

# Overview

Experience the Sta-Kon advantage.



Sta-Kon 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

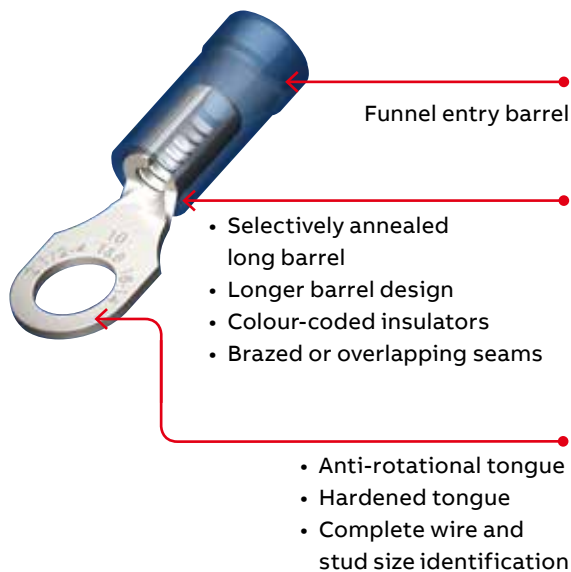
After the insertion of a wire into the terminal's barrel, a deep, serrated interior ensures a large area of contact that lowers the resistance of a connection. With the mechanical force of the tool, the wire strands cold flow into the serrated interior. This guarantees electrical resistance lower than 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.

**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, ABB 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 that 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 ABB 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 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 that 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**

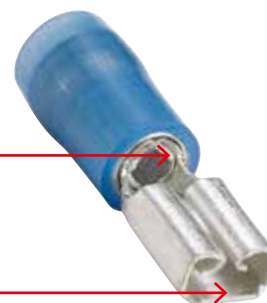
Electro-plated tin is the standard. All others require minimum order quantities and are generally not stocked. Alternative platings as follows: gold, silver, tin-alloys, nickel, etc. The following finishes are available on most one-piece Sta-Kon terminals:

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

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## 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 that 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 AWG
  - Insulated: 22–10 AWG

## 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. ABB tooling techniques correctly match tools, wire size and terminal to produce optimum mechanical and electrical performance.





Sta-Kon RA, RB and RC insulated quick disconnect products are now UL Listed at 600 volts.

**Sta-Kon technical data**

Terminals and splices insulation rating	UL 94 flammability	Voltage	Temperature
Nylon	V-2	600	105 °C
Vinyl	V-0	600	105 °C
Tefzel®	V-0	600	105 °C
Disconnects (non-insulated)		300	105 °C

Tefzel is a registered trademark of DuPont.

**The Sta-Kon terminals numbering system**

Distributor package 100/50  
Bulk OEM package 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

<b>Example: 10RC-8F</b>	
C	Indicates 12–10 AWG
10RC	Vinyl insulated
8	Indicates stud size
F	Means a fork tongue terminal
FL	Would indicate locking fork

<b>Example: 2RA18X</b>	
2	Indicates a 2-way or butt-style connector
X	Means expanded insulation