

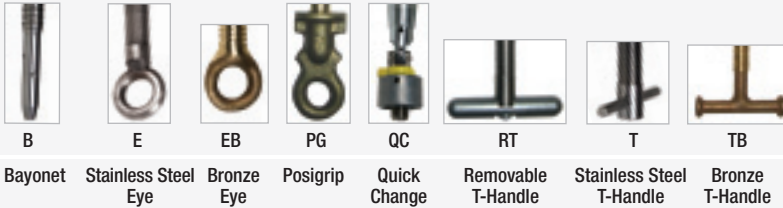
TEMPORARY PROTECTIVE GROUNDING EQUIPMENT safety line



TEMPORARY PROTECTIVE GROUNDING EQUIPMENT

safety line

ADDITIONAL SCREW OPTIONS AVAILABLE WHERE DESIGNATED



Bayonet Ferrule

Installs/removes ground heads equipped with bayonet studs.
98B Quick Change 1 lbs. (0.45 kgs)
Add suffix "U" for Universal, "Q" for Quick Change

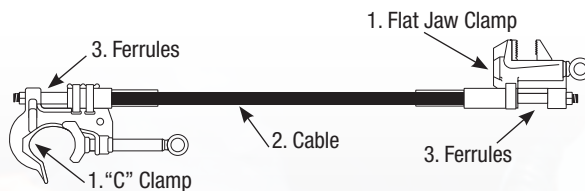
NOTE:

Salisbury by Honeywell's Safety Line grounding equipment offers solutions for all applications. This line of temporary protective grounding equipment offers a wide variety of products to meet many individual needs. These products are available in complete assemblies or individual components.

PLEASE NOTE: When ordering assemblies of grounding products, please make sure all items included in the assembly are only from the product line found within this section. Including items from other grounding equipment sections of this book will add additional shipping time.

SAFETY LINE TEMPORARY PROTECTIVE GROUNDING EQUIPMENT

GROUND SET CHECKLIST



1. Specify the clamps. Two are required for a complete assembly. The maximum amperage of the clamp is designated by the ASTM grade of each clamp. Be sure that the clamp will meet or exceed the maximum amperage rating of the ground cable that it will be used with.

2. Specify the cable. Once the short circuit capacity of the system has been determined, choose the appropriate size cable. Specify the cable length and the color of the jacket desired.

3. Specify the ferrules. One pair of ferrules is required per assembly. The size of the ferrule must match the size of the cable that it will be used with. Specify copper or aluminum and shrouded or non-shrouded.

4. Specify the options. List any optional equipment that is desired. This can include hanger studs, contact studs, heat shrink tubing, markings, clear strain relief, etc.

Options also include a ground set label. These optional labels include the date of manufacture and are available upon request when ordering.

HOW TO SPECIFY TEMPORARY PROTECTIVE GROUNDING ASSEMBLIES.

A grounding assembly in its basic form consists of two clamps, one pair of ferrules and a length of cable.

The clamps can be identical to each other or quite different depending on each grounding application. Because of this, ground clamps are sold individually, not in pairs. Salisbury offers a wide variety of clamps including C-clamps, flat jaw clamps, socket clamps, duckbill clamps and specialty clamps for unique situations. Clamps are offered in either bronze or aluminum alloys and are manufactured to meet the current specifications of ASTM F 855.

To attach a clamp to the grounding cable requires the use of a ferrule. Ferrules are compressed on the strands of the cable to provide a low resistance permanent connection. The size of the ferrule is determined by the size of the cable. Ferrules are available in aluminum or plated copper. Plated copper ferrules can be used with either aluminum or bronze clamps. Two ferrules are required for each assembly therefore they are sold in pairs. Ferrules are manufactured to the specifications of ASTM F855.

The final component that makes up a ground set is the grounding cable itself. The size of the cable is dependent on the short circuit current capacity of the system being grounded. Once this is determined, only the length of the cable and the color of the jacket need to be specified to complete the assembly.

Salisbury by Honeywell is your complete source for grounding equipment and assemblies.

DUCK BILL GROUNDING CLAMPS

1.13" AND 1.63" SIZES



Open Duck Bill Clamp: Includes springs that keep jaw open for easy application.

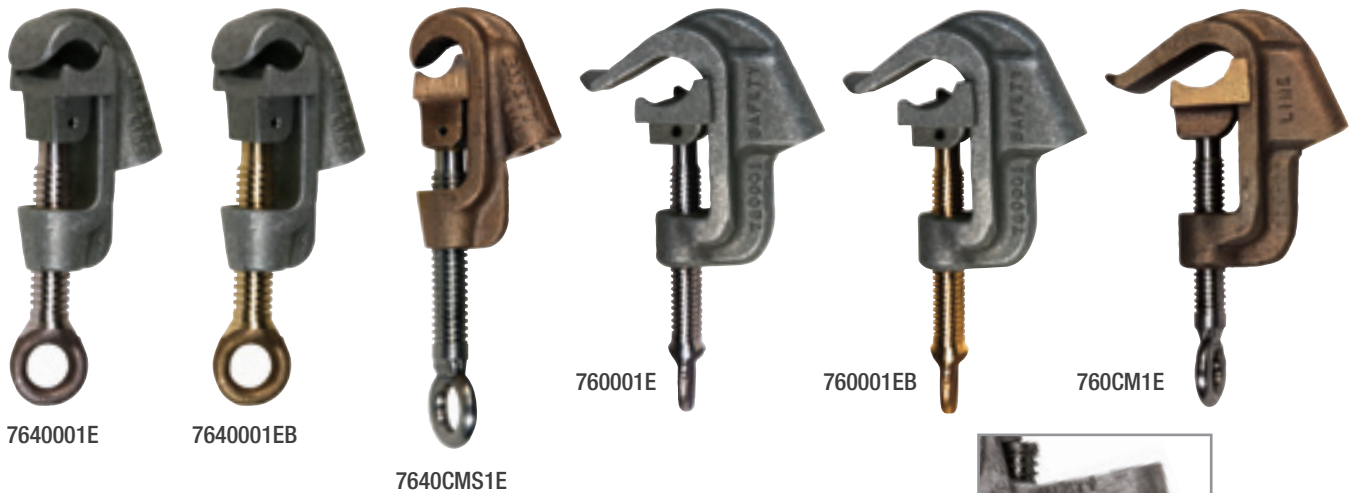


CAT. NO.	EYE & CLAMP DESCRIPTION	ASTM GRADE / CLASS	MAIN LINE RANGE	CONTINUOUS CURRENT RATING	WEIGHT EA. lbs. (kgs)
1.13" SMOOTH JAW ALUMINUM DUCK BILL CLAMPS - THREADED - W/O STRAIN RELIEF SYSTEM					
767E	Stainless Steel Eye, Smooth Jaw	3 / A	795 MCM ACSR to #6 .19" - 1.13" (4.8 mm - 28.7 mm) Dia.	300 RMS Amps, 60Hz	1.4 (0.63)
768E	Stainless Steel Eye, Open Clamp, Smooth Jaw	3 / A		300 RMS Amps, 60Hz	1.4 (0.63)
1.63" SMOOTH JAW ALUMINUM DUCK BILL CLAMPS - THREADED					
760006E	Stainless Steel Eye, Smooth Jaw	5 / A	954 MCM ACSR to #6 .19" - 1.63" (4.8 mm - 41 mm) Dia.	400 RMS Amps, 60Hz	3.0 (1.36)
760SR6E	Stainless Steel Eye, Smooth Jaw w/ strain relief system	5 / A		400 RMS Amps, 60Hz	2.2 (1.00)
760SR6PSE	Stainless Steel Eye, Smooth Jaw, w/ AL Parking Stand & Strain Relief System	5 / A		400 RMS Amps, 60Hz	1.6 (0.73)
760SRS6E	Stainless Steel Eye, Serrated Jaw w/ Strain Relief System	5 / B		400 RMS Amps, 60Hz	2.2 (1.00)
1.63" SMOOTH JAW ALUMINUM DUCK BILL CLAMPS - PIN - W/O STRAIN RELIEF SYSTEM					
761E	Stainless Steel Eye, Smooth Jaw w/ AL Parking Stand	3 / A	954 MCM ACSR to #6 .19" - 1.63" (4.8 mm - 41 mm) Dia.	300 RMS Amps, 60Hz	1.4 (0.63)

Additional screw options available. See page J-2 or contact your local Salisbury Representative for more information.

"C" TYPE GROUNDING CLAMPS

.75" AND 1.25" SIZES



CAT. NO.	EYE & CLAMP DESCRIPTION	ASTM GRADE / CLASS	MAIN LINE RANGE	CONTINUOUS CURRENT RATING	WEIGHT EA. lbs. (Kgs)
0.75" ALUMINUM "C" CLAMP - THREADED - W/O STRAIN RELIEF SYSTEM					
7640001E	Stainless Steel Eye, Smooth Jaw	5 / A	2 Ø MCM ACSR to #6 .19" - .75" (4.8 mm - 19 mm) Dia.	400 RMS Amps, 60Hz	1.0 (0.45)
7640001EB	Bronze Eye, Smooth Jaw	5 / A		400 RMS Amps, 60Hz	1.0 (0.45)
76400S1E	Stainless Steel Eye, Serrated Jaw	5 / B		400 RMS Amps, 60Hz	1.0 (0.45)
76400S1EB	Bronze Eye, Serrated Jaw	5 / B		400 RMS Amps, 60Hz	1.0 (0.45)
0.75" BRONZE "C" CLAMP - THREADED - W/O STRAIN RELIEF SYSTEM					
7640CM1E	Stainless Steel Eye, Smooth Jaw	5 / A	2 Ø MCM ACSR to #6 .19" - .75" (4.8 mm - 19 mm) Dia.	400 RMS Amps, 60Hz	3.0 (1.40)
7640CMS1E	Stainless Steel Eye, Serrated Jaw	5 / B		400 RMS Amps, 60Hz	3.0 (1.40)
1.25" ALUMINUM "C" CLAMPS - THREADED - W/O STRAIN RELIEF SYSTEM					
760001E	Stainless Steel Eye, Smooth Jaw	5 / A	900 MCM ACSR to #6 .19" - 1.25" (4.8 mm - 131.8 mm) Dia.	400 RMS Amps, 60Hz	1.0 (0.45)
760001EB	Bronze Eye, Smooth Jaw	5 / A		400 RMS Amps, 60Hz	1.0 (0.45)
760001RT	Stainless Steel Removable T, Smooth Jaw	5 / A		400 RMS Amps, 60Hz	1.0 (0.45)
760001T	Stainless Steel T-Handle, Smooth Jaw	5 / A		400 RMS Amps, 60Hz	1.0 (0.45)
760001PSE	Stainless Steel Eye, w/ Parking Stand, Smooth Jaw	5 / A		400 RMS Amps, 60Hz	1.3 (0.59)
760001CS	Stainless Steel Eye, w/ Steel Parking Stand, Smooth Jaw	5 / A		400 RMS Amps, 60Hz	1.3 (0.59)
7600S1EB	Bronze Eye	5 / B		400 RMS Amps, 60Hz	- -
1.25" BRONZE "C" CLAMPS - THREADED - W/O STRAIN RELIEF SYSTEM					
760CM1E	Stainless Steel Eye, Smooth Jaw	5 / A	900 MCM ACSR to #6 .19" - 1.25" (4.8 mm - 31.8 mm) Dia.	400 RMS Amps, 60Hz	3.3 (1.50)
760MS1E	Stainless Steel Eye, Serrated Jaw	5 / B		400 RMS Amps, 60Hz	3.3 (1.50)

"C" TYPE GROUNDING CLAMPS

2.13" AND 2.5" SIZES



76600S1PG



7660001E



7512B

CAT. NO.	EYE & CLAMP DESCRIPTION	ASTM GRADE / CLASS	MAIN LINE RANGE	CONTINUOUS CURRENT RATING	WEIGHT EA. lbs. (kgs)
2.13" ALUMINUM "C" CLAMP - THREADED - W/O STRAIN RELIEF SYSTEM					
7660001E	Stainless Steel Eye, Smooth Jaw	5 / A	3000 MCM ACSR to #6 .25" - 2.13" (6.4 mm - 54 mm) Dia.	400 RMS Amps, 60Hz	2.0 (0.91)
76600S1E	Stainless Steel Eye, Serrated Jaw	5 / B		400 RMS Amps, 60Hz	2.0 (0.91)
76600S1PG	Posigrip, Stainless Steel, Serrated Jaw	5 / B		400 RMS Amps, 60Hz	2.0 (0.91)
2.5" ALUMINUM "C" CLAMP - THREADED - W/O STRAIN RELIEF SYSTEM					
7512B	Stainless Steel Bayonet, Smooth Jaw	5 / A	2.0" I.P.S. to #6 0.5" - 2.5" (12.7 mm - 63.5 mm) Dia.	400 RMS Amps, 60Hz	4.0 (1.82)
7512E	Stainless Steel Eye, Smooth Jaw	5 / A		400 RMS Amps, 60Hz	4.0 (1.82)

Additional screw options available. See page J-2 or contact your local Salisbury Representative for more information.

BUS BAR AND BUS BAR ALLIGATOR CLAMPS

.5", AND 4.4" SIZES



7575FE



7542E



7542B



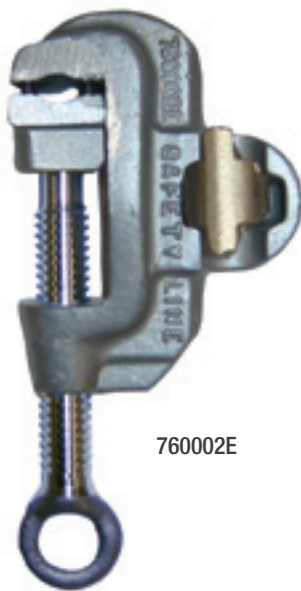
7541T

CAT. NO.	EYE & CLAMP DESCRIPTION	ASTM GRADE / CLASS	MAIN LINE RANGE	CONTINUOUS CURRENT RATING	WEIGHT EA. lbs. (kgs)
0.5" BRONZE BUS BAR ALLIGATOR CLAMPS - THREADED - W/O STRAIN RELIEF SYSTEM					
7575FE	Stainless Steel Eye, Smooth Jaw	2 / A	.0234" - .05" (6 mm - 12.7 mm) Dia.	250 RMS Amps, 60 Hz	2.0 (0.91)
7575FEST	Stainless Steel Eye-T, Smooth Jaw	2 / A		250 RMS Amps, 60 Hz	2.0 (0.91)
7575FGA	Grip-All, Stainless Steel, Smooth Jaw	2 / A		250 RMS Amps, 60 Hz	2.0 (0.91)
7575FPSE	Stainless Steel Eye, w/ Parking Stand, Smooth Jaw	2 / A		250 RMS Amps, 60 Hz	2.0 (0.91)
0.5" BRONZE BUS BAR ALLIGATOR CLAMPS WITH TEETH - THREADED - W/O STRAIN RELIEF SYSTEM					
7575FTGA	Stainless Steel Grip-All, Serrated Jaw	2 / B	0.234" - .05" (6 mm - 12.7 mm) Dia.	250 RMS Amps, 60 Hz	2.0 (0.91)
4.4" ALUMINUM BUS BAR CLAMPS - THREADED - W/O STRAIN RELIEF SYSTEM					
7541E	Stainless Steel Eye, Serrated Jaw	5 / B	0.31" - 4.25" (7.9 mm - 112 mm) Dia.	400 RMS Amps, 60Hz	2.0 (0.91)
7541T	Stainless Steel T-Handle, Serrated Jaw	5 / B		400 RMS Amps, 60Hz	2.0 (0.91)
4.4" ALUMINUM BUS BAR CLAMPS - PIN - W/O STRAIN RELIEF SYSTEM					
7542B	Stainless Steel Bayonet, Serrated Jaw	5 / B	0.31" - 4.25" (7.9 mm - 112 mm) Dia.	400 RMS Amps, 60Hz	2.0 (0.91)

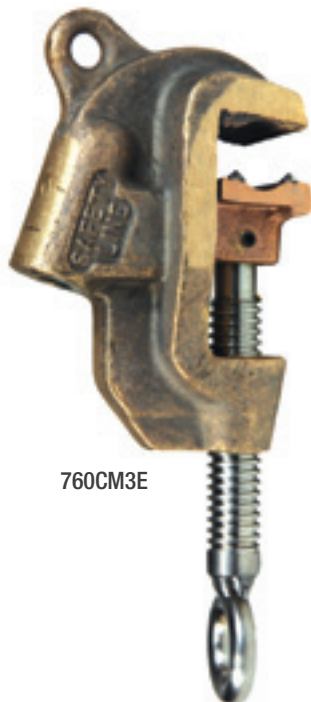
Additional screw options available. See page J-2 or contact your local Salisbury Representative for more information.

GROUNDING CLAMPS FOR FLATS & ANGLES

1.4" AND 1.5" SIZES



760002E



760CM3E



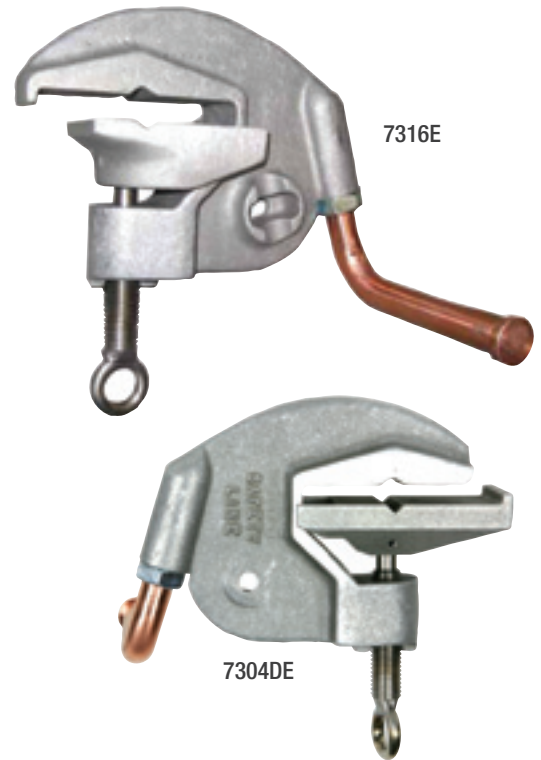
760CMSR3E

CAT. NO.	EYE & CLAMP DESCRIPTION	ASTM GRADE / CLASS	MAIN LINE RANGE	CONTINUOUS CURRENT RATING	WEIGHT EA. lbs. (kgs)
1.4" ALUMINUM FLAT FACE CLAMPS - PIN - W/O STRAIN RELIEF SYSTEM					
760002E	Stainless Steel Eye, Serrated Jaw	5 / B	0.19" - 1.4" (4.8 mm - 35.6 mm) Dia.	400 RMS Amps, 60Hz	1.0 (0.45)
760002T	Stainless Steel T-Handle, Serrated Jaw	5 / B		400 RMS Amps, 60Hz	1.0 (0.45)
1.4" BRONZE FLAT FACE CLAMPS - THREADED					
760CMSR3E	Stainless Steel Eye, W/ Strain Relief System Serrated Jaw	5 / B	0.19" - 1.4" (4.8 mm - 35.6 mm) Dia.	400 RMS Amps, 60Hz	4.5 (2.0)
1.5" ALUMINUM FLAT FACE CLAMPS - THREADED - W/O STRAIN RELIEF SYSTEM					
760003E	Stainless Steel Eye, Serrated Jaw	5 / B	0.19" - 1.5" (4.8 mm - 38 mm) Dia.	400 RMS Amps, 60Hz	1.2 (0.54)
1.5" BRONZE FLAT FACE CLAMPS - THREADED - W/O STRAIN RELIEF SYSTEM					
760CM3T	Stainless Steel T-Handle, Serrated Jaw	5 / B	0.19" - 1.5" (4.8 mm - 38 mm) Dia.	400 RMS Amps, 60Hz	3.2 (1.40)
760CM3E	Stainless Eye, Serrated Jaw	5 / B		400 RMS Amps, 60Hz	3.2 (1.40)

Additional screw options available. See page J-2 or contact your local Salisbury Representative for more information.

GROUNDING CLAMPS FOR FLATS & ANGLES

2.5" AND 4" SIZES

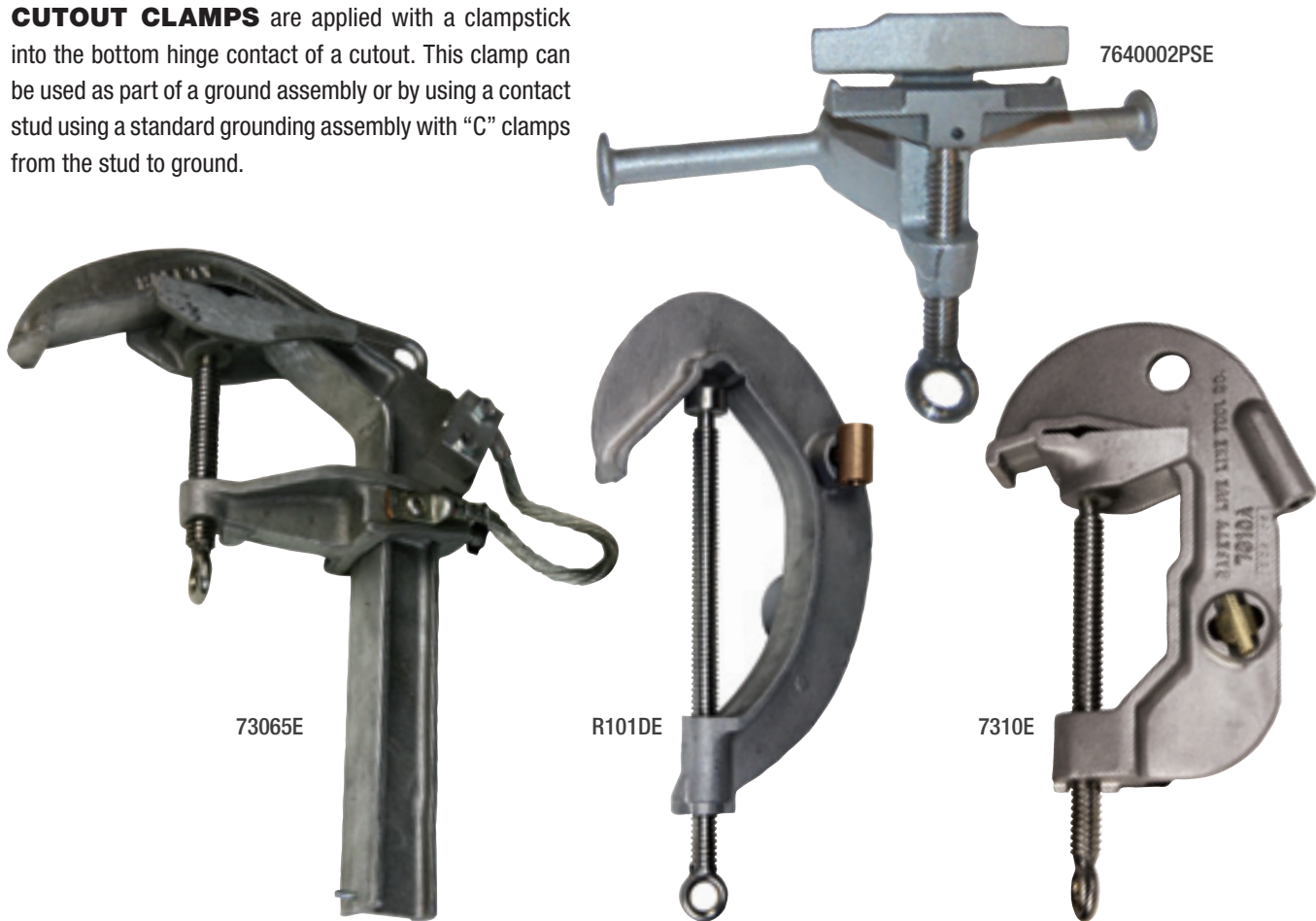


CAT. NO.	EYE & CLAMP DESCRIPTION	ASTM GRADE / CLASS	MAIN LINE RANGE	CONTINUOUS CURRENT RATING	WEIGHT EA. lbs. (kgs)
2.5" ALUMINUM ALL ANGLE CLAMPS - THREADED - W/O STRAIN RELIEF SYSTEM					
7315E	Stainless Steel Eye, Serrated Jaw	5 / B	2" I.P.S. to #4 0.25" - 2.5" (6.4 mm - 54 mm) Dia.	400 RMS Amps, 60Hz	4.3 (2.00)
7315PG	Bronze Posigrip, Serrated Jaw	5 / B		400 RMS Amps, 60Hz	4.3 (2.00)
2.5" ALUMINUM TOWER ANGLE CLAMPS - THREADED - W/O STRAIN RELIEF SYSTEM					
73025T	Stainless Steel T-Handle, Smooth Jaw	5 / A	0.3" - 1.6" (8-41 mm) Dia.	400 RMS Amps, 60Hz	2.5 (1.14)
4" ALUMINUM TOWER ANGLE CLAMPS - THREADED - W/O STRAIN RELIEF SYSTEM					
7304T	Stainless Steel T-Handle, Smooth Jaw	5 / A	0.25" - 0.94" (6-24 mm) Dia.	400 RMS Amps, 60Hz	3.3 (1.50)
4" ALUMINUM TOWER ANGLE CLAMPS - PIN + THREADED - W/O STRAIN RELIEF SYSTEM					
7314T	Stainless Steel T-Handle, Smooth Jaw	5 / A	0.25" - 0.94" (6-24 mm) Dia.	400 RMS Amps, 60Hz	3.3 (1.50)
4" ALUMINUM TOWER ANGLE CLAMPS WITH COPPER PARKING STAND - RATED FOR 49KA FOR 15 CYCLES W/ X/R=25					
7316E	Stainless Steel Eye, Smooth Jaw	Exceeds Grade 5	Outside Angle Clamp 4" max.	-	-
7304DE	Stainless Steel Eye, Smooth Jaw	Exceeds Grade 5	Inside Angle Clamp 4" max.	-	-

Additional screw options available. See page J-2 or contact your local Salisbury Representative for more information.

LARGE SUBSTATION BUS CLAMPS & CUTOUT CLAMPS

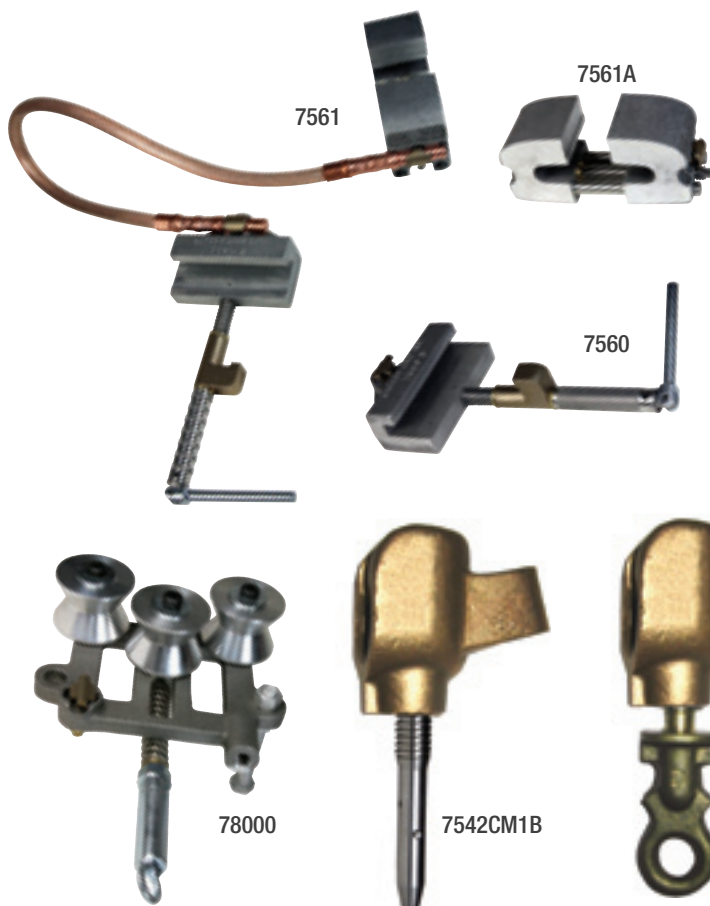
CUTOUT CLAMPS are applied with a clampstick into the bottom hinge contact of a cutout. This clamp can be used as part of a ground assembly or by using a contact stud using a standard grounding assembly with “C” clamps from the stud to ground.



CAT. NO.	EYE & CLAMP DESCRIPTION	ASTM GRADE / CLASS	MAIN LINE RANGE	CONTINUOUS CURRENT RATING	WEIGHT EA. lbs. (kgs)
4.5" ALUMINUM SUBSTATION BUS CLAMPS - THREADED - W/O STRAIN RELIEF SYSTEM					
7311E	Stainless Steel Eye, Smooth Jaw	5 / A	0.5" - 4.5" (12.7 mm - 114 mm) Dia.	400 RMS Amps, 60Hz	4.0 (1.82)
4.5" ALUMINUM SUBSTATION BUS CLAMPS - PIN - W/O STRAIN RELIEF SYSTEM					
7310E	Stainless Steel Eye, Smooth Jaw	5 / A	1/2" I.P.S., 0.5"-4.5" (12.7 mm - 114 mm) Dia.	400 RMS Amps, 60Hz	4.0 (1.82)
6" ALUMINUM SUBSTATION BUS CLAMPS - THREADED - W/O STRAIN RELIEF SYSTEM					
R101DE	Stainless Steel Eye, Serrated Jaw	5 / B	1 Ø I.P.S., 0.5" - 6" (12.7 mm - 152 mm) Dia.	400 RMS Amps, 60Hz	4.0 (1.82)
7" ALUMINUM SUBSTATION BUS CLAMPS - THREADED - W/O STRAIN RELIEF SYSTEM					
73065E	Stainless Steel Eye, Smooth Jaw	5 / A	0.4" - 7" (10.2 mm - 178 mm) Dia.	400 RMS Amps, 60Hz	6.7 (3.00)
1.63" ALUMINUM CUTOUT CLAMPS - THREADED - W/O STRAIN RELIEF SLEEVE					
7640002E	Stainless Steel Eye, Smooth Jaw	3 / A	0.188" - 1.63" (4.77 mm - 41.4mm) Dia.	300 RMS Amps, 60Hz	1.0 (0.45)
7640002PSE	Stainless Steel Eye, w/ Al. Dbl. Parking Stand, Smooth Jaw	3 / A		300 RMS Amps, 60Hz	1.2 (0.5)
7640002PSEB	Bronze Eye, w/ Al. Dbl. Parking Stand, Smooth Jaw	3 / A		300 RMS Amps, 60Hz	1.2 (0.5)

Additional screw options available. See page J-2 or contact your local Salisbury Representative for more information.

RUNNING RAIL CLAMPS & BALL & SOCKET SYSTEM



The **RUNNING POWER RAIL GROUND SET** is made up of 7561A power rail clamp and 7560 running rail clamp connected with three feet (91.4 cm) of 4/0 PVC-jacketed copper cable. Set includes one 10024BC, 1" x 24" (2.5 x 61 cm) fiberglass handle with bayonet to operate the power rail clamp.

The **BALL AND SOCKET GROUNDING SYSTEM** has a lightweight compact design and allows for variable angle accessibility. These clamps are made from bronze alloy and have a socket size of 1" (25.4 mm) with a threaded bore boss of 5/8"-11 UNC. There are fixed grounding points on the socket clamp.

See page K-3 for ball socket studs and accessories available.

CAT. NO.	EYE & CLAMP DESCRIPTION	ASTM GRADE / CLASS	MAIN LINE RANGE	CONTINUOUS CURRENT RATING	WEIGHT EA. lbs. (kgs)
5.75" ALUMINUM RUNNING RAIL CLAMP - PIN					
7560	Stainless Steel Toggle Handle, Smooth Jaw	5 / A	5" - 5.75"	400 RMS Amps, 60Hz	5.0 (2.27)
4" ALUMINUM POWER RAIL CLAMP - PIN					
7561A	Stainless Steel Bayonet, Smooth Jaw	5 / A	0" - 4"	400 RMS Amps, 60Hz	7.0 (3.17)
TRAVELING GROUND					
7561	Running Power Rail Ground Set	5	-	-	15 (6.80)
1.63" ALUMINUM TRAVELING GROUND CLAMPS - PIN/THREADED					
78000	Stainless Steel Eye, w/ Contact Stud, Smooth Jaw	3 / A	0.125" - 1.63"	300 RMS Amps, 60Hz	10 (4.54)

CAT. NO.	DESCRIPTION	ASTM GRADE	CONTINUOUS CURRENT RATING	WEIGHT EA. lbs. (kgs)
BALL & SOCKET SYSTEM				
7542CM1B	Smooth Jaw, Threaded, w/ Stainless Steel Bayonet	5	400	1.5 (.68)
7542CM1E	Smooth Jaw, Threaded, w/ Stainless Steel Eye	5	400	1.5 (.68)
7542CM1PG	Smooth Jaw, Threaded, w/ Bronze Posigrip	5	400	1.5 (.68)
7542CM1T	Smooth Jaw, Threaded, w/ Stainless Steel T-Handle	5	400	1.5 (.68)

Additional screw options available. See page J-2 or contact your local Salisbury Representative for more information.

THREADED & PIN FERRULES FOR SAFETY LINE SETS

For **THREADED FERRULES** (Terminals) the recommended torque applied during installation of jam nut for threaded ferrules is 20 ft.-lb. These threaded ferrules include one brass jam nut and one lock washer. For **PIN TERMINALS** the recommended torque applied during installation of pin ferrule eye bolts is 28 ft.-lb.

GROUNDING CABLES are made with extra flexible strand of soft drawn #30 AWG (.01") copper and are available in three different jackets.



CAT. NO.	CONDUCTOR SIZE	STYLE	STUD SIZE	BODY DIE CODES	SHROUD DIE CODES	LENGTH STRIPPED INCHES
COPPER SHROUDED						
760001CT40	#2	Threaded	5/8-11	U27RT	U27ART	1-5/8
760001CT41	1/0	Threaded	5/8-11	T&B 66	B75-AH	1-15/16
760001CT42	2/0	Threaded	5/8-11	T&B 66	B75-AH	2
76CT43	4/0	Threaded	5/8-11	T&B 66	B75-AH	2
760001PT40	#2	Pin	11/16	U27RT	U27ART	1-5/8
760001PT41	1/0	Pin	11/16	T&B 66	B75-AH	1-15/16
760001PT42	2/0	Pin	11/16	T&B 66	B75-AH	2
76PT43	4/0	Pin	11/16	T&B 66	B75-AH	2

Add suffix "T" to the catalog number when requesting tin-plated copper.

COPPER UNSHROUDED

98132022	#2	Threaded	5/8-11	U243	-	1-5/16
98132023	1/0	Threaded	5/8-11	U243	-	1-5/16
98132024	2/0	Threaded	5/8-11	T&B 60	-	1-5/16
98132025	4/0	Threaded	5/8-11	T&B 62	-	1-5/16
98132022P	#2	Pin	11/16	U243	-	1-5/16
98132023P	1/0	Pin	11/16	U243	-	1-5/16
98132024P	2/0	Pin	11/16	T&B 60	-	1-5/16
98132025P	4/0	Pin	11/16	T&B 62	-	1-5/16

SINGLE POINT DISTRIBUTION GROUNDING SET & BALL SOCKET 4-WAY CONNECTOR SETS



Grounding Sets



75420010236

SETS FOR GROUNDED “Y” SYSTEMS provide all the equipment required to safely ground a variety of structures on grounded “Y” distribution systems. Factory assembled kits are for conductors ranging from #6 to 1-1/2” (3.8 cm) diameter, with serrated jaw “C” clamps with threaded terminals. All clamps are supplied with eye screws for installation with clampstick (not included). Other lengths and configurations are available.

STANDARD EQUIPOTENTIAL GROUNDING SETS provide all the equipment required to safely ground a variety of structures on delta distribution systems. Factory assembled kits are for conductors ranging from #6 to 1-1/2” (3.8 cm) diameter, with smooth or serrated jaw clamps with threaded terminals. All clamps are supplied with eye screws for installation with grip-all clampsticks (not included). Other lengths and configurations are available.

BALL SOCKET 4-WAY CONNECTOR SETS are designed for variable angle accessibility, three-phase grounding. It is supplied with three-foot leads and six feet of cable from a common connection to ground. Upper heads are ball socket clamps (7542CM1E). Lower ground head is a standard “C” type ground head (760001E) with a range of #6 to 1-1/4” (32 mm). Ball studs needed but not included.

CAT. NO.	CABLE SIZE	FAULT DUTY 15 CYCLES	ASTM GRADE	WEIGHT EA. lbs. (kgs)
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GROUNDED “Y” SYSTEMS

763S011	2/0	27 kA	3	69 (31.3)
763S45	4/0	43kA	5	110 (49.9)
Complete Grounded “Y” Set Includes				
3 - 6’ (1.83 m) Line Jumpers				
1 - 12’ (3.66 m) Line to Ground Jumper				
1 - 60’ (18.3 m) Ground Lead				
1 - Pole Band				
1 - Pole Band Extension				
1 - Flat Face Clamp (760003E)				
1 - Protective Bag				

EQUIPOTENTIAL DELTA

7600011	2/0	27 kA	3	62 (28.1)
760045	4/0	43 kA	5	100 (45.4)
Complete Delta Set Includes				
2 - 6’ (1.83 m) Line Jumpers				
1 - 12’ (3.66 m) Line to Ground Jumper				
1 - 60’ (18.3 m) Ground Lead				
1 - Pole Band				
1 - Pole Band Extension				
1 - Flat Face Clamp (760003E)				
1 - Protective Bag				

BALL SOCKET 4-WAY CONNECTOR SETS

75420010236	#2	14.5 kA	1	9 (4.08)
75420011036	1/0	21 kA	2	12 (5.44)
75420012036	2/0	27 kA	3	14 (6.35)

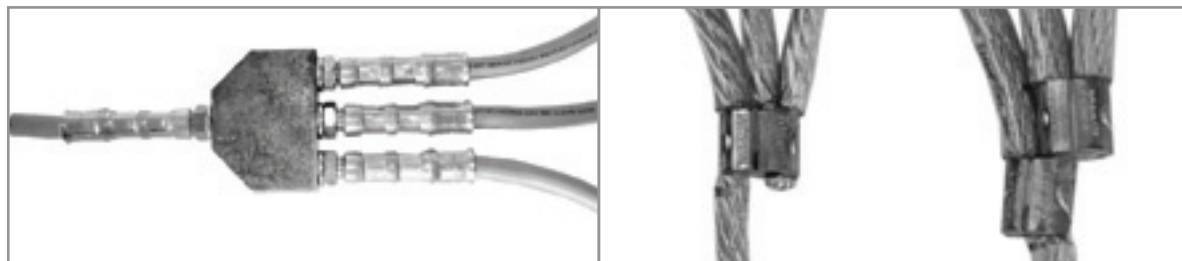
Optional ground set label available upon request when ordering.

GROUNDING SETS

4 WAY CONNECTOR SET, 4 WAY CONNECTOR AND SQUEEZE-ONS

The **4-WAY CONNECTOR SETS** are made with #2 clear-jacketed, extra flexible cable, three 8-foot (2.44 m) leads from the heads to the common connection and one 50-foot (15.25 m) lead from the common connection to the ground connection. The grounding 4-way connector set has a fixture to raise and lower the set which can be easily tied onto the pole. The 752076 grounding 4-way connector set is also supplied with 3 fiberglass handles (10078BC) and a bag. The 752576 grounding 4-way connector set requires a clampstick. Sets come with bags. Other lengths and configurations available. Meets ASTM F 855 Grade 1 specifications. Maximum fault duty is 14.5 kA for 15 cycles.

4-WAY CONNECTORS are used to create a common connection between the conductor leads and the ground lead of a ground set.



CAT. NO.	DESCRIPTION	MAX. OPENING in. (cm)	ASTM GRADE	WEIGHT EA. lbs. (kgs)
4 WAY CONNECTOR SETS				
752076	4-Way Connector Set w/ "C" Type Clamps, Bayonet	1 1/4 (3.2)	1	32 (14.5)
752576	4-Way Connector Set w/ "C" Type Clamps, Eye	1 1/4 (3.2)	1	39 (17.9)

CAT. NO.	DESCRIPTION	QTY. REQUIRED	WEIGHT lbs. (kgs)
CONNECTORS FOR GROUND SETS			
76630882	Squeeze-on for #2 Cable	1	0.25 (0.113)
76630782	Squeeze-on for 1/0 - 4/0 Cable	2	0.25 (0.113)
CB36	4-Way Set Block, Copper	1	0.187 (0.085)
CA36	4-Way Set Block, Aluminum	1	0.125 (0.056)

QUICK GRIP GROUND CLAMPS & GROUNDING SETS



QUICK GRIP CLAMPS are specifically designed and ideally suited for temporary grounding where spacing and orientation of components limit the use of traditional ground clamps. The Quick Grip Ground Clamp is available with a Grip-All eye or a Bayonet fitting for installation with a live line tool.

- Available in both the traditional style (VG01) and a hotstick operated version (VG01GA and VG01B).
- Available in a single lead ground jumper or grounding set with 1, 3 or 4 leads for grounding of single or three-phase secondary terminals.
- Fitted with a copper overlay, riveted to the stationary jaw and connected to a grounding jumper with a one hole NEMA connector to assure a low resistance connection.
- The grounding set connection is made using standard copper compression connectors and all connections are covered with a heat-shrink tube to reduce fatigue at stress points.
- The locking jaw pliers are equally suited for flat or rounded terminals.

Optional flat jaw available.

CAT. NO. STANDARD	CAT. NO. FLAT JAW	DESCRIPTION	CABLE LENGTH FT. (M)	ASTM GRADE	WEIGHT lbs. (kgs)
QUICK GRIP GROUND CLAMPS & GROUNDING SETS, CLAMP OPENING: MIN. 0.125" - MAX. 1.5"					
VG01	VG01	Locking Pliers, Cu Overlay	N/A	3	1.5 (0.68)
VG01B	VG01B	Locking Pliers, Cu Overlay. Bayonet	N/A	3	1.6 (0.73)
VG01GA	VG01GA	Locking Pliers, Cu Overlay. Grip-All	N/A	3	1.6 (0.73)
VG01033	VG01033	Grounding Set, 3 Leads, 1/0 x 3' with VG01	9 (2.743)	3	10.5 (4.77)
VG01034	VG01034	Grounding Set, 4 Leads, 1/0 x 3' with VG01	12 (3.657)	3	13.2 (5.99)
VG11013	VG11013	Single Lead, 1/0 x 3' with VG01GA	3 (0.914)	3	3.7 (1.68)
VG11033	VG11033	Grounding Set, 3 Leads, 1/0 x 3' with VG01GA	9 (2.743)	3	10.8 (4.9)
VG11034	VG11034	Grounding Set, 4 Leads, 1/0 x 3' with VG01F	12 (3.657)	3	13.6 (6.17)
VG11034B	VG11034B	Grounding Set, 4 Leads, 1/0 x 3' with VG01GB	12 (3.657)	3	13.6 (6.17)

Optional ground set label available upon request when ordering.

GROUNDING SETS

INDUSTRIAL GROUND 4-WAY GROUND SETS

The **INDUSTRIAL GROUND SET** consists of three upper ground heads, one lower head, visible trifurcation, six-foot (1.83 m) leads to common connections and a twenty foot lead from common to ground connection. All ground heads (7541B and 7541T) will accept 4"x 4"(10.2 x 10.2 cm) copper or aluminum bus configurations.

Also includes a bag for installation at the main disconnect point. The 7551 includes a one-foot fiberglass handle (10012BC) for installing upper heads.

NOTE: 8106C clampstick (not included) must be used to apply 7551GA grounds. Other lengths available. Conductor size is 2/0 copper. Meets ASTM F-855 Grade 3 specifications. Maximum fault duty is 27kA for 15 cycles.



7551

LIGHTWEIGHT INDUSTRIAL GROUND SETS

are designed for smaller conductor size applications. Clamps used include screws with eyes (GA attachments) for use with a clampstick. A #2 extra flexible copper ground cable is used throughout. The 75FGT0266 has six-foot (1.83m) leads to the common connection and a six-foot lead from the common connection to ground. The 7640244GA uses 4' (1.22 m) leads throughout. Sets include a bag. Other lengths and configurations are available.



75FGT0266

CAT. NO.	DESCRIPTION	ASTM GRADE	WEIGHT lbs. (kgs)
INDUSTRIAL GROUND SETS			
7551	Industrial Ground Set - with Bayonet	1	35 (15.8)
7551GA	Industrial Ground Ser - with Grip-All	3	35 (15.8)

CAT. NO.	DESCRIPTION	CLAMP USED	FAULT DUTY 15 CYCLES	ASTM GRADE	WEIGHT EA. lbs. (kgs)
LIGHTWEIGHT INDUSTRIAL GROUND SETS					
7640244GA	Ultra Lightweight	7640001E	14.5 kA	1	13 (5.90)

Optional ground set label available upon request when ordering.



GROUND SETS include three upper heads and are easily and safely attached to the line with the fiberglass handles. The ground heads have a maximum opening of 1-3/4" (4.4 cm) and can be applied to angle irons, flat buses as well as on-line wires. A tight, four-point contact is made with the quick adjusting screw. The handles are easily removed when necessary. The lifting fixture provides ease when raising and lowering the set and eliminates hanging the entire ground set's weight on the conductor. Other lengths and configurations available.

PARKING STUDS provide a temporary location to attach ground clamps when raising or lowering multiple ground leads.

SHRINK TUBE for terminal connection strain relief fits #2 through 4/0 terminals and ground cable.

CAT. NO.	DESCRIPTION	WEIGHT lbs. (kgs.)
PARKING STUDS		
76000APS	Single Stud	0.187 (0.085)
SHRINK TUBE		
761ST	6" (15 cm) for Shrouded Ferrules	0.375 (0.170)

CAT. NO.	CABLE SIZE	FAULT DUTY 15 CYCLES	ASTM GRADE	WEIGHT EA. lbs. (kgs)
766FG	#2	14.5 kA	1	42 (19.0)
7661FG	1/0	21 kA	2	43 (19.5)

Standard Ground Set Includes
 3 - Upper Heads
 1 - Lower Head
 1 - Leather, Lace and Lifting Ring
 74 - Cable only with 8-Foot leads to common connection
 and 50' from common connection to ground connection
 3 - 6'6" (1.98 m) Fiberglass Handles
 1 - Bag for Handles
 1 Bag for Ground Set

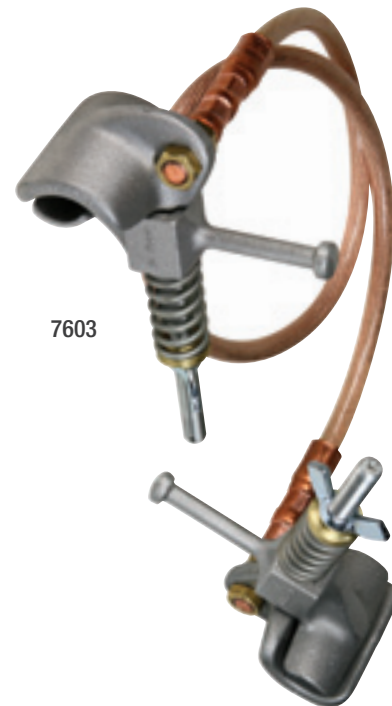
URD ASSEMBLY, NEUTRAL JUMPER ASSEMBLY & UNDERGROUND DEAD BREAK SET

The **CONCENTRIC NEUTRAL JUMPER ASSEMBLY** is used for bonding purposes on non-jacketed cable. It is usually installed across a portion of cable to be cut, repaired or spliced. The assembly is left in place until the concentric neutral is spliced. As a safety precaution, follow all of your organization's applicable rules and/or policies pertaining to faulted cable, spiking and grounding.

Made with two ground clamps and 4 feet (1.22 m) of 1/0 clear jacketed extra flexible copper cable, the concentric neutral ground clamp is spring pressured. The assemblies have a continuous current rating of 250 amps and fault rated to ASTM Grade 1, 14 KA for 15 cycles. Other lengths are available. Bag not included.

The components of the **UNDERGROUND DEAD BREAK GROUND SET** provide safe and simple grounding methods on padmount transformers or any related URD equipment. These grounds can be ordered in complete sets or individual components. The jumpers are made with 6 foot (1.83m) lengths of #2, clear-jacketed, extra flexible cable. Clamps (7640001E) supplied include an eye for a grip-all insulating stick application.

The **URD GROUNDING ASSEMBLY** is used for underground personal protective grounding elbow used for grounding pad-mounted equipment, switches and transformers when performing de-energized maintenance on URD distribution systems, and draining DC capacitive charges from de-energized URD cables.



7603



ES10YB615LB

CAT. NO.	DESCRIPTION	FOR CABLE DIAMETER in. (cm)	WEIGHT lbs. (kgs)
CONCENTRIC NEUTRAL JUMPER ASSEMBLY			
7603	Assembly	3/4 to 2 (1.9 - 5.1)	12 (5.44)
7603GA	Grip-All Assembly	3/4 to 2 (1.9 - 5.1)	12 (5.44)
PARTS			
7603C	Clamp with Wing Nut		4 (1.81)
7603CGA	Clamp with Grip-All		4 (1.81)
7604C	Clamp with Wing Nut		4 (1.81)
7604CGA	Clamp with Grip-All		4 (1.81)

15 KV UNDERGROUND DEAD BREAK GROUND SET

LOCAL LOOP

764156STGES0	Full Assembly with Bag		21 (9.52)
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ASSEMBLY INCLUDES:

764156234H	3 - Ground Jumper, 6' (1.83 m)		6 (2.72)
764000ST	3 - Ground Stud for Low Profile Transformer		1 (0.45)
764015GE	3 - 15 kV Ground Elbow		1 (0.45)
764015S0	3 - 15 kV Ground Standoff with Spring Bail		1 (0.45)
B1715	1 - Protective Bag		2 (0.91)

UNDERGROUND GROUNDING ASSEMBLY

ES10Y615LB	Single, 15 kV		9 (4.08)
ES1Y21015LB	Set, 15 kV		22 (9.98)
ES10Y625LB	Single, 25 kV		10 (4.53)
ES1Y21025LB	Set, 25 kV		23 (10.43)



764156STGES0

Optional ground set label available upon request when ordering.



EB100615

The **SINGLE GROUNDING BUSHING SET** is a single lead made from 6 feet (1.83 m) of 1/0 cable. The bushing set consists of 3 bushing assemblies connected together with 3-foot (0.92 m) leads to a common connection, and 10 feet (3.05 m) from common connection to ground. The conductor is made of 1/0 clear jacketed copper stranded cable. The ground clamp (7640001E) can be applied with a clampstick. Sets come complete with bag; single leads do not. All sets are rated for 10 kA for 10 cycles. Other lengths and configurations are available.



EB1021015

GROUND BUSHINGS WITH CONNECTIONS (parking stands for 'J' boxes or padmounts) provide a safe, convenient ground for elbows and a "positive" test to ensure a de-energized elbow.



EB1021015LB

The **ELBOW GROUNDING SET** includes a single lead made from 6 feet (1.83 m) of 1/0 cable. This set consists of 3 elbow assemblies connected together with 3-foot (0.92 m) leads to a common connection, and 10-foot (3.05 m) from a common connection to ground. The conductor is made of 1/0 clear jacketed copper stranded cable. A ground clamp (7640001E) can be applied with a clampstick. Sets are rated for a maximum fault current of 10,000 amps for 10 cycles. Sets come complete with bag; single leads do not. Other lengths and configurations are available.



764015S0

764150025LS0



ES1021015LB

CAT. NO.	DESCRIPTION	WEIGHT lbs. (kgs)
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200 AMP ELBOW GROUNDING SETS

DEAD BREAK

ES100615	Single, 15 kV	8 (3.63)
ES1021015	Set, 15 kV	20 (9.30)

LOAD BREAK

ES100615LB	Single, 15 kV	9 (4.08)
ES1021015LB	Set, 15 kV	22 (9.98)
ES3LY635	Set, 35 kV	23 (10.43)
ES100625LB	Single, 25/35 kV	10 (4.53)
ES1021025LB	Set, 25/35 kV	23 (10.43)

200 AMP GROUNDING BUSHING SETS

DEAD BREAK

EB100615	Single, 15 kV	8 (3.63)
EB1021015	Set, 15 kV	20 (9.30)

LOAD BREAK

EB100615LB	Single, 15 kV	9 (4.08)
EB1021015LB	Set, 15 kV	22 (9.98)
EB100625LB	Single, 25 kV	10 (4.53)
EB1021025LB	Set, 25 kV	23 (10.43)

200 AMP GROUNDING BUSHINGS WITH CONNECTIONS

DEAD BREAK

764015S0	15 kV	1 (0.45)
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LOAD BREAK

764150015LS0	15 kV	2 (0.91)
764150025LS0	25 kV	4 (1.81)

Optional ground set label available upon request when ordering.



ASTM F855-09 TABLE 1 - PROTECTIVE GROUNDING CLAMP RATINGS

TABLE 1 Protective Ground Cable, Ferrule, Clamp and Assembly Ratings for Symmetrical Current

Grade	Grounding Clamp Torque Strength, min				Short Circuit Properties ^A							Continuous Current Rating, A RMS, 60 Hz
	Yield ^B		Ultimate		Withstand Rating, Symmetrical kA RMS, 60 Hz			Ultimate Rating Capacity ^{CD} , Symmetrical kA RMS, 60 Hz				
	lbf-in.	n-m	lbf-in.	n-m	15 cycles (250 ms)	30 cycles (500 ms)	Copper Cable Size	15 cycles (250 ms)	30 cycles (500 ms)	60 cycles (1 s)	Maximum Copper Test Cable Size	
1	280	32	330	37	14	10	#2	18	13	9	2/0	200
2	280	32	330	37	21	15	1/0	29	21	14	4/0	250
3	280	32	330	37	27	20	2/0	37	26	18	4/0	300
4	330	37	400	45	34	25	3/0	47	33	23	250 kcmil	350
5	330	37	400	45	43	30	4/0	59	42	29	250 kcmil	400
6	330	37	400	45	54	39	250 kcmil or 2 2/0	70	49	35	350 kcmil	450
7	330	37	400	45	74	54	350 kcmil or 2 4/0	98	69	48	550 kcmil	550

^A Withstand and ultimate short circuit properties are based on performance with surges not exceeding 20 % asymmetry factor (see 9.1 and 12.3.4.2).

^B Yield shall mean no permanent deformation such that the clamp cannot be reused throughout its entire range of application.

^C Ultimate rating represents a symmetrical current which the assembly or individual components shall carry for the specified time.

^D Ultimate values are based upon application of Onderdonk's equation to 98 % of nominal circular mil area allowed by Specifications B 172 and B 173.

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ASTM F855-09 TABLE 2 - GROUNDING CABLE FERRULE AND ASSEMBLY RATINGS

TABLE 2 Ultimate Assembly Rating for High X/R Ratio Applications

Grade	Size	High Asymmetrical Test Requirements			
		Rating Rated Current (kA)	X/R = 30	Last Cycle Current Peak (kA)	Test Duration (cycles)
			1st Cycle Current Peak (kA) X 2.69		
1H	No. 2	15	41	23	15
2H	1/0	25	65	37	15
3H	2/0	31	84	46	15
4H	3/0	39	105	58	15
5H	4/0	47	126	70	15
6H	250 MCM	55	148	82	15
7H	350 MCM	68	183	101	15

NOTE 1—The above current values are based on electromechanical test values.

NOTE 2—Assemblies that have been subjected to these shall not be re-used.

NOTE 3—For use with currents exceeding 20 % asymmetry factor.

NOTE 4—See X4.7.2 for additional information.

NOTE 5—Alternate testing circuits are available for laboratories that cannot achieve the above requirements. See Appendix X4 for details.

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