithley Instruments  
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## Safety Interlock Mating Connector

### Description

The Model CS-1616-3 is an interlock mating connector that is supplied with Keithley Instruments that include an interlock connection.

Figure 1: CS-1616-3 Safety Interlock Mating Connector



### Specifications

**Material:**

- Glass-reinforced thermoplastic body and lower cover
- Transparent thermoplastic cover

**Flammability:**

- UL 94V-0

**Wire outside diameter range:**

- 1.2 mm to 1.6 mm (0.047 in. to 0.063 in.)

**Current rating:**

- 3.0 A

**Temperature rating:**

- -20 °C to 85 °C



## Connection wire and assembly

When using the CS-1616-3 interlock mating connector with a Keithley instrument, use the following recommendations for choosing a connection wire:

- Copper alloy
- 7 to 19 bare and tinned strands
- 0.25 mm<sup>2</sup> to 0.50 mm<sup>2</sup>, 20 AWG to 24 AWG
- Flexible vinyl, semi-flexible vinyl, polyethylene, cross-linked polyethylene, or PTFE

To ensure proper interlock operation, the combined resistance of the external interlock switch and connection wires must be less than 10  $\Omega$  when the switch is closed.

### ***To assemble the interlock:***

1. Insert the wire into the CS-1616-3.
2. Use a pair of pliers to squeeze the connector sections together.

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## NOTE

You cannot disassemble and reuse the CS-1616-3.

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