

# Anderson Airmotive

Your Power Connection

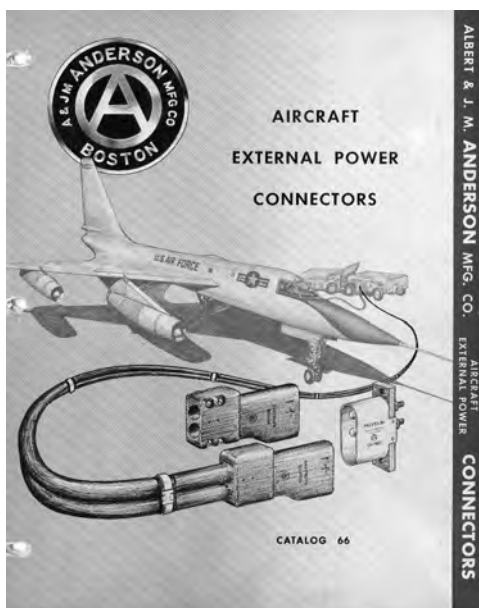
Ground Power &  
Battery Connectors  
for Aircraft



# THE ANDERSON FAMILY LEGACY



*The name Anderson is known as an innovative leader in the Ground Power industry with over 60 years of experience in product design and manufacturing.*



*One of the first industry catalogues for Aircraft External Ground Power Connectors about early 1950's.*

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# THE ANDERSON FAMILY NOW

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SAVE TIME AND MONEY WITH ANDERSON AIRMOTIVE – YOUR GREEN CHOICE.



Anderson Airmotive continues the tradition of design and manufacturing excellence by producing and offering the largest selection of qualified plugs, cable assemblies and receptacles covering all commercial and military requirements for 28VDC, 270VDC, 80VDC, 200VAC, and 400VAC.

Our family of Attachable® plugs are designed to be simple to assemble in the field, durable and cost effective with many options for safety and protection.

Our family of rugged receptacles offers you a choice of male or female design.

Our family of power cables is unequalled in the industry. Anderson Airmotive is the only company to offer you a choice of: (1) making/repairing your own ground power cables with our family of high quality and durable Attachable® plugs, or (2) buying a wide variety of new cable assemblies with either Attachable® or Overmolded heads, from the factory.

The “Green” contribution: With the earth’s resources being consumed at ever increasing rates, it makes more sense than ever to repair your own ground power cable assemblies, in the field, with our service proven Attachable® plugs. This simple operation will not only keep your ground service running, but will eliminate costs associated with packaging, shipping and waste removal. When you choose Anderson, you choose responsibility to the planet, as well.

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# **The Attachable® FAMILY OF PRODUCTS**

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## **THE ANDERSON AIRMOTIVE ADVANTAGE**

ANDERSON AIRMOTIVE is the only manufacturer with a complete line of QPL'd (MIL-C-7974D) Attachable® Plugs, as well as over molded AC and DC power connectors and cable assemblies. The connectors and assemblies have passed the stringent US and Canadian QPL tests. In addition Anderson is approved to German Standard VG 85211 and meets ISO461-1 and ISO461-2.

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### **THE ATTACHABLE® PLUG FAMILY INCLUDES:**

#### **THE GRABBER CONTACT® PLUG / Portable Receptacle**

The "standard" for over 10 years. The service proven Grabber Contact Attachable® plug has **watertight**, (IP068) molded-in contacts that are finger proof (UL1977) (EN1175) (VL1950) with extra safety insulation. The plug has been designed to assure consistent contact even on worn pins and under heavy loads commonly encountered on the ramp. Listed on QPL for AS7974D  
Now available with EcoNose, Temperature Sensing and Euro Contact.

Order R67GxxE(F), (EN)(T) AC Plug  
R65GxxE DC Plug  
R112GxxE(F), (EN)(T) Portable Receptacle  
R68GxxE(F), (EN)(T) DC Portable Receptacle  
R64 GxxE(F), (EN)(T) DC Plug  
R71G xxE(F), (EN)(T) DC Plug  
R72G xxE(F), (EN)(T) DC Plug  
R78GxxE(F), (EN)(T) DC Portable Receptacle

**THE ATTACHABLE POWER NOSE® PLUG-RUBBER** The Attachable Power Nose® (APN) is designed to be the **quickest assembly** and **lowest overall service** cost in the industry. The modular construction allows easy replacement of worn components (contacts, nose, back end) for extended service life and quick repair. The body and nose are molded from Anderson's highly abrasion resistant proprietary synthetic elastomer. Available with EcoNose, Temperature Sensing and Euro Contacts.

Order R90Gxx(E)(F)(G)(W)(EN)(T) AC Plug  
R93Gxx(E)(F)(G)(W)(EN)(T) DC Plug

#### **THE ATTACHABLE POWER NOSE® WITH SWITCHES, LEDs - Ionomer Plastic**

The newest Attachable Power Nose® (APN) for Composite or single conductors has integral O-ring seals that eliminate the need for potting. The super tough clam shells have high impact strength and great wear resistance. Waterproof switches; LEDs, EcoNose, Microswitch Sensing, Single Piece Contact and Euro Contact are available.

Order R91Gxx(E)(F)(G)(Y)(Z)(W)(EN)(T) AC Plug  
R92Gxx(E)(F)(G)(Y)(Z)(W)(EN)(T) DC Plug

#### **THE 4 OR 6 WIRE DC PLUGS**

These plugs are designed to accommodate two wires per leg with optional sensing leads and switches. The plugs allow extra long cable assemblies at high current without excess voltage drop. Optional crimp lugs make assembly easier.

Order R765GxxE(w)(v) Plug  
R771GxxE(w)(v) (EN) Plug  
R768GxxE (w)(v) Portable Receptacle  
R778GxxE (w)(v) Portable Receptacle

#### **THE REPLACEABLE CONTACT PLUG**

The original Attachable® with **replaceable** contacts (power only) has been in service for twenty five plus years. Worn power contacts can be replaced on AC plug.

Order R67GxxB AC Plug  
R65GxxB DC Plug

#### **270 DC PLUG**

Plugs and cable assemblies are designed for 270V DC applications in Attachable® and Overmolded versions with replaceable Wear Nose®. Also used in Fast Charge applications.

Order R270GxxE

#### **80V FAST CHARGE: B1B 230/400V AC**

Plugs are designed for 80V DC 150A fast charge application. B1B Military Plug profile for for 230/400V 400A application.

Order R80GxxE  
R69GxxE  
R129GxxE

Plugs are available with sensing leads or switches that allow power-up only when 80-90% engaged. All of our connectors are made from high quality, proprietary synthetic elastomer rubber, that is specially formulated for excellent chemical and abrasion resistance. Each connector has heavy silver plated tellurium copper contacts with quad beams and engineered steel springs that assure consistent contact for thousands of cycles.

xx denotes cable size/configuration    ®Attachable is a registered trademark of Anderson Airmotive Products Co., Inc.

(F) Euro Contact    (G) Single Piece Contact    W-denotes sensing options    Z-LED options    Y-switch options    V-lug options    EN-EcoNose    T-Temperature Sensing

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## ***PLUG and Cable Assembly QPL Tests***

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**QUALIFICATION TESTS TO MIL-C-7974D for Ground Power Plugs and Cable Assemblies; 400 Hz AC, 28V DC. The Military uses the QPL listings as another control measure to ensure consistency, quality and performance to specifications.**

### ***A, B. Dimensions and Examination of product***

Measure all dimensions as per print for MS25486 AC; MS 25488 DC

### ***C. Structural Integrity***

Remove 1/8 inch of plug nose sides and perform all tests. This test checks performance of plug after considerable wear as in actual use.

### ***D. Initial Mating forces***

Measure mating forces with 2 sets of receptacles (MS90362); one set +.001 from nominal; one set -.001 from nominal. Insertion must be less than 100 lbs and extraction force of 60-100 lbs for AC; insertion 50 lbs and extraction of 30-50 lbs for DC. Force measured at 8 inches per minute.

### ***E. Mating forces after fluid immersion***

One sample is immersed in hydraulic oil and one sample is immersed in jet fuel for 20 hours. Mating forces must meet values as in C. No dimensional changes shall be evident.

### ***F. Force measurement for individual contacts***

Individual power contacts shall measure 24 lbs maximum insertion (A,B,C,N), extraction 16-24 lbs.; auxiliary contacts shall measure 2-4 lbs max. (E,F).

### ***G. Impact after low temperature exposure***

Plugs shall be cooled to -55°C for 24 hours. An impact force of 20 ftlbs shall be applied to each side 3 times. No damage is allowed.

### ***H. Mating at low temperature***

Plugs shall be cooled to -55°C for 24 hours and then engaging as in D. The values shall not exceed 150% of nominal values.

### ***I. Life flexing***

A plug is mated with a standard receptacle 1/4 inch from full mating. The assembly is then flexed with 20lbs force in a reciprocating mechanism for 10,000 cycles at 10 cycles per minute. The plug shall pass all tests.

### ***J. Dielectric strength after humidity exposure***

Plugs shall be maintained in a humidity chamber cycled 10 times as per MIL-STD-202. All samples must pass a test potential of 2000VDC with current leakage of less than 1.0 milliamperes.

### ***K. Voltage drop following salt spray***

Plugs shall be subjected to a 5% salt spray test for 48 hours as per MIL-STD-202. The maximum voltage drop at 300 Amps shall be 45 millivolts after 5 minutes.

### ***L. Mating forces after current overload***

Plugs shall be tested with a current overload of 700 Amps for 2/0 (70mm) and 1000 Amps for 4/0 (120mm) for 3 minutes. There shall be no shorting, loss of continuity, burning, rupture or other damage preventing completion of test.

### ***M. Cable attachment to plug***

A cable assembly shall be tested with a pull force on each conductor of 100 lbs. No damage shall result from this test.

### ***N. Cable attachment to lug terminals***

Items shall be tested in a tensile tester where each 70 mm conductor shall have a tensile strength of at least 750 lbs pull out force.

### ***O. Plug static strength***

Plugs are mounted on a flat surface and a force 1000 lbs is applied. No damage shall result and plugs shall pass all tests.

### ***P. Plug bending strength***

Plugs are mated with a receptacle and mounted horizontally with a weight of 64 pounds suspended at the midpoint of the plug for 5 minutes on each side of the plug. For DC plugs the weight is reduced to 32 lbs. The plug shall pass insertion, extraction after this test and show no damage.

### ***Q. Band tensile strength***

A cable assembly shall be heated to 71°C for 6 hours then a force of 300 lbs shall be applied to pull apart the cable bands. There shall be no tearing of bands and shifting of more than 1 inch.

### ***R. Misengagement***

The plug is rotated 180° and a mating force of 150 lbs is applied. No electrical contact shall occur with the auxiliary contacts.

### ***S. Abrasion resistance***

The plug body material shall have an abrasion resistance of at least 75% of the standard reference compound per ASTM D1630-83.

### ***T. Cable attachment to crimp barrel***

As per test M, N

### ***U. Ozone resistance***

A plug is heat aged at 70°C for 70 hours and then at ambient for four days. The plug shall then be ozone tested as per ASTM D1149 at 38°C for 168 hours at 50 parts ozone per hundred million parts air. No cracks shall be visible under seven power magnification after test.

# BASIC PLUG ASSEMBLY PROCEDURE

## GUIDE TO MILITARY PLUG STANDARDS

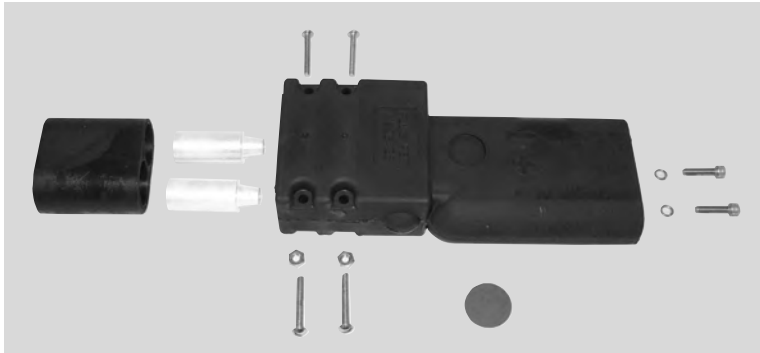


### Repair Ground Power Cable Assemblies . . . Or Make New Ones.

A full line of ATTACHABLE® Plugs, Receptacles and accessories now available from ANDERSON makes it possible for you to have an adequate supply of cable assemblies on hand at all times.

- Reduces inventory cost and space problems.
- Keeps all ground power units operational without prolonged tie-ups waiting for new cable assemblies
- More positive, longer lasting connections.
- No messy rubber potting or vulcanizing.
- Qualified and approved for use under all appropriate military specifications for both replacement plug and new cable assemblies.
- Environmentally friendly

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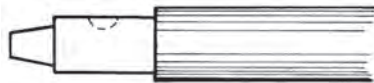
R65 WITH COMPONENTS

### Assembly Procedure Illustrated



#### STEP 1

Prepare cables in accordance with Instruction Card included with each unit packaging.



#### STEP 2

Crimp or solder lugs to cables\*\*



#### STEP 3

Assemble cables to plug.



#### STEP 4

Secure plug to cable jackets.

### Guide to Military Standards for Attachable or Overmolded Cable Assemblies

ANDERSON CATALOG NUMBER	MS NUMBER ATTACHABLE PLUG	FOR CABLE ASSEMBLY MS NUMBER	FORMER CABLE ASSEMBLY NUMBER
R65G1E	MS25488-25	AS(MS)90347-7, -8, -9, -10, -11, -12	MS25488-6, -7, -8, -9, -10, -11
R65G2E	MS25488-26	AS(MS)90347-13, -14, -15, -16, -17, -18	MS25488-12, -13, -14, -15, -16, -17
R65G3E	MS25488-27	AS(MS)90347-19, -20, -21, -22, -23, -24	MS25488-18, -19, -20, -21, -22, -23
*R65G7E	—	AS(MS)24121-1	MS24121-1
R67G4E	MS25486-16	AS(MS)90328-13, -14, -15, -16, -17, -18	MS25486-4, -5, -6, -7, -8, -9
R67G5E	MS25486-30	AS(MS)90328-25, -26, -27, -28, -29, -30	MS25486-18, -19, -20, -21, -22, -23
*R67G12E	—	AS(MS)24208-1	MS24208-1
R67G21E	MS25486-17	AS(MS)90328-19, -20, -21, -22, -23, -24	MS25486-10, -11, -12, -13, -14, -15
R67G36E	MS25486-31	AS(MS)90328-31, -32, -33, -34, -35, -36	MS25486-24, -25, -26, -27, -28, -29
R68GxxE	—	(Mating Unit for CAT. R65)	(Mating Unit for CAT. R65)
R71G6E	MS25487-10	AS(MS)25019-20, -30, -40, -60, -80, -100	MS25487-3, -4, -5, -6, -7, -8
R112GxxE	—	(Mating Unit for CAT. R67)	(Mating Unit for CAT. R67)

\*2 Heads Required for Cable Assembly.

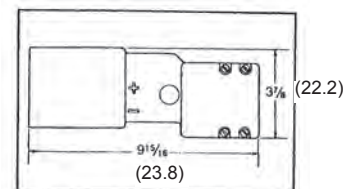
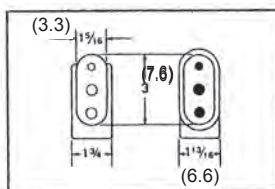
\*\*Recommended crimp tool is the Anderson Electric VC-7 crimp tool.  
Consult factory for further information.



## A black, rectangular, plug-and-play device. The top surface features a circular button and a white '+' symbol. The side of the device is labeled 'PLUG PER' and 'MS26-489'. The device has a multi-pin connector on one end.

A black, cylindrical, high-pressure plug with a white '+' symbol and a label 'PLUG PIER MS25488'. The plug has a large, circular opening at one end and a smaller, circular opening at the other. The label is located on the side of the plug.

Technical drawing of a mechanical part. The drawing shows a side view of a component with a total width of 20 units and a height of 9.2 units. The component has a rectangular base with a circular feature on the right side. The height of the base is 3 1/8 units. The total width is 20 units. The drawing includes dimension lines and labels for the height and width.



soldered to cables. The R65 and R68 series are manufactured to MS25488 specifications and are listed on Qualified Product List (QPL) for MIL-C-7974D. Portable receptacles are particularly useful where a portable connection is required or for extending existing cables.

### 3-Pole DC 28V Attachable® Plugs-2 wire

COMPLETE PLUG NO.	MILITARY PART NO.	BODY ONLY PART NO	CABLE ACCOMMODATION	GROMMET KIT NO.	PORT RECEPTACLE PART NO.	Schematic
R65G1E	MS25488-25	110368G2E	2-1/0(50mm) MIL-C-5756C Single Conductor	112080G1	R68G1E	
R65G2E	MS25488-26	110368G2E	2-2/0(70mm) MIL-C-5756C Single Conductor	112080G2	R68G2E	
R65G3E	MS25488-27	110368G2E	2-4/0(120mm) MIL-C-5756C Single Conductor	112080G3	R68G3E	
R65G6E		110368G2E	2-4/0(120mm) Oval Twin Conductor	112080G6	R68G6E	
R65G8E		110368G2E	2-1/0(35mm) Welding Single Conductor	112080G8	R68G8E	
R65G10E		110368G2E	2-4/0(120mm) Welding Single Conductor	112080G10	R68G10E	
R65G20E		110368G2E	2-2/0(70mm) Welding Single Conductor	112080G20	R68G20E	
R65G25E		110368G2E	2-3/0 (90mm) welding Single Conductor	112080G25	R68G25E	
R65G43E		110368G2E	#8/2 (8mm) welding Single Jacket	112080G43	R68G43E	

R65Gxx(E)(F)(EN)    xx-model number    (F) Euro Contact  
(E) Standard Contact    (EN) EcoNose

# DC PLUGS ATTACHABLE® 3-POLE

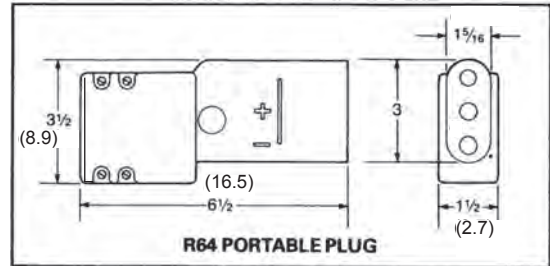


## Attachable® Portable Plugs and Receptacles, R64 and R71 Series

The R64 Series are manufactured with MS25488 components but have a more compact design for smaller wires.



R64 PORTABLE PLUG



### ORDERING INFORMATION

Catalog No. Portable Plug	Cable Accommodation	Schematic
R64G3E	Two #1/0 (50mm) Welding Cable Single Conductor	
R64G10E	Two #1/0 (50mm) Welding Single Conductors	
R64G12E	Two #16 (1.5mm) Welding Cable Single Conductors	

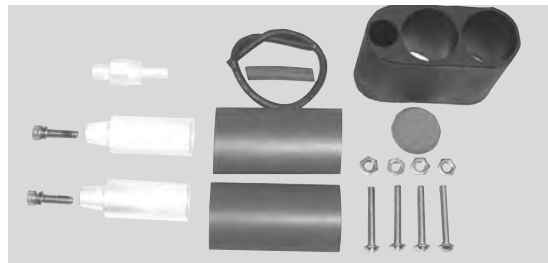
## 3-Pole DC 28V Attachable® Plugs-3 wire; Rect/Oval Nose; Split Control Sensing®

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The 71 Series are manufactured to MS25487 specifications.



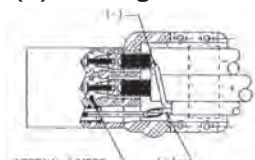
R71 PORTABLE PLUG  
(R) Rectangular Nose



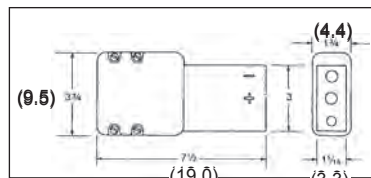
DC GROMMET KIT FOR R71



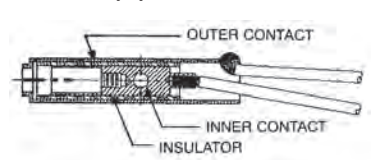
R71 PORTABLE PLUG  
(O) Oval Nose



SENSING LEAD SCHEMATIC R72



R71 PORTABLE PLUG "R"



SENSING LEAD 2 WIRE

Complete Plug No.	Nose R-Rect O-Oval	Military Part No.	Body Only Part No.	Cable Accommodation	Portable Recept.#	Grommet Kit No.	Split Control	Sensing	Schematic
R71G3E	R		110371G1E	2-4/0 (120mm) TWIN OVAL; #8/1(8mm) Aux.	R78	112085G3	NO	-	
R71G4E	R		113071G1E	2-4/0 (120mm) TWIN OVAL; #10/1(5mm) Aux.	R78	112085G4	NO	+	
R71G5E	O		113071G2E	2-4/0 (120mm) Mil-C-5756C; #12/2 (1x3mm) Aux.	R78	112085G5	NO	-	
R71G6E	R	MS25487-10	113071G1E	2-4/0 (120mm) Mil-C-5756C Single Conductor; #8/1 (8mm) Aux.	R78	112085G6	NO	+	
R71G9E	O		113071G2E	2-2/0 (70mm) Welding Single Conductor, #12/2 (1x3mm) Aux.	R78	112085G9	NO	-	
R71G11E	O		113071G2E	2-2/0 (70mm) Welding Single Conductor, #12/2 (2x3mm) Aux.	R78	112085G11	NO	+	
R71G15E	R		113071G1E	2-2/0 (70mm) Mil-C-5756C Single Conductor; #8/1 (8mm) Aux.	R78	112085G15	NO	-	
R72G5E or R71G5E1S	O		113072G2E	2-4/0 (120mm) Mil-C-5756C Single Conductor; #8/1 (8mm) Aux. with split control sensing lead (1 wire)	N/A	112085G5	YES	+	
R71G5E2S	O		113072G2E	2-4/0 (120mm) Mil-C-5756C Single Conductor; #8/1 (8mm) Aux. with split control sensing lead (2 wire)	N/A	112085G5	YES	+	

Other models available for different cable sizes, configurations and options

R71Gxx(E)(F)(EN) xx-model number (F) Euro Contact  
(E) Standard Contact (EN) EcoNose



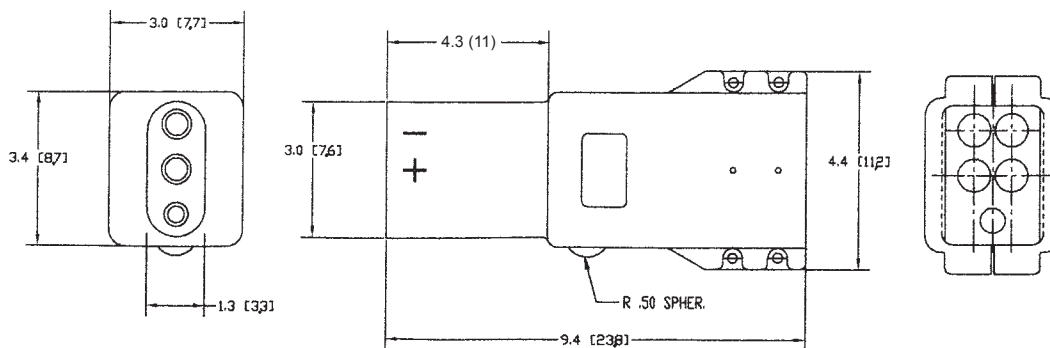
# DC PLUGS ATTACHABLE® 3-POLE



**Attachable® Portable Plugs and Receptacles, 3 Pole, 4, 5, 6 wire. R765 and R771 Series 28 VDC**



**With Eco-Nose**



Electrical Ratings: 30°C rise Power Components, 450A Continuous 1500A for 1 minute, Control Components, 35A continuous

## 3-Pole DC 28V Attachable® Plugs-4,5,6 wire; Split Control Sensing

Complete Plug No.	Configuration	Body Only Part no.	Cable Accommodation	Grommet Kit No.	Split Control	Portable Receptacle	Schematic
R765G1E (F)(V)(EA)	4-wire	110381G2E	4-1/0 (50mm) Mil-C-5756C Single Conductors	112086G1	NO	R768G1E	
R765G2E (V)	4-wire	110381G2E	4-2/0 (70mm) Mil-C-5756C Single Conductors	112086G2	NO	R768G2E	
R765G3E (V)	4-wire	110381G2E	4-4/0 (120mm) Mil-C-5756C Single Conductors	112086G3	NO	R768G3E	
R771G1E (V)	5-wire	110382G2E	4-1/0 (50mm) Mil-C-5756C Single Conductors; #8(8mm)/1 Aux.	112087G1	NO	R778G1E	
R771G2E (V)	5-wire	110382G2E	4-2/0 (70mm) Mil-C-5756C Single Conductors; #8(8mm)/1 Aux.	112087G2	NO	R778G2E	
R771G3E (V)	5-wire	110382G2E	4-4/0 (120mm) Mil-C-5756C Single Conductors; #8(8mm)/1 Aux.	112087G3	NO	R778G3E	
R771G30E (V)	5-wire	110382G2E	4-70mm Single Conductors; #12/2(2x3mm) Aux.	112087G30	NO	R778G30E	
R771G1E(W)(V)	6-wire	110383G2E	4-1/0 (50mm) Mil-C-5756C Single Conductors; #16/2 (2x1.3mm) Sensing Aux.	112087G1	YES		
R771G2E(W)(V)	6-wire	110383G2E	4-2/0 (70mm) Single Conductors; #16/2 (2x1.3mm) Sensing	112087G2	YES		

### Other Models available for different cable sizes and configurations

W= sensing options      V= lug options      E- Standard Contact  
 1S= one wire split control      1= solder lugs      F- Euro Contact  
 2S= two wire split control      2= crimp lugs      En-EcoNose  
 SW= sensing split converse  
 SWB= sensing switch and auxiliary

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# AC PLUG ATTACHABLE® 6-POLE

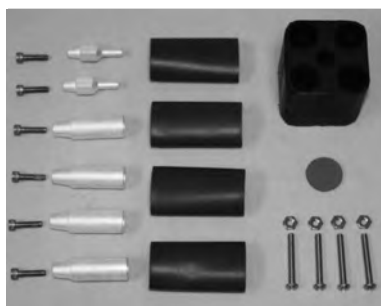
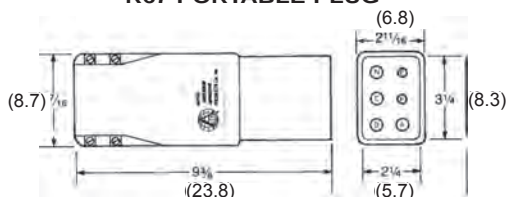


**AC 115/200 VOLTS 400 Hz**

**Attachable® Portable Plugs and Receptacles, 6 Pole, R67 and R112 Series**



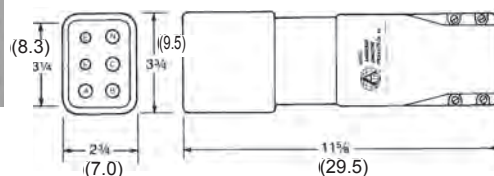
**R67 PORTABLE PLUG**



**R67 GROMMET "G" KIT**



**R112 PORTABLE RECEPTACLE**



The ATTACHABLE® Portable Plugs and Receptacles are molded of Anderson Synthetic Elastomer\*, a proprietary compound specially selected for its resistance to moisture and chemicals as well as its ability to stand up under severe wear and tear. Power contacts are silver-plated over machined copper to reduce contact resistance. Contact lugs may be either crimped or soldered to cables. The ATTACHABLE® Plugs and Receptacles are manufactured to MS25486 specifications and are listed on Qualified Product List (QPL) for MIL-C-7974. (AS 7974)

The R67 series plugs mate with either the R112 series of Portable Receptacles or with the fixed receptacles. Portable Receptacles are particularly useful where a portable connection is required or for extending existing cable assemblies.

Six-pole ATTACHABLE Portable Plugs and Receptacles may be furnished in many combinations of power and control contacts, cable sizes and internal wiring arrangements.

Electrical Ratings: 30°C rise Power Components, 450A Continuous 1500A for 1 minute, Control Components, 35A continuous

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## 6-Pole AC 115/200V 400Hz Attachable® Plugs

Complete Plug No.	Military Part No.	Body Only Part no.	Grommet Kit No.	Cable Accommodation	Portable Receptacle Part No.
R67G4E	MS25486-16	110369G4E	112081G4	4-1/0 (50mm) Mil-C-5756C Single Conductor	R112G4E
R67G5E	MS25486-30	110369G4E	112081G5	4-1/0 (50mm) Mil-C-5756C Single Conductor; 12/2 (2x3mm)Aux.	R112G5E
R67G7E		110369G4E	112081G7	4-2/0 (70mm) Welding Single Conductor	R112G7E
R67G12E		110369G4E	112081G12	4-#4 (20mm) Welding Single Conductor; 12/2 (2x3mm)Aux.	R112G12E
R67G16E		110369G4E	112081G16	4-#6 (13mm) Welding Single Conductor; 12/2 (2x3mm)Aux.	R112G16E
R67G18E		110382G4E	112081G18	4-#2 (34mm) Welding Multiconductor	R112G18E
R67G20E		110369G4E	112081G20	4-2/0 (70mm) Welding Single Conductor; 12/2 (2x3mm)Aux.	R112G20E
R67G21E	MS25486-17	110369G4E	112081G21	4-2/0 (70mm) Mil-C-5756C Single Conductor	R112G21E
R67G26E		110369G4E	112081G26	3-#3 (27mm) 1#5 (17mm) CVSF Multiconductor	R112G26E
R67G36E	MS25486-31	110369G4E	112081G36	4-2/0 (70mm) Mil-C-5756C Single Conductor; 12/2 (2x3mm)Aux.	R112G36E
R67G56E		110369G4E	112081G56	4-1/0 (50mm) Welding Single Conductor; 12/2 (2x3mm)Aux.	R112G56E
R67G82E		110369G4E	112081G82	4-1/0 (50mm) Single Conductor; (2x2.5mm) Aux.	R112G82E
R67G91E		110369G4E	112081G91	3-1/0 (50mm) 3-#6 (13mm) Command Multiconductor	R112G91E
R67G100E	Voltage Sensing	110369GE	112081G100	4-2/0 (70mm) : 12/5 (5x3mm) Aux.	R112G100E
R67G103E		110369G4E	112081G103	6-#4 (20mm) 1-1/0 (50mm) 6x1 Composite	R112G103E

Other models available for different cable sizes, configurations and options

R67Gxx(E)(F)(EN)(T) (XX) Model Number (T)-temperature sensing (F) Euro Contact  
(E) Standard Contact (EN) EcoNose

# AC PLUG ATTACHABLE® POWER NOSE 6-POLE DC PLUG ATTACHABLE® POWER NOSE 3-POLE

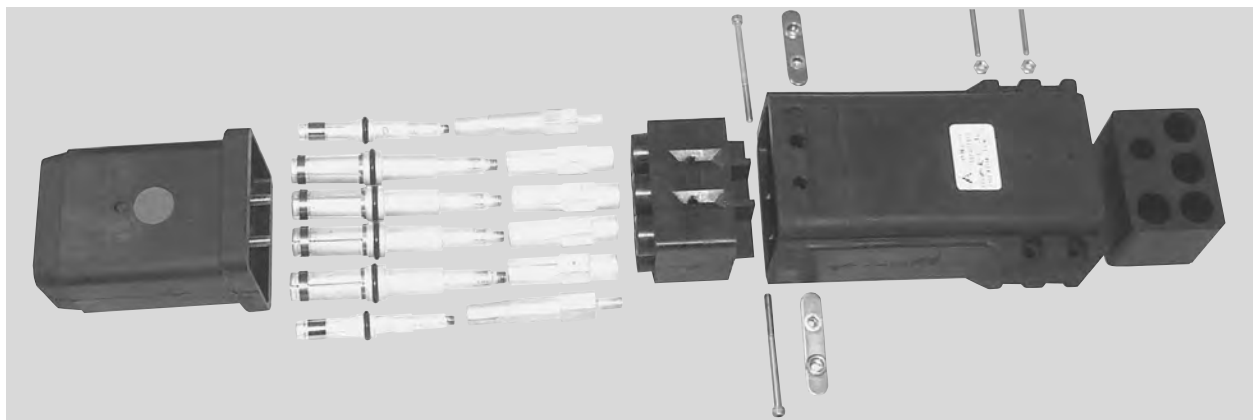


## Attachable Power Nose® (APN) R90: Rubber

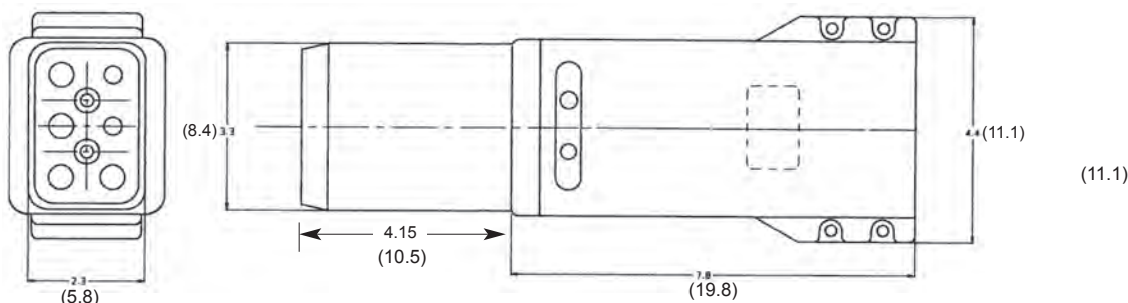
The Attachable® Power Nose is designed to be the quickest assembly and lowest overall service ground power connector. The modular construction allows easy replacement of worn components (contacts,

nose, back end) for extended service life and quick repair. The body and nose are molded from the proprietary synthetic elastomer known for its excellent abrasion resistance. Suitable for composite cables.

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Electrical Ratings: 30°C rise Power Components, 450A Continuous 1500A for 1 minute, Control Components, 35A continuous



## 6-Pole 115/200V 400Hz Attachable® Power Nose (APN) R90

Complete Plug No.	Replacement Nose only	Cable Accommodation	Replacement Lug Contact Kit
R90G5E	R90KIT 1	4-1/0 (50mm) MIL-C-5756C Single Conductors; #12/2 (2x3mm) Aux.	R90 Kit 2-1 1/0 Power
R90G36E	R90KIT 1	4-2/0 (70mm) MIL-C-5756C Single Conductors; #12/2 (2x3mm) Aux.	R90 Kit 2-2 2/0 Power
R90G101E	R90KIT 1	6 #4 (20mm), 1-1/0 (50mm) Multiconductor; 6X1 Single Jacket	R90 Kit 2-3 # 4 Power
R90G118E	R90KIT 1	4-70mm Single Conductors; #12/2 (2x3mm) Aux	R90 Kit 3 Aux
	R90KIT1SW	Replacement Nose with Microswitch	

## 3-Pole 28V DC Attachable® Power Nose (APN) R93

Complete Plug No.	Replacement Nose only	Cable Accommodation
R93G3E	R93KIT 1	2-4/0 (120mm) MIL-C-5756C Single Conductors
	R93KIT1SW	Replacement Nose with Microswitch
	R93KIT2	Replacement Power Contact



Replacement Lug Contact Kit
R93 Kit 5-1 1/0 Power
R93 Kit 5-2 2/0 Power
R93 Kit 5-3 4/0 Power
R93 Kit 2A-2 2/0 Power
R93 Kit 3A -Sensing Auxiliary

Other Models available for different cable sizes and configurations. Other kits available. Contact factory.

R90Gxx(E)(F)(G)(W)(EN)(T) (XX) Model Number (E) Standard Contact (G) Single Piece Contact (EN) EcoNose (F) Euro Contact (W) Sensing Options (page8) (T)-temperature sensing

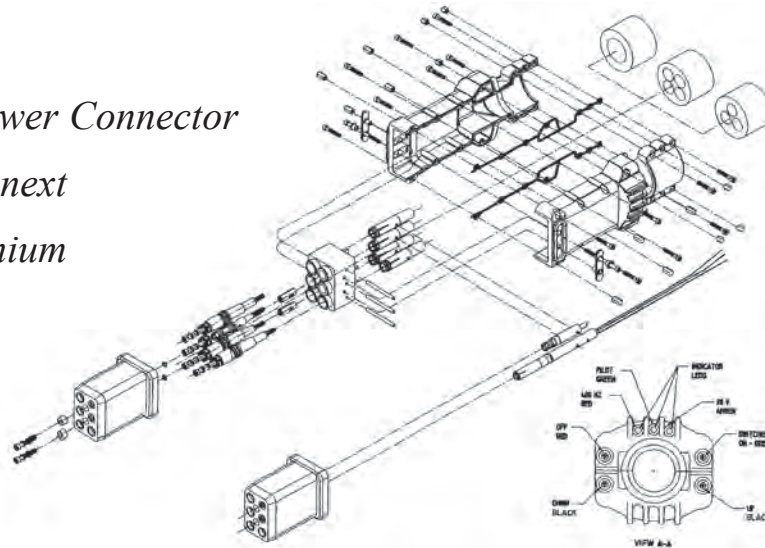


# AC PLUG ATTACHABLE POWER NOSE® APN 6-POLE DC APN 3-POLE with switches & LEDs

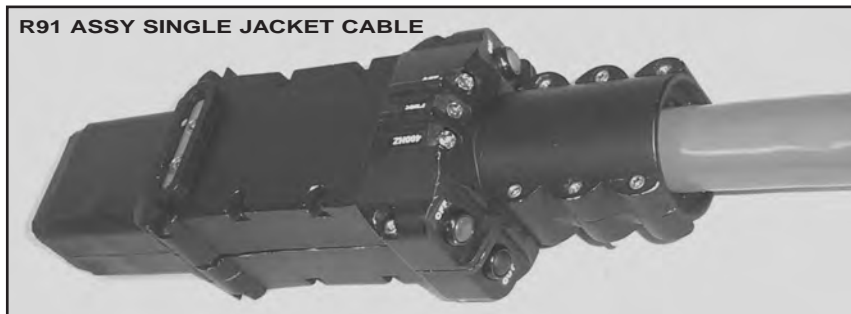


Super Tough Ionomer Plastic Clam Shell Design

*The Power Connector  
for the next  
Millennium*



Electrical Ratings: 30°C rise Power Components, 450A Continuous 1500A for 1 minute, Control Components, 35A continuous



R91 ASSY SINGLE JACKET CABLE



R91 CLAMSHELL  
3 CONDUCTOR

Quick, easy assembly of all components; Triple sealed against moisture intrusion

Modular Components can be replaced quickly at the ramp:

- High abrasion resistant special rubber nose
- Rugged service proven long life Grabber® Contacts
- On-off; in-out waterproof switches with Waterproof LED status indicators
- Waterproof sensing lead or microswitch available see page 32
- Super tough clam shell with stainless hardware

## 6-Pole 115/200V 400Hz Attachable® Power Nose (APN) R91

Complete Plug No.	Replacement Nose only	Cable Accommodation
R91G5E	R91KIT 1	4-1/0 (50mm) MIL-C-5756C Single Conductors; #12/2 (2x3mm) Aux.
R91G36E	R91KIT 1	4-2/0 (70mm) MIL-C-5756C Single conductors; #12/2 (2x3mm) Aux.
R91G103E	R91KIT 1	6 #4 (20mm), 1-1/0 (50mm) Multiconductor; 6X1 Single Jacket
R91G118E	R91KIT 1	4-70mm Single Conductors; #12/2 (2x3mm) Aux
R91G146E	R91KIT 1	3-70mm Cables W Neutral
R91G127E	R91KIT 1	3-50mm Cables W Neutral

### Replacement Contact Kits

R91 Kit 2A Power  
R91 Kit 3A Auxiliary

### Crimp Lug Kits

R91 Kit 5A-1 50mm<sup>2</sup> (1/0)  
R91 Kit 5A-2 70mm<sup>2</sup> (2/0)  
R91 Kit 5A-3 20mm<sup>2</sup> (#4)

## 3 Pole 28V DC Attachable® Power Nose (APN) R92

R92G3E	R92KIT 1	2-4/0 (120mm) Single Conductors
R92G65EY1	R92KIT 1	2-(120mm) Single Conductors with switches
R92G174EY2ARG	R92KIT 1	4-(70mm) Single Conductors with switches, LED's

Other models available for different cable sizes, configurations and options

R91Gxx(E)(F)(G)(Y)(Z)(W)(EN)(T)	A= Amber LED	(E) Standard Contact	(W) Sensing Option (Page 8)
Y1= on/off switches	R= Red LED	(F) Euro Contact	(EN) EcoNose
Y2= on/off; up/down switches	G= Green LED	(G) Single Piece Contact	(T) Temperature Sensing
xx Model Number			



### Replacement Contact Kits

R92 Kit 2A Power  
R92 Kit 3A Auxiliary

### Crimp Lug Kits

R92 Kit 5A-1 50mm<sup>2</sup> (1/0)  
R92 Kit 5A-2 70mm<sup>2</sup> (2/0)  
R92 Kit 5A-3 120mm<sup>2</sup> (4/0)

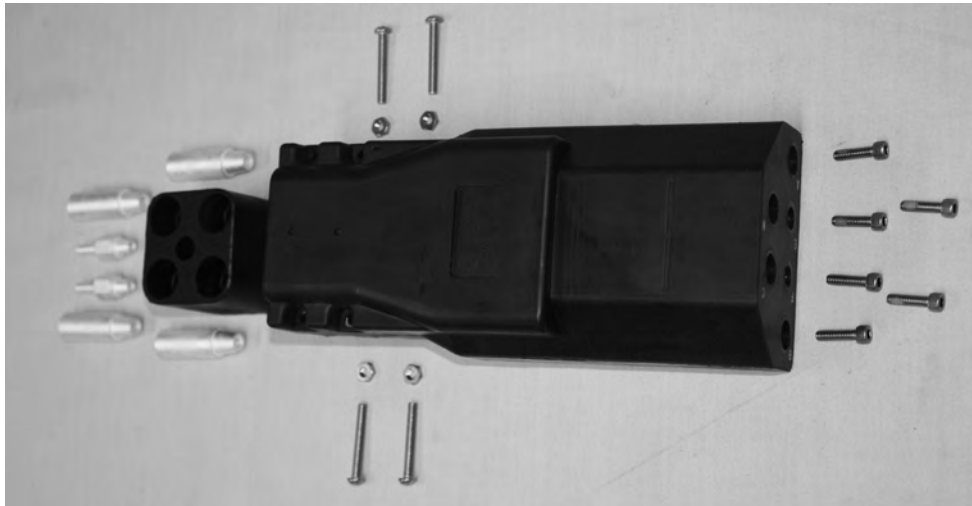
# AC PLUG ATTACHABLE® 230/400 VAC



## B1B Bomber Military Aircraft Connector

The ATTACHABLE Portable Plugs and Receptacles are molded of a proprietary synthetic elastomer, a compound specially selected for its resistance to moisture and chemicals as well as its ability to stand up under severe wear and tear. Power contacts are of machined copper, silver-plated to reduce contact

resistance. Contact lugs may be either crimped or soldered to cables. The R129 and R130 series are manufactured to MS21378 specifications and tested per MIL-C-7974D. Portable receptacles are particularly useful where a portable connection is required or for extending existing cable assemblies.



Electrical Ratings: 30°C rise Power Components, 450A Continuous 1500A for 1 minute, Control Components, 35A continuous

## 6-Pole AC 230/400V 400Hz Attachable® Plugs

Complete Plug No.	Military Part No.	Body Only Part no.	Cable Accommodation	Grommet Kit No.	Portable Receptacle Part No.
R129G4E	MS21378	3-4991G1	4-1/0 (50mm) Mil-C-5756C Single Conductor	112081G4	R130G4E
R129G5E-50A		3-4991G1	4-1/0 (50mm) Mil-C-5756C Single Conductor; 12/2 (2x3mm)Aux.	112081G5	R130G5E
R129G7E		3-4991G1	4-2/0 (70mm) Welding Single Conductor	112081G7	R130G7E
R129G12E		3-4991G1	4-#4 (20mm) Welding Single Conductor; 12/2 (2x3mm)Aux.	112081G12	R130G12E
R129G16E		3-4991G1	4-#6 (13mm) Welding Single Conductor; 12/2 (2x3mm)Aux.	112081G16	R130G16E
R129G18E		3-4991G1	4-#2 (33mm) Welding Multiconductor	112081G18	R130G18E
R129G20E		3-4991G1	4-2/0 (50mm) Welding Single Conductor; 12/2 (2x3mm)Aux.	112081G20	R130G20E
R129G21E		3-4991G1	4-2/0 (50mm) Mil-C-5756C Single Conductor	112081G21	R130G21E
R129G26E		3-4991G1	3-#3 (27mm) 1#5(17mm) CVSF Multiconductor	112081G26	R130G26E
R129G36E		3-4991G1	4-2/0 (70mm) Mil-C-5756C Single Conductor; 12/2 (2x3mm)Aux.	112081G36	R130G36E
R129G56E		3-4991G1	4 (50mm) Welding Single Conductor; 12/2 (2x3mm)Aux.	112081G56	R130G56E
R129G82E		3-4991G1	4 (50mm) Single Conductor; 2.5mm/2Aux.	112081G82	R130G82E
R129G91E		3-4991G1	3-1/0 (50mm) 3-#6 (13mm) Command Multiconductor	112081G91	R130G91E
R129G100E		3-4991G1	4-2/0 (70mm) : 12/5 (5x3mm) Aux	112081G100	R130G100E
R129G103E		3-4991G1	6-#4 (20mm) 1-1/0 (50mm) 6x1 Multiconductor	112081G101	R130G101E

Other Models available for different cable sizes and configurations  
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## **The Anderson Family Ground Power Cable Assemblies**

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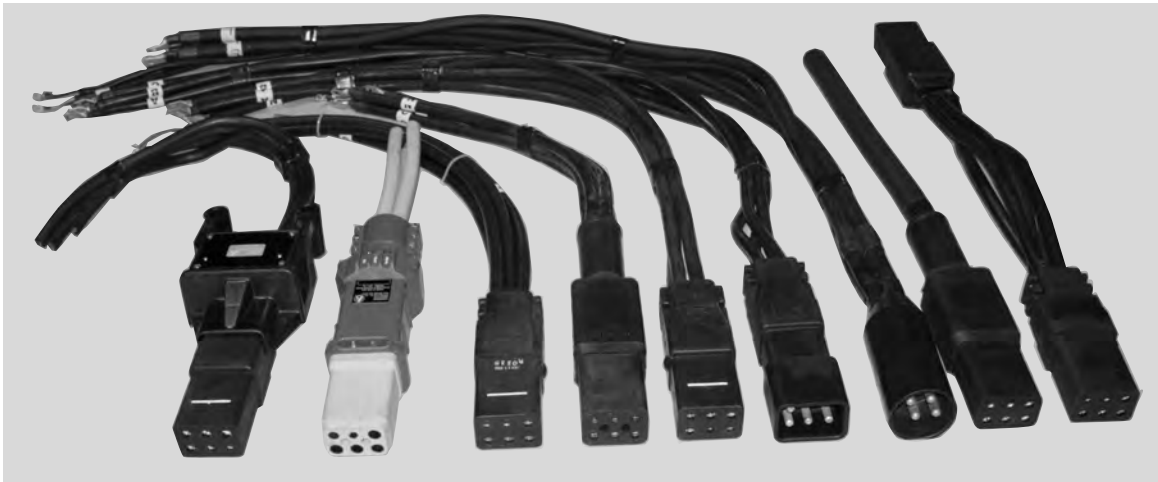
### ***Attachable® and Over Molded Cable Assemblies***

Cable assemblies are fabricated to the exacting requirements of MIL-C-7974D. Anderson Airmotive Products is a qualified source of supply for MS25019, MS90328, MS21378, and MS90347 assemblies.

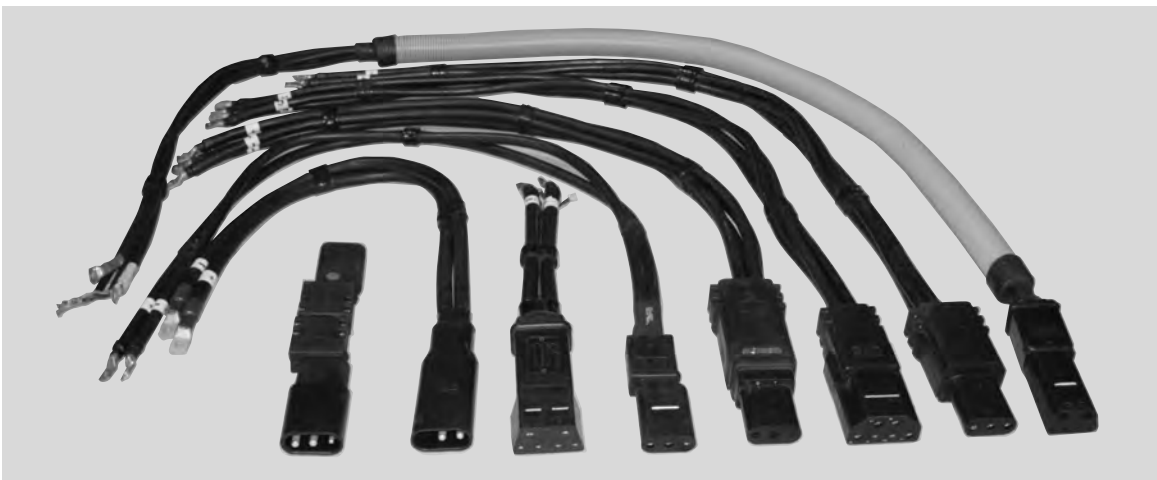
In addition, Anderson can supply special cable configurations or lengths to meet your requirements. Contact the factory or your local Authorized Distributor for additional information.

All Anderson cable assemblies feature silver plated high conductivity contacts with finger proof safety insulators and cable qualified to the latest military specification MIL-C-5756C; Composite Cables are UL listed. Plugs are molded proprietary synthetic elastomer for severe wear and tear applications. All these features insure that our cable assemblies are the safest, most flexible and longest lasting cable assemblies available today.

Our family of power cables is unequalled in the industry. Anderson Airmotive is the only company to offer you a choice of:  
(1) making/repairing your own ground power cables with our family of high quality and durable Attachable® plugs, or  
(2) buying a wide variety of new cable assemblies with either Attachable® or Overmolded plugs, from the factory.



AC output cable assemblies from 110/200 VAC and 230/400VAC to 600V input cable assemblies with quick change Wear noses, EcoNose, Temperature sensing switch plugs with modular components and many cable options.



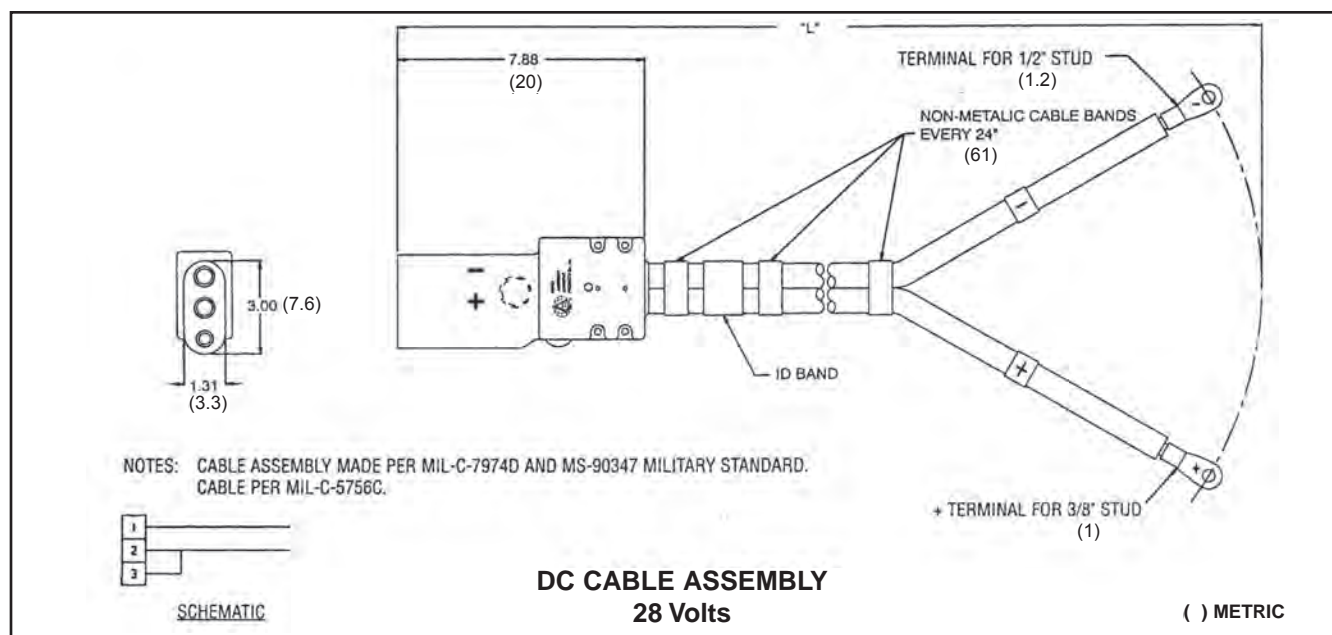
DC output cable assemblies from 28VDC, 80VDC and 270VDC with quick Change Wear Noses, Eco Noses and many cable options.



# DC AIRCRAFT GROUND POWER CABLE ASSEMBLIES 3-POLE



## 2 Wire R65 28V DC



Electrical Ratings: 30°C rise Power Components, 450A Continuous 1500A for 1 minute, Control Components, 35A continuous

PART NUMBER	LENGTH FEET/METERS	MILITARY PART NO.	CABLE DESCRIPTION	WEIGHT LBS (KG)	ASSEMBLY CONFIGURATION
R65G1E-20AorM	20 (6)	MS90347-7AorM	2-1/0 (50mm) AWG SINGLE	26 (12)	
R65G1E-30AorM	30 (9)	MS90347-8AorM	CONDUCTORS,	36 (16)	
R65G1E-40AorM	40 (12)	MS90347-9AorM	NO CONTROL LEAD,	46 (21)	
R65G1E-60AorM	60 (18)	MS90347-10AorM	SILVERPLATED	67 (30)	
R65G1E-80AorM	80 (24)	MS90347-11AorM	CONTACTS, AND	87 (40)	
R65G1E-100AorM	100 (30)	MS90347-12AorM	NON-METALLIC BANDS	107 (49)	
R65G1E-2AorM	2 (0.7)	MS90347-25AorM	SPLICE KIT	7 (3)	
R65G2E-20AorM	20 (6)	MS90347-13AorM	2-2/0 (70mm) AWG SINGLE	32 (15)	
R65G2E-30AorM	30 (9)	MS90347-14AorM	CONDUCTORS,	45 (21)	
R65G2E-40AorM	40 (12)	MS90347-15AorM	NO CONTROL LEAD,	58 (26)	
R65G2E-60AorM	60 (18)	MS90347-16AorM	SILVERPLATED	84 (38)	
R65G2E-80AorM	80 (24)	MS90347-17AorM	CONTACTS, AND	110 (50)	
R65G2E-100AorM	100 (30)	MS90347-18AorM	NON-METALLIC BANDS	136 (67)	
R65G2E-2AorM	2 (0.7)	MS90347-26AorM	SPLICE KIT	8 (4)	
R65G3E-20AorM	20 (6)	MS90347-19AorM	2-4/0 (120mm) AWG SINGLE	45 (20)	
R65G3E-30AorM	30 (9)	MS90347-20AorM	CONDUCTORS,	65 (29)	
R65G3E-40AorM	40 (12)	MS90347-21AorM	NO CONTROL LEAD,	84 (38)	
R65G3E-60AorM	60 (18)	MS90347-22AorM	SILVERPLATED	123 (56)	
R65G3E-80AorM	80 (24)	MS90347-23AorM	CONTACTS, AND	162 (74)	
R65G3E-100AorM	100 (30)	MS90347-24AorM	NON-METALLIC BANDS	201 (91)	
R65G3E-2AorM	2 (0.7)	MS90347-27AorM	SPLICE KIT	9 (4)	

Cable assemblies are available with Attachable® plug types as well as integrally Over Molded connectors.  
Other assemblies available for different cable sizes and configurations

R65Gxx(E)(F)(EN)(A)(M)

A= Attachable® Head  
M=Over Molded Head

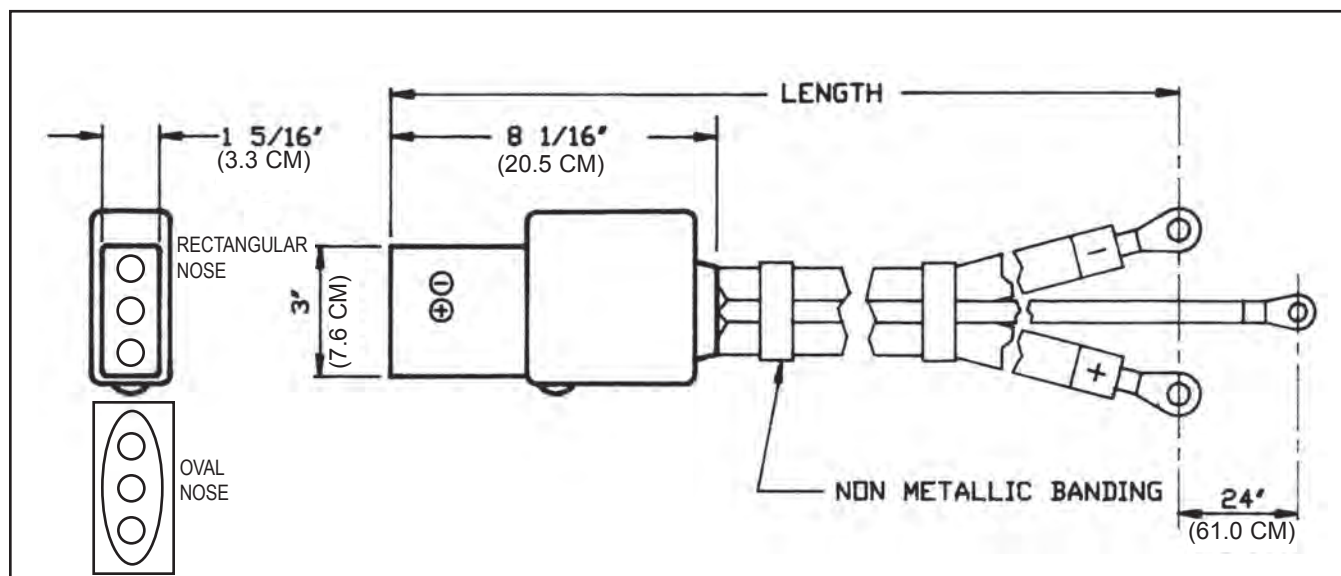
(E) Standard Contact  
(F) Euro Contact  
(EN) EcoNose

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# DC AIRCRAFT GROUND POWER CABLE ASSEMBLIES 3-POLE



## 3 Wire R71, R72



Electrical Ratings: 30°C rise Power Components, 450A Continuous 1500A for 1 minute, Control Components, 35A continuous

PART NUMBER	LENGTH FEET/METERS	MILITARY PART NO.	CABLE DESCRIPTION	WEIGHT LBS (KG)	ASSEMBLY CONFIGURATION
R71G6E-20AorM	20 (6)	MS25019-20A, M	2-4/0 (120mm) AWG SINGLE	46 (21)	 RECTANGULAR NOSE
R71G6E-30AorM	30 (9)	MS25019-30A, M	CONDUCTORS, #8	66 (30)	
R71G6E-40AorM	40 (12)	MS25019-40A, M	CONTROL LEAD,	85 (39)	
R71G6E-60AorM	60 (18)	MS25019-60A, M	SILVERPLATED	124 (57)	
R71G6E-80AorM	80 (24)	MS25019-80A, M	CONTACTS, AND	162 (74)	
R71G6E-100AorM	100 (30)	MS25019-100A, M	NON-METALLIC BANDS	202 (92)	
R71G6E-2AorM	2 (0.7)	MS25019-2AorM	SPLICE KIT	10 (4)	
R71G5E-20AorM	20 (6)		2-4/0 (120mm) AWG SINGLE	46 (21)	 OVAL NOSE
R71G5E-30AorM	30 (9)		CONDUCTORS, #8	66 (30)	
R71G5E-40AorM	40 (12)		CONTROL LEAD,	85 (39)	
R71G5E-60AorM	60 (18)		SILVERPLATED	124 (57)	
R71G5E-80AorM	80 (24)		CONTACTS, AND	162 (74)	
R71G5E-100AorM	100 (30)		NON-METALLIC BANDS	202 (92)	
R71G5E-2AorM	2 (0.7)		SPLICE KIT	10 (4)	
R72G5E-20AorM	20 (6)		2-4/0 (120mm) AWG SINGLE	46 (21)	 OVAL NOSE
R72G5E-30AorM	30 (9)		CONDUCTORS, #8	66 (30)	
R72G5E-40AorM	40 (12)		CONTROL LEAD, SENSING	85 (39)	
R72G5E-60AorM	60 (18)		SILVERPLATED	124 (57)	
R72G5E-80AorM	80 (24)		CONTACTS, AND	162 (74)	
R72G5E-100AorM	100 (30)		NON-METALLIC BANDS	202 (92)	
R72G5E2S-2AorM	2 (6)		2 WIRE SENSING LEAD #12/2 AWG	10 (4)	

Cable assemblies are available with Attachable® plug types as well as integrally Over Molded connectors. Other assemblies available for different cable sizes and configurations

R71Gxx(E)(F)(EN)(A)(M)

A= Attachable® Head  
M=Over Molded Head

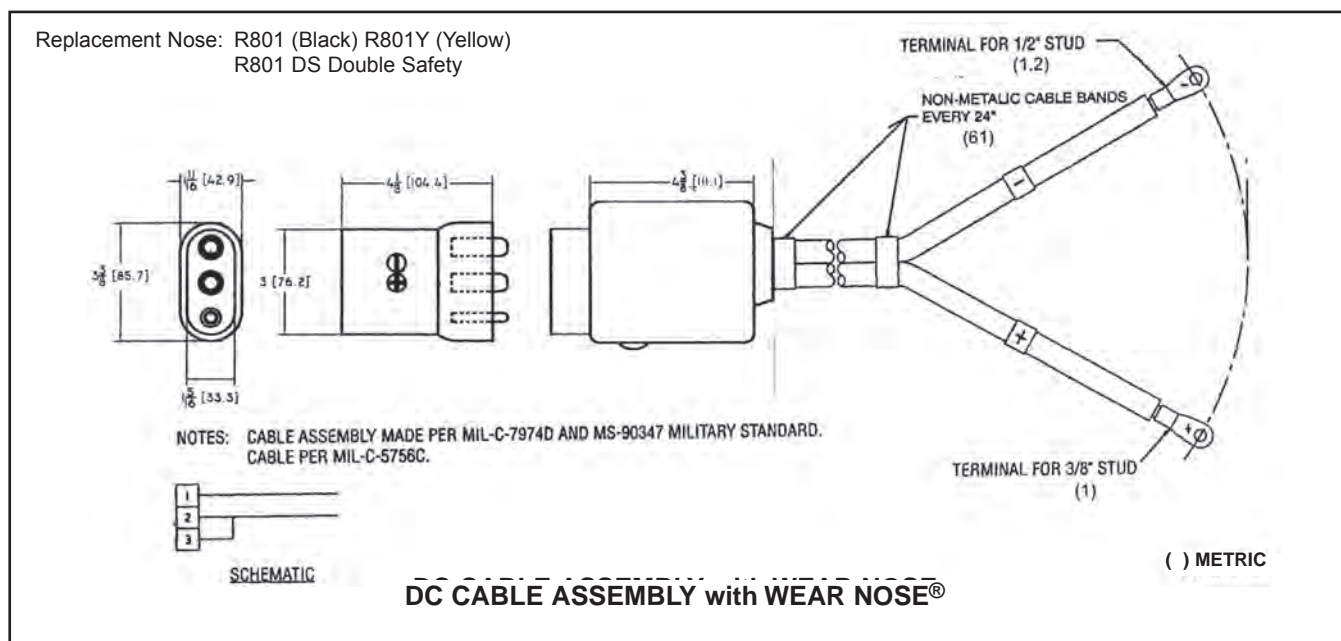
(E) Standard Contact  
(F) Euro Contact  
(EN) EcoNose

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# DC AIRCRAFT GROUND POWER CABLE ASSEMBLIES 3-POLE



## 2 Wire R65 28V DC Wear Nose®



Electrical Ratings: 30°C rise Power Components, 450A Continuous 1500A for 1 minute, Control Components, 35A continuous

PART NUMBER	LENGTH FEET/METERS	MILITARY PART NO.	CABLE DESCRIPTION	WEIGHT LBS (KG)	ASSEMBLY CONFIGURATION
R800G1E-20M	20 (6)	MS90347-7AorM	2-1/0 (50mm) AWG SINGLE	26 (12)	
R800G1E-30M	30 (9)	MS90347-8AorM	CONDUCTORS,	36 (16)	
R800G1E-40M	40 (12)	MS90347-9AorM	NO CONTROL LEAD,	46 (21)	
R800G1E-60M	60 (18)	MS90347-10AorM	SILVERPLATED	67 (30)	
R800G1E-80M	80 (24)	MS90347-11AorM	CONTACTS, AND	87 (40)	
R800G1E-100M	100 (30)	MS90347-12AorM	NON-METALLIC BANDS	107 (49)	
R800G1E-2AM	2 (0.7)	MS90347-25AorM	SPLICE KIT	7 (3)	
R800G2E-20M	20 (6)	MS90347-13AorM	2-2/0 (70mm) AWG SINGLE	32 (15)	
R800G2E-30M	30 (9)	MS90347-14AorM	CONDUCTORS,	45 (21)	
R800G2E-40M	40 (12)	MS90347-15AorM	NO CONTROL LEAD,	58 (26)	
R800G2E-60M	60 (18)	MS90347-16AorM	SILVERPLATED	84 (38)	
R800G2E-80M	80 (24)	MS90347-17AorM	CONTACTS, AND	110 (50)	
R800G2E-100M	100 (30)	MS90347-18AorM	NON-METALLIC BANDS	136 (67)	
R800G2E-2M	2 (0.7)	MS90347-26AorM	SPLICE KIT	8 (4)	
R800G3E-20M	20 (6)	MS90347-19AorM	2-4/0 (120mm) AWG SINGLE	45 (20)	
R800G3E-30M	30 (9)	MS90347-20AorM	CONDUCTORS,	65 (29)	
R800G3E-40M	40 (12)	MS90347-21AorM	NO CONTROL LEAD,	84 (38)	
R800G3E-60M	60 (18)	MS90347-22AorM	SILVERPLATED	123 (56)	
R800G3E-80M	80 (24)	MS90347-23AorM	CONTACTS, AND	162 (74)	
R800G3E-100M	100 (30)	MS90347-24AorM	NON-METALLIC BANDS	201 (91)	
R800G3E-2M	2 (0.7)	MS90347-27AorM	SPLICE KIT	9 (4)	



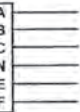

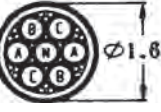
Cable assemblies are available with Attachable® plug types as well as integrally Over Molded connectors.  
Other assemblies available for different cable sizes and configurations

M =Over Molded Head

Wear Nose® is a registered trademark of Anderson Airmotive Products.  
ATTACHABLE® is a registered trademark of Anderson Airmotive Products.



Electrical Ratings: 30°C rise Power Components, 450A Continuous 1500A for 1 minute, Control Components, 35A continuous

PART NUMBER	LENGTH FEET/ METERS	MILITARY PART NO.	CABLE DESCRIPTION	WEIGHT LBS (KG)	ASSEMBLY CONFIGURATION
R67G4E-20AorM	20 (6)	MS90328-13AorM	4-1/0 (50mm) AWG SINGLE	46 (21)	
R67G4E-30AorM	30 (9)	MS90328-14AorM	CONDUCTORS,	67 (30)	
R67G4E-40AorM	40 (12)	MS90328-15AorM	NO CONTROL LEADS,	87 (39)	
R67G4E-60AorM	60 (18)	MS90328-16AorM	E AND F SHUNTED IN PLUG,	127 (58)	
R67G4E-80AorM	80 (24)	MS90328-17AorM	SILVER PLATED CONTACTS,	168 (76)	
R67G4E-100AorM	100 (30)	MS90328-18AorM	AND NON-METALLIC BANDS	208 (94)	
R67G4E-2AorMSK	2 (.7)	MS90328-39AorM	SPLICE KITS	10 (5)	
R67G21E-20AorM	20 (6)	MS90328-19AorM	4-2/0 (70mm) AWG SINGLE	60 (27)	
R67G21E-30AorM	30 (9)	MS90328-20AorM	CONDUCTORS,	88 (40)	
R67G21E-40AorM	40 (12)	MS90328-21AorM	NO CONTROL LEADS,	116 (53)	
R67G21E-60AorM	60 (18)	MS90328-22AorM	E AND F SHUNTED IN PLUG,	172 (78)	
R67G21E-80AorM	80 (24)	MS90328-23AorM	SILVER PLATED CONTACTS,	226 (103)	
R67G21E-100AorM	100 (30)	MS90328-24AorM	AND NON-METALLIC BANDS	281 (127)	
R67G21E-2AorMSK	2 (.7)	MS90328-40AorM	SPLICE KITS	12 (5)	
R67G5E-20AorM	20 (6)	MS90328-25AorM	4-1/0(50mm) AWG SINGLE	50 (23)	
R67G5E-30AorM	30 (9)	MS90328-26AorM	CONDUCTORS,	71 (32)	
R67G5E-40AorM	40 (12)	MS90328-27AorM	1-12/2 (2X3mm) CONTROL LEAD,	93 (42)	
R67G5E-60AorM	60 (18)	MS90328-28AorM	SILVER PLATED CONTACTS,	137 (62)	
R67G5E-80AorM	80 (24)	MS90328-29AorM	AND NON-METALLIC BANDS	180 (22)	
R67G5E-100AorM	100 (30)	MS90328-30AorM		224 (102)	
R67G5E-2AorMSK	2 (.7)	MS90328-37AorM	SPLICE KITS	9 (4)	
R67G36E-20AorM	20 (6)	MS90328-31AorM	4-2/0 (70mm) AWG SINGLE	58 (26)	
R67G36E-30AorM	30 (9)	MS90328-32AorM	CONDUCTORS, 1-12/2 (2X3mm)	84 (38)	
R67G36E-40AorM	40 (12)	MS90328-33AorM	CONTROL LEADS,	110 (50)	
R67G36E-60AorM	60 (18)	MS90328-34AorM	SILVER PLATED CONTACTS,	162 (78)	
R67G36E-80AorM	80 (24)	MS90328-35AorM	AND NON-METALLIC BANDS	213 (97)	
R67G36E-100AorM	100 (30)	MS90328-36AorM		297 (135)	
R67G36E-2AorMSK	2 (.7)	MS90328-38AorM	SPLICE KITS	9(4)	
R67G103E-20AorM	20 (6)	6 #4 AWG (20mm); 1 #1 (42 mm) COMPOSITE CABLE		50 (23)	
R67G103E-30AorM	30 (9)	6 #4 AWG (20mm); 1 #1 (42 mm) COMPOSITE CABLE		70 (32)	
R67G103E-40AorM	40 (12)	6 #4 AWG (20mm); 1 #1 (42 mm) COMPOSITE CABLE		90 (41)	
R67G103E-60AorM	60 (18)	6 #4 AWG (20mm); 1 #1 (42 mm) COMPOSITE CABLE		130 (59)	
R67G103E-80AorM	80 (24)	6 #4 AWG (20mm); 1 #1 (42 mm) COMPOSITE CABLE		170 (77)	
R67G103E-100AorM	100 (30)	6 #4 AWG (20mm); 1 #1 (42 mm) COMPOSITE CABLE		210 (95)	
R67G103E-2AorMSK	3 (1)	6 #4 AWG (20mm); 1 #1 (42 mm) COMPOSITE CABLE		16(7)	

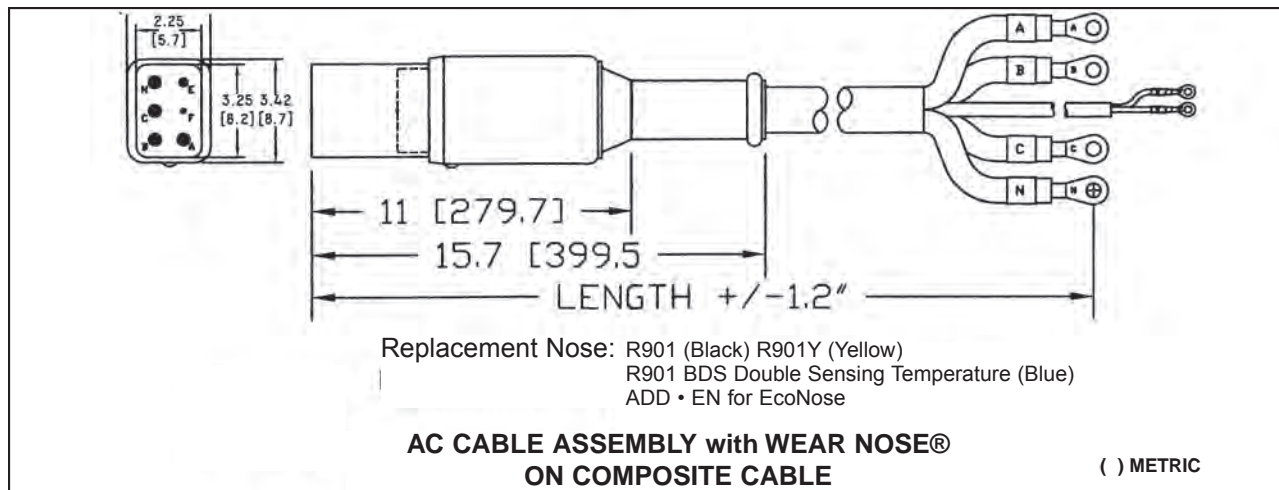
R67Gxx(E)(F)(EN)(T)    xx model number    (E) Standard Contact    (F) Euro Contact    (EN) EcoNose    (T) Temperature Sensitive  
A= Attachable® Head    M =Over Molded Head

# AC AIRCRAFT GROUND POWER CABLE ASSEMBLIES 6-POLE



## R900 110/200V AC with Wear Nose®

Cable assembly with over molded plug and field replaceable nose. Compatible with other wear nose type assemblies.



Electrical Ratings: 30°C rise Power Components, 450A Continuous 1500A for 1 minute, Control Components, 35A continuous

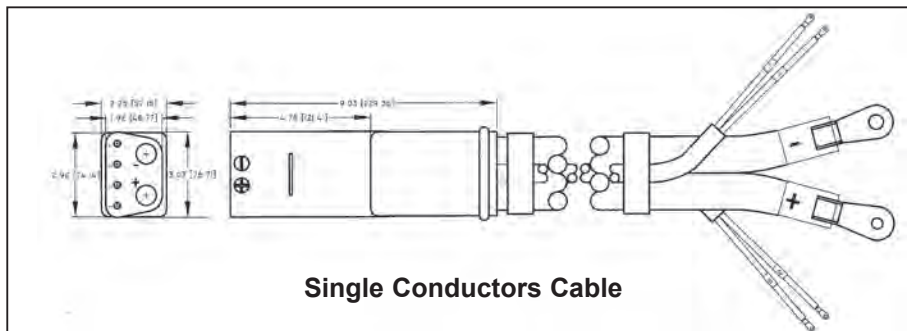
PART NUMBER	LENGTH FEET/ METERS	CABLE DESCRIPTION	WEIGHT LBS (KG)	ASSEMBLY CONFIGURATION
R900G4E-20M	20 (6)	4-1/0 (50mm) AWG SINGLE CONDUCTORS, NO CONTROL LEADS, E AND F SHUNTED IN PLUG, SILVER PLATED CONTACTS, AND NON-METALLIC BANDS	46 (21)	
R900G4E-30M	30 (9)		67 (30)	
R900G4E-40M	40 (12)		87 (39)	
R900G4E-60M	60 (18)		127 (58)	
R900G4E-80M	80 (24)		168 (76)	
R900G4E-100M	100 (30)		208 (94)	
R900G4E-2M SK	2 (.7)	SPLICE KITS	10 (5)	
R900G21E-20M	20 (6)	4-2/0 (70mm) AWG SINGLE CONDUCTORS, NO CONTROL LEADS, E AND F SHUNTED IN PLUG, SILVER PLATED CONTACTS, AND NON-METALLIC BANDS	60 (27)	
R900G21E-30M	30 (9)		88 (40)	
R900G21E-40M	40 (12)		116 (53)	
R900G21E-60M	60 (18)		172 (78)	
R900G21E-80M	80 (24)		226 (103)	
R900G21E-100M	100 (30)		281 (127)	
R900G21E-2M SK	2 (.7)	SPLICE KITS	12 (5)	
R900G5E-20M	20 (6)	4-1/0(50mm) AWG SINGLE CONDUCTORS, 1-12/2 (2X3mm) CONTROL LEAD, SILVER PLATED CONTACTS, AND NON-METALLIC BANDS	50 (23)	
R900G5E-30M	30 (9)		71 (32)	
R900G5E-40M	40 (12)		93 (42)	
R900G5E-60M	60 (18)		137 (62)	
R900G5E-80M	80 (24)		180 (82)	
R900G5E-100M	100 (30)		224 (102)	
R900G5E-2M SK	2 (.7)	SPLICE KITS	9 (4)	
R900G36E-20M	20 (6)	4-2/0 (70mm) AWG SINGLE CONDUCTORS, 1-12/2 (2X3mm) CONTROL LEADS, SILVER PLATED CONTACTS, AND NON-METALLIC BANDS	58 (26)	
R900G36E-30M	30 (9)		84 (38)	
R900G36E-40M	40 (12)		110 (50)	
R900G36E-60M	60 (18)		162 (78)	
R900G36E-80M	80 (24)		213 (97)	
R900G36E-100M	100 (30)		297 (135)	
R900G36E-2M SK	2 (.7)	SPLICE KITS	9(4)	
R900G103E-20M	20 (6)	6 #4 AWG (20mm); 1 #1 (42 mm) COMPOSITE CABLE	50 (23)	
R900G103E-30M	30 (9)		70 (32)	
R900G103E-40M	40 (12)		90 (41)	
R900G103E-60M	60 (18)		130 (59)	
R900G103E-80M	80 (24)		170 (77)	
R900G103E-100M	100 (30)		210 (95)	
R900G103E-3M SK	3 (1)	6 #4 AWG (20mm); 1 #1 (42 mm) COMPOSITE CABLE	16(7)	

# AC AIRCRAFT GROUND POWER CABLE ASSEMBLIES

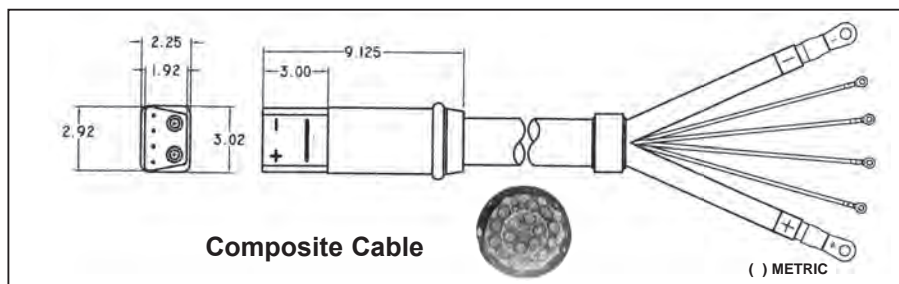


## FAST CHARGE 80V/150A

**Type A:** 2 Power Leads and 4 Auxiliaries - 6 pin



## FAST CHARGE 270VDC



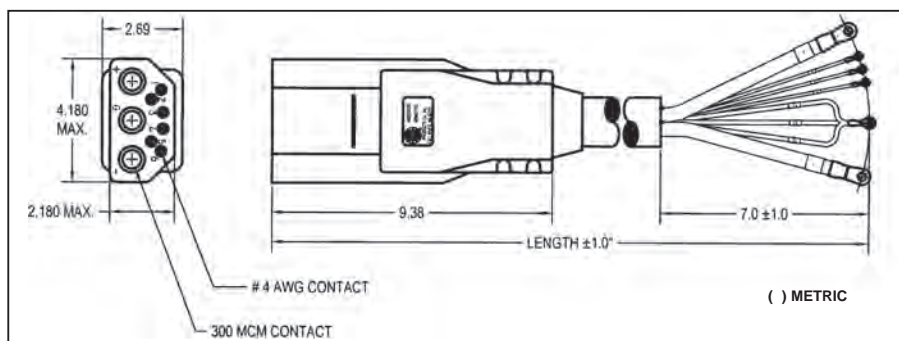
Electrical Ratings: 30°C rise Power Components, 450A Continuous 1500A for 1 minute, Control Components, 35A continuous

PART NUMBER	LENGTH FEET/ METERS	CABLE DESCRIPTION	WEIGHT LBS (KG)	ASSEMBLY CONFIGURATION
R270G5E-20M	20 (6)	2 1/0 (50mm) and 4 #12 (3mm) AWG MILC5756B	55 (25)	
R270G36E-20M	20 (6)	2 2/0 (70mm) and 4 #12 (3mm) AWG MILC5756B	65 (30)	
R270G81E-XXM	Various	2 2/0 (70mm) Welding Cable; 2 x #12/2 Welding	Varies	
R270G103E-XXM	Various	2 x (16/8) + 2 (3x18) Composite Cable		

## FAST CHARGE 400V/400A

Electrical Ratings: 30°C rise Power Components, 450A Continuous 1500A for 1 minute, Control Components, 35A continuous

**Type B:** 2 Power Leads 1 Ground and 6 Auxiliaries - 9 pin



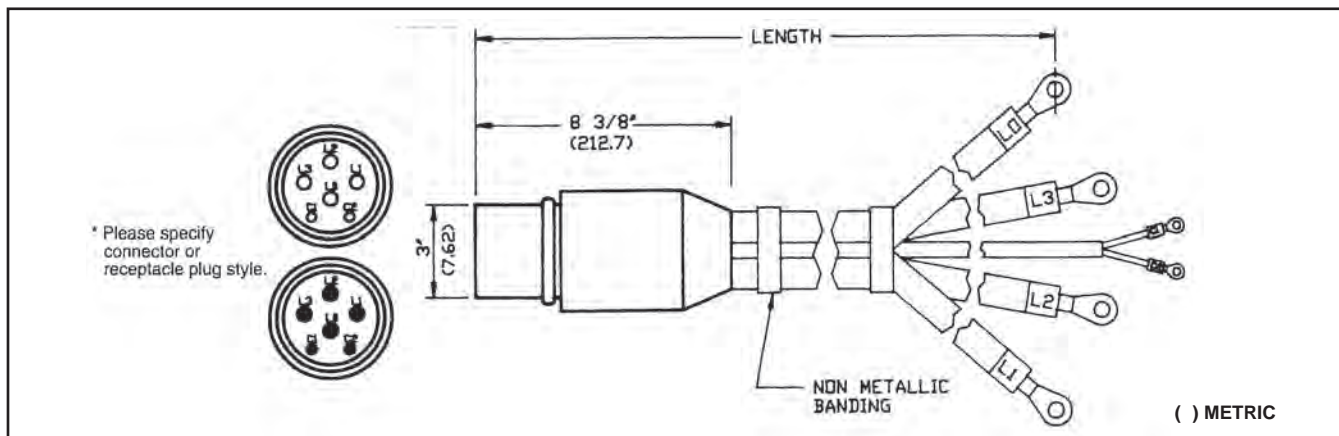
A= Attachalbe M = Overmolded.

PART NUMBER	LENGTH FEET/ METERS	CABLE DESCRIPTION	WEIGHT LBS (KG)	ASSEMBLY CONFIGURATION
R80G103E-XXM	AS REQUIRED	COMPOSITE CABLE WITH 6 #4; 1 #1; 18 #18	2.3lbs (1 kg) per foot	<div style="display: flex; align-items: center;"> <div style="border: 1px solid black; padding: 5px; margin-right: 10px;">             3 SHIELD JUMPER REQUIRED BE ON ONE END ONLY         </div> <div>             CONNECTOR              1 - BLACK #4/0 AWG              2 - BLACK #4/0 AWG              3 - GREEN #6 AWG              4 - GREEN #6 AWG              5 - WHITE #22 AWG              6 - RED #22 AWG              7 - BLACK #22 AWG              8 - BLUE #16 AWG              9 - WHITE #16 AWG              10 - BLACK #16 AWG         </div> </div>

# AC AIRCRAFT GROUND POWER CABLE ASSEMBLIES 6-POLE





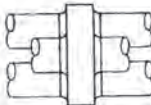


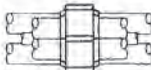
## RAMP POWER 416/240V



The Ramp Power Connector is used on a variety of military and commercial ground service equipment around the world. The proprietary synthetic elastomer body and silver-plated contacts provide for a safe, reliable connection that is not only moisture and corrosion-resistant, but able to withstand the real-life abuse of everyday usage on the ramp. Accommodates wire sizes from #4 AWG to 4/0 AWG.

Applications include: Hydraulic test stands, motor generators, air conditioning units, 400Hz Frequency Converters

Electrical Ratings: 30°C rise Power Components, 450A Continuous 1500A for 1 minute, Control Components, 35A continuous

G.A.P.P. P/N	LENGTH FEET	LENGTH METERS	CONDUCTOR NO. AND SIZE	SHIP. WT (LBS)	CABLE, BAND & SCHEMATIC
MALE					
833N005020	20	6.10	(4) 1/0, (50mm) (2x3mm)	46	
833N005030	30	9.14	(4) 1/0, (50mm) (2x3mm)	67	
833N005040	40	12.19	(4) 1/0, (50mm) (2x3mm)	87	
833N005060	60	18.29	(4) 1/0, (50mm) (2x3mm)	127	
833N005080	80	24.38	(4) 1/0, (50mm) (2x3mm)	168	
833N005100	100	30.48	(4) 1/0, (50mm) (2x3mm)	208	
833N036020	20	6.10	(4) 2/0, (70mm) (2x3mm)	56	 
833N036030	30	9.14	(4) 2/0, (70mm) (2x3mm)	84	
833N036040	40	12.19	(4) 2/0, (70mm) (2x3mm)	110	
833N036060	60	18.29	(4) 2/0, (70mm) (2x3mm)	162	
833N036080	80	24.38	(4) 2/0, (70mm) (2x3mm)	213	
833N036100	100	30.48	(4) 2/0, (70mm) (2x3mm)	265	
FEMALE					
834N005020	20	6.10	(4) 1/0, (50mm) (2x3mm)	50	
834N005030	30	9.14	(4) 1/0, (50mm) (2x3mm)	71	
834N005040	40	12.19	(4) 1/0, (50mm) (2x3mm)	93	
834N005060	60	18.29	(4) 1/0, (50mm) (2x3mm)	137	
834N005080	80	24.38	(4) 1/0, (50mm) (2x3mm)	180	
834N005100	100	30.48	(4) 1/0, (50mm) (2x3mm)	224	
834N036020	20	6.10	(4) 2/0, (70mm) (2x3mm)	60	 
834N036030	30	9.14	(4) 2/0, (70mm) (2x3mm)	88	
834N036040	40	12.19	(4) 2/0, (70mm) (2x3mm)	116	
834N036060	60	18.29	(4) 2/0, (70mm) (2x3mm)	172	
834N036080	80	24.38	(4) 2/0, (70mm) (2x3mm)	226	
834N036100	100	30.48	(4) 2/0, (70mm) (2x3mm)	281	



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## THE ANDERSON FAMILY RECEPTACLES

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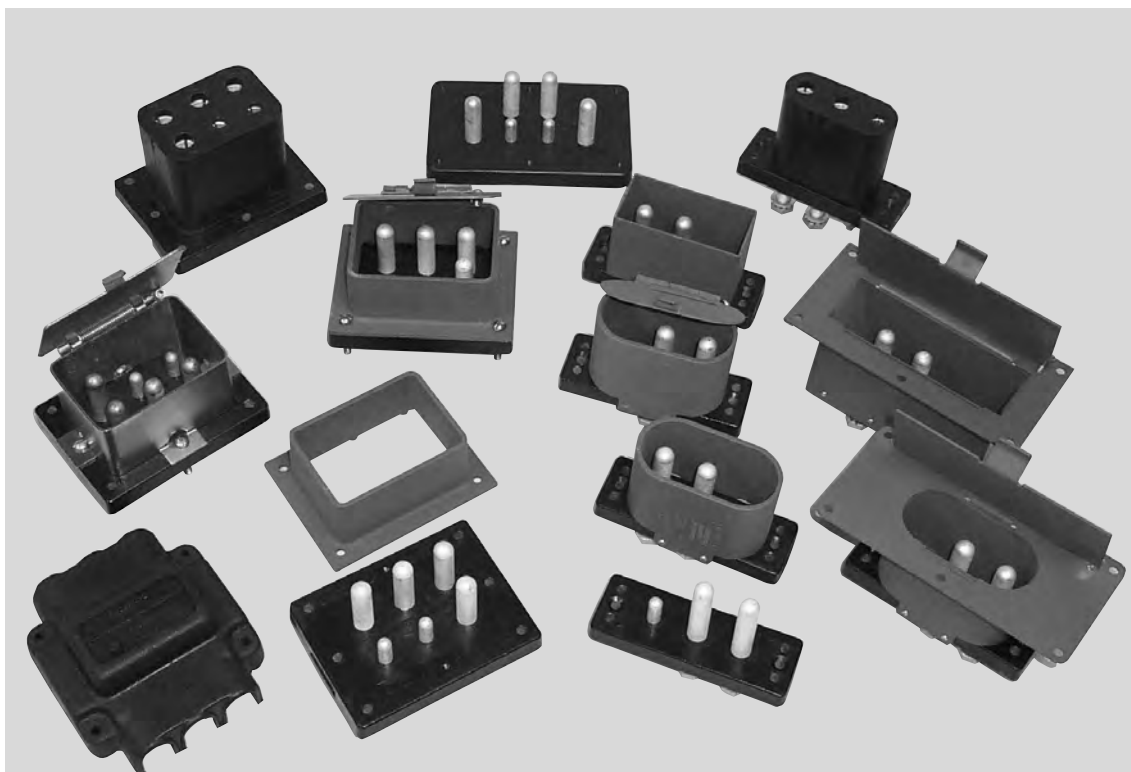


Ground Power Receptacles are located on the aircraft or other devices and receive the power input from a ground source to recharge and operate electrical accessories. Anderson offers the largest selection of receptacles ranging from 28V DC to 270V DC and 110V AC to 400V AC accommodating all your power needs. Varieties include male and female designs.

Anderson Airmotive DC and AC receptacles are manufactured to specification MIL-C-81790 and are listed on the Qualified Products List. Bases are molded of glass reinforced material for low moisture absorption and high strength. The copper power and brass control contacts are machined and silverplated to MS

tolerances.

The shield, when applicable, is of anodized aluminum to guide plug insertion and guard against misalignment. Studs and contact nuts for lug connections are located at the rear of the receptacle.



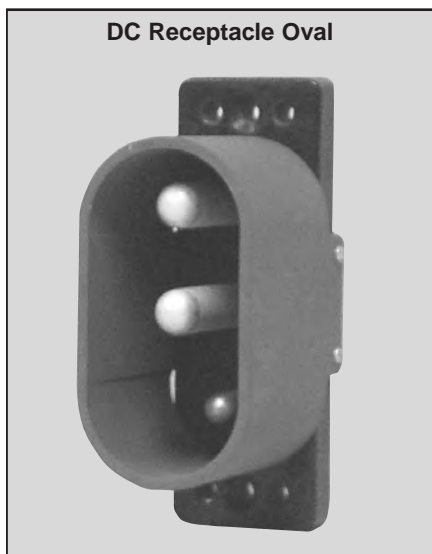
### **Receptacle Performance to QPL MIL-C-81790 (AS81790)**

Dielectric Withstand	2500VRMS WITH< 1 milli-amp leakage
Current Rating - Power Contacts	450A continuous (> than 1 hour) 1500A for 1 minute
Current Rating - Control Contacts	35A continuous auxiliary
Flexural Strength	3500 lbs (1590 Kg)
Thermal Shock	-65° to +200°C
Impact Strength - Power Contacts	Withstands impact of 10 lb weight (4.5KG) dropped from 24 inches (60 cm)
Impact Strength - Control Contacts	Withstands impact of 10 lb weight (4.5KG) dropped from 12 inches (30 cm)

# GROUND POWER RECEPTACLES (3-POLE) 28V DC

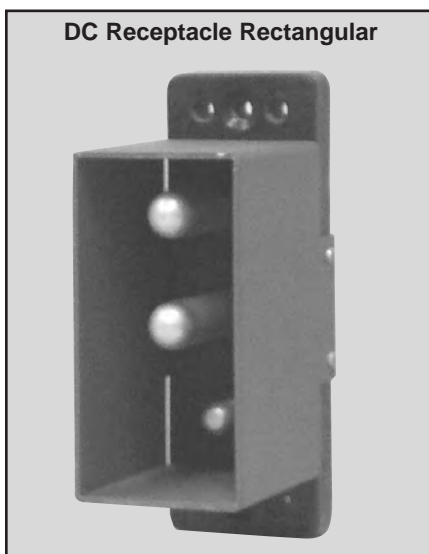


DC Receptacle Oval



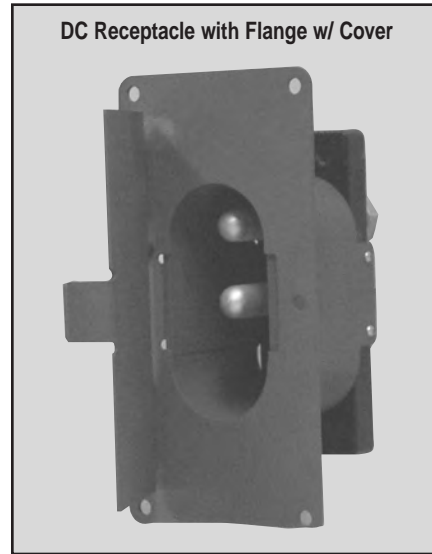
**Receptacle with Oval Shield  
MS 3506-1  
4621B**

DC Receptacle Rectangular

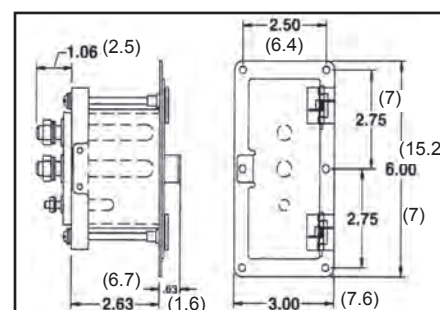
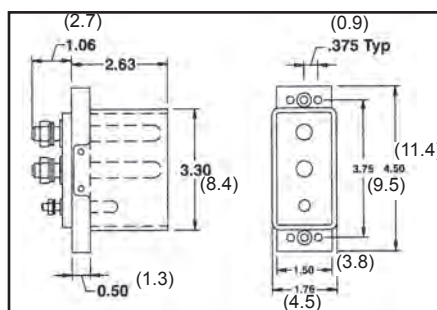
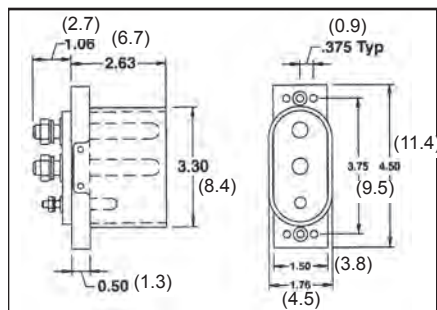


**Receptacle with Rectangular  
Shield MS 25018-2  
4632B**

DC Receptacle with Flange w/ Cover



**Receptacle with Oval  
Shield and Cover  
4650B**



Description	Anderson Catalog Number	Government Reference Number	Mating Plug & Cable Assemblies
Receptacle only	4622B		Series R64 Plug
Receptacle w/Oval Shield	4621B	MS3506-1	Series R65 (MS25488)
Receptacle w/Oval Shield and Snap Cover	4621BSC		Series R71, R92
Receptacle w/Oval Shield and Flanged Cover	4650B		(MS93047) Cable Assembly
Receptacle with Rectangular Shield	4632B	MS25018-2	Series R71 Plug (MS25487)
Receptacle w/Rectangular Shield & Flanged Cover	4651B		(MS25019) Cable Assembly
Oval Flange Cover DC	B00773G1		R765, R771, R93
Rectangular Flange Cover DC	B00773G2		
Female Receptacle	4665B		Series R68
Snap Cover for female receptacle	4652G5B		



4665B



4622B



4651B



4652G5B

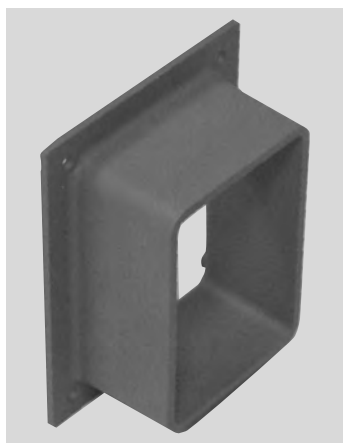


4621BSC

# Ground Power RECEPTACLES (6-POLE) 115/200V AC 400Hz



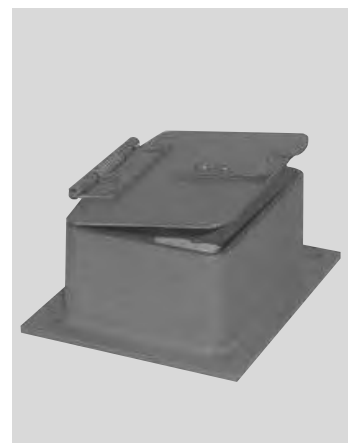
**Receptacle MS90302-3  
4627B**



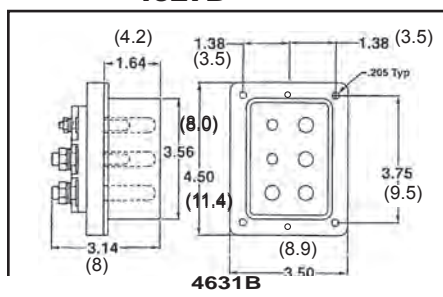
**Shield MS17845-1  
4654B**



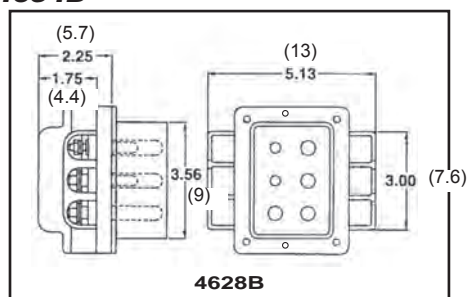
**Rear Cover MS3505-1  
4633B**



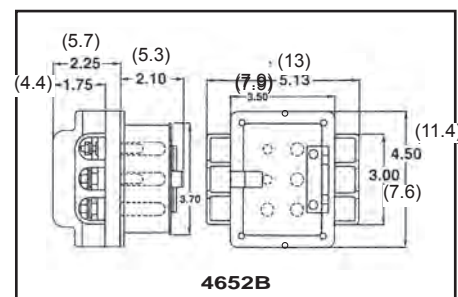
**Snap Cover 4652G2B**



**Receptacle with Shield**



**Receptacle with Shield  
and Rear Cover**



**Receptacle with Rear Cover  
and Snap Cover**

400 Hz Receptacles are designed to meet specifications for Connector Style 3A as detailed in ISO461/1 AND ISO461/2, and US Military Specification MIL-C-81790 (A) and are listed on Qualified Product List (QPL)

Description	Anderson Catalog Number	Government Reference Number	Mating Plug & Cable Assemblies
Receptacle Only	4627B	MS90362-3	Series R67 Plug (MS25486)
Receptacle w/Rear Cover and Shield	4628B	MS90362-4	
Receptacle w/Shield	4631B	MS90362-1	
Rear Cover Only	4633B	MS3505-1	and Cable Assembly
Shield Only	4654B	MS17845-1	
Receptacle w/Rear Cover, Shield and Hinged Snap Front Cover	4652B	_____	MS90328
Hinged Snap Cover Steel Shield	4652G4	_____	Series R90, R91
Hinged Snap Cover Aluminum Shield	4652G2B		
Female Receptacle	4667B		
Snap Cover and Shield (steel) Female Receptacle	4652G3B		
			Series R112

Power Terminal Studs have 3/8 - 24 thread. Control terminal studs have 10-32 N.F. thread.  
All dimensions are in inches and centimeters for reference only; they should not be used for layout work. Specific details will be furnished on request.



**4628B**



**4631B**



**4652G2**



**4652G3B**



**4667B**

# 80 VDC Fast Charge; 230/400V AC RECEPTACLES



## 80 VDC Fast Charge; 270 VDC; 400 VDC

Ground Power Receptacles are located on the aircraft or other devices and receive the power input from a ground source to recharge and operate electrical accessories. Anderson offers the largest selection of receptacles ranging from 28V DC, 80V DC, 400V DC, 270V DC and 110V AC to 400V AC accommodating all your power needs.

### 80V/270V



**Receptacle\***  
**270V 3-8358P1**  
**80VFC 3-8358P2**



**Receptacle**  
**with Shield**  
**270V 4629B**  
**80VFC-4630B**

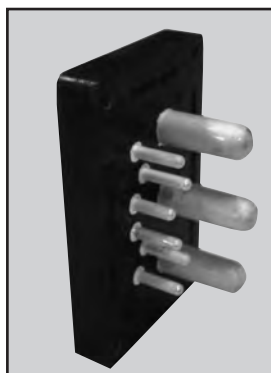


**Shield**  
**2-8356P1**  
**2-8356P1SC**  
**with Snap Cover**



**Rear Cover**  
**4634B**

### 400V/400A DC 9 Pin Fast Charge



**Receptacle**  
**3-8400MD1**



**Shield**  
**2-8356P2**



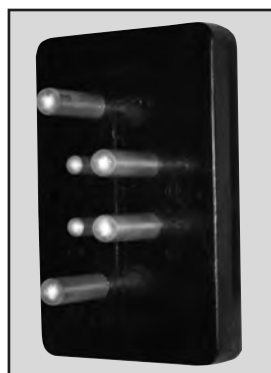
**Receptacle**  
**with Shield**  
**4635B**

**\* Note**    **270V/80V DC**

**270V**        **3-8358P1**  
                  **+ Terminal MJ8**  
                  **— Terminal MJ6**

**80VFC**       **3-8358P2**  
                  **+ Terminal MJ8**  
                  **— Terminal MJ8**

### 230/400V AC



**Receptacle**  
**3-4985G1**



**Receptacle**  
**with Shield**  
**MS21379**



**Shield**  
**2-6976P1**



**Snap Cover**  
**2-6976P1SC**



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# **ANDERSON ATTACHABLE® AC/DC HANDLE**

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## **ATTACHABLE® HANDLE FOR 400 HZ. GROUND POWER CONNECTORS AND 28VDC**

- **CONVENIENT**
- **LIGHTWEIGHT CLAM SHELL DESIGN**
- **COMPATIBLE WITH ALL COMMERCIAL AIRCRAFT**
- **ACCEPTS SINGLE-JACKETED CABLE or Multiconductors**

### **AC Plastic Handle**

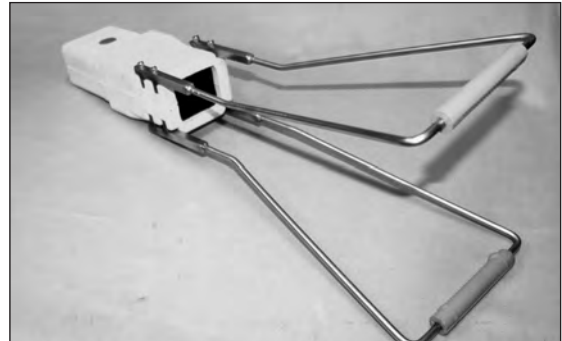


**30G1**

Fabricated from a unique lonomer material, the handle combines light weight (2 lbs/1kg) with exceptional impact characteristics. It is impervious to typical aircraft fluids such as jet fuel, skydrol, glycol and water.

The design offers protection for the power connector and a convenient hand grip to make engaging and disengaging easier. This helps reduce strain on the connector due to mishandling. An outer flange prevents the connector from laying on the ground, reducing abrasion of the connector and potential danger in wet locations.

### **AC Metal Handle**



**30G9**

The design offers protection for the power connector and a convenient hand grip to make engaging and disengaging easier. This helps reduce strain on the connector due to mishandling.

The metal handle with over molded grip is made for Attachable® as well as over molded sockets.

### **DC Handle and Strain Relief**



**120012 G1M**

The DC Handle and Strain Relief design offers protection for the power connector and provides a convenient hand grip to make engaging and disengaging easier. This helps reduce strain on the connector due to mishandling.

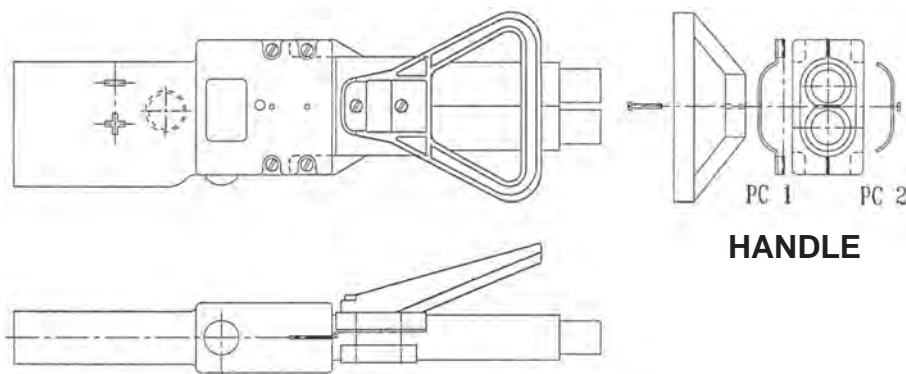
DC handle comes with plastic or metal handles.

ATTACHABLE® is a Registered Trademark of Anderson Airmotive Products

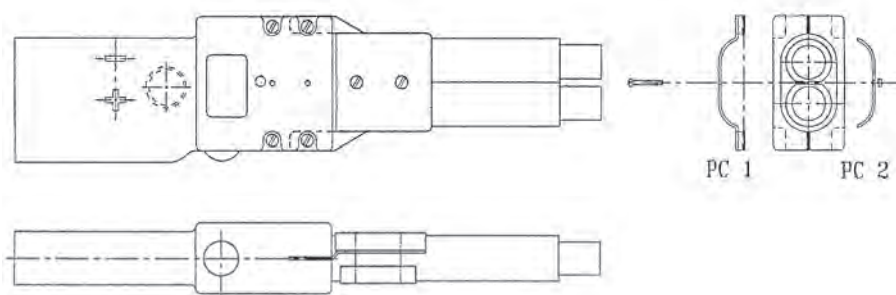
## DC Handle and Strain Relief



### DC Handle and Strain Relief on R65



### DC Strain Relief on R65



The DC Handle and Strain Relief design offers protection for the power connector and provides a convenient hand grip to make engaging and disengaging easier. This helps reduce strain on the connector due to mishandling.

#### Order Information:

##### Strain Relief Kit with Handle:

Part No. — 120012G1G Gray Polycarbonate Plastic

Part No. — 120012G1R Red Polycarbonate Plastic

Part No. — 120012G1M Insulated Non-corrosive Steel Handle

# The Anderson Family BATTERY CONNECTORS



## Battery Connectors - CAT. NOS. R121, R125, 4657B



### Corkscrew plugs and receptacles lock into compact, rugged connections

#### The connector

Corkscrew locking plugs and receptacles provide compact, weathertight connections for quick indoor or outdoor battery charging and numerous other electric vehicle, industrial and aircraft applications.

For maximum conductivity with minimum corrosion, all contacts are silverplated copper. Even after salt-spray exposure electrical resistance stays minimal.

#### The plug

Plug mechanisms are encased in a durable Hypalon insulation housing. Stainless steel garter springs reinforce the socket-type contacts to increase mating pressure and make each connection equally reliable. Intergrally designed gaskets seal the mated connector.

The plug models differ primarily by means of termination and current rating. Catalog number R121 is a convenient no crimp no solder setscrew termination. Catalog number R125 provides the precise fit and rugged connection of a conical lug termination, which is retained in the plug with an allen-type screw.

A screw-lock mates the connector tightly enough to withstand severe vibration and physical shocks. It is operated by a twist handle which positively connects and disconnects the plug. The handle also indicates the state of the connection by its position.

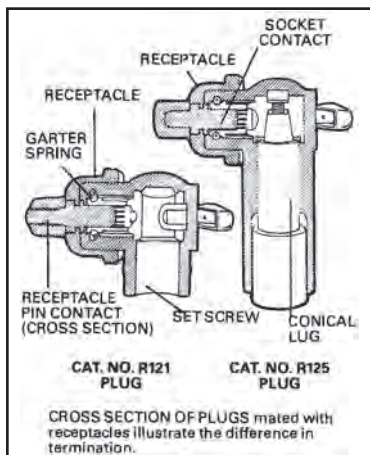
#### The receptacle

The receptacle is flanged for surface mounting. Pin-style contacts are molded into the glass-filled thermoset plastic housing. Hardware is plated to resist corrosion.

#### Applications

The corkscrew is a versatile, high performance connector, that may be used for weatherproof battery charger and intercomponent connections in electric vehicles; as a stand-by power connector in computer systems; or as a ground power connector in marine, air and rail transport. It is recommended for other similar applications, or wherever hydraulic fluids, oils, acids and other such potentially destructive elements could shorten the life of another connector.

data table



	PLUG R121	PLUG R125	PLUG RECEPTACLE 4657
CATALOG NUMBER	R121	R125	4657
AMPERES, CONTINUOUS	250	300	300
VOLTS	125	600	600
CONNECT-DISCONNECTS	no load load		
	at least 5000 time (all) for disconnect use only (all)		
AWG CABLE SIZES	6-3/0	10-4/0	10-4/0
MAXIMUM CABLE O.D.	3/4"	1"	
CABLE CONNECTION	set screw	conical lug*	threaded pin
CONTACT TYPE	socket	socket	
CONTACT MATERIAL	silverplated copper (all)		
CONTACT RESISTANCE	approximately 75 micro-ohms maximum after 100-hr. salt spray test		
CONTACT MATING FORCE	<12 inch-pound torque (all)		
AUXILIARY CONTACT	available - consult factory		
TEMP. RISE ABOVE AMBIENT	<30°C with largest cable rated-continuous duty (all)		
ENVIRONMENTAL RESTRICTIONS			
AMBIENT OPERATING TEMP.	-40°C to + 71°C (all)		
WEATHERPROOF	yes†	yes†	yes‡
OTHER TESTING	vibration, temperature, shock, dielectric strength, fungus, salt spray, humidity, hydraulic fluids, acid, alkali, lubrication oil		
HOUSING COLOR	black	black	black

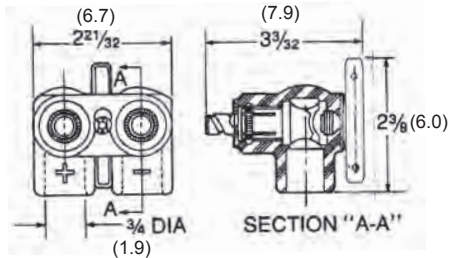
\*crimp or solder contact \*\* shrink tubing over connector sleeve-to-cable joint and potted set-screw holes required

# BATTERY CONNECTORS

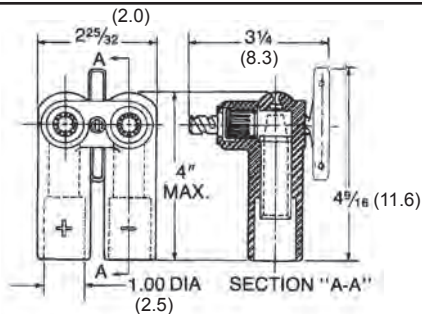


## Battery Connectors - Plugs and Receptacles

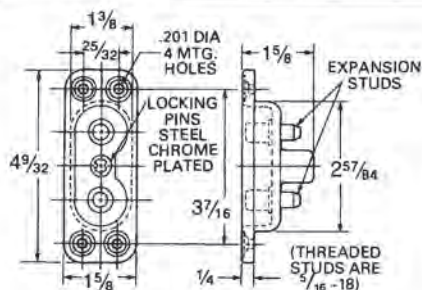
### DIMENSIONS



**CAT. NO. R121 PLUG**



**CAT. NO. R125 PLUG**



**CAT. NO. 4657B RECEPTACLE**

#### SUGGESTED CRIMP TOOLS FOR R125

AWG Size	Tool	Nest	Indenter
6		A6CD	Y34PL-1
5-4	Burndy	A2CD	Y34PLA
3-2	Y34A	A1CD	Y34PLA
1	Hypress	A25D	Y34PA
1/0	or	A26D	Y34PA
2/0	equivalent	A27D	Y34PA
3/0		A28D	Y34PR-5
4/0		A29D	Y34PR-5

The cat. no. R125 Plug is covered by the following patents:  
U.S. Patent 2,917,722  
Canadian Patent 612,047

### ORDERING INFORMATION

#### set screw termination



AWG Size **	Metric mm	Catalog Number
#6-3/0	(85 )	R121

#### lug termination (lugs included)



AWG Size **	MS 1411-	Metric mm	Catalog Number
10	-2	(5)	R125G1
8	-3	(8)	R125G2
6	-4	(13)	R125G3
5-4	-5	(17-21)	R125G4
3-2	-6	(27-34)	R125G5
1	-7	(42)	R125G6
1/0	-8	(53)	R125G7
2/0	-9	(67)	R125G8
3/0	-10	(85)	R125G9
4/0	-11	(107)	R125G10

#### lug sets (replacement)



Two lugs per set, with hardware

AWG Size **	METRIC mm	Catalog Number
8-10	(8-5)	970
12-10	(3-5)	971
8	(8)	972
6	(13)	973
5-4	(17-21)	974
3-2	(27-34)	975
1	(42)	976
1/0	(53)	977
2/0	(67)	978
3/0	(85)	979
4/0	(107)	980

#### ordering information Receptacle



Description***	Catalog Number
Black with threaded studs _____	4657B

\*\* Soldering is recommended for cable sizes 10 through 8 AWG. For Cable sizes 6 through 4/0 AWG, see suggested crimping tool.



# AC, DC QuickBreakaway® QB

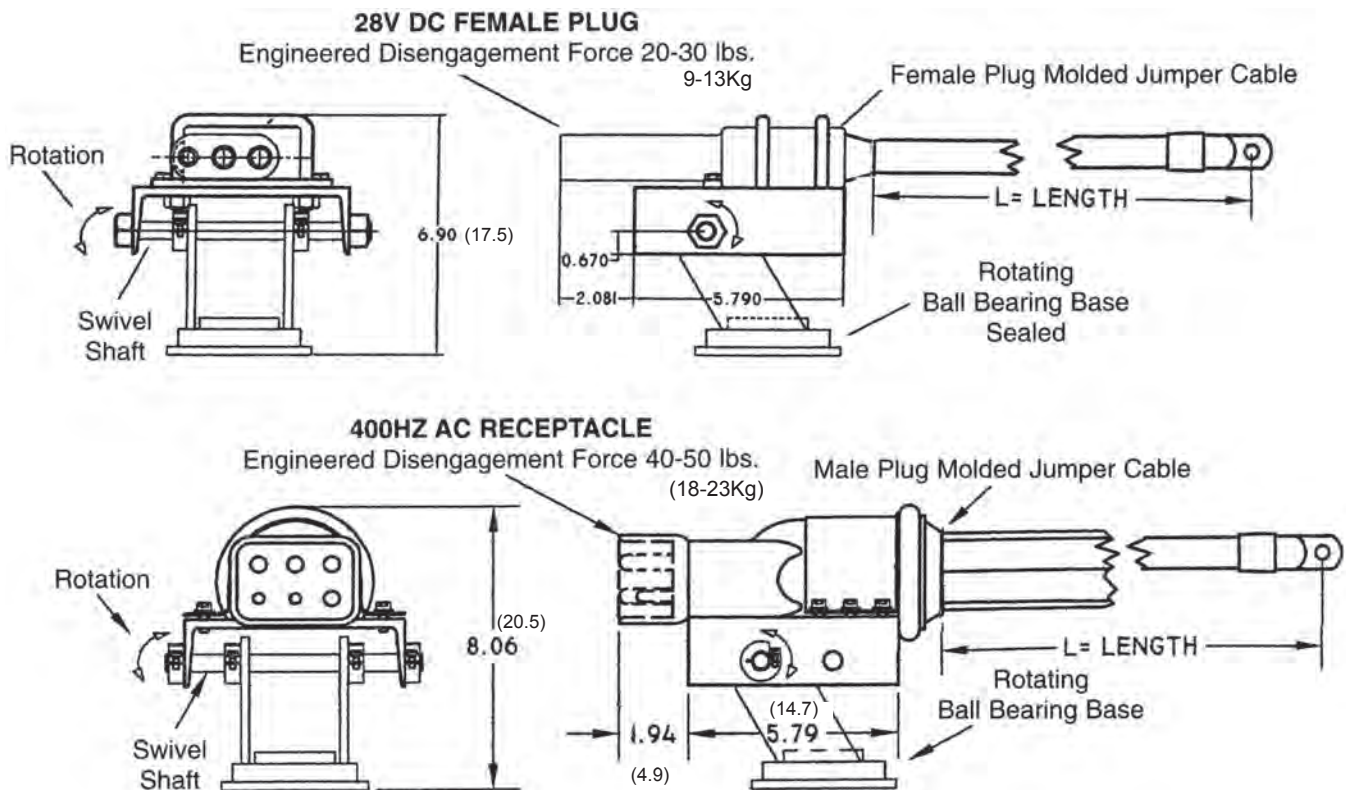


## Principle:

The QuickBreakaway® is designed to disconnect the power cord from the source (GPU or Bridge) without damage to the equipment if operators fail to disconnect the power cable.

## Operation:

The QB is a rugged ball bearing swivel assembly that rotates the male or female plug jumper cable 360° in the direction of pull. The male-female configuration is designed to disconnect at about 50% of the normal disconnect force; thus, the connection will break at the QB assembly on the power source if the plug is not disengaged at the plane.



## Installation:

The QB can easily be installed on a GPU or on a bridge through the mounting holes in the base. Adaptors are available for mounting. The jumper assembly hooks up to the power source output with terminal lugs and is customized for length based on the application.

The power cable will require two female connectors or a male-female depending on configuration; one connector plugs into the QB and the other provides power to the plane.

		DC	AC
Order Information:	A. 360° Swivel Base	QB-DC	(1) QB-AC (2) QD-AC
	360° Swivel Base w Spacer	QB-DCS	(1) QB-ACS (2) QD-ACS
B. QB Jumper	Male	R68GxxEQB-xM	R112GxxEQB-xM
	Female	R65GxxEQB-xM	R67GxxEQB-xM
C. QB Cable Assy	Double Female	R65GxxE-2-xM	R67GxxE-2-xM
	Male/Female	R68GxxEQBR65-xM	R112GxxEQBR67-xM

(1) For overhauled plugs (2) For Attachable® plugs


® QuickBreakaway (QB) is a registered trademark of Anderson Airmotive Products Co., Inc.

# The Anderson Family Options & ACCESSORIES




## Lug Sets

**Cable lugs** for crimping or soldering to cable prior to assembly into Attachable® plugs. R65, R67, R71 Series, R125, R68, R112, R765, R768, R771

Cable lug sets			
 Two lugs per set, with hardware	AWG Size **	Metric	Catalog Number
	Aux 12-10	(3.3-5.3)	971
	Aux 8-10	(8.3-5.3)	970
	PWR 8	(8.3)	972
	PWR 6	(13.3)	973
	PWR 5-4	(17.2-21)	974
	PWR 3-2	(27.4-33.6)	975
	PWR 1	(42.4)	976
	PWR 1/0	(53.5)	977
	PWR 2/0	(67.4)	978
	PWR 3/0	(85)	979
	PWR 4/0	(107.2)	980
	PWR 12/10	(3-5.3)	981
	PWR 250mm	120	982

**Terminal lugs** for crimping or soldering on to cable.

Terminal lug sets				
 Two lugs per set	AWG Size **	Metric	Terminal Lug Set 3/8" (0.9) hole	Terminal Lug Set 1/2" (1.3) hole
	12-10	(3.3-5.3)	T971	T971-1
	8-10	(8.3-5.3)	T970	T970-1
	8	(8.3)	T972	T972-1
	6	(13.3)	T973	T973-1
	5-4	(17.2-21)	T974	T974-1
	3-2	(27.4-33.6)	T975	T975-1
	1	(42.4)	T976	T976-1
	1/0	(53.5)	T977	T977-1
	2/0	(67.4)	T978	T978-1
	3/0	(85)	T979	T979-1
	4/0	(107.2)	T980	T980-1

## Crimp Tool Recommendations

### VERSA-CRIMP® HYDRAULIC COMPRESSION TOOL HAND OPERATED TYPE VC7-SP

#### Die Less

- The original notched-top VERSA-CRIMP compression tool allows direct access of the tool to the connector for compressing multi-strand/rope lay copper cable in mining, marine and industrial applications. Copper color label denotes use with copper connectors, only with 360° head rotation.

Includes:

- High impact plastic carrying and shipping case with Service Manual and 2-Year warranty.

- Notes: 1) Due to high pressure developed by this tool, it is not to be used on aluminum connector or cable.  
2) add suffix "D" to catalog number for neoprene covered head.  
3) Type VCHTG, Direct Reading Pressure Gauge, is used for checking operating pressure.

® Anderson  
Electric

TOOL
VC7-SP



#### TYPE VC7-SP Hand tool

Conductor Range — #6 Str. — 500 MCMBare Cu  
Approx. Wt. Each — 10.5 lbs. (4.7 kg.)  
Also available as bench mounted

## Rotating Hex Die Hand Crimper (CT-090)

RANGE: #8 AWG TO 4/0 AWG  
LENGTH: 25.5 inches WEIGHT: 6.5 lbs.



CT-090

## Hex Die Crimper

MS25441 Crimper with 12 ton Hydraulic Head and appropriate MS90485 crimp dies. T&B or equivalent

## Hand Crimper

RANGE: #22 TO #10  
LENGTH: 9.5 inches WEIGHT: 7/8 lbs



H-2200P1

## ACCESSORIES (cont'd)



### Environmental End Caps

Protect end of connector from dust and environmental damage



AC END CAP FOR PLUG  
2-8300P1



AC END CAP  
FOR RECEPTACLE  
2-8300P2



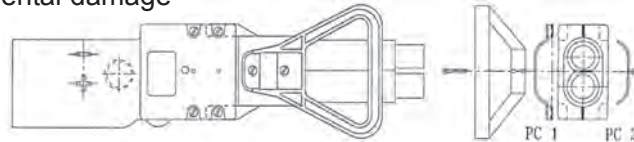
DC END CAP  
FOR RECEPTACLE  
2-8299P2



DC END CAP  
FOR PLUG  
2-8299P1

### Strain Relief for DC Cable Assemblies

Protect end of connector from dust and environmental damage



Order Information:

Strain Relief Kit with handle: Part No. - 120012G1G, R, M

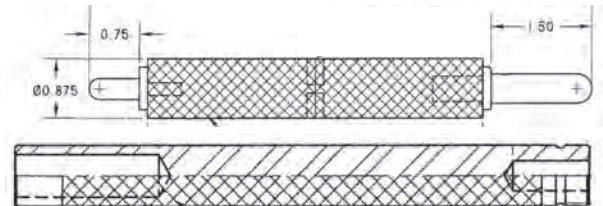
Handle Only: Gray Polycarbonate Plastic Part No - HDLG

Red Polycarbonate Plastic Part No. — HDLR

Insulated non-corrosive steel Part No. — HDLM

### Test Pins

1. For checking plug wear on Power and Auxiliary female contacts  
Order: TPM
2. For checking receptacle power pin and auxiliary pin wear  
Order: TPF



### Scuff Covers

Protects cables from direct contact with ground and eases sliding.



SC-xx(c) (id)  
c = color  
id = inside  
diameter  
xx = length

Supplied in 30 feet max increments; Order SC-xx



R65G3E-3SK



AC SPLICE KIT R67G36E-3SK

**Splice Kits** DC & AC See page 14,15,16 for options.

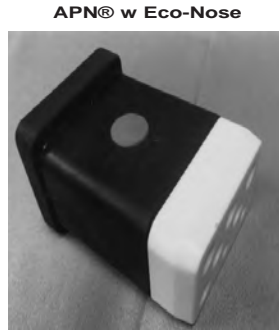
## ACCESSORIES (cont'd)



### Replacement Noses



APN®  
R90 Kit 1  
R91 Kit 1



APN® w Eco-Nose  
R90 Kit 1EN  
R91 Kit 1EN



Aux. Switch Assembly  
1-8627G1SWA KIT  
REPLACEMENT  
SWITCH ASSY.



Wear Nose®  
R901 (Black)  
R901Y (Yellow)

Wear Nose Double Sensing  
with Eco-Nose



R901DSEN  
Double Sensing  
with Eco-Nose

Double safety nose option can be added to both APN and Wear Nose. Add DS as prefix. The DS will disconnect plug if resistance is too high when properly connected. Nose color is blue/green.

### Cable Options

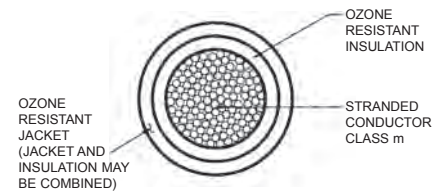
#### MIL-C-5756 C

Super flexible ozone **RESISTANT**

1/0 H 2041P2

2/0 H 2042P1

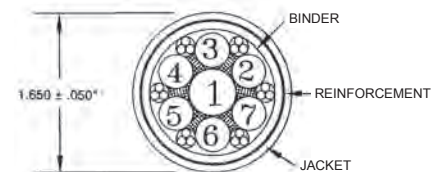
4/0 H 2044P1



#### Single Jacket Balanced Composite Cable

260A 400 Hz # 81501

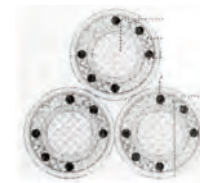
300A 400 Hz #81502



#### Betajet®

50 MM #81503

70 MM #81504



®BetaJet registered Trademark Leoni Studer Cable  
Other Cable Available - Welding, TPE Insulation, etc.

### Assembly Kit

Order No. 111239G2



### Strap Hanger

Relieves stress on plugs for  
longer cable assembly life.

Order No. A28273







## ANDERSON AIRMOTIVE CAN ENGINEER SOLUTIONS TO YOUR SPECIAL POWER CONNECTION REQUIREMENTS



MS 3108 with R67G11E



28V DC Helicopter Plug  
250 MCM R83, R84



R65 with SB Anderson Power Products  
Battery Connector



R65G3E with R125 BATTERY PLUG

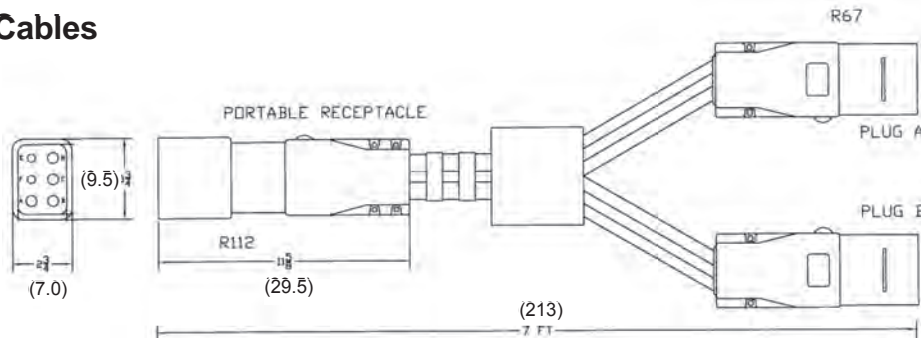


MS 27285 Male with MS25486 PLUG



Lear Jet Adapter: Female/Male Jumper Order: R68G3ER65-0

### "Y" Cables



AC + DC "Y" available designed so that both output plugs have to be plugged in to power up. AC Part # R112GxxER67GS2-7A; DC Part # R68GxxER65-GS2-7A

## CONVERSION OF AMERICAN WIRE GAUGE TO METRIC SYSTEM

SIZE AWG OR MCM	AMPERES SINGLE COND. 75° C COPPER (NFPA)	AREA			APPROX. DIAMETER	
		CIRCULAR MILS	SQUARE INCHES	SQUARE mm	INCHES CLASS M (NEMA)	mm
20	7	1020	0.0008	0.52	0.038	.97
18	10	1620	0.0013	0.82	0.048	1.22
16	15	2580	0.0020	1.31	0.060	1.52
14	20	4110	0.0032	2.08	0.078	1.98
12	25	6530	0.0051	3.31	0.101	2.57
10	40	10380	0.0082	5.26	0.126	3.20
8	65	16510	0.0130	8.37	0.162	4.11
6	95	26240	0.0206	13.30	0.215	5.46
4	125	41740	0.0328	21.15	0.269	6.83
2	170	66360	0.0521	33.62	0.337	8.56
1	195	83690	0.0657	42.41	0.376	9.55
1/0	230	105600	0.0829	53.50	0.423	10.74
2/0	265	133100	0.1045	67.43	0.508	12.90
3/0	310	167800	0.1318	85.01	0.576	14.63
4/0	360	211600	0.1662	107.2	0.645	16.38
250	405	250000	0.1964	126.7	0.713	18.11
300	445	300000	0.2356	152.0	0.768	19.51
500	620	500000	0.3927	253.4	0.997	25.32
750	785	750000	0.5891	380.0	1.207	30.66
1000	935	1000000	0.7854	506.7	1.404	35.66



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