

# Rebling Datasheet: 7007 Avionics 4-Wire Cable-Mounted Plug

All of our two pole, avionics-grade, quick disconnect, cable-mounted plugs are designed to mate with our avionics-grade, bulkhead-mounted receptacles. The quick disconnect feature enables an operator, even with double-gloved hands, to rotate the handle clockwise to engage the connector and lock it in place then to rotate the handle counter-clockwise to disengage the electrical contacts and unlock the connector. Polarity markings on the outside and inside of the connector are clearly visible and the mechanical polarizing design prevents it from being mis-mated. All fastening and mechanical hardware components are composed of stainless steel. Our 7007 is a two pole, four cable, avionics-grade, quick disconnect, cable-mounted plug and is designed to mate with our avionics-grade, bulkhead-mounted receptacles. The 7007 has four side access cable openings for connecting two positive and two negative cables. It can also be used when only two cables are attached.

## Electrical (per MIL PRF 18148)

|                                      |               |
|--------------------------------------|---------------|
| <b>Current</b>                       |               |
| Rated Current                        | 750 amps      |
| Peak Current                         | 1,500 amps    |
| <b>Voltage &amp; Resistance</b>      |               |
| Rated Voltage (DC)                   | 750 volts     |
| Dielectric Withstanding Voltage (DC) | 2,500 volts   |
| Contact Resistance (maximum)         | 60 micro-ohms |

## Mechanical (per MIL PRF 18148)

|  |                 |
|--|-----------------|
| Flammability Rating  | UL94 V-0        |
| Environmental Sealing when mated with standard kit components        | IP34            |
| Environmental Sealing when mated with optional accessories, grommets | IP56            |
| Operating Temperature  | -85 to +71 C°   |
| Mechanical Shock   | 50 Gs – 3 axes  |
| Vibration  | 10 Gs – 3 axes  |
| Mating Cycles (no electrical load)                                   | 5,000 cycles    |
| Maximum Wire Size  | 4/0 (110 mm²)   |
| Maximum Cable Outside Diameter                                       | 0.95" (24.2 mm) |
| Maximum Crimp Lug Tongue Width                                       | 1.07" (27.2 mm) |
| Maximum Crimp Lug Web Width  | 0.40" (10.2 mm) |

## Compliance

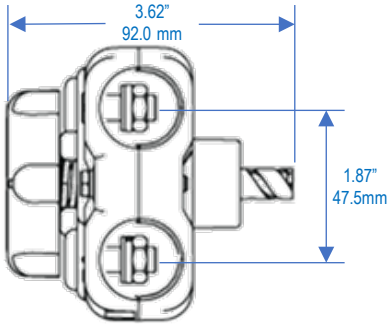
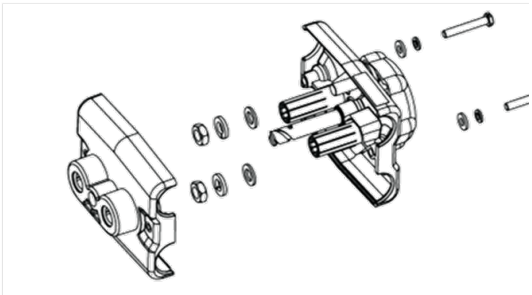
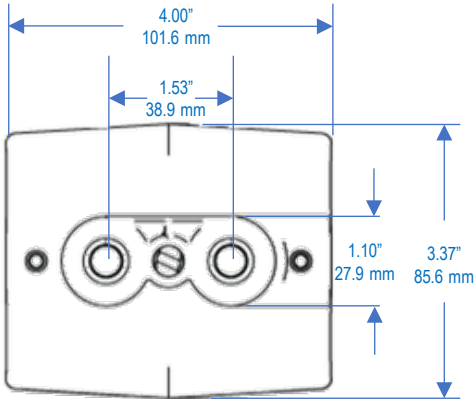
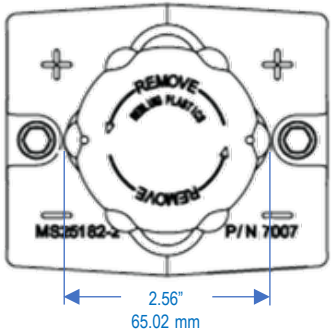
RoHS, REACH, CMRT/3TG                      All parts listed on this datasheet are RoHS, REACH and CMRT/3TG Compliant

## Assembly

|   |                                   |
|---|-----------------------------------|
| Recommended Torque on the 5/16 electrical connection nuts | 100 - 140 in-lbs (11.3 - 15.9 Nm) |
| Recommended Torque on the 10-32 backshell bolts           | 15- 20 in-lbs (1.7 – 2.3 Nm)      |

## Application Notes

- When attaching large cables to the threaded posts, use Burndy narrow tongue crimp lugs



For complete dimensions, download 3D Step files of Receptacle and Accessories at [Rebling.com](https://rebling.com)



| P/N        | Description   | Plastic Color | Weight (Grams) | Handle Type |
|------------|---|---------------|----------------|-------------|
| 7007       | Cable-mounted Avionics Plug, 4 wire, T-Handle                     | Black         | 469            | Round       |
| 7007-3     | Cable-mounted Avionics Plug, 4 wire, Round Handle                 | Black         | 472            | Tee         |
| 653A1659-0 | Grommet/ Rubber Plug for 7007 Connector cable entrance ID = 0.000 | Black         | 3              | N/A         |

