

# Rebling Datasheet

## Battery Swap Bulkhead-Mounted Connectors

*This Battery Swap Connector brings Rebling's high current, high voltage, avionics-reliable contact design to a drawer style connector suitable for battery swap and stackable modular power applications. Both high current DC connector halves are bulkhead-mounted and the rugged, high current pin contacts of the male connector act as the guide pins which mate with the socket contacts of the female connector.*



### ELECTRICAL

#### Current

- ▶ Continuous Rated Current (CRC) (per UL1977)
- ▶ Current Profile #2 - 50% CRC for 60min + 1 sec peak + 50% CRC for 60 min
- ▶ Current Profile #3 - 50% CRC for 60min + 10 sec peak + 50% CRC for 60 min
- ▶ Current Profile #4 - 50% CRC for 60min + 30 sec peak + 50% CRC for 60 min
- ▶ Current Profile #5 - 50% CRC for 60min + 60 sec peak + 50% CRC for 60 min

#### Voltage

- ▶ Rated Voltage (volts DC)
- ▶ Dielectric Withstanding Voltage (volts DC)

#### Contact Resistance Max (Micro Ohms)

500 amp  
3,000 amp  
2,000 amp  
1,500 amp  
1,000 amp

### MOUNTING and ASSEMBLY

Mounting Hole Pattern  
Recommended Torque on Electrical Connections  
Application Recommendations

see Diagram Below  
30 to 40 in-lbs

- ▶ #8 or M4 flathead 82 degree screws for mounting connectors to the bulkhead

### MECHANICAL

#### Bus Bar and Cable Size Range

- ▶ Maximum Bus Bar Cross Sectional Area (sq inches)
- ▶ Maximum Bus Bar Width (inches)
- ▶ Maximum Cable Crimp Lug Tongue Width (inches)

#### Environmental Sealing with optional gasket

- ▶ Pin Connector
- ▶ Socket Connector

#### Operating Temperature

- ▶ Minimum (°C)
- ▶ Maximum (°C)

#### Flammability Rating (per UL94)

#### Mechanical Shock

#### Vibration

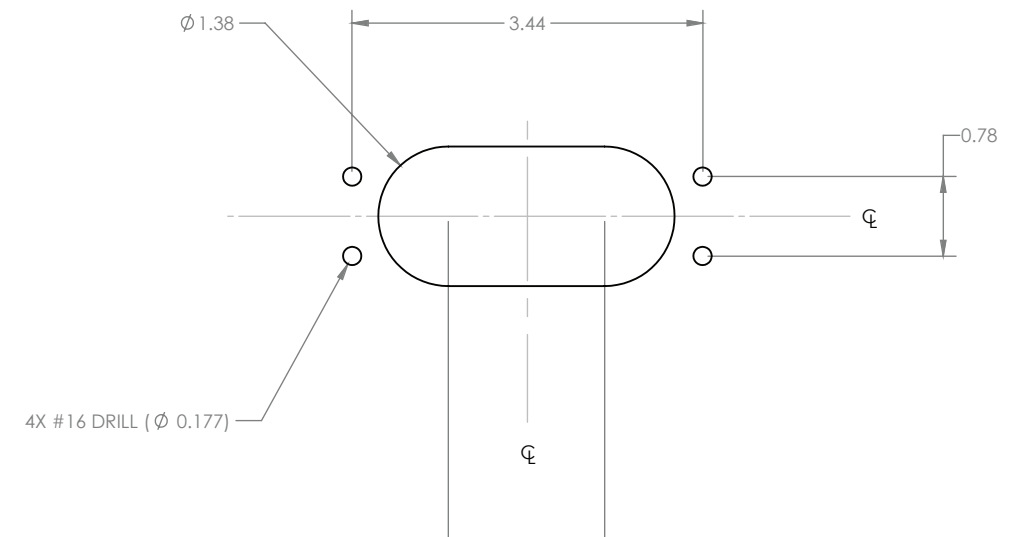
#### Mating Cycles

- ▶ No Electrical Load

#### Torque on Electrical Connections

- ▶ Recommended
- ▶ Material Failure

0.80  
1.3  
1.3  
IP68  
IP66  
-40°  
140°  
V-0  
50gs - 3 axes  
10gs - 3 axes  
5,000  
30-40 in-lbs  
80 in-lbs



Mounting Hole Pattern (inches)

### CERTIFICATIONS

UL Conformance  
RoHS Compliance

Certificate is downloadable from [Rebling.com](http://Rebling.com)  
All parts itemized on this datasheet are RoHS compliant

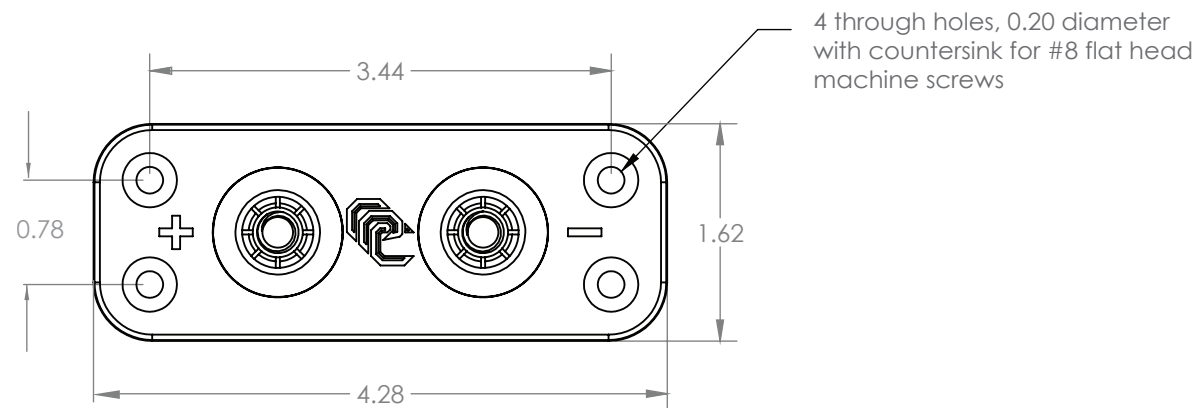
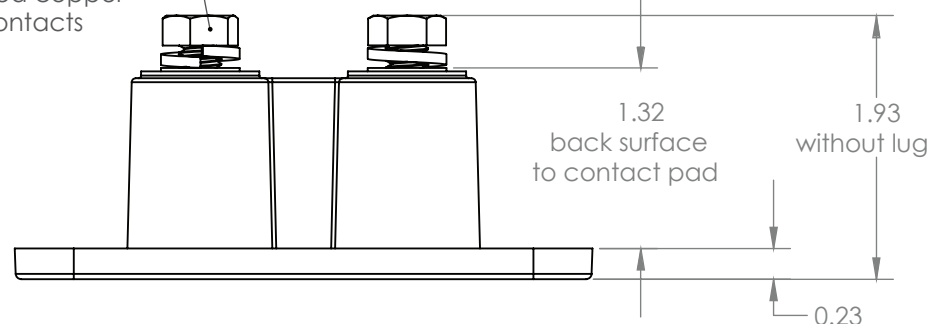
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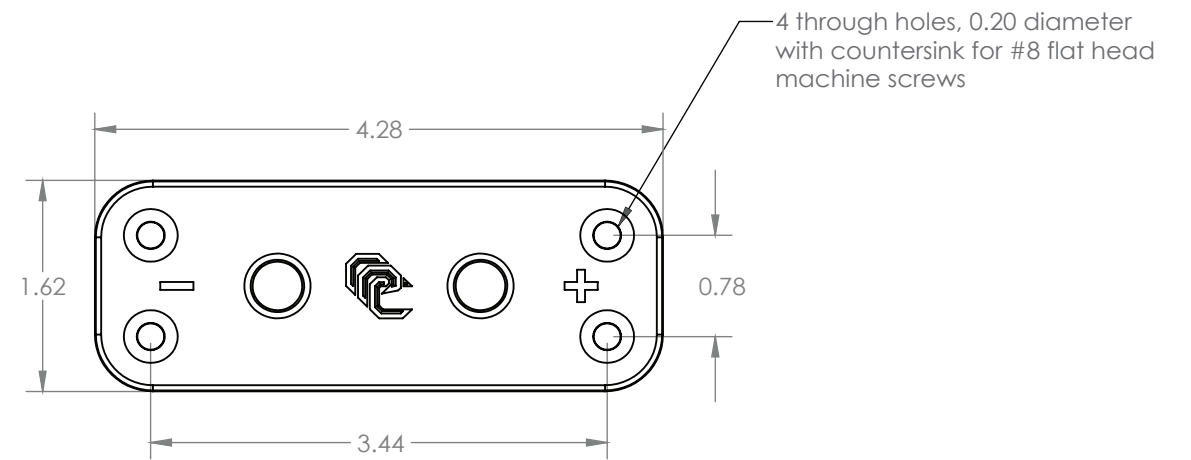
P/N	Description	Plastic Color	Weight (Grams)	Min Thick (mm)	UL 94 Rating	Plastic Material #
654A1679	Battery Swap Pin Connector*	Black	105	2.0	V-0	000A1272
654A1680	Battery Swap Socket Connector*	Black	155	2.0	V-0	000A1272
100A1112	Gasket for Pin or Socket Connector	Black	0.8	1.5	V-0	000A1864
* Pin and Socket connectors must be ordered in matching quantities (pairs)						



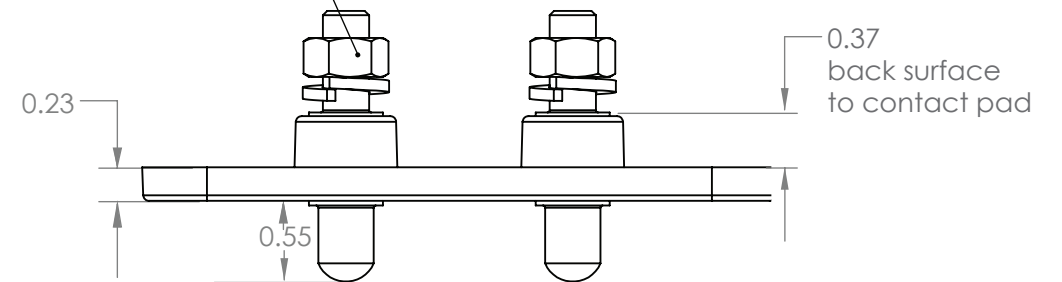
5/16-18 SS Bolts and Split Washers into tapped copper contacts



Socket Connector



5/16-18 SS Nuts and Split Washers onto threaded copper posts



Pin Connector