

100 to 1,000 amp DC Connectors used in:

Batteries & Energy Storage



Work Trucks, APUs, Electrification



Motive Power



Rebling is a connector manufacturer located near Philadelphia which has specialized in high current (100 to 1,000 amps) connectors for the past 50 years. Fortunately for us, there has been significant growth in the markets we serve (battery manufacturers, motive power, energy storage systems, auxiliary power, power conditioning).

As applications trend toward higher voltages and currents as well as faster charging times, improved features are needed to enable the OEMs in those sectors to maintain their competitive edge and reduce their end users' total cost of ownership. We will continue to innovate and bring those vital features to market at economical prices.

Wherever you find a Lithium Battery Module larger than a loaf of bread, you will find Rebling



Forklifts & AGVs



DC Power Converters



Tugs & Tractors



Lithium Batteries



EV Fast Chargers



Portable Battery Packs



Mining Vehicles



High Performance EVs



Energy Storage Systems



Marine Micro Grids



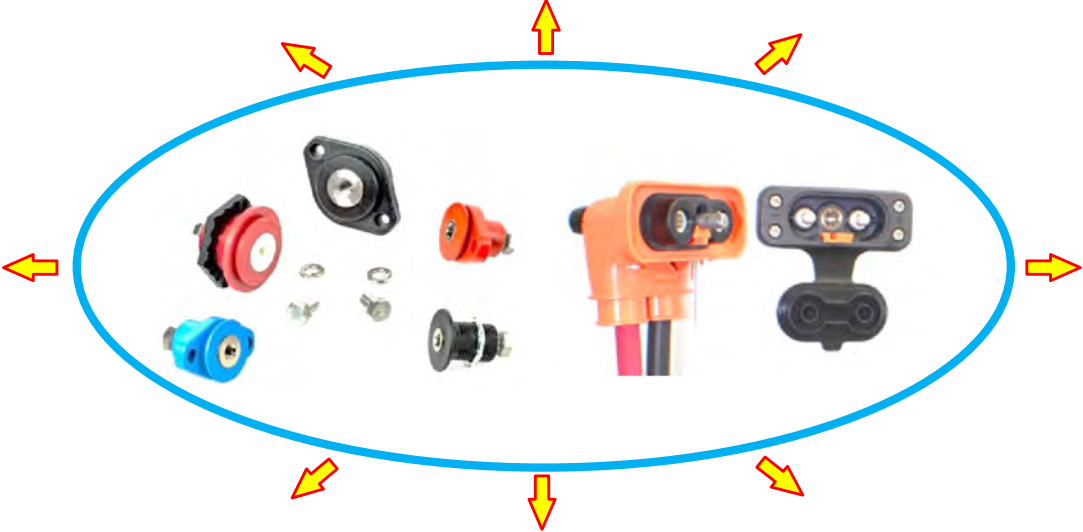
Long Haul BEVs



Pulse Weapons



Zero Emission Work Trucks



Generator Sets



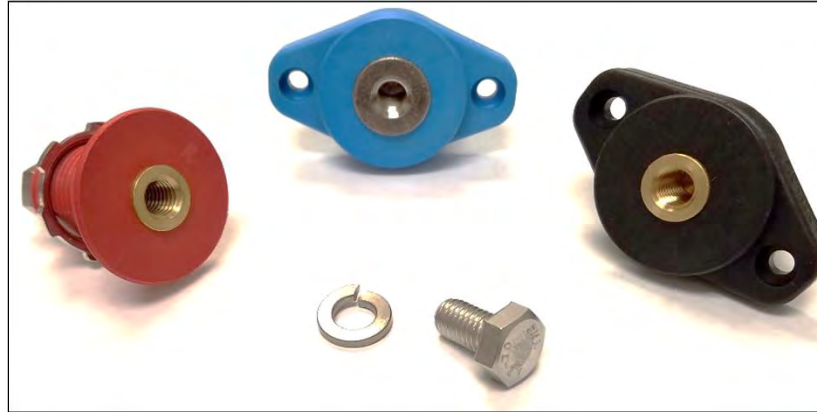
Off-Grid Backup

Double Pole Quick-Disconnect Connectors



pages 14 → 20

Single Pole Feed Through Terminals



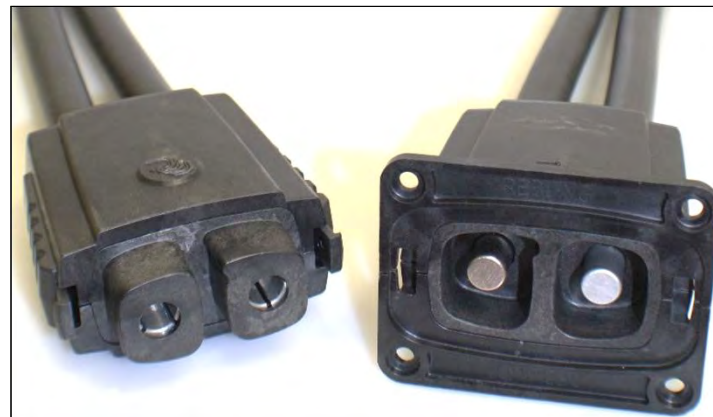
pages 4 → 13

Battery Swap Connectors



pages 19 → 20

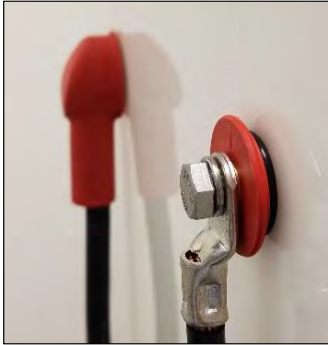
Double Pole Renewable Energy Inverter Connectors



Datasheets and 3D Step Files
for all products can be
Downloaded from Rebling.com

Feed Through Terminal, Single Pole, Wrench-Disconnect

LFT, SFT, MFT, BFT and XFT Styles



Our terminals are designed for the temperature sensitive environment of lithium battery modules and are compatible with any battery chemistry as well as air-cooled or liquid-cooled systems. Available in nickel plated for harsh environments, they prevent the ingress or egress of fluids and stay cool even at extreme charge and discharge rates. Equipping your design with these watertight terminals will enable designers and integrators to easily incorporate your products into Battery Pack, Motive Power, Energy Storage, Auxiliary Power or Power Conditioning applications.

The **Selection Guides** on pages 8 & 9 identify the optimal part based upon your application's rated current, panel material, panel thickness, desired mounting pattern, environmental sealing and cover requirements.

Rigid and flexible covers snap onto the terminals with an audible click.

Ordering Information for terminals and accessories can be found on pages 11, 12 and 13.



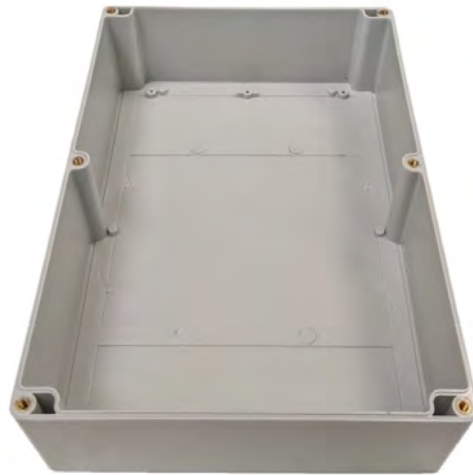
Feed-through Terminals in an Energy Storage System

Battery Module

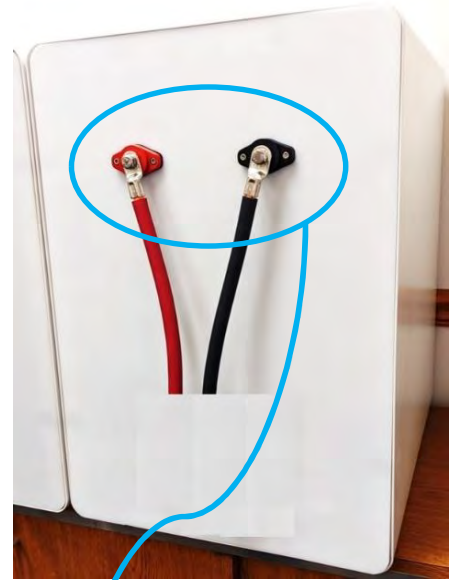


Multiple Module Stack

Feed-through Terminals in a Battery Module



Feed-through Terminals in a Multiple-module Battery Pack



Cable and Connector Selection Guidelines

Product Category	Industry Standard or Test Results	Product			Tool Required for Mating & Un-mating	Cross Sectional Area of Conductor mm ² (in ²)	30° C Rise		45° C Rise		60° C Rise		90° C Rise	
							55° total	60° Touch Safe Metal	70° total	77° Brewed Coffee	85° total	85° Touch Safe Plastic	100° Boiling Water	115° total
Connector	Test Results	Rebling	BFT or XFT	1,000 amp rating with one 750 MCM cable per terminal	Wrench	390 (.601)	1,020		1,270		1,470		1,690	
Connector	Test Results	Rebling	BFT or XFT	750 amp rating with one 750 MCM cable per terminal	Wrench	390 (.601)	900		1,100		1,250		1,440	
Connector	Test Results	Rebling	MFT	500 amp rating with one 450 MCM cable per terminal	Wrench	240 (.372)	520		630		730		840	
Connector	Test Results	Rebling	LFT or SFT	250 amp rating with one 4/0 cable per terminal	Wrench	130 (.196)	280		340		390		450	
Connector	Test Results	Anderson	SB350	with one 4/0 cable per terminal	None	130 (.196)	280		340		390		450	
Connector	Test Results	Rebling	7010+7020	with one 4/0 cable per terminal	None	75 (.110)	270		330		380		430	
Cable	Test Results	750 MCM	Cable	7,600 strands of 30 gauge wire		380 (.597)	1,010		1,250		1,430			
Cable	Test Results	500 MCM	Cable	5,000 strands of 30 gauge wire		250 (.393)	690		850		970			
Cable	Test Results	450 MCM	Cable	4,500 strands of 30 gauge wire		230 (.353)	550		660		770			
Cable	Test Results	250 MCM	Cable	2,500 strands of 30 gauge wire		130 (.196)	360		450		520			
Cable	Test Results	4/0	Cable	2,060 strands of 30 gauge wire		105 (.162)	290		350		400			
Cable	Test Results	3/0	Cable	1,590 strands of 30 gauge wire		80 (.125)	260		310		350			
Cable	Test Results	2/0	Cable	1,280 strands of 30 gauge wire		65 (.101)	240		290		335			
Cable	Test Results	1/0	Cable	1,000 strands of 30 gauge wire		50 (.079)	230		270		315			
Cable	Test Results	2 AWG	Cable	600 strands of 30 gauge wire		30 (.047)	160		190		220			
Cable	Test Results	6 AWG	Cable	250 strands of 30 gauge wire		13 (.020)	90		110		125			
Cable	NEC/UL Standard	1,000 MCM	Cable	10,300 strands of 30 gauge wire		520 (.809)	455		545		615			
Cable	NEC/UL Standard	750 MCM	Cable	7,600 strands of 30 gauge wire		380 (.597)	400		475		535			
Cable	NEC/UL Standard	500 MCM	Cable	5,000 strands of 30 gauge wire		250 (.393)	320		380		430			
Cable	NEC/UL Standard	450 MCM	Cable	4,500 strands of 30 gauge wire		230 (.353)	300		355		405			
Cable	NEC/UL Standard	4/0	Cable	2,060 strands of 30 gauge wire		105 (.162)	195		230		260			
Cable	NEC/UL Standard	2/0	Cable	1,280 strands of 30 gauge wire		65 (.101)	145		175		195			
Cable	NEC/UL Standard	1/0	Cable	1,000 strands of 30 gauge wire		50 (.079)	125		150		170			
Cable	NEC/UL Standard	1 AWG	Cable	800 strands of 30 gauge wire		40 (.063)	110		130		145			
Cable	NEC/UL Standard	2 AWG	Cable	600 strands of 30 gauge wire		30 (.047)	95		115		130			
Cable	NEC/UL Standard	6 AWG	Cable	250 strands of 30 gauge wire		13 (.020)	55		65		75			

Cable and Connector Selection Guidelines: The cross sectional areas of the terminal and the cable attached to the terminal should be the same. Attaching a small cable to a large terminal is like attaching a 1 inch pipe to a 4 inch fitting, the size of the cable will limit the system's electrical and thermal performance, not the terminal. To select the optimal connector, follow the steps below:

- Step 1: determine the temperature rise your equipment design can tolerate. The higher the temperature rise your equipment can tolerate, the lower the cost of cable and connectors.
- Step 2: determine if your equipment needs to comply with UL, NEC, IEC or other standards
- Step 3: determine the steady state current which your equipment must handle. If there are frequent or extended peaks of higher currents, use these peaks to estimate an average steady state current.
- Step 4: select the smallest cable which can carry your steady state current which does not exceed the temperature rise you can tolerate and which conforms to the standard with which you wish to comply.
- Step 5: determine if your equipment needs a separable electrical connection. Separable connections are more expensive and less reliable than permanent (soldered or welded) connections.
- Step 6: determine if it is acceptable to use a tool to un-mate your electrical connection. Toolless connectors are more expensive and less reliable than connectors which require tools but might be justifiable if: frequent un-matings occur, the installer is unskilled, a 20 second reduction in maintenance time is critical or lowered assembly labor costs offset the increased cost of the toolless connector.
- Step 7: select the lowest cost connector which: does not exceed the temperature rise your equipment can tolerate at your steady state current and meets your un-mating tool requirements.

Temperature Rise Values: the NEC (National Electrical Code) values are NEC's recommendations for typical thermoplastic insulated cables enclosed in a conduit which are close to other cables.

UL has adopted NEC's 45° C rise values as their recommendations for current levels per cable size in UL 98. The values labeled "Test Results" were obtained from current vs temperature rise testing of individual cables and connectors suspended in air inside an 18" x 18" x 18" test chamber. Lithium battery system designers usually select components which keep the temperature rise to a maximum of 30° C due the sensitivity of lithium cells. It is wise to compare connectors based upon temperature rise test results since the rated currents and total allowable temperatures defined by standards like UL1977 and IEC 61984 can vary by a factor of 2.5. The current vs temperature rise characteristics of your application may be significantly different than the assumptions used in NEC, UL or IEC standards.

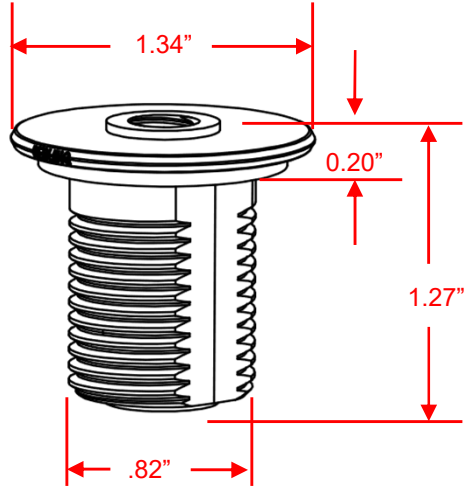
Touch Safe Temperatures: IEC/UL 60950-1 defines the maximum allowable temperature for 3 seconds of contact between a metal component and the human body as 60° C; for plastic it's 85° C.

Cross Sectional Area of Conductor: the cross sectional areas of the stranded cables shown above were calculated using the diameter of one 30 gauge wire = 0.01000 inches

Terminal Selection Guide

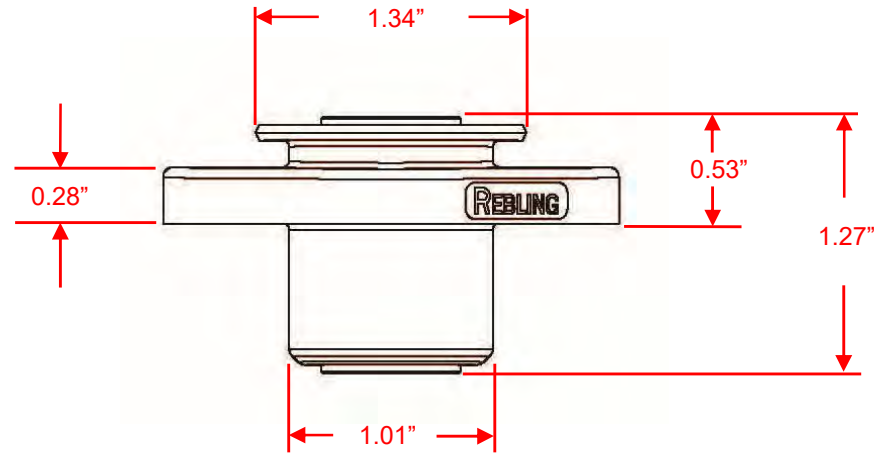
Your Application's Parameters					Rebling Terminal Selection Guide					Accessories				
Rated Current	Your Panel Material	Your Panel Thickness	Desired Panel Mounting	Connector Plating	Style	Insulator Color	P/N for bagged Kit	Advantages over other Styles	O-ring	Gasket	Flexible Cover	Long Rigid Cover	Short Rigid Cover	
250 amps	Plastic	0.025 → 0.220" 0,64 → 5,59 mm	3 circular holes	Unplated Brass	SFT	Black	SFT-B-B	Can be mounted on very thin or weak panels Mounting holes can be made with a hand drill	-	716A1814	713A1808-B (BLK) 713A1808-R (RED) 713A1808-E (BLU)	698A1789-L-B (BLK) 698A1789-L-R (RED) 698A1789-L-E (BLU)	698A1789-S-B (BLK) 698A1789-S-R (RED) 698A1789-S-E (BLU)	
				Ni-plated Brass		Red	SFT-P-B							
	0.230 → 0.660" 5,84 → 16,76 mm	1 double-D hole	Unplated Brass	LFT	Black	LFT-B-B	Smallest Footprint, Lowest Cost Simplest Environmental Seal	700A1799	-					
			Ni-plated Brass		Red	LFT-P-B								
	3 circular holes	Unplated Brass	SFT	Black	SFT-B-B	Can be mounted on very thin or weak panels Mounting holes can be made with a hand drill	-	716A1814						
				Red	SFT-P-B									
0.025 → 0.100" 0,64 → 2,54 mm	3 circular holes	Unplated Brass	SFT	Black	SFT-B-B	Can be mounted on very thin or weak panels Mounting holes can be made with a hand drill	-	716A1814						
				Red	SFT-P-B									
0.110 → 0.660" 2,80 → 16,76 mm	1 double-D hole	Unplated Brass	LFT	Black	LFT-B-B	Smallest Footprint, Lowest Cost Simplest Environmental Seal	700A1799	-						
				Ni-plated Brass	Red				LFT-P-B					
3 circular holes	Unplated Brass	SFT	Black	SFT-B-B	Can be mounted on very thin or weak panels Mounting holes can be made with a hand drill	-	716A1814							
			Red	SFT-P-B										
500 amps	Plastic or Metal	0.025 → 0.660" 0,64 → 16,76 mm	3 circular holes	Unplated Brass	MFT	Black	MFT-B-B	Can be mounted on very thin or weak panels Mounting holes can be made with a hand drill	-	716A1815				
				Ni-plated Brass		Red	MFT-P-B							
750 amps	Plastic	0.025 → 0.180"	3 circular holes	Ni-plated Brass	XFT	Black	XFT-P-B	Can be mounted on very thin or weak panels Mounting holes can be made with a hand drill		720A1817	639A1830-B (BLK) 639A1830-R (RED)			
				Ni-plated Brass		Red	XFT-P-R							
	0.190 → 0.550" 4,83 → 13,97 mm	1 double-D hole	Ni-plated Brass	BFT	Black	BFT-P-B	Smallest Footprint, Lowest Cost Simplest Environmental Seal	851A1811	-					
			Ni-plated Brass		Red	BFT-P-R								
	3 circular holes	Ni-plated Brass	XFT	Black	XFT-P-B	Can be mounted on very thin or weak panels Mounting holes can be made with a hand drill	-	720A1817						
				Red	XFT-P-R									
0.025 → 0.070"	3 circular holes	Ni-plated Brass	XFT	Black	XFT-P-B	Can be mounted on very thin or weak panels Mounting holes can be made with a hand drill	-	720A1817						
				Red	XFT-P-R									
0.080 → 0.550" 2,04 → 13,97 mm	1 double-D hole	Ni-plated Brass	BFT	Black	BFT-P-B	Smallest Footprint, Lowest Cost Simplest Environmental Seal	851A1811	-						
				Ni-plated Brass	Red				BFT-P-R					
3 circular holes	Ni-plated Brass	XFT	Black	XFT-P-B	Can be mounted on very thin or weak panels Mounting holes can be made with a hand drill	-	720A1817							
			Red	XFT-P-R										
1000 amps	Plastic	0.025 → 0.180"	3 circular holes	Ni-plated Copper	XFT	Black	XFT-N-B	Can be mounted on very thin or weak panels Mounting holes can be made with a hand drill		720A1817	639A1830-B (BLK) 639A1830-R (RED)			
				Ni-plated Copper		Red	XFT-N-R							
	0.190 → 0.550" 4,83 → 13,97 mm	1 double-D hole	Ni-plated Copper	BFT	Black	BFT-N-B	Smallest Footprint, Lowest Cost Simplest Environmental Seal	851A1811	-					
			Ni-plated Copper		Red	BFT-N-R								
	3 circular holes	Ni-plated Copper	XFT	Black	XFT-N-B	Can be mounted on very thin or weak panels Mounting holes can be made with a hand drill	-	720A1817						
				Ni-plated Copper	Red				XFT-N-R					
0.025 → 0.070"	3 circular holes	Ni-plated Copper	XFT	Black	XFT-N-B	Can be mounted on very thin or weak panels Mounting holes can be made with a hand drill	-	720A1817						
				Ni-plated Copper	Red				XFT-N-R					
0.080 → 0.550" 2,04 → 13,97 mm	1 double-D hole	Ni-plated Copper	BFT	Black	BFT-N-B	Smallest Footprint, Lowest Cost Simplest Environmental Seal	851A1811	-						
				Ni-plated Copper	Red				BFT-N-R					
3 circular holes	Ni-plated Copper	XFT	Black	XFT-N-B	Can be mounted on very thin or weak panels Mounting holes can be made with a hand drill	-	720A1817							
			Ni-plated Copper	Red				XFT-N-R						

Dimensions & Specifications



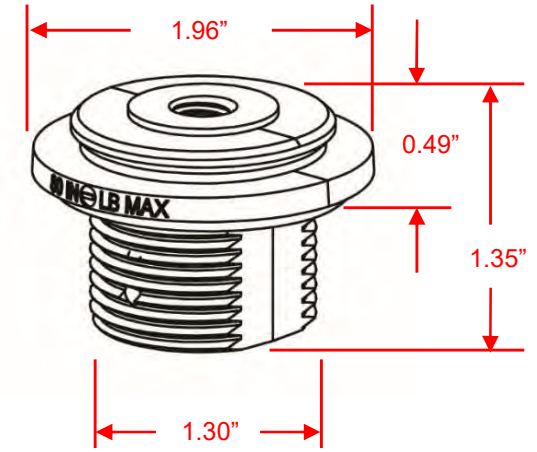
LFT Style

250 amps, 2,000 volts
 UL94 5VA IP68 with O-Ring
 One Double-D mounting hole



MFT Style

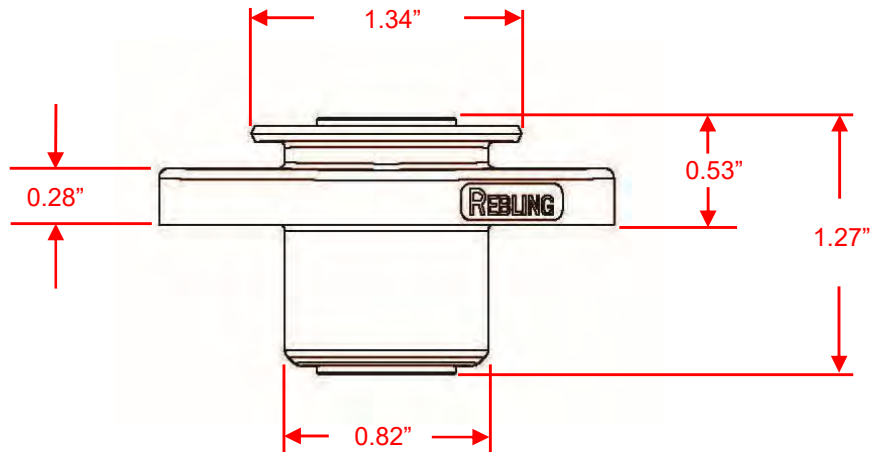
500 amps, 2,000 volts
 UL94 V-0 IP68 with gasket
 Three circular mounting holes



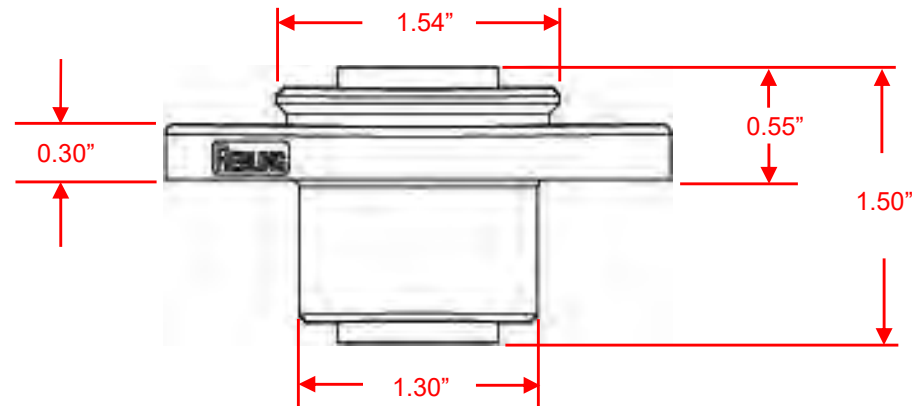
BFT Style

750 amps, 2,000 volts in brass
 1,000 amps, 2,000 volts in copper
 UL94 5VA IP68 with gasket
 One Double-D mounting hole

SFT Style
 250 amps, 2,000 volts
 UL94 V-0 IP68 with gasket
 Three circular mounting holes



XFT Style
 750 amps, 2,000 volts in brass
 1,000 amps, 2,000 volts in copper
 UL94 V-0 IP68 with gasket
 Three circular mounting holes





Feed-through Terminals

Rebling's Terminals are the most economical, smallest footprint, watertight feed-throughs that stay cool at the extreme charge and discharge rates of today's most advanced battery chemistries. These terminals are used on Lithium Battery Packs, Energy Storage Systems, Electric Vehicles, Power Distribution Panels, Chargers, Battery Management Systems, Inverters, Auxiliary Power Units and Power Conditioning Modules.

Covers and Gaskets can be found on the Accessories Page

P/N	Description	Pricing
LFT-B-B LFT-B-R LFT-B-E	250 amp Lithium Battery Terminal, Brass, Unplated w M8 bolts (Black, Red, Blue)	<p style="color: red; font-weight: bold; margin: 0;">Pricing and Delivery</p> <p style="margin: 0;">please contact these Authorized Distributors</p> <p style="font-weight: bold; margin: 10px 0;">North and South America</p> <p style="margin: 0;">Flame Enterprises FlameCorp.com</p> <p style="margin: 0;">Vandapower-USA Vandapower.com/us</p> <p style="margin: 0;">Bisco Industries BiscoInd.com</p> <p style="font-weight: bold; margin: 10px 0;">Europe, Middle East, Africa</p> <p style="margin: 0;">Vandapower-Belgium Vandapower.com</p> <p style="font-weight: bold; margin: 10px 0;">Australia & Asia</p> <p style="margin: 0;">Vandapower-Belgium Vandapower.com</p> <p style="margin: 0;">Flame Enterprises FlameCorp.com</p>
LFT-P-B LFT-P-R LFT-P-E	250 amp Lithium Battery Terminal, Brass, Nickel plated w M8 bolts (Black, Red, Blue)	
SFT-B-B SFT-B-R SFT-B-E	250 amp Lithium Battery Terminal, Brass, Unplated w M8 bolts (Black, Red, Blue)	
SFT-P-B SFT-P-R SFT-P-E	250 amp Lithium Battery Terminal, Brass, Nickel plated w M8 bolts (Black, Red, Blue)	
MFT-B-B MFT-B-R MFT-B-E	500 amp Lithium Battery Terminal, Brass, Unplated w M8 bolts (Black, Red, Blue)	
MFT-P-B MFT-P-R MFT-P-E	500 amp Lithium Battery Terminal, Brass, Nickel plated w M8 bolts (Black, Red, Blue)	
XFT-P-B XFT-P-R	750 amp Lithium Battery Terminal, Brass, Nickel plated w M10 bolts (Black or Red)	
XFT-N-B XFT-N-R	1000 amp Lithium Battery Terminal, Copper, Nickel plated w M10 bolts (Black or Red)	
BFT-P-B BFT-P-R	750 amp Lithium Battery Terminal, Brass, Nickel plated w 5/16 bolts (Black or Red)	
BFT-N-B BFT-N-R	1,000 amp Lithium Battery Terminal, Copper, Nickel plated w 5/16 bolts (Black or Red)	





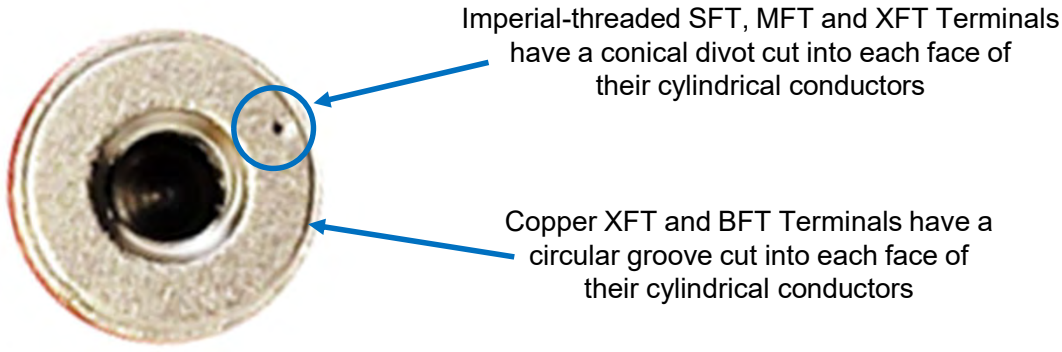
Imperial-threaded Feed-through Terminals

Imperial-threaded fasteners have been the standard on military and civilian aircraft worldwide for over 100 years
 These Terminals are used on Avionics Power Distribution Panels, Power Conditioning Modules, UAVs and EV Passenger Planes

Imperial-threaded Terminals have the same Performance Characteristics and accept the same Covers and Gaskets as their metric-threaded equivalents



P/N	Description	Pricing
SFT-P-B-516 SFT-P-R-516 SFT-P-E-516	250 amp Lithium Battery Terminal, Brass, Nickel plated w 5/16 bolts (Black, Red, Blue)	<p>Pricing and Delivery</p> <p>Imperial-threaded Terminals are available Worldwide exclusively through Rebling's Authorized Distributor</p> <p>Flame Enterprises at FlameCorp.com</p>
MFT-P-B-516 MFT-P-R-516	500 amp Lithium Battery Terminal, Brass, Nickel plated w 5/16 bolts (Black or Red)	
XFT-N-B-38 XFT-N-R-38	1000 amp Lithium Battery Terminal, Copper, Nickel plated w 3/8 bolts (Black or Red)	
BFT-P-B BFT-P-R	750 amp Lithium Battery Terminal, Brass, Nickel plated w 5/16 bolts (Black or Red)	
BFT-N-B BFT-N-R	1,000 amp Lithium Battery Terminal, Copper, Nickel plated w 5/16 bolts (Black or Red)	



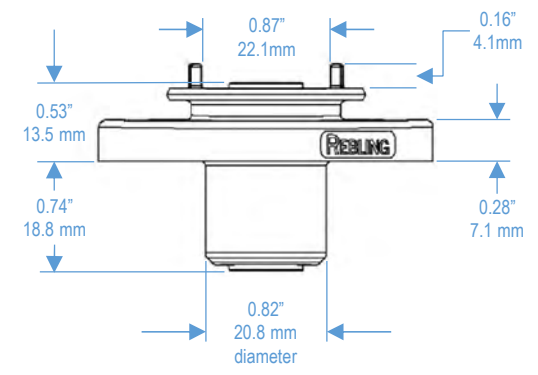
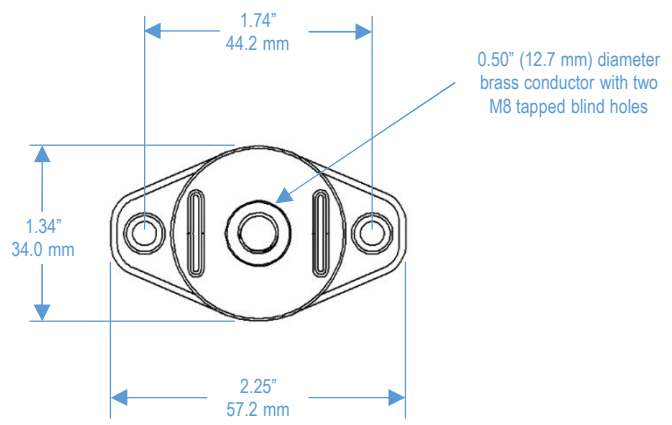


Fixed-Orientation SFT Terminals

Some applications, especially automotive, require that a cable be attached to a terminal in a specific orientation. This terminal has orientation ridges that allow a cable lug to only be attached to the terminal perpendicular to the centerline of the mounting holes. A Fixed-orientation Terminal assures that a complex automotive cable harness, which might be 12 feet in length and have 20 different power and signal connectors attached, can only be installed on the vehicle in one of two orientations. The orientation ridges of this terminal are spaced 0.87" (22 mm) apart and are designed to accommodate standard ring lugs crimped to 1/0 or 2/0 (50 to 70 mm²) cable or narrow-tongue crimp lugs for 3/0 or 4/0 (80 to 110 mm²) cable.











The nickel-plated brass conductor of this water-tight terminal has two blind M8 threaded holes which accept the stainless steel bolts and split washers included in the kit. Fixed-Orientation SFT Terminals have the same Performance Characteristics and accept the same Flexible Covers and Gaskets as Standard SFT Terminals



P/N	Description	Pricing
SFT-P-B-087	250 amp Fixed-orientation Terminal, Brass, Nickel plated w M8 Bolts, Black	Please contact these Authorized Distributors Flame Enterprises FlameCorp.com
SFT-P-R-087	250 amp Fixed-orientation Terminal, Brass, Nickel plated w M8 Bolts, Red	
SFT-P-E-087	250 amp Fixed-orientation Terminal, Brass, Nickel plated w M8 Bolts, Blue	Vandapower Vandapower.com

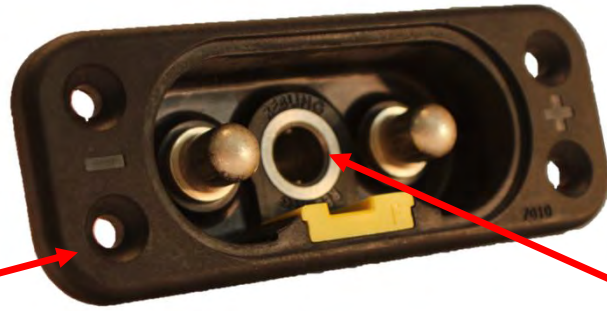
Accessories for Feed-through Terminals

The Accessories shown below fit all Metric-threaded and Imperial-threaded Terminals

P/N	Description	Pricing
 	698A1789-S-B 698A1789-S-R 698A1789-S-E 698A1789-L-B 698A1789-L-R 698A1789-L-E	<p>Pricing and Delivery please contact these Authorized Distributors</p> <p>North and South America Flame Enterprises FlameCorp.com</p> <p>Vandapower-USA Vandapower.com/us</p> <p>Bisco Industries BiscoInd.com</p> <p>Europe, Middle East, Africa Vandapower-Belgium Vandapower.com</p> <p>Australia & Asia Vandapower-Belgium Vandapower.com</p> <p>Flame Enterprises FlameCorp.com</p>
	713A1806-B 713A1806-R 713A1806-E	
	700A1799	
	716A1814	
	716A1815	
	720A1817	
	651A1811	
	639A1830-B 639A1830-R	
	648A1758 (Black) 648A1779 (Red)	

Double Pole, Bulkhead-mounted, Quick-Disconnect Receptacles

7010 Series



1.62" Overall Height
4.30" Overall Width
1.60" Overall Depth

Bulkhead-mounted, Keyable Receptacle (7010-3)

The shaft of the handle on our cable-mounted connector locks into this socket.



Cables with crimped terminal lugs can be attached to these rear threaded posts

Bulkhead-mounted Receptacle with EMI-ESD Shielding (7009-51)



Elastomeric Gasket with Dust Cover (685A1766)



Receptacle with Gasket and Dust Cover installed



Dust Cover closed

Double Pole, Cable-mounted, Quick-Disconnect Plugs

7020 Series



Two Wire with non-conductive black backshell (7020-T)



Two Wire with non-conductive orange backshell (7020-O)



Two Wire with EMI-ESD conductive gray backshell (7020-E)

Rotate the Handle clockwise to engage. It gives positive tactile and visual feedback when mated

Four Wire, Double Pole, Tee Handle (7007-3)



Four Wire, Double Pole, Round Handle (7007)

Series and Parallel Configurations



Two Wire with non-conductive black backshell (7020-T)



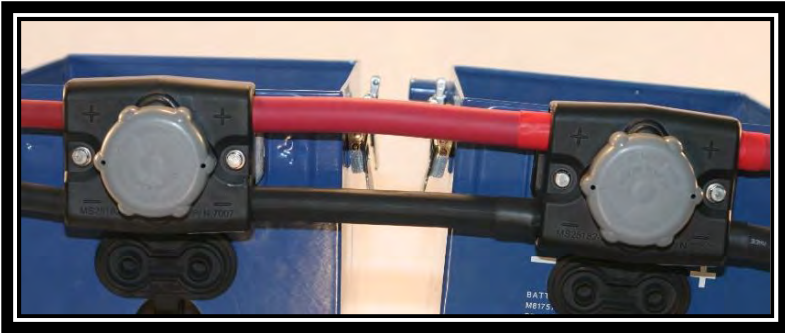
Series Configuration



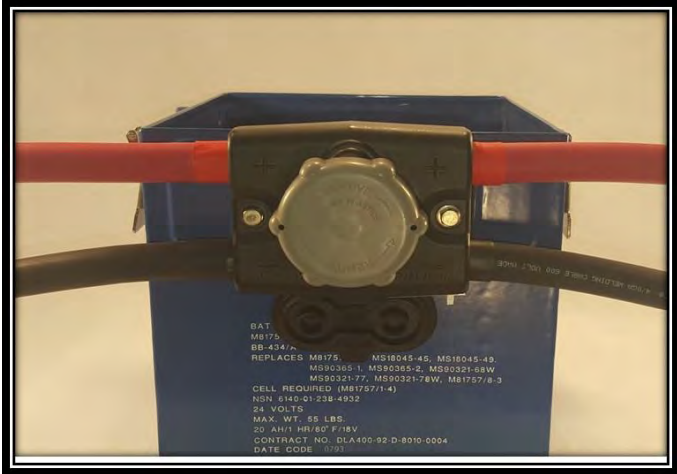
Two Wire with EMI-ESD conductive gray backshell (7020-E)



Four Wire, Tee Handle (7007-3)



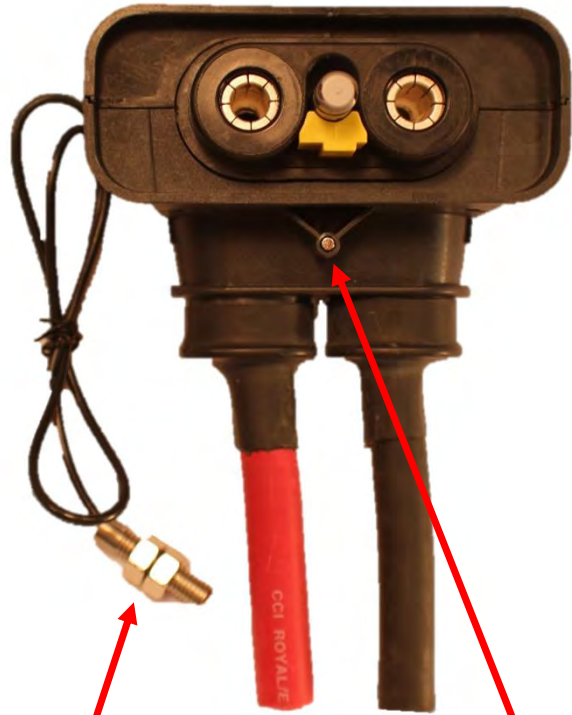
Parallel Configuration



Four Wire, Round Handle (7007)

HVIL and EMI-ESD Versions

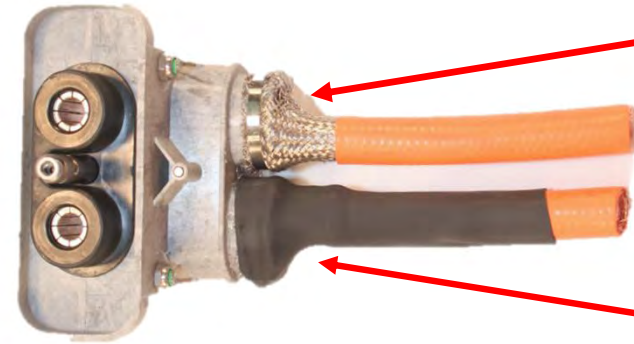
Cable-mounted Plug with High Voltage Interlock



Magnetic Micro Switch is activated by the neodymium magnet to actuate the contactor in your switching cabinet

1/8" x 5/8" neodymium magnet installed in backshell
Magnet + Micro Switch = kit # 643A1757

Cable-mounted Plug with EMI-ESD Conductive Backshell



Braided cable shield can be flared-out or pig-tailed then attached to the conductive plastic backshell with a zip tie

Shrink tubing can be applied to cover the braided shield

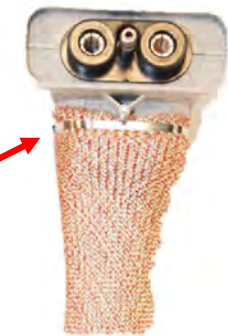


To measure the resistivity of any conductive fiber infused plastic with a multimeter, use a probe with a 10mm diameter tip

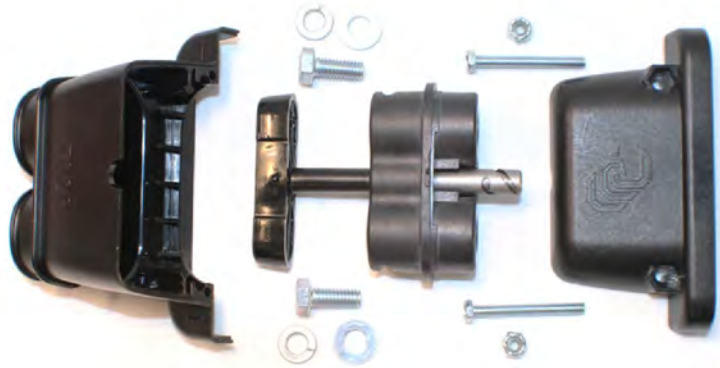


A shielded sleeve can be used to surround un-shielded cable. The sleeve can be attached to the conductive backshell with a zip tie.

Shrink tubing or tape can be applied to cover the end of the sleeve.



Assembly Process



Cable-mounted Plug with Black Backshell (7020-T)



Attach terminal lugs (purchased separately) to the cable size appropriate for your application (8 AWG – 4/0)

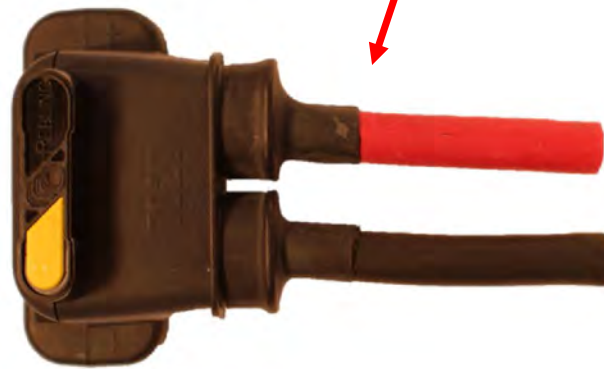


Attach the terminal lugs to the threaded holes in our connector using the bolts and washers in our kit

Plug and Receptacle mated



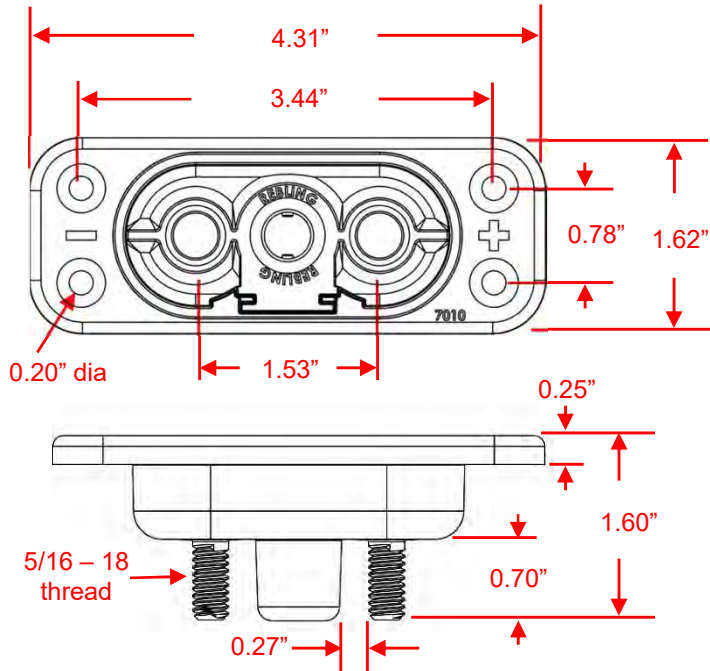
Shrink Tubing can be applied between the cable and the backshell to achieve sealing



Attach the backshell

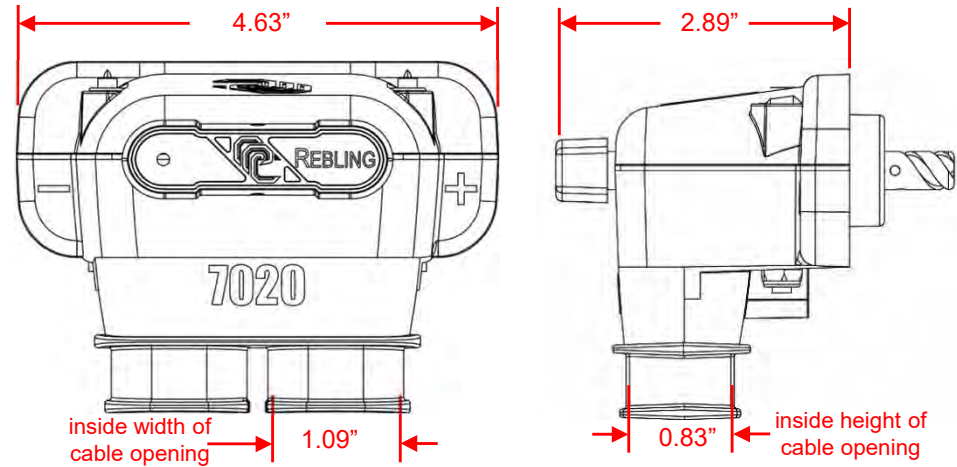


Dimensions & Specifications



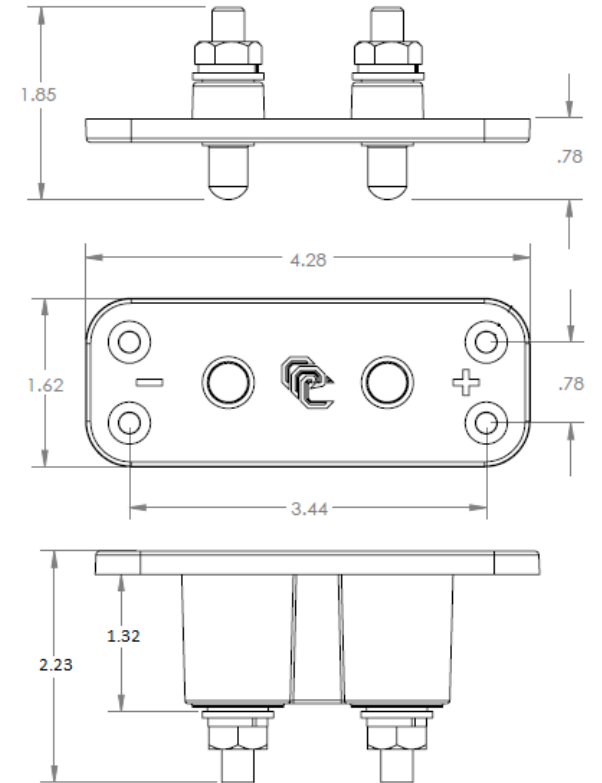
7010 Series

Rated Current = 500 amps
 Peak Current = 3,000 amps for 1 second
 Rated Voltage = 1,500 volts
 IP68 when mounted with gasket
 UL94 V-0 Flammability Rating
 Torque on electrical connections:
 Nominal 30 – 40 in-lbs Max 60 in-lbs



7020 Series

Rated Current = 500 amps
 Peak Current = 3,000 amps for 1 second
 Rated Voltage = 1,500 volts
 IP56 when shrink tubing is applied
 UL94 V-0 Flammability Rating
 Torque on electrical connections:
 Nominal 30 – 40 in-lbs Max 60 in-lbs
 Torque on backshell bolts: 6 – 8 in-lbs



Battery Swap

Rated Current = 500 amps
 Peak Current = 3,000 amps for 1 second
 Rated Voltage = 1,000 volts
 UL94 V-0 Flammability Rating
 Torque on electrical connections:
 Nominal 30 – 40 in-lbs Max 60 in-lbs



Quick-Disconnect Connectors and Accessories



P/N	Description	Pricing
7010-3	Bulkhead-mounted Receptacle, Keyable, Threaded posts, Black	<p>Pricing and Delivery please contact these Authorized Distributors</p> <p>North and South America Flame Enterprises FlameCorp.com</p> <p>Vandapower-USA Vandapower.com/us</p> <p>Bisco Industries BiscoInd.com</p> <p>Europe, Middle East, Africa Vandapower-Belgium Vandapower.com</p> <p>Australia & Asia Vandapower-Belgium Vandapower.com</p> <p>Flame Enterprises FlameCorp.com</p>
684A1763-x	Key for 7010 bulkhead-mounted receptacle (Orange-A, Blue-B, Green-C, Pink-D, White-E, Yellow-F)	
7020-T	Cable-mounted Plug Connector, Keyable, with non-conductive Black Backshell	
684A1765-x	Key Set for 7020 cable-mounted plug (Orange-A, Blue-B, Green-C, Pink-D, White-E, Yellow-F)	
685A1766	Gasket with Attached Dust Cover for 7010 bulkhead-mounted receptacle, Black	
7009-51	Bulkhead-mounted Receptacle Connector, EMI Shielded, Gray	
7020-O	Cable-mounted Plug Connector, Keyable, with non-conductive Orange Backshell	
7020-E	Cable-mounted Plug with EMI-ESD Conductive Gray Backshell	
100A1784 100A1112	Gasket for 7010 bulkhead-mounted receptacle, Black Gasket for Battery Swap Pin or Socket Connectors	
643A1625	EMI conductive gasket for 7009-51 bulkhead-mounted receptacle	
643A1757	HVIL Kit for 7010 and 7020, includes magnet + magnetic switch	
654A1679 654A1680	Battery Swap Male Pin Connector Battery Swap Female Socket Connector	<p><i>Male & Female connectors must be ordered in matching quantities (pairs)</i></p>