The Hi/Mate™ Series of high voltage insertable/removeable contact assemblies are rated at 13.5 kVDC and can be fitted into a Subminiature-D (Sub-D) 8 gauge insert cavity. The assemblies are ideal for airborne applications up to 70,000 feet altitude over a temperature range of -55° to 125°C. Hi/Mate™ is fully compatible with signal lines, coaxial, fiber optic and power contacts in the same Sub-D connector. These contact assemblies are independent high voltage connectors, and do not rely upon the dielectric properties of the Sub-D insert.

Complete cable assemblies with Hi/Mate™ high voltage contact assemblies installed into Positronic CBD/CBM Series Subminiature-D connectors, are available from Teledyne Reynolds as fully tested units.

**INSERT ARRANGEMENTS**

Any 8 gauge cavity in the insert arrangements shown below, can be converted to a 13.5 kVDC high voltage circuit simply by installing a Hi/Mate™ contact assembly into the appropriate male or female cavity.

**PLUG AND RECEPTACLE CONTACT ASSEMBLY DIMENSIONS**

**Receptacle Contact Assembly**

**Plug Contact Assembly**

Note: Receptacle assembly can only be installed into a Sub-D female insert. Plugs can only be installed into a male insert.
Hi/Mate™ SERIES | 13.5 kVDC | 70,000 FT | -55º TO 125ºC | Various Pins

PLUG CONTACT ASSEMBLIES

Single-Ended
178-5727

Double-Ended
178-5740

RECEPTACLE CONTACT ASSEMBLIES

Single-Ended
178-5728

Double-Ended
178-5741

PLUG-RECEPTACLE CONTACT ASSEMBLY

Double-Ended
178-5729

SERIES SPECIFICATIONS

<table>
<thead>
<tr>
<th>Series</th>
<th>Voltage Rating (kVDC)</th>
<th>Altitude Rating (ft)</th>
<th>Operating Temp. (ºC)</th>
<th>Current Rating (Amp)</th>
<th>Receptacle Insulator Material</th>
<th>Plug Insulator Material</th>
<th>Coupling Style</th>
<th>Coupling Nut Material/Finish</th>
<th>Plug Contact Material/Finish (Socket)</th>
<th>Receptacle Contact Material/Finish (Pin)</th>
<th>Wire Type</th>
<th>Wire Insulation</th>
<th>Braid Termination</th>
<th>Test Voltage @ 70,000 ft (kVDC)</th>
<th>Test Voltage @ Sea Level (kVDC)</th>
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<tr>
<td>Hi/Mate™</td>
<td>13.5</td>
<td>70,000</td>
<td>-55 to 125</td>
<td>2.1</td>
<td>Plastic</td>
<td>Plastic</td>
<td>D-Sub</td>
<td>D-Sub</td>
<td>BeCu/Au</td>
<td>Brass/Au</td>
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**WIRE SPECIFICATIONS**

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<tr>
<th>Part #</th>
<th>Operating Voltage (kVDC)</th>
<th>Conductor</th>
<th>Insulation</th>
<th>Shielding</th>
<th>Jacket</th>
<th>Impedance (Ω)</th>
<th>Attenuation dB/100 ft @ 400 MHz</th>
<th>Capacitance pF/ft (Nom. @ 1 kHz)</th>
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<td></td>
<td>AWG</td>
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**(• = Same value as above)**

**Cable Assembly Ordering Information:** All cable assembly cable lengths are to be specified in inches only. For example, to order part number 178-6027 with a cable length of 10 feet 8 inches the cable assembly part number would be specified as 178-6027-1008. • Positronic® is a trademarks owned by Positronic Industries, Inc.

• Note: Product numbers and specs subject to change without notice. • Products listed represent only a small selection of Teledyne Reynolds’ products please visit www.teledynereynolds.com for the most up to date product information. • Contact Teledyne Reynolds’ Engineering to discuss custom designs. **WARNING:** Connectors should NEVER be handled mated or unmated when voltage is applied.