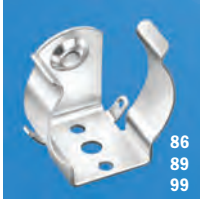


RUGGED STEEL BATTERY CLIPS

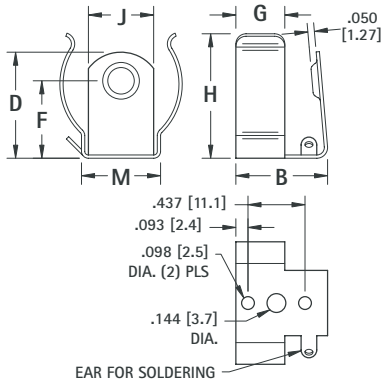
For "AA" • "C" • "D"



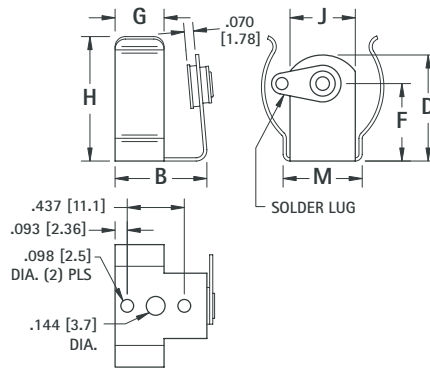
86
89
99

SPECIFICATIONS Clips: Spring Steel, Nickel Plate **Contact Eyelets:** Brass, Nickel Plate
Insulating Washers: Moisture Proof, Resin Impregnated Fibre **Solder Lugs:** Brass, Tin Plate

- Available with insulated or non-insulated contact. Positive contact grips battery securely.



DWG. 1
Non-Insulated Contact



DWG. 2
Insulated Contact



87
88
100

CAT. NO.	DWG. NO.	B	C	D	F	G	H	J	M	STEEL THICKNESS	BATTERY DIAMETER MIN. - MAX.	CELL SIZE
86	1	.703 (17.9)	.391 (9.9)	.812 (20.6)	.593 (15.1)	.375 (9.5)	.937 (23.8)	500 (12.7)	.605 (15.4)	.020 (.51)	.875 to 1.125 (22.2 to 28.6)	"C"
87	2											
88	2	.775 (19.7)	.463 (11.8)	1.075 (27.3)	.750 (19.1)	.437 (11.1)	1.187 (30.1)	500 (12.7)	.609 (15.5)	.020 (.51)	1.187 to 1.350 (30.1 to 34.3)	"D"
89	1											
99	1	.703 (17.9)	.391 (9.9)	.609 (15.5)	.375 (9.5)	.375 (9.5)	.609 (15.5)	.312 (7.9)	.353 (9.0)	.015 (.39)	.531 to .650 (13.5 to 16.5)	"AA"
100	2											

BATTERY RETAINER CLIPS

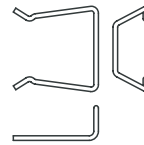
- Prevents battery from loosening in battery holder
- Retainer clip slips on the ears of the battery holder clip



Retainer for "AA" or cells with diameters of .532 (13.5) to .562 (14.3). Used with Keystone Battery Clips Cat. No. 91, 92, 95, 99, 100 and 2915.

MATERIAL: Stainless Steel

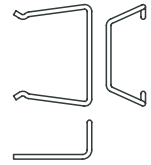
CAT. NO. 61



Retainer for "C" cells or similar size batteries to 1.032 (26.2) diameter. Used with Keystone Battery Clips Cat. No. 86, 87, 93 and 222.

MATERIAL: Spring Steel, Nickel Plate

CAT. NO. 62



Retainer for "D" cells or similar size batteries to 1.343 (34.1) diameter. Used with Keystone Battery Clips Cat. No. 88, 89 and 94.

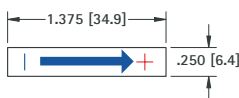
MATERIAL: Spring Steel, Nickel Plate

CAT. NO. 63

POLARITY INDICATING LABEL

- No Gluing or Wetting Needed
- Pressure Sensitive Adhesive Back
- Economical
- Adheres To All Surfaces

Recommended where proper polarity of battery insertion or circuit polarity is to be shown. Labels are two color, (+) positive side red; arrow, (-) negative side blue.

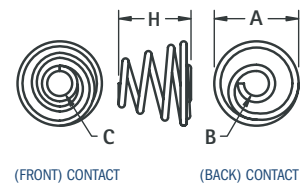


CAT. NO. 58

BATTERY SPRING CONTACTS

For "A" • "AA" • "C" • "D"

Easy to assemble with eyelets or rivets. Refer to page 124.



CAT. NO.	H	A	B	C	MATERIAL	CELL SIZE
211	.290 (7.4)	.335 (8.5)	.100 (2.5)	.140 (3.6)	.025 (.64) Dia. Spring Steel, Nickel Plate	"A" • "AA"
211-D	.850 (21.6)	.650 (16.5)	.162 (4.1)	.300 (7.6)	.040 (1.0) Dia. Spring Steel, Nickel Plate	"C" • "D"

INSULATED POLARIZING WASHERS

Prevents improper connection of battery which may cause damage to electronic equipment. Washers hold securely when snapped over eyelets. Used on our standardized battery holders. For "AA", "C" & "D" cells.



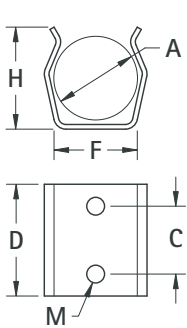
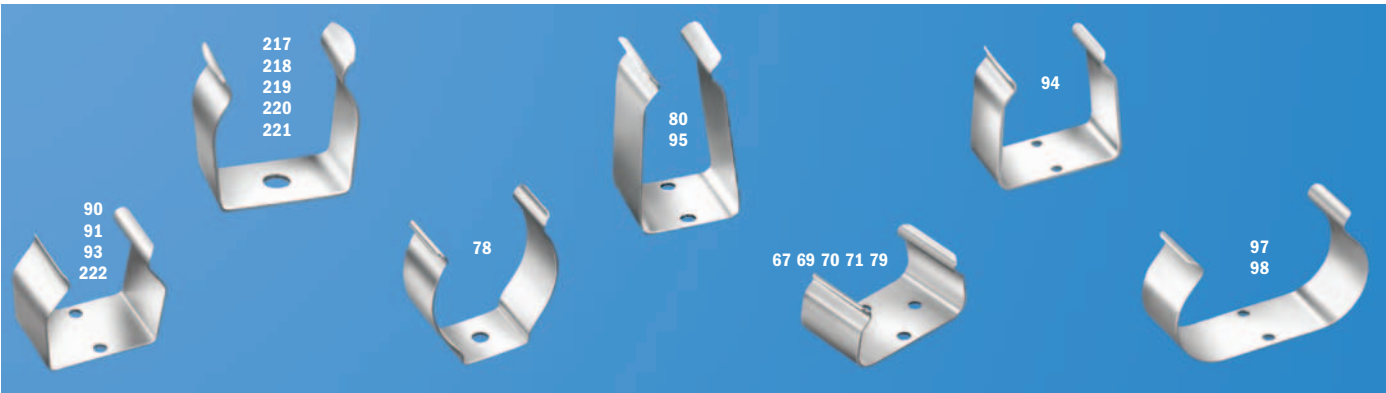
CAT. NO. 59 (RED)

CAT. NO. 60 (BLACK)

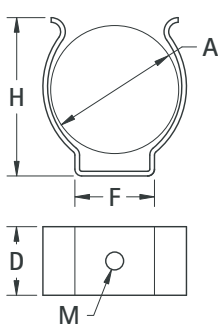
MATERIAL: Molded Polyethylene

ALUMINUM & STEEL CLIPS

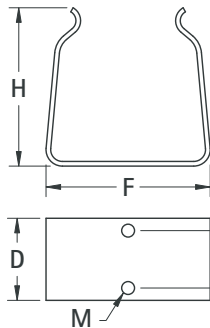
Precision made spring clips are available in a wide range of sizes. These clips will hold round, square and rectangular batteries or components with similar dimensions. Clips are manufactured from Aluminum or Spring Steel.



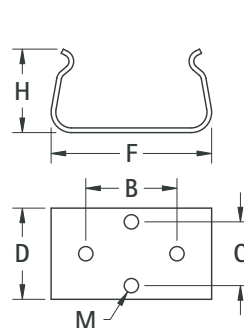
DWG. 1



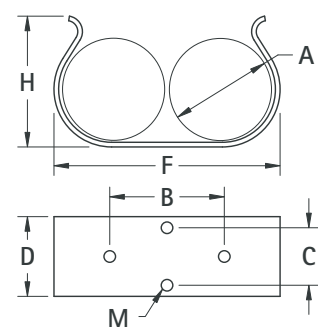
DWG. 2



DWG. 3



DWG. 4



DWG. 5

MATERIAL: Steel Clips: Spring Steel, Nickel Plate Aluminum Clips: 2024-T3

CAT. NO.	DWG. NO.	A MIN MAX DIA. OR SIZE	FOR CELLS	B	C	D	F	H	M MTG HOLE(S)	MATERIAL THICKNESS	TYPE
67	3	.375 x .125 (9.5 x 3.2)	CRYSTAL	—	.187 (4.7)	.350 (8.9)	.410 (10.4)	.210 (5.3)	.067 (1.7)	.016 (.41)	Steel
69	4	.562 (14.3)	AA (2)	.625 (15.9)	.437 (11.1)	.625 (15.9)	1.125 (28.6)	.562 (14.3)	.098 (2.5)	.015 (.39)	Steel
70	4	.656 (16.7)	RM12 (2)	.625 (15.9)	.437 (11.1)	.625 (15.9)	1.343 (34.1)	.740 (18.8)	.098 (2.5)	.020 (.51)	Alum.
71	3	.593 x 1.031 (15.1 x 26.2)	9 VOLT	—	.437 (11.1)	.625 (15.9)	1.031 (26.2)	.687 (17.4)	.098 (2.5)	.015 (.39)	Steel
78	2	1.187 to 1.350 (30.1 to 34.3)	D	—	—	.500 (12.7)	.562 (14.3)	1.218 (30.9)	.136 (3.5)	.020 (.51)	Steel
79	4	.650 x 1.280 (16.5 x 32.5)	9 VOLT	.625 (15.9)	.437 (11.1)	.625 (15.9)	1.050 (26.7)	.765 (19.4)	.098 (2.5)	.015 (.39)	Steel
80	3	.650 x 1.280 (16.5 x 32.5)	9 VOLT	—	.437 (11.1)	.625 (15.9)	.675 (17.1)	1.187 (30.1)	.098 (2.5)	.015 (.39)	Steel
90	1	.375 to .468 (9.5 to 11.9)	AAA	—	.437 (11.1)	.625 (15.9)	.312 (7.9)	.453 (11.5)	.098 (2.5)	.020 (.51)	Alum.
91	1	.531 to .656 (13.5 to 16.7)	AA	—	.437 (11.1)	.625 (15.9)	.406 (10.3)	.562 (14.3)	.098 (2.5)	.020 (.51)	Alum.
93	1	.875 to 1.125 (22.2 to 28.6)	C	—	.437 (11.1)	.625 (15.9)	.937 (23.8)	.921 (23.4)	.098 (2.5)	.020 (.51)	Alum.
94	3	1.187 to 1.375 (30.1 to 34.9)	D	—	.437 (11.1)	.625 (15.9)	1.250 (31.8)	1.218 (30.9)	.098 (2.5)	.032 (.81)	Alum.
95	3	.625 x 1.000 (15.9 x 25.4)	9 VOLT	—	.437 (11.1)	.625 (15.9)	.656 (16.7)	1.125 (28.6)	.098 (2.5)	.020 (.51)	Alum.
97	5	1.031 (26.2)	C (2)	—	.437 (11.1)	.625 (15.9)	2.062 (52.4)	1.125 (28.6)	.098 (2.5)	.020 (.51)	Alum.
98	5	1.312 (33.3)	D (2)	1.125 (28.6)	.437 (11.1)	1.000 (25.4)	2.656 (67.5)	1.437 (36.5)	.098 (2.5)	.032 (.81)	Alum.
217	2	1.375 to 1.500 (34.9 to 38.1)	NiCd	—	—	.812 (20.6)	1.218 (30.9)	1.430 (36.3)	.157 (4.0)	.025 (.64)	Steel
218	2	1.437 to 1.687 (36.5 to 42.8)	NiCd	—	—	.812 (20.6)	1.375 (34.9)	1.531 (38.9)	.157 (4.0)	.025 (.64)	Steel
219	2	2.000 to 2.500 (50.8 to 63.5)	NiCd	—	—	.812 (20.6)	1.687 (42.8)	2.156 (54.8)	.157 (4.0)	.025 (.64)	Steel
220	2	.187 to .203 (4.7 to 5.2)	5mm	—	—	.315 (8.0)	.158 (4.0)	.280 (7.1)	.093 (2.4)	.010 (.25)	Steel
221	2	.859 to .890 (21.8 to 22.6)	.875 (22.2)	—	—	.468 (11.9)	.828 (21.0)	.906 (23.0)	.157 (4.0)	.020 (.51)	Steel
222	1	.875 to 1.125 (22.2 to 28.6)	C	—	.437 (11.1)	.625 (15.9)	.937 (23.8)	.921 (23.4)	.098 (2.5)	.020 (.51)	Steel

DIMENSIONS ARE FOR REFERENCE ONLY

NOTES

CUSTOM CLIPS & CONTACTS

Keystone is fully integrated to meet your total design and production needs.

Manufacturing custom designs and modifications of standard items is our specialty.

Quotations on clips and contacts furnished promptly upon receipt of sample, sketch, print or CAD drawings.