



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

K	V	18	6	R	M
Product	Terminal and Insulation	Wire Size Range	Feature Size	Terminal Type	Box Quantity
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	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 (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.

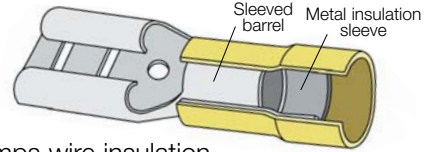
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Spec-Kon®



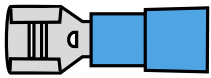
Features and Benefits

Nylon and Vinyl Disconnects

- **Sleeved barrel**—Ensures barrel does not separate during crimping.
- **Funnel entry insulators**—Funnel entry speeds installation and reduces wire hang up.
- **Partial and fully insulated**—Offers a wide range of products to meet virtually any application
- **Metal insulation sleeve**—Sleeve crimps wire insulation, providing high-vibration resistance and conductor strain relief.
- **Ratings**—UL Listed, cULus Listed, CSA, 600 V at 105°C for nylon and vinyl.

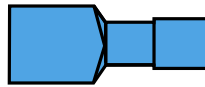


Design Features of Spec-Kon® Disconnects



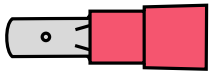
Female Disconnect

Provides easy installation and removal from male tabs and auxiliary equipment



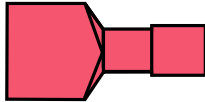
Fully Insulated Female

Standard female tab with the safety and reliability of complete insulation



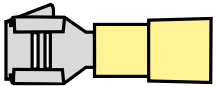
Male Disconnect

Tab-style male disconnects are fast and reliable



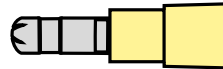
Fully Insulated Male

Standard male tab with the safety and reliability of complete insulation



Female Piggy Back

Provides the option for multiple circuits using one termination point



Bullet Disconnect and Receptacle

Fast and reliable alternative to the tab style featuring a lower profile to reduce space requirements

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Performance Requirements

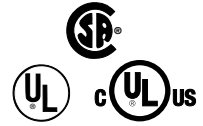
Description	Wire Size (AWG)						
	#22	#20	#18	#16	#14	#12	#10
U.L. 310 (Disconnects)							
Test Current for Max. 30°C Rise (Amps)	3	4	7	10	15	20	24
Min. Tensile Strength* (Lbs.)	8	13	20	30	50	70	80

* Pull-out force of the crimped terminal.

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

- UL310 (Disconnects)
- CSA

UL listed products are shown with the applicable logos in the product section.
UL file #E66716 (Disconnects).
CSA file #LR4503



Vinyl Fully Insulated Female Disconnects



110 Tab Size



187 Tab Size



250 Tab Size

- Fully Insulated
- Brazed Seam
- Internal Barrel Serrations
- Funnel Entry

Catalog Number	Wire Range	Tab Size inch	Dimension ^{inch} / _{mm}					
			W	F	L	B	D	T
KVF18-110-20FDM	22-16 A.W.G. 0.5-1.5 mm ²	.110 x .020	.126 3.2	.256 6.5	.748 19.0	.413 10.5	.150 3.8	.012 0.3
KVF18-110-32FDM		.110 x .032	.126 3.2	.256 6.5	.748 19.0			
KVF18-187-20FDM		.187 x .020	.197 5.0	.252 6.4	.807 20.5	.413 10.5	.185 4.7	.016 0.4
KVF18-187-32FDM		.187 x .032	.197 5.0	.252 6.4	.807 20.5			
KVF18-250FD-M		.250 x .032	.260 6.6	.287 7.3	.858 21.8			
KVF14-110-20FDM	16-14 A.W.G. 1.5-2.5 mm ²	.110 x .020	.126 3.2	.256 6.5	.748 19.0	.413 10.5	.185 4.7	.012 0.3
KVF14-110-32FDM		.110 x .032	.126 3.2	.256 6.5	.748 19.0			
KVF14-187-20FDM		.187 x .020	.197 5.0	.252 6.4	.796 20.2	.413 10.5	.185 4.7	.016 0.4
KVF14-187-32FDM		.187 x .032	.197 5.0	.252 6.4	.796 20.2			
KVF14-250FD-M		.250 x .032	.260 6.6	.287 7.3	.874 22.2			
KVF10-250FD-D	12-10 A.W.G. 4-6 mm ²	.250 x .032	.260 6.6	.287 7.3	.953 24.2	.492 12.5	.244 6.2	.016 0.4

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

For Mylar Tape replace box quantity with (T). Example: KVF18-110-20FD-T

UL File #E66716

CSA File #LR4503

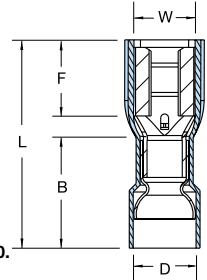
See pages in back of catalog for complete tool information.

Tool and Die Selection Chart on page M42.

Maximum Electrical Rating: 105°C 300 Volts Max.

Terminal Material: Brass with Copper Sleeve

Tools used with Vinyl Fully Insulated Female Disconnects: ERG2500 and KT2500.



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- Fully Insulated
- Metal Insulation Sleeve
- Molded Insulator
- Internal Barrel Serrations
- Funnel Entry

Nylon Fully Insulated Male Disconnects



Catalog Number	Wire Range	Tab Size inch	Dimension ^{inch} / _{mm}					
			W	F	L	B	D	T
KNF18-250MD-D	22-16 A.W.G. 0.5-1.5 mm ²	.250 x .032	.250 6.35	.303 7.7	.976 24.0	.433 11.0	.157 4.0	.016 0.4
KNF14-250MD-D	16-14 A.W.G. 1.5-2.5 mm ²	.250 x .032	.250 6.35	.303 7.7	.976 24.0	.433 11.0	.197 5.0	.016 0.4
KNF10-250MD-D	12-10 A.W.G. 4-6 mm ²	.250 x .032	.250 6.35	.303 7.7	1.016 25.8	.512 13.0	.256 6.5	.016 0.4

Box Quantity: (D)=500

UL File #E66716

CSA File #LR4503

See pages in back of catalog for complete tool information.

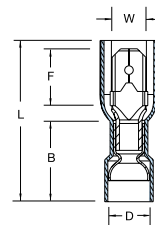
Tool and Die Selection Chart on page M42.

Maximum Electrical Rating: 105°C 600 Volts Max.

Terminal Material: Brass with Copper Sleeve

Yellow Male Disconnect Not Shown.

Tools used with Nylon Fully Insulated Male Disconnects: ERG2500 and KT2500.















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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