

The Hi/MateTM 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/MateTM is fully compatible with signal lines, co-axial, 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.

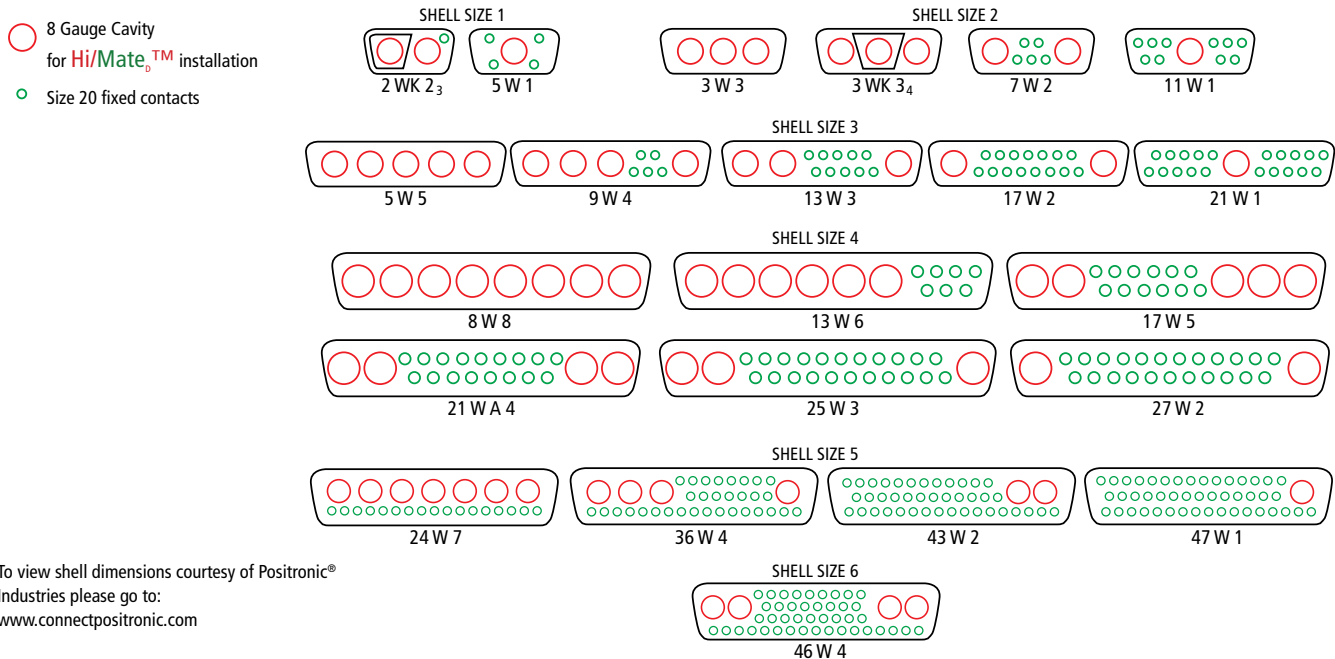
Complete cable assemblies with Hi/MateTM high voltage contact assemblies installed into Positronic[®] CBD/CBM Series Subminiature-D connectors, are available from Teledyne Reynolds as fully tested units.

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/MateTM contact assembly into the appropriate male or female cavity.

Positronic[®] CBD/CBM series Subminiature-D Insert Arrangements

Face view of Male - Rear view of Female

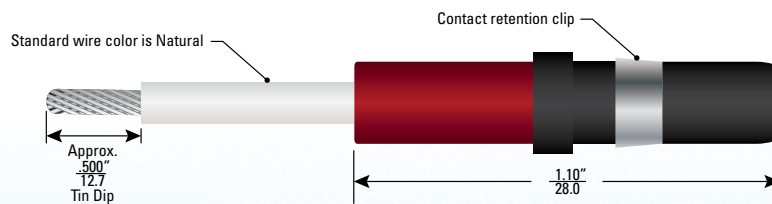


To view shell dimensions courtesy of Positronic[®] Industries please go to:
www.connectpositronic.com

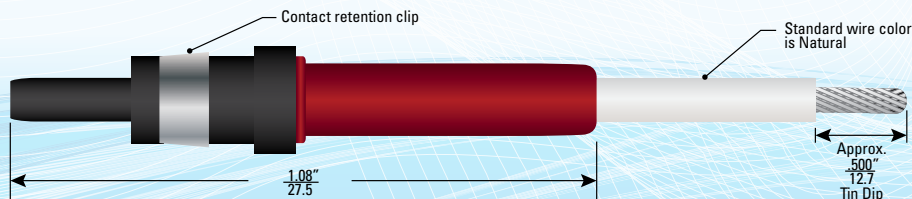
- Notes:
1. Shell drawings are not to scale.
 2. Care must be taken to observe Male/Female gender of both the Hi/MateTM contact assembly and the Sub-D Shell/Insert arrangement.
 3. 2WK2 connectors have 1 male and 1 female contacts. Female connector should be loaded with female contact in A2 position.
 4. 3WK3 male variant contains 2 male contacts and 1 female contact. Female variant contains 2 female contacts and 1 male contact

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.

PLUG CONTACT ASSEMBLIES

Single-Ended
178-5727

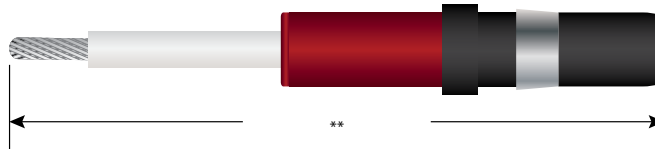


Double-Ended
178-5740



RECEPTACLE CONTACT ASSEMBLIES

Single-Ended
178-5728



Double-Ended
178-5741



PLUG-RECEPTACLE CONTACT ASSEMBLY

Double-Ended
178-5729



SERIES SPECIFICATIONS

(• = Same value as above)

Series	Voltage Rating (kVDC)	Altitude Rating (ft)	Operating Temp. (°C)	Current Rating (Amp)	Receptacle Insulator Material	Plug Insulator Material	Coupling Style	Coupling Nut Material/Finish	Plug Contact Material/Finish (Socket)	Recept. Contact Material/Finish (Pin)	Wire Type	Wire Insulation	Braid Termination	Test Voltage @ 70,000 ft (kVDC)	Test Voltage @ Sea Level (kVDC)
Hi/Mate™	13.5	70,000	-55 to 125	2.1	Plastic	Plastic	D-Sub	D-Sub	BeCu/Au	Brass/Au	Non-shielded	FEP	N/A	18	NA

WIRE SPECIFICATIONS

Part #	Operating Voltage (kVDC)	Conductor			Insulation		Shielding			Jacket		Impedance Ω	Attenuation dB/100 ft @ 400 MHz	Capacitance pF/ft (Nom.) @ 1 kHz
		AWG	Strands	Plating	Material	ø in./mm	AWG	Plating	ø in./mm	Material	ø in./mm			
178-8066	18	24	19/32	SPC	FEP	.06 / 1.53	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**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 178-6027-128N. • 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.**