

# Rebling Datasheet

## CABLE MOUNTED PLUG 7007 SERIES

### AVIONICS/MIL

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 members of our avionics family of connectors conform to and are QPL'd to Mil Specs MS25182, MS3509, Mil-PRF-18148, Mil-E-18148, Mil-E-81099 and are available under Rebling's Cage Code 30525. Each connector undergoes an electrical resistance test prior to shipment, 100% of the attaching hardware is functionally tested, the connector's components are fully assembled, a unique serial number is attached to the connector as well as the individual container in which it is shipped and a list of all serial numbers for each shipment is included with the shipping documents. 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. 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 made from stainless steel.



#### CERTIFICATIONS:

CERTIFIED FOR AVIONICS APPLICATIONS  
PER MILITARY STANDARDS #

- ▶ MIL PRF 18148-2
- ▶ MS 25182-2
- ▶ MIL E 81099

#### ELECTRICAL

##### Current

- ▶ Rated Current

750 amp

##### Voltage

- ▶ Rated Voltage (volts, continuous)
- ▶ Dielectric Withstanding Voltage

750

2,500

##### Contact Resistance (Micro Ohms)

60

#### MECHANICAL

##### Wire Size Range

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

8 AWG

4/0

0.90"

1.07"

0.40"

##### Environmental Sealing when mated

- ▶ With standard kit components
- ▶ With optional gasket, shrink tubing or boot accessories

IP34

IP56

##### Operating Temperature

- ▶ Minimum (°C)
- ▶ Maximum (°C)

-85°

71°

##### Flammability Rating (per UL Standard #94)

V-0

##### Mechanical Shock

50gs - 3 axes

##### Vibration

10gs - 3 axes

##### Mating Cycles

- ▶ No Electrical Load (# mating cycles)

5,000

##### Mating Force

- ▶ Maximum Mating or Unmating force after 10 matings (pounds)
- ▶ Maximum Mating or Unmating force after 5,000 matings (pounds)

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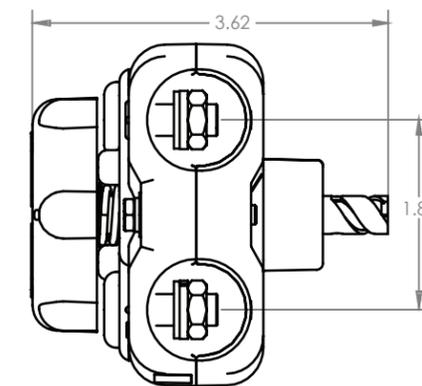
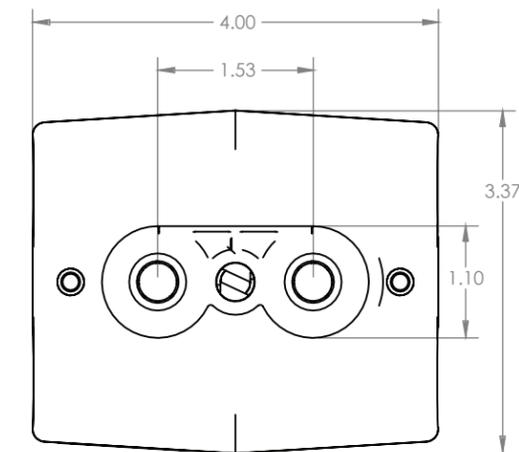
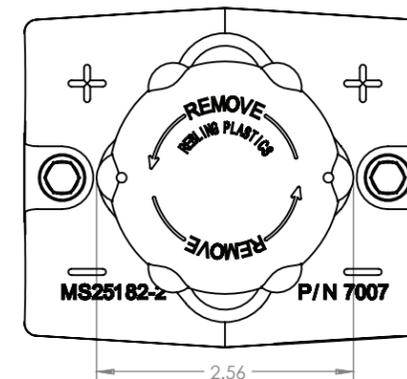
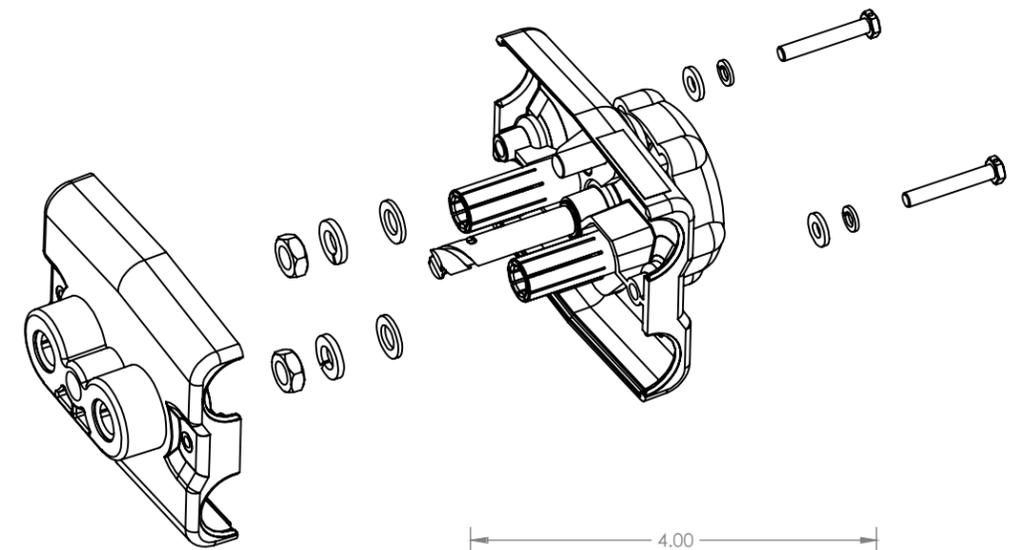
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##### Assembly Instructions

- ▶ Recommended Torque on 5/16" Electrical Connection Nuts
- ▶ Recommended Torque on 10-32 Backshell Bolts

100 to 140 in-lbs

15 to 20 in-lbs



#### ORDERING INFORMATION

##### CONNECTOR

- ▶ 7007 (MS2182-2) Plug, 4 Wire, Round Handle, Black

##### ACCESSORIES

- ▶ 653A1659-0 Grommet (black rubber), accepts cable OD = .000 (solid plug)
- ▶ 653A1659-10 Grommet (black rubber), accepts cable OD = .625
- ▶ 653A1659-11 Grommet (black rubber), accepts cable OD = .688
- ▶ 653A1659-7 Grommet (black rubber), accepts cable OD = .438
- ▶ 653A1659-8 Grommet (black rubber), accepts cable OD = .500
- ▶ 653A1659-9 Grommet (black rubber), accepts cable OD = .563