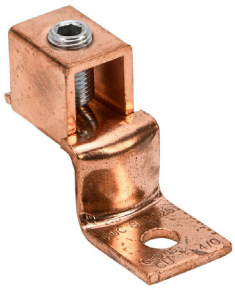
PENNUNION™ Mechanical Connectors

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** **LA-250-1**	  **BLU-1S-1** **BLU-035D-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.

PENNUNION™ Mechanical Connectors

1-Opening Aluminum Dual-Rated Mechanical Lugs LA Series

Overview

The LA series is a heavy-duty high-strength aluminum dual-rated connector that makes a reliable electrical connection to either an aluminum or copper conductor. These lugs have a single opening and are designed for easy installation while maintaining a low resistance high strength connection.

Features

- Use with copper or aluminum conductors
- Manufactured from high strength aluminum alloy extrusion
- Electro-tin plated to ensure minimum contact resistance and corrosion protection when used with copper wire
- Connectors are rated for 600V, 90ºC [194ºF] applications
- The use of oxide inhibitor is recommended for all aluminum terminations

LA-250-1

c UL us

1-Opening Aluminum Dual-Rated Mechanical Lugs - LA Series

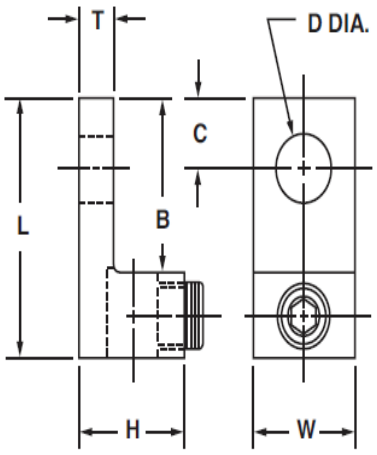
Part Number	Price	Qty	Type	Voltage Rating	Number of Openings	Conductor Material and Conductor Range	Tightening Torque	Conductor Bolt Style	Number of Mounting Holes	Mounting Bolt Size	Material	Drawing Link
LA-0-1	$1.25	1	Box	600V	1	Copper (1) 14-1/0 AWG (2)14-4 AWG Aluminum (1) 12-1/0 AWG (2) 12-4 AWG	CU: 50 lb•in AL: 35 lb•in	Slotted set screw	1	1/4in	Tin-plated aluminum	PDF
LA-2-1	$0.75					Copper (1) 14-2 AWG (2) 14-10 AWG Aluminum (1) 12-2 AWG (2) 10-12 AWG	45 lb•in	Slotted set screw		1/4in		PDF
LA-2/0-1	$1.25					Copper (1) 14-2/0 AWG Aluminum (1) 8-2/0 AWG	120 lb•in	3/16in hex		1/4in		PDF
LA-250-1	$2.75					Copper (1) 6 AWG-250 MCM Aluminum (1) 6 AWG-250 MCM	275 lb•in	5/16in hex		5/16in		PDF
LA-350-1	$4.50					Copper (1) 6 AWG-350 MCM Aluminum (1) 6 AWG-350 MCM	275 lb•in	5/16in hex		3/8in		PDF
LA-500-1	$6.75					Copper (1) 4 AWG-500 MCM Aluminum (1) 4 AWG-500 MCM	375 lb•in	3/8in hex		3/8in		PDF
LA-6-1	$0.50					Copper (1) 14-4 AWG Aluminum (1) 8-4 AWG	35 lb•in	Slotted set screw		1/4in		PDF
LA-600-1	$8.50					Copper (1) 2 AWG-600 MCM Aluminum (1) 2 AWG-600 MCM	500 lb•in	1/2in hex		3/8in		PDF
LA-800-1	$12.25					Copper (1) 300-800 MCM Aluminum (1) 300-800 MCM	500 lb•in	1/2in hex		5/8in		PDF

Note: Use same conductor type, Copper or Aluminum, per opening. Do not mix conductor type in an opening.

PENNUNION™ Mechanical Connectors

1-Opening Aluminum Dual-Rated Mechanical Lugs
LA Series

1-Opening Aluminum Dual-Rated Mechanical Lugs - LA Series Dimensions							
Part Number	*Approximate Dimensions in [mm]*						
	L	*W*	*H*	*T*	*B*	*C*	*D (Dia.)*
LA-0-1	1.46 [37.08]	0.63 [16.00]	0.79 [20.26]	0.19 [4.82]	0.84 [21.33]	0.44 [11.17]	0.27 [6.85]
LA-2-1	1.16 [29.46]	0.50 [12.70]	0.55 [13.97]	0.11 [2.79]	0.69 [17.52]	0.31 [7.87]	0.27 [6.85]
LA-2/0-1	1.46 [37.08]	0.63 [16.00]	0.79 [20.26]	0.19 [4.82]	0.84 [21.33]	0.44 [11.17]	0.27 [6.85]
LA-250-1	2.00 [50.80]	1.00 [25.40]	1.12 [28.44]	0.25 [6.35]	1.00 [25.40]	0.47 [11.93]	0.33 [8.38]
LA-350-1	2.25 [57.15]	1.13 [28.70]	1.25 [31.75]	0.25 [6.35]	1.13 [28.70]	0.50 [12.70]	0.41 [10.41]
LA-500-1	2.81 [71.37]	1.50 [38.10]	1.57 [39.87]	0.31 [7.87]	1.59 [40.38]	0.87 [22.09]	0.41 [10.41]
LA-6-1	1.06 [26.92]	0.50 [12.70]	0.50 [12.70]	0.09 [2.28]	0.68 [17.27]	0.25 [6.35]	0.27 [6.85]
LA-600-1	3.19 [81.02]	1.50 [38.10]	1.57 [39.87]	0.44 [11.17]	1.81 [45.97]	0.87 [22.09]	0.41 [10.41]
LA-800-1	3.37 [85.59]	1.75 [44.45]	1.94 [49.27]	0.50 [12.70]	1.75 [44.45]	0.87 [22.09]	0.66 [16.76]



PENNUNION™ Mechanical Connectors

2-Opening Aluminum Dual-Rated Mechanical Lugs
L2A Series

Overview

The L2A series is a heavy-duty high strength aluminum dual-rated connector that makes a reliable electrical connection to either an aluminum or copper conductor. These lugs have 2 openings and are designed for easy installation while maintaining a low resistance high strength connection.

Features

- For use with copper or aluminum conductors
- Manufactured from high strength aluminum alloy extrusion
- Electro-tin plated to ensure minimum contact resistance and corrosion protection
- Connectors are rated for 600V, 90°C [194°F] applications
- The use of oxide inhibitor is recommended for all aluminum terminations

L2A-250-1

c UL us

2-Opening Aluminum Dual-Rated Mechanical Lugs - L2A Series

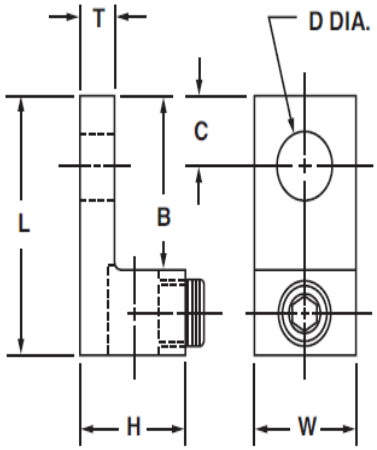
Part Number	Price	Qty	Type	Voltage Rating	Number of Openings	Conductor Material and Conductor Range	Tightening Torque	Conductor Bolt Size	Number of Mounting Holes	Mounting Bolt Size	Material	Drawing Link
L2A-0-1	$2.00	1	Box	600V	2	Copper (1) 14 to 1/0 AWG Aluminum (1) 8 to 1/0 AWG	40 lb•in	Slotted set screw	1	1/4in	Aluminum-tin plated	PDF
L2A-2/0-1	$2.25					Copper (1) 14 to 2/0 AWG Aluminum (1) 8 to 2/0 AWG	120 lb•in	3/16in hex		1/4in		PDF
L2A-250-1	$5.75					Copper (1) 6 AWG-250 MCM Aluminum (1) 6 AWG-250 MCM	225 lb•in	5/16in hex		3/8in		PDF
L2A-350-1	$7.75					Copper (1) 6 AWG-350 MCM Aluminum (1) 6 AWG-350 MCM	225 lb•in	5/16in hex		1/2in		PDF
L2A-600-1	$13.25					Copper (1) 2 AWG-600 MCM Aluminum (1) 2 AWG-600 MCM	400 lb•in	1/2in hex		1/2in		PDF

Note: Use same conductor type, Copper or Aluminum, per opening. Do not mix conductor type in an opening.

PENNUNION™ Mechanical Connectors

2-Opening Aluminum Dual-Rated Mechanical Lugs
L2A Series

2-Opening Aluminum Dual-Rated Mechanical Lugs - L2A Series Dimensions							
Part Number	*Approximate Dimensions in [mm]*						
	L	*W1*	*H*	*T*	*B*	*C*	*D (Dia.)*
L2A-0-1	1.46 [37.08]	1.22 [30.98]	0.79 [20.06]	0.19 [4.82]	0.84 [21.33]	0.44 [11.17]	0.27 [6.85]
L2A-2/0-1	1.46 [37.08]	1.25 [31.75]	0.79 [20.06]	0.19 [4.82]	0.84 [21.33]	0.42 [10.66]	0.27 [6.85]
L2A-250-1	2.56 [65.02]	1.66 [42.16]	1.19 [30.22]	0.25 [6.35]	1.56 [39.62]	0.87 [22.09]	0.39 [9.90]
L2A-350-1	2.87 [72.89]	1.91 [48.54]	1.22 [30.98]	0.25 [6.35]	1.75 [44.45]	0.87 [22.09]	0.56 [14.22]
L2A-600-1	3.19 [81.02]	2.41 [61.12]	1.57 [39.87]	0.44 [11.17]	1.81 [45.97]	0.63 [16.00]	0.53 [13.46]



PENNUNION™ Mechanical Connectors

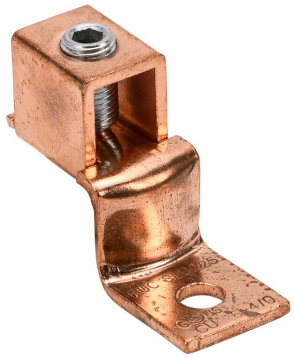
Copper Offset Tongue Mechanical Lugs
SAU & SLU Series

Overview

The SAU and SLU series is copper mechanical lug with an offset tongue. The concave pressure bar and V-bottom collar design assure positive contact and a reliable electrical connection to the copper conductor. These lugs have a single opening and are designed for easy installation for a wide variety of industrial applications.

Features

- Manufactured from electrolytic copper for maximum conductivity and strength
- Unique design of the concave pressure bar and V-bottom collar assures positive contact and firm, permanent grip
- Use with copper conductors only
- Offset tongue for joining a wide range of cable to equipment pads or bars
- Plated steel set screws resist corrosion



SLU-225-1

c UL us

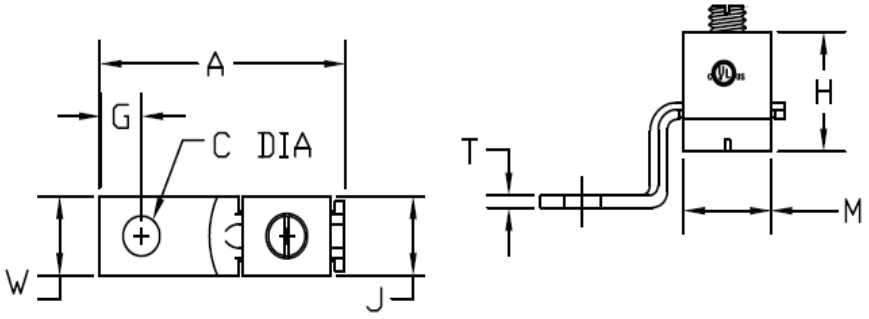
Copper Offset Tongue Mechanical Lugs - SAU & SLU Series

Part Number	Price	Qty	Type	Amperage Rating	Number of Openings	Conductor Material and Conductor Range	Tightening Torque	Conductor Bolt Style	Number of Mounting Holes	Mounting Bolt Size	Material	Drawing Link
SAU-70-1	$2.00	1	Offset tongue	70A	1	Copper (1) 14 AWG solid (1) 4 AWG stranded	14-10 AWG: 20 lb•in 8 AWG: 25 lb•in 6-4 AWG:35 lb•in	Slotted set screw	1	1/4in	Copper-electrolytic	PDF
SLU-125-1	$3.50			125A		Copper (1) 8 AWG solid (1) 1/0 AWG stranded	120 lb•in	3/16in hex		1/4in		PDF
SLU-175-1	$5.50			175A		Copper (1) 4 AWG stranded (1) 3/0 AWG stranded	120 lb•in			3/8in		PDF
SLU-225-1	$10.00			225A		Copper (1) 6 AWG stranded (1) 4/0 AWG stranded	150 lb•in	7/32in hex		5/16in		PDF
SLU-35-1	$1.25			35-50A		Copper (1) 14 AWG solid (1) 6 AWG stranded	14-10 AWG: 20 lb•in 8 AWG: 25 lb•in 6 AWG: 35 lb•in	Slotted pan head		#10		PDF
SLU-70-1	$2.25			70-90A		Copper (1) 8 AWG solid (1) 2 AWG stranded	8 AWG: 40 lb•in 6-4 AWG: 45 lb•in 3 AWG: 50 lb•in 2 AWG:50 lb•in	Slotted set screw		1/4in		PDF

PENNUNION™ Mechanical Connectors

Copper Offset Tongue Mechanical Lugs
SAU & SLU Series

Copper Offset Tongue Mechanical Lugs - SAU & SLU Series Dimensions								
Part Number	Approximate Dimensions in [mm]							
	A	W	G	C (Dia.)	T	M	H	J
SAU-70-1	1.38 [35.05]	0.50 [12.70]	0.26 [6.60]	0.27 [6.85]	0.08 [2.03]	0.43 [10.92]	0.55 [13.97]	0.39 [9.90]
SLU-125-1	1.95 [49.53]	0.63 [16.00]	0.33 [8.38]	0.27 [6.85]	0.12 [3.04]	0.60 [15.24]	0.82 [20.82]	0.63 [16.00]
SLU-175-1	2.20 [55.88]	0.75 [19.05]	0.43 [10.92]	0.41 [10.41]	0.12 [3.04]	0.73 [18.54]	1.04 [26.41]	0.71 [18.03]
SLU-225-1	2.62 [66.54]	0.98 [24.89]	0.48 [12.19]	0.35 [8.89]	0.12 [3.04]	0.98 [24.89]	1.16 [29.46]	0.77 [19.55]
SLU-35-1	1.17 [29.71]	0.38 [9.65]	0.21 [5.33]	0.20 [5.08]	0.06 [1.52]	0.43 [10.92]	0.48 [12.19]	0.31 [7.87]
SLU-70-1	1.55 [39.37]	0.50 [12.70]	0.26 [6.60]	0.27 [6.85]	0.08 [2.03]	0.49 [12.44]	0.64 [16.25]	0.47 [11.93]



PENNUNION™ Mechanical Connectors

Copper Straight Tongue Mechanical Lugs
SAS & SLS Series

SAS-70-1

Overview

The SAS and SLS series are copper mechanical lugs with a compact straight tongue design. These lugs have a single opening and are designed for easy installation for a wide variety of industrial applications.

Features

- Manufactured from electrolytic copper for maximum conductivity and strength
- For use in power and grounding applications
- Use with copper conductors only
- Plated steel set screws resist corrosion
- UL 467 listed and UL 486A-B listed

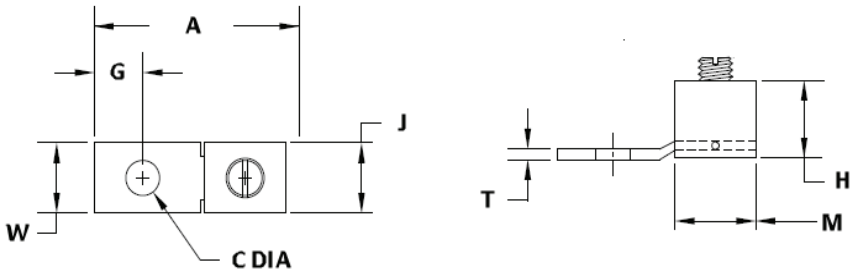
c UL us

Copper Straight Tongue Mechanical Lugs - SAS & SLS Series

Part Number	Price	Qty	Type	Amperage Rating	Number of Openings	Conductor Material and Conductor Range	Tightening Torque	Conductor Bolt Style	Number of Mounting Holes	Mounting Bolt Size	Material	Drawing Link
SAS-70-1	$1.75	1	Straight tongue	70A	1	Copper (1) 14-4 AWG	14-10 AWG: 20 lb•in 8 AWG: 25 lb•in 6-4 AWG: 35 lb•in	Slotted set screw	1	1/4in	Copper-electrolytic	PDF
SLS-35-1	$1.50			35-50A		Copper (1) 14-6 AWG	14-10 AWG: 13 lb•in 8 AWG: 25 lb•in 6 AWG: 25 lb•in	Slotted pan head		#10		PDF

Copper Straight Tongue Mechanical Lugs - SAS & SLS Series Dimensions

Part Number	Approximate Dimensions in [mm]							
	A	W	G	C (Dia.)	T	M	H	J
SAS-70-1	1.26 [32.04]	0.50 [12.70]	0.38 [9.65]	0.27 [6.85]	0.08 [2.03]	0.49 [12.44]	0.54 [13.71]	0.44 [11.17]
SLS-35-1	1.00 [25.40]	0.37 [9.39]	0.24 [6.09]	0.20 [5.08]	0.06 [1.52]	0.37 [9.39]	0.47 [11.93]	0.34 [8.63]



PENNUNION™ Mechanical Connectors

Aluminum Dual-Rated Panelboard Mechanical Lugs PB Series

Overview

The PB series is a heavy-duty high strength aluminum dual-rated connector that makes a reliable electrical connection to either an aluminum or copper conductor. These lugs feature 2, 3, or 4 openings and a stacked space saving design for easy installation while maintaining a low resistance high strength connection.

Features

- Use with copper or aluminum conductors
- Space saving design allows for 2, 3, or 4 openings
- Manufactured from high strength aluminum alloy extrusion
- Electro-tin plated to ensure minimum contact resistance and corrosion protection when used with copper wire
- Rated for 600V, 90°C [194°F] applications
- The use of oxide inhibitor is recommended for all aluminum terminations

PB3-600D1-1

c UL us

Aluminum Dual-Rated Panelboard Mechanical Lugs - PB Series

Part Number	Price	Qty	Type	Voltage Rating	Number of Openings	Conductor Material and Conductor Range	Tightening Torque	Conductor Bolt Style	Number of Mounting Holes	Mounting Bolt Size	Material	Drawing Link
PB2-350S-1	$21.50	1	Panelboard	600V	2	Copper (1) 6 AWG-350 MCM Aluminum (1) 6 AWG-350 MCM	375 lb•in	5/16 in hex	1	5/16in	Aluminum-tin plated	PDF
PB2-600D1-1	$41.50				2	Copper (1) 2 AWG-600 MCM Aluminum (1) 2 AWG-600 MCM	500 lb•in		2	3/8in		PDF
PB2-750D1-1	$47.50				2	Copper (1) 1/0 AWG-750 MCM Aluminum (1) 1/0 AWG-750 MCM	620 lb•in		2			PDF
PB3-600D1-1	$59.50				3	Copper (1) 2 AWG-600 MCM Aluminum (1) 2 AWG-600 MCM	500 lb•in		2			PDF
PB3-750D1-1	$72.00				3	Copper (1) 1/0 AWG-750 MCM Aluminum (1) 1/0 AWG-750 MCM	620 lb•in		2			PDF
PB4-600D1-1	$59.50				4	Copper (1) 2 AWG-600 MCM Aluminum (1) 2 AWG-600 MCM	500 lb•in		2			PDF
PB4-750D1-1	$73.75				4	Copper (1) 1/0 AWG-750 MCM Aluminum (1) 1/0 AWG-750 MCM	620 lb•in		2			PDF

Note: Use same conductor type, Copper or Aluminum, per opening. Do not mix conductor type in an opening.

PENNUNION™ Mechanical Connectors

Aluminum Dual-Rated Panelboard Mechanical Lugs
PB Series

Aluminum Dual-Rated Panelboard Mechanical Lugs - PB Series Dimensions							
Part Number	*Figure Number*	*Approximate Dimensions in [mm]*					
		L	*W*	*H*	*T*	*C*	*E*
PB2-350S-1	1	2.99 [75.94]	1.00 [25.40]	2.01 [51.05]	0.31 [7.87]	0.39 [9.90]	–
PB2-600D1-1	2	4.94 [125.47]	1.50 [38.10]	2.99 [75.94]	0.76 [19.30]	0.39 [9.90]	1.38 [35.05]
PB2-750D1-1	2	4.94 [125.47]	1.57 [39.87]	2.99 [75.94]	0.76 [19.30]	0.39 [9.90]	1.38 [35.05]
PB3-600D1-1	3	4.94 [125.47]	2.68 [68.07]	2.99 [75.94]	0.76 [19.30]	0.39 [9.90]	1.38 [35.05]
PB3-750D1-1	3	4.94 [125.47]	2.83 [71.88]	2.99 [75.94]	0.76 [19.30]	0.39 [9.90]	1.38 [35.05]
PB4-600D1-1	4	4.94 [125.47]	2.68 [68.07]	2.99 [75.94]	0.76 [19.30]	0.39 [9.90]	1.38 [35.05]
PB4-750D1-1	4	4.94 [125.47]	2.83 [71.88]	2.99 [75.94]	0.76 [19.30]	0.39 [9.90]	1.38 [35.05]

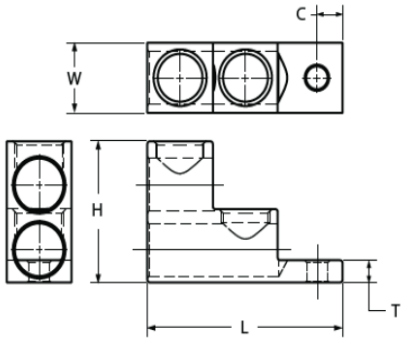


FIGURE 1

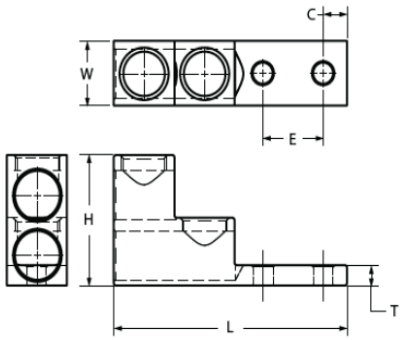


FIGURE 2

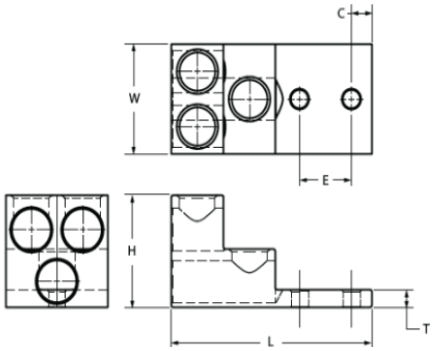


FIGURE 3

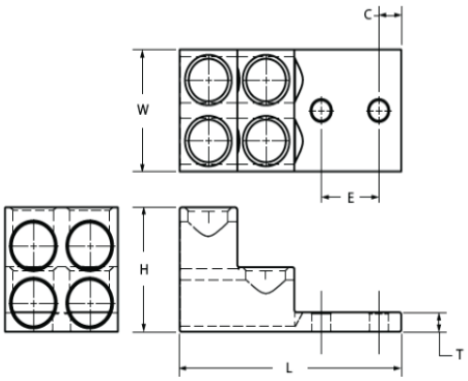


FIGURE 4

PENNUNION™ Mechanical Connectors

Aluminum Neutral Bars
NA Series

Overview

The NA series aluminum neutral bars are manufactured from high strength aluminum alloy and tin plated to maintain a low resistance high strength dual-rated connection. These neutral bars are designed for easy installation, can have up to 20 circuits on a single bar, and can be used in a variety of neutral and grounding applications.

Features

- For use in neutral and grounding applications
- Manufactured from high strength aluminum alloy
- Tin plated
- Screws are made of mild steel and plated
- Dual-rated for copper or aluminum conductors
- UL 467 listed

NA-409-1

c UL us c UL us

Aluminum Neutral Bars - NA Series

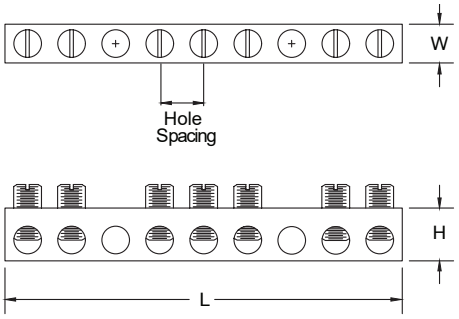
Part Number	Price	Qty	Number of Openings	Number of Circuits	Mounting Hole Position	Conductor Material and Conductor Range	Tightening Torque	Material	Drawing Link
NA-401-1	$1.00	1	3	2	2	Copper 14-4 AWG stranded 14-8 AWG solid Aluminum 8-4 AWG stranded 12-8 AWG solid	Copper 14-8 AWG 20 lb•in 6-4 AWG 31 lb•in Aluminum 14-8 AWG 20 lb•in 6-4 AWG 31 lb•in	Tin-plated aluminum	PDF
NA-402-1	$1.25		5	4	3				PDF
NA-403-1	$1.50		6	5	3				PDF
NA-404-1	$1.75		7	6	4				PDF
NA-405-1	$1.50		6	4	1 and 4				PDF
NA-406-1	$1.75		7	5	1 and 7				PDF
NA-407-1	$1.75		7	5	2 and 6				PDF
NA-408-1	$2.00		8	6	4 and 7				PDF
NA-409-1	$2.25		9	7	3 and 7				PDF
NA-410-1	$2.75		11	9	1 and 11				PDF
NA-411-1	$3.00		12	10	1 and 12				PDF
NA-412-1	$3.50		14	12	1 and 14				PDF
NA-413-1	$4.25		17	15	1 and 17				PDF
NA-414-1	$5.50		22	20	1 and 22				PDF
NA-416-1	$4.25		12	10	3 and 11	Aluminum 8-2 AWG stranded 12-8 AWG solid	Aluminum 12-10 AWG 35 lb•in 8 AWG 40 lb•in 6-4 AWG 45 lb•in 2 AWG 50 lb•in		PDF
NA-417-1	$3.25		3	2	2	Copper 14-2/0 AWG stranded 14-8 AWG solid Aluminum 8-2/0 AWG stranded 12-8 AWG solid	Copper 14-10 AWG 35 lb•in 8-2/0 AWG 120 lb•in Aluminum 14-10 AWG 35 lb•in 8 AWG 50 lb•in 6-2/0 AWG 120 lb•in		PDF
NA-418-1	$5.50		5	3	2 and 4				PDF
NA-419-1	$9.00		8	6	1 and 8				PDF

Note: Use same conductor type, Copper or Aluminum, per opening. Do not mix conductor type in an opening.

PENNUNION™ Mechanical Connectors

Aluminum Neutral Bars
NA Series

Aluminum Neutral Bars - NA Series Dimensions				
Part Number	*Approximate Dimensions in [mm]*			*Hole Spacing*
	L	*W*	*H*	
NA-401-1	0.95 [24.13]	0.33 [8.38]	0.44 [11.17]	0.31 [7.87]
NA-402-1	1.57 [39.87]	0.33 [8.38]	0.44 [11.17]	0.31 [7.87]
NA-403-1	1.88 [47.75]	0.33 [8.38]	0.44 [11.17]	0.31 [7.87]
NA-404-1	2.25 [57.15]	0.33 [8.38]	0.44 [11.17]	0.31 [7.87]
NA-405-1	1.88 [47.75]	0.33 [8.38]	0.44 [11.17]	0.31 [7.87]
NA-406-1	2.25 [57.15]	0.33 [8.38]	0.44 [11.17]	0.31 [7.87]
NA-407-1	2.25 [57.15]	0.33 [8.38]	0.44 [11.17]	0.31 [7.87]
NA-408-1	2.56 [65.02]	0.33 [8.38]	0.44 [11.17]	0.31 [7.87]
NA-409-1	2.87 [72.89]	0.33 [8.38]	0.44 [11.17]	0.31 [7.87]
NA-410-1	3.50 [88.90]	0.33 [8.38]	0.44 [11.17]	0.31 [7.87]
NA-411-1	3.81 [96.77]	0.33 [8.38]	0.44 [11.17]	0.31 [7.87]
NA-412-1	4.43 [112.52]	0.33 [8.38]	0.44 [11.17]	0.31 [7.87]
NA-413-1	5.37 [136.39]	0.33 [8.38]	0.44 [11.17]	0.31 [7.87]
NA-414-1	6.93 [176.02]	0.33 [8.38]	0.44 [11.17]	0.31 [7.87]
NA-416-1	4.83 [122.68]	0.38 [9.65]	0.50 [12.70]	0.40 [10.16]
NA-417-1	1.75 [44.45]	0.63 [16.00]	0.75 [19.05]	0.60 [15.24]
NA-418-1	2.95 [74.93]	0.63 [16.00]	0.75 [19.05]	0.60 [15.24]
NA-419-1	4.75 [120.65]	0.63 [16.00]	0.75 [19.05]	0.60 [15.24]



PENNUNION™ Mechanical Connectors

Copper Neutral Bars
NC Series

Overview

The NC series copper neutral bars are manufactured from high strength copper. These neutral bars are designed for easy installation, can have up to 13 circuits on a single bar and can be used in a variety of neutral and grounding applications.

Features

- Manufactured from high strength copper
- For use in neutral and grounding applications
- Use with copper conductors only
- Screws are made of mild steel and plated
- UL 467 listed

NC-420-1

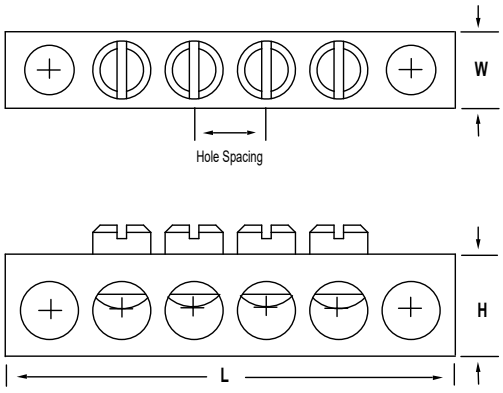
c UL us c UL us

Copper Neutral Bars - NC Series

Part Number	Price	Qty	Number of Openings	Number of Circuits	Mounting Hole Position	Conductor Material and Conductor Range	Tightening Torque	Material	Drawing Link
NC-420-1	$4.00	1	6	4	1 and 6	Copper 14-4 AWG stranded 14-8 AWG solid	Copper 14-8 AWG 20 lb•in 6-4 AWG 31 lb•in	Copper	PDF
NC-421-1	$4.50		7	5	1 and 7				PDF
NC-422-1	$5.25		8	6	1 and 8				PDF
NC-423-1	$9.00		14	12	1 and 14				PDF
NC-424-1	$9.75		15	13	3 and 13				PDF
NC-425-1	$9.75		15	13	6 and 11				PDF
NC-428-1	$9.00		8	6	2 and 7	Copper 14-2 AWG stranded 14-8 AWG solid	Copper 14-8 AWG 20 lb•in 6-4 AWG 45 lb•in 2 AWG 50 lb•in		PDF

Copper Neutral Bars - NC Series Dimensions

Part Number	Approximate Dimensions in [mm]			Hole Spacing
	L	W	H	
NC-420-1	1.94 [49.27]	0.33 [8.38]	0.44 [11.17]	0.31 [7.87]
NC-421-1	2.25 [57.15]	0.33 [8.38]	0.44 [11.17]	0.31 [7.87]
NC-422-1	2.56 [65.02]	0.33 [8.38]	0.44 [11.17]	0.31 [7.87]
NC-423-1	4.43 [112.52]	0.33 [8.38]	0.44 [11.17]	0.31 [7.87]
NC-424-1	4.74 [120.39]	0.33 [8.38]	0.44 [11.17]	0.31 [7.87]
NC-425-1	4.74 [120.39]	0.33 [8.38]	0.44 [11.17]	0.31 [7.87]
NC-428-1	3.25 [82.55]	0.38 [9.65]	0.50 [12.70]	0.40 [10.16]



PENNUNION™ 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.

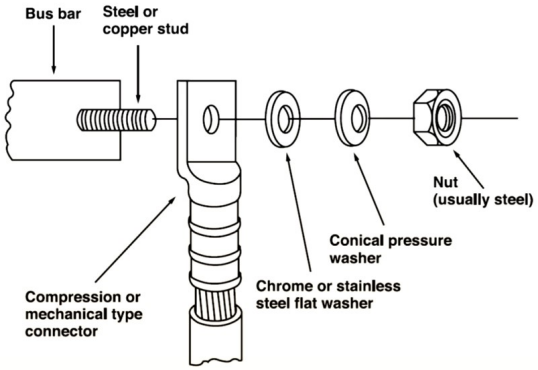


Table 1 to the right shows the recommended tightening torques for silicon bronze, stainless steel, galvanized steel, and lubricated aluminum alloy hardware.

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.

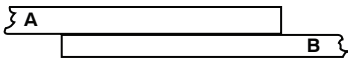
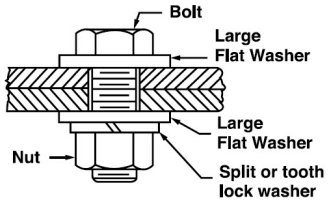
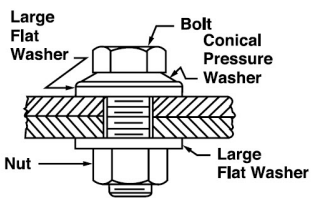


Table 2 - Joining Bus Bar Methods

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.

PENNUNION™ Mechanical Connectors

Standard Barrel 1-Hole Tongue with Inspection Window Copper Compression Lugs - BLU 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 conductors
- Manufactured from high conductivity seamless copper tubing
- Tin-plated to inhibit corrosion
- Beveled entry for easy cable insertion
- Inspection window to ensure full 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
- Note Versa-Crimp® is a registered trademark of HUBBELL Incorporated

BLU-1S-1

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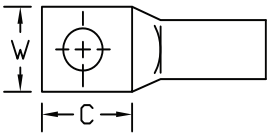
Standard Barrel 1-Hole Tongue with Inspection Window Copper Compression Lugs - BLU Series

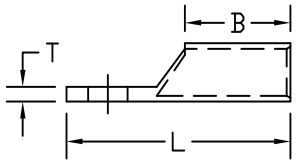
Part Number	Price	Conductor Material and Conductor Size	Stud Size	Die Color Code	Installation Tool	Wire Strip Length	Voltage Rating	Number of Openings	Number of Mounting Holes	Qty	Material
BLU-8S14-1	$1.50	Copper 8 AWG	#10	Red	TDM-250 or TDM-500	1/2in	35 kV	1	1	1	Tin-plated copper
BLU-8S15-1	$1.50		1/4in								
BLU-6S-1	$1.50	Copper 6 AWG	#10	Blue		15/16in					
BLU-6S1-1	$1.50		1/4in								
BLU-4S-1	$2.00	Copper 4 AWG	#10	Gray							
BLU-4S1-1	$2.00		1/4in								
BLU-2S-1	$2.75	Copper 2 AWG	1/4in	Brown		1in					
BLU-2S1-1	$2.75		5/16in								
BLU-1S9-1	$2.75	Copper 1 AWG	1/4in	Green		3/4in					
BLU-1S-1	$2.75		5/16in			1in					
BLU-1S1-1	$2.75		3/8in			1-1/16in					
BLU-1/0S-1	$3.50	Copper 1/0 AWG	5/16in	Pink		1in					
BLU-1/0S1-1	$3.50		3/8in								
BLU-2/0S-21-1	$3.75	Copper 2/0 AWG	5/16in	Black		1-1/16in					
BLU-2/0S-1	$3.75		3/8in								
BLU-3/0S-1	$4.25	Copper 3/0 AWG	3/8in	Orange		1/1/8in					
BLU-3/0S1-1	$4.25		1/2in								
BLU-4/0S-1	$4.25	Copper 4/0 AWG	3/8in	Purple							
BLU-4/0S1-1	$4.25		1/2in								
BLU-025S2-1	$8.25	Copper 250 MCM	3/8in	Yellow		1-3/16in					
BLU-025S-1	$8.25		1/2in								
BLU-030S-7-1	$10.50	Copper 300 MCM	3/8in	White	TDM-500						
BLU-030S-1	$10.50		1/2in								
BLU-035S1-1	$10.50	Copper 350 MCM	3/8in	Red		1-1/4in					
BLU-035S-1	$10.50		1/2in								
BLU-040S-4-1	$12.75	Copper 400 MCM	1/2in	Blue		1-5/16in					
BLU-040S-1	$12.75		5/8in								
BLU-050S2-1	$14.75	Copper 500 MCM	1/2in	Brown		1-1/2in					
BLU-050S-1	$14.75		5/8in								

PENNUNION™ Mechanical Connectors

Standard Barrel 1-Hole Tongue with Inspection Window Copper Compression Lugs - BLU Series

Standard Barrel 1-Hole Tongue Copper Compression Lugs - BLU Series Dimensions						
Part Number	Approximate Dimensions in [mm]					
	W	C	T	B	L	Drawing Link
BLU-8S14-1	0.37 [9.39]	0.50 [12.70]	0.08 [2.03]	0.41 [10.41]	1.09 [27.68]	PDF
BLU-8S15-1	0.37 [9.39]	0.56 [14.22]	0.08 [2.03]	0.41 [10.41]	1.14 [28.95]	PDF
BLU-6S-1	0.41 [10.41]	0.53 [13.46]	0.09 [2.28]	0.81 [20.57]	1.51 [38.35]	PDF
BLU-6S1-1	0.41 [10.41]	0.69 [17.52]	0.09 [2.28]	0.81 [20.57]	1.67 [42.41]	PDF
BLU-4S-1	0.48 [12.19]	0.56 [14.22]	0.09 [2.28]	0.81 [20.57]	1.61 [40.89]	PDF
BLU-4S1-1	0.48 [12.19]	0.69 [17.52]	0.09 [2.28]	0.81 [20.57]	1.67 [42.41]	PDF
BLU-2S-1	0.59 [14.98]	0.69 [17.52]	0.11 [2.79]	0.88 [22.35]	1.73 [43.94]	PDF
BLU-2S1-1	0.59 [14.98]	0.75 [19.05]	0.11 [2.79]	0.88 [22.35]	1.86 [47.24]	PDF
BLU-1S9-1	0.67 [17.01]	0.56 [14.22]	0.11 [2.79]	0.62 [15.74]	1.42 [36.06]	PDF
BLU-1S-1	0.67 [17.01]	0.75 [19.05	0.11 [2.79]	0.88 [22.35]	1.86 [47.24]	PDF
BLU-1S1-1	0.67 [17.01]	0.87 [22.09]	0.11 [2.79]	0.94 [23.87]	2.05 [52.07]	PDF
BLU-1/0S-1	0.73 [18.54]	0.87 [22.09]	0.12 [3.04]	0.88 [22.35]	2.05 [52.07]	PDF
BLU-1/0S1-1	0.73 [18.54]	0.87 [22.09]	0.12 [3.04]	0.88 [22.35]	2.05 [52.07]	PDF
BLU-2/0S-21-1	0.81 [20.57]	0.81 [20.57]	0.12 [3.04]	0.94 [23.87]	2.06 [52.32]	PDF
BLU-2/0S-1	0.81 [20.57]	0.87 [22.09]	0.12 [3.04]	0.94 [23.87]	2.11 [53.59]	PDF
BLU-3/0S-1	0.89 [22.60]	0.87 [22.09]	0.12 [3.04]	1.00 [25.4]	2.25 [57.15]	PDF
BLU-3/0S1-1	0.89 [22.60]	1.12 [28.44]	0.12 [3.04]	1.00 [25.4]	2.50 [63.5]	PDF
BLU-4/0S-1	1.00 [25.4]	0.87 [22.09]	0.14 [3.55]	1.00 [25.4]	2.31 [58.67]	PDF
BLU-4/0S1-1	1.00 [25.4]	1.09 [27.68]	0.14 [3.55]	1.00 [25.4]	2.50 [63.5]	PDF
BLU-025S2-1	1.09 [27.68]	1.13 [28.70]	0.15 [3.81]	1.06 [26.92]	2.69 [68.32]	PDF
BLU-025S-1	1.09 [27.68]	1.13 [28.70]	0.15 [3.81]	1.06 [26.92	2.69 [68.32]	PDF
BLU-030S-7-1	1.19 [30.22]	1.09 [27.68]	0.16 [4.06]	1.06 [26.92	2.5 [63.5]	PDF
BLU-030S-1	1.19 [30.22]	1.09 [27.68]	0.16 [4.06]	1.06 [26.92	2.75 [69.85]	PDF
BLU-035S1-1	1.28 [32.51]	0.88 [22.35]	0.17 [4.31]	1.13 [28.70]	2.63 [66.80]	PDF
BLU-035S-1	1.25 [31.75]	1.16 [29.46]	0.17 [4.31]	1.13 [28.70]	2.91 [73.91]	PDF
BLU-040S-4-1	1.39 [35.30]	1.19 [30.22]	0.19 [4.82]	1.19 [30.22]	3.06 [77.72]	PDF
BLU-040S-1	1.39 [35.30]	1.44 [36.57]	0.19 [4.82]	1.13 [28.70]	3.31 [84.07]	PDF
BLU-050S2-1	1.53 [38.86]	1.13 [28.70]	0.21 [5.33]	1.38 [35.05]	3.28 [83.31]	PDF
BLU-050S-1	1.53 [38.86]	1.44 [36.57]	0.21 [5.33]	1.38 [35.05]	3.63 [92.20]	PDF





PENNUNION™ Mechanical Connectors

Standard Barrel 2-Hole Tongue with Inspection Window Copper Compression Lugs BLU Series

BLU-035D-1

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 conductors
- Manufactured from high conductivity seamless copper tubing
- Tin-plated to inhibit corrosion
- Beveled entry for easy cable insertion
- Inspection window to ensure full 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
- Note Versa-Crimp® is a registered trademark of HUBBELL Incorporated

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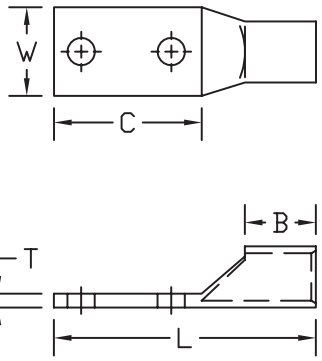
Standard Barrel 2-Hole Tongue with Inspection Window Copper Compression Lugs - BLU Series

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
BLU-8D-2TC14-1	$4.75	Copper 8 AWG	1/4in	0.63in	Red	TDM-250 or TDM-500	1/2in	35 kV	1	2	1	Tin-plated copper
BLU-8D-2TC14E2-1	$4.75			0.75in								
BLU-6D-2TC14-1	$5.00	Copper 6 AWG	1/4in	0.63in	Blue		15/16in					
BLU-6D-2TC14E1-1	$5.00			1.00in								
BLU-4D-2TC14E1-1	$5.75	Copper 4 AWG	1/4in	1.00in	Gray							
BLU-4D-2TC38-1	$5.75		3/8in	1.00in								
BLU-2D-2TC14-1	$6.50	Copper 2 AWG	1/4in	0.63in	Brown		1in					
BLU-2D-2TC38-1	$6.50		3/8in	1.00in								
BLU-1D-2TC14-1	$7.25	Copper 1 AWG	1/4in	0.63in	Green		1-1/16in					
BLU-1D-2TC516E6-1	$7.25		5/16in	0.88in								
BLU-1/0D-2TC14-1	$8.50	Copper 1/0 AWG	1/4in	0.63in	Pink		1in					
BLU-1/0D-2TC38-1	$8.50		3/8in	1.00in								
BLU-1/0D2-1	$8.50		1/2in	1.75in								
BLU-2/0D-2TC38-1	$9.25	Copper 2/0 AWG	3/8in	1.00in	Black		1-1/16in					
BLU-2/0D-1	$9.25		1/2in	1.75in								
BLU-3/0D-2TC38-1	$9.75	Copper 3/0 AWG	3/8in	1.00	Orange		1-1/8in					
BLU-3/0D-1	$9.75		1/2in	1.75in								
BLU-4/0D-2TC38-1	$10.00	Copper 4/0 AWG	3/8in	1.00	Purple							
BLU-4/0D-1	$10.00		1/2in	1.75in								
BLU-025D-2TC38-1	$10.50	Copper 250 MCM	3/8in	1.00	Yellow		1-3/16in					
BLU-025D-1	$10.50		1/2in	1.75in								
BLU-030D-2TC38-1	$15.00	Copper 300 MCM	3/8in	1.00	White	TDM-500						
BLU-030D-1	$15.00		1/2in	1.75in								
BLU-035D-2TC38-1	$16.00	Copper 350 MCM	3/8in	1.00	Red		1-1/4in					
BLU-035D-1	$16.00		1/2in	1.75in								
BLU-040D-2TC38-1	$16.00	Copper 400 MCM	3/8in	1.00	Blue		1-5/16in					
BLU-040D-1	$16.00		1/2in	1.75in								
BLU-050D-2TC38-1	$18.50	Copper 500 MCM	3/8in	1.00	Brown		1-1/2in					
BLU-050D-1	$18.50		1/2in	1.75in								

PENNUNION™ Mechanical Connectors

Standard Barrel 2-Hole Tongue with Inspection Window Copper Compression Lugs - BLU Series

Standard Barrel 2-Hole Tongue Copper Compression Lugs - BLU Series Dimensions						
Part Number	Approximate Dimensions in [mm]					
	W	C	T	B	L	Drawing Link
BLU-8D-2TC14-1	0.41 [10.41]	1.22 [30.98]	0.08 [2.03]	0.41 [10.41]	1.78 [45.21]	PDF
BLU-8D-2TC14E2-1	0.41 [10.41]	1.36 [34.54]	0.08 [2.03]	0.41 [10.41]	1.88 [47.75]	PDF
BLU-6D-2TC14-1	0.41 [10.41]	1.22 [30.98]	0.09 [2.28]	0.81 [20.57]	2.25 [57.15]	PDF
BLU-6D-2TC14E1-1	0.41 [10.41]	1.61 [40.89]	0.09 [2.28]	0.81 [20.57]	2.67 [67.81]	PDF
BLU-4D-2TC14E1-1	0.50 [12.70]	1.61 [40.89]	0.09 [2.28]	0.81 [20.57]	2.68 [68.07]	PDF
BLU-4D-2TC38-1	0.61 [15.49]	1.81 [45.97]	0.08 [2.03]	0.81 [20.57]	2.87 [72.89]	PDF
BLU-2D-2TC14-1	0.59 [14.98]	1.22 [30.98]	0.11 [2.79]	0.88 [22.35]	2.32 [58.92]	PDF
BLU-2D-2TC38-1	0.59 [14.98]	1.83 [46.48]	0.11 [2.79]	0.88 [22.35]	2.96 [75.18]	PDF
BLU-1D-2TC14-1	0.67 [17.01]	1.22 [30.98]	0.10 [2.54]	0.94 [23.87]	2.41 [61.21]	PDF
BLU-1D-2TC516E6-1	0.67 [17.01]	1.62 [41.14]	0.10 [2.54]	0.94 [23.87]	2.79 [70.86]	PDF
BLU-1/0D-2TC14-1	0.74 [18.79]	1.22 [30.98]	0.11 [2.79]	0.88 [22.35]	2.44 [61.97]	PDF
BLU-1/0D-2TC38-1	0.74 [18.79]	1.83 [46.48]	0.11 [2.79]	0.88 [22.35]	3.02 [76.70]	PDF
BLU-1/0D2-1	0.82 [20.82]	2.82 [71.62]	0.10 [2.54]	0.89 [22.60]	3.98 [101.09]	PDF
BLU-2/0D-2TC38-1	0.82 [20.82]	1.83 [46.48]	0.12 [3.04]	0.94 [23.87]	3.08 [78.23]	PDF
BLU-2/0D-1	0.82 [20.82]	2.88 [73.15]	0.12 [3.04]	0.94 [23.87]	4.13 [104.90]	PDF
BLU-3/0D-2TC38-1	0.89 [22.60]	1.83 [46.48]	0.13 [3.30]	1.00 [25.40]	3.24 [82.29]	PDF
BLU-3/0D-1	0.89 [22.60]	2.88 [73.15]	0.13 [3.30]	1.00 [25.40]	4.25 [107.95]	PDF
BLU-4/0D-2TC38-1	1.00 [25.40]	1.83 [46.48]	0.14 [3.55]	1.00 [25.40]	3.30 [83.82]	PDF
BLU-4/0D-1	1.00 [25.40]	2.88 [73.15]	0.14 [3.55]	1.00 [25.40]	4.31 [109.47]	PDF
BLU-025D-2TC38-1	1.09 [27.68]	1.83 [46.48]	0.16 [4.06]	1.06 [26.92]	3.43 [87.12]	PDF
BLU-025D-1	1.09 [27.68]	2.88 [73.15]	0.16 [4.06]	1.06 [26.92]	4.44 [112.77]	PDF
BLU-030D-2TC38-1	1.19 [30.22]	1.83 [46.48]	0.16 [4.06]	1.06 [26.92]	3.50 [88.90]	PDF
BLU-030D-1	1.19 [30.22]	2.88 [73.15]	0.16 [4.06]	1.06 [26.92]	4.50 [114.30]	PDF
BLU-035D-2TC38-1	1.28 [32.51]	1.83 [46.48]	0.17 [4.31]	1.13 [28.70]	3.61 [91.69]	PDF
BLU-035D-1	1.28 [32.51]	2.88 [73.15]	0.17 [4.31]	1.13 [28.70]	4.63 [117.60]	PDF
BLU-040D-2TC38-1	1.39 [35.30]	1.83 [46.48]	0.19 [4.82]	1.19 [30.22]	3.74 [94.99]	PDF
BLU-040D-1	1.39 [35.30]	2.88 [73.15]	0.19 [4.82]	1.19 [30.22]	4.75 [120.65]	PDF
BLU-050D-2TC38-1	1.53 [38.86]	1.83 [46.48]	0.21 [5.33]	1.38 [35.05]	3.99 [101.34]	PDF
BLU-050D-1	1.53 [38.86]	2.88 [73.15]	0.21 [5.33]	1.38 [35.05]	5.00 -127.00]	PDF



PENNUNION™ 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

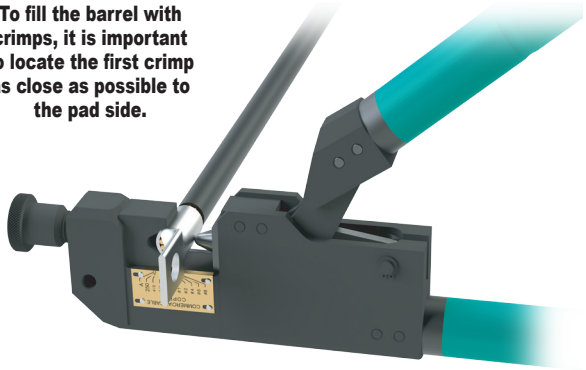
- Dieless - no dies to buy or lose
- Compression connectors are UL listed and CSA certified when installed in accordance with manufacturer's installation instructions
- Quality durable steel
- Easily adjustable tool settings
- Easy-to-read settings are provided on calibrated index plates, one for AL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

TDM-250

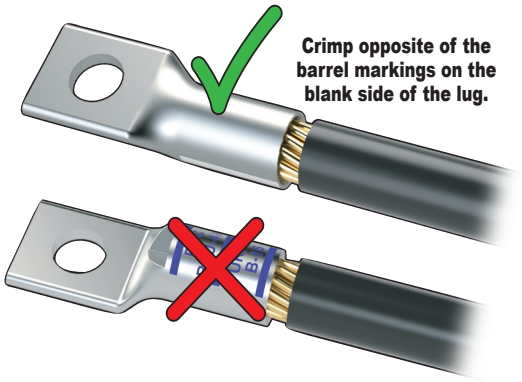
Hand - Operated Crimp Tools								
Part Number	*Price*	*Qty*	*Type*	*Crimp Profile*	*Wire Range*	*Overall Length*	*Weight*	*Material*
TDM-250	$361.25	1	Telescopic handle with rubberized non-slip grip	Indent	8 AWG-250 MCM copper and 8-4AWG aluminum	26.0in [660mm]	9.5 lbs	Steel
TDM-500	$506.25				8 AWG-500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

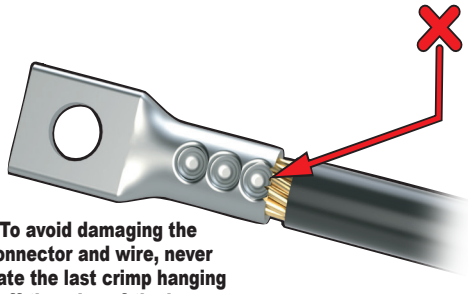
Crimp Tools Instructions

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

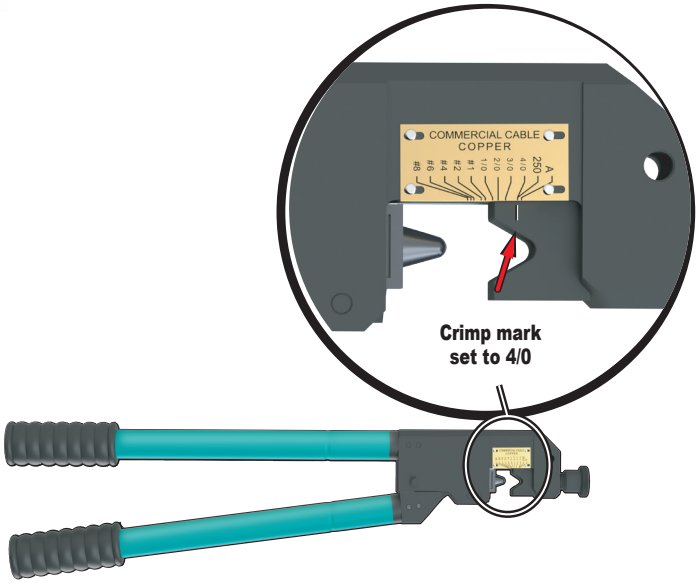


Crimp opposite of the barrel markings on the blank side of the lug.





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

PENNUNION™ Mechanical Connectors

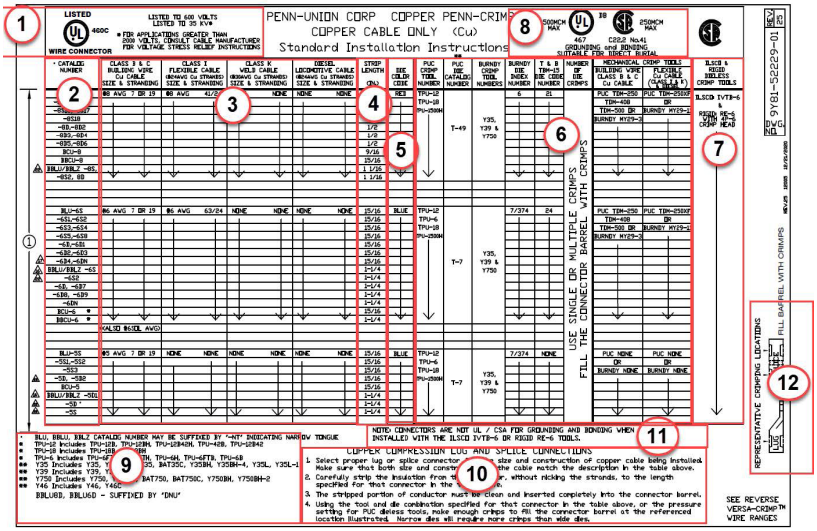
Standard Installation Instructions for Copper Compression Lugs - BLU Series

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.

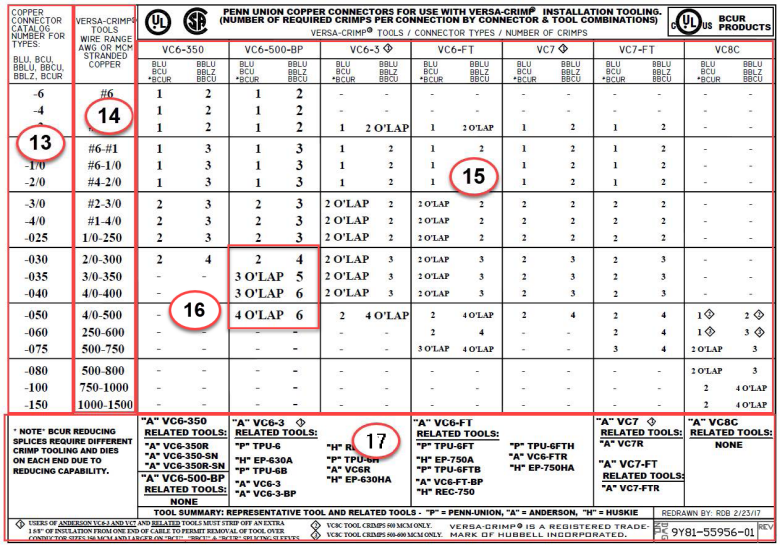
This information is supplied by Penn-Union in the form of an insert/stuffer sheet, available in the packaging of each part number.

Information Found in the Penn-Union Inserts



Insert Page 1	
1	UL POWER rating: UL 486A, CSA C22.2 NO. 65
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 power and UL/CSA Ground/Bond and Direct Burial ratings
7	Tools that retain UL Power ratings only
8	UL/CSA Grounding and Bonding and Direct Burial: UL 467, CSA C22.2 NO.41
9	List of additional related crimping tools
10	Instructions on how to crimp the connector
11	Note: Connectors are not UL/CSA for Ground and Bonding when installed with Ilsco IVTB-6 or Rigid RE-6 tools
12	Representative image of crimp locations on the connector barrel

Insert Page 2	
13	Connector Series
14	Versa-Crimp ® tool wire range
15	List of Vesa-Crimp Tools, connector types per tool type and number of crimps
16	Number of crimps: For Example 2 = two crimps on the barrel 3 O'LAP = 3 overlapping crimps on the barrel
17	List of additional related tools



PENNUNION™ Mechanical Connectors

Wire Size Recommendations for Copper Compression Lugs - BLU Series

Copper Connector 1 & 2 Hole Lugs Size	Class B&C Building Wire CU Cable Size & Stranding	Class I Weld Cable (#24 AWG CU Strands) Size & Stranding	Class K Weld Cable (#30 AWG CU Strands) Size & Stranding	Diesel Locomotive Cable (#24 AWG CU Strands) Size & Stranding	Class H Cable (NO. & DIA. of Wire) Size & Stranding	Class G Cable (NO. & DIA. of Wire) Size & Stranding	Class M Flexible Cable (#34 AWG CU Strands) Size & Stranding	Metric Cable Wire Size Range Copper Cable Only Metric Size & Dia.	Navy Cable	Air Craft
8 AWG	#8 AWG 7 or 19	#8 AWG 41 / 24	None	None	#8 AWG 133 / 0.0111	#8 AWG 49 / 0.0184	#8 AWG 420 / 34	$6mm^2$ 3.21mm	#23	AN-8
6 AWG	#6 AWG 7 or 19	#6 AWG 63 / 24	None	None	#7 AWG 133 / 0.0125	#7 AWG 49 / 0.0206	#7 AWG 532 / 34	$10mm^2$ 4.12mm	None	None
5 AWG	#5 AWG 7 or 19	None	None	None	#6 AWG 133 / 0.0140	#6 AWG 49 / 0.0231	#6 AWG 665 / 34	$16mm^2$ 5.18mm	#30	AN-6
4 AWG	#4 AWG 7 or 19	None	None	None	#5 AWG 133 / 0.0158	#5 AWG 49 / 0.0260	#5 AWG 836 / 34	$20mm^2$ 5.72mm	#40	None
3 AWG	#3 AWG 7 or 19	#4 AWG 105 / 24	#4 AWG 420 / 30	#4 AWG 105 / 24	#4 AWG 133 / 0.0177	#4 AWG 49 / 0.0292	#4 AWG 1064 / 34	$25mm^2$ 6.60mm	#50	AN-4
2 AWG	#2 AWG 7 or 19	None	None	None	#3 AWG 133 / 0.0199	#3 AWG 49 / 0.0328	#3 AWG 1323 / 34	$30mm^2$ 7.01mm	#60	None
1 AWG	#1 AWG 19 or 37	#2 AWG 161 / 24	#2 AWG 665 / 30	#2 AWG 150 / 24	#2 AWG 133 / 0.0223	#2 AWG 49 / 0.0368	#2 AWG 1666 / 34	$40mm^2$ 8.20mm	#75	AN-2
1/0 AWG	#1/0 AWG 19 or 37	None	#1 AWG 836 / 30	#1 AWG 225 / 24	#1 AWG 259 / 0.0180	#1 AWG 133 / 0.0251	#1 AWG 2107 / 34	$50mm^2$ 9.27mm	#100	AN-1
2/0 AWG	#2/0 AWG 19 or 37	#1/0 AWG 266 / 24	#1/0 AWG 1064 / 30	#1/0 AWG 275 / 24	#1/0 AWG 259 / 0.0202	#1/0 AWG 133 / 0.0282	#1/0 AWG 2646 / 34	$70mm^2$ 10.92mm	#125	AN-1/0
3/0 AWG	#3/0 AWG 19 or 37	#2/0 AWG 342 / 24	#2/0 AWG 1323 / 30	#2/0 AWG 325 / 24	#2/0 AWG 259 / 0.0227	#2/0 AWG 133 / 0.0316	None	$85mm^2$ 11.94mm	#150	None
4/0 AWG	#4/0 AWG 19 or 37	None	#3/0 AWG 1666 / 30	#3/0 AWG 450 / 24	#3/0 AWG 259 / 0.0255	#3/0 AWG 133 / 0.0355	#2/0 AWG 3325 / 34	$95mm^2$ 12.8mm	#200	AN 2/0
250 MCM	250 MCM 37 or 61	None	None	None	None	None	#3/0 AWG 4256 / 34	$120mm^2$ 14.4mm	None	None
350 MCM	350 MCM 37 or 61	None	None	262 MCM 650 / 24	250 MCM 427 / 0.0242	250 MCM 259 / 0.0311	None	$180mm^2$ 17.42mm	#350	None
400 MCM	400 MCM 37 or 61	None	None	313 MCM 775 / 24	300 MCM 427 / 0.0265	250 MCM 259 / 0.0340	250 MCM 6384 /34	$185mm^2$ 17.80mm	#4000	None
500 MCM	500 MCM 37 or 61	350 MCM 882 / 24	None	373 MCM 925 / 24	400 MCM 427 / 0.0306	400 MCM 259 / 0.0393	350 MCM 8806 /34	$240mm^2$ 20.30mm	None	None