



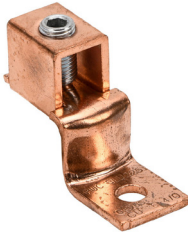




Mechanical Connectors

Mechanical Lugs Verses Compression Lugs Connector Comparison Chart

The variety of connectors available can be broken down into two general categories:

- Mechanical lugs
- Compression lugs

The following chart has been prepared in an effort to clarify the difference between these two categories.

Mechanical Lugs vs Compression Lugs	
Mechanical Lugs	Compression Lugs
 	  
SLU-225-1	BLU-1S-1
LA-250-1	BLU-035D-1
BLUA-2S-1	
Range taking and non-range taking. For pipe, cable, bar shapes etc.	Range taking and non-range taking. For cable conductors only.
Many designs are universal for copper and aluminum.	Separate designs required for aluminum, copper, or aluminum to copper.
Salvageable. Conductors can be removed and replaced if necessary. Wiring changes easily made.	Not salvageable. Conductor and connector must be cut off and scrapped if necessary.
Short runs and specials easily handled by manufacturer with better delivery.	Non-standard designs and modifications may be difficult to supply.
Taping depends on design.	Easily taped.
Installed cost comparable on small jobs and higher on large volume jobs.	Installed cost generally lower, particularly when large quantities are involved.
No special tools to install. Can use screwdriver, pliers, or wrench.	Special tools and dies required. If wrong tool or die is used, poor joint results.

Agency Approvals			
LA and L2A series	cULus: ZMVV	Wire Connectors and Soldering Lugs	
NA and NC series	cURus: ZMVV	Wire Connectors and Soldering Lugs - Component	
	cULus: KDER	Grounding and Bonding Equipment	
PB2, PB3, PB4 series	cULus: ZMVV	Wire Connectors and Soldering Lugs	
SAS, SAU, SLS series	cULus: ZMVV	Wire Connectors and Soldering Lugs	
	cULus: KDER	Grounding and Bonding Equipment	
SLU-125, -175, -225 series	cULus: ZMVV	Wire Connectors and Soldering Lugs	
SLU-35, -70 series	cULus: ZMVV	Wire Connectors and Soldering Lugs	
	cULus: KDER	Grounding and Bonding Equipment	
BLU Series	cULus: ZMVV	Wire Connectors and Soldering Lugs	
	cULus: KDER	Grounding and Bonding Equipment	Grounding up to 500 kcmil
	CSA: Class 6223-02	Wire Connecting Devices - Wire Connectors	
	CSA: Class 4414-04	Fittings - Grounding and Bonding Equipment	Grounding up to 500 kcm
BLUA Series	cULus: ZMVV	Wire Connectors and Soldering Lugs	
	CSA: Class 6223-02	Wire Connecting Devices - Wire Connectors	
	CSA: Class 4414-04	FITTINGS - Grounding and Bonding Equipment	

To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.



Mechanical Connectors

Lug Tongue Connections

The tongue of a compression or a mechanical lug is, basically, a bus bar that connects to another bus bar.

The illustration to the right shows a typical bar connection and the type of hardware used.

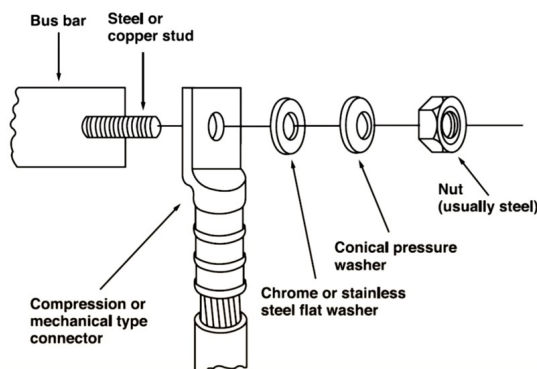


Table 1 to the right shows the recommended tightening torques for silicon bronze, stainless steel, galvanized steel, and lubricated aluminum alloy hardware.

NOTE: Torque values presently recommended by NEMA-CCI 2018 specification.

Table 1 - Tightening Torques

Bolt Diameter	Nominal Torque Values			
	Silicon Bronze, Galvanized, or Stainless Steel		Aluminum Alloy (Lubricated)	
	ft-lbs	inch-lbs	ft-lbs	inch-lbs
1/4	7	80	—	—
5/16	15	180	—	—
3/8	20	240	14	168
1/2	40	480	25	300
5/8	55	660	40	480
3/4	87	1050	54	650

For optimum efficiency, it is necessary that the correct bolt, nut, and washer combination be used with the correct combination of conductor materials. Table 2 shows acceptable methods of joining different combinations of bus bar. Where different combinations of metals are being joined, a follow-up device such as a conical pressure washer is usually recommended if one, or both, bus materials are soft drawn aluminum. If both bars are hard drawn,

large flat washers will suffice regardless of the bolt materials. Other considerations which should be taken into account when selecting hardware are corrosion and vibration. For example, if severe corrosion is anticipated, non-corrosive materials such as stainless steel or silicon bronze, should be selected in preference to galvanized steel. If vibration is anticipated, the use of locking washers should be considered.

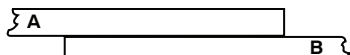


Table 2 - Joining Bus Bar Methods

If "A" bar is	Copper	Aluminum	Steel	Aluminum	Steel
And if "B" bar is	Copper	Copper	Copper	Aluminum	Aluminum
Hard Drawn Bus such as aluminum alloy 	(1) Silicon Bronze (2) Stainless Steel	(1) Silicon Bronze (2) Aluminum (3) Stainless Steel	(1) Silicon Bronze (2) Stainless Steel	(1) Aluminum (2) Stainless Steel (3) Silicon Bronze, Plated	(1) Aluminum (2) Stainless Steel
Soft Drawn Bus such as EC-H13 Aluminum 	(1) Silicon Bronze (2) Stainless Steel	(1) Silicon Bronze (2) Aluminum (3) Stainless Steel (4) Conical Pressure Washer (Plated or Stainless Steel)	(1) Silicon Bronze (2) Stainless Steel	(1) Aluminum (2) Stainless Steel (3) Silicon Bronze, Plated (4) Conical Pressure Washer (Plated or Stainless Steel)	(1) Aluminum (2) Stainless Steel (3) Conical Pressure Washer (Plated or Stainless Steel)

"(1)" denotes preferred hardware usage.



Mechanical Connectors

Standard Barrel 1-Hole Tongue Aluminum Compression Lugs BLUA Series

Overview

Penn-Union compression connectors are made of the highest-grade materials and offer very high conductivity (low resistance) while meeting or exceeding all industry standards. Penn-Union compression connectors are certified to be installed using commonly found tools and do so without loss of agency certification. Penn-Union manufactures extremely dependable connectors at a low installed cost and its full line of compression connectors have a color-coding system that makes inspections and certified installations much simpler.

Features

- Rated for use with copper or aluminum conductors
- Rated for use up to 90°C and conductors rated to 90°C can be used
- Manufactured from seamless aluminum tubing
- Tin-plated and factory prefilled with oxide inhibitor compound
- End caps provided to prevent foreign materials from entering and contaminating the connector prior to usage
- Beveled entry for easy cable insertion
- Color-coded barrels are marked with die index numbers
- Connectors are suitable for voltages up to 35 kV
- Connectors are UL Listed and CSA Certified with Penn-Union, Burndy, T&B, Huskie, Greenlee and Versa-Crimp® style tooling. Versa-Crimp® is a registered trademark of HUBBELL Incorporated



BLUA-2S-1



AL9CU

Standard Barrel 1-Hole Tongue Aluminum Compression Lugs BLUA Series											
Part Number	Price	Conductor Material and Conductor Size	Stud Size	Die Color Code	Installation Tool	Wire Strip Length	Voltage Rating	Number of Openings	Number of Mounting Holes	Qty	Material
BLUA-6S-NT-1	\$3.00	Copper or Aluminum 6 AWG	1/4in	Gray	TDM-250 or TDM-500	7/8in	35 kV	1	1	1	Tin-plated aluminum
BLUA-6S2-1	\$3.00		5/16in								
BLUA-4S2-1	\$4.00	Copper or Aluminum 4 AWG	5/16in	Green		1in					
BLUA-4S3-1	\$4.00		1/4in								
BLUA-2S-1	\$6.00	Copper or Aluminum 2 AWG	3/8in	Pink							
BLUA-2S3-1	\$6.00		1/4in								
BLUA-2S4-1	\$6.00		5/16in								
BLUA-1S-1	\$7.00	Copper or Aluminum 1 AWG	3/8in	Gold							
BLUA-1S1-1	\$7.00		1/4in								
BLUA-1S2-1	\$7.00		1/2in								
BLUA-1S3-1	\$7.00		5/16in								
BLUA-1/0S-1	\$7.00	Copper or Aluminum 1/0 AWG	3/8in	Tan		1-1/8in					
BLUA-1/0S1-1	\$7.00		1/2in								
BLUA-1/0S2-1	\$7.00		1/4in								
BLUA-1/0S3-1	\$7.00		5/16in								
BLUA-2/0S-1	\$9.00	Copper or Aluminum 2/0 AWG	1/2in	Olive		1-1/4in					
BLUA-2/0S1-1	\$9.00		3/8in								
BLUA-2/0S4-1	\$9.00		1/4in								
BLUA-2/0S5-1	\$9.00		5/16in								
BLUA-3/0S-1	\$10.00	Copper or Aluminum 3/0 AWG	1/2in	Ruby		1-3/8in					
BLUA-3/0S2-1	\$10.00		3/8in								
BLUA-3/0S5-1	\$10.00		5/16in								
BLUA-4/0S-1	\$11.00	4/0 AWG	1/2in	White		1-7/16in					
BLUA-4/0S3-1	\$11.00		5/16in								
BLUA-4/0S4-1	\$11.00		5/8in								
BLUA-4/0S5-1	\$11.00		3/8in								
BLUA-025S-1	\$12.00	250 MCM	1/2in	Red		1-9/16in					
BLUA-025S2-1	\$12.00		3/8in								

Continued on the next page.



PennUnion™ Mechanical Connectors

Standard Barrel 1-Hole Tongue Aluminum Compression Lugs BLUA Series

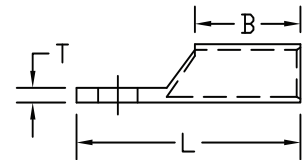
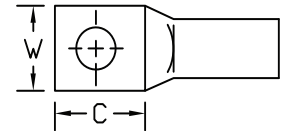
Standard Barrel 1-Hole Tongue Aluminum Compression Lugs BLUA Series											
Part Number	Price	Conductor Material and Conductor Size	Stud Size	Die Color Code	Installation Tool	Wire Strip Length	Voltage Rating	Number of Openings	Number of Mounting Holes	Qty	Material
<u>BLUA-030S-1</u>	\$14.25	Copper or Aluminum 300 MCM	5/8in	Blue	<u>TDM-500</u>	1-5/8in	35 kV	1	1	1	Tin-plated aluminum
<u>BLUA-030S1-1</u>	\$14.25		1/2in								
<u>BLUA-030S2-1</u>	\$14.25		3/8in								
<u>BLUA-035S-1</u>	\$17.50	Copper or Aluminum 350 MCM	5/8in	Brown		1-3/4in					
<u>BLUA-035S1-1</u>	\$17.50		1/2in								
<u>BLUA-040S2-1</u>	\$26.00	Copper or Aluminum 400 MCM	1/2in	Green		2in					
<u>BLUA-040S3-1</u>	\$26.00		5/8in								
<u>BLUA-050S2-1</u>	\$28.00	Copper or Aluminum 500 MCM	1/2in	Pink		2-1/16in					
<u>BLUA-050S3-1</u>	\$28.00		5/8in								



Mechanical Connectors

Standard Barrel 1-Hole Aluminum Compression Lugs BLUA Series

Dimensions								
Part Number	Stud Size	Approximate Dimensions in [mm]						
		W	C	T	B	L	Drawing Link	
BLUA-6S-NT-1	1/4in	0.50 [12.70]	0.80 [20.32]	0.13 [3.30]	0.69 [17.52]	1.83 [46.48]	PDF	
BLUA-6S2-1	5/16in		0.78 [19.81]		0.75 [19.05]	1.82 [46.22]	PDF	
BLUA-4S2-1		1/4in	0.58 [14.73]	0.80 [20.32]	0.18 [4.57]	0.87 [22.09]	1.89 [48.06]	PDF
BLUA-4S3-1	PDF							
BLUA-2S-1	3/8in	0.70 [17.78]	0.86 [21.84]	0.21 [5.33]	0.78 [19.81]	2.05 [52.07]	PDF	
BLUA-2S3-1	1/4in						PDF	
BLUA-2S4-1	5/16in						PDF	
BLUA-1S-1	3/8in						0.73 [18.54]	1.19 [30.22]
BLUA-1S1-1	1/4in	0.78 [19.81]	1.92 [48.76]	PDF				
BLUA-1S2-1	1/2in	0.83 [21.08]	1.25 [31.75]	0.27 [6.85]	2.59 [65.78]	PDF		
BLUA-1S3-1	5/16in	0.73 [18.54]	0.84 [21.33]	0.17 [4.31]	1.95 [49.53]	PDF		
BLUA-1/0S-1	3/8in	0.84 [21.33]	0.86 [21.84]	0.23 [5.84]	0.87 [22.09]	2.17 [55.11]	PDF	
BLUA-1/0S1-1	1/2in	0.86 [21.84]	1.13 [28.70]		1.10 [27.94]	2.44 [61.97]	PDF	
BLUA-1/0S2-1	1/4in	0.84 [21.33]	0.86 [21.84]		0.88 [22.35]	2.17 [55.11]	PDF	
BLUA-1/0S3-1	5/16in						PDF	
BLUA-2/0S-1	1/2in	0.93 [23.62]	1.20 [30.48]	0.25 [6.35]	1.09 [27.68]	2.62 [66.54]	PDF	
BLUA-2/0S1-1	3/8in					2.25 [57.15]	PDF	
BLUA-2/0S4-1	1/4in	0.94 [23.87]	0.78 [19.81]			2.31 [58.67]	PDF	
BLUA-2/0S5-1	5/16in	0.93 [23.62]	0.84 [21.33]			2.31 [58.67]	PDF	
BLUA-3/0S-1	1/2in	1.03 [26.16]	1.22 [30.98]	0.27 [6.85]	1.25 [31.75]	2.91 [73.91]	PDF	
BLUA-3/0S2-1	3/8in		1.06 [26.92]	0.26 [6.60]		2.81 [71.37]	PDF	
BLUA-3/0S5-1	5/16in		0.84 [21.33]	0.27 [6.85]		2.59 [65.78]	PDF	
BLUA-4/0S-1	1/2in	1.17 [29.71]	1.18 [29.97]	0.30 [7.62]	1.28 [32.51]	2.97 [75.43]	PDF	
BLUA-4/0S3-1	5/16in		0.84 [21.33]		1.31 [33.27]	2.65 [67.31]	PDF	
BLUA-4/0S4-1	5/8in		1.47 [37.33]			3.28 [83.31]	PDF	
BLUA-4/0S5-1	3/8in		1.20 [30.48]		1.28 [32.51]	2.97 [75.43]	PDF	
BLUA-02S5-1	1/2in	1.25 [31.75]	1.53 [38.86]	0.33 [8.38]	1.41 [35.18]	3.00 [76.20]	PDF	
BLUA-02S52-1	3/8in	1.26 [32.00]	1.06 [26.92]			3.44 [87.37]	PDF	
BLUA-030S-1	5/8in	1.39 [35.30]	1.47 [37.33]	0.36 [9.14]	1.50 [38.10]	3.68 [93.47]	PDF	
BLUA-030S1-1	1/2in	1.37 [34.79]	1.56 [39.62]			3.88 [98.55]	PDF	
BLUA-030S2-1	3/8in	1.39 [35.30]	1.25 [31.75]			3.63 [92.20]	PDF	
BLUA-035S-1	5/8in	1.48 [37.59]	1.55 [39.37]	0.39 [9.90]	1.61 [40.89]	3.91 [99.31]	PDF	
BLUA-035S1-1	1/2in					PDF		
BLUA-040S2-1	1/2in	1.63 [41.02]	1.50 [38.10]	0.42 [10.66]	1.81 [45.97]	4.53 [115.06]	PDF	
BLUA-040S3-1	5/8in		1.81 [45.97]			4.84 [122.93]	PDF	
BLUA-050S2-1	1/2in	1.80 [45.72]	1.50 [38.10]	0.47 [11.93]	1.88 [47.75]	4.31 [109.47]	PDF	
BLUA-050S3-1	5/8in		1.81 [45.97]		1.87 [47.49]	4.62 [117.34]	PDF	





Mechanical Connectors

Standard Barrel 2-Hole Tongue Aluminum Compression Lugs BLUA Series

Overview

Penn-Union compression connectors are made of the highest-grade materials and offer very high conductivity (low resistance) while meeting or exceeding all industry standards. Penn-Union compression connectors are certified to be installed using commonly found tools and do so without loss of agency certification. Penn-Union manufactures extremely dependable connectors at a low installed cost and its full line of compression connectors have a color-coding system that makes inspections and certified installations much simpler.

Features

- Rated for use with copper or aluminum conductors
- Rated for use up to 90°C and conductors rated to 90°C can be used
- Manufactured from seamless aluminum tubing
- Tin-plated and factory prefilled with oxide inhibitor compound
- End caps provided to prevent foreign materials from entering and contaminating the connector prior to usage
- Beveled entry for easy cable insertion
- Color-coded barrels are marked with die index numbers
- Connectors are suitable for voltages up to 35 kV
- Connectors are UL Listed and CSA Certified with Penn-Union, Burndy, T&B, Huskie, Greenlee and Versa-Crimp® style tooling. Versa-Crimp® is a registered trademark of HUBBELL Incorporated



BLUA-4/0D-1



AL9CU

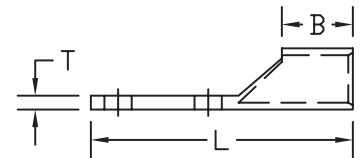
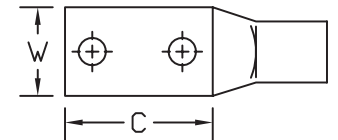
Standard Barrel 2-Hole Tongue Aluminum Compression Lugs BLUA Series												
Part Number	Price	Conductor Material and Conductor Size	Stud Size	Stud Hole Spacing	Die Color Code	Installation Tool	Wire Strip Length	Voltage Rating	Number of Openings	Number of Mounting Holes	Qty	Material
BLUA-1D1-1	\$6.00	Copper or Aluminum 1 AWG	1/2in	1.75in	Gold	TDM-250 or TDM-500	1-1/16in	35 kV	1	2	1	Tin-plated copper
BLUA-1/0D1-1	\$8.00	Copper or Aluminum 1/0 AWG	3/8in	1.00in	Tan		1-1/8in					
BLUA-1/0D3-1	\$8.00		1/2in	1.75in			1-1/4in					
BLUA-2/0D-1	\$10.00	Copper or Aluminum 2/0 AWG	1/2in	1.75in	Olive		1-3/8in					
BLUA-2/0D2-1	\$10.00		3/8in	1.00in			1-7/16in					
BLUA-3/0D-1	\$11.00	Copper or Aluminum 3/0 AWG	1/2in	1.75in	Ruby		1-9/16in					
BLUA-3/0D1-1	\$11.00		3/8in	1.00in			2in					
BLUA-4/0D-1	\$12.00	Copper or Aluminum 4/0 AWG	1/2in	1.75in	White		2-1/16in					
BLUA-4/0D2-1	\$12.00		3/8in	1.00in			2-1/16in					
BLUA-025D-1	\$13.00	Copper or Aluminum 250 MCM	1/2in	1.75in	Red		2-1/16in					
BLUA-025D1-1	\$13.00		3/8in	1.00in		2-1/16in						
BLUA-030D-1	\$15.25	Copper or Aluminum 300 MCM	1/2in	1.75in	Blue	2-1/16in						
BLUA-030D1-1	\$15.25		3/8in	1.00in		2-1/16in						
BLUA-035D-1	\$18.50	Copper or Aluminum 350 MCM	1/2in	1.75in	Brown	2-1/16in						
BLUA-035D1-1	\$18.50		3/8in	1.00in		2-1/16in						
BLUA-040D-1	\$27.00	Copper or Aluminum 400 MCM	5/8in	1.75in	Green	2-1/16in						
BLUA-040D1-1	\$27.00		3/8in	1.00in		2-1/16in						
BLUA-040D2-1	\$27.00		1/2in	1.75in		2-1/16in						
BLUA-050D-1	\$29.00	Copper or Aluminum 500 MCM	5/8in	1.75in	Pink	2-1/16in						
BLUA-050D1-1	\$29.00		3/8in	1.00in		2-1/16in						
BLUA-050D2-1	\$29.00		1/2in	1.75in		2-1/16in						



PennUnion™ Mechanical Connectors

Standard Barrel 2-Hole Tongue Aluminum Compression Lugs BLUA Series

Dimensions							
Part Number	Stud Size	Approximate Dimensions in [mm]					Drawing Link
		W	C	T	B	L	
BLUA-1D1-1	1/2in	0.83 [21.08]	2.91 [73.91]	0.27 [6.85]	0.91 [23.11]	4.05 [102.87]	PDF
BLUA-1/0D1-1	3/8in	0.86 [21.84]	1.88 [47.75]	0.23 [5.84]	1.00 [25.4]	3.53 [89.66]	PDF
BLUA-1/0D3-1	1/2in1/2in	0.84 [21.33]	3.00 [76.20]	0.24 [10.16]	1.00 [25.4]	4.57 [116.07]	PDF
BLUA-2/0D-1		0.94 [23.87]	3.18 [80.77]	0.25 [6.35]	1.09 [27.68]	4.62 [117.34]	PDF
BLUA-2/0D2-1	3/8in		1.88 [47.75]			3.38 [85.82]	PDF
BLUA-3/0D-1	1/2in	1.03 [26.16]	2.97 [75.43]	0.26 [6.60]	1.25 [31.75]	4.66 [118.36]	PDF
BLUA-3/0D1-1	3/8in		1.88 [47.75]	0.27 [6.85]		3.91 [99.31]	PDF
BLUA-4/0D-1	1/2in	1.16 [29.46]	2.94 [74.67]	0.30 [7.62]	1.29 [32.76]	4.73 [120.14]	PDF
BLUA-4/0D2-1	3/8in	1.17 [29.71]	2.06 [52.32]		1.31 [33.27]	3.88 [98.55]	PDF
BLUA-025D-1	1/2in	1.25 [31.75]	2.91 [73.91]	0.33 [8.38]	1.79 [45.46]	5.20 [132.08]	PDF
BLUA-025D1-1	3/8in	1.27 [32.25]	2.06 [52.32]		1.41 [35.81]	4.00 [101.60]	PDF
BLUA-030D-1	1/2in	1.38 [35.05]	3.00 [76.20]	0.36 [9.14]	1.47 [37.33]	5.34 [135.63]	PDF
BLUA-030D1-1	3/8in	1.39 [35.30]	2.38 [60.45]		1.50 [38.10]	4.47 [113.53]	PDF
BLUA-035D-1	1/2in	1.48 [37.59]	2.94 [74.67]	0.39 [9.90]	1.59 [40.38]	5.31 [134.87]	PDF
BLUA-035D1-1	3/8in		2.06 [52.32]		1.63 [41.40]	4.44 [112.77]	PDF
BLUA-040D-1	5/8in	1.63 [41.40]	3.09 [78.48]	0.42 [10.66]	1.81 [45.97]	5.59 [141.98]	PDF
BLUA-040D1-1	3/8in		2.06 [52.32]			4.56 [115.82]	PDF
BLUA-040D2-1	1/2in		3.13 [79.50]		1.81 [45.97]	5.63 [143.02]	PDF
BLUA-050D1-1	5/8in	1.80 [45.72]	2.06 [52.32]	0.47 [11.93]	1.88 [47.75]	4.88 [123.95]	PDF
BLUA-050D2-1	3/8in	1.79 [45.46]	3.13 [79.50]	0.46 [11.68]		5.94 [150.87]	PDF
BLUA-050D-1	1/2in	1.80 [45.72]	3.22 [81.78]	0.47 [11.93]	1.87 [47.49]	6.03 [153.16]	PDF





Mechanical Connectors

Standard Installation Instructions for Aluminum Compression Lugs BLUA Series

Of all the methods used to make electrical connections, compression of the connector onto the cable with some type of compression tool is considered by most installers to be the most permanent of the common connection methods.

To maintain Underwriters Laboratories listing (UL) or Canadian Standards Association certification (CSA) for a completed compression connection, it is necessary to use the installation tools and installation methods which have been qualified for the connectors by those organizations during the listing/certification processes.

This information is supplied by Penn-Union in the form of an insert/stuffer sheet, available in the packaging of each part number.

Information Found in the Penn-Union Inserts

PENN-UNION CO. LLC ALUMINUM PENN-CRIMPS ALUMINUM OR COPPER CABLE (ALPCU) STANDARD INSTALLATION INSTRUCTIONS									
CATALOG NUMBER	CLASS & C-BUILDING WIRE AL & CU CABLE SIZE & STRANDING	STRIP LENGTH (IN.)	DIE COLOR CODE	PU CRIMP TOOL NUMBER	PU DIE CATALOG NUMBER	BURNDY CRIMP TOOL NUMBER	BURNDY DIE NUMBER	T&B 18M-15 DIE CODE NUMBER	MECHANICAL CRIMP TOOLS BUILDING WIRE CLASS & C-AL & CU CABLE
BLUA-200R	250 MCM 37 OR 21	1 1/16	RED	TPU-12 TPU-18 TPU-4	1-324	Y35 Y39 Y750	324	71	PU TOM-250, TOM-500 OR BURNDY MY29-3
BLUA-300R	300 MCM 37 OR 21	1 1/16	BLUE	TPU-12 TPU-18 TPU-4	1-470	Y35 Y39 Y750	470	76	PU TOM-500
BLUA-350R	350 MCM 37 OR 21	2 3/4	BROWN	TPU-12 TPU-18 TPU-4	1-299	Y35 Y39 Y750	299	87	PU TOM-500
BLUA-400R	400 MCM 37 OR 21	2 1/16	GREEN	TPU-12 TPU-18 TPU-4	1-472	Y35 Y39 Y750	472	94	PU TOM-500
BLUA-500R	500 MCM 37 OR 21	2 1/16	PINK	TPU-12 TPU-18 TPU-4	1-300	Y35 Y39 Y750	300	108	PU TOM-500

NOTE: BLUA CATALOG NUMBERS MAY BE PREVIEWED BY "H" INDICATING NARROW TOOLING.

1. ALUMINUM/COPPER COMPRESSION LUG AND SPICE CONNECTIONS: SELECT PROPER LUG OR SPICE CONNECTOR FOR THE SIZE AND CONSTRUCTION OF COPPER CABLE. MAKE SURE THAT THE SIZE AND CONSTRUCTION OF THE CABLE MATCH THE DESCRIPTION IN THE TABLE. CAREFULLY STRIP THE INSULATION FROM THE CONDUCTOR WITHOUT NICKING THE STRANDS, TO THE LENGTH SPECIFIED FOR THAT CONNECTOR IN THE TABLE ABOVE.

2. WIRE BRUSH THE STRIPPED PORTION OF THE CONDUCTOR TO REMOVE OXIDE FILM.

3. THE STRIPPED PORTION OF CONDUCTOR MUST BE CLEAN AND INSERTED COMPLETELY INTO THE CONNECTOR BARREL. USING THE TOOL AND DIE COMBINATION SPECIFIED FOR THAT CONNECTOR IN THE TABLE ABOVE, MAKE ENOUGH CRIMPS TO FULLY CRIMP THE CONNECTOR BARREL AT THE REFERENCED LOCATION ILLUSTRATED. NARROW DIE WILL REQUIRE MORE CRIMPS THAN WIDE DIE.

4. REPRESENTATIVE CRIMPING LOCATIONS

5. CRIMPING LOCATIONS

Insert Page 1	
1	UL and CSA Wire Connectors, based on UL 486A-486B
2	List of part numbers covered by insert
3	List of cables that can be used with lug series
4	Stripping length per lug series
5	DIE color code (indicated on the lug)
6	Tools that retain UL/CSA Wire Connector ratings
7	List of additional related crimping tools and associated notes
8	Instructions on how to crimp the connector
9	Representative image of crimp locations on the connector barrel

Insert Page 2	
10	Connector Series
11	Versa-Crimp ® tool wire range
12	TPU and related Tools, connector types per tool type and number of crimps
13	Number of crimps: For Example 2 = two crimps on the barrel
14	List of additional related tools

PENN-UNION ALUMINUM CONNECTORS FOR USE WITH DIELESS VERSA-CRIMP® STYLE INSTALLATION TOOLING. (NUMBER OF REQUIRED CRIMPS PER CONNECTION BY CONNECTOR & TOOL COMBINATIONS)	
*CRIMP TOOL:	TPU-6 (AND RELATED TOOLS)
ALUMINUM CONNECTOR SIZE / DIELESS CATALOG NUMBER FOR TYPES:	TPU-6FT (AND RELATED TOOLS)
BLUA- BCUA	BLUA BCUA
-4	#4 - #6
-2	#2 - #6
-1	#1 - #4
-1/0	1/0 - #1
-2/0	2/0 - #1
-3/0	3/0 - #1
-4/0	4/0 - #1
-025	250 - 1/0
-030	300 - 2/0
-035	350 - 3/0
-040	400 - 4/0
-050	500 - 4/0
-060	600 - 250
-075	750 - 500

TOOL SUMMARY

REPRESENTATIVE TOOL & RELATED TOOLS

14 "P" PENN-UNION "HPS" HUBBELL POWER SYSTEMS "H" HUSKIE

TOOL CATALOG#	TOOL DESCRIPTION
"P" TPU-6 (RELATED TOOLS)	REPRESENTATIVE HAND OPERATED HYDRAULIC TOOL
"HPS" VC63SP "H" EP-630A	HAND OPERATED HYDRAULIC TOOLS
"P" TPU-6H "H" REC-6350	BATTERY OPERATED HYDRAULIC TOOLS
"P" TPU-6H "HPS" VC63SP "H" EP-630A	REMOTE OPERATED HYDRAULIC TOOLS
"P" TPU-6-FT (RELATED TOOLS)	REPRESENTATIVE HAND OPERATED HYDRAULIC TOOL
"HPS" VC6FTSP "H" EP-750A	HAND OPERATED HYDRAULIC TOOLS
"P" TPU-6-FTB "H" REC-6750	BATTERY OPERATED HYDRAULIC TOOLS
"P" TPU-6-FTH "HPS" VC6FTTRSP "H" EP-750A	REMOTE OPERATED HYDRAULIC TOOLS

USERS OF PENN-UNION TPU-6 AND RELATED TOOLS MUST STRIP OFF AN EXTRA 1/8" OF INSULATION FROM ONE END OF CABLE TO PERMIT REMOVAL OF TOOL OVER CONDUCTOR SIZES 250 MCM AND LARGER ON "BCUA" SPLICING SLEEVES.

VERSA-CRIMP® IS A REGISTERED TRADEMARK OF HUBBELL INCORPORATED

DRAWN BY: ROB 8/27/18 9Y81-56015-01



Mechanical Connectors

Hand-Operated Crimp Tools

Overview

The hand-operated crimp tools are designed for easy use especially in confined spaces and bench top use. The unique telescopic handle design (TDM) provides increased leverage when needed. The TDM series crimp tools are designed to make the perfect crimp every time using the BLU series compression lugs.

Features

- Dieless - no dies to buy or lose
- Compression connectors are UL listed and CSA certified when installed in accordance with manufacturer's installation instructions
- Quality durable steel
- Easily adjustable tool settings
- Easy-to-read settings are provided on calibrated index plates, one for AL and one for CU, located on the side of the tool
- Small head is convenient in confined areas

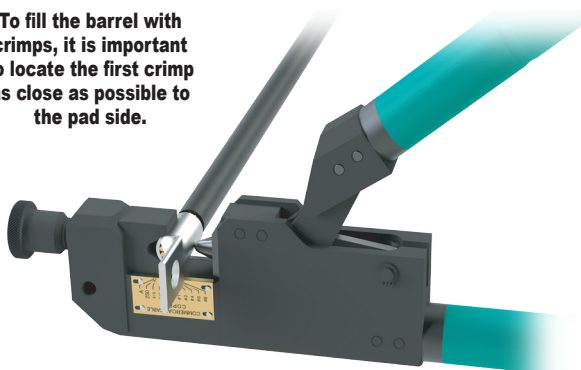


TDM-250

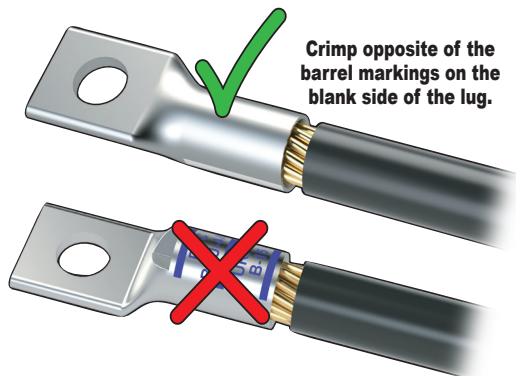
Hand - Operated Crimp Tools								
Part Number	Price	Qty	Type	Crimp Profile	Wire Range	Overall Length	Weight	Material
<u>TDM-250</u>	\$361.25	1	Telescopic handle with rubberized non-slip grip	Indent	8 AWG-250 MCM copper and 8-4AWG aluminum	26.0in [660mm]	9.5 lbs	Steel
<u>TDM-500</u>	\$506.25				8 AWG-500 MCM copper and aluminum	27.4in [696mm]	9.9 lbs	

Crimp Tools Instructions

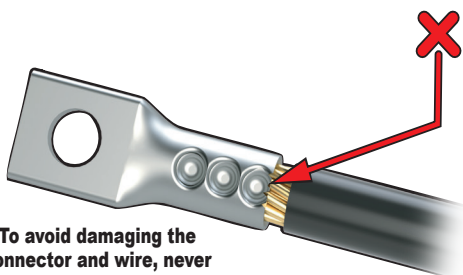
To fill the barrel with crimps, it is important to locate the first crimp as close as possible to the pad side.



Crimp opposite of the barrel markings on the blank side of the lug.



To avoid damaging the connector and wire, never locate the last crimp hanging off the edge of the lug.



Crimp mark set to 4/0

