



**Crimp Terminals, Disconnects, and Splices**

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**

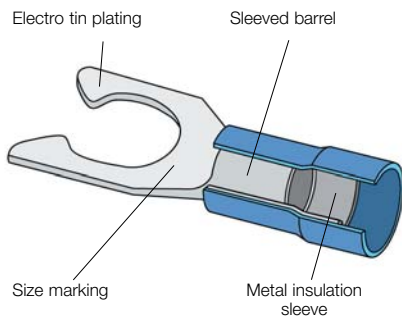
<b>K</b>	<b>V</b>	<b>18</b>	<b>6</b>	<b>R</b>	<b>M</b>
<b>Product</b>	<b>Terminal and Insulation</b>	<b>Wire Size Range</b>	<b>Feature Size</b>	<b>Terminal Type</b>	<b>Box Quantity</b>
Thomas & Betts Spec-Kon® Terminals	(Blank) Bare Non-Insulated (V) Vinyl Funnel Entry (N) Nylon Funnel Entry (VF) Vinyl Fully Insulated (NF) Nylon Fully Insulated	(18) 22-16 AWG (14) 16-14 AWG (10) 12-10 AWG (8) 8 AWG (6) 6 AWG (4) 4 AWG (2) 2 AWG	<b>Bolt Hole:</b> Ring and Fork Terminals  <b>Tab Width:</b> (250 Series) Disconnects  <b>Pin Length:</b> Pin Terminals  <b>Blade Length:</b> Blade Terminals  <b>Diameter:</b> 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 (FFD) Female Flag Disconnect (PD) Piggy Back Disconnect (FB) Female Bullet (MB) Male Bullet (BS) Butt Splice (QS) Quick Splice (WJ) Wire Joint (Closed End) (BFD) Barrel Flag Disconnect	(C) = 100 (CC) = 200 (W) = 250 (D) = 500 (M) = 1,000 (T) = Mylar Tape*  * Please contact Customer Service for pricing and availability.

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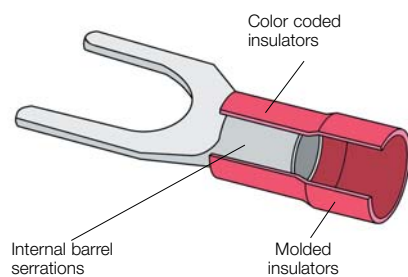
## Features and Benefits of Spec-Kon® Terminals

- **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.



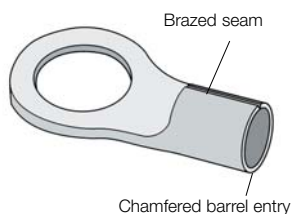
## Nylon Insulated Terminals

- **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

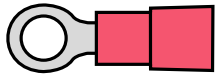
- **Brazed seam**—Ensures barrel does not separate during crimping.
- **Molded funnel entry insulators**—Funnel entry speeds installation and reduces wire hang up. Molded insulators ensure consistent shape and quality every time.
- **Insulation crimp**—The insulator mouth is flared to speed installation 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

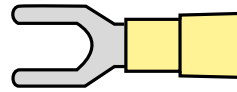
- **Brazed seam**—Ensures barrel does not separate during crimping.
- **Chamfered barrel entry**—Smoothing the barrel entry edge facilitates wire insertion.
- **Ratings**—UL Listed, cULus Listed, CSA, 2000 V.

## Design Features of Spec-Kon® Terminals



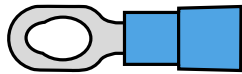
### Rings

Provides the most secure and reliable connection available



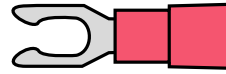
### Forks

Fast and easy to install without removing the terminal block screw



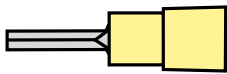
### Multiple-Stud Rings

Special tongue style that accommodates 3 stud sizes with one terminal



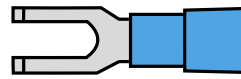
### Locking Forks

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



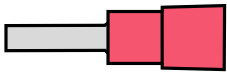
### Pins

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)										
	#22	#20	#18	#16	#14	#12	#10	#8	#6	#4	#2
<b>U.L. 486A (Terminals)</b>											
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

\* Pull-out force of the crimped terminal.

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

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

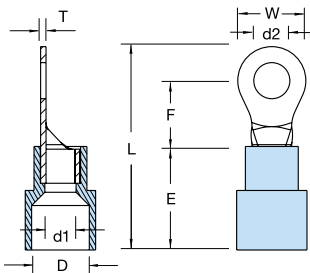
UL listed products are shown with the applicable logos in the product section.

UL file #E9809 (Terminals).

CSA file #LR4503



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



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## Vinyl Insulated Ring Terminals



Catalog Number	Wire Range	Bolt Size (d2)	Dimension <small>inch mm</small>							
			W	F	L	E	D	d1	T	
KV18-6R-M	22-16 A.W.G. 0.5-1.5 mm <sup>2</sup>	#6	.146 3.7	.260 6.6	.248 6.3	.803 20.4	.433 11.0	.157 4.0	.067 1.7	.030 0.75
KV18-8R-M		#8	.169 4.3	.260 6.6	.248 6.3	.803 20.4				
KV18-10R-M		#10	.209 5.3	.315 8.0	.276 7.0	.858 21.8				
KV18-14R-M		1/4	.252 6.4	.457 11.6	.433 11.0	1.094 27.8				
KV18-516R-M		5/16	.331 8.4	.457 11.6	.433 11.0	1.094 27.8				
KV18-38R-M		3/8	.413 10.5	.835 13.6	.547 13.9	1.240 31.5				
KV14-6R-M	16-14 A.W.G. 1.5-2.5 mm <sup>2</sup>	#6	.146 3.7	.260 6.6	.248 6.3	.803 20.4	.433 11.0	.177 4.5	.091 2.3	.031 0.8
KV14-8R-M		#8	.169 4.3	.260 6.6	.248 6.3	.803 20.4				
KV14-10R-M		#10	.209 5.3	.335 8.5	.307 7.8	.898 22.8				
KV14-14R-M		1/4	.252 6.4	.472 12.0	.433 11.0	1.094 27.8				
KV14-516R-M		5/16	.331 8.4	.472 12.0	.433 11.0	1.094 27.8				
KV14-38R-M		3/8	.413 10.5	.535 13.6	.547 13.9	1.240 31.5				
KV10-6R-D	12-10 A.W.G. 4-6 mm <sup>2</sup>	#6	.146 3.7	.283 7.2	.240 6.1	.894 22.7	.512 13.0	.252 6.4	.134 3.4	.039 1.0
KV10-8R-D		#8	.169 4.3	.283 7.2	.240 6.1	.894 22.7				
KV10-10R-D		#10	.209 5.3	.374 9.5	.358 9.1	1.047 26.6				
KV10-14R-D		1/4	.252 6.4	.472 12.0	.413 10.5	1.161 29.5				
KV10-516R-D		5/16	.331 8.4	.591 15.0	.531 13.5	1.339 34.0				
KV10-38R-D		3/8	.413 10.5	.591 15.0	.531 13.5	1.339 34.0				
KV10-12R-D	1/2	.512 13.0	.756 19.2	.630 16.0	1.520 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.

**Maximum Electrical Rating:** 105°C 600 Volts Max.

**Terminal Material:** Copper

### Tools used with Vinyl Insulated Ring Terminals



ERG2500



KT-2500

**Thomas & Betts**













### Tool and Die Selection Chart

Spec-Kon® Terminals		Plier Tool	Ergonomic Hand Tool	KT-2500 Pneumatic Tool Die Part Numbers			13500 Pneumatic Tool Die Part Numbers			Erg-3000 Power Hand Tool Die Part Numbers		
Nylon Terminal (22-10 AWG)	KN or KNF	WT112M	ERG-2500	KT-18	KT-14	KT-10	KT-18X	KT-14X	KT-10X	KT-18Y	KT-14Y	KT-10Y
Nylon Butt Splice		WT112M	ERG-2500	N/A	N/A	N/A	KT-18X	KT-14X	KT-10X	KT-18Y	KT-14Y	KT-10Y
Nylon Disconnect		WT112M	ERG-2500	KT-18	KT-14	KT-10	KT-18X	KT-14X	KT-10X	KT-18Y	KT-14Y	KT-10Y
Nylon Terminal (8-6 AWG)		TBM6	N/A	KT-8	KT-6	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Vinyl Terminal (22-10 AWG)	KV or KVF	WT112M	ERG-2500	KT-18	KT-14	KT-10	KT-18X	KT-14X	KT-10X	KT-18Y	KT-14Y	KT-10Y
Vinyl Butt Splice		WT112M	ERG-2500	KT-18	KT-14	KT-10	KT-18X	KT-14X	KT-10X	KT-18Y	KT-14Y	KT-10Y
Vinyl Disconnect		WT112M	ERG-2500	KT-18	KT-14	KT-10	KT-18X	KT-14X	KT-10X	KT-18Y	KT-14Y	KT-10Y
Non Insulated Terminal (22-10 AWG)	K	WT111M	ERG-2002	KTU-18	KTU-14	KTU-10	KTU-2210X	KTU-2210X	KTU-2210X	KTU-2214Y	KTU-2214Y	KTU-2214Y
Non Insulated Butt Splice		WT111M	ERG-2002	N/A	N/A	N/A	KTU-2210X	KTU-2210X	KTU-2210X	KTU-2214Y	KTU-2214Y	KTU-2214Y
Non Insulated Terminal (8-6 AWG)		TBM6	N/A	N/A	N/A	N/A	KTU-8	KTU-6	N/A	N/A	N/A	N/A
Wire Joints	KN or KNF	WT112M	ERG-2500WJ	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Flag Terminals		N/A	ERG-2500F	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

### Strip Length Chart

Description	Terminal Series	Wire Strip Length
Non-Insulated Terminals	K18	1/4"
	K14	1/4"
	K10	5/16"
	K8	3/8"
	K6	7/16"
	K4	1/2"
	K2	9/16"
Vinyl Insulated Terminals	KV18	1/4"
	KV14	1/4"
	KV10	5/16"
	KV8	3/8"
	KV6	7/16"
Nylon Insulated Terminals	KN18	1/4"
	KN14	1/4"
	KN10	5/16"
	KN8	3/8"
	KN6	7/16"
Vinyl Insulated Disconnects	KV18	1/4"
	KV14	1/4"
	KV10	5/16"
Nylon Insulated Disconnects	KN18	1/4"
	KN14	1/4"
	KN10	5/16"
Vinyl Insulated Butt Splices	KV18	5/16"
	KV14	5/16"
	KV10	5/16"
Nylon Insulated Butt Splices	KN18	1/4"
	KN14	1/4"
	KN10	1/4"
Nylon Wire Joints	K18	9/32"
	K14	9/32"
	K10	11/32"

### Stud Size Chart

Standard Stud Size U.S.		Stud Diameter Inches mm	Terminal Hole Dia. Inches mm	Spec-Kon Stud Size Part No. Designation
	#2 M2	.086 2.18	.090 2.29	2
	#4 M2,5	.112 2.84	.118 3.00	4
	#5 M3	.125 3.18	.127 3.23	5
	#6 M3,5	.138 3.51	.146 3.71	6
	#8 M4	.164 4.17	.173 4.39	8
	#10 M5	.190 4.83	.198 5.03	10
	1/4 M6	.250 6.35	.270 6.86	14
	5/16 M8	.312 7.92	.330 8.38	56
	3/8 M10	.375 9.53	.385 9.78	38
	1/2 M12	.500 12.7	.520 13.21	12
	5/8 M16	.625 15.88	.650 16.51	58
	3/4 M18	.750 19.05	.810 20.57	34

### Common Conductor Size Chart

Size	No. of Strands	Individual Strand Size	Conductor Size	
		Inches mm	Inches mm	Circl. Mil Area mm
22AWG	7	.0096 0.24	.028 0.74	640 0.74
20AWG	10	.0100 0.25	.038 0.97	1020 0.519
18AWG	16	.0100 0.25	.048 1.22	1620 0.823
16AWG	26	.0100 0.25	.060 1.52	2580 1.310
14AWG	7	.0242 0.61	.073 1.85	4110 2.080
12AWG	7	.0305 0.77	.092 2.34	6530 3.310
10AWG	7	.0385 0.98	.116 2.95	10,380 5.261
8AWG	7	.0486 1.23	.146 3.71	16,510 8.367
6AWG	7	.0612 1.55	.184 4.67	26,240 13.30
4AWG	7	.0772 1.96	.232 5.89	41,740 21.15
2AWG	7	.0974 2.47	.292 7.42	66,360 33.62
1AWG	19	.0664 1.69	.332 8.43	83,690 42.41
1/10AWG	19	.0745 1.89	.373 9.47	105,600 53.49
2/0AWG	19	.0837 2.13	.418 10.62	133,100 67.43
3/0AWG	19	.0940 2.39	.470 11.94	167,800 85.01
4/0AWG	19	.1055 2.68	.528 13.41	211,600 107.2
250MCM	37	.0822 2.09	.575 14.61	250,000 127
300MCM	37	.0900 2.29	.630 16.00	300,000 152
350MCM	37	.0973 2.47	.681 17.29	350,000 177
400MCM	37	.1040 2.64	.728 18.49	400,000 203
500MCM	37	.1162 2.95	.813 20.65	500,000 253
600MCM	61	.0992 2.52	.893 22.68	600,000 304
750MCM	61	.1109 2.82	.998 25.35	750,000 380
800MCM	61	.1145 2.91	1.031 26.19	800,000 405
1000MCM	61	.1280 3.25	1.152 29.26	1,000,000 507

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