

wiley

# Wiley Solutions



Connecting Power to Your World®





# Engineering Innovation At the Speed of Light

**As the solar industry's technology continues to advance at a rapid rate, solar energy has become increasingly accessible and affordable.** Leading the way with a commitment to innovation and quality are Wiley and BURNDY.

In 2011, BURNDY was thrilled to combine our history of engineering expertise, superior customer service and long-term reliability with the Wiley product line. Industry-leading companies specify the Wiley family of products more often than any other brand in projects.

Wiley is most widely recognized for the invention of the WEEB® Washer (Washer Electrical Equipment Bond). Wiley is dedicated to developing and providing high-quality solutions that revolutionize the solar industry. The Wiley engineers work closely with solar manufacturers and installers to develop products that address the evolving needs of the PV industry in bonding, grounding, and wire management. These products enable customers to install PV systems safely, efficiently and cost effectively.

**BURNDY now offers the complete line of Wiley's unique solutions for photovoltaic applications, staying light years ahead of the competition.**

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# ACE Conduit Entry Box

## Features & Benefits

- UL 1741 Listed
- 1000V DC rating
- Convenient side and bottom conduit drill-out for easy conduit routing
- Choice of pass-through or combiner box with bracket
- Compatible with any conduit type
- Preassembled for quick and easy installation

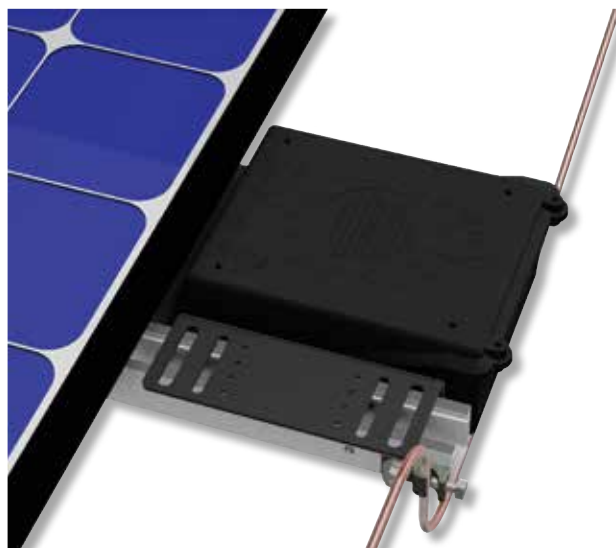
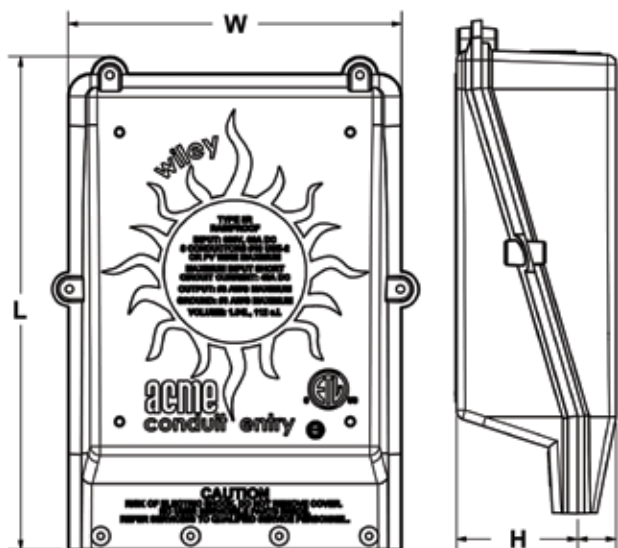
The ACE Conduit Entry Box makes quick and simple transitions from USE-2 or PV array wire to conduit protected THWN-2 wire.

The box features a compact two-piece UV resistant, NEMA 3R rated enclosure that allows ample wiring space and is compatible with any conduit type.



ITEM #	CATALOG #	LENGTH (IN / MM)	WIDTH (IN / MM)	HEIGHT (IN / MM)	INPUT WIRE DIAMETER RANGE (IN / MM)	EQUIPMENT GROUND CONDUCTOR TYPE	EQUIPMENT GROUND CONDUCTOR DIAMETER RANGE (IN / MM)
30020123	ACE-PT	10.066 in 255.68 mm	6.832 in 173.533 mm	3.269 in 83.03 mm	0.20-0.27 in 5.0-6.8 mm 10-12 AWG USE-2/PV V	Bare Solid or jacketed only	0.16-0.27 in 4.0-6.8 mm
30020124	ACE-1P	10.066 in 255.68 mm	6.832 in 173.533 mm	3.269 in 83.03 mm	0.20-0.27 in 5.0-6.8 mm 10-12 AWG USE-2/PV V	Bare Solid or jacketed only	0.16-0.27 in 4.0-6.8 mm
30020125	ACE-2P	10.066 in 255.68 mm	6.832 in 173.533 mm	3.269 in 83.03 mm	0.20-0.27 in 5.0-6.8 mm 10-12 AWG USE-2/PV V	Bare Solid or jacketed only	0.16-0.27 in 4.0-6.8 mm
30020126	ACE-3P	10.066 in 255.68 mm	6.832 in 173.533 mm	3.269 in 83.03 mm	0.20-0.27 in 5.0-6.8 mm 10-12 AWG USE-2/PV V	Bare Solid or jacketed only	0.16-0.27 in 4.0-6.8 mm
30020127	ACE-4P	10.066 in 255.68 mm	6.832 in 173.533 mm	3.269 in 83.03 mm	0.20-0.27 in 5.0-6.8 mm 10-12 AWG USE-2/PV V	Bare Solid or jacketed only	0.16-0.27 in 4.0-6.8 mm
30020128	ACE-2C	10.066 in 255.68 mm	6.832 in 173.533 mm	3.269 in 83.03 mm	0.20-0.27 in 5.0-6.8 mm 10-12 AWG USE-2/PV V	Bare Solid or jacketed only	0.16-0.27 in 4.0-6.8 mm
30020129	ACE-3C	10.066 in 255.68 mm	6.832 in 173.533 mm	3.269 in 83.03 mm	0.20-0.27 in 5.0-6.8 mm 10-12 AWG USE-2/PV V	Bare Solid or jacketed only	0.16-0.27 in 4.0-6.8 mm
30020131	ACE-4C	10.066 in 255.68 mm	6.832 in 173.533 mm	3.269 in 83.03 mm	0.20-0.27 in 5.0-6.8 mm 10-12 AWG USE-2/PV V	Bare Solid or jacketed only	0.16-0.27 in 4.0-6.8 mm
50049810	ACE-3C-1GND	10.066 in 255.68 mm	6.832 in 173.533 mm	3.269 in 83.03 mm	0.20-0.27 in 5.0-6.8 mm 10-12 AWG USE-2/PV V	Bare Solid or jacketed only	0.16-0.27 in 4.0-6.8 mm
50053056	ACE-3C-DF	10.066 in 255.68 mm	6.832 in 173.533 mm	3.269 in 83.03 mm	0.20-0.27 in 5.0-6.8 mm 10-12 AWG USE-2/PV V	Bare Solid or jacketed only	0.16-0.27 in 4.0-6.8 mm





Mounting bracket is included with the purchase of the ACE. It is made of lightweight, corrosion resistant, anodized aluminum.

ACCEPTABLE CONDUIT SIZES (IN / MM)	DRILL OUT	ACE CONFIGURATION	TERMINAL BLOCK	TERMINAL BLOCK INTERNAL BUS	FUSE HOLDER	FUSE COMBINER BUS	GROUNDING TERMINAL	DIN RAIL
0.75 in, 1.0 in 19.05 mm, 25.44 mm	Side, Bottom	Pass-through using Butt Splices/ Wire Nuts	N/A	N/A	N/A	N/A	N/A	N/A
0.75 in, 1.0 in 19.05 mm, 25.44 mm	Side, Bottom	1- String Pass-through	2	N/A	N/A	N/A	1	1
0.75 in, 1.0 in 19.05 mm, 25.44 mm	Side, Bottom	2-String Pass-through	4	N/A	N/A	N/A	1	1
0.75 in, 1.0 in 19.05 mm, 25.44 mm	Side, Bottom	3-String Pass-through	6	N/A	N/A	N/A	2	1
0.75 in, 1.0 in 19.05 mm, 25.44 mm	Side, Bottom	4-String Pass-through	8	N/A	N/A	N/A	2	1
0.75 in, 1.0 in 19.05 mm, 25.44 mm	Side, Bottom	2-String Combiner	2	N/A	Not Required for 2 String Combiner	N/A	1	1
0.75 in, 1.0 in 19.05 mm, 25.44 mm	Side, Bottom	3-String Combiner	2	1X2- Pole	3	1X3-Pole	2	1
0.75 in, 1.0 in 19.05 mm, 25.44 mm	Side, Bottom	4-String Combiner	2	1X2- Pole	4	1X4-Pole	2	1
0.75 in, 1.0 in 19.05 mm, 25.44 mm	Side, Bottom	3-String Combiner with 1 Ground Terminal	3	2x2-pole	3	1X3-Pole	1	1
0.75 in, 1.0 in 19.05 mm, 25.44 mm	Side, Bottom	3-String Dual Fuse Combiner	0	N/A	6	1X3-Pole	1	1

# Bonding Jumper



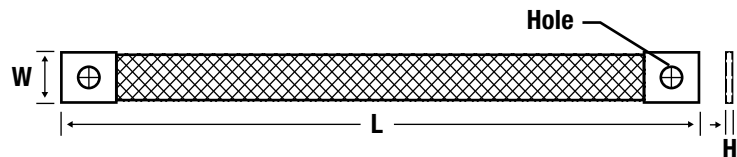
## Features & Benefits

- UL 2703 Listed
- ETL Listed to ANSI/UL 467
- CSA Certified to C22.2 No. 41
- Equivalent to 6AWG
- Available:
  - With or without WEEB® washer technology
  - Assembled and unassembled
  - With or without installation hardware
- In-stock standard lengths from 6" to 36"
- 10, 8 and 4 AWG options available
- Custom designs available upon request

Constructed of corrosion resistant, tin-plated, braided copper, the Wiley line of bonding jumpers are high quality solutions for your solar PV system.

The **WEEB® Bonding Jumper** is used to create an electrical connection between two pieces of anodized aluminum or any electrically conductive metal. This maintains electrical continuity over long spans or air gaps between metal structures.

The **Wiley Bonding Jumper** is used to create an electrical connection between two pieces of galvanized steel. Compatible with 1/4" hardware, the Wiley Bonding Jumpers come in custom lengths upon request.



**WILEY BONDING JUMPER** Perfect for galvanized steel applications or anywhere a WEEB® washer is not required

ITEM #	CATALOG #	LENGTH (IN / MM)	WIDTH (IN / MM)	HEIGHT (IN / MM)	HOLE SIZE (IN / MM)	GAUGE	HARDWARE	ASSEMBLED	TORQUE
50058962	WILEYBRAID6-516	6.000 in 152.4 mm	0.866 in 22.00 mm	0.100 in 2.54 mm	0.323 in 8.2 mm	6 AWG	No WEEB® washer; 5/16" mounting hardware not included	N/A	N/A
50058963	WILEYBRAID10-516	10.000 in 254.00 mm	0.709 in 18.00 mm	0.08 in 2.03 mm	0.323 in 8.200 mm	6 AWG	No WEEB® washer; 5/16" mounting hardware not included	N/A	N/A
50028014	WILEYBRAID9	9.000 in 228.6 mm	0.709 in 18.00 mm	0.08 in 2.03 mm	0.257 in 6.53 mm	6 AWG	No WEEB® washer; 1/4" mounting hardware not included	N/A	N/A
50010336	WILEYBRAID12	12.000 in 304.80 mm	0.709 in 18.00 mm	0.08 in 2.03 mm	0.257 in 6.53 mm	6 AWG	No WEEB® washer; 1/4" mounting hardware not included	N/A	N/A
50049991	WILEYBRAID18	18.00 in 457.2 mm	0.709 in 18.00 mm	0.08 in 2.03 mm	0.257 in 6.53 mm	6 AWG	No WEEB® washer; 1/4" mounting hardware not included	N/A	N/A
50010337	WILEYBRAID24	24.000 in 609.60 mm	0.709 in 18.00 mm	0.08 in 2.03 mm	0.257 in 6.53 mm	6 AWG	No WEEB® washer; 1/4" mounting hardware not included	N/A	N/A
50010338	WILEYBRAID36	36.000 in 914.40 mm	0.709 in 18.00 mm	0.08 in 2.03 mm	0.257 in 6.53 mm	6 AWG	No WEEB® washer; 1/4" mounting hardware not included	N/A	N/A



**WEEB® BONDING JUMPER** Utilizes proven WEEB® washer technology

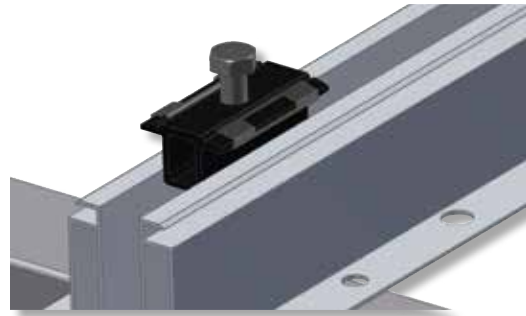
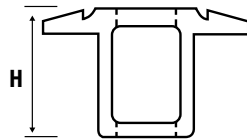
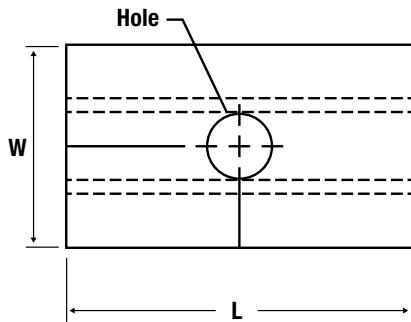
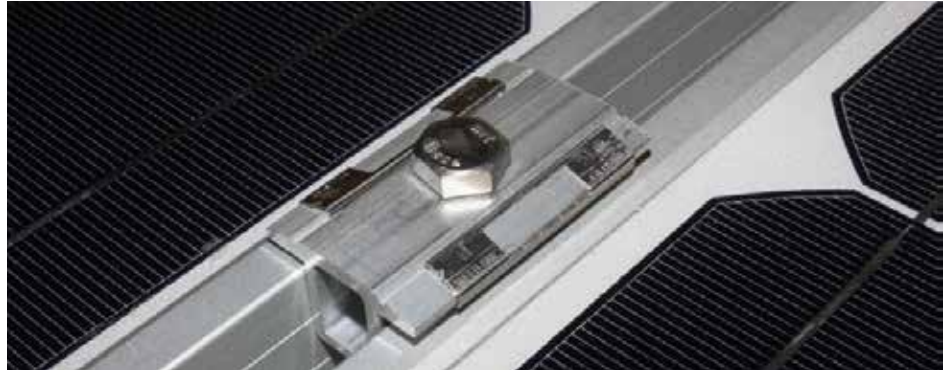
ITEM #	CATALOG #	LENGTH (IN / MM)	WIDTH (IN / MM)	HEIGHT (IN / MM)	HOLE SIZE (IN / MM)	GAUGE	HARDWARE	ASSEMBLED	TORQUE
30020147	WEEB-BNDJMP6.7	9.000 in 228.6 mm	0.709 in 18.00 mm	0.08 in 2.03 mm	0.257 in 6.53 mm	6 AWG	WEEB® washer & 1/4" mounting hardware included	N	10 ft-lbs
30020117	WEEB-BNDJMP6.7AS	9.000 in 228.6 mm	0.709 in 18.00 mm	0.08 in 2.03 mm	0.257 in 6.53 mm	6 AWG	WEEB® washer & 1/4" mounting hardware included	Y	10 ft-lbs
30020121	WEEB-BNDJMP8.0	6.000 in 152.4 mm	0.866 in 22.00 mm	0.100 in 2.54 mm	0.323 in 8.2 mm	6 AWG	WEEB® washer included; M8 or 5/16" mounting hardware not included	N/A	10 ft-lbs
50010334	WEEB-BNDJMP8.0AS	6.000 in 152.4 mm	0.866 in 22.00 mm	0.100 in 2.54 mm	0.323 in 8.2 mm	6 AWG	WEEB® washer included; M8 or 5/16" mounting hardware included	Y	10 ft-lbs
50044565	WEEB-BNDJMP8.2	10.000 in 254.00 mm	0.709 in 18.00 mm	0.08 in 2.03 mm	0.323 in 8.2 mm	6 AWG	WEEB® washer included; M8 or 5/16" mounting hardware not included	N/A	10 ft-lbs
30020122	WEEB-BNDJMP8.2MS	10.000 in 254.00 mm	0.709 in 18.00 mm	0.08 in 2.03 mm	0.323 in 8.2 mm	6 AWG	WEEB® washer included; M8 or 5/16" flat washer included	N/A	10 ft-lbs
50028011	WEEB-BNDJMP9	9.000 in 228.6 mm	0.709 in 18.00 mm	0.08 in 2.03 mm	0.257 in 6.53 mm	6 AWG	WEEB® washer included; 1/4" mounting hardware not included	N/A	10 ft-lbs
50014641	WEEB-BNDJMP12	12.00 in 304.8 mm	0.709 in 18.00 mm	0.08 in 2.03 mm	0.257 in 6.53 mm	6 AWG	WEEB® washer included; 1/4" mounting hardware not included	N/A	10 ft-lbs
50014642	WEEB-BNDJMP12AS	12.00 in 304.8 mm	0.709 in 18.00 mm	0.08 in 2.03 mm	0.257 in 6.53 mm	6 AWG	WEEB® washer & 1/4" mounting hardware included	Y	10 ft-lbs
50049988	WEEB-BNDJMP18	18.00 in 457.2 mm	0.709 in 18.00 mm	0.08 in 2.03 mm	0.257 in 6.53 mm	6 AWG	WEEB® washer included; 1/4" mounting hardware not included	N/A	10 ft-lbs
50049985	WEEB-BNDJMP18AS	18.00 in 457.2 mm	0.709 in 18.00 mm	0.08 in 2.03 mm	0.257 in 6.53 mm	6 AWG	WEEB® washer & 1/4" mounting hardware included	Y	10 ft-lbs
50014644	WEEB-BNDJMP24	24.00 in 609.8 mm	0.709 in 18.00 mm	0.08 in 2.03 mm	0.257 in 6.53 mm	6 AWG	WEEB® washer included; 1/4" mounting hardware not included	N/A	10 ft-lbs
50014645	WEEB-BNDJMP24AS	24.00 in 609.8 mm	0.709 in 18.00 mm	0.08 in 2.03 mm	0.257 in 6.53 mm	6 AWG	WEEB® washer & 1/4" mounting hardware included	Y	10 ft-lbs
50028017	WEEB-BNDJMP36	36.000 in 914.4 mm	0.709 in 18.00 mm	0.08 in 2.03 mm	0.257 in 6.53 mm	6 AWG	WEEB® washer included; 1/4" mounting hardware not included	N/A	10 ft-lbs

# Clamping Solutions

## Features & Benefits

- ETL Listed to ANSI/UL 467
- UL Recognized to UL 2703
- Low profile design
- Increased inspectability
- Available in mill finish, or black or clear anodizing
- Custom designs and finishes available upon request
- Reliability for use throughout the lifetime of the PV system

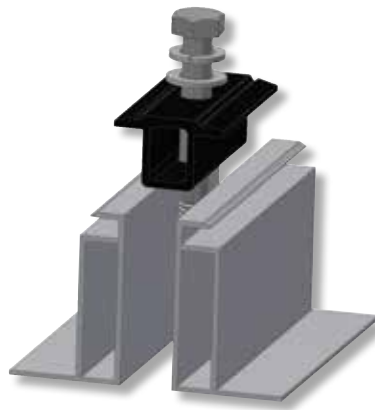
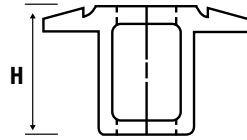
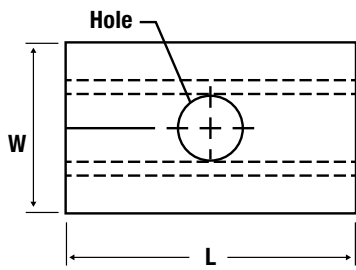
Our universal mid-clamp and adjustable end clamp designs accommodate various module thicknesses. Plus, the Wiley Mid-Clamp uses proven WEEB® technology for integrated bonding as well as a quick and easy installation.



## WEEB® MID-CLAMP

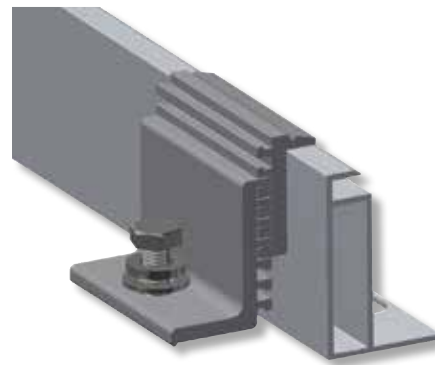
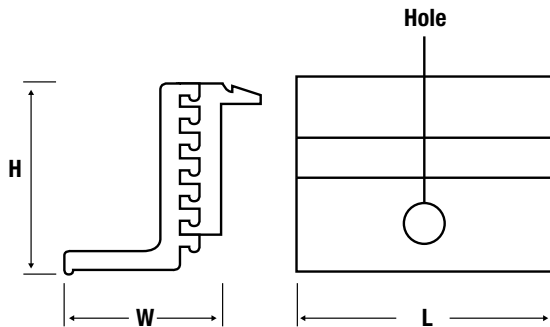
ITEM #	CATALOG #	LENGTH (IN / MM)	WIDTH (IN / MM)	HEIGHT (IN / MM)	HOLE SIZE (IN / MM)	FINISH
50039039	WEEB-BMC2-516	2 in 50.8 mm	1.17 in 29.7 mm	0.75 in 19.05 mm	0.323 in 8.20 mm	mill
50042257	WEEB-BMC2-516BK	2 in 50.8 mm	1.17 in 29.7 mm	0.75 in 19.05 mm	0.323 in 8.20 mm	black anodized
50042259	WEEB-BMC2-516CL	2 in 50.8 mm	1.17 in 29.7 mm	0.75 in 19.05 mm	0.323 in 8.20 mm	clear anodized
50052929	WEEB-BMC2-14	2 in 50.8 mm	1.17 in 29.7 mm	0.75 in 19.05 mm	0.260 in 6.60 mm	mill
50052930	WEEB-BMC2-14BK	2 in 50.8 mm	1.17 29.7 mm	0.75 in 19.05 mm	0.260 in 6.60 mm	black anodized
50052931	WEEB-BMC2-14CL	2 in 50.8 mm	1.17 29.7 mm	0.75 in 19.05 mm	0.260 in 6.60 mm	clear anodized





### MID-CLAMP

ITEM #	CATALOG #	LENGTH (IN / MM)	WIDTH (IN / MM)	HEIGHT (IN / MM)	HOLE SIZE (IN / MM)	FINISH
50039037	BMC2-516	2 in 50.8 mm	1.17 in 29.7 mm	0.75 in 19.05 mm	0.323 in 8.20 mm	mill
50042242	BMC2-516BK	2 in 50.8 mm	1.17 in 29.7 mm	0.75 in 19.05 mm	0.323 in 8.20 mm	black anodized
50042244	BMC2-516CL	2 in 50.8 mm	1.17 in 29.7 mm	0.75 in 19.05 mm	0.323 in 8.20 mm	clear anodized
50052932	BMC2-14	2 in 50.8 mm	1.17 in 29.7 mm	0.75 in 19.05 mm	.260 in 6.60 mm	mill
50052933	BMC2-14BK	2 in 50.8 mm	1.17 in 29.7 mm	0.75 in 19.05 mm	.260 in 6.60 mm	black anodized
50052934	BMC2-14CL	2 in 50.8 mm	1.17 in 29.7 mm	0.75 in 19.05 mm	.260 in 6.60 mm	clear anodized



### END CLAMP

ITEM #	CATALOG #	LENGTH (IN / MM)	WIDTH (IN / MM)	HEIGHT (IN / MM)	HOLE SIZE (IN / MM)	FINISH
50039198	BEC2-516	2 in 50.8 mm	0.762 in 19.35 mm	Adjustable from 1.38 in – 2.36 in 35.05 mm–59.94 mm	0.323 in 8.20 mm	mill
50046643	BEC2-516BK	2 in 50.8 mm	0.762 in 19.35 mm	Adjustable from 1.38 in – 2.36 in 35.05 mm–59.94 mm	0.323 in 8.20 mm	black anodized
50046646	BEC2-516CL	2 in 50.8 mm	0.762 in 19.35 mm	Adjustable from 1.38 in – 2.36 in 35.05 mm – 59.94 mm	0.323 in 8.20 mm	clear anodized
50052869	BEC2-14	2 in 50.8 mm	0.762 in 19.35 mm	Adjustable from 1.38 in – 2.36 in 35.05 mm–59.94 mm	0.266 in 6.67 mm	mill
50053052	BEC2-14BK	2 in 50.8 mm	0.762 in 19.35 mm	Adjustable from 1.38 in – 2.36 in 35.05 mm–59.94 mm	0.266 in 6.67 mm	black anodized
50053010	BEC2-14CL	2 in 50.8 mm	0.762 in 19.35 mm	Adjustable from 1.38 in – 2.36 in 35.05 mm – 59.94 mm	0.266 in 6.67 mm	clear anodized

# Grounding Lug



## Features & Benefits

- UL 2703 Listed
- ETL Listed to ANSI/UL 467
- CSA Certified to C22.2 No. 41
- Made of corrosion-resistant, tin-plated copper
- Design ensures a quick and easy installation
- Available:
  - With or without WEEB® washer technology
  - Assembled and unassembled
  - With or without installation hardware
- **No** surface preparation required on the rail or module
- Custom designs available upon request
- Reliability for use throughout the lifetime of the PV system

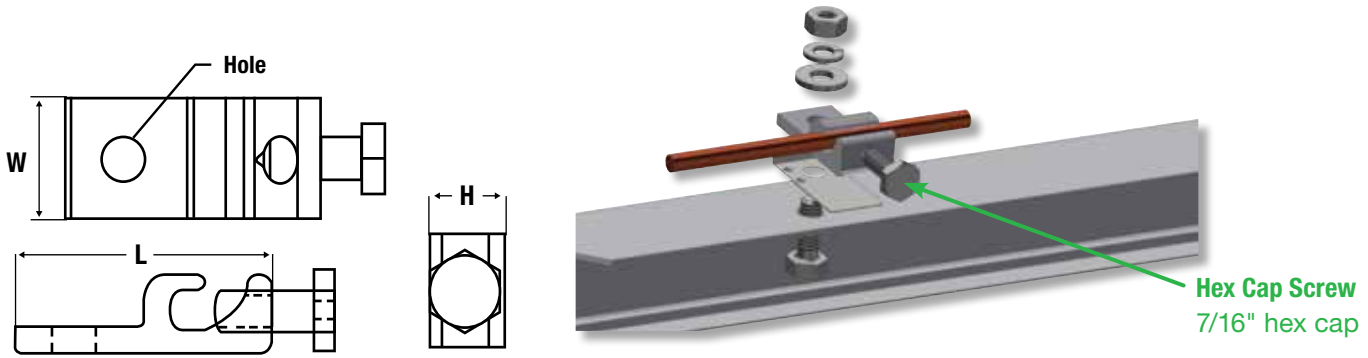
Constructed of corrosion resistant, tin-plated copper, the

**Wiley line of grounding lugs are high quality solutions for your solar PV system.** The tin-plated lug assures minimum contact resistance and protection against corrosion. The low profile of the grounding lug allows it to be installed in a variety of positions with one solid or stranded copper wire (14 AWG to 6 AWG), or two copper wires (12 AWG to 10 AWG). Copper wire is secured by a 1/4-28 stainless steel screw, which is horizontal to the tang. This allows for easy access when mounted under a PV module. The result is a continuous ground on all solar applications.

The **WEEB® Grounding Lug** is installed using stainless steel mounting hardware. When the hardware is tightened, the WEEB® washer's specialized teeth embed into anodized aluminum or any electrically conductive metal to establish a gas tight electrical connection.

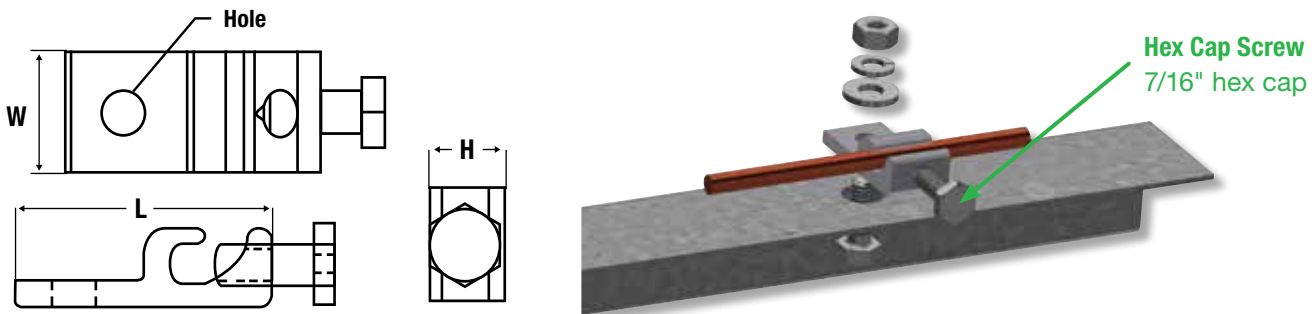
The **Wiley Grounding Lug** is available unassembled, without installation hardware, and with standard hole sizes of 1/4" and 5/16" (M8). Perfect for galvanized steel applications or anywhere a WEEB® washer is not required.





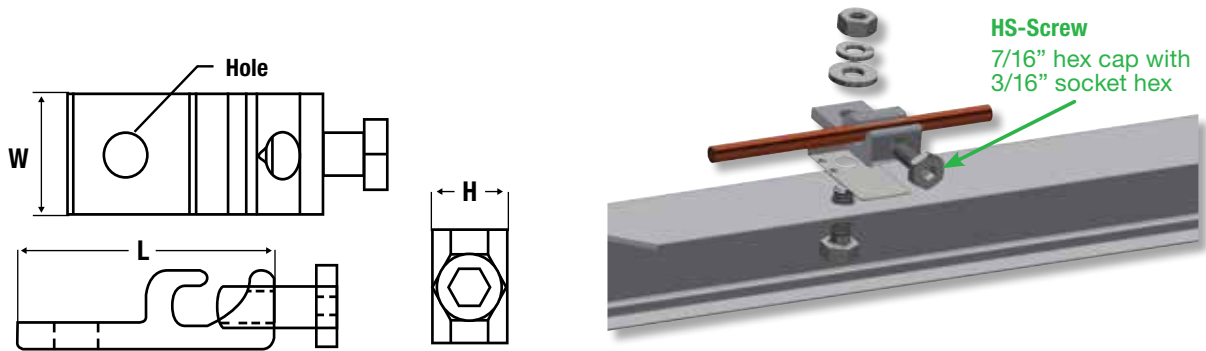
**WEEB® LUG** Utilizes proven WEEB® washer technology

ITEM #	CATALOG #	LENGTH (IN / MM)	WIDTH (IN / MM)	HEIGHT (IN / MM)	HOLE SIZE (IN / MM)	MOUNTING HARDWARE	ASSEMBLED	TORQUE
30020109	WEEB-LUG-6.7	1.575 in 40.00 mm	0.709 in 18.00 mm	0.472 in 12.00 mm	0.266 in 6.76 mm	1/4 inch hardware included	N	5ft lbs for terminal screw, 10ft lbs for mounting hardware w/ Penetrox-A on threads
30020110	WEEB-LUG-6.7AS	1.575 in 40.00 mm	0.709 in 18.00 mm	0.472 in 12.00 mm	0.266 in 6.76 mm	1/4 inch hardware included	Y	
30020111	WEEB-LUG-8.0	1.575 in 40.00 mm	0.866 in 22.00 mm	0.472 in 12.00 mm	0.323 in 8.20 mm	M8 or 5/16 inch hardware not included	N/A	
50010335	WEEB-LUG-8.0AS	1.575 in 40.00 mm	0.866 in 22.00 mm	0.472 in 12.00 mm	0.323 8.20 mm	5/16 inch hardware included	Y	
50023920	WEEB-LUG-8.0UN	1.575 in 40.00 mm	0.866 in 22.00 mm	0.472 in 12.00 mm	0.323 8.20 mm	5/16 inch hardware included	N	
30020112	WEEB-LUG-15.8	1.575 in 40.00 mm	0.709 in 18.00 mm	0.472 in 12.00 mm	0.323 in 8.20 mm	M8 or 5/16 inch hardware not included	N/A	
50021995	WEEB-LUG-8.2	1.575 in 40.00 mm	0.709 in 18.00 mm	0.472 in 12.00 mm	0.323 8.20 mm	M8 or 5/16 inch hardware not included	N/A	



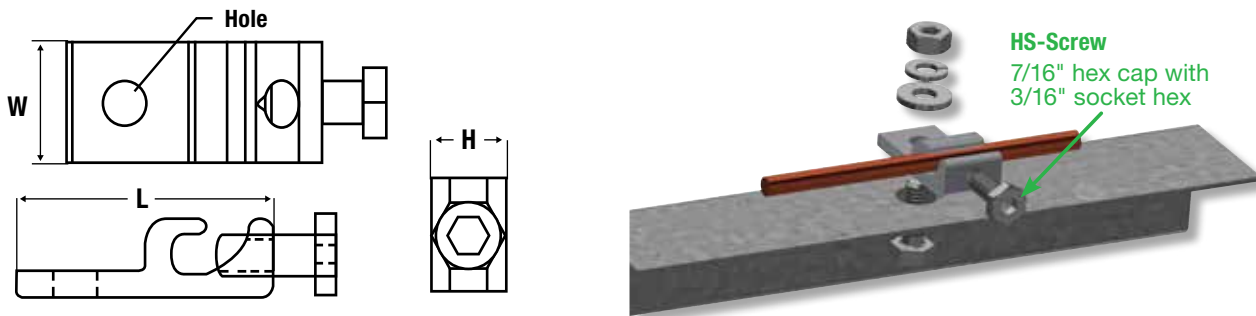
**WILEY LUG** Perfect for galvanized steel applications or anywhere a WEEB® washer is not required

ITEM #	CATALOG #	LENGTH (IN / MM)	WIDTH (IN / MM)	HEIGHT (IN / MM)	HOLE SIZE (IN / MM)	MOUNTING HARDWARE	ASSEMBLED	TORQUE
50028861	WILEYLUG6.7	1.575 in 40.00 mm	0.709 in 18.00 mm	0.472 in 12.00 mm	0.266 in 6.76 mm	1/4 inch hardware not included	N/A	5ft lbs for terminal screw
50028866	WILEYLUG8.0	1.575 in 40.00 mm	0.866 in 22.00 mm	0.472 in 12.00 mm	0.323 in 8.20 mm	M8 or 5/16 inch hardware not included	N/A	
50028869	WILEYLUG8.2	1.575 in 40.00 mm	0.709 in 18.00 mm	0.472 in 12.00 mm	0.323 in 8.20 mm	M8 or 5/16 inch hardware not included	N/A	
50028872	WILEYLUG15.8	1.575 in 40.00 mm	0.709 in 18.00 mm	0.472 in 12.00 mm	0.323 in 8.20 mm	M8 or 5/16 inch hardware not included	N/A	



**WEEB® LUG HS** Utilizes proven WEEB® washer technology and features a hex head socket cap terminal screw

ITEM #	CATALOG #	LENGTH (IN / MM)	WIDTH (IN / MM)	HEIGHT (IN / MM)	HOLE SIZE (IN / MM)	MOUNTING HARDWARE	ASSEMBLED	TORQUE
50045236	WEEB-LUG-6.7HS	1.575 in 40.00 mm	0.709 in 18.00 mm	0.472 in 12.00 mm	0.266 in 6.76 mm	1/4 inch hardware included	N	5ft lbs for terminal screw, 10ft lbs for mounting hardware w/ Penetrox-A on threads
50046747	WEEB-LUG-6.7ASHS	1.575 in 40.00 mm	0.709 in 18.00 mm	0.472 in 12.00 mm	0.266 in 6.76 mm	1/4 inch hardware included	N	
50046750	WEEB-LUG-8.0HS	1.575 in 40.00 mm	0.866 in 22.00 mm	0.472 in 12.00 mm	0.323 in 8.20 mm	M8 or 5/16 inch hardware not included	N/A	
50046753	WEEB-LUG-8.0UNHS	1.575 in 40.00 mm	0.866 in 22.00 mm	0.472 in 12.00 mm	0.323 in 8.20 mm	5/16 inch hardware included	N	
50046756	WEEB-LUG-8.0ASHS	1.575 in 40.00 mm	0.866 in 22.00 mm	0.472 in 12.00 mm	0.323 in 8.20 mm	M8 or 5/16 inch hardware not included	N/A	
50046759	WEEB-LUG-15.8HS	1.575 in 40.00 mm	0.709 in 18.00 mm	0.472 in 12.00 mm	0.323 in 8.20 mm	M8 or 5/16 inch hardware not included	N/A	
50046762	WEEB-LUG-8.2HS	1.575 in 40.00 mm	0.709 in 18.00 mm	0.472 in 12.00 mm	0.323 in 8.20 mm	M8 or 5/16 inch hardware not included	N/A	



**WILEY LUG HS**

Perfect for galvanized steel applications or anywhere a WEEB® washer is not required and features a hex head socket cap terminal screw.

ITEM #	CATALOG #	LENGTH (IN / MM)	WIDTH (IN / MM)	HEIGHT (IN / MM)	HOLE SIZE (IN / MM)	MOUNTING HARDWARE	ASSEMBLED	TORQUE
50046765	WILEYLUG6.7HS	1.575 in 40.00 mm	0.709 in 18.00 mm	0.472 in 12.00 mm	0.266 in 6.76 mm	1/4 inch hardware not included	N/A	5ft lbs for terminal screw
50046768	WILEYLUG8.0HS	1.575 in 40.00 mm	0.866 in 22.00 mm	0.472 in 12.00 mm	0.323 in 8.20 mm	M8 or 5/16 inch hardware not included	N/A	
50046771	WILEYLUG8.2HS	1.575 in 40.00 mm	0.709 in 18.00 mm	0.472 in 12.00 mm	0.323 in 8.20 mm	M8 or 5/16 inch hardware not included	N/A	
50046774	WILEYLUG15.8HS	1.575 in 40.00 mm	0.709 in 18.00 mm	0.472 in 12.00 mm	0.323 in 8.20 mm	M8 or 5/16 inch hardware not included	N/A	



# WEEB® Washer

## (Washer Electrical Equipment Bond)

A revolution in the solar industry, WEEB® washers eliminate the need for older, more expensive grounding methods while also significantly reducing the amount of labor and materials used in installations.

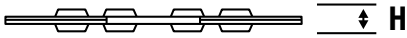
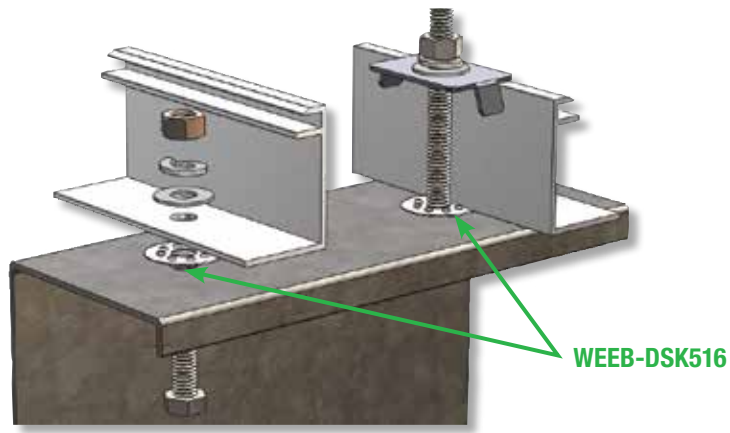
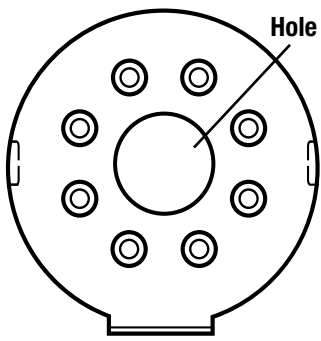
Here's how it works: When the WEEB® is inserted between the module frame and mounting structure, the teeth of the WEEB® pierce the anodized coating. The result is excellent conductivity without oxidation—bonding the PV module frame with the metal racking structure. Essentially, the module and rail become one singular piece of metal, creating an electrical path to the ground.



### Features & Benefits

- ETL Listed to ANSI/UL 467
- UL Recognized to UL 2703
- CSA Certified to C22.2 No. 41
- Corrosion-resistant 304 stainless-steel construction
- Reliability for use throughout the lifetime of the PV system
- Rated for outdoor use
- Multiuse
- Custom designs and packaging (plastic buckets, etc.) available upon request





### UNIVERSAL WEEB® DISK WASHERS—TOP CLAMP APPLICATIONS

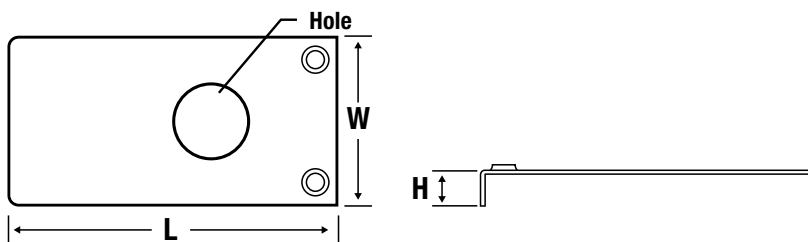
Universal WEEB® Disk Washers allow for a wide range of compatibility across various racking systems

ITEM #	CATALOG #	LENGTH (IN / MM)	WIDTH (IN / MM)	HEIGHT (IN / MM) INCLUDES TABS IF ANY	HOLE SIZE (IN / MM)	TYPE
50040122	WEEB-DSKBD34	1.575 in 40.00 mm	1.575 in 40.00 mm	0.069 in 1.750 mm	0.319 in 8.10 mm	disk
50049647	WEEB-DSK516-31	1.220 in 31.000	1.220 in 31.000	0.069 in 1.750 mm	0.319 in 8.10 mm	disk
50053002	WEEB-DSK516-45	1.772 in 45.000 mm	1.772 in 45.000 mm	0.069 in 1.750 mm	0.319 in 8.10 mm	disk

### UNIVERSAL WEEB® DISK WASHERS—BOTTOM MOUNT APPLICATIONS

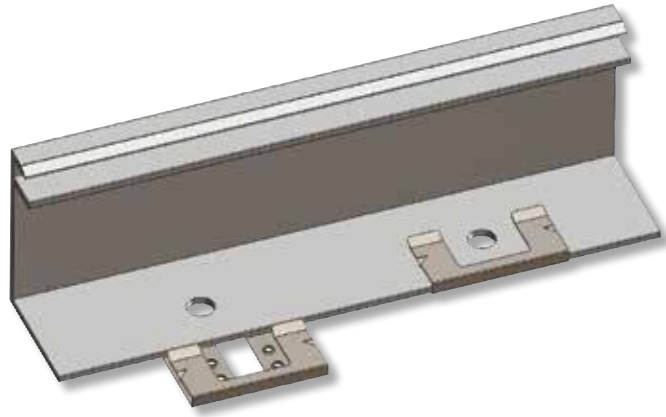
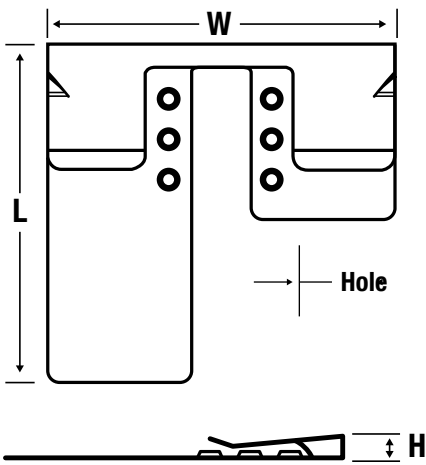
Universal WEEB® Disk Washers allow for a wide range of compatibility across various racking systems

ITEM #	CATALOG #	LENGTH (IN / MM)	WIDTH (IN / MM)	HEIGHT (IN / MM) INCLUDES TABS IF ANY	HOLE SIZE (IN / MM)	TYPE
50017068	WEEB-DSK14	0.949 in 24.10 mm	0.949 in 24.10 mm	0.069 in 1.753 mm	0.266 in 6.75 mm	disk
50017071	WEEB-DSK38	1.184 in 30.88 mm	1.184 in 30.88 mm	0.069 in 1.753 mm	0.386 in 9.80 mm	disk
50020373	WEEB-DSK516	1.014 in 25.75 mm	1.014 in 25.75 mm	0.069 in 1.753 mm	0.319 in 8.10 mm	disk



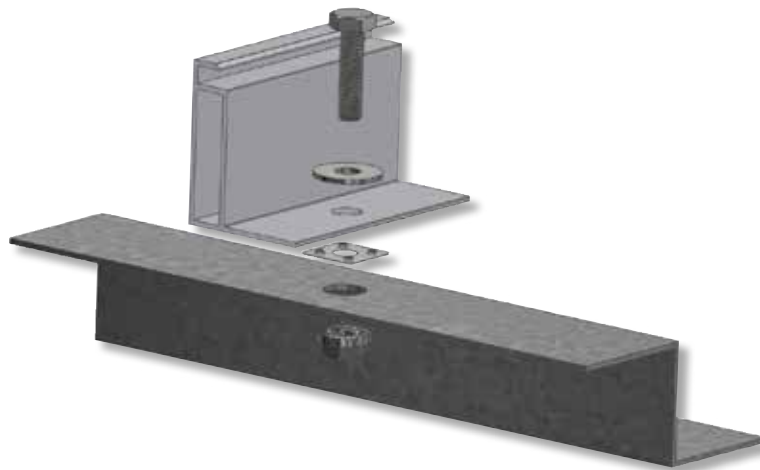
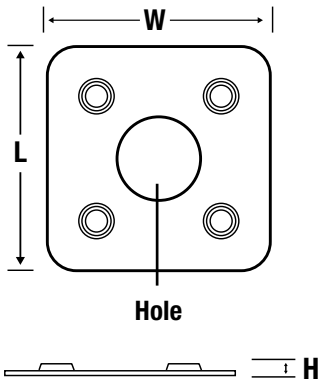
### REPLACEMENT WEEB® WASHERS Replacement WEEB® washers for WEEB-LUG and WEEB-BNDJMP product lines

ITEM #	CATALOG #	LENGTH (IN / MM)	WIDTH (IN / MM)	HEIGHT (IN / MM) INCLUDES TABS IF ANY	HOLE SIZE (IN / MM)	TYPE
30020085	WEEB-15.8	1.372 in 34.85 mm	0.709 in 18.00 mm	0.168 in 4.27 mm	0.323 in 8.20 mm	rigid
30020107	WEEB-6.7	1.447 in 36.75 mm	0.709 in 18.00 mm	0.171 in 4.34 mm	0.257 in 6.53 mm	rigid
30020105	WEEB-8.0	1.447 in 36.75 mm	0.866 in 22.00 mm	0.172 in 4.34 mm	0.323 in 8.20 mm	rigid
30020143	WEEB-8.2	1.372 in 34.86 mm	0.709 in 18.00 mm	0.168 in 4.27 mm	0.323 in 8.20 mm	rigid



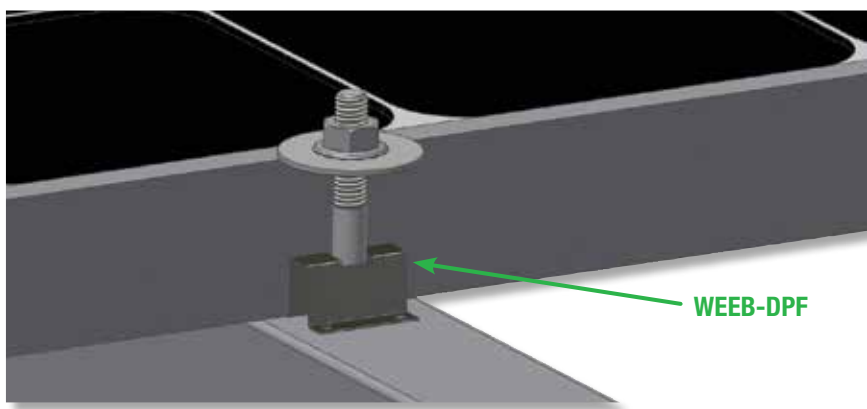
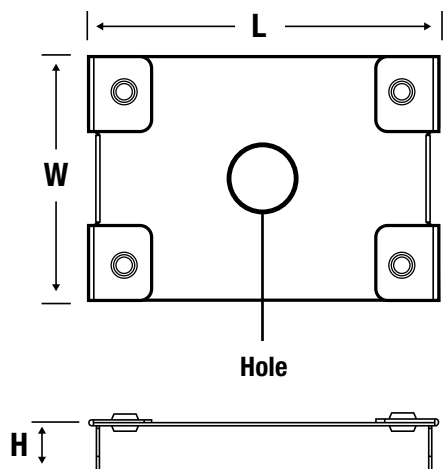
**UNIVERSAL FRAME BOTTOM MOUNT WEEB® WASHERS** Universal WEEB® FBM washers are used in bottom mount applications. Bonds PV modules to the mounting structure at the module mounting holes. Can be secured directly to the module frame prior to installation.

ITEM #	CATALOG #	LENGTH (IN / MM)	WIDTH (IN / MM)	HEIGHT (IN / MM) INCLUDES TABS IF ANY	HOLE SIZE (IN / MM)	TYPE
50041070	WEEB-FBM14	1.781 in 45.25 mm	1.673 in 42.50 mm	0.135 in 3.429 mm	0.266 in 6.75 mm	clip on
50032833	WEEB-FBM516	1.811 in 46.00 mm	1.781 in 45.25 mm	0.126 in 3.200 mm	0.319 in 8.10 mm	clip on



**BOTTOM MOUNT WEEB® WASHERS** Bottom mounting WEEB® washers bond PV modules to the mounting structure at the module mounting holes. May have features that secure the WEEB® at holes, slots, or directly to the module frame prior to installation.

ITEM #	CATALOG #	LENGTH (IN / MM)	WIDTH (IN / MM)	HEIGHT (IN / MM) INCLUDES TABS IF ANY	HOLE SIZE (IN / MM)	TYPE
30020098	WEEB-UIR	0.709 in 18.00 mm	0.709 in 18.00 mm	0.035 in 0.889 mm	0.266 in 6.75 mm	rigid
30020084	WEEB-11.5	0.870 in 22.10 mm	0.795 in 20.20 mm	0.202 in 5.131 mm	0.472 in 12.00 mm	rigid
30020082	WEEB-9.5	0.709 in 18.00 mm	0.594 in 15.10 mm	0.169 in 4.293 mm	0.394 in 10.00 mm	rigid
30020083	WEEB-9.5NL	0.709 in 18.00 mm	0.594 in 15.10 mm	0.069 in 1.753 mm	0.394 in 10.00 mm	rigid



**TOP CLAMP WEEB® WASHERS** Top clamp mounting WEEB® washers bond PV modules to the mounting structure at mid-clamp locations. May be pre-installed or slid onto midclamp hardware prior to the securement of modules.

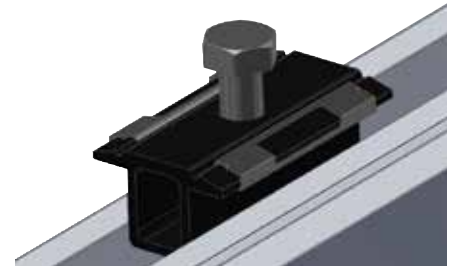
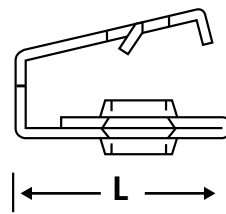
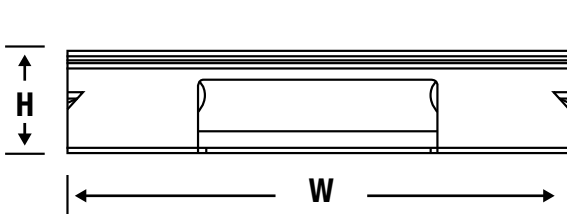
ITEM #	CATALOG #	LENGTH (IN / MM)	WIDTH (IN / MM)	HEIGHT IN / MM INCLUDES TABS IF ANY	HOLE SIZE (IN / MM)	TYPE
50017562	WEEB-ADC	0.945 in 24.00 mm	0.735 in 18.66 mm	0.147 in 3.734 mm	N/A	clip on
50017651	WEEB-ADR	1.339 in 34.00 mm	1.181 in 30.00 mm	0.719 in 18.25 mm	0.384 in 9.75 mm	rigid
30020106	WEEB-ASR	1.512 in 38.40 mm	1.004 in 25.50 mm	0.241 in 6.120 mm	0.321 in 8.14 mm	rigid
30020086	WEEB-ATF	1.680 in 42.66 mm	1.260 in 32.00 mm	0.398 in 10.11 mm	0.313 in 7.94 mm	flexible
50038427	WEEB-BMC	1.496 in 38.00 mm	0.299 in 7.600 mm	0.117 in 2.970 mm	N/A	clip on
30020144	WEEB-CCR	1.588 in 40.33 mm	1.260 in 32.00 mm	0.238 in 6.050 mm	0.332 in 8.43 mm	rigid
50038555	WEEB-CCR-2	1.588 in 40.33 mm	1.496 in 38.00 mm	0.238 in 6.050 mm	0.332 in 8.43 mm	rigid
30020087	WEEB-CMC	1.280 in 32.50 mm	1.146 in 29.10 mm	0.190 in 4.830 mm	0.314 in 8.00 mm	slotted
30022583	WEEB-DHF	1.063 in 27.00 mm	1.130 in 28.60 mm	0.594 in 15.09 mm	0.303 in 7.69 mm	flexible
30020088	WEEB-DMC	0.868 in 22.04 mm	0.709 in 18.00 mm	0.300 in 7.620 mm	0.250 in 6.35 mm	rigid
30020089	WEEB-DPF	1.063 in 27.00 mm	1.130 in 28.60 mm	0.594 in 15.09 mm	0.303 in 7.69 mm	flexible
50010339	WEEB-DPR	1.000 in 25.41 mm	0.984 in 25.00 mm	0.311 in 7.900 mm	0.315 in 8.00 mm	rigid
30020145	WEEB-ECR	2.165 in 55.00 mm	1.169 in 29.70 mm	0.279 in 7.090 mm	0.332 in 8.43 mm	rigid
30020090	WEEB-JJR	1.250 in 31.75 mm	0.906 in 23.00 mm	0.335 in 8.509 mm	0.370 in 9.40 mm	flexible

(Continued on next page)



**TOP CLAMP WEEB® WASHERS** (Continued)

ITEM #	CATALOG #	LENGTH (IN / MM)	WIDTH (IN / MM)	HEIGHT (IN / MM) INCLUDES TABS IF ANY	HOLE SIZE (IN / MM)	TYPE
30020091	WEEB-OSF	1.484 in 37.70 mm	1.260 in 32.00 mm	0.395 in 10.03 mm	0.376 in 9.55 mm	flexible
30020108	WEEB-PMC	1.579 in 40.11 mm	1.102 in 28.00 mm	0.251 in 6.375 mm	0.313 in 7.94 mm	rigid
50000374	WEEB-RPR	1.473 in 37.41 mm	1.136 in 28.85 mm	0.271 in 6.883 mm	0.323 in 8.20 mm	rigid
50024038	WEEB-SCR	1.720 in 43.70 mm	0.650 in 16.51 mm	0.280 in 7.112 mm	0.375 in 9.53 mm	rigid
30020092	WEEB-SMC-2	1.500 in 38.10 mm	0.984 in 25.00 mm	0.330 in 8.382 mm	0.323 in 8.20 mm	slotted
50005265	WEEB-SSF	1.333 in 33.86 mm	0.591 in 15.00 mm	0.667 in 16.94 mm	0.344 in 8.48 mm	flexible
30020093	WEEB-SSR	1.700 in 43.20 mm	1.350 in 34.30 mm	0.270 in 6.858 mm	0.375 in 9.53 mm	rigid
30023673	WEEB-STC	0.945 in 24.00 mm	0.417 in 10.58 mm	0.174 in 4.420 mm	N/A	clip on
30020095	WEEB-UMC	1.493 in 37.91 mm	0.709 in 18.00 mm	0.290 in 7.336 mm	0.250 in 6.35 mm	rigid
30020096	WEEB-WMC	1.626 in 41.30mm	1.319 in 33.50 mm	0.339 in 8.611 mm	0.313 in 7.94 mm	rigid
50028883	WEEB-KMC	1.670 in 42.42 mm	1.220 in 31.00 mm	0.185 in 4.699 mm	0.331 in 8.40 mm	rigid
30020099	WEEB-KSR	1.388 in 35.26 mm	0.992 in 25.20 mm	0.125 in 3.175 mm	0.314 in 8.00 mm	slotted
30020100	WEEB-OCR	1.358 in 34.50 mm	1.161 in 29.50 mm	0.125 in 3.175 mm	0.330 in 8.38 mm	slotted



**MID-CLAMP WEEB® WASHERS** WEEB® mid-clamp washers easily snap or slide onto the mid-clamp for quick installation

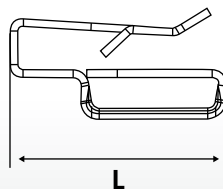
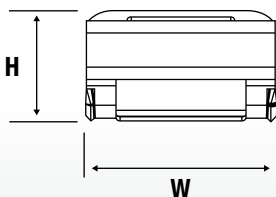
ITEM #	CATALOG #	LENGTH (IN / MM)	WIDTH (IN / MM)	HEIGHT (IN / MM) INCLUDES TABS IF ANY	HOLE SIZE (IN / MM)	TYPE
50038427	WEEB-BMC	1.496 in 38.00 mm	0.299 in 7.600 mm	0.117 in 2.970 mm	N/A	clip on
50039376	WEEB-M-KR	1.65 in 41.9 mm	1.40 in 35.8 mm	0.217 in 5.50 mm	0.330 in 8.38 mm	slide on
50057018	WEEB-MSNR516	1.496 in 38.000 mm	1.575 in 40.000 mm	0.252 in 6.400 mm	0.433 in 11.000 mm	slide on
50059115	WEEB-MCD	0.945 in 24.00 mm	0.417 in 10.58 mm	0.174 in 4.420 mm	N/A	clip on

# Wire Management

## Features & Benefits

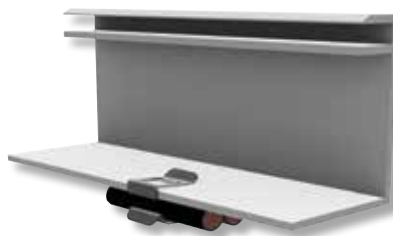
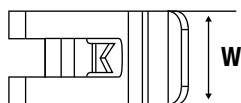
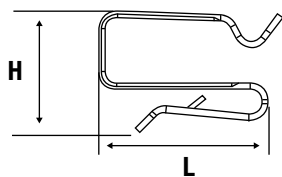
- UL 1565 Listed
- Accommodation for a broad range of cable combinations and sizes (e.g., USE-2, PV, AC module and micro inverter cables)
- Compatible on modules with a flange thickness range of 1.3 to 2.5mm
- No tools required for installation
- Multiuse capabilities
- Coined edges to prevent damage to cable insulation
- Reliability for use throughout the lifetime of the PV system

Engineered for high-quality wire management solutions, Wiley Cable Clips simplify wire management and create a cleaner aesthetic to solar PV arrays. The clips are made of corrosion resistant stainless steel, which makes them a durable, long lasting and reliable solution for all environments, and are designed with coined edges to prevent damage to cable insulation. The design is easy to install and remove with a flat head screwdriver and can be reused. The clips can be used in a wide variety of mounting configurations (including 90 degree) for module and rail applications. Custom designs are available upon request.



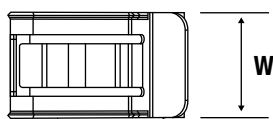
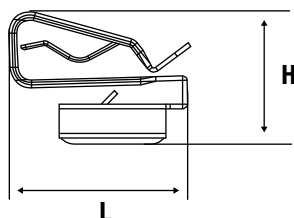
**BUNDLE CLIP** 304 stainless steel bundle clips that install on the module frame or mounting rail

ITEM #	CATALOG #	LENGTH (IN / MM)	WIDTH (IN / MM)	HEIGHT (IN / MM)	CABLE TIE WIDTH (IN / MM)	WIRE DIAMETER (IN / MM)	TYPE
50037643	ACC-FBC	0.553 in 14.05 mm	0.482 in 12.25 mm	0.275 in 7.00 mm	Max .315 in 8.00 mm	See UNIRAP section for bundle diameter (pg 18)	module
50050035	ACC-RBC15	23.000 in 0.907 mm	16.500 in 0.650 mm	12.000 in 0.472 mm	N/A	2 Micro Inverter Cables or up to 4 PV wires	rail



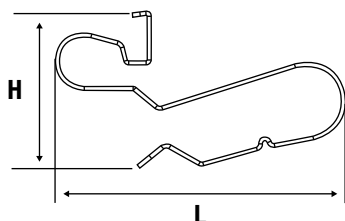
**MODULE CLIPS** 304 stainless steel cable clips that install on the module frame

ITEM #	CATALOG #	LENGTH (IN / MM)	WIDTH (IN / MM)	HEIGHT (IN / MM)	QTY OF WIRES HELD	WIRE DIAMETER (IN / MM)
30020080	ACC	0.663 in / 16.85 mm	0.394 in / 10.00 mm	0.396 in / 10.06 mm	1 to 2 USE-2 wires or 1 PV wire	Max 0.295 in / 7.50 mm
30020081	ACC-PV	0.725 in / 18.42 mm	0.394 in / 10.00 mm	0.469 in / 12.60 mm	1 to 2 PV wires	1 wire: Max 0.551 in / 14.0 mm 2 wires: Max 0.433 in / 11.0 mm
50017421	ACC-FLD	0.748 in / 19.00 mm	0.394 in / 10.00 mm	0.499 in / 19.00 mm	1 to 2 PV wires	Max 0.295 in / 7.50 mm



**90 DEGREE MODULE CLIPS** 304 stainless steel cable clips that install parallel or perpendicular on the module frame

ITEM #	CATALOG #	LENGTH (IN / MM)	WIDTH (IN / MM)	HEIGHT (IN / MM)	QTY OF WIRES HELD	WIRE DIAMETER (IN / MM)
50042497	ACC-F90-1	0.810 in / 20.58 mm	0.514 in / 13.08 mm	0.560 in / 14.22 mm	1 to 2 USE-2 wires or 1 to 2 PV wire	Max 0.295 in / 7.50 mm
50042501	ACC-F2-90	1.161 in / 29.49 mm	0.414 in / 10.51 mm	0.593 in / 15.10 mm	1 to 2 Micro Inverter Trunk or AC cables	1 wire: Max 0.551 in / 14.0 mm 2 wires: Max 0.433 in / 11.0 mm
50042503	ACC-F4-90	1.367 in / 34.72 mm	0.414 in / 10.51 mm	0.563 in / 14.31 mm	1 to 4 PV wires	Max 0.295 in / 7.50 mm



**RAIL CLIPS** 304 stainless steel cable clips that install on the rail or in the channel

ITEM #	CATALOG #	LENGTH (IN / MM)	WIDTH (IN / MM)	HEIGHT (IN / MM)	QTY OF WIRES HELD	WIRE DIAMETER (IN / MM)
30020078	ACC-R2	1.473 in / 37.41	0.394 in / 10.00 mm	0.807 in / 20.50 mm	1 to 2 Micro Inverter Trunk or AC cables	1 wire: Max 0.551 in / 14.0 mm 2 wires: Max 0.433 in / 11.0 mm
50037835	ACC-R2-E	1.185 in / 30.10 mm	0.492 in / 12.50 mm	0.662 in / 16.81 mm	1 to 2 Micro Inverter Trunk or AC cables	1 wire: Max 0.551 in / 14.0 mm 2 wires: Max 0.433 in / 11.0 mm
30020079	ACC-R4	1.554 in / 39.46 mm	0.394 in / 10.00 mm	0.632 in / 16.05 mm	1 to 4 PV wires	Max 0.295 in / 7.50 mm
50050035	ACC-RBC15	23.000 in / 0.907 mm	16.500 in / 0.650 mm	12.000 in / 0.472 mm	2 Micro Inverter Cables or up to 4 PV wires	N/A

# UNIRAP™ Cable Ties

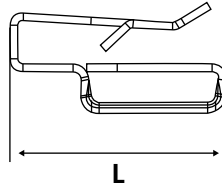
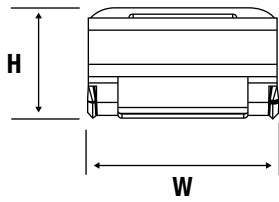
## Features & Benefits

- Available in non-magnetic 316 or 304 grade stainless steel (both grades available) & UV stabilized Nylon 6/6
- SS cable ties available with full or partial coating of low smoke, halogen free polyester
- Smooth, rounded edges do not damage wires

**UNIRAP™ cable ties are designed to secure cables to the PV system.** The UNIRAP™ cable ties are available in corrosion resistant stainless steel suitable for rigorous corrosive conditions, and UV stabilized Nylon 6/6, which provides a strong durable method of cable bundling. For increased versatility use a ACC-FBC with the UNIRAP™ cable ties, this allows you to install the UNIRAP™ cable ties parallel or perpendicular to the module frame.

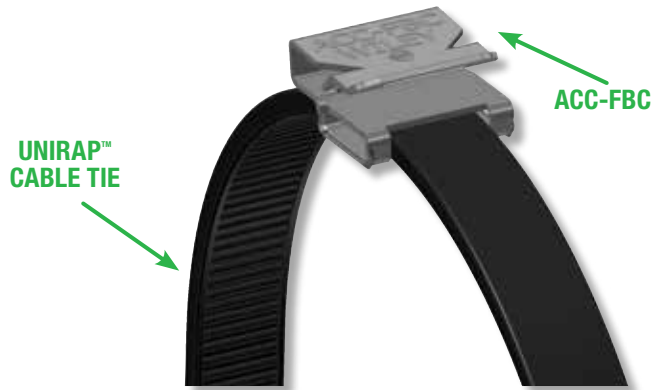
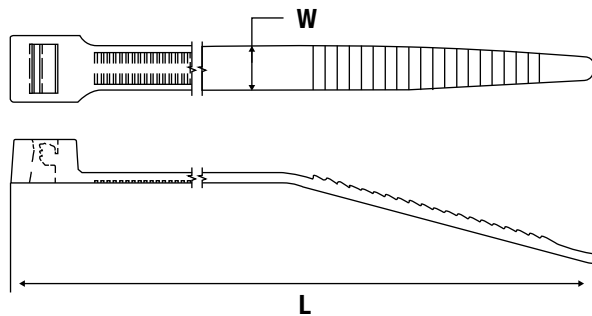






**BUNDLE CLIP** 304 stainless steel module frame bundle clip that allows you to use an UNIRAP™ cable tie parallel or perpendicular for high capacity wire management. Available in UV rated nylon and coated or uncoated stainless steel

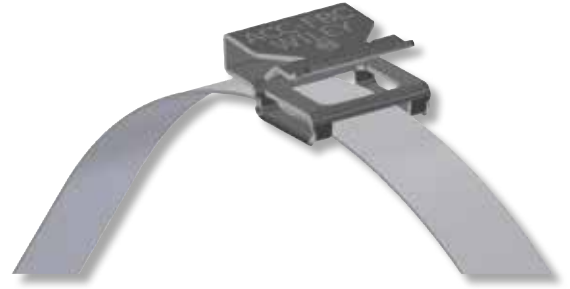
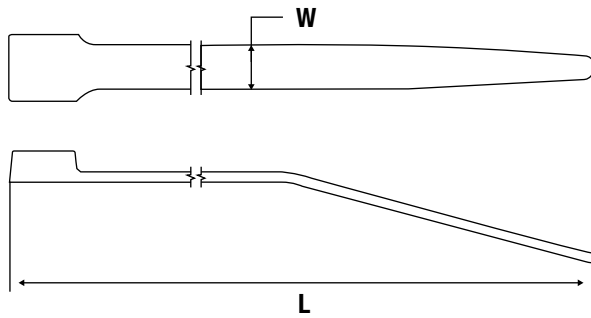
ITEM #	CATALOG #	LENGTH (IN / MM)	WIDTH (IN / MM)	HEIGHT (IN / MM)	CABLE TIE WIDTH (IN / MM)	WIRE DIAMETER (IN / MM)
50037643	ACC-FBC	0.553 in 14.05 mm	0.482 in 12.25 mm	0.275 in 7.00 mm	Max .315 in 8.00 mm	See UNIRAP tables for compatible cable ties



**UNIRAP™ CABLE TIES NYLON 6/6 UV STABILIZED CABLE TIES**

Chemical inhibitors are used to give nylon 6/6 material added properties to fight against premature aging of products due to the effects of ultraviolet rays

CATALOG #	MATERIAL	MAX BUNDLE DIAMETER (IN)	MIN TENSILE STRENGTH (LBS)	LENGTH (IN)	WIDTH (IN)
CT18125C0	BLACK NYLON 6/6 UV	1.25	18	6.10	0.1
CT18200C0	BLACK NYLON 6/6 UV	2	18	8.10	0.1
CT30125C0	BLACK NYLON 6/6 UV	1.25	30	5.80	0.14
CT40200C0	BLACK NYLON 6/6 UV	2	40	7.60	0.15
CT40300C0	BLACK NYLON 6/6 UV	3	40	11.10	0.15
CT40400C0	BLACK NYLON 6/6 UV	4	40	14.60	0.15
CT50175C0	BLACK NYLON 6/6 UV	1.75	50	8.00	0.18
CT50300C0	BLACK NYLON 6/6 UV	3	50	11.75	0.18
CT50400C0	BLACK NYLON 6/6 UV	4	50	15.50	0.18
CT120200L0	BLACK NYLON 6/6 UV	2	120	9.00	0.3
CT120300L0	BLACK NYLON 6/6 UV	3	120	12.00	0.3
CT120400L0	BLACK NYLON 6/6 UV	4	120	15.00	0.3
CT120800L0	BLACK NYLON 6/6 UV	8	120	29.20	0.3



### UNIRAP™ CABLE TIES FULLY COATED 304 STAINLESS STEEL CABLE TIES

Stainless steel fully coated cable ties have smooth, rounded edges and a polyester coating

CATALOG #	MATERIAL	MAX BUNDLE DIAMETER (IN)	MIN TENSILE STRENGTH (LBS)	LENGTH (IN)	WIDTH (IN)
CTSS100100FC304C	304 STAINLESS STEEL	0.98	160	3.94	0.18
CTSS100200FC304C	304 STAINLESS STEEL	1.97	160	7.87	0.18
CTSS100300FC304C	304 STAINLESS STEEL	3.00	160	11.81	0.18
CTSS100400FC304C	304 STAINLESS STEEL	4.02	160	15.75	0.18
CTSS100500FC304C	304 STAINLESS STEEL	5.04	160	19.68	0.18
CTSS100600FC304C	304 STAINLESS STEEL	6.07	160	23.60	0.18
CTSS100800FC304C	304 STAINLESS STEEL	8.11	160	31.50	0.18

### UNIRAP™ CABLE TIES PARTIALLY COATED 304 STAINLESS STEEL CABLE TIES

Stainless steel partially coated cable ties have smooth, rounded edges and a polyester coating

CATALOG #	MATERIAL	MAX BUNDLE DIAMETER (IN)	MIN TENSILE STRENGTH (LBS)	LENGTH (IN)	WIDTH (IN)
CTSS250200PC304L	304 STAINLESS STEEL	1.97	270	7.87	0.31
CTSS250300PC304L	304 STAINLESS STEEL	3.00	270	11.81	0.31
CTSS250400PC304L	304 STAINLESS STEEL	4.02	270	15.75	0.31
CTSS250500PC304L	304 STAINLESS STEEL	5.04	270	19.98	0.31
CTSS250600PC304L	304 STAINLESS STEEL	6.07	270	23.62	0.31
CTSS250700PC304L	304 STAINLESS STEEL	7.09	270	27.56	0.31
CTSS250800PC304L	304 STAINLESS STEEL	8.11	270	39.37	0.31

### UNIRAP™ CABLE TIES 304 STAINLESS STEEL CABLE TIES

Stainless steel cable ties are designed to provide a long lasting solution when faced with harsh environmental conditions

CATALOG #	MATERIAL	MAX BUNDLE DIAMETER (IN)	MIN TENSILE STRENGTH (LBS)	LENGTH (IN)	WIDTH (IN)
CTSS225100304C	304 STAINLESS STEEL	0.99	225	3.94	0.18
CTSS225200304C	304 STAINLESS STEEL	1.97	225	7.87	0.18
CTSS225300304C	304 STAINLESS STEEL	3.00	225	11.81	0.18
CTSS225400304C	304 STAINLESS STEEL	4.02	225	15.75	0.18
CTSS225500304C	304 STAINLESS STEEL	5.04	225	19.68	0.18
CTSS225600304C	304 STAINLESS STEEL	6.07	225	23.62	0.18

# Accessory Tools

Ergonomics and the prevention of repetitive motion injuries, coupled with the need to continually improve assembly efficiencies and procedures, are a major concern with most cable tie users. BURNDY® cable tie tools effectively address both issues. BURNDY has world class cable tie tools to compliment its line of high quality cable ties.



## Features & Benefits

- Lightweight
- Ergonomic
- Quick release button for interchanging sockets with ease
- Ratcheting, calibrated, dual direction provides ease of use in the field
- Rugged metal handle withstands the rigors of professional use

The BURNDY series of torque tools are professional grade and easy to operate. To set the desired torque, simply pull down the lock ring and turn the handle to the desired torque setting. Once set, the lock ring secures the torque setting. When the desired torque is reached, an impulse can be felt through the handle and an audible “click” can be heard.



## UNIRAP™ CABLE TIE TOOLS

CATALOG #	REF. FIGURE	DESCRIPTION	FOR USE ONLY
CTT50	A	Adjustable Tension Tool for Width 0.10 in - 0.19 in	Nylon 18-50 lbs
MK9	B	Adjustable Tension Tool for Width 0.19 in - 0.35 in	Nylon 18-250 lbs
CTSS900	F	Stainless Steel Tie Tool	SS Ties up to 900 lbs

## ADJUSTABLE-RATCHET TORQUE TOOL

PART NUMBER	TORQUE RANGE	LENGTH	WEIGHT	DRIVE
BTW30150	30-150 in-lbs	10.15"	0.90 lbs	3/8 in

# Reference

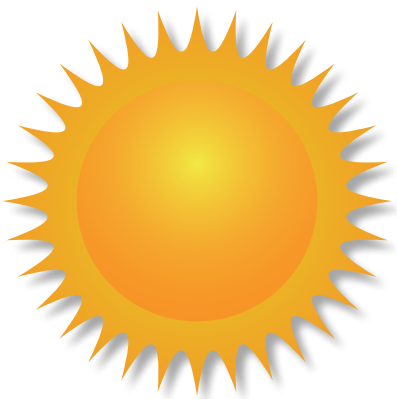
## TORQUE VALUES FOR A2 OR A4 METRIC STAINLESS STEEL FASTENERS

BOLT DIAMETER (MM)	TORQUE (N-m)		TORQUE (IN-LBS / FT-LBS)	
	DRY	LUBRICATED	DRY	LUBRICATED
5	5.1	4.6	45.1 in-lbs	40.6 in-lbs
6	8.7	7.8	77.0 in-lbs	69.3 in-lbs
8	21.2	19.1	188.0 in-lbs	169.0 in-lbs
10	42	38	372.0 in-lbs	335.0 in-lbs
12	73	66	54 ft-lbs	48 ft-lbs

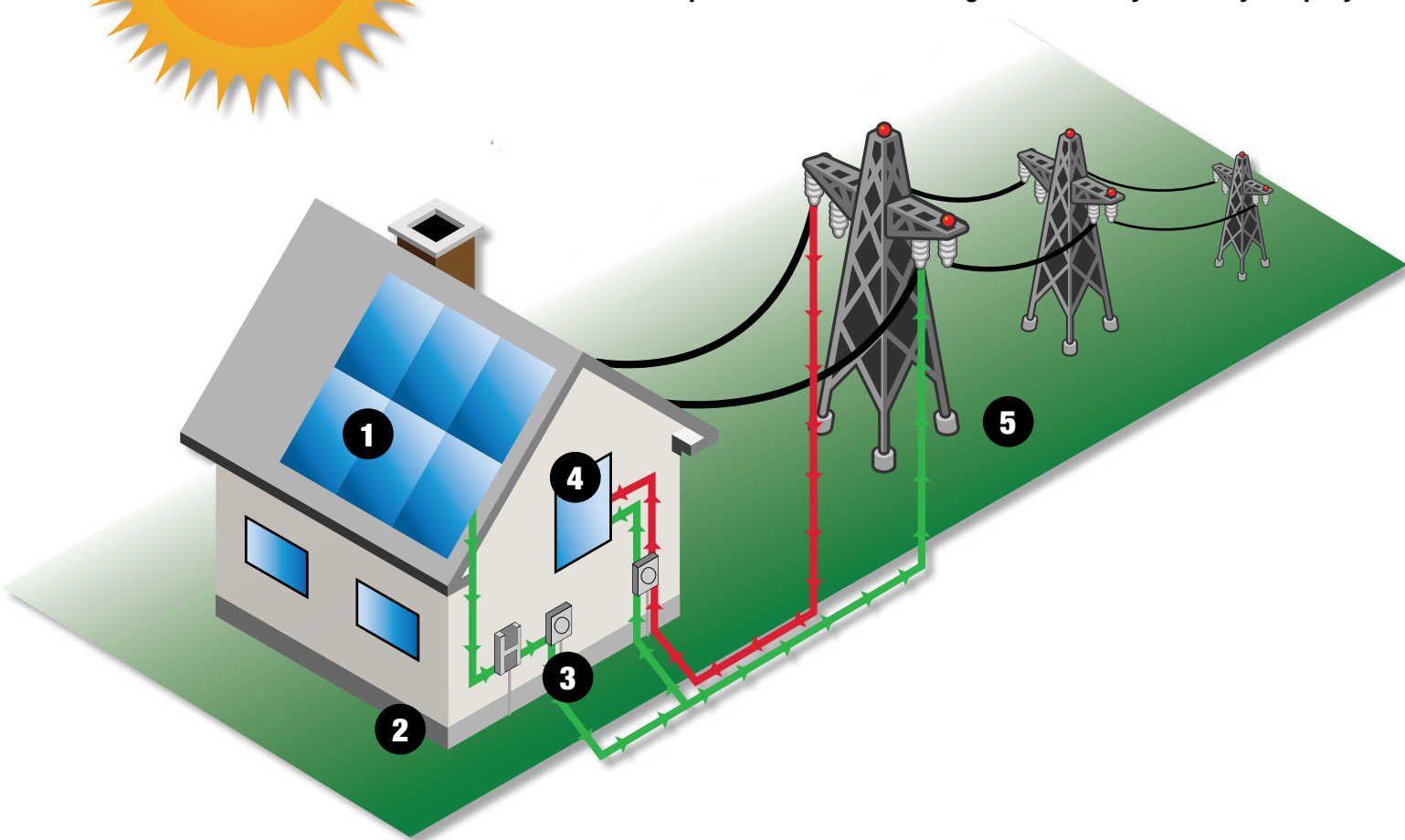
## TORQUE VALUES FOR STAINLESS STEEL AND NON-FERROUS FASTENERS

BOLT SIZE	18-8 STAINLESS STEEL		316 STAINLESS STEEL		SILICONE BRONZE (IN-LBS)	MONEL (IN-LBS)	BRASS (IN-LBS)	2024-T4 ALUMINUM (IN-LBS)
	DRY (IN-LBS)	LUBRICATED (IN-LBS)	DRY (IN-LBS)	LUBRICATED (IN-LBS)				
8-32	19.8	16.8	20.7	17.6	18.4	20.2	16.2	10.8
8-36	22	18.7	23	19.6	20.4	22.4	18	12
10-24	22.8	19.4	23.8	20.2	21.2	25.9	18.6	13.8
10-32	31.7	26.9	33.1	28.1	29.3	34.9	25.9	19.2
1/4-20	75.2	63.9	78.8	67	68.8	85.3	61.5	45.6
1/4-28	94	80	99	84	87	106	77	57
5/16-18	132	112	138	117	123	149	107	80
5/16-24	142	121	147	125	131	160	116	86
3/8-16	236	201	247	210	219	266	192	143
3/8-24	259	220	271	230	240	294	212	157

# How Solar Works



1. Photons from the sun are turned into electricity by the solar panels
2. Inverters convert the DC current into useable AC current
3. Meters measure the amount of electricity produced and consumed
4. Electricity produced can be used to power your home
5. Unused AC power is sent back to the grid and used by the utility company



## SOLAR PV APPLICATIONS

WILEY PRODUCTS	INVERTER & TRANSFORMER	GROUNDING	MODULE & RACKING
ACE Conduit Entry Box			•
Bonding Jumpers			•
Clamps (Mid/End)		•	•
Grounding Lugs	•	•	•
WEEB® washers		•	•
Wire Management			•
UNIRAP™ Cable Ties	•		•





# How Wiley Products Work

## **A** WEEB® (Washer Electrical Equipment Bond)

A revolution in the solar industry, WEEB® washers eliminate the need for older, more expensive grounding methods while also significantly reducing the amount of labor and materials used in installations.

Here's how it works: When the WEEB® is inserted between the module frame and mounting rail, the teeth of the WEEB® pierce the anodized coating. The result is excellent conductivity without oxidation—bonding the PV module frame with the metal racking structure. Essentially, the module and rail become one singular piece of metal, creating an electrical path to the ground.

Other features include:

- Corrosion-resistant 304 stainless-steel construction
- Reliability for use throughout the lifetime of the PV system
- ETL Listed to ANSI/UL 467
- UL Recognized to UL 2703
- CSA Certified to C22.2 No. 41
- Rated for outdoor use
- Multiuse
- Custom designs available upon request

## **B** WEEB® Grounding Lug

The low profile of the WEEB® Grounding Lug allows it to be installed in a variety of positions with one solid or stranded copper wire (14 AWG to 6 AWG), or two copper wires (12 AWG to 10 AWG). The result is a continuous ground on all solar applications.

Other features include:

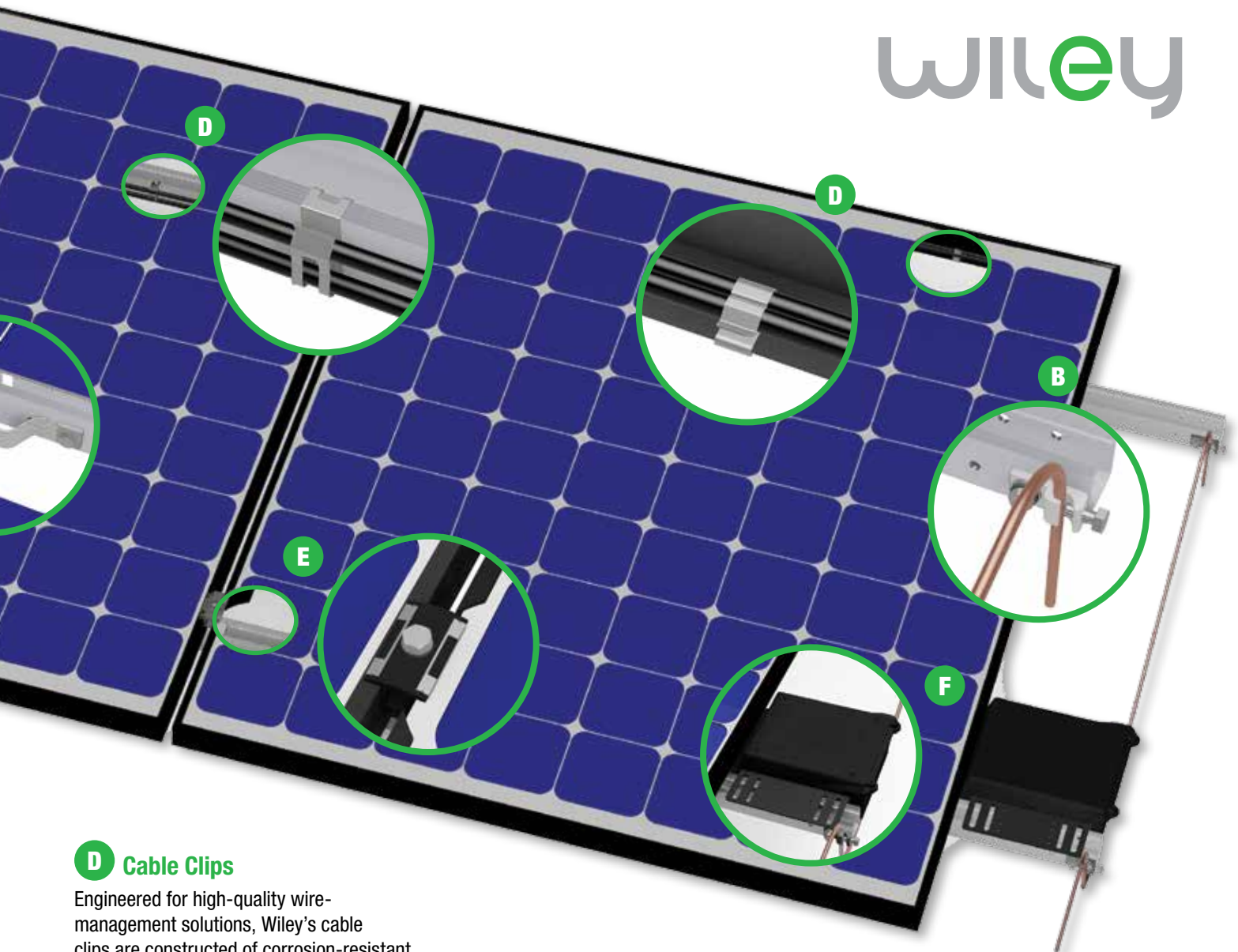
- Made of corrosion-resistant, tin-plated copper
- Design ensures a quick and easy installation
- Available:
  - With or without WEEB® washer technology
  - Assembled and unassembled
  - With or without installation hardware
- **No** surface preparation required on the rail or module
- ETL Listed to ANSI/UL 467
- CSA Certified to C22.2 No. 41
- Custom designs available upon request
- Reliability for use throughout the lifetime of the PV system

## **C** Grounding Jumper

The Wiley Bonding Jumper is used to create an electrical connection between two pieces of anodized aluminum, galvanized steel, or any electrically conductive metal. This maintains electrical continuity over long spans or air gaps between metal structures.

Other features include:

- ETL Listed to ANSI/UL 467
- CSA Certified to C22.2 No. 41
- Corrosion resistant
- Equivalent to 6AWG copper wire
- Available:
  - With or without WEEB® washer technology
  - Assembled and unassembled
  - With or without installation hardware
- In-stock standard lengths from 6" to 36" (custom lengths available upon request)
- Custom designs available upon request
- Reliability for use throughout the lifetime of the PV system



## D Cable Clips

Engineered for high-quality wire-management solutions, Wiley's cable clips are constructed of corrosion-resistant 304 stainless steel. Featuring dual wire compartments, the clips can be used in a wide variety of mounting configurations (including 90 degree) for module and rail applications.

Other features include:

- Accommodation for a broad range of cable combinations and sizes (e.g., USE-2, PV, AC module and micro inverter cables)
- No tools required for installation
- Multiuse capabilities
- Coined edges to prevent damage to cable insulation
- Reliability for use throughout the lifetime of the PV system

## E Mid-Clamp/End Clamp

Our universal mid-clamp and adjustable end clamp designs accommodate various module thicknesses. Plus, the Wiley Mid-Clamp uses proven WEEB® technology for integrated bonding as well as a quick and easy installation.

Other features include:

- Low profile design
- Increased inspectability
- Available in mill finish, or black or clear anodizing
- Custom designs and finishes available upon request
- ETL Listed to ANSI/UL 467
- UL Recognized to UL 2703
- Reliability for use throughout the lifetime of the PV system

## F ACE Conduit Entry Box

The ACE Conduit Entry Box makes quick and simple transitions from USE-2 or PV array wire to conduit protected THWN-2 wire.

The box features a compact two-piece UV resistant, NEMA 3R rated enclosure that allows ample wiring space and is compatible with any conduit type.

Other features include:

- UL 1741 Listing
- Convenient side and bottom conduit drill-out for easy conduit routing
- Choice of pass-through or combiner box with bracket
- Compatible with any conduit type
- Preassembled for quick and easy installation



# Don't Waste Time Searching for Balance of System Solutions



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[www.burndy.com](http://www.burndy.com) | 1-800-346-4175

## Customer Service Department

7 Aviation Park Drive  
Londonderry, NH 03053  
1-800-346-4175  
1-603-647-5299 (International)

## Canada

1-800-361-6975 (Quebec)  
1-800-387-6487 (All other provinces)

## Mexico

011-52-722-265-4400

## Brazil

011-55-11-5515-7225

## Tool Service Center

Littleton Industrial Park  
Littleton, NH 03561  
1-800-426-8720



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