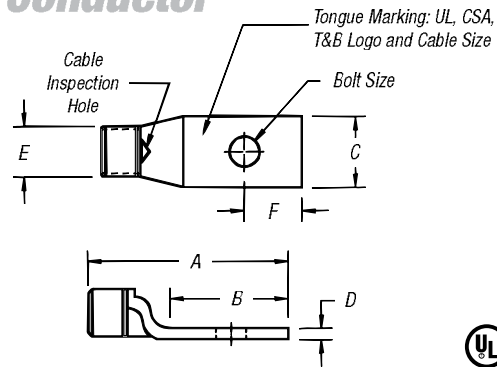


## Compression Connectors for Copper Conductor

### One-Hole Lugs — Standard Barrel 600V to 35kV

**Material:** High-Conductivity Wrought Copper

**Finish:** Electro Tin Plate



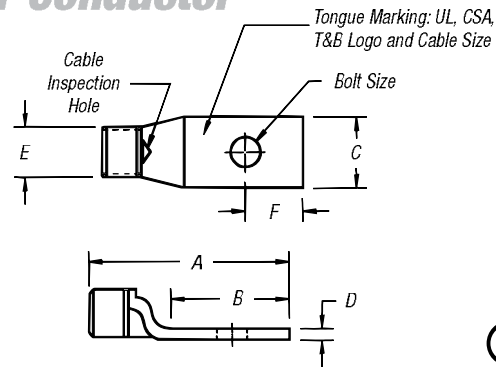
CAT. NO.	WIRE SIZE			DIMENSIONS (IN.)						DIE CODE	DIE COLOR
	CODE	FLEX CLASS G, H, I, K, M†	BOLT SIZE	A	B	C	D	E	F		
54101			¼	1.23	.56	.50	.05	.20	¼		
256-30695-1351	#14-10 AWG		#8	1.36	.68	.36	.05	.20	¼	ERG4002	"C" NEST
256-30695-1352			¼	1.36	.68	.41	.05	.20	¼	ERG4005	
256-30695-263			¼	1.69	.81	.50	.07	.20	¼		
54104			#10	1.16	.50	.39	.08	.25	½	21	RED
54130	#8 AWG	23 Navy	¼	1.20	.61	.45	.07	.25	¼	21	
54131		#8 Weld	⅝	1.33	.64	.56	.05	.25	⅜	21	
54132		37/24 = 14.9 kcmil	¾	1.33	.64	.56	.05	.25	½	21	
256-30695-424			½	1.75	1.31	1.00	.13	.25	½	21	
256-30695-1361			#12	1.23	.53	.44	.07	.31	⅜	24	BLUE
54134	#6 AWG	#30 Navy	#10	1.23	.53	.44	.07	.31	½	24	
54105		#6 Weld	¼	1.23	.53	.44	.07	.31	½	24	
54135		61/24 = 24.6 kcmil	⅝	1.41	.67	.60	.07	.31	⅝	24	
54136		133/.014	¾	1.41	.67	.60	.07	.31	¾	24	
256-30695-282			¾	1.41	.75	.56	.06	.31	¾	24	
256-30695-422			½	1.75	1.31	1.00	.13	.31	½	24	
256-30695-1362			#12	1.38	.60	.55	.09	.37	¼	29	GRAY
54138	#4 AWG	#4 Weld	#10	1.38	.60	.55	.09	.37	¼	29	
54106		40-50 Navy	¼	1.38	.60	.55	.09	.37	¼	29	
54139		91/24 = 36.7 kcmil	⅝	1.42	.66	.61	.07	.37	⅝	29	
54140		133/.0177	¾	1.42	.66	.61	.07	.37	¾	29	
256-30695-233		49/.029	¾	1.56	.75	.59	.06	.37	¾	29	
256-30695-264		#5 91/24	½	2.20	1.40	1.00	.06	.37	½	29	
54107			¼	1.50	.65	.59	.11	.41	¼	33	BROWN
54142-TB	#2 AWG	#60 Navy	⅝	1.73	.88	.59	.11	.41	⅝	33	
54143-TB		125/24 = 50.5 kcmil	¾	1.65	.80	.59	.11	.41	¾	33	
54145-TB		#3 Weld	½	1.92	1.08	.75	.08	.41	½	33	
54108		75 Navy, #2 Weld	¼	1.50	.65	.68	.11	.47	¼	37	
54147	#1 AWG	150/24 = 60.5 kcmil	⅝	1.73	.93	.68	.11	.47	⅝	37	
54148		175/24 = 70.6 kcmil	¾	1.78	.98	.68	.11	.47	¾	37	
54150		133/.0223	½	2.10	1.25	.76	.11	.47	½	37	
54152-TB		#100 Navy	¼	1.60	.65	.75	.13	.52	¼	42	
54153-TB	1/0 AWG	#1 Weld	⅝	1.83	.88	.75	.13	.52	⅝	42	
54109		225/24 = 90.8 kcmil	¾	1.88	.93	.75	.13	.52	¾	42	
54155-TB		133/.0254	½	2.20	1.25	.75	.13	.52	½	42	
256-30695-1383			¾	2.54	1.50	.88	.13	.52	¾	42	
54157			¼	1.65	.65	.83	.13	.57	¼	45	BLACK
54158	2/0 AWG	125 Navy	⅝	1.88	.88	.83	.13	.57	⅝	45	
54110		1/0 Weld	¾	1.93	.93	.83	.13	.57	¾	45	
54160		275/24 = 111 kcmil	¾	2.25	1.25	.83	.13	.57	¾	45	
256-30695-131		427/.0155	½	2.25	1.25	.83	.13	.57	½	45	
256-30695-131			¾	2.56	1.50	.83	.13	.57	¾	45	

† Contact Technical Services for specific stranding listings

Tooling: pp. F-80-F-100

Die Selector Chart: pp. F-101-F-104

## Compression Connectors for Copper Conductor



CAT. NO.	WIRE SIZE			DIMENSIONS (IN.)							DIE CODE	DIE COLOR
	CODE	FLEX CLASS G, H, I, K, M†	BOLT SIZE	A	B	C	D	E	F			
54162-TB		150 Navy, 2/0 Weld	¼	1.75	.65	.92	.13	.63	¼	50	ORANGE	
54163-TB	3/0 AWG	325/24 = 131 kcmil	⅙	1.98	.88	.92	.13	.63	⅝	50		
54111		133/.0316, 259/.0227	⅝	2.03	.93	.92	.13	.63	⅝	50		
54165-TB		427/.0177	½	2.35	1.25	.92	.13	.63	½	50		
54167		200 Navy	¼	1.90	.65	1.03	.14	.70	¼	54	PURPLE	
54168	4/0 AWG	3/0 Weld	⅙	2.13	.87	1.03	.14	.70	⅝	54		
54112		450/24 = 182 kcmil	⅝	2.18	.93	1.03	.14	.70	⅝	54		
54170		703/.0154	½	2.50	1.25	1.03	.14	.70	½	54		
256-30695-1174			¾	2.86	1.56	1.03	.14	.70	¾	54	54	
58161		4/0 Weld	¼	2.23	.78	1.25	.15	.79	⅝	62	YELLOW	
58162		550/24 = 222 kcmil	⅙	2.33	.88	1.25	.15	.79	⅝	62		
58163		133/.0399	⅝	2.38	.93	1.25	.15	.79	⅝	62		
58165		259/.0286	½	2.76	1.25	1.25	.15	.79	½	62		
58166		637/.0183	⅝	3.03	1.58	1.25	.15	.79	⅝	62		
54172-TB			¼	2.00	.65	1.13	.14	.77	½	62		
54173	250 kcmil	250 Navy	⅙	2.23	.88	1.13	.14	.77	⅝	62	WHITE	
54174			⅝	2.28	.93	1.13	.14	.77	⅝	62		
54113			½	2.60	1.25	1.13	.14	.77	½	62		
58168			250 Weld, 650/24 = 262 kcmil, 259/.0311, 703/.0189	½	2.70	1.25	1.25	.15	.85	½		66
54178	300 kcmil	300 Navy	⅙	2.33	.88	1.25	.15	.85	⅝	66	WHITE	
54179			⅝	2.43	.93	1.25	.15	.85	⅝	66		
54114			½	2.70	1.25	1.25	.15	.85	½	66		
54181			⅝	3.03	1.58	1.25	.15	.85	¾	66		
58171		300 Weld, 259/.034, 427/.0265, 889/.0183 775/24 = 313 kcmil	½	2.85	1.25	1.36	.18	.93	½	71	RED	
256-30695-112			⅝	2.90	1.13	1.36	.18	.93	½	71		
54115	350 kcmil	350 Navy	½	2.85	1.25	1.36	.18	.93	½	71		
54183			⅝	3.21	1.58	1.36	.18	.93	¾	71		
58174		350 Weld, 259/.0368, 427/.0285, 703/.0224, 889/.0201	½	3.35	1.25	1.61	.22	1.09	½	76	BLUE	
54116	400 kcmil	400 Navy	½	3.20	1.25	1.41	.17	.96	½	76		
54185			⅝	3.53	1.58	1.41	.17	.96	¾	76		

† Contact Technical Services for specific stranding listings

Tooling: pp. F-80-F-100

Die Selector Chart: pp. F-101-F-104

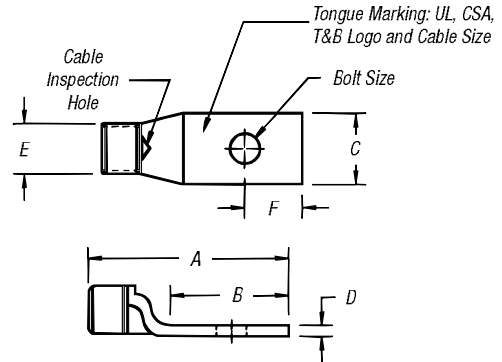
Connectors & Grounding — Blackburn® Compression Connectors Featuring the Color-Keyed® System

## Compression Connectors for Copper Conductor

### One-Hole Lugs — Standard Barrel 600V to 35kV (continued)

**Material:** High-Conductivity Wrought Copper

**Finish:** Electro Tin Plate



CAT. NO.	WIRE SIZE			DIMENSIONS (IN.)						DIE CODE	DIE COLOR
	CODE	FLEX CLASS G, H, I, K, M†	BOLT SIZE	A	B	C	D	E	F		
256-30695-1403		400 Weld 925/24 = 373 kcmil	3/8	3.31	1.31	1.61	.22	1.04	3/8	80	N/A
58177		259/.0393 or 427/.0306	1/2	3.31	1.25	1.61	.22	1.04	1/2	80	
256-30695-339			3/8	3.10	1.00	1.61	.22	1.10	3/8	87	BROWN
54118	500 kcmil	500 Navy	1/2	3.30	1.25	1.61	.22	1.10	1/2	87	
54187			3/8	3.63	1.58	1.61	.22	1.10	3/8	87	
58180		450 Flex, 1127, 4522 1100/24 = 444 kcmil	3/8	3.79	1.58	1.75	.24	1.20	3/8	94	GREEN
256-30695-1370			1/2	3.65	1.44	1.75	.24	1.20	3/16	94	
54120	600 kcmil		3/8	3.79	1.58	1.75	.24	1.20	3/8	94	
54122-TB	700 kcmil		3/8	3.68	1.58	1.84	.23	1.26	3/8	99	PINK
256-30695-1404			3/8	3.29	1.29	1.81	.28	1.25	21/32	99	
256-30695-1405		1325/24 = 535 kcmil	1/2	3.29	1.29	1.81	.28	1.25	21/32	99	
256-30695-840		500 Flex 427/.0342	1/2	4.00	1.69	1.81	.28	1.25	31/64	99	
58182		259, 4125, 5054	3/8	3.83	1.58	1.81	.28	1.25	3/8	99	BLACK
256-30695-193			1/2	4.00	1.69	1.94	.27	1.33	31/64	106	
54123-TB	750 kcmil	600 Flex 427	3/8	3.87	1.58	1.94	.27	1.33	3/8	106	
58184		1600/24 = 646 kcmil	3/8	3.80	1.58	1.94	.27	1.33	3/8	106	ORANGE
54124-TB	800 kcmil	800 Navy	3/8	4.04	1.58	2.01	.27	1.38	3/8	107	
256-30695-843		1925/24 = 777 kcmil	1/2	4.31	1.81	2.17	.31	1.50	7/8	115	YELLOW
54126	900 kcmil		3/8	4.15	1.58	2.17	.31	1.50	3/8	115	
54126		900 Navy	3/8	4.15	1.58	2.17	.31	1.50	3/8	115	
54128	1000 kcmil	1000 Navy	3/8	4.09	1.58	2.27	.30	1.55	3/8	125	N/A

† Contact Technical Services for specific stranding listings

Tooling: pp. F-80-F-100

Die Selector Chart: pp. F-101-F-104

Note: Angled Lugs can be readily available as: 15°, 30°, 45°, 60°, and 90°

## Overview

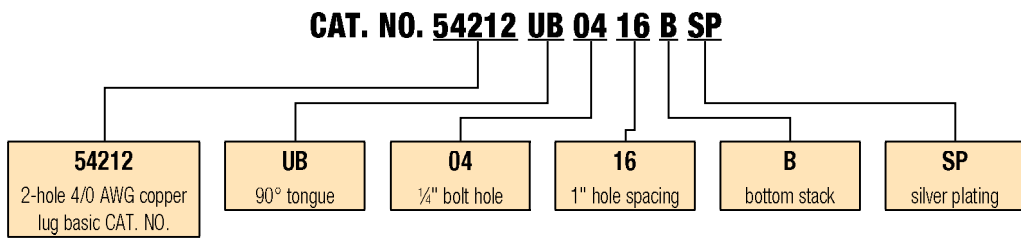
### Order Form

Catalog No. \_\_\_\_\_ Qty. \_\_\_\_\_  
 (For 54100, 54200, 54800 & 54900 Series Copper Lugs Only)

### Design Controls and Requirements

All "MADE-UP" catalog numbers start with a standard or basic catalog number and are followed by the customer-required extra features: tongue shape, bolt hole size, distance between bolt holes, stacking, plating and inspection hole (peep hole). A code letter or a number has been assigned to each extra feature. See CODE TABLE.

- Notes:** 1) Lack of any of the extra features on the "MADE-UP" catalog number means that the standard Cat. No. features are prevalent.  
 2) If either bolt hole size or distance between bolt holes needs to be changed from standard Cat. No., both code numbers will appear on the "MADE-UP" Cat. No. (See example below)



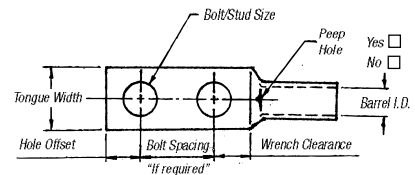
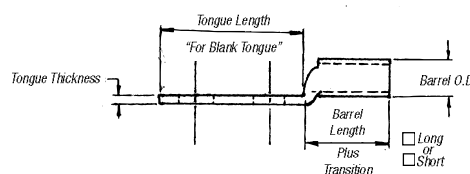
### Code Table

TONGUE SHAPE		BOLT HOLES		BOLT HOLE CENTERS		STACKING		FINISH (PLATING)		INSPECTION HOLE (LONG BARREL)		INSPECTION HOLE (SHORT BARREL)		
TYPE	CODE	SIZE	.020	CODE	DISTANCE .015	CODE	TYPE	CODE	TYPE 1	CODE	I.D.	CODE	I.D.	CODE
15°	UI	#8	.173	02	1/2"	08	Top	T**	Silver Plate	SP	Peep Hole	PH	Blind End	BE
30°	UT	#10	.204	03	5/8"	10	Bottom	B	Lead Plate	LP				
45°	UF	1/4"	.281	04	3/4"	12			Nickel Plate	NP				
60°	US	5/16"	.344	05	1/2"	14			Plain Finish	PF				
90°	UB	3/8"	.406	06	1"	16			No Marking	NM				
Blank	BT	1/2"	.531	08	1 1/8"	18			Not QTP if					
(No Bolt Hole)		5/8"	.656	10	1 1/4"	20			suffix other					
		3/4"	.812	12	1 3/8"	22			than - PF or					
		7/8"	.937	14	1 1/2"	24			standard					
		1"	1.062	16	1 5/8"	26			tin plate					
					1 3/4"	28								
					1 7/8"	30								
					2"	32								

\* These bolt centers not available for bolt holes larger than 3/8".

\*\* Not required for 45° & 90° top stacking.

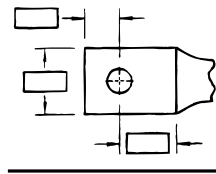
Cable	Code	Weld
<input type="checkbox"/> #8	<input type="checkbox"/> #6	<input type="checkbox"/> #4
<input type="checkbox"/> #2	<input type="checkbox"/> #1	<input type="checkbox"/> 1/0
<input type="checkbox"/> 2/0	<input type="checkbox"/> 3/0	<input type="checkbox"/> 4/0
<input type="checkbox"/> 250 kcmil & up (Code Only)		



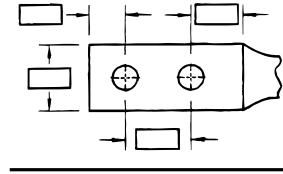
## Overview

### Tongue Specifications — See Chart “A” For Dimensions

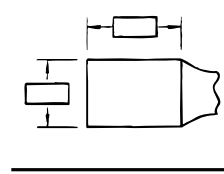
Stud Sizes		
<input type="checkbox"/> #8	<input type="checkbox"/> #10	<input type="checkbox"/> ¼"
<input type="checkbox"/> ⅜"	<input type="checkbox"/> ⅝"	<input type="checkbox"/> ½"
<input type="checkbox"/> ⅞"	<input type="checkbox"/> ¾"	<input type="checkbox"/> ⅝"
<input type="checkbox"/> 1"		



Single Hole



Double Hole



Blank

**Chart A**

NOMINAL BOLT HOLE SIZE .015	HOLE OFFSET .030	WRENCH CLEARANCE MIN.	TONGUE WIDTH CABLE SIZE										
			#8 CODE #8 WELD	#6 CODE #6 WELD	#4 CODE #4 WELD	#2 CODE #2 WELD	#1 CODE #1 WELD	1/0 CODE 1/0 WELD	2/0 CODE 2/0 WELD	3/0 CODE 3/0 WELD	4/0 CODE 3/0 WELD	250 CODE	
#8	.173	.200	.240	.406	.437	.562	.593	.672	.750	.825	.937	1.030	1.125
#10	.204	.218	.250	.406	.437	.562	.593	.672	.750	.825	.937	1.030	1.125
¼	.281	.250	.312	.469	.500	.562	.593	.672	.750	.825	.937	1.030	1.125
⅜	.344	.375	.406	.562	.562	.562	.675	.672	.750	.825	.937	1.030	1.125
⅝	.406	.375	.440	.578	.578	.594	.675	.672	.750	.825	.937	1.030	1.125
½	.531	.500	.562	—	—	—	.750	.750	.750	.825	.937	1.030	1.125
⅞	.656	.625	.875	—	—	—	—	—	—	—	.937	1.030	1.125
¾	.812	.750	.770	—	—	—	—	—	—	—	—	—	—
⅞*	.937	.875	.890	—	—	—	—	—	—	—	—	—	—
1*	1.062	.937	1.000	—	—	—	—	—	—	—	—	—	—

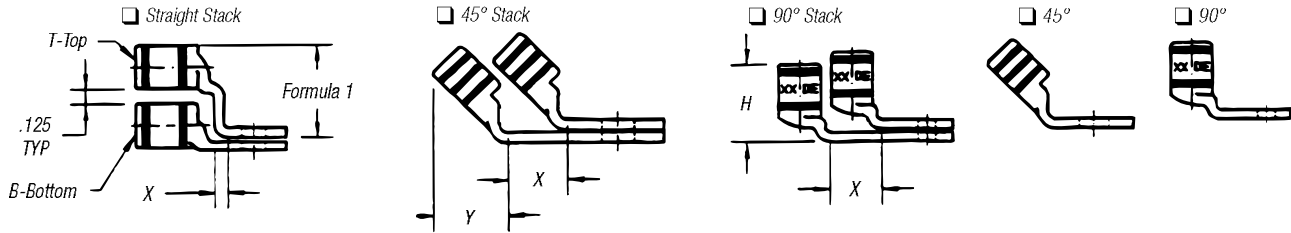
\* These bolt holes available in one-hole lug only.

**Chart B**

CABLE SIZE	TONGUE THICKNESS	STRAIGHT LUG BARREL LENGTH PLUS TRANSITION		BARREL		DIM "X" STACKED LUGS			DIM "Y"		DIM "H"	
		SHORT	LONG	O.D.	I.D.	STRAIGHT	45°	90°	SHORT	LONG	SHORT	LONG
		#8	.080	.635	.935	.260	.180	.158	.478	.394	.595	.808
#6	.081	.675	.975	.296	.215	.134	.544	.432	.587	.799	.767	1.067
#4	.099	.685	.985	.365	.266	.175	.622	.502	.637	.849	.838	1.138
#2	.108	.815	1.115	.410	.302	.216	.649	.535	.711	.923	.958	1.258
#1	.106	.825	1.275	.467	.361	.212	.731	.592	.710	1.028	.956	1.406
1/0	.125	.975	1.325	.520	.396	.250	.789	.646	.794	1.042	1.075	1.425
2/0	.125	.965	1.315	.571	.446	.250	.859	.696	.829	1.077	1.125	1.475
3/0	.125	1.085	1.435	.632	.507	.250	.946	.757	.900	1.148	1.225	1.575
4/0	.137	1.255	1.705	.701	.564	.274	1.031	.826	1.015	1.333	1.387	1.837
250	.137	1.375	1.925	.766	.629	.274	1.123	.891	1.085	1.474	1.487	2.037
300	.153	1.900	2.675	.850	.660	.459	1.226	.975	1.180	1.726	1.924	2.679
350	.177	2.090	2.896	.926	.720	.531	1.333	1.103	1.267	1.830	2.096	2.896
400	.173	2.460	2.980	.960	.757	.519	1.370	1.085	1.551	1.913	2.484	2.984
500	.218	2.670	3.610	1.100	.852	.654	1.514	1.225	1.629	2.266	2.669	3.619
600	.244	2.900	3.490	1.200	.926	.732	1.630	1.325	1.762	2.147	2.897	3.497
700	.228	2.784	—	1.255	.997	.684	1.662	1.375	1.780	—	3.011	—
750	.270	3.050	3.925	1.330	1.030	.810	1.745	1.455	1.827	2.434	3.050	3.925
800	.266	3.213	—	1.375	1.079	.800	1.728	1.625	1.952	2.787	3.213	4.554
900	.313	3.450	4.550	1.500	1.145	.940	1.900	1.650	2.065	—	1.387	—
1,000	.297	3.356	4.500	1.550	1.203	.890	2.070	1.675	2.031	2.787	1.487	4.506

**Note:** Stacking lugs are available for one bolt only.  
 Consult Factory: Straight: 700 kcmil & up.  
 45°: 400 kcmil & up  
 90°: 500 kcmil & up

## Overview



**Formula 1 = (.125 + 2 (OD) + .037 – Tongue Thickness)**

### Chart C

BOLT HOLE SIZE	TONGUE WIDTH .030 CODE CABLE SIZE										
	300 KCMIL 4/0 WELD	350 KCMIL	400 KCMIL	500 KCMIL 400 WELD	600 KCMIL 500 WELD	1325/24	700 KCMIL	750 KCMIL	800 KCMIL	900 KCMIL	1000 KCMIL
#8	—	—	—	—	—	—	—	—	—	—	—
#10	—	—	—	—	—	—	—	—	—	—	—
¼	1.250	1.355	1.410	1.605	1.745	1.805	1.840	1.935	2.010	2.180	2.265
⅓	1.250	1.355	1.410	1.605	1.745	1.805	1.840	1.935	2.010	2.180	2.265
½	1.250	1.355	1.410	1.605	1.745	1.805	1.840	1.935	2.010	2.180	2.265
¾	1.250	1.355	1.410	1.605	1.745	1.805	1.840	1.935	2.010	2.180	2.265
¾*	—	—	—	1.605	1.745	1.805	1.840	1.935	2.010	2.180	2.265
1*	—	—	—	—	1.745	1.805	1.840	1.935	2.010	2.180	2.265

\* These bolt holes available in one-hole lug only.