## Waterpipe ground clamps





Water pipe size (in.)	Ground wire size (AWG)	Cat. no.	
½, ¾, 1 or rebar 4–10	#6, #4, #2	2-TB	
1¼, 1½ or 2	#6, #4, #2	3-TB	
2½, 3 or 3½	#6, #4, #2	4	N N
4, 4½ or 5	#6, #4, #2	5-TB	
6	#6, #4, #2	6	

Malleable iron crossbar, steel U-bolt, comes with copper cable clamp with serrations

#### Waterpipe ground clamps





•	Ground wire	
Water pipe size (in.)	size (AWG)	Cat. no.
1/2-1	#4-4/0	3902
11/4-2	#4-4/0	3903
2½-3½	#4-4/0	3904
4–5	#4-4/0	3905-TB
6	#4-4/0	3906-TB
8	#4-4/0	3907
10	#4-4/0	3908
12	#4-4/0	3909-TB

Material: Steel U-bolt and nut, comes with bronzed aluminum cap and crossbar cadmium plated plus gold chromate finish.

#### Waterpipe ground clamps





	Cat. no.	Ground wire size (AWG)	Water pipe size (in.)
	3902BU*	#4-4/0	1/2-1
	3903BU*	#4-4/0	11/4-2
( )	3904BU*	#4-4/0	21/2-31/2
1 1	3905BU*	#4-4/0	4–5
1 1	3906BU*	#4-4/0	6
	3907BU*	#4-4/0	8
	3908BU*	#4-4/0	10
7	3909BU*	#4-4/0	12

 ${\it Material: Bronze\ U-bolt\ and\ nut, complete\ with\ bronzed\ aluminum\ cap\ and\ crossbar\ with}$ a bright dip finish. \*UL Listed for direct burial

#### **Ground clamps**





Cat. no.	Material	Water pipe, copper tubing size (in.)	
3826*	Malleable iron	¥2, <b>¾</b> 4	1/2-1



3846*	Bronze		
3849**	Brass	<b>½</b> −1	_



½, ¾ or 1



- $^{\star}$  For unarmoured copper wires #6, #4 AWG.  $^{\star\star}$  For copper and aluminum conductors; for #14 through #2 AWG unarmoured copper wires for corrosive and outdoor use. UL  $\,$ approved for direct burial.
- #8 through #4 AWG. Not CSA certified.





Ground clamps for K&L g	rade coppe	<b>⊕</b> , <b>€</b>	
	Cat. no.	Ground wire size (AWG)	Water pipe, copper tubing size (in.)
	3844*	#8-#4	1/2-1
	3888**	#8-#4	½−1, also rebar 4−10

<sup>\*</sup> With steel screws. \*\* UL approved for direct burial. Silicon bronze screws.

## Galvanized grounding plates

- Made of high-quality steel, hot dip galvanized
- Major time and cost saving versus ground rods

	Cat. no.	Description	Wire range (AWG)	Std. pkg.
1016TB - 1016BTB	1016TB	Galvanized grounding plate	8 sol. to 4/0 str.	1
	1016BTB	Galvanized grounding plate (complete with JAB34C connector)	8 sol. to 4/0 str.	1
	1016TB-NG*	Grounding plate (not galvanized)	8 sol. to 4/0 str.	1
	1016BTB-NG*	Grounding plate (not galvanized) (complete with JAB34C connector)	8 sol. to 4/0 str.	1

**Ground electrode boxes** 

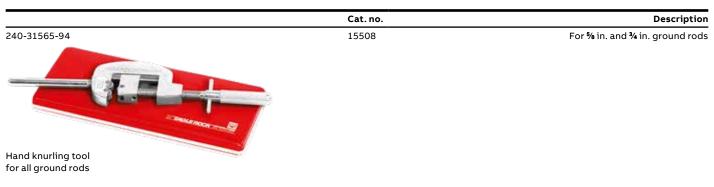
	Cat. no.	Description
51628 - 51629	51628	Pregalvanized steel
	51629	Hot dip galvanized steel



14 gauge steel, 10 in. diameter, 12 in. depth.

\* CSA not applicable.

### Knurling dies for 14- and 15-ton tools



Used to knurl ground rods in order to increase the pullout value of the compression connection by as much as 20%.

## Ground rods

## Galvanized ground rods

- Made of high-strength quality cold drawn steel, (1035) hot dip galvanized
- Meets ANSI CI35.30-1979 requirements
- Stainless steel rods are also available (for more detailed information, contact your ABB regional sales office)





	1	rade size		(nominal x length)	Plating thickness		Weig	ht per 100
Cat. no.	in.	ft.	mm	m	(mils)	Std. pkg.	lb	kg
GR5006	1/2	6	12.7	1.8	4	10	410	186
GR6256	<sup>5</sup> / <sub>8</sub>	6	15.8	1.8	4	5	600	272
GR6258	5/8	8	15.8	2.4	4	5	800	363
GR6250 (0.543 – 0.555)	5/8	10	15.8	3.0	4	5	1,000	454
GR6260 (0.625 – 0.640)	5/8	10	15.8	3.0	4	5	1,000	454
GR6250B* (0.618 – 0.623)	5/8	10	15.8	3.0	4	5	1,000	454
GR7506	3/4	6	15.8	1.8	4	5	700	318
GR7508	3/4	8	19.0	2.4	4	5	1,200	545
GR7510	3/4	10	19.0	3.0	4	5	1,500	681

<sup>\*</sup> B suffix denotes black iron bare steel ground rod (CSA not applicable). CSA lists rods ½ in. and larger, 10 ft. and longer.

### Copper bonded steel ground rods

- All EZGround ground rods have a heavy uniform covering of electrolytic copper bonded to a rigid steel core
- Copper ions are forced electrically to join with the steel core, establishing a corrosion-resistant bond between the copper and the steel





	т	Trade size		Rod size (nominal diameter x length)			Weig	ght per 100
Cat. no.	in.	ft.	mm	m	thickness (mils)	Std. pkg.	lb	kg
5005	1/2	5	12.7	1.8	5	10	305	138
5006	1/2	6	15.8	1.8	5	5	370	168
5008	1/2	8	15.8	2.4	5	5	545	247
5010	1/2	10	15.8	3.0	5	5	611	277
6256	5/8	6	15.8	3.0	5	5	508	230
6258*	5/8	8	15.8	3.0	10	5	678	308
6260*	5/8	10	15.8	1.8	10	5	847	384
7508*	3/4	8	19.0	2.4	10	5	992	450
7510*	3/4	10	19.0	3.0	10	5	1,240	462
1010*	1	10	25.4	3.0	10	1	2,248	1,020

<sup>\*</sup> Ground rods are UL listed (425H), except for regular rods shorter than 8 ft. or less than  $\frac{1}{2}$  po CSA lists rods  $\frac{1}{2}$  po and larger, 10 ft. and longer.

## Ground rods

## Sectional type ground rods

 Sectional type ground rods have the same highquality as regular copper bonded steel ground rods, and are threaded top and bottom



	Tra	ıde size	(nominal	Rod size diameter x length)	Plating thickness	Thread size		Weigh	it per 100
Cat. no.	in.	ft.	mm	m	(mils)	(inUNS)	Std. pkg.	lb	kg
5006LS	1/2	6	12.7	1.8	10	<b>%16-1</b> 2	5	410	189
5008LS	1/2	6	15.8	1.8	10	<b>%16-1</b> 2	5	546	248
5010LS	1/2	8	15.8	2.4	10	<b>%16-1</b> 2	5	682	309
6256S	5/8	6	15.8	3.0	5	5/8-11	5	481	230
6258S	5/8	8	15.8	3.0	10	<b>5</b> ⁄8−11	5	670	308
6260S	5/8	10	15.8	3.0	10	5/8-11	5	837	384
7506S	3/4	6	15.8	1.8	5	3/4-10	5	774	160
7508S	3/4	8	19.0	2.4	10	3/4-10	5	992	450
7510S	3/4	10	19.0	3.0	10	<b>3/4-1</b> 0	5	1,040	562
1010S	1	10	25.4	3.0	10	8-1	1	2,248	1,020

CSA lists rods  $\frac{1}{2}$  in. and larger, 10 ft. and longer.

### Couplings

- Threaded couplings are made of high-strength, corrosion resistant alloy
- Streamlined design reduces driving friction
- Couplings are tapped for use on all standard threaded sectional rods







Cat. no.	Rod diameter (in.)	Thread size (inUNS)	Std. pkg.	Weight per 100 (lb)
50LC	1/2	<b>%16-1</b> 2	25	17
60C	5%8	<b>5</b> ⁄8−11	25	25
70C	3/4	<b>3/4</b> -10	25	38
80C	1	1-8	10	75

#### \_

## **EZGround grounding systems**

## Ground rods

## **Driving studs**

- Driving studs of high-strength steel
- May be used with all standard threaded couplings





	Cat. no.	Rod diameter (in.)	Thread size (inUNS)	Std. pkg.	Weight per 100 (lb)
4	50LDS*	1/2	9/16-12	10	16
4	60DS*+	5/8	5/8-11	25	23
	70DS*	3/4	³ <b>¼</b> -10	5	35
	80DS	1	1–8	10	75

# Threadless couplings and driving caps for standard copper bonded ground rods

## Threadless couplings

- For joining non-threaded, sectional, copper bonded, steel ground rods
- Coupling is manufactured of a high-strength, corrosion resistant, silicone bronze

### Threadless driving caps

- Prevent "mushrooming" of ground rod while driving to ensure proper fit of coupling
- Driving cap is manufactured of high-strength, hardened steel

4	The Park	
911	100	
	100	
200	.000	
	4.4000	
	100 200	
1		
	Land B.	
45	THE RESERVE	
5 6		
2	100	
	4 (000)	

		D	imensions (in.)			
Cat. no.	Size (in.)	Length	Diameter	Std. pkg.Weight per 100 (lb)		
Threadless couplings						
50CNT*	1/2	3.0	0.78	25	34	
60CNT2*	5/8	2.5	0.69	25	34	
70CNT*	3/4	3.0	0.97	25	31	
Driving caps						
60DSNT	5/8	4.0	0.88	10	43	

<sup>\*</sup> UL Listed +CSA Certified

## Clamps

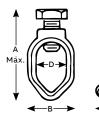
## Type JAB — ground rod clamps

- Cast of high-strength corrosion-resistant copper alloy
- Both hex head and socket set screws available
- Long bearing surface of clamp on ground wire secures ground connection
- UL listed for direct burial



	Cat. no.		Nominal	rod dia.			Wii	e range				Dimensions (in.)			
	Socket set screw	Hex head bolt	(in.)	(mm)	max.	min.	max. (mm²)	min. (mm²)	A (max.) socket screw	A (max.) hex bolt	Screw thread size UNC-2A	В	С	D	
-33	JAB12*	JAB12H	1/2	12.7	2 str.	10 sol.	33.6	5.2	1 <sup>19</sup> /32	2³/32	7/16-14	27/32	7/8	19/32	
8	JAB58	JAB58H	5/8	15.8	1/0 str.	8 sol.	53.4	8.3	1 <sup>27</sup> / <sub>32</sub>	2 <sup>13</sup> /64	<b>½6-14</b>	29/32	1	11/16	
	JAB34	JAB34H	3/4	19.0	1/0 str.	8 sol.	53.4	8.3	2	211/32	7/16-14	11/16	1	51/64	
	-	JAB34C	3/4 + 5/8	15.8 to 19.0	3/0 str.	8 sol.	95.0	8.3	-	2 <sup>11</sup> / <sub>32</sub>	<b>½</b> 16-14	11/8	11/32	13/16	
	JAB1	JAB1H	1	25.0	4/0 str.	8 sol.	107.1	8.3	21/4	3	<b>½6-14</b>	111/32	11/16	1	







## Type G — budget line ground clamps

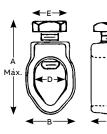
- A dependable ground connection offered at a substantial saving
- Cast of high-strength corrosion-resistant copper alloy
- Hex head bolts
- Simplified compact design will make a lasting, trouble-free connection
- Listed for direct burial





		Nominal ro	d dia.	Wire range							s (in.)		
	Cat. no.	(in.)	(mm)	max.	min.	max. (mm²)	min. (mm²)	A (max.) Bolt	Screw thread size UNC-2A	В	c	D	E
and the same	G3*	3/8	9.5	4 str.	10 sol.	21.1	5.2	13/8	5/16-18	11/16	1/2	27/64	3/8
STATE OF THE PARTY	G4	1/2	12.7	2 str.	10 sol.	33.6	5.2	_	<b>3</b> ⁄8-16	27/32	3/8	37/64	1/2
100	<b>G</b> 5	5/8	15.8	2 str.	10 sol.	33.6	5.2	_	<b>3</b> /8-16	29/32	3/8	43/64	1/2
	G6	3/4	19.0	2 str.	10 sol.	33.6	5.2	_	<b>%-1</b> 6	11/16	3/8	13/16	1/2





<sup>\*</sup> CSA not applicable. Add suffix P to No de cat. for tin-plated clamp

<sup>\*</sup> Not UL Listed and CSA not applicable. Add suffix P to cat. no. for tin-plated clamp