

Product Notice

Date: 11/21/2021
Manufacturer: Rebling

AVIONICS/ MIL SPEC 8002/8003 Series Connectors

Rebling has discontinued manufacturing 8002 Pink Receptacle Housings. Flame Enterprises will be stocking the remaining product available and will be supplying available alternate products going forward in limited colors [Black]. Flame Enterprises will be the exclusive source for these products after 11/15/2021. 8003 Cable Mounted Plugs will still be available but only through Flame Enterprises.

See the chart below for information that may be helpful. Please reach out to Dave Boush in Product Management at Flame Enterprises to discuss your options.

dave@flamecorp.com

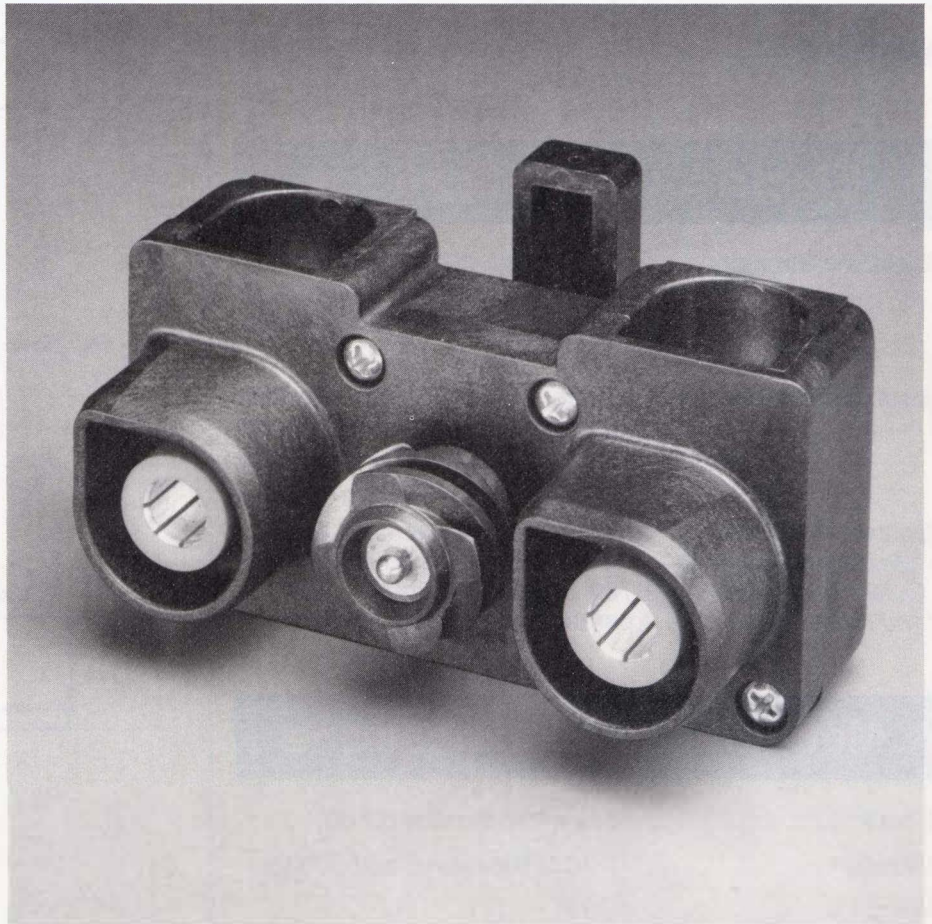
P/N	Status	Replace with	Differences	Description
8002-ADPT-KIT	Active			Male Pin Contact Kit in poly bag. Kit Includes: (2 pcs) # 098A1190 silver-plated copper contact (2 pcs) 10-32 x 3/4 fillister head screw, steel, nickel-plated (2 pcs) #10 split washer, steel, nickel-plated used with for 8002-xx Receptacle
8002-1-W/KIT	Obsolete	8002-2B-W/KIT	Black Color	Receptacle Housing, Acme Screw Style, Pink + 8002-ADPT-KIT_mates w 8003
8002-1-W/O-KIT	Obsolete	8002-2B-W/O-KIT	Black Color	Receptacle Housing, Acme Screw Style, Pink_ No Contacts_mates w 8003
8002-2B-W/KIT	Active			Receptacle Housing, Acme Screw Style, Black + 8002-ADPT-KIT_mates w 8003
8002-2B-W/O-KIT	Active			Receptacle Housing, Acme Screw Style, Black_No Contacts_mates w 8003
8003	Active			Cable-mounted Plug, 2 wire, Acme Screw Style, Black_mates w 8002

Rebling Type 8003 Quick Disconnect plugs are two-socket two-wire connectors for lead-acid aviation batteries. They are designed to mate with Rebling Type 8002 aero battery receptacle adapters and with other receptacle adapters conforming to Figure 2 of MIL-B-83769.

The 8003 plug provides for rapid connection and release of the electrical load from the battery. Rotation of the handle in a clockwise direction engages the Quick Disconnect with the battery receptacle while rotation in a counter-clockwise direction unlocks the unit. The handle is clearly marked for direction of rotation. Once engaged with the receptacle, there are provisions on the 8003 handle to lockwire the unit in a fully engaged position.

The 8003 unit is keyed so that it can only be installed in the receptacle with the correct polarity. Polarity markings are clearly indicated on the outside and inside of the body.

The 8003 body is made from acid-resistant and fungus-resistant glass reinforced plastic. Contacts are silver-plated copper alloy. The plug can accommodate up to 000 wire on the positive and negative terminals.



Rebling 8003 Quick Disconnect

- Two-wire design
- For lead-acid batteries
- Mates with all receptacle adapters per Figure 2 of MIL-B-83769, and Rebling Part No. 8002

Material Specifications

Body Material	Acid and fungus resistant glass reinforced plastic.
Color	Black
Contacts	Copper alloy - silver plated per QQ-S-365D.
Handwheel	Molded plastic acme thread over steel shaft.

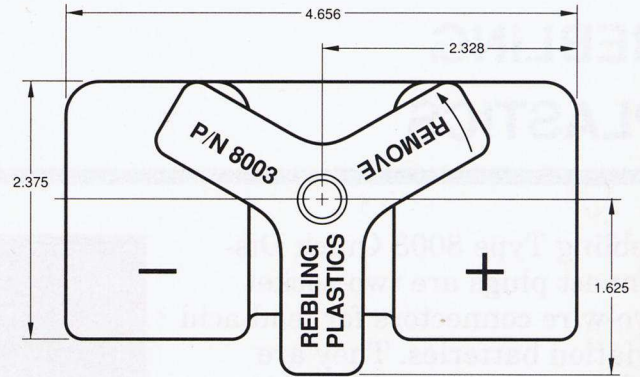
Electrical Specifications

Dielectric Strength	Greater than 2500 VDC, applied for 1 minute between contacts at temperatures between -65°F and +160°F.
Insulation Resistance	Greater than 5 gigohms with 500 VDC applied between contacts at temperatures between -65°F and +160°F.
Contact Resistance	Less than 88 mv at 1200 amps for 1 minute. Less than 55 mv at 750 amps for 5 minutes. Temperature range -65°F to +160°F.

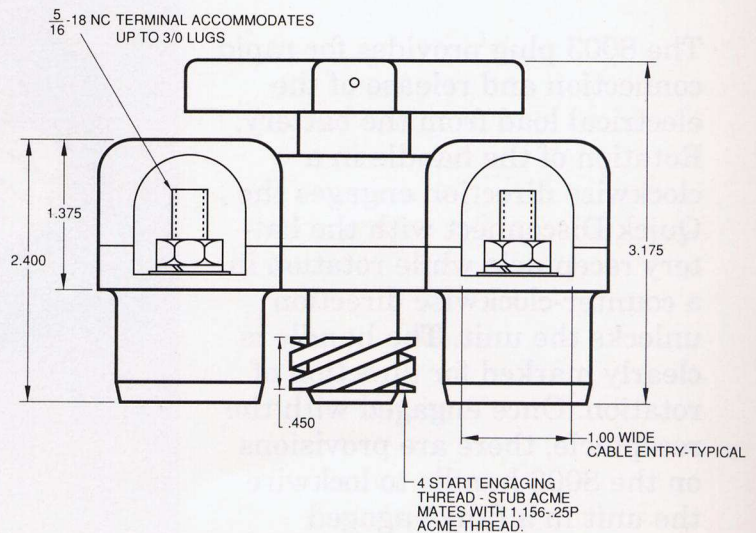
(Measured between Quick Disconnect and receptacle.)

Mechanical Specifications

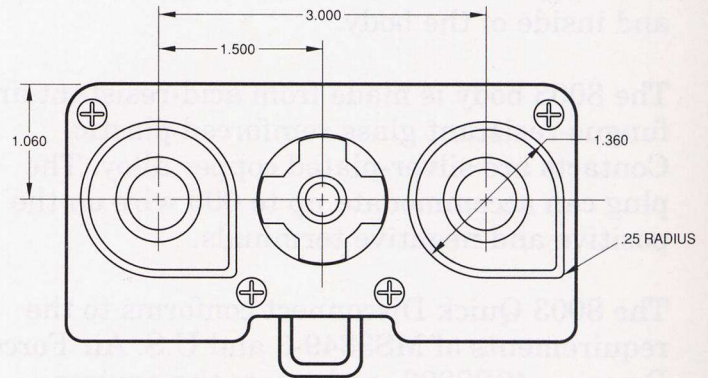
Shock	15 G within 5 milliseconds.
Vibration	+/- 10 G between 5 and 500 Hz.
Weight	0.73 lb.
Temperature Shock	-40°F to +160°F within 5 minutes.
Engagement Torque	10-12 inch pounds at temperatures between -65°F and +160°F.
Lifespan	Greater than 5000 engagements with receptacle.
Humidity	Withstands 95% RH, up to 140°F.
Salt Spray	Withstands 7 day exposure of 5% salt spray at 95°F.
Fungus Resistance	Will not support fungus growth.
Chemical Resistance	Withstands immersion in following: <ul style="list-style-type: none"> • 1.1 Sp.Gr. Sulfuric Acid - 4 hours • Aircraft hydraulic fluid per MIL-H-5606 - 20 hours • Lubrication oil per MIL-L-23699 - 20 hours



FRONT VIEW



BOTTOM VIEW



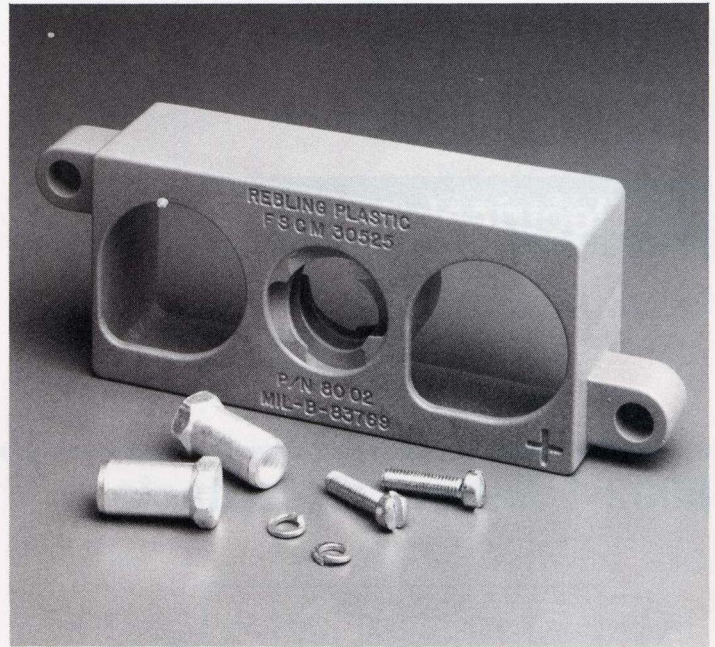
BACK VIEW

The Rebling 8002 Aero Battery Receptacles are for lead-acid batteries. They are designed to mate with Rebling 8003 quick disconnect. Attached directly to the battery housing, the 8002 receptacle provides for a reliable, high-current connection of the battery output to the electrical load, and permits rapid removal of the battery from the aircraft.

The 8002 receptacles and mating quick disconnects are shaped to insure correct polarity is maintained when connecting the battery to the system. Polarity markings are also molded on the body of the receptacle.

There are two basic models. The 8002-1 receptacle is designed in accordance with Figure 2 of MIL-B-83769. The 8002-2 receptacle is identical to the 8002-1, except for the location of the mounting lugs. The body color for the 8002-1 is pink, while the 8002-2 is either black or pink.

The 8002 unit is molded of acid-resistant, high dielectric strength glass-reinforced plastic. Contact kits are available with both the 8002-1 and 8002-2 models. Contact kits include 2 silver-plated copper terminals, 2 lock washers and 2 mounting screws.



Rebling 8002 Battery Receptacle

- For lead acid batteries
- Mates with Rebling# 8003
- Available in two styles
- Optional contact kits

Material Specifications

Body Material	Acid resistant, high-dielectric strength glass-reinforced plastic.
Color	Pink per Fed.Std. 595, #21158 or black
Contacts	Copper per QQ-C-502, silver plated per QQ-S-365

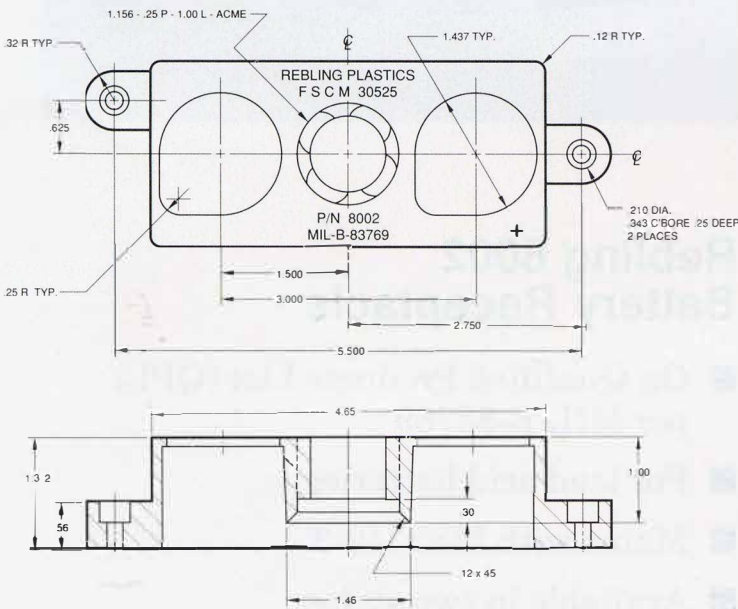
Electrical Specifications

Insulation Resistance	Greater than 2500 VDC applied for one minute between contacts (-65°F to +140°F).
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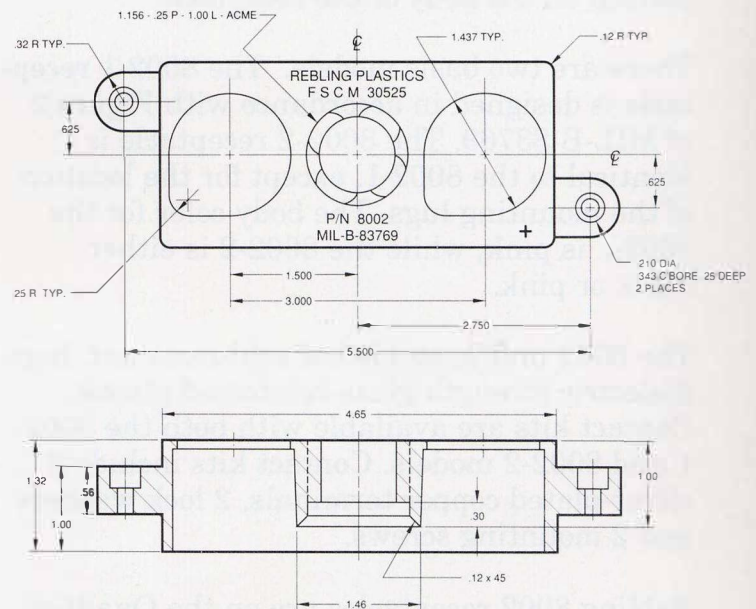
Mechanical Specifications

Strength	Withstands 400 lb. pullout force applied through acme threads and 10 ft.lb. of torque applied at centerline when in mounted configuration.
Temperature Shock	-70°F to +160°F within 5 minutes, 4 hour soak @ each temperature (3 cycles).
Humidity	240 hour exposure @ 95% Relative Humidity (70°F to 149°F)
Salt Fog	5% Salt spray @ 95°F, 100% RH for 48 hours
Shock	Sinusoidal shock of 15 g's for 11 msec.
Weight	0.16 lbs.
Chemical Resistance	1.30 Sp. Gr. Sulfuric acid - 24 hours

8002-1 Battery Receptacle



8002-2 Battery Receptacle



Optional Contact Kits

