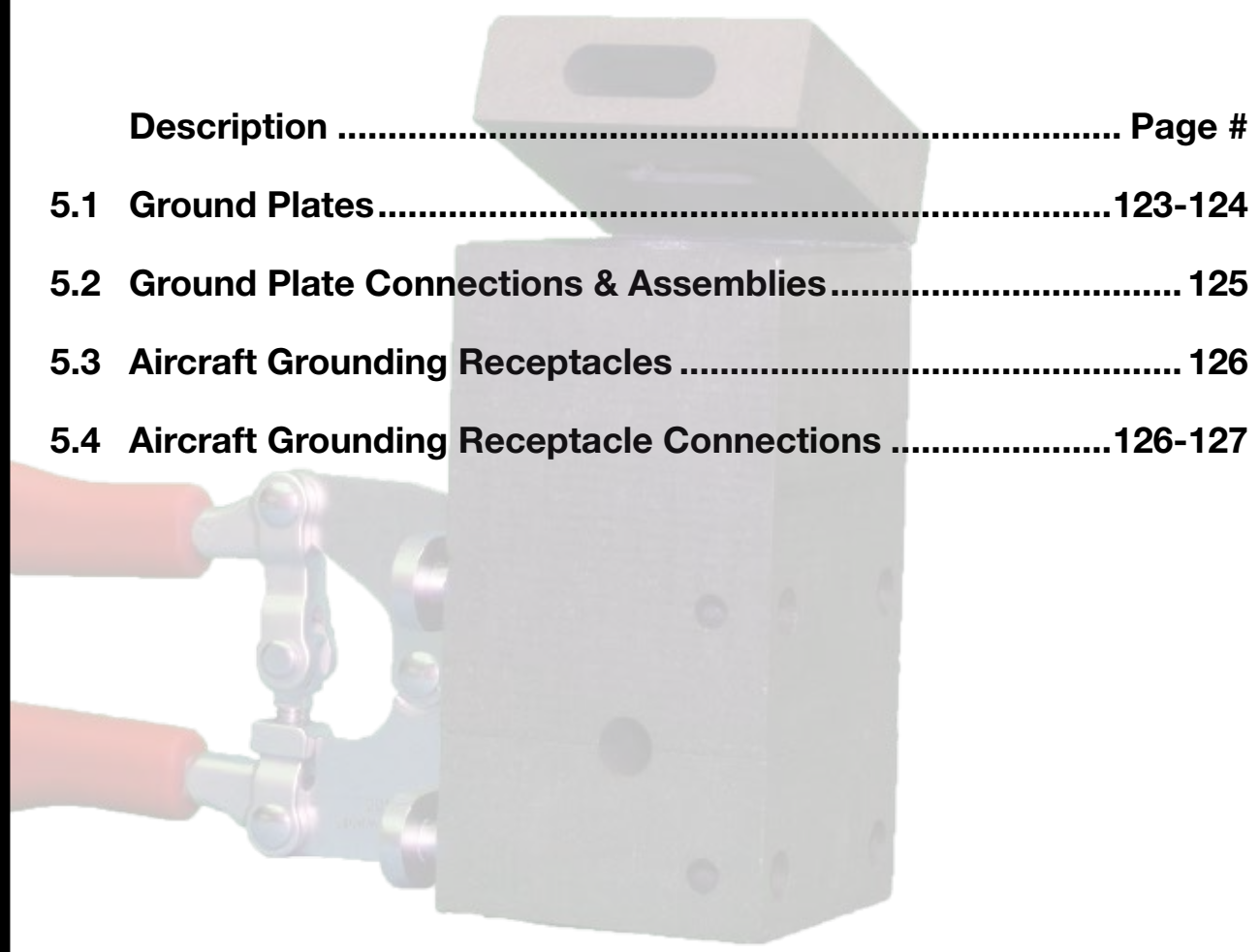


Section 5

Ground Plates & Aircraft Grounding Receptacles











Description	Page #
5.1 Ground Plates	123-124
5.2 Ground Plate Connections & Assemblies	125
5.3 Aircraft Grounding Receptacles	126
5.4 Aircraft Grounding Receptacle Connections	126-127







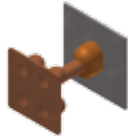


Connecting Power to Your World™



GROUND PLATES & AIRCRAFT GROUNDING RECEPTACLES

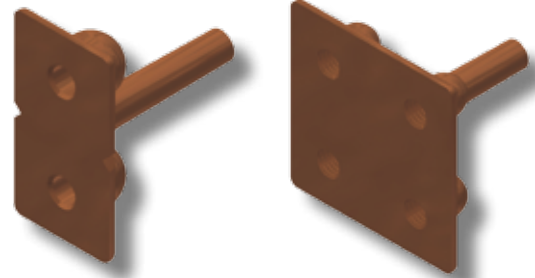
Weld Type		Page #
	AC-1	127
	AC-2	127
	ACR-1	128
	ACR-2	128
	Aircraft Grd Recept	126
	Aircraft Grd Eyelet	126
	AR-1	128
	CR-27	125

Weld Type		Page #
	CR-30	125
	CR-31	125
	CR-32	125
	CRS-1	124
	CRS-2	124
	Grd Plates	123
	RS-3	124

GROUND PLATES

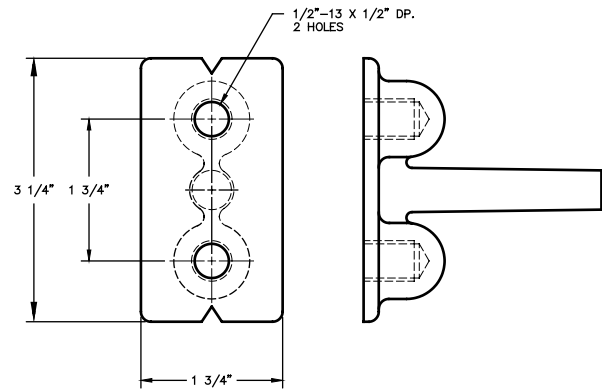
GROUND PLATES

When cast into concrete structures, these offer grounding points for equipment, machinery, etc. They are made from high quality copper alloy and can be thermOwelded easily to copper cable.



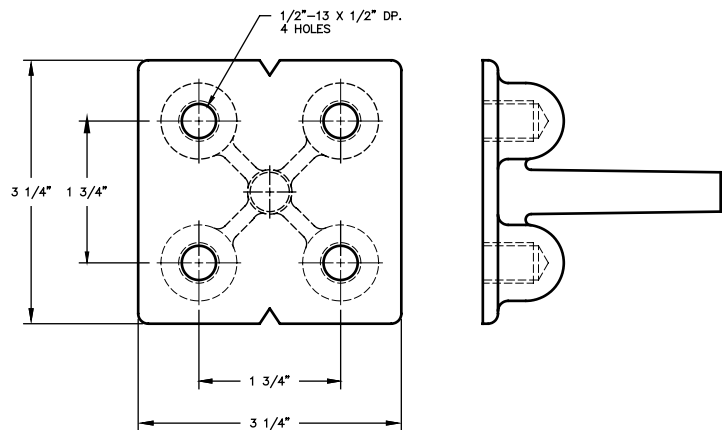
Part #	Stud Size
38-2999-00	4/0

NEMA Spaced Holes

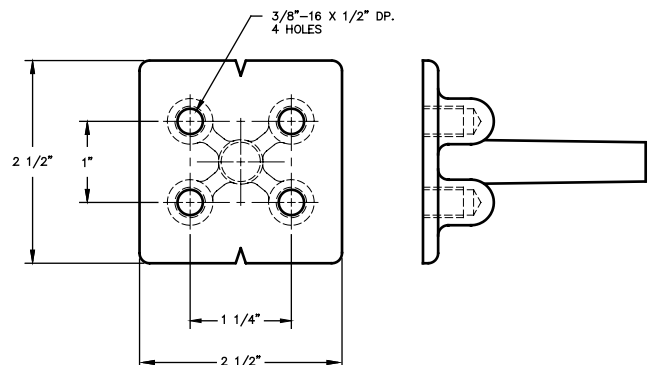


Part #	Stud Size
38-4051-00	4/0
38-4178-00	500 Kcmil

NEMA Spaced Holes



Part #	Stud Size
38-2864-00	4/0



GROUND PLATES

GROUND PLATES

Use weld types CC-1 and CC-2 to connect copper cable to ground plates. Contact thermOweld® for mold numbers.

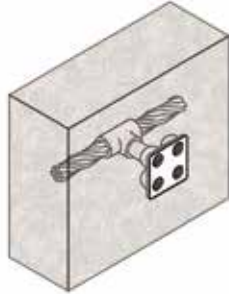
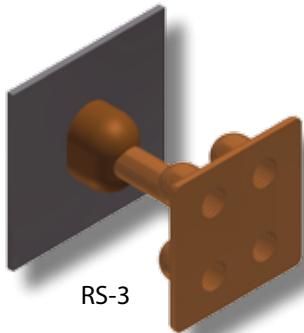
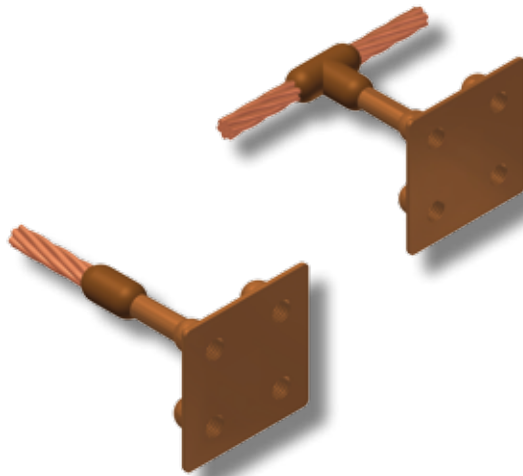
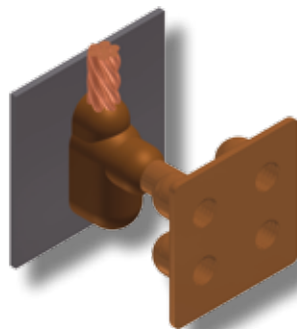


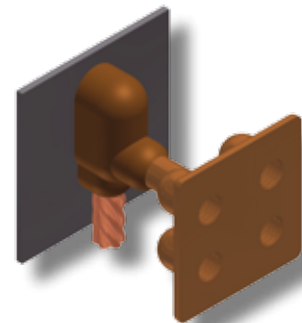
Illustration at left shows a ground plate installed in a concrete wall.



RS-3



CRS-2



CRS-1

MOLDS FOR AWG CONDUCTORS					
Ground Plate Part #	RS-3 Mold #	Price Key	Weld Metal	Handle Clamps	Lead Time
38-2864-00	M-6091	4	150	B-106	2
38-2999-00	M-6091	4	150	B-106	2
38-4051-00	M-6091	4	150	B-106	2
38-4178-00	M-6092	4	200	B-106	4

* To order weld metal for use with EZ Lite Remote® insert TW before and EZ after weld metal number.

NOTE:

For structural purposes, weld types RS-3, CRS-1 and CRS-2 should only be used when the ground plate is to be encased in concrete.

MOLDS FOR AWG CONDUCTORS										
CRS-1† Mold #	Price Key	Weld Metal	Handle Clamps	Lead Time	Cable Size	CRS-2† Mold #	Price Key	Weld Metal	Handle Clamps	Lead Time
M-6093	17	200	B-106	4	1/0	M-6101	17	200	B-106	4
M-6094	17	200	B-106	2	2/0	M-6102	17	200	B-106	4
M-6095	17	250	B-106	2	3/0	M-6103	17	250	B-106	4
M-6096	17	250	B-106	2	4/0	M-6104	17	250	B-106	2
M-6097	17	250	B-106	4	250 MCM	M-6105	17	250	B-106	4
M-6098	17	2-150	B-106	4	300 MCM	M-6106	17	2-150	B-106	2
M-6099	17	2-150	B-106	4	350 MCM	M-6107	6	2-200	B-107	4
M-6100	6	2-200	B-107	4	500 MCM	M-6108	6	500	B-107	4

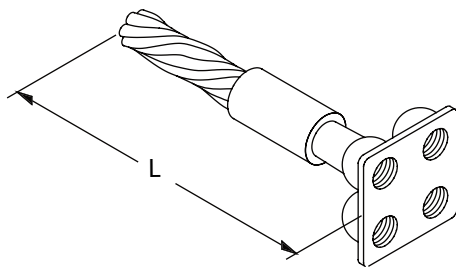
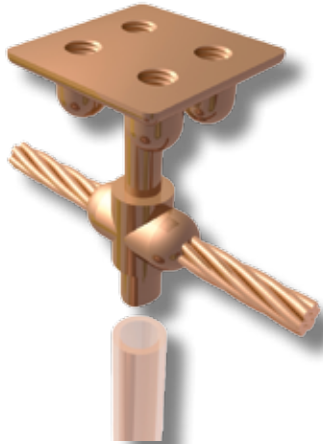
† These mold numbers are for use with Ground Plates 38-2999-00, 38-4051-00 and 38-2864-00. Contact thermOweld® for molds used with Ground Plate 38-4178-00.

* To order weld metal for use with EZ Lite Remote® insert TW before and EZ after weld metal number.

GROUND PLATES

GROUND PLATE ASSEMBLY

thermOweld® Pre-fabricated Ground Plate Assemblies come ready to splice into your grounding system. Types CR-31 and CR-32 are welded in an inverted position and the resulting riser is used to place the ground plate on top of 1/2" pipe. This helps position the ground plate flush with a floor slab.

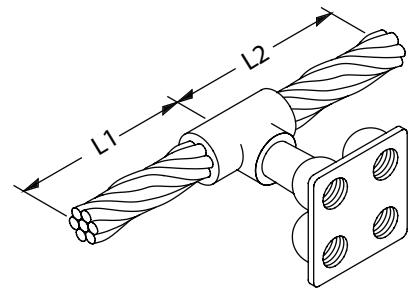


CR-27

Ground Plate	Type CR-27 Assy.
38-2864-00	38-4529-†‡
38-2999-00	38-4531-†‡
38-4051-00	38-4532-†‡
38-4178-00	38-4533-†‡

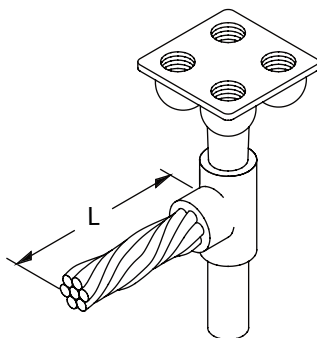
For the complete part number replace with corresponding number for cable size and corresponding letter for cable length. Contact thermOweld® for cable sizes and lengths not shown.

Example: 38-4524-5C would be a CR-32 type with a 38-2864-00 ground plate and a 4/0 str pigtail, 18" (L1) + 18" (L2) long for a total length of 36".



CR-30

Ground Plate	Type CR-30 Assy.
38-2864-00	38-4534-†‡
38-2999-00	38-4536-†‡
38-4051-00	38-4537-†‡
38-4178-00	38-4538-†‡

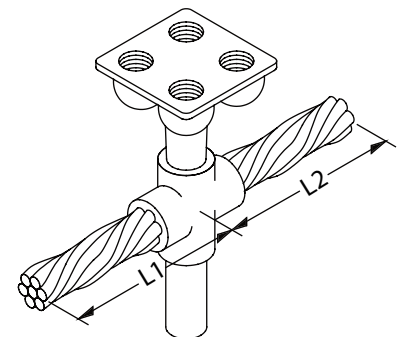


CR-31

Ground Plate	Type CR-31 Assy.
38-2864-00	38-4519-†‡
38-2999-00	38-4521-†‡
38-4051-00	38-4522-†‡
38-4178-00	38-4523-†‡

† = CABLE SIZE	
1 = #4 STR	5 = 4/0 STR
2 = #2 STR	6 = 250 MCM
3 = 1/0 STR	7 = 350 MCM
4 = 2/0 STR	8 = 500 MCM

‡ = LENGTH IN INCHES	
A = 6"	D = 24"
B = 12"	E = 36"
C = 18"	F = 48"
G = 10"	H = 96"
J = 60"	K = 72"
L = 144"	M = 30"
N = 120"	P = 240"
	R = 180"

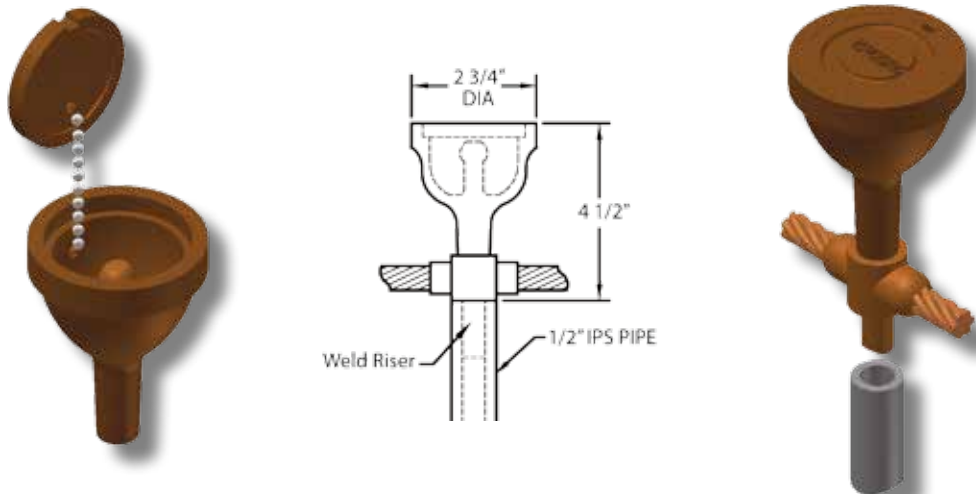


CR-32

Ground Plate	Type CR-32 Assy.
38-2864-00	38-4524-†‡
38-2999-00	38-4526-†‡
38-4051-00	38-4527-†‡
38-4178-00	38-4528-†‡

AIRCRAFT GROUNDING RECEPTACLE

Aircraft Grounding Receptacle 38-0119-00 is a copper alloy casting used for static grounding in aircraft refueling areas. The receptacle, when installed, is flush with the airport apron surface and provides a permanent, corrosion-proof static grounding connection. It can easily be attached to copper cable or ground rods in several configurations with a thermOweld® mold. Replacement studs available, part #38-0119-13.



Aircraft Grounding Eyelet

Cast bronze grounding eyelet designed with threads to screw onto sectional ground rods. Eyelet provides a static discharge tie down point for aircraft. Can withstand 9000 lbs. of pulling force. UL Listed.

Aircraft Eyelet Grounding	
Catalog Number	Description
38-7702-00	Bronze Eyelet with 1/2" Internal Threads
38-7702-01	Bronze Eyelet with 5/8" Internal Threads
38-7702-02	Bronze Eyelet with 3/4" Internal Threads



AIRCRAFT GROUNDING RECEPTACLE

AC TYPE MOLDS

Horizontal Cable to Aircraft Grounding Receptacle

AC-1 Type Molds are used to terminate a horizontal copper cable to a ground receptacle. AC-2 Type Molds are used to connect a horizontal through copper cable to a ground receptacle. thermOweld® types AC-1 and AC-2 are made with the receptacle in an inverted position. The resulting riser is then used to position the receptacle on top of 1/2" IPS pipe. Size range is #2 through 4/0 solid, ropelay or concentric stranded conductors.

MOLDS FOR AWG CONDUCTORS										
Mold #	AC-1				Cable Size	AC-2				
	Price Key	Weld Metal	Handle Clamps	Lead Time		Mold #	Price Key	Weld Metal	Handle Clamps	Lead Time
M-6330	4	115	B-106	2	#2	M-6338	4	115	B-106	2
M-6332	4	115	B-106	4	#1	M-6339	4	115	B-106	2
M-6333	4	150	B-106	4	1/0	M-6341	4	150	B-106	2
M-6335	4	150	B-106	2	2/0	M-6342	4	150	B-106	2
M-6336	4	150	B-106	2	3/0	M-6343	4	200	B-106	2
M-6337	4	150	B-106	2	4/0	M-6344	4	200	B-106	2



AC-2



AC-1

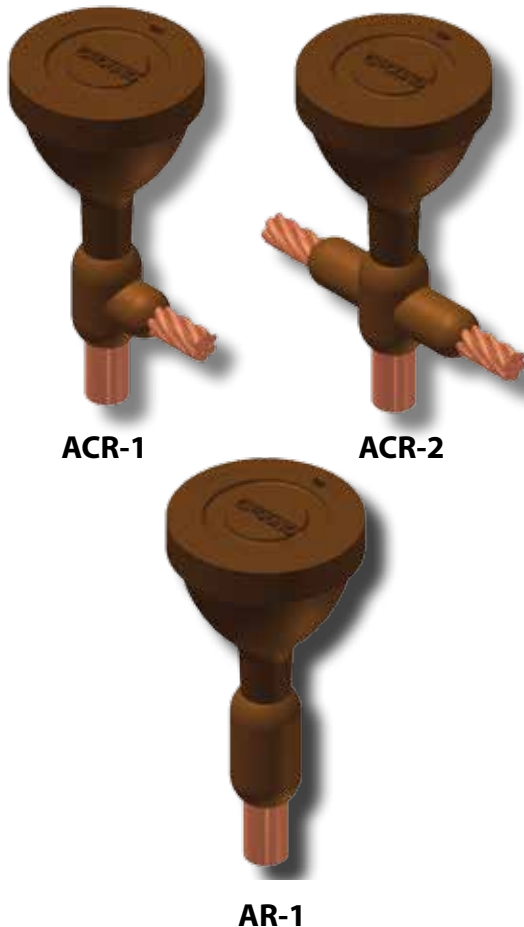
- For sizes not listed, contact thermOweld®.
- Molds listed are for concentric stranded cable. Add suffix "-S" to mold number for solid conductors.
- For heavy duty connections, contact thermOweld®.
- For molds with wear plates, see page 135.
- For expedited service, contact thermOweld®
- To order weld metal for use with EZ Lite Remote® insert TW before and EZ after weld metal number.
- Required Tools;
 - Handle Clamps w/ Flint Ignitor (see chart for correct handles)
 - 38-0309-00 ~ Flint Ignitor or 38-EZLT-RU EZ Lite Remote®
- Other recommended accessories;
 - 38-3922-00 ~ Mold Cleaning Brush
 - 38-0135-00 ~ Cable Cleaning Brush

AIRCRAFT GROUNDING RECEPTACLE

AR & ACR TYPE MOLDS

Horizontal Cable and Aircraft Grounding Receptacle to Ground Rod

Type AR-1 molds are used to weld a ground receptacle to the top of a ground rod. Types ACR-1 and ACR-2 are used to weld a horizontal cable and ground receptacle to the top of a ground rod.



MOLDS FOR AWG CONDUCTORS						
ACR-1						
Ground Rod Size	Cable Size	Mold #	Price Key	Weld Metal	Handle Clamps	Lead Time
5/8"	1/0	M-6305	8	2-200	B-107	4
	2/0	M-6306	8	2-200	B-107	2
	3/0	M-6307	8	2-200	B-107	2
	4/0	M-6309	8	2-200	B-107	4
3/4"	1/0	M-6310	8	2-200	B-107	2
	2/0	M-6311	8	2-200	B-107	2
	3/0	M-6312	8	2-200	B-107	2
	4/0	M-6313	8	2-200	B-107	2
1"	1/0	M-6314	8	500	B-107	4
	2/0	M-6315	8	500	B-107	4
	3/0	M-6316	8	500	B-107	4
	4/0	M-6317	8	500	B-107	4

ACR-2						
Ground Rod Size	Cable Size	Mold #	Price Key	Weld Metal	Handle Clamps	Lead Time
5/8"	1/0	M-6318	8	2-200	B-107	2
	2/0	M-6319	8	2-200	B-107	2
	3/0	M-6320	8	2-200	B-107	4
	4/0	M-6321	8	2-200	B-107	2
3/4"	1/0	M-6322	8	2-200	B-107	2
	2/0	M-6323	8	2-200	B-107	2
	3/0	M-6324	8	2-200	B-107	2
	4/0	M-6325	8	2-200	B-107	2
1"	1/0	M-6326	8	500	B-107	4
	2/0	M-6327	8	500	B-107	4
	3/0	M-6328	8	500	B-107	4
	4/0	M-6329	8	500	B-107	4

AR-1						
Ground Rod Size	Mold #	Price Key	Weld Metal	Handle Clamps	Lead Time	
5/8"	M-6301	17	2-150	B-106	2	
3/4"	M-6300	17	2-150	B-106	4	
1"	M-6303	6	2-200	B-107	4	

- For sizes not listed, contact thermOweld®.
- Molds listed are for concentric stranded cable. Add suffix "-S" to mold number for solid conductors.
- Molds listed are for copper clad ground rods. For welding to steel, stainless steel or galvanized steel ground rods add suffix "-N" to mold number.
- For heavy duty connections, contact thermOweld®.
- To order weld metal for use with EZ Lite Remote® insert TW before and EZ after weld metal number.
- For molds with wear plates, see page 135.
- For expedited service, contact thermOweld®.
- Required Tools;
 - Handle Clamps w/ Flint Ignitor (see chart for correct handles), 38-0309-00 ~ Flint Ignitor or 38-EZLT-RU EZ Lite Remote®
- Other recommended accessories;
 - 38-3922-00 ~ Mold Cleaning Brush
 - 38-0135-00 ~ Cable Cleaning Brush
 - 38-0304-00 ~ File
 - 38-0330-00 ~ Cable Clamp