



**Aircraftplugs®**

Producer of ground power connectors



PRODUCER OF POWER BATTERY CONNECTORS AND RECEPTACLES

**Connect with confidence**  
**Disconnect in safety**

**Aircraftplugs®**

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Connect with Confidence, Disconnect in Safety with Aircraftplugs®

Aircraftplugs® manufactures aircraft and helicopter power connectors, Worldwide deliveries

Aircraftplugs advantages

- minimum structure for maximum efficiency
- strategic locations around the world and fast distribution
- hi-tech production equipment
- orders tailored to the customer's needs
- competitive prices
- expansive international reputation and no-nonsense style
- Every delivery comes with the technical data sheets and certificates
- Performance and dimensions to Mil spec, ISO, and appropriate MOD (Air) and NSN Standards



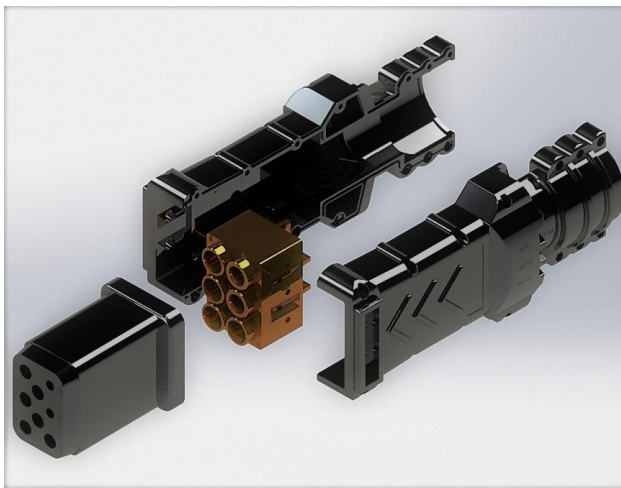
Your green, reliable partner in Aviation Connectors

 Aircraftplugs®



## ABOUT US

- Aircraftplugs, develops, tests and manufactures battery connectors, DC and AC 400 Hz. connectors and assemblies for the aeronautical industries. (Airports, Handling companies, Airlines and private users.)
- Deliveries throughout Europe and the rest of the world are prompt and right on time.
- Aircraftplugs is a Belgium based company established in 1997 and started with the mass production in 2007. We managed to increase business together with the expansion of the production facilities, warehouses and up-to-date testing facilities in a short period of time.
- We stand for top quality products, client first service and worldwide on-time deliveries.
- With over 25 years of experience in the airline industry.
- We do have a 6000 m<sup>2</sup> productions site, with state of the art CNC machinery and own testing facilities. Own molding and injection machines.
- More than 10.000 connectors in stock at all times.





- Aircraftplugs, develops, tests and manufactures battery connectors and covers.
- World largest producer of 400 hz connector and battery connectord.
- More than 1.000.000 items in stock.



## CERTIFIED

- Aircraftplugs, is the only manufacturer in the world certified to produce high current DC connectors for general aviation, commercial aviation, military and aerospace.
- Aircraftplugs's technology, quality and reliability can be summed up in one statement: "Connect in confidence, disconnect in safety."



Aircraftplugs has over 10 years of experience in producing battery connectors and receptacles, including battery vents and tubes.

To facilitate installation and removal of the battery in some aircraft, a quick disconnect assembly is used to connect the power leads to the battery. This assembly, attaches the battery leads in the aircraft to a receptacle mounted on the side of the battery. The receptacle covers the battery terminal posts and prevents accidental shorting during the installation and removal of the battery. The plug consists of a socket and a handwheel with a coarse pitch thread. It can be readily connected to the receptacle by the handwheel. Another advantage of this assembly is that the plug can be installed in only one position, eliminating the possibility of reversing the battery leads.

We Produce different types of receptacles with different cables attachments .

### MS3509 Style 1



- Mil-Spec qualified to MIL-PRF-18148/3 (MS3509). Military connector #'s include: MS3509-28, MS3509-28-1, MS3509-29, MS3509-29-1, MS3509-20, MS3509-30, MS3509-31, MS3509-32.
- Aircraftplugs battery receptacles maintain a low contact resistance, even when used in certain applications requiring 750 amps of continuous current, with peak current reaching 1500+ amps.

### MS3509 Style 2



- Mil-Spec qualified to MIL-PRF-18148/3 (MS3509). Military connector #'s include: MS3509-28, MS3509-28-1, MS3509-29, MS3509-29-1, MS3509-20, MS3509-30, MS3509-31, MS3509-32.
- Aircraftplugs battery receptacles maintain a low contact resistance, even when used in certain applications requiring 750 amps of continuous current, with peak current reaching 1500+ amps.

### BATTERY SWAP CONNECTOR



- Mil-Spec qualified to MIL-PRF-18148/3 (MS3509). Military connector #'s include: MS3509-28, MS3509-28-1, MS3509-29, MS3509-29-1, MS3509-20, MS3509-30, MS3509-31, MS3509-32.
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### MS3509 AVIONIC/MIL RECEPTACLES, NON-KEYABLE



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**MS3509 Style 1**

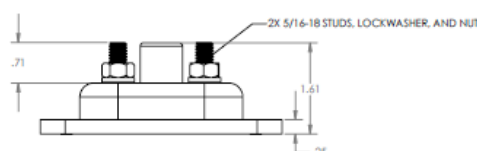
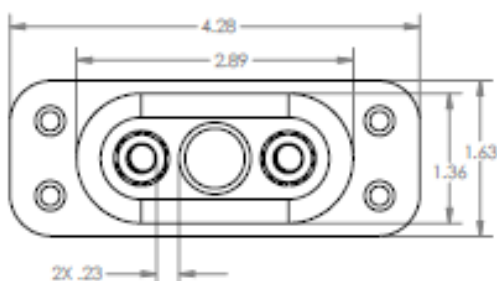

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**Mechanical properties**

- Made with precision out of High temperature nylon
- Locking possible.
- Maximum Wire Size 4/0
- Environmental Sealing IP68 (pin connector) & IP55 (socket connector)
- Operating Temperature -40° C to +125° C
- Flammability Rating UL94 V-0
- Mates with all MS battery connectors.
- 99% pure red copper contacts.
- 5 micron or more durable silver plating.

**Electrical properties**

- Mil-Spec qualified to MIL-PRF-18148/3 (MS3509). Military connector #'s include: MS3509-28, MS3509-28-1, MS3509-29, MS3509-29-1, MS3509-20, MS3509-30, MS3509-31, MS3509-32.
- Aircraftplugs battery receptacles maintain a low contact resistance, even when used in certain applications requiring 750 amps of continuous current, with peak current reaching 3000+ amps. Rated voltage 1000 Volts

**Dimensions**


## Battery connector receptacle MS3509

### MS3509 Style 1



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### PART NUMBERS

PLUG PART	Description
ACP-MS3509-1	MS3509-30 - Receptacle, Style 1, Threaded Post, Pink
ACP-MS3509-2	MS3509 Receptacle, Style 1, Threaded Post, Green
ACP-MS3509-3	MS3509 Receptacle, Style 1, Threaded Post, Blue
ACP-MS3509-4	MS3509 Receptacle, Style 1, Threaded Post, Black
ACP-MS3509-5	MS3509-20 Receptacle, Style 1, Threaded Post, with Gasket, Pink
ACP-MS3509-6	MS3509-28-1 Receptacle, Style 1, Hollow Post, Blue
ACP-MS3509-7	Backshell for rear of receptacle, Style 1, 3/0 or Smaller Cable
ACP-MS3509-8	Backshell for rear of receptacle, Style 1, 4/0 Cable



## Battery connector receptacles MS3509

### MS3509 Style 1

- Check our quality. More than 5 micron silver plated contacts.



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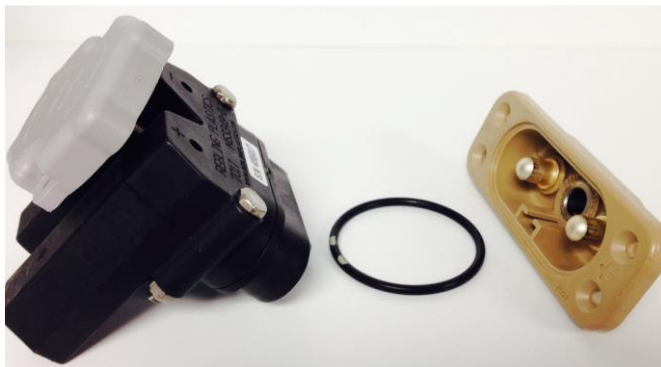
## Battery connector receptacles MS3509

### MS3509 Style 1

- With back shell and dustcover



- With sealing "O" Ring, for a more environmental seal



## Battery connector receptacles MS3509

### MS3509 Style 1



MS3509 Style 2



- Mil-Spec qualified to MIL-PRF-18148/3 (MS3509). Military connector #'s include: MS3509-28, MS3509-28-1, MS3509-29, MS3509-29-1, MS3509-20, MS3509-30, MS3509-31, MS3509-32.
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Mechanical properties

- Made with precision out of High temperature nylon
- Locking possible.
- Own color scheme and logo possible (minimum quantity required).
- Standard color black.
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- Rated voltage 1000 Volt.

PARTNUMBERS

PLUG PART	Description
ACP-MS3509-style2-1	MS3509-29-1 Receptacle, Style 2, Hollow Post, with Two Drive Pins, Blue
ACP-MS3509-style2-2	Receptacle, Style 2, Threaded Post, Blue
ACP-MS3509-style2-3	Receptacle, Style 2, Threaded Post, Black

## MS3509



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## PARTNUMBERS




**GENERAL**

- Meets MS 25182-2
- 750 Amps cont. 1500 A for 1 minute.
- 5000 engagements
- It is designed to operate at temperature extremes of -65F to +160F.
- Different config :
  - Extended Handle
  - Extended Terminal Length
  - Low Profile w/ Stainless Steel Handle

**PARTNUMBERS**

PLUG PART	Configuration
MS 25182-2 – ACP1	Extended Handle
MS 25182-2 – ACP2	Extended Terminal Length
MS 25182-2 – ACP3	Low Profile w/ Stainless Steel Handle

## Battery connector - Receptacle



### GENERAL

- 4, wire , high impact resistance battery connector
- Silver plated contacts.
- Special cable sizes and configurations on request.

### PROPERTIES

### PARTNUMBERS

PLUG PART	Configuration
MS3349-2-STD	MS3349-2 Plug, 2 Wire, Tee Handle, Standard Backshell, Black
MS3349-2-ROUND	MS3349-2 Plug, 2 Wire, Round Handle, Standard Backshell, Black



## GENERAL

- Nominal operating voltage: 12V/24V
- Max. continuous operating current: 100A
- Max. peak current: 500A for 5secs
- Ingress Protection (IP) rating: IP43 (solid objects >1mm and spraying water)
- Operating temp: -40°C to +50°C
- Terminal contact material: Copper
- Nut material: Zinc-plated steel
- Terminal stud size: M8 x 13mm
- Panel hole size for barrel clearance: 23mm
- Fixing hole dia: 6.6mm
- Fixing hole pitch: 38mm
- Overall height (inc. key): 106mm
- Diameter of body: 58mm
- Optional with locking key.

## PARTNUMBERS

PLUG PART	Description
ACPBSC-1	Battery main switch – removable key
ACPBSC-2	Battery main switch – non removable key
ACPBSC-3	Battery main switch – with lock


**GENERAL**

- Aircraftplugs connectors are genderless - two identical connectors are mated by turning one of them through 180 degrees and pushing them together. There are no male or female contacts. The high power contacts must be connected to the cable and inserted in the housings in order to connect the two connectors. This is because flat wipe Aircraftplugs connector type contacts are held in place by a spring that is depressed by the insertion of a contact.

**PARTNUMBERS**

PLUG PART	Amperage	Description
ACPBPC-1	50 A	Grey – dual poles
ACPBPC-2	50 A	Red – dual poles
ACPBPC-3	175 A	Grey – dual poles
ACPBPC-4	175 A	Red – dual poles
ACPBPC-5	Handle	Red insert handle
ACPBPC-6	350 A	Grey – dual poles
ACPBPC-7	350 A	Red – dual poles
ACPBPC-8	600 A	Grey – dual poles
ACPBPC-9	600 A	Red – dual poles

Not all partnumbers / configurations are listed, check with [sales@aircraftplugs.com](mailto:sales@aircraftplugs.com) for specific requirements.


**GENERAL**

- Our compression lugs are manufactured from high-conductivity seamless copper tube to EN 12735 with a purity greater than 99.5% each product is designed to meet the requirements of BS4579 Part 3 when used with the appropriate die set/compression tool combination.
- For copper and aluminium cables

**PART NUMBER**

PART no	Cable section	Fixing bolt
ACPL-10	10 mm <sup>2</sup>	Available for M6/M8/M10
ACPL-16	16 mm <sup>2</sup>	Available for M6/M8/M10
ACPL-25	25 mm <sup>2</sup>	Available for M6/M8/M10/M12/M14
ACPL-36	36 mm <sup>2</sup>	Available for M6/M8/M10/M12/M14
ACPL-50	50 mm <sup>2</sup>	Available for M6/M8/M10/M12/M14
ACPL-70	70 mm <sup>2</sup>	Available for M6/M8/M10/M12/M14
ACPL-90	90 mm <sup>2</sup>	Available for M6/M8/M10/M12/M14
ACPL-120	120 mm <sup>2</sup>	Available for M6/M8/M10/M12/M14



- Battery drain / vent tubes.
- When a battery is charged and discharged, water contained in the electrolyte is decomposed, generating hydrogen and oxygen gases. These gases are vented out of the battery through the exhaust vent tube to prevent potentially damaging high pressure gas accumulation.

Part no.	Section diameter (outer / inner diameter)
ACPVENT1	7 : 5 mm
ACPVENT2	8 : 6 mm
ACPVENT3	11 : 8 mm



# Aircraftplugs®

Distributed by



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