Overview

Experience the Sta-Kon® advantage!

Thomas & Betts developed the first tool-applied solderless terminals and connectors more than 70 years ago in response to industry awareness of the need for better performance of electrical systems.

Key Features and Benefits

- Metal insulation grip sleeve is included on all nylon terminal for strain relief
- Long barrel selectively annealed
- CSA Certified
- UL Listed unless otherwise specified

- Funnel Entry Barrel
- Selectively annealed long barrel
- Longer barrel design
- Colour-coded insulators
- Brazed or overlapping seams
- Anti-rotational tongue
- Hardened tongue
- Complete wire and stud size identification

Deep Internal Serrations

After the insertion of a wire into the terminal's barrel, a deep, serrated interior ensures a large area of contact that lowers the resistance of a connection. With the mechanical force of the tool, the wire strands cold flow into the serrated interior. This guarantees electrical resistance lower than the wire to which it is applied. This feature also prevents pullout from vibration and mechanical strain. Deep internal serrations can be compared to the effective holding power of a well-treaded tire on a wet highway.

Funneled Terminal Barrel Entry

This feature makes wire insertion faster and easier. A funneled barrel eliminates wire strand "hang up" upon insertion into the terminal's barrel. The loss of even a couple of wire strands can have negative results on electrical efficiency and resistance to mechanical strain.

Sta-Kon® Long Barrel Design

If lowering electrical resistance, preventing wire pullout, eliminating a "missed" crimp and having an insulator that stays on the barrel during installation are your goals, then you must design a terminal with a long barrel. This also provides the insulator with additional surface area, holding tight to the barrel. Most competitive barrel lengths range from 20–50% shorter than Sta-Kon® terminals. The results are usually a stream of electrical failure, rework and added expense. Many competitive insulators come off during crimping due to a limited barrel length.

Note: Listed for solid wire up to #10 AWG, terminals only.

Overview

Why Sta-Kon® Terminals are Better

Selective Annealing

Because of the mechanical strength of copper, an installer can experience fatigue associated with repeated installations. For this reason Thomas & Betts puts our terminals through one more step called selective annealing. This process leaves the barrel soft enough to crimp and form around the wire. However, we "cold form" the tongue during the manufacturing process so it remains strong. This is done so the tongue can withstand repeated bends and bolt tightening strain common in most electrical installations. Many competitors attempt to accomplish similar goals by removing valuable material or using a softer copper which has lower conductivity. This increases electrical resistance as well as the odds for shorting and downtime.

Anti-Rotational Tongues

This is a unique feature to the Thomas & Betts ring tongue terminal. This design prevents terminal shorting by keeping the terminal secure in the terminal block. The installer can place a greater number of terminals closer together without worry.

Proper Identification

We identify all terminals with Thomas & Betts initials, T&B. We also indicate wire and stud sizes. These markings are clearly visible on the surface of the tongue, taking any guesswork out of replacing or reordering additional parts. Our superior bright plating also assists in visibility.

All Sta-Kon® Terminals are Deburred and Degreased

To ensure a Sta-Kon® terminal is properly plated and insulated, all our parts are put through a process which cleans and smooths the terminal of any manufacturing residues, mainly grease, oils and sharp edges. Many competitive products do not put their product through such rigorous finishing.

Platings/Finish

Electroplated-Tin is standard. All others require minimum order quantities and are generally not stocked. Alternative platings as follows: Gold, Silver, Tin-alloys, Nickel, etc.

The following finishes are available on most one-piece Sta-Kon® terminals:

Finish	Suffix	Spec.	Temp. Rating
Gold Plate	GP	MIL-G-45204 Type II, Grade B, C, D, Class 0	260ºC
Nickel Plate	NP	QQ-N-290 Class 2, Grade G	260ºC
Plain Finish	PF	None	150ºC
Silver Plate	SP	MIL-T-16366 Type I, or II, 400°F, 204°C	150ºC
Tin Plate	TP	MIL-T-10727 Type I	150ºC

To order, add the indicated suffix to the regular catalogue number.

Underwriters Laboratories Listing

Sta-Kon® Rings, Forks, Locking Forks, two-way splices and disconnects are tested and listed to UL standards and all applicable products to CSA standards.

- Flat bottom box
- Electro-tin plating
- Center reinforced spring detent for minimum insertion force
- Compound Spring Rails provide positive contact after repeated insertions

Overview

Sta-Kon® Ring, Fork and Locking Fork

- Complete line of installing tools engineered to match tool with terminal
- First to gain military approval for pressure connections … many styles available for military applications
- Sta-Kon® products exceed test specification requirements of military, UL and CSA
- Fluoropolymer and Nylon Terminals provided with extra metal sleeve to grip insulation
- Vinyl insulated and bare Sta-Kon® terminals feature brazed seam wire barrels which can be crimped at any place on the barrel circumference
- Ring and Fork terminals can be used with solid wire as follows:
  Non-Insulated: 22-8 gauge
  Insulated: 22-10 gauge

ERG4001

Sta-Kon® Disconnects

- Internal barrel serrations and long barrel provide for maximum tensile strength
- Complete line of installing tools, engineered to match tool with terminal
- Funnel entry insulators allow for easier inserting of wire into barrel
- Colour-coded for easy installation

The Shure-Stake® Tools are Matched to Terminals

The Shure-Stake® mechanism prevents the dies from releasing the terminal until the proper compression has been completed. With this method, an operator achieves a reliable crimp everytime. Thomas & Betts' tooling techniques correctly match tools, wire size and terminal to produce optimum mechanical and electrical performance.

Overview

Thomas & Betts is pleased to announce that Sta-Kon® RA, RB and RC insulated quick disconnect products are now UL Listed at 600 volts.

Sta-Kon® Technical Data

Terminals & Splices Insulation Rating	UL 94 Flammability	Voltage	Temperature
Nylon	V-2	600V	105ºC
Vinyl	V-0		
TEFZEL®	V-0		
Disconnects (non-insulated)		300V	

TEFZEL® is a registered trademark of DuPont.

The Sta-Kon® Terminals Numbering System

Distributor Package 100/50
Bulk "O.E.M." Packaged 1000/500

Common to Both Packages

- Letter **A** denotes 22-18 AWG wire range = Red
- Letter **B** denotes 16-14 AWG wire range = Blue
- Letter **C** denotes 26-22 AWG, 12-10 AWG wire range = Yellow
- Letter **R** preceding the above letters indicates the terminal is insulated
- No letter **R**… no insulation … no exception!

Distributor Packaged

Part numbers are very descriptive indicating insulation and type, stud size, tongue style and the largest maximum wire that can be put inside.

- If the letter **R precedes** the number, the part is nylon insulated – RA18-6
- If the letter **R follows** the number, the part is vinyl insulated – 14RB-8

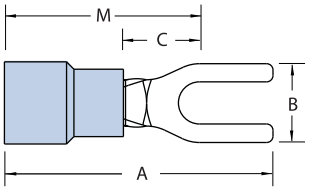
EXAMPLE: 10RC-8F
C – Indicates 12-10 AWG
10RC – Vinyl Insulated
8 – Indicates stud size
F – Means a fork tongue terminal
FL – Would indicate locking fork

EXAMPLE: 2RA18X
2 – Indicates a 2 way or butt style connector
X – Means expanded insulation

Fork Terminals

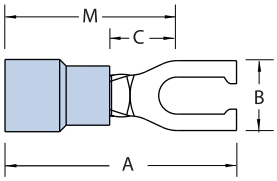
- Fork terminals enable easy installation because the mounting screw does not have to be completely removed
- Brazed-seam barrel is serrated for high pull-out value
- Terminal is high-conductivity electrolytic copper, electro-tin plated. Insulation is colour-coded
- Vinyl-insulated fork terminals have extra-long PVC insulation sleeve for protection and stress relief at wire's flex point

Nylon-Insulated Forks



Cat. No.	Pkg. Qty.	Wire Range	Max. Ins. (in.)	Bolt Hole	Rec. Tool	Dimensions (in.) A	B	C	M	Stock Thick. (in.)
RA18-6F	100	22–16	0.136	#6	ERG4001	0.83	0.25	0.25	0.71	0.02
RA1103	1,000			#6		0.83	0.25			
RA18-8F	100			#8		0.86	0.31			
RA1123	1,000			#8		0.86	0.31			
RA18-10F	100			#10		0.86	0.31			
RA1153	1,000			#10		0.86	0.31			
RA18-14F	100			1/4 in.		0.95	0.44	0.31	0.70	
RA1163	1,000			1/4 in.		0.95	0.44			
RB14-6F	100	18–14	0.162	#6		0.87	0.31	0.25	0.71	0.03
RB1113	1,000			#6		0.87	0.31			
RB14-8F	100			#8		0.87	0.31			
RB1123	1,000			#8		0.87	0.31			
RB14-10F	100			#10		0.87	0.38			
RB1153	1,000			#10		0.87	0.38			
RB14-14F	100			1/4 in.		0.95	0.44	0.28	0.74	
RB1163	1,000			1/4 in.		0.95	0.44			
RB1103	1,000			#6		0.74	0.28	0.16	0.60	
RB1124	1,000		0.190	#8		0.95	0.31	0.25	0.79	
RB1154	1,000			#10		0.95	0.31			
RC10-6F	50	12–10	0.210	#6		0.97	0.31	0.27	0.81	0.04
RC1113	500			#6		0.97	0.31			
RC10-8F	50			#8		1.00	0.37			
RC1123	500			#8		1.00	0.37			
RC10-10F	50			#10		1.00	0.37			
RC1153	500			#10		1.00	0.37			
RC10-14F	50			1/4 in.		1.12	0.50		0.86	
RC1163	500			1/4 in.		1.12	0.50			
RC1124	500		0.250	#8		1.10	0.37		0.91	
RC1154	500			#10		1.10	0.37			

Nylon-Insulated Locking Forks

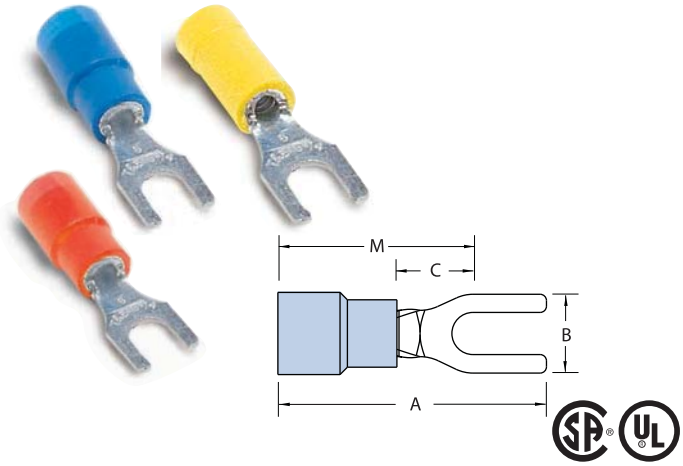


Cat. No.	Pkg. Qty.	Wire Range	Max. Ins. (in.)	Bolt Hole	Rec. Tool	Dimensions (in.) A	B	C	M	Stock Thick. (in.)
RA18-6FL	100	22–16	0.136	#6	ERG4001	0.86	0.25	0.25	0.71	0.02
RA2213	1,000			#6						
RA18-8FL	100			#8			0.29			
RA2243	1,000			#8						
RA18-10FL	100			#10						
RA2253	1,000			#10						
RB14-6FL	100	18–14	0.162	#6		0.87	0.25			0.03
RB2213	1,000			#6						
RB2214	1,000			#6		0.95			0.79	
RB14-8FL	100			#8		0.87	0.29		0.71	
RB2233	1,000			#8						
RB14-10FL	100			#10						
RB2253	1,000			#10						
RB2254	1,000		0.190	#10		0.95				
RC10-6FL	50	12–10	0.210	#6		0.97	0.31	0.27	0.81	0.04
RC2203	500			#6						
RC2204	1,000		0.250	#6		1.07			0.91	
RC10-8FL	50		0.210	#8		1.00	0.37		0.81	
RC2213	500			#8		1.00				
RC10-10FL	50			#10		1.00				
RC2223	500			#10		1.00				
RC2224	500		0.250	#10		1.10			0.91	
RC10-14FL	50		0.210	1/4 in.		1.12	0.50	0.32	0.86	
RC2233	500			1/4 in.		1.12				

Add suffix "X" for wider wire entry to accommodate heavy wall insulation

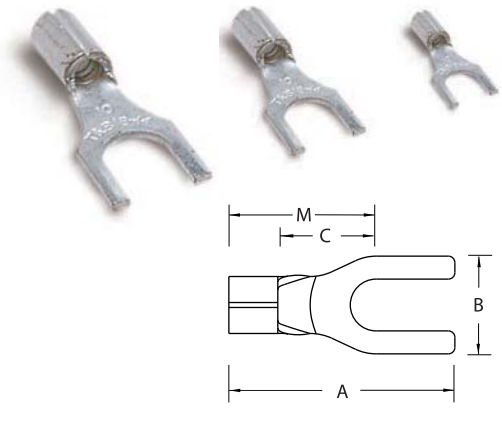
Fork Terminals

Vinyl-Insulated Forks — Expanded Insulation



Cat. No.	Pkg. Qty.	Wire Range	Max. Ins. (in.)	Bolt Hole	Rec. Tool	Dimensions (in.) A	B	C	M	Stock Thick. (in.)
18RA-6FX	100	22–16	0.170	#6	ERG4001	0.94	0.25	0.27	0.81	0.02
RA1167-170	1,000			#6						
18RA-8FX	100			#8		0.97	0.31			
RA1147-170	1,000			#8						
18RA-10FX	100			#10						
RA1157-170	1,000			#10						
14RB-6FX	100	18–14	0.200	#6						0.03
RB647-200	1,000			#6						
14RB-8FX	100			#8						
RB657-200	1,000			#8						
14RB-10FX	100			#10						
RB1157-200	1,000			#10						
10RC-8FX	50	12–10	0.250	#8		1.11	0.38		0.90	0.04
RC1147-250	500			#8						
10RC-10FX	50			#10						
RC1157-250	500			#10						
10RC-14FX	50			1/4 in.		1.17	.50	.37		

Non-Insulated Locking Fork Terminals



Cat. No.	Pkg. Qty.	Wire Range	Bolt Hole	Rec. Tool	Dimensions (in.) A	B	C	M	Stock Thick. (in.)
A18-6F	100	22–16	#6	ERG4002	0.72	0.25	0.27	0.59	0.02
A116	1,000		#6		0.72	0.25			
A18-8F	100		#8		0.75	0.31			
A114	1,000		#8		0.75	0.31			
A18-10F	100		#10		0.75	0.31			
A115-TB	1,000		#10		0.75	0.31			
B14-6F	100	18–14	#6		0.75	0.31			0.03
B64	1,000		#6		0.75	0.31			
B19	1,000		#6		0.66	0.25	0.13	0.50	
B14-8F	100		#8		0.75	0.31	0.27	0.59	
B65-TB	1,000		#8		0.75	0.31			
B14-10F	100		#10		0.75	0.31			
B115	1,000		#10		0.75	0.31			
B14-14F	100		1/4 in.	ERG4002	0.90	0.44	0.38	0.68	
C10-6F	50	12–10	#6	ERG4005	0.77	0.31	0.27	0.63	0.04
C133	500		#6		0.77	0.31			
C10-8F	50		#8		0.82	0.38			
C114	500		#8		0.82	0.38			
C10-10F	50		#10		0.82	0.38			
C115	500		#10		0.82	0.38			
C10-14F	50		1/4 in.		0.98	0.50	0.37	0.73	
C116-TB	500		1/4 in.		0.98	0.50			