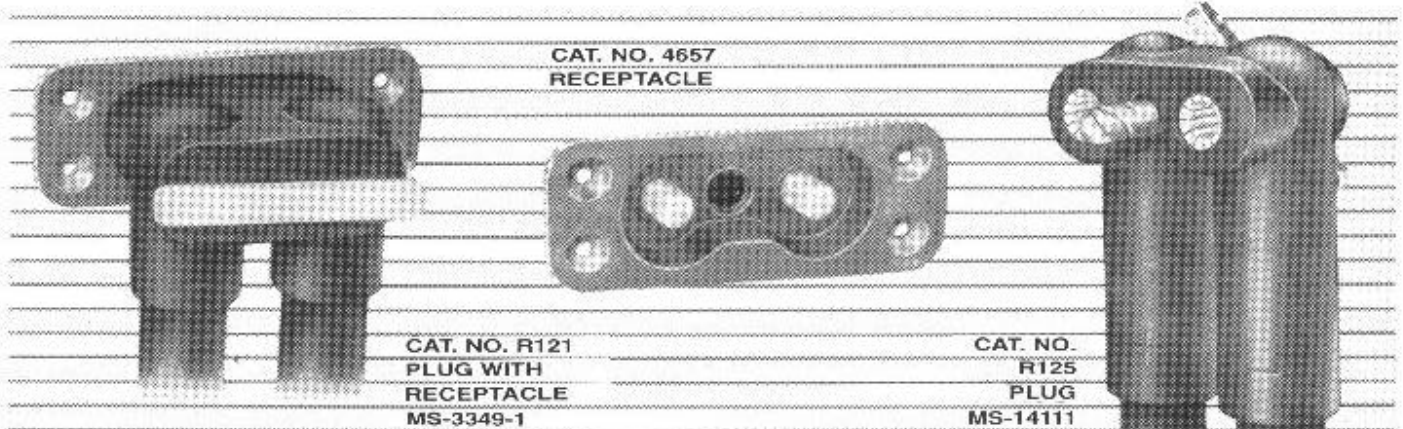


BATTERY CONNECTORS

Battery Connectors - Catalog Numbers R121, R125, 4657



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. Integrally designed gaskets seal the mated connector.

The plug models differ primarily by means of termination and current rating. Catalog number R121 offers the convenience of a no-crimp, no-solder, set screw 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.

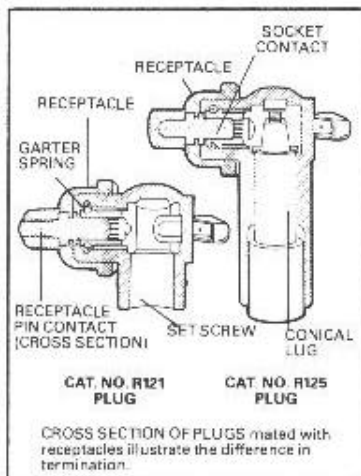
A screw-lock mates the connector tightly enough to withstand severe vibration and physical shocks. It is operated by a twist handle which positively connects and disconnects the plug. The handle also indicates the state of the connection by its position.

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.



	Plug	Plug	Receptacle
CATALOG NUMBER	R121	R125	4657
AMPERES, CONTINUOUS	250	300	300
VOLTS	72.5	600	600
CONNECT-DISCONNECTS	no load load	at least 5000 times (all) for disconnect use only (all)	
AWG CABLE SIZES	6, 3/0	10-4/0	10-4/0
MAXIMUM CABLE O.D.	1/4"	1/4"	
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	black	black
HOUSING COLOR	black	black	black

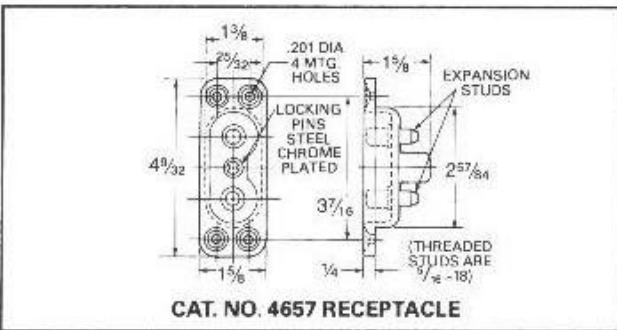
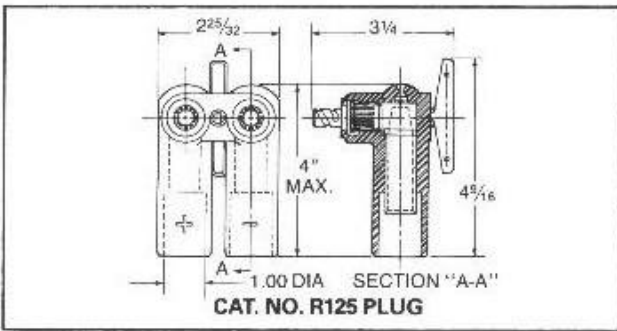
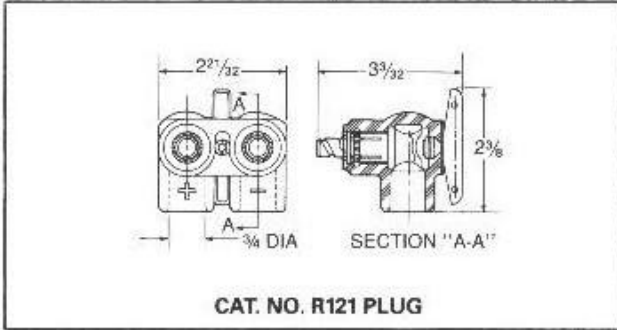
*Crimp or solder contact
†shrink tubing over connector sleeve to cable joint and ported set-screw holes required

data table

BATTERY CONNECTORS

Battery Connectors – Plugs and Receptacles





DIMENSIONS



SUGGESTED CRIMP TOOLS FOR R125			
AWG Size	Tool	Nest	Indentor
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**	Catalog Number
	6-3/0	R121
lug termination (lugs included)		
	AWG Size**	Catalog Number
	10	R125G1
	8	R125G2
	6	R125G3
	5-4	R125G4
	3-2	R125G5
	1	R125G6
	1/0	R125G7
	2/0	R125G8
	3/0	R125G9
	4/0	R125G10
lug sets (replacement)		
	AWG Size**	Catalog Number
	12-10	971
	8	972
	6	973
	5-4	974
	3-2	975
	1	976
	1/0	977
	2/0	978
	3/0	979
	4/0	980
Two lugs per set, with hardware		
ordering information		
	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.