

# Rebling Datasheet

## Commerical Bulkhead-Mounted Keyable Receptacle

As work truck, electrified vehicle, auxiliary power and stationary power applications trend toward higher voltages and currents and faster charging times, improved features are needed to enable the OEMs in those markets to maintain their competitive edge and reduce their end users' total cost of ownership. In keeping with our commitment to deliver new features at economical prices, we offer a commercial grade receptacle with six color-coded mechanical keying combinations. These keying combinations can be used to differentiate various voltage or current levels to prevent errors by your system assembly, operations or maintenance personnel. These two pole, bulkhead-mounted, keyable receptacles are designed to mate with our commercial grade, cable-mounted plug connectors which have the same keying option. Our keyable receptacles, if no key is inserted, can mate with any of our legacy non-keyable cable-mounted plug connectors.



### 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)

#### HVIL Circuit

### MECHANICAL

#### Wire Size Range

- ▶ Maximum Wire Size
- ▶ Maximum Cable OD (inches)
- ▶ Maximum Terminal Lug Tongue Width (inches)
- ▶ Maximum Terminal Lug Web Width (inches)

#### Environmental Sealing when mated

- ▶ With standard kit components
- ▶ With optional gasket

#### Operating Temperature

- ▶ Minimum (°C)
- ▶ Maximum (°C)

#### Flammability Rating (per UL94)

#### Mechanical Shock

#### Vibration

#### Mating Cycles

- ▶ No Electrical Load
- ▶ Live Electrical Load (24 volts & 100amps)

#### Torque on Electrical Connections

- ▶ Recommended
- ▶ Material Failure

#### Keying

### CERTIFICATIONS

UL Conformance  
RoHS Compliance

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

1,500  
5,000  
70  
Yes - Optional

4/0 (110mm<sup>2</sup>)  
1.1  
0.82  
0.26

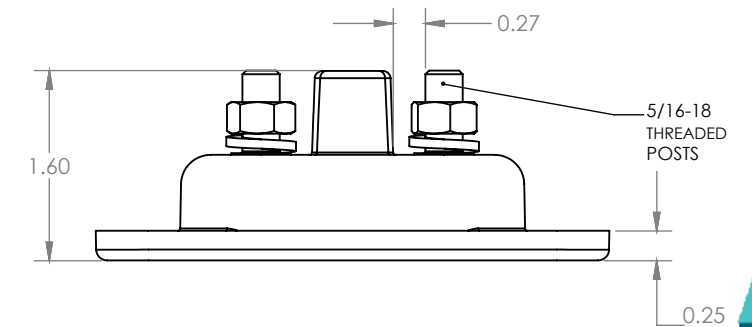
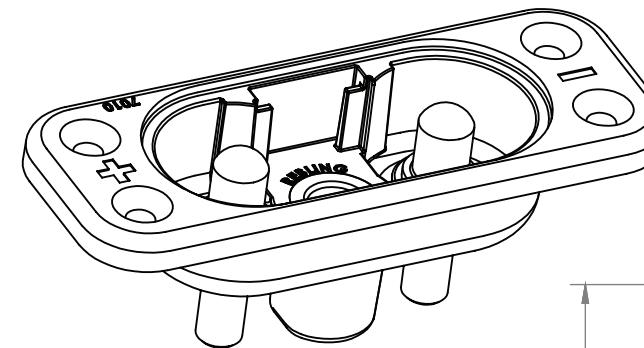
IP56  
IP68

-40°  
140°  
V-0

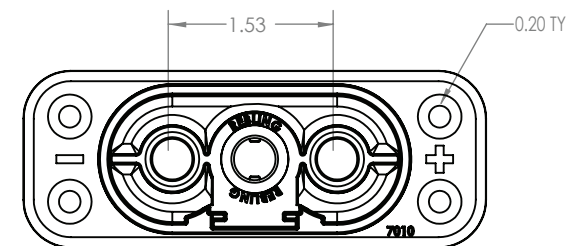
50gs - 3 axes  
10gs - 3 axes

5,000  
100

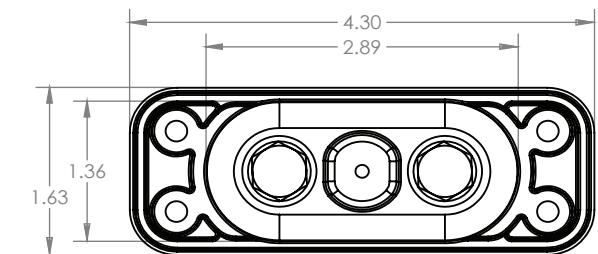
30-40 in-lbs  
80 in-lbs  
6 colored keys



7010-3



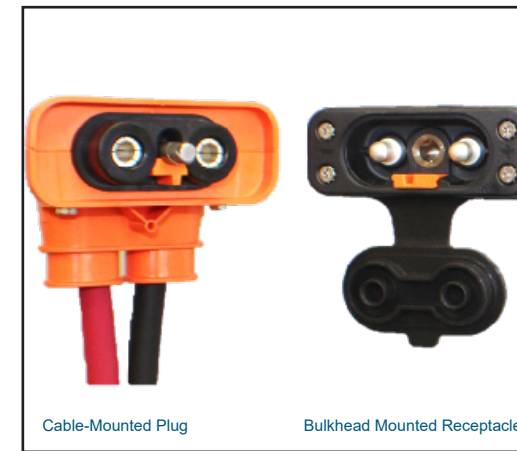
FRONT



BACK

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

# Rebling Datasheet Commerical Bulkhead-Mounted Keyable Receptacle



Cable-Mounted Plug

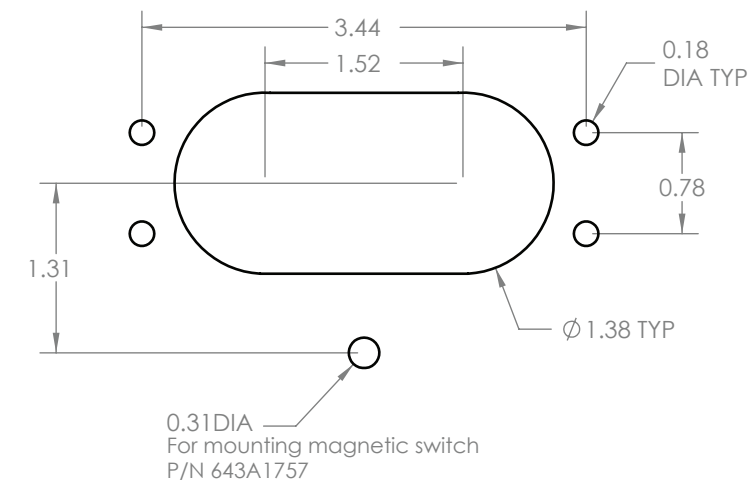
Bulkhead Mounted Receptacle

## MOUNTING and ASSEMBLY

Mounting Hole Pattern (see diagram)  
 Recommended Torque on Electrical Connection nuts  
 Application Recommendations

30 to 40 in-lbs

- ▶ When attaching 4/0 cable to the rear threaded posts, use Burndy narrow tongue crimp lugs
- ▶ For extreme vibration applications which exceed the limits published above, use a small amount of adhesive to glue each key into its slot. Recommended adhesive: 3M's DP190
- ▶ #8 or M4 flathead 82 degree screws recommended for mounting to the bulkhead
- ▶ Optional HVIL Switch - HVIL Kit P/N 643A1757 includes a 1/8" x 5/8" cylindrical neodymium magnet which is inserted into a cylindrical opening on the face of the cable-mounted plug which aligns with the magnetic reed switch which is mounted on the panel below the bulkhead-mounted receptacle
- ▶ EMI Shielding - see datasheet for EMI Receptacle 7009-51



Mounting Hole Pattern (inches)



P/N	Description	Plastic Color	Weight (Grams)	Min Thick (mm)	UL 94 Rating	Plastic Material #
7010-3	Receptacle, Keyable, With Threaded Posts*	Black	120	2.5	V-O	000A1272
685A1766	Gasket with attached Dust Cover for 7010	Black	18	1.0	V-O	000A1864
100A1784	Foam Gasket for 7010	Black	2.5	1.3	V-O	000A1864
643A1757	HVIL Switch & Magnet Kit	-	25	n/a	-	n/a
684A1763-A	Key for 7010 Receptacle	Orange	1.8	2.0	V-O	000A1862
684A1763-B	Key for 7010 Receptacle	Blue	1.8	2.0	V-O	000A1862
684A1763-C	Key for 7010 Receptacle	Green	1.8	2.0	V-O	000A1862
684A1763-D	Key for 7010 Receptacle	Pink	1.8	2.0	V-O	000A1862
684A1763-E	Key for 7010 Receptacle	White	1.8	2.0	V-O	000A1862
684A1763-F	Key for 7010 Receptacle	Yellow	1.8	2.0	V-O	000A1862

\*Receptacle includes two 5/16 stainless nuts and split washers