



Thomas & Betts is pleased to introduce Spec-Kon® crimp terminals, disconnects, and splices. Ideal for OEM applications, the Spec-Kon® line can be used anywhere a high number of terminations are required every day, such as the wiring harness, panelboard, telecommunications, and automotive industries.

### The Spec-Kon° terminal offering includes:

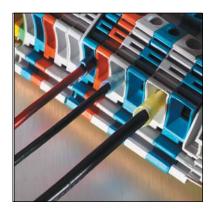
- A broad selection of bulk-packaged loose piece terminals in non-insulated and insulated varieties, including male and female disconnects, rings, forks, pins, blades, butt splices, wire joints and bullet connectors.
- Terminals on mylar tape for automated applications, including the new KT-2500 power tool for frequent, repeated crimps.
- The ERG-2500 ergonomic hand tool, which crimps all sizes of insulated barrel-style Spec-Kon\* wire termination products.

# **Catalog Numbering System**

| Example: KV18-6R-M                       |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|
| K  | V  | 18   | 6  | М  |  |  |  |  |  |  |
| Product                                  | Terminal and Insulation  | Wire Size Range  | Feature Size   | Terminal Type  | Box Quantity   |  |  |  |  |  |
| Thomas & Betts<br>Spec-Kon*<br>Terminals | (Blank) Bare Non-Insulated (V) Vinyl Funnel Entry (N) Nylon Funnel Entry (VF) Vinyl Fully Insulated (NF) Nylon Fully Insulated | (18) 22-16 AWG<br>(14) 16-14 AWG<br>(10) 12-10 AWG<br>(8) 8 AWG<br>(6) 6 AWG<br>(4) 4 AWG<br>(2) 2 AWG | Bolt Hole: Ring and Fork Terminals  Tab Width: (250 Series) Disconnects  Pin Length: Pin Terminals  Blade Length: Blade Terminals  Diameter: Bullets | (R) Ring (MS) Multiple Stud Ring (F) Fork (LF) Locking Fork (FF) Flanged Fork (PT) Pin Terminal (BL) Blade Terminal (MD) Male Disconnect (FD) Female Disconnect (FD) Female Flag Disconnect (PD) Piggy Back Disconnect (FB) Female Bullet (MB) Male Bullet (MB) Male Bullet (BS) Butt Splice (QS) Quick Splice (WJ) Wire Joint (Closed End) (BFD) Barrel Flag Disconnect | (C) = 100<br>(CC) = 200<br>(W) = 250<br>(D) = 500<br>(M) = 1,000<br>(T) = Mylar<br>Tape* |  |  |  |  |  |

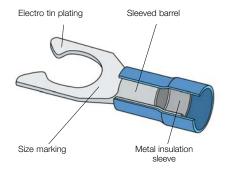


# **Spec-Kon**° Terminals



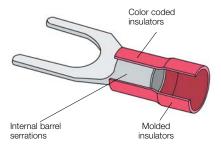
### Features and Benefits of Spec-Kon<sup>o</sup> Terminals

- *Internal barrel serrations*—During crimping, the wire will cold flow into serrations, giving lower resistance connections and improving tensile strength.
- Size marking—Wire range is stamped on the tongue (metric and English) for easy access to the terminal size without drawings/packaging.
- *Electro tin plating*—Provides excellent corrosion resistance, superior finish for better-looking installation.
- *Ergonomic hand tool*—Ergonomically designed ERG-2500 completes a UL listed crimp while requiring substantially lower handle forces.
- One tool for all insulated products—Thomas & Betts offers a single tool that crimps the entire range of standard insulated terminals, disconnects, and butt splices. Many competitors require 2 to 4 tools to cover the same range.
- Color coding—Insulators are color coded for specific wire size (red=22-16AWG, blue=16-14AWG, yellow=12-10AWG). Red=8AWG, blue=6AWG.



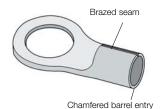
## **Nylon Insulated Terminals**

- Sleeved barrel—Ensures barrel does not separate during crimping.
- *Molded insulators*—Molded insulators ensure consistent shape and quality, shaped entry speeds installation and reduces wire hang up.
- Metal insulation sleeve—Sleeve crimps wire insulation, providing high-vibration resistance and conductor strain relief.
- *Nylon material*—Ideal for harsh environments. Provides excellent chemical, impact and abrasion resistance.
- Ratings—UL Listed, cULus Listed, CSA, 600 V at 105°C.



#### **Vinyl Insulated Terminals**

- Brazed seam—Ensures barrel does not separate during crimping.
- Molded funnel entry insulators—Funnel entry speeds installation and reduces wire hang up. Molded insulators ensure consistent shape and quality every time.
- *Insulation crimp*—The insulator mouth is flared to speed installation and accommodate thicker insulated wires. Also, provides insulation support strain relief in high-vibration applications.
- Vinyl material—Economical, moisture resistant and flame retardant (UL94V-0)
- Ratings—UL Listed, cULus Listed, CSA, 600 V at 105°C.



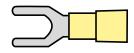
#### **Non-Insulated Terminals**

- Brazed seam—Ensures barrel does not separate during crimping.
- Chamfered barrel entry—Smoothing the barrel entry edge facilitates wire insertion.
- Ratings—UL Listed, cULus Listed, CSA, 2000 V.



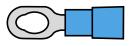
## Rings

Provides the most secure and reliable connection available



### **Forks**

Fast and easy to install without removing the terminal block screw



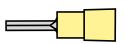
## **Multiple-Stud Rings**

Special tongue style that accommodates 3 stud sizes with one terminal



## **Locking Forks**

Offers the secure connection of a ring terminal with the fast and easy installation of a fork terminal



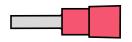
#### **Pins**

Standard insulation-style terminals for use on DIN-style/metric terminal blocks



## Flanged Forks

Turned-up toes provide secure connections in high-vibration applications



#### **Blades**

Standard insulation-style terminals for use on DIN-style/metric terminal blocks

## **Performance Requirements**

| Description                            | Wire Size (AWG) |     |     |     |     |     |     |    |     |     |     |
|--|-----------------|-----|-----|-----|-----|-----|-----|----|-----|-----|-----|
| Description                            | #22             | #20 | #18 | #16 | #14 | #12 | #10 | #8 | #6  | #4  | #2  |
| U.L. 486A (Terminals)                  |                 |     |     |     |     |     |     |    |     |     |     |
| Test Current for Max. 50°C Rise (Amps) | 9               | 12  | 17  | 18  | 30  | 35  | 50  | 70 | 95  | 125 | 70  |
| Min. Tensile Strength* (Lbs.)          | 8               | 13  | 20  | 30  | 50  | 70  | 80  | 90 | 100 | 140 | 180 |

<sup>\*</sup> Pull-out force of the crimped terminal.

# Applicable Spec-Kon° products meet or exceed the following test specifications:

- UL486A (Terminals)
- CSA
- UL486C (Splices)

UL listed products are shown with the applicable logos in the product section.

UL file #E9809 (Terminals).

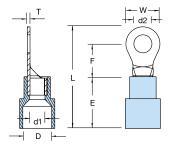
CSA file #LR4503



# **Spec-Kon**° **Terminals**



- Molded Funnel Entry Insulator
- Brazed Seam
- Internal Barrel Serrations



## **Vinyl Insulated Ring Terminals**







| Catalog     | Wire                                      | Во   | olt          | Dimension inch |              |               |      |             |             |              |  |
|-------------|---|------|--------------|----------------|--------------|---------------|------|-------------|-------------|--------------|--|
| Number      | Range                                     | Size | (d2)         | w              | F            | L             | Е    | D           | d1          | Т            |  |
| KV18-6R-M   | 22-16<br>A.W.G.<br>0.5-1.5<br>mm'         | #6   | .146<br>3.7  | .260<br>6.6    | .248<br>6.3  | .803<br>20.4  | .433 | .157<br>4.0 | .067<br>1.7 | .030<br>0.75 |  |
| KV18-8R-M   |   | #8   | .169<br>4.3  | .260<br>6.6    | .248<br>6.3  | .803<br>20.4  |      |             |             |              |  |
| KV18-10R-M  |   | #10  | .209<br>5.3  | .315<br>8.0    | .276<br>7.0  | .858<br>21.8  |      |             |             |              |  |
| KV18-14R-M  |   | 1/4  | .252<br>6.4  | .457<br>11.6   | .433<br>11.0 | 1.094<br>27.8 |      |             |             |              |  |
| KV18-516R-M |   | 5/16 | .331<br>8.4  | .457<br>11.6   | .433<br>11.0 | 1.094<br>27.8 |      |             |             |              |  |
| KV18-38R-M  |   | 3/8  | .413<br>10.5 | .835<br>13.6   | .547<br>13.9 | 1.240<br>31.5 |      |             |             |              |  |
| KV14-6R-M   | 16-14<br>- A.W.G.<br>1.5-2.5<br>- mm'     | #6   | .146<br>3.7  | .260<br>6.6    | .248<br>6.3  | .803<br>20.4  | .433 | .177<br>4.5 | .091        | .031         |  |
| KV14-8R-M   |   | #8   | .169<br>4.3  | .260<br>6.6    | .248<br>6.3  | .803<br>20.4  |      |             |             |              |  |
| KV14-10R-M  |   | #10  | .209<br>5.3  | .335<br>8.5    | .307<br>7.8  | .898<br>22.8  |      |             |             |              |  |
| KV14-14R-M  |   | 1/4  | .252<br>6.4  | .472<br>12.0   | .433<br>11.0 | 1.094<br>27.8 |      |             |             |              |  |
| KV14-516R-M |   | 5/16 | .331<br>8.4  | .472<br>12.0   | .433<br>11.0 | 1.094<br>27.8 |      |             |             |              |  |
| KV14-38R-M  |   | 3/8  | .413<br>10.5 | .535<br>13.6   | .547<br>13.9 | 1.240<br>31.5 |      |             |             |              |  |
| KV10-6R-D   | 12-10<br>A.W.G.<br>4-6<br>mm <sup>*</sup> | #6   | .146<br>3.7  | .283<br>7.2    | .240<br>6.1  | .894<br>22.7  | .512 | .252<br>6.4 | .134<br>3.4 | .039         |  |
| KV10-8R-D   |   | #8   | .169<br>4.3  | .283<br>7.2    | .240<br>6.1  | .894<br>22.7  |      |             |             |              |  |
| KV10-10R-D  |   | #10  | .209<br>5.3  | .374<br>9.5    | .358<br>9.1  | 1.047<br>26.6 |      |             |             |              |  |
| KV10-14R-D  |   | 1/4  | .252<br>6.4  | .472<br>12.0   | .413<br>10.5 | 1.161<br>29.5 |      |             |             |              |  |
| KV10-516R-D |   | 5/16 | .331<br>8.4  | .591<br>15.0   | .531<br>13.5 | 1.339<br>34.0 |      |             |             |              |  |
| KV10-38R-D  |   | 3/8  | .413<br>10.5 | .591<br>15.0   | .531<br>13.5 | 1.339<br>34.0 |      |             |             |              |  |
| KV10-12R-D  |   | 1/2  | .512<br>13.0 | .756<br>19.2   | .630<br>16.0 | 1.520<br>38.6 |      |             |             |              |  |

Box Quantity: (D)=500; (M)=1000

For Mylar Tape replace box quantity with (T). Example: KV18-6R-T

UL File #E9809 CSA File #LR4503

See pages in back of catalog for complete tool information. Tool and Die Selection Chart on page M42.

 $\begin{tabular}{ll} \textbf{Maximum Electrical Rating:} & 105 \ensuremath{^{\circ}\text{C}} & 600 \ensuremath{\mbox{ Volts Max.}} \\ \textbf{Terminal Material:} & Copper \ensuremath{\mbox{ Copper}} \\ \ensuremath{\mbox{ Volts Max.}} \\ \ensuremath{\mbox{ Volts Max.}} \\ \ensuremath{\mbox{ Copper}} \\ \ensuremath{\mbox{ Copper}} \\ \ensuremath{\mbox{ Volts Max.}} \\ \ensuremath{\mbox{ Copper}} \\ \ensuremath{\mbox{ Cop$ 

# Tools used with Vinyl Insulated Ring Terminals





