
 TECHNICAL DATA SHEET

Smart[®] tool + Intelligent Dieless Crimping System



Eliminate dies, eliminate mistakes, eliminate doubt, when used according to manufacturer's instructions.

Certifications / Standards:



Tool part number: BTRF-37C16A

Features and Benefits:

Smart[®] dieless 6.5 ton crimping System

- Lightweight balanced inline design
- UL 486 compliant with a single compression when used with T&B Color Keyed Connectors
 - Note:** Aluminum lugs with copper conductor require 2 compressions
- 3/0 - 750 CU and 1/0 to 600 AL range
- Closed head design, unlocks for increased accessibility
- 180 degree rotatable head
- Automatic work light
- Ram release mechanism
- LED display with integrated controls
- Integrated RFID reader for scanning Smart[®] lugs
- Backward compatible with standard lugs
- Bluetooth Enabled for data transfer
- Mobile App for data upload and download
- Cloud account with data management dashboard
- Pre-crimp battery check to ensure sufficient battery charge to complete crimp
- Milwaukee M18 battery system
- High speed hydraulic pump for fast action
- Sturdy case to hold tool, battery charger, and two batteries

When used with T&B[®] Color-Keyed[®] connectors, the crimped connection conforms to:

- UL 486A-486B
- CSA C22.2 No.65

Applications:

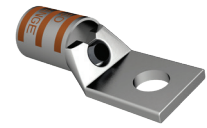
- Critical Power
- Data Centers
- OEM Switch Gear and Power Critical Equipment
- Critical Asset installations

Connector material:

- High conductivity ETP copper, tin plated
- High conductivity wrought aluminum, tin plated
- Max working temperature 90°C

RFID enabled copper Smart® lugs for copper conductors

- Standard barrel, 1 hole lug, with peephole



Drawing	Product selection													
	Part no:	Tool setting*	Cable size copper only	Bolt size	Dimensions (inches)						Color code	Die color	Final** dim. (inches) H	
					A	B	C	D	E	F				
	54111RF	SMART LUG	3/0 AWG Code	3/8	2.03	0.93	0.92	0.13	0.63	3/8	50	Orange	0.3346	
	54165RF	SMART LUG	2/0 Weld	1/2	2.35	1.25	0.92	0.13	0.63	1/2				
	54112RF	SMART LUG	4/0 AWG Code	3/8	2.18	0.93	1.03	0.14	0.7	3/8	54	Purple	0.3740	
	54170RF	SMART LUG	3/0 Weld	1/2	2.5	1.25	1.03	0.14	0.7	1/2				
	58163RF	SMART LUG	4/0 Weld	3/8	2.38	0.93	1.25	0.15	0.79	3/8	62	Yellow	0.4331	
	58165RF	SMART LUG	4/0 Weld	1/2	2.76	1.25	1.25	0.15	0.79	1/2				
	54113RF	SMART LUG	250 kcmil Cu	250 kcmil Code	1/2	2.6	1.25	1.13	0.14	0.77	1/2	62	Yellow	0.4331
	54114RF	SMART LUG	300 kcmil Cu	300 kcmil Code	1/2	2.7	1.25	1.25	0.15	0.85	1/2			
	54115RF	SMART LUG	350 kcmil Cu	350 kcmil Code	1/2	2.85	1.25	1.36	0.18	0.93	1/2	71	Red	0.5118
	58174RF	SMART LUG	350 Weld	1/2	3.35	1.25	1.61	0.22	1.09	1/2				
	54116RF	SMART LUG	400 kcmil Cu	400 kcmil Code	1/2	3.2	1.25	1.41	0.17	0.96	1/2	76	Blue	0.5315
	58177RF	SMART LUG	400 Weld	1/2	3.31	1.25	1.61	0.22	1.04	1/2				
	54118RF	SMART LUG	500 kcmil Cu	500 kcmil Code	1/2	3.3	1.25	1.61	0.22	1.1	1/2	87	Brown	0.6693
	54120RF	SMART LUG	600 kcmil Cu	600 kcmil Code	3/8	3.79	1.58	1.75	0.24	1.2	3/8			
	54122RF	SMART LUG	700 kcmil Cu	700 kcmil Code	3/8	3.68	1.58	1.84	0.23	1.26	3/8	99	Pink	0.7874
54123RF	SMART LUG	750 kcmil Cu	750 kcmil Code	3/8	3.87	1.58	1.94	0.27	1.33	3/8				

Note: Product must be installed in accordance with applicable national and local electrical codes.
 * "SMART LUG" text will display on the Smart® Tool + when Smart® lug is scanned. "STANDARD LUG" will display when setting the tool manually. A Smart® Lug can be crimped when setting the tool manually, but will not populate the Connector S/N data field in the mobile app.
 ** A good crimp will result in a Final Dim value equal to or less than the value listed.

RFID enabled copper Smart® lugs for copper conductors

- Standard barrel, 2 hole lug, with peephole

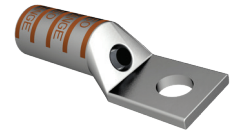


Drawing	Product selection														
	Part no:	Tool setting*	Cable size copper only	Bolt size	Dimensions (inches)							Color code	Die color	Final** dim. (inches) H	
					A	B	C	D	E	F	G				
	54265RF	SMART LUG	3/0 AWG Code	1/2	3.94	2.81	0.94	0.14	0.63	1/2	1 3/4	50	Orange	0.3346	
	54270RF	SMART LUG	2/0 Weld	1/2	4.25	3	1.03	0.14	0.7	1/2	1 3/4				
	54275RF	SMART LUG	4/0 AWG Code	3/8	4.19	2.81	1.13	0.18	0.77	1/2	1 3/4	62	Yellow	0.4331	
	58265RF	SMART LUG	3/0 Weld	1/2	3.94	2.81	0.94	0.14	0.79	1/2	1 3/4				
	54280RF	SMART LUG	4/0 Weld	3/8	4.45	3	1.25	0.15	0.85	1/2	1 3/4	66	White	0.4724	
	54282RF	SMART LUG	300 kcmil Cu	300 kcmil Code	1/2	4.6	3	1.36	0.18	0.93	1/2				1 3/4
	54283RF	SMART LUG	350 kcmil Cu	350 kcmil Code	1/2	4.6	3	1.36	0.18	0.93	1/2	1 3/4	71	Red	0.5118
	54283RF	SMART LUG	400 kcmil Cu	400 kcmil Code	3/8	3.88	1.93	1.41	0.17	0.96	3/8	1 1/2			
	58277RF	SMART LUG	400 Weld	1/2	5.06	3	1.61	0.22	1.04	1/2	1 3/4	80	—	0.5512	
	54286RF	SMART LUG	500 kcmil Cu	500 kcmil Code	1/2	5.07	3	1.61	0.22	1.1	1/2				1 3/4
	54289RF	SMART LUG	600 kcmil Cu	600 kcmil Code	1/2	5.23	3	1.75	0.24	1.2	1/2	1 3/4	94	Green	0.7283
	54291RF	SMART LUG	700 kcmil Cu	700 kcmil Code	1/2	5.18	3	1.84	0.23	1.25	1/2	1 3/4			
	54223RF	SMART LUG	750 kcmil Cu	750 kcmil Code	1/2	5.32	3	1.94	0.27	1.33	1/2	1 3/4	106	Black	0.8661

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RFID enabled copper Smart® lugs for copper conductors

- Long barrel, 1 hole lug, blind end



Drawing	Product selection												
	Part no:	Tool setting*	Cable size copper only	Bolt size	Dimensions (inches)						Color code	Die color	Final** dim. (inches) H
					A	B	C	D	E	F			
	54965BERF	SMART LUG 3/0 AWG Cu	3/0 AWG Code 2/0 Weld 131 kcmil DLO (325/24) Flex	½	2.700	1.250	0.920	0.130	0.630	½	50	Orange	0.3346
	54970BERF	SMART LUG 4/0 AWG Cu	4/0 AWG Code 3/0 Weld 182 kcmil DLO (450/24) Flex	½	2.950	1.250	1.030	0.140	0.700	½	54	Purple	0.3740
	54913BERF	SMART LUG 250 kcmil Cu	250 kcmil Code	½	3.150	1.250	1.130	0.140	0.770	½	62	Yellow	0.4331
	54914BERF	SMART LUG 300 kcmil Cu	300 kcmil Code	½	3.500	1.250	1.250	0.150	0.850	½	66	White	0.4724
	54915BERF	SMART LUG 350 kcmil Cu	350 kcmil Code	½	3.680	1.250	1.360	0.180	0.930	½	71	Red	0.5118
	54916BERF	SMART LUG 400 kcmil Cu	400 kcmil Code	¾	3.750	1.250	1.410	0.170	0.960	½	76	Blue	0.5315
	54918BERF	SMART LUG 500 kcmil Cu	500 kcmil Code 450 Weld 444 kcmil DLO (1100/24) Flex	½	4.250	1.250	1.610	0.220	1.100	½	87	Brown	0.6693
	54921BERF	SMART LUG 600 KCMIL Cu	600 kcmil Code 500 Weld 444 kcmil DLO (1100/24) Flex 535 kcmil DLO (1325/24) Flex	½	4.100	1.250	1.750	0.240	1.200	½	94	Green	0.7283
	54922BERF	SMART LUG 750 KCMIL Cu	750 kcmil Code	½	4.400	1.250	1.940	0.270	1.330	½	106	Black	0.8661

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RFID enabled copper Smart® lugs for copper conductors

- Long barrel, 2 hole lug, blind end

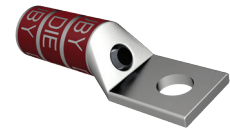


Drawing	Product selection													
	Part no:	Tool setting*	Cable size copper only	Bolt size	Dimensions (inches)							Color code	Die color	Final** dim. (inches) H
					A	B	C	D	E	F	G			
	54864BERF	SMART LUG 3/0 AWG Cu	3/0 AWG Code 2/0 Weld 131 kcmil DLO (325/24) Flex	½	4.480	3.000	0.940	0.130	0.630	½	1¾	50	Orange	0.3346
	54866BERF	SMART LUG 4/0 AWG Cu	4/0 AWG Code 3/0 Weld 182 kcmil DLO (450/24) Flex	½	4.700	3.000	1.030	0.140	0.700	½	1¾	54	Purple	0.3740
	54868BERF	SMART LUG 250 kcmil Cu	250 kcmil Code	½	4.920	3.000	1.130	0.140	0.770	½	1¾	62	Yellow	0.4331
	54870BERF	SMART LUG 300 kcmil Cu	300 kcmil DLO	½	5.230	3.000	1.250	0.150	0.850	½	1¾	66	White	0.4724
	54872BERF	SMART LUG 350 kcmil Cu	350 kcmil Code	½	5.400	3.000	1.360	0.180	0.930	½	1¾	71	Red	0.5118
	54874BERF	SMART LUG 400 kcmil Cu	400 kcmil Code	½	5.510	3.000	1.410	0.170	0.960	½	1¾	76	Blue	0.5315
	54876BERF	SMART LUG 500 kcmil Cu	500 kcmil Code 450 Weld 444 kcmil DLO (1100/24) Flex	½	6.000	3.000	1.610	0.220	1.100	¾	1¾	87	Brown	0.6693
	54878BERF	SMART LUG 600 kcmil Cu	600 kcmil Code 500 Weld 444 kcmil DLO (1100/24) Flex 535 kcmil DLO (1325/24) Flex	½	5.830	3.000	1.750	0.240	1.200	½	1¾	94	Green	0.7283
	54880BERF	SMART LUG 750 KCMIL Cu	750 kcmil Code	½	6.200	3.000	1.940	0.270	1.330	½	1¾	106	Black	0.8661

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RFID enabled aluminum Smart® lugs for aluminum and copper conductors

- Long barrel, 1 hole lug, blind end



Drawing	Product selection												
	Part no:	Tool setting*	Cable size Al - 1 compression Cu - 2 compressions	Bolt size	Dimensions (inches)						Color code	Die color	Final** dim. (inches) H
					A	B	C	D	E	F			
	60132RF	SMART LUG 1/0 AWG Al	1/0 AWG	½	2.950	1.410	0.940	0.190	0.620	0.690	50	Tan	0.2953
	60138RF	SMART LUG 2/0 AWG Al	2/0 AWG	½	3.100	1.410	1.030	0.220	0.700	0.690	54	Olive	0.3150
	60144RF	SMART LUG 3/0 AWG Al	3/0 AWG	½	3.150	1.410	1.060	0.220	0.770	0.690	60	Ruby	0.3346
	60150RF	SMART LUG 4/0 AWG Al	4/0 AWG	½	3.900	1.250	1.210	0.250	0.857	0.500	66	White	0.3937
	60156RF	SMART LUG 250 Kcmil Al	250 kcmil	½	4.050	1.250	1.290	0.270	0.917	0.500	71	Red	0.4528
	60162RF	SMART LUG 300 Kcmil Al	300 kcmil	½	4.130	1.250	1.390	0.280	0.990	0.500	76	Blue	0.4724
	60165RF	SMART LUG 350 Kcmil Al	350 kcmil	½	4.830	1.250	1.530	0.330	1.090	0.500	87	Brown	0.6102
	60168RF	SMART LUG 400 Kcmil Al	400 kcmil	½	4.950	1.250	1.650	0.380	1.180	0.500	94	Green	0.7283
	60171RF	SMART LUG 500 Kcmil	500 kcmil	½	4.950	1.250	1.790	0.380	1.280	0.500	99	Pink	0.7874
	60174RF	SMART LUG 600 Kcmil Al	600 kcmil	⅝	5.830	2.000	1.920	0.370	1.360	0.750	106	Black	0.8661

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RFID enabled copper Smart® lugs for aluminum and copper conductors

- Long barrel, 2 hole lug, blind end



Drawing	Product selection													
	Part no:	Tool setting*	Cable size Cu - 2 compressions	Bolt size	Dimensions (inches)							Color code	Die color	Final** dim. (inches) H
					A	B	C	D	E	F	G			
	60230RF	SMART LUG 1/0 AWG Al	1/0 AWG	⅝	3.500	1.900	0.880	0.190	0.620	0.375	1.000	50	Tan	0.2953
	60238RF	SMART LUG 2/0 AWG Al	2/0 AWG	½	5.030	3.410	0.970	0.220	0.700	0.750	1.750	54	Olive	0.3150
	60244RF	SMART LUG 3/0 AWG Al	3/0 AWG	½	5.160	3.410	1.063	0.220	0.770	0.750	1.750	60	Ruby	0.3346
	60250RF	SMART LUG 4/0 AWG Al	4/0 AWG	½	5.650	3.000	1.210	0.250	0.860	0.750	1.750	66	White	0.3937
	60256RF	SMART LUG 250 Kcmil Al	250 kcmil	½	5.800	3.000	1.290	0.270	0.920	0.750	1.750	71	Red	0.4528
	60262RF	SMART LUG 300 Kcmil Al	300 kcmil	½	5.880	3.000	1.390	0.280	0.990	0.750	1.750	76	Blue	0.4724
	60267RF	SMART LUG 350 Kcmil Al	350 kcmil	½	6.580	3.000	1.530	0.330	1.090	0.750	1.750	87	Brown	0.6102
	60269RF	SMART LUG 400 Kcmil Al	400 kcmil	½	6.700	3.000	1.650	0.380	1.180	0.750	1.750	94	Green	0.7283
	60273RF	SMART LUG 500 Kcmil Al	500 kcmil	½	6.700	3.000	1.790	0.380	1.280	0.750	1.750	99	Pink	0.7874
	60275RF	SMART LUG 600 Kcmil Al	600 kcmil	½	6.830	3.000	1.920	0.370	1.360	0.750	1.750	106	Black	0.8661

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 Electrification products
 Memphis, Tennessee
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