

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

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.

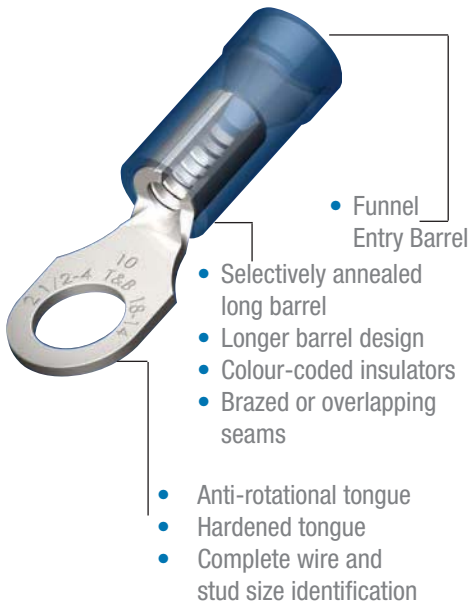
Funneled Terminal Barrel Entry

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 O	260°C
Nickel Plate	NP	QQ-N-290 Class 2, Grade G	260°C
Plain Finish	PF	None	150°C
Silver Plate	SP	MIL-T-16366 Type I, or II, 400°F, 204°C	150°C
Tin Plate	TP	MIL-T-10727 Type I	150°C

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.



• Deep Internal Serrations.

- 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	105°C
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

Disconnects and Male Tabs

- 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 enable easier inserting of wire into barrel
- Colour-coded for easy installation

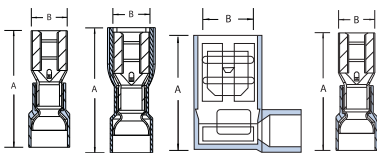
250 Series – Female Disconnects

- Female disconnect terminals and matching male tabs accommodate a range of #22–#10 AWG, and are available in non-insulated, partially insulated and fully insulated styles, in both nylon and vinyl
- Unique construction of the female disconnect offers long-term dependability
- Brazed-seam serrated barrel provides maximum tensile strength

187 Series – Female Disconnects

- Quick, reliable method of connection to terminal blocks and boards without the use of tools
- Female disconnect terminals and matching male tabs accommodate a range of #22–#10 AWG, and are available in non-insulated, partially insulated and fully insulated styles, in both nylon and vinyl
- Unique construction of the female disconnect offers long-term dependability

250 Series – Female Disconnects



Nylon self-insulated



Vinyl self-insulated



Nylon fully insulated



Nylon open top insulated 90° flag



Non-insulated



Non-insulated/insulation grip



Cat. No.	Pkg. Qty.	Wire Range	Max. Ins. (in.)	Tab Size	Fig.	Rec. Tool	Dimensions (in.)	
							A	B
Nylon self-insulated								
RA18-250F	100	22–18	0.136	0.250 x 0.032	1	ERG4001	0.91	0.29
RA250-TB	1,000	22–18	0.136					
RB14-250F	100	16–14	0.162					
RB250	1,000	16–14	0.162					
RC10-250F	50	12–10	0.215					
RC250	500	12–10	0.215					
Vinyl self-insulated								
18RA-250F	100	22–18	0.150	0.250 x 0.032	1	ERG4001	0.96	0.29
RA257	1,000	22–18	0.150					
RA257-170	1,000	22–18	0.170					
14RB-250F	100	16–14	0.170					
RB257	1,000	16–14	0.170					
RB257-200	1,000	16–14	0.200					
10RC-250F	50	12–10	0.250	0.250 x 0.032	2	ERG4001	1.03	0.38
RC257	500	12–10	0.250					
Nylon fully insulated								
18RA-2577	50	22–18	0.165	0.250 x 0.032	2	ERG4001	1.01	0.38
RA2573	1,000	22–18	0.165					
14RB-2577	50	16–14	0.185					
RB2573	1,000	16–14	0.185					
10RC-2577	50	12–10	0.225					
RC2573	500	12–10	0.225					
Nylon open top insulated 90° flag								
RA18-250A	50	22–18	0.170	0.250 x 0.032	3	ERG4001	0.80	0.71
RA2577F	500	22–18	0.170					
RB14-250A	50	16–14	0.190				0.88	
RB2577F	500	16–14	0.190					
RC10-250A	50	12–10	0.245					
RC2577F	500	12–10	0.245					
Non-insulated								
A18-250	100	22–18	–	0.250 x 0.032	1	ERG4002	0.73	0.31
A250-TB	1,000	22–18						
B14-250	100	16–14						
B250	1,000	16–14						
C10-250F	50	12–10						
C250	500	12–10						
Non-insulated/insulation grip								
B14-250F	100	16–14	–	0.250 x 0.032	4	WT110M	0.87	0.31
B250G	1,000	16–14						

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