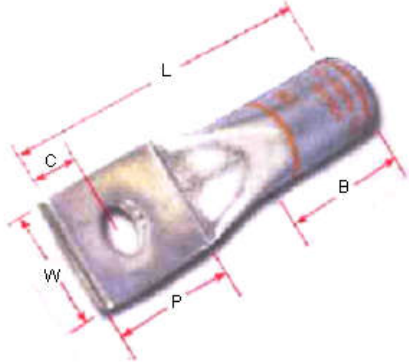


3M™ Scotchlok™ Copper Compression Lugs, 30000 and 31000 Series

One-Hole, Standard-Barrel Lug Dimensions and Selection Guide [Dimensions in Inches and (Millimeters)]

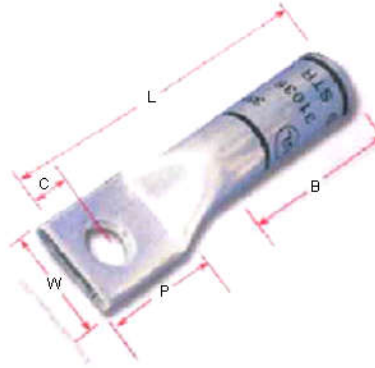


NOTE: All listed lugs in this table are UL Listed and CSA Certified

3M™ Scotchlok™ Lug Number	Conductor Size AWG	Stud Size	Color Code	I.D., +/- .010"	O.D., +/- .010"	L, Length, +/- .100"	B, Barrel Length, +/- .060"	P, Pad Length, +/- .060"	W, Pad Width, +/- .060"	C, Center of Hole-to-End of Pad, +/- .030"
30014	6 AWG	#10 (5)	Blue	.196 (5,0)	.290 (7,4)	1.78 (45,2)	.86 (21,8)	.75 (19,1)	.435 (11,0)	.375 (9,5)
30015	6 AWG	1/4 (6)	Blue	.196 (5,0)	.290 (7,4)	1.78 (45,2)	.86 (21,8)	.75 (19,1)	.435 (11,0)	.375 (9,5)
30016	6 AWG	5/16 (8)	Blue	.196 (5,0)	.290 (7,4)	1.78 (45,2)	.86 (21,8)	.75 (19,1)	.50 (12,7)	.375 (9,5)
30018	4 AWG	#10 (5)	Gray	.247 (6,3)	.340 (8,6)	1.94 (49,3)	.75 (19,1)	.89 (22,6)	.485 (12,3)	.375 (9,5)
30019	4 AWG	1/4 (6)	Gray	.247 (6,3)	.340 (8,6)	1.94 (49,3)	.75 (19,1)	.89 (22,6)	.485 (12,3)	.375 (9,5)
30021	4 AWG	3/8 (10)	Gray	.247 (6,3)	.340 (8,6)	1.94 (49,3)	.75 (19,1)	.89 (22,6)	.59 (15,1)	.375 (9,5)
30022	2 AWG	1/4 (6)	Brown	.307 (7,8)	.416 (10,6)	1.97 (50,0)	.81 (20,7)	.89 (22,6)	.63 (15,9)	.375 (9,5)
30023	2 AWG	5/16 (8)	Brown	.307 (7,8)	.416 (10,6)	1.97 (50,0)	.81 (20,7)	.89 (22,6)	.63 (15,9)	.375 (9,5)
30024	2 AWG	3/8 (10)	Brown	.307 (7,8)	.416 (10,6)	1.97 (50,0)	.81 (20,7)	.89 (22,6)	.63 (15,9)	.375 (9,5)
30027	1 AWG	5/16 (8)	Green	.358 (9,1)	.462 (11,7)	1.97 (50,0)	.81 (20,7)	.75 (19,1)	.69 (17,5)	.375 (9,5)
30028	1 AWG	3/8 (10)	Green	.358 (9,1)	.462 (11,7)	1.97 (50,0)	.81 (20,7)	.75 (19,1)	.69 (17,5)	.375 (9,5)
30031	1/0 AWG	5/16 (8)	Pink	.394 (10,0)	.512 (13,0)	2.16 (54,9)	.81 (20,7)	.89 (22,6)	.75 (19,1)	.375 (9,5)
30032	1/0 AWG	3/8 (10)	Pink	.394 (10,0)	.512 (13,0)	2.16 (54,9)	.81 (20,7)	.89 (22,6)	.75 (19,1)	.375 (9,5)
30036	2/0 AWG	3/8 (10)	Black	.439 (11,2)	.560 (14,2)	2.37 (60,2)	.87 (22,2)	1.11 (28,2)	.81 (20,7)	.375 (9,5)
30041	3/0 AWG	1/2 (12)	Orange	.490 (12,4)	.617 (15,7)	2.63 (66,8)	.94 (23,8)	1.11 (28,2)	.91 (23,0)	.531 (13,5)
30045	4/0 AWG	1/2 (12)	Purple	.548 (13,9)	.687 (17,4)	2.60 (65,9)	.97 (24,6)	1.11 (28,2)	1.00 (25,4)	.531 (13,5)

3M™ Scotchlok™ Copper Compression Lugs, 30000 and 31000 Series

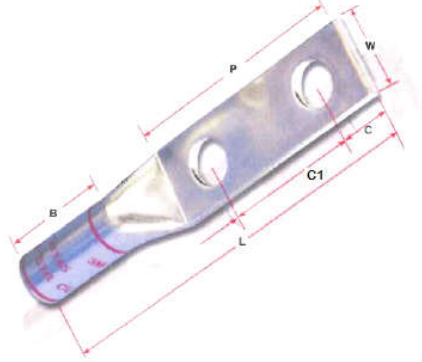
One Hole, Long-Barrel Lug Dimensions and Selection Guide [Dimensions in Inches and (Millimeters)]



3M™ Scotchlok™ Lug Number	Conductor Size AWG or kcmil (MCM)	Stud Size	Color Code	I.D., +/- .010"	O.D., +/- .010"	L, Length, +/- .100"	B, Barrel Length, +/- .060"	P, Pad Length, +/- .060"	W, Pad Width, +/- .060"	C, Center of Hole-to-End of Pad, +/- .030"	Agency Approvals
31023	2 AWG	5/16 (8)	Brown	.307 (7,8)	.416 (10,6)	2.32 (58,9)	1.16 (29,5)	.89 (22,6)	.63 (16,0)	.380 (9,7)	UL
31027	1 AWG	5/16 (8)	Green	.358 (9,1)	.462 (11,7)	2.50 (63,5)	1.34 (34,0)	.75 (19,1)	.69 (17,5)	.380 (9,7)	UL
31032	1/0 AWG	3/8 (10)	Pink	.394 (10,0)	.512 (13,0)	2.84 (72,1)	1.49 (37,8)	.89 (22,6)	.75 (19,1)	.375 (9,5)	UL
31036	2/0 AWG	3/8 (10)	Black	.439 (11,2)	.560 (14,2)	2.84 (72,1)	1.44 (36,5)	.89 (22,6)	.810 (20,6)	.375 (9,5)	UL, CSA
31041	3/0 AWG	1/2 (12)	Orange	.490 (12,4)	.617 (15,7)	3.13 (79,5)	1.44 (36,5)	1.11 (28,2)	.910 (23,1)	.531 (13,5)	UL, CSA
31045	4/0 AWG	1/2 (12)	Purple	.548 (13,9)	.687 (17,4)	3.32 (84,4)	1.56 (39,7)	1.11 (28,2)	1.00 (25,4)	.531 (13,5)	UL, CSA
31049	250 kcmil	1/2 (12)	Yellow	.595 (15,1)	.750 (19,1)	3.38 (85,9)	1.50 (38,0)	1.11 (28,2)	1.11 (28,2)	.531 (13,5)	UL, CSA
31053	300 kcmil	1/2 (12)	White	.650 (16,5)	.813 (20,6)	3.78 (96,0)	1.94 (49,2)	1.11 (28,2)	1.22 (31,3)	.531 (13,5)	UL, CSA
31056	350 kcmil	1/2 (12)	Red	.700 (17,8)	.875 (22,2)	3.84 (97,5)	1.94 (49,2)	1.11 (28,2)	1.27 (32,3)	.531 (13,5)	UL, CSA
31060	400 kcmil	1/2 (12)	Blue	.762 (19,3)	.950 (24,1)	4.16 (105,7)	2.00 (50,8)	1.34 (34,2)	1.41 (35,8)	.66 (16,8)	UL
31066	500 kcmil	1/2 (12)	Brown	.836 (21,3)	1.059 (26,9)	4.50 (114,3)	2.19 (55,6)	1.34 (34,2)	1.53 (38,9)	.66 (16,8)	UL, CSA
31067	500 kcmil	5/8 (16)	Brown	.836 (21,3)	1.059 (26,9)	4.50 (114,3)	2.19 (55,6)	1.34 (34,2)	1.53 (38,9)	.66 (16,8)	UL, CSA
31068	600 kcmil	1/2 (12)	Green	.923 (23,4)	1.188 (30,2)	5.12 (130,0)	2.60 (66,0)	1.75 (44,5)	1.69 (42,9)	.88 (22,4)	UL

3M™ Scotchlok™ Copper Compression Lugs, 30000 and 31000 Series

Two Hole, Long-Barrel Lug Dimensions and Selection Guide [Dimensions in Inches and (Millimeters)]



3M™ Scotchlok™ Lug Number	Conductor Size AWG or kcmil (MCM)	Stud Size	Color Code	I.D., +/- .010"	O.D., +/- .010"	L, Length, +/- .100"	B, Barrel Length, +/- .100"	P, Pad Length, +/- .060"	W, Pad Width, +/- .060"	C, Center of Hole-to-End of Pad, +/- .030"	C1, Hole-to-Hole, Center-to-Center, +/- .015"	Agency Approvals
31116	6 AWG	1/2 (12)	Blue	.200 (5,1)	.290 (7,4)	3.16 (80,3)	1.07 (27,2)	3.00 (76,2)	.63 (16,0)	.63 (16,0)	1.75 (44,5)	N/A
31122	4 AWG	1/2 (12)	Grey	.250 (6,4)	.340 (8,6)	4.19 (106,4)	1.07 (27,2)	3.00 (76,2)	.63 (16,0)	.63 (16,0)	1.75 (44,5)	N/A
31125	2 AWG	1/2 (12)	Brown	.310 (7,9)	.420 (10,7)	4.85 (123,2)	1.25 (31,8)	3.00 (76,2)	.63 (16,0)	.63 (16,0)	1.75 (44,5)	N/A
31129	1 AWG	1/2 (12)	Green	.360 (9,1)	.460 (11,7)	4.85 (123,2)	1.25 (31,8)	3.00 (76,2)	.69 (17,5)	.63 (16,0)	1.75 (44,5)	N/A
31130	1/0 AWG	1/2 (12)	Pink	.390 (9,9)	.510 (13,0)	4.98 (126,5)	1.38 (35,0)	3.00 (76,2)	.80 (20,3)	.63 (16,0)	1.75 (44,5)	N/A
31137	2/0 AWG	1/2 (12)	Black	.441 (11,2)	.560 (14,2)	5.03 (127,8)	1.45 (36,8)	3.00 (76,2)	.81 (20,6)	.63 (16,0)	1.75 (44,5)	N/A
31141	3/0 AWG	1/2 (12)	Orange	.490 (12,4)	.617 (15,7)	5.13 (130,3)	1.44 (36,6)	3.00 (76,2)	.91 (23,1)	.63 (16,0)	1.75 (44,5)	N/A
31145	4/0 AWG	1/2 (12)	Purple	.548 (13,9)	.687 (17,4)	5.16 (131,1)	1.56 (39,6)	3.00 (76,2)	1.00 (25,4)	.63 (16,0)	1.75 (44,5)	UL, CSA
31149	250 kcmil	1/2 (12)	Yellow	.595 (15,1)	.750 (19,1)	5.31 (134,9)	1.56 (39,6)	3.00 (76,2)	1.13 (28,7)	.63 (16,0)	1.75 (44,5)	UL, CSA
31153	300 kcmil	1/2 (12)	White	.650 (16,5)	.813 (20,7)	5.75 (146,1)	1.94 (49,2)	3.00 (76,2)	1.22 (31,0)	.63 (16,0)	1.75 (44,5)	UL, CSA
31156	350 kcmil	1/2 (12)	Red	.700 (17,8)	.875 (22,2)	5.75 (146,1)	1.94 (49,2)	3.00 (76,2)	1.31 (33,3)	.63 (16,0)	1.75 (44,5)	UL, CSA
31160	400 kcmil	1/2 (12)	Blue	.762 (19,4)	.950 (24,1)	6.00 (152,4)	2.12 (53,8)	3.00 (76,2)	1.41 (35,8)	.63 (16,0)	1.75 (44,5)	UL
31166	500 kcmil	1/2 (12)	Brown	.836 (21,2)	1.059 (26,9)	6.16 (156,5)	2.19 (55,6)	3.00 (76,2)	1.53 (38,9)	.63 (16,0)	1.75 (44,5)	UL, CSA
31168	600 kcmil	1/2 (12)	Green	.923 (23,4)	1.188 (30,2)	6.72 (170,6)	2.62 (66,5)	3.00 (76,2)	1.69 (42,9)	.63 (16,0)	1.75 (44,5)	UL
31172	750 kcmil	1/2 (12)	Black	1.031 (26,2)	1.299 (33,0)	7.00 (177,8)	2.81 (71,4)	3.00 (76,2)	1.72 (43,7)	.63 (16,0)	1.75 (44,5)	UL, CSA
31178	1000 kcmil	1/2 (12)	White	1.173 (29,8)	1.500 (38,1)	7.28 (184,9)	2.94 (74,6)	3.00 (76,2)	1.72 (43,7)	.63 (16,0)	1.75 (44,5)	UL, CSA

3M™ Scotchlok™ Copper Compression Lugs, 30000 and 31000 Series

Typical Properties

Not for specifications. Values are typical, not to be considered minimum or maximum. Properties measured at room temperature 73°F (23°C) unless otherwise stated.

3M Scotchlok Copper Compression Lugs, 30000 and 31000 Series, when crimped with approved die sets, can be used on cables with an operating temperature of 221°F (105°C) and an emergency overload rating of 284°F (140°C). The lugs pass the requirements of UL486A (Underwriters Laboratories standard for safety) and are CSA Certified (as indicated in the above tables). The current rating of these lugs meets or exceeds the current rating of the conductor size for which it is intended.

Tool/Installation Information

Lugs shall be crimped with one of the approved die sets according to the engineering information supplied with the lugs. (Also see Crimping Tool-Die Sets tables below). If different crimping tools and die sets are used, consult the tool and die manufacturer.

Crimping Tool Recommendations

One-Hole, Standard-Barrel Lug Crimping Tool – Die Sets (Minimum # of Crimps)

3M™ Scotchlok™ Lug Number	Conductor Size AWG or kcmil (MCM)	Burdny Corporation				Thomas & Betts Corporation			Square D Co. Anderson Div.
		MD6	MY29	Y34A	Y35, Y39, Y45*, Y46*	TBM5	TBM 8	TBM15	VC6-3, VC6-FT**
30014	6 AWG	-----	6 AWG (1)	-----	U5CRT (1)	Blue (1)	Blue (1)	-----	Universal (1)
30015	6 AWG	-----	6 AWG (1)	-----	U5CRT (1)	Blue (1)	Blue (1)	-----	Universal (1)
30016	6 AWG	-----	6 AWG (1)	-----	U5CRT (1)	Blue (1)	Blue (1)	-----	Universal (1)
30018	4 AWG	W161 (1)	4 AWG (1)	A4CR (1)	U4CRT (1)	Gray (1)	Gray (1)	-----	Universal (1)
30019	4 AWG	W161 (1)	4 AWG (1)	A4CR (1)	U4CRT (1)	Gray (1)	Gray (1)	-----	Universal (1)
30021	4 AWG	W161 (1)	4 AWG (1)	A4CR (1)	U4CRT (1)	Gray (1)	Gray (1)	-----	Universal (1)
30022	2 AWG	W162 (2)	2 AWG (1)	A2CR (1)	U2CRT (2)	Brown (1)	Brown (1)	33 (1)	Universal (1)
30023	2 AWG	W162 (2)	2 AWG (1)	A2CR (1)	U2CRT (2)	Brown (1)	Brown (1)	33 (1)	Universal (1)
30024	2 AWG	W162 (2)	2 AWG (1)	A2CR (1)	U2CRT (2)	Brown (1)	Brown (1)	33 (1)	Universal (1)
30027	1 AWG	-----	1 AWG (1)	A1CR (1)	U1CRT (2)	Green (1)	Green (1)	37 (1)	Universal (1)
30028	1 AWG	-----	1 AWG (1)	A1CR (1)	U1CRT (2)	Green (1)	Green (1)	37 (1)	Universal (1)
30031	1/0 AWG	W163 (2)	1/0 (1)	A25R (1)	U25RT (1)	Pink (2)	Pink (2)	42H (2)	Universal (1)
30032	1/0 AWG	W163 (2)	1/0 (1)	A25R (1)	U25RT (1)	Pink (2)	Pink (2)	42H (2)	Universal (1)
30036	2/0 AWG	W241 (2)	2/0 (1)	A26R (1)	U26RT (2)	Black (2)	Black (2)	45 (1)	Universal (1)
30041	3/0 AWG	W243 (2)	3/0 (1)	A27R (1)	U27RT (2)	Orange (2)	Orange (2)	50 (1)	Universal (1)
30045	4/0 AWG	BG (3)	4/0 (1)	A28R (2)	U28RT (2)	Purple (2)	Purple (2)	54H (2)	Universal (1)

* Y45 and Y46 accept all Y35 dies (“U” series). For Y45 use PT6515 adapter. For Y46 use PUADP adapter.

** Anderson VC6-3 and VC6-FT require no die set.

3M™ Scotchlok™ Copper Compression Lugs, 30000 and 31000 Series

One-Hole, Long-Barrel Lug Crimping Tool – Die Sets (Minimum # of Crimps)

3M™ Scotchlok™ Lug Number	Conductor Size AWG or kcmil (MCM)	Burdny Corporation				Thomas & Betts Corporation			Square D Co. Anderson Div.
		MD6	MY29	Y34A	Y35, Y39, Y45*, Y46*	TBM5	TBM 8	TBM15	VC6-3, VC6-FT**
31023	2 AWG	W162 (2)	2 AWG (2)	A2CR (2)	U2CRT (2)	Brown (2)	Brown (2)	33 (2)	Universal (1)
31027	1 AWG	W1CRT1 (2)	1 AWG (2)	A1CR (2)	U1CRT (2)	Green (2)	Green (2)	37 (2)	Universal (1)
31032	1/0 AWG	W163 (2)	1/0 (2)	A25R (2)	U25RT (2)	Pink (2)	Pink (2)	42H (2)	Universal (1)
31036	2/0 AWG	W241 (3)	2/0 (2)	A26R (2)	U26RT (2)	Black (3)	Black (3)	45 (2)	Universal (1)
31041	3/0 AWG	W243 (3)	3/0 (2)	A27R (2)	U27RT (2)	Orange (3)	Orange (3)	50 (2)	Universal (1)
31045	4/0 AWG	BG (4)	4/0 (2)	A28R (2)	U28RT (2)	Purple (3)	Purple (3)	54H (3)	Universal (1)
31049	250 kcmil	W166 (4)	250 (2)	A29R (2)	U29RT (2)	Yellow (2)	Yellow (2)	62 (2)	Universal (2)
31053	300 kcmil	-----	-----	A30R (2)	U30RT (3)	-----	White (3)	66 (3)	Universal (2)
31056	350 kcmil	-----	-----	A31R (2)	U31RT (3)	-----	Red (4)	71H (4)	-----
31060	400 kcmil	-----	-----	A32R (2)	U32RT (3)	-----	Blue (4)	76H (4)	-----
31066	500 kcmil	-----	-----	A34R (2)	U34RT (3)	-----	Brown (4)	87H (4)	-----
31067	500 kcmil	-----	-----	A34R (2)	U34RT (3)	-----	Brown (4)	87H (4)	-----
31068	600 kcmil	-----	-----	-----	U36RT (3)	-----	Green (4)	94H (4)	-----

* Y45 and Y46 accept all Y35 dies (“U” series). For Y45 use PT6515 adapter. For Y46 use PUADP adapter.

** Anderson VC6-3 and VC6-FT require no die set.

3M™ Scotchlok™ Copper Compression Lugs, 30000 and 31000 Series

Two-Hole, Long-Barrel Lug Crimping Tool – Die Sets (Minimum # of Crimps)

3M™ Scotchlok™ Lug Number	Conductor Size AWG or kcmil (MCM)	Burdny Corporation				Thomas & Betts Corporation			Square D Co. Anderson Div.
		MD6	MY29	Y34A	Y35, Y39, Y45*, Y46*	TBM5	TBM 8	TBM15	VC6-3, VC6-FT**
31116	6 AWG	W5CRT (2)	6 AWG (2)	A5CR (2)	U5CRT (2)	Blue (2)	Blue (2)	24 (2)	Universal (1)
31122	4 AWG	W4CRT (2)	4 AWG (2)	A4CR (2)	U4CRT (2)	Grey (2)	Grey (2)	29 (2)	Universal (1)
31125	2 AWG	W2CRT (2)	2 AWG (2)	A2CR (2)	U2CRT (2)	Brown (2)	Brown (2)	33 (2)	Universal (1)
31129	1 AWG	W1CRT1 (2)	1 AWG (2)	A1CR (2)	U1CRT (2)	Green (2)	Green (2)	37 (2)	Universal (1)
31130	1/0 AWG	W25RT (4)	1/0 (2)	A25R (2)	U25RT (2)	Pink (2)	Pink (2)	42H (2)	Universal (1)
31137	2/0 AWG	W26RT (4)	2/0 (2)	A26R (2)	U26RT (2)	Black (3)	Black (3)	45 (2)	Universal (1)
31141	3/0 AWG	W27RT (4)	3/0 (2)	A27R (2)	U27RT (2)	Orange (3)	Orange (3)	50 (2)	Universal (1)
31145	4/0 AWG	BG (4)	4/0 (2)	A28R (2)	U28RT (2)	Purple (3)	Purple (3)	54H (3)	Universal (1)
31149	250 kcmil	W166 (4)	250 (2)	A29R (2)	U29RT (2)	Yellow (2)	Yellow (2)	62 (2)	Universal (2)
31153	300 kcmil	-----	-----	A30R (2)	U30RT (3)	-----	White (3)	66 (3)	Universal (2)
31156	350 kcmil	-----	-----	A31R (2)	U31RT (3)	-----	Red (4)	71H (4)	-----
31160	400 kcmil	-----	-----	A32R (2)	U32RT (3)	-----	Blue (4)	76H (4)	-----
31166	500 kcmil	-----	-----	A34R (2)	U34RT (3)	-----	Brown (4)	87H (4)	-----
31168	600 kcmil	-----	-----	-----	U36RT (3)	-----	Green (4)	94H (4)	-----
31172	750 kcmil	-----	-----	-----	Y39, Y45, Y46: U39RT (5)	-----	-----	106H (4)	-----
31178	1000 kcmil	-----	-----	-----	Y45: S44RT (6) Y46: P44RT (6)	-----	-----	125H (4)	-----

* Y45 and Y46 accept all Y35 dies (“U” series). For Y45 use PT6515 adapter. For Y46 use PUADP adapter.

** Anderson VC6-3 and VC6-FT require no die set

3M™ Scotchlok™ Copper Compression Lugs, 30000 and 31000 Series

Storage	Components of the lugs are not impaired by freezing or overheating due to ambient temperatures found in typical storage or shipping. Normal stock rotation procedures are recommended.
Availability	Please contact your local distributor; available from 3M.com/electrical, Purchasing Information (at bottom of website page), then choose your Market (Construction and Industrial, Electrical Utility or Electrical & Electronics OEM) or call 1.800.245.3573.

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