

Termination solutions  
Easily and reliably connect your wires

# Spec-Kon®

## Solderless crimp connectors

Experience the Spec-Kon® advantage!

Thomas & Betts (today a Member of the ABB Group) developed the first tool-applied solderless terminals and connectors more than 60 years ago in response to industry awareness of the need for better performance of electrical systems.

1

Since then, the crimping technology, in which a permanent joining of wires / cables to connectors is achieved by the insertion of a conductor into the barrel of the connector, which is then compressed to form a solid joint, has proven its many advantages year after year. Reliability of connection, low installed cost, low level of skill required to produce repeatable and quality crimps, environmental compliance (versus soldering for instance) are examples of benefits that have given this technology its natural superiority.

### Easy entry design

This feature makes wire insertion faster and easier. Chamfering eliminates wire strand “hang up” and departure 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.

### Brazed seam / tubular construction

Spec-Kon® brazed seam connectors have a barrel with brazed seam (or a tubular construction), which provides increased mechanical properties (no barrel separation during the crimp process, higher wire pullout force) and electrical properties (reduced chances of wirestrand loss and electrical failure) compared to butted seam connectors.

### Double crimp

The double crimp feature has an extra copper sleeve within the barrel to ensure additional solid conductivity and pull-out-strength. Ideal for high vibration or heavy industrial applications.

### Wide range of styles, materials and application tools

Extensive range of styles to suit the various applications: rings, forks, blades, pins, bootlace ferrules, disconnects, splices....

Non-insulated or insulated with various types of material (Polycarbonate, Vinyl, Nylon, Heat Shrink) according to the specific requirements (moisture protection, short circuits, dust, and solid crimping against vibration).

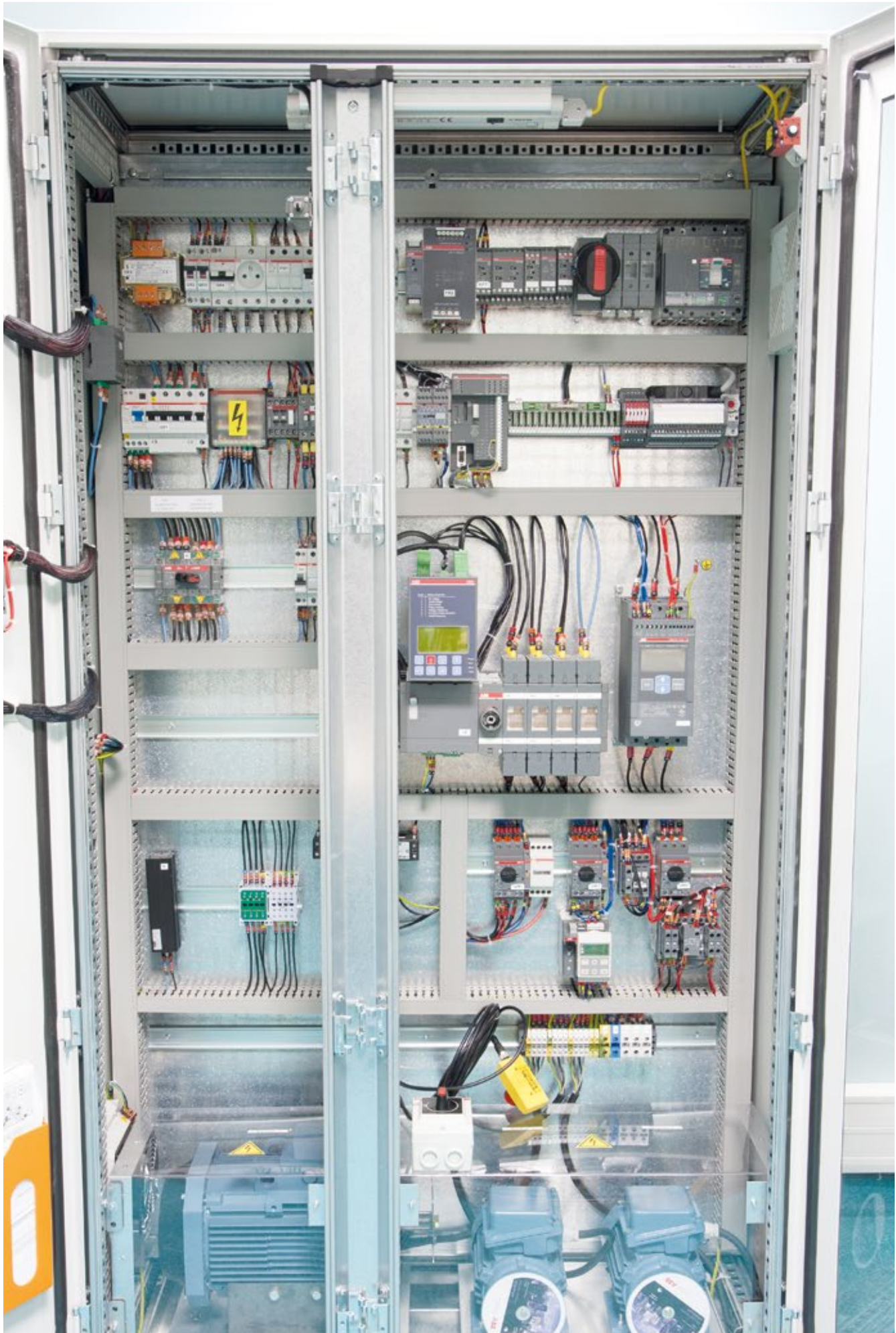
Complete range of tooling, from ergonomic hand tool to pneumatic and hydraulic power tools.

### Thomas & Betts - A Member of the ABB Group

Since June 2012, Thomas & Betts (T&B) is a Member of the ABB Group. ABB is a leading power and automation technology group, active in more than 100 countries with about 150.000 employees worldwide.

With Thomas & Betts, this portfolio will now be completed with the following product lines and flagship brands:

- *Wire & Cable Management* - Ty-Rap® and Ty-Met® cable ties, Shrink-Kon® heat shrink, T&B Cabletray
- *Cable Protection Systems* - nylon & metallic incl. brands: PMA, Adaptaflex, Kopex-Ex, Harnessflex
- *Low Power Connection & Control* - Furse lightning & surge protection, Elastimold, Joslyn Hi-Voltage
- *Emergency lighting* - emergency lighting, battery systems incl. VanLien, Kaufel, Emergi-Lite brands
- *Hazardous location products* - DTS explosion proof light & boxes, Kopex-Ex conduits & fittings



# Table of Content

## Spec-Kon® Crimp terminals

### Spec-Kon® - Crimp terminals

4

Selection guide	4
Spec-Kon® Non-insulated terminals	6
Spec-Kon® Vinyl-Insulated terminals	16
Spec-Kon® Nylon-Insulated terminals	31
Spec-Kon® Polycarbonate-Insulated terminals	50
Heat Shrink Insulated terminals	59
Crimping Tools	71

### Color-Keyed® - power cable connectors

74

### Dragon Tooth® - magnet wire terminals

88

### Shield-Kon® - shielded cable connectors

122

# Selection guide

## Spec-Kon® Crimp terminals

4



### Characteristics


With the Spec-Kon® range of solderless terminals, Thomas & Betts offer a complete termination system:

- Terminals for wires from 0.25 to 6.0 mm<sup>2</sup>
- Standard and unique products for specific applications
- Products for harsh or ambient environments

Features	Benefits
Several styles: Rings, Forks, Blades, pins, bootlace ferrules, Male and female disconnects, ...	To cover all types of application
Several insulation materials: PVC (Vinyl), PA (Nylon), PC (Polycarbonate)	Multiple temperature and flammability rating
Colour coded insulators, according to DIN cable sizes	Instant identification and selection of the terminal
Brazed seam	No barrel separation during crimping
Easy entry design	Avoid wire hang up and allows fast and secure insertion of the conductor
High conductivity electrolytic copper	Superior conductivity and low contact resistance with a strong connection
Electro-tin plating	Maximum corrosion resistance
The contact area on the terminal (e.g. in forks, rings,...) is harder than the crimp area	Better resistance to mechanical deformations
Internal barrel serrations (with some terminals)	Better contact (low contact resistance) and improved mechanical properties (against vibration and pull out)
Dimensional specifications according to DIN 46237	Standardised dimensioning
Cable size and bolt size marking (on most terminals)	Instant identification and selection of the terminal

# Selection guide

## Spec-Kon® Crimp terminals



Terminal type	Material	Plating	Marking	Metal barrel	Insulation	Colour coding	Cable insertion
<b>INSULATED TERMINALS</b>							
Ring	Copper	Tin plated	Wire size & bolt size	With brazed seam or butted seam	PC / PVC / PA	yes	Easy entry
Fork	Copper	Tin plated	Wire size & bolt size	With brazed seam or butted seam	PC / PVC / PA	yes	Easy entry
Blade	Copper	Tin plated	Wire size	With brazed seam or butted seam	PC	yes	Easy entry
Pin	Copper	Tin plated	-	With brazed seam or butted seam	PC	yes	Easy entry
Splice	Copper / Brass	Tin plated	-	With brazed seam or butted seam	PA / PC / heat shrink insulation / PP	yes	Easy entry
Cord End	Copper	Tin plated	-	Copper tube	PA	yes	-
Disconnect	Brass	Tin plated	-	With brazed seam or butted seam	PC / PVC / PA	yes	Easy entry
Bullet	Phosphor bronze / Brass	Tin plated	-	With brazed seam or butted seam	PC / PVC	yes	Easy entry
Receptable	Brass	Tin plated	-	Bullet	Bullet	Bullet	Bullet
<b>NON-INSULATED TERMINALS</b>							
Ring	Copper	Tin plated	-	Brazed seam			
Fork	Copper	Tin plated	-	Brazed seam			
Blade	Copper	Tin plated	-	Brazed seam			
Pin	Electrolytic Copper	Tin plated	-	Brazed seam			
Splice	Copper	Tin plated	-	-			
Disconnect	Brass	Tin plated	-	-			
Cord end	Copper	Tin plated	-	-			
<b>COLOR KEYED LUGS</b>							
Ring	High Conductivity Copper	Electro Tin plated	Wire size & bolt size	Copper tube			

# Non-insulated ring terminals

## Spec-Kon® Non-insulated terminals

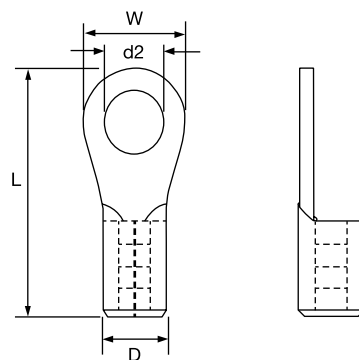
6

### Technical Information

Terminal material	Copper
Terminal surface treatment	Tin plated
Metal barrel	Brazed seem



Product Ref.	Wire size range [mm <sup>2</sup> ]	Stud hole size d2	Dimensions			Quantity [pieces]	Crimping tool	
			W [mm]	L [mm]	D [mm]			
K1-R25	0.5 - 1.5	M2.5	5.5	12.4	3.4	100		
K1-R3	0.5 - 1.5	M3	5.5	12.5	3.4	100		
K1-R35	0.5 - 1.5	M3.5	8.0	12.5	3.4	100		
K1-R4	0.5 - 1.5	M4	8.0	14.4	3.4	100		
K1-R5	0.5 - 1.5	M5	11.6	15.8	3.4	100		
K1-R6	0.5 - 1.5	M6	11.6	21.8	3.4	100		
K1-R8	0.5 - 1.5	M8	11.6	21.8	3.4	100		
K1-R10	0.5 - 1.5	M10	13.6	25.5	3.4	100		
K1-R12	0.5 - 1.5	M12	19.2	30.4	3.4	100		
K2-R3	1.5 - 2.5	M3	8.5	13.2	4.1	100		MCT2000DD
K2-R35	1.5 - 2.5	M3.5	8.5	12.8	4.1	100		ERG4002
K2-R4	1.5 - 2.5	M4	8.5	14.4	4.1	100		
K2-R5	1.5 - 2.5	M5	9.5	16.5	4.1	100		
K2-R6	1.5 - 2.5	M6	12.0	21.8	4.1	100		
K2-R8	1.5 - 2.5	M8	12.0	21.8	4.1	100		
K2-R10	1.5 - 2.5	M10	13.6	25.5	4.1	100		
K2-R12	1.5 - 2.5	M12	19.2	30.4	4.1	100		
K6-R4	4.0 - 6.0	M4	9.5	19.0	6.0	100		
K6-R5	4.0 - 6.0	M5	9.5	19.0	6.0	100		
K6-R6	4.0 - 6.0	M6	12.0	22.5	6.0	100		
K6-R8	4.0 - 6.0	M8	15.0	27.0	6.0	100		
K6-R10	4.0 - 6.0	M10	15.0	27.0	6.0	100		
K6-R12	4.0 - 6.0	M12	19.2	31.5	6.0	100		



# Non-insulated ring DIN terminals

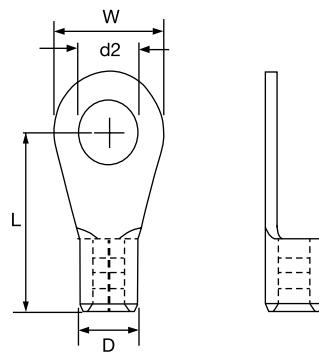
## Spec-Kon® Non-insulated terminals

### Technical Information

Terminal material                   Copper  
 Terminal surface treatment       Tin plated  
 Metal barrel                         Brazed seem



Product Ref.	Wire size range [mm²]	Stud hole size d2	Dimensions			Quantity [pieces]	Crimping tool
			W [mm]	L [mm]	D [mm]		
K1-25R-DIN	0.5 - 1.5	M2.5	6.0	11.0	4.0	100	
K1-3R-DIN	0.5 - 1.5	M3	6.0	11.0	4.0	100	
K1-35R-DIN	0.5 - 1.5	M3.5	6.0	11.0	4.0	100	
K1-4R-DIN	0.5 - 1.5	M4	8.0	12.0	4.0	100	
K1-5R-DIN	0.5 - 1.5	M5	10.0	13.0	4.0	100	
K1-6R-DIN	0.5 - 1.5	M6	11.0	13.0	4.0	100	
K1-8R-DIN	0.5 - 1.5	M8	14.0	17.0	4.0	100	
K1-10R-DIN	0.5 - 1.5	M10	18.0	19.0	4.0	100	
K2-3R-DIN	1.5 - 2.5	M3	6.0	11.0	4.5	100	
K2-35R-DIN	1.5 - 2.5	M3.5	6.0	11.0	4.5	100	MCT2000D
K2-4R-DIN	1.5 - 2.5	M4	8.0	12.0	4.5	100	ERG4002
K2-5R-DIN	1.5 - 2.5	M5	10.0	14.0	4.5	100	
K2-6R-DIN	1.5 - 2.5	M6	11.0	16.0	4.5	100	
K2-8R-DIN	1.5 - 2.5	M8	14.0	17.0	4.5	100	
K2-10R-DIN	1.5 - 2.5	M10	18.0	17.0	4.5	100	
K6-4R-DIN	4.0 - 6.0	M4	8.0	14.0	6.0	100	
K6-5R-DIN	4.0 - 6.0	M5	10.0	15.0	6.0	100	
K6-6R-DIN	4.0 - 6.0	M6	18.0	21.0	6.0	100	
K6-8R-DIN	4.0 - 6.0	M8	14.0	19.0	6.0	100	
K6-10R-DIN	4.0 - 6.0	M10	18.0	21.0	6.0	100	
K6-12R-DIN	4.0 - 6.0	M12	18.0	21.0	6.0	100	





# Non-insulated fork terminals

## Spec-Kon® Non-insulated terminals

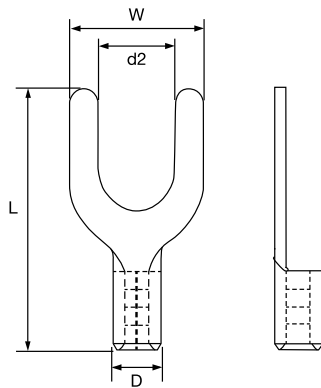
8

### Technical Information

Terminal material	Copper
Terminal surface treatment	Tin plated
Metal barrel	Brazed seem



Product Ref.	Wire size range [mm <sup>2</sup> ]	Stud hole size d2	Dimensions			Quantity [pieces]	Crimping tool
			W [mm]	L [mm]	D [mm]		
K1-3F	0.5 - 1.5	M3	5.7	16.0	3.4	100	MCT2000D ERG4002
K1-35F	0.5 - 1.5	M3.5	6.4	16.0	3.4	100	
K1-4F	0.5 - 1.5	M4	8.1	16.0	3.4	100	
K1-5F	0.5 - 1.5	M5	9.5	16.0	3.4	100	
K1-6F	0.5 - 1.5	M6	12.0	22.0	3.4	100	
K2-3F	1.5 - 2.5	M3	5.7	16.0	4.1	100	
K2-35F	1.5 - 2.5	M3.5	6.0	16.0	4.1	100	
K2-4F	1.5 - 2.5	M4	7.9	16.0	4.1	100	
K2-5F	1.5 - 2.5	M5	9.3	16.0	4.1	100	
K2-6F	1.5 - 2.5	M6	12.0	22.0	4.1	100	
K6-4F	4.0 - 6.0	M4	9.0	18.5	5.6	100	
K6-5F	4.0 - 6.0	M5	9.0	18.5	5.6	100	
K6-6F	4.0 - 6.0	M6	12.0	24.5	5.6	100	
K6-8F	4.0 - 6.0	M8	14.0	23.5	5.6	100	



# Non-insulated blade terminals

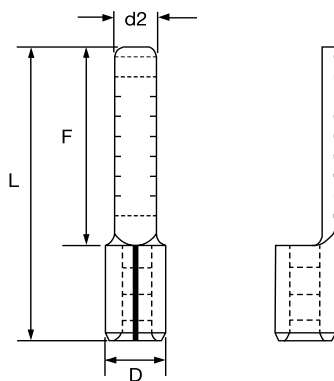
## Spec-Kon® Non-insulated terminals

### Technical Information

Terminal material	Copper
Terminal surface treatment	Tin plated
Metal barrel	Brazed seem



Product Ref.	Wire size range [mm²]	Stud size d2 [mm]	L [mm]	Dimensions		Quantity [pieces]	Crimping tool
				F [mm]	D [mm]		
K1-B23	0.5 - 1.5	2.3	14.8	10.0	3.4	100	
K1-B28	0.5 - 1.5	2.8	13.8	9.0	3.4	100	
K1-B30	0.5 - 1.5	3.0	15.8	11.0	3.4	100	
K2-B24	1.5 - 2.5	2.4	14.8	10.0	4.1	100	
K2-B28	1.5 - 2.5	2.8	13.8	9.0	4.1	100	MCT2000D
K2-B30	1.5 - 2.5	3.0	17.8	13.0	4.1	100	ERG4002
K2-B45	1.5 - 2.5	4.5	17.8	13.0	4.1	100	
K6-B28	4.0 - 6.0	2.8	16.0	10.0	5.6	100	
K6-B40	4.0 - 6.0	4.0	20.0	14.0	5.6	100	
K6-B45	4.0 - 6.0	4.5	20.0	14.0	5.6	100	



# Non-insulated pin terminals

## Spec-Kon® Non-insulated terminals

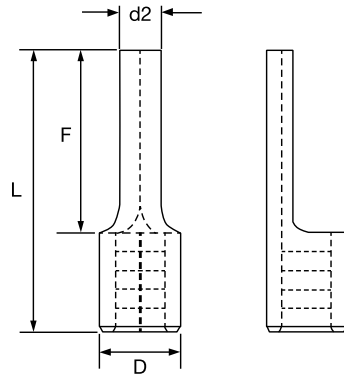
10

### Technical Information

Terminal material	Copper
Terminal surface treatment	Tin plated
Metal barrel	Brazed seem



Product Ref.	Wire size range [mm <sup>2</sup> ]	Stud size d2 [mm]	Dimensions			Quantity [pieces]	Crimping tool
			L [mm]	F [mm]	D [mm]		
K1-P12	0.5 - 1.5	1.9	11.8	7	3.4	100	
K1-P14	0.5 - 1.5	1.9	13.8	9	3.4	100	
K1-P15	0.5 - 1.5	1.9	14.8	10	3.4	100	
K1-P17	0.5 - 1.5	1.9	16.8	12	3.4	100	
K1-P18	0.5 - 1.5	1.9	17.8	13	3.4	100	
K1-P19	0.5 - 1.5	1.9	18.8	14	3.4	100	MCT2000D
K1-P21	0.5 - 1.5	1.9	20.8	16	3.4	100	ERG4002
K2-P14	1.5 - 2.5	1.9	13.8	9	4.1	100	
K2-P15	1.5 - 2.5	1.9	14.8	10	4.1	100	
K2-P17	1.5 - 2.5	1.9	16.8	12	4.1	100	
K2-P18	1.5 - 2.5	1.9	17.8	13	4.1	100	
K2-P21	1.5 - 2.5	1.9	20.8	16	4.1	100	
K6-P17	4.0 - 6.0	2.8	17.0	10	5.6	100	



# Non-insulated parallel splice terminals

## Spec-Kon® Non-insulated terminals

### Technical Information

Terminal material

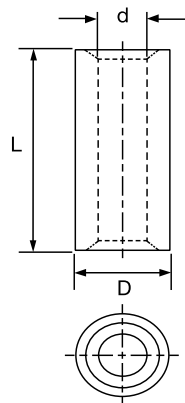
Copper

Terminal surface treatment

Tin plated



Product Ref.	Wire size range [mm <sup>2</sup> ]	Dimensions			Quantity [pieces]	Crimping tool
		L [mm]	D [mm]	d [mm]		
K05-PS	0.2 - 0.5	5.0	2.1	1.3	100	
K1-PS	0.5 - 1.5	8.0	3.3	1.7	100	MCT2000D
K2-PS	1.5 - 2.5	8.0	3.9	2.3	100	ERG4002
K6-PS	4.0 - 6.0	8.5	5.4	3.4	100	



# Non-insulated butt splice terminals

## Spec-Kon® Non-insulated terminals

12

### Technical Information

Terminal material

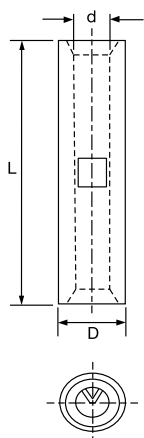
Copper

Terminal surface treatment

Tin plated



Product Ref.	Wire size range [mm <sup>2</sup> ]	Dimensions			Quantity [pieces]	Crimping tool
		L [mm]	D [mm]	d [mm]		
K05-BS	0.2 - 0.5	12	2.1	1.3	100	
K1-BS	0.5 - 1.5	15	3.3	1.7	100	MCT2000D
K2-BS	1.5 - 2.5	15	3.9	2.3	100	ERG4002
K6-BS	4.0 - 6.0	15	5.4	3.4	100	



# Non-insulated female disconnect terminals

## Spec-Kon® Non-insulated terminals

### Technical Information

Terminal material

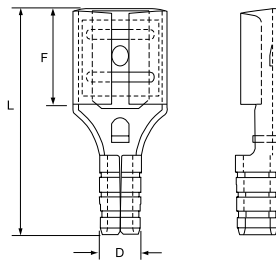
Brass

Terminal surface treatment

Tin plated



Product Ref.	Wire size range [mm <sup>2</sup> ]	Tab size [mm]	Dimensions			Quantity [pieces]	Crimping tool
			L [mm]	F [mm]	D [mm]		
K1-285-FD	0.5 - 1.5	2.8 x 0.5	13.6	6.5	2.7	100	ERG4002 MCT2000D
K1-288-FD	0.5 - 1.5	2.8 x 0.8	13.6	6.5	2.7	100	
K1-485-FD	0.5 - 1.5	4.8 x 0.5	13.8	6.3	2.7	100	
K1-488-FD	0.5 - 1.5	4.8 x 0.8	13.8	6.3	2.7	100	
K1-638-FD	0.5 - 1.5	6.3 x 0.8	15.2	7.5	2.7	100	
K2-285-FD	1.5 - 2.5	2.8 x 0.5	13.8	6.5	3.3	100	
K2-288-FD	1.5 - 2.5	2.8 x 0.8	13.8	6.5	3.3	100	
K2-485-FD	1.5 - 2.5	4.8 x 0.5	13.8	6.3	3.3	100	
K2-488-FD	1.5 - 2.5	4.8 x 0.8	13.8	6.3	3.3	100	
K2-638-FD	1.5 - 2.5	6.3 x 0.8	15.2	7.5	3.3	100	
K6-638-FD	4.0 - 6.0	6.3 x 0.8	16.3	7.3	4.5	100	



# Non-insulated male disconnect terminals

## Spec-Kon® Non-insulated terminals

14

### Technical Information

Terminal material

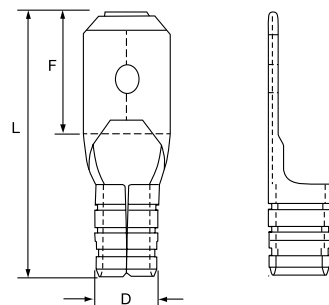
Brass

Terminal surface treatment

Tin plated



Product Ref.	Wire size range [mm <sup>2</sup> ]	Tab size [mm]	Dimensions			Quantity [pieces]	Crimping tool
			L [mm]	F [mm]	D [mm]		
K1-285-MD	0.5 - 1.5	2.8 x 0.5	13.5	6.5	2.7	100	ERG4002 MCT2000D
K1-288-MD	0.5 - 1.5	2.8 x 0.8	13.5	6.5	2.7	100	
K1-485-MD	0.5 - 1.5	4.8 x 0.5	14.0	6.5	2.7	100	
K1-488-MD	0.5 - 1.5	4.8 x 0.8	14.0	6.5	2.7	100	
K1-638-MD	0.5 - 1.5	6.3 x 0.8	16.4	7.6	2.7	100	
K2-285-MD	1.5 - 2.5	2.8 x 0.5	13.5	6.5	3.3	100	
K2-288-MD	1.5 - 2.5	2.8 x 0.8	13.5	6.5	3.3	100	
K2-485-MD	1.5 - 2.5	4.8 x 0.5	14.0	6.5	3.3	100	
K2-488-MD	1.5 - 2.5	4.8 x 0.8	14.0	6.7	3.3	100	
K2-638-MD	1.5 - 2.5	6.3 x 0.8	16.4	7.7	3.3	100	
K6-638-MD	4.0 - 6.0	6.3 x 0.8	17.0	7.7	4.5	100	



# Non-insulated cord end terminals

## Spec-Kon® Non-insulated terminals

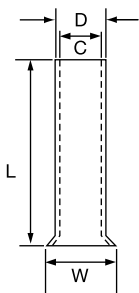
### Technical Information

Terminal material  
Terminal surface treatment

Copper  
Tin plated



Product Ref.	Conductor section [mm <sup>2</sup> ]	Dimensions				Quantity [pieces]	Crimping tool
		L [mm]	W [mm]	D [mm]	C [mm]		
C0206	0.25	6	1.5	1.1	0.8	1000	
C0208	0.25	8	1.5	1.1	0.8	1000	
C0306	0.34	6	1.5	1.1	0.8	1000	
C0308	0.34	8	1.5	1.1	0.8	1000	
C0505	0.50	5	1.7	1.3	1.0	1000	
C0506	0.50	6	1.7	1.3	1.0	1000	
C0508	0.50	8	1.7	1.3	1.0	1000	
C0510	0.50	10	1.7	1.3	1.0	1000	
C0512	0.50	12	1.7	1.3	1.0	1000	
C7506-TB	0.75	6	1.9	1.5	1.2	1000	
C7508	0.75	8	1.9	1.5	1.2	1000	
C7510	0.75	10	1.9	1.5	1.2	1000	
C7512	0.75	12	1.9	1.5	1.2	1000	
C7515	0.75	15	1.9	1.5	1.2	1000	
C7520	0.75	20	1.9	1.5	1.2	1000	
C1006	1.00	6	2.2	1.7	1.4	1000	
C1008	1.00	8	2.2	1.7	1.4	1000	
C1010-TB	1.00	10	2.2	1.7	1.4	1000	
C1012-TB	1.00	12	2.2	1.7	1.4	1000	
C1015	1.00	15	2.2	1.7	1.4	1000	
C1020	1.00	20	2.2	1.7	1.4	1000	MCT2000L
C1508	1.50	8	2.5	2.0	1.7	1000	
C1510	1.50	10	2.5	2.0	1.7	1000	
C1512	1.50	12	2.5	2.0	1.7	1000	
C1515	1.50	15	2.5	2.0	1.7	1000	
C1518	1.50	18	2.5	2.0	1.7	1000	
C1520	1.50	20	2.5	2.0	1.7	1000	
C2506	2.50	6	3.3	2.6	2.3	1000	
C2508	2.50	8	3.3	2.6	2.3	1000	
C2510	2.50	10	3.3	2.6	2.3	1000	
C2512	2.50	12	3.3	2.6	2.3	1000	
C2515	2.50	15	3.3	2.6	2.3	1000	
C2518	2.50	18	3.3	2.6	2.3	1000	
C2520	2.50	20	3.3	2.6	2.3	1000	
C4010	4.00	10	3.9	3.2	2.8	1000	
C4012	4.00	12	3.9	3.2	2.8	1000	
C4015	4.00	15	3.9	3.2	2.8	1000	
C4018	4.00	18	3.9	3.2	2.8	1000	
C4020	4.00	20	3.9	3.2	2.8	1000	
C6006	6.00	6	4.7	3.9	3.5	1000	
C6010	6.00	10	4.7	3.9	3.5	1000	
C6012	6.00	12	4.7	3.9	3.5	1000	MCT2000M
C6015	6.00	15	4.7	3.9	3.5	1000	
C6020	6.00	20	4.7	3.9	3.5	1000	





# Non-insulated twin cord end terminals

## Spec-Kon® Non-insulated terminals

16

### Technical Information

Terminal material

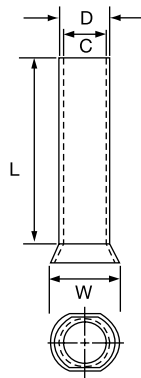
Copper

Terminal surface treatment

Tin plated



Product Ref.	Wire size range [mm <sup>2</sup> ]	Dimensions				Quantity [pieces]	Crimping tool
		L [mm]	W [mm]	D [mm]	C [mm]		
TC0508	2 x 0.50	8.0	2.3	1.8	1.5	1000	MCT2000L
TC7508	2 x 0.75	8.0	2.8	2.1	1.8	1000	
TC7510	2 x 0.75	10.0	2.8	2.1	1.8	1000	
TC1008	2 x 1.00	8.0	3.2	2.4	2.1	1000	
TC1010	2 x 1.00	10.0	3.2	2.4	2.1	1000	
TC1508	2 x 1.50	8.0	3.5	2.6	2.3	1000	
TC1512	2 x 1.50	12.0	3.5	2.6	2.3	1000	
TC2510	2 x 2.50	10.0	4.8	3.3	2.9	1000	
TC2513	2 x 2.50	13.0	4.8	3.3	2.9	1000	
TC4012	2 x 4.00	12.0	6.0	4.2	3.8	1000	
TC6014	2 x 6.00	14.0	7.1	5.3	4.9	1000	MCT2000N
TC1014	2 x 10.00	14.0	8.7	6.9	6.5	500	
TC1614	2 x 16.00	14.0	10.5	8.7	8.3	500	



# Vinyl-Insulated ring Easy-Entry terminals

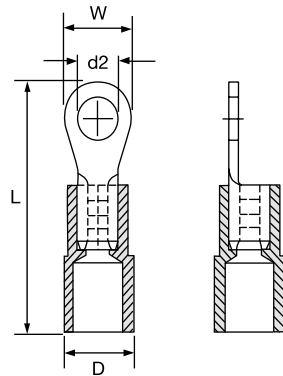
## Spec-Kon® Insulated terminals

### Technical Information

Terminal material	Copper
Terminal surface treatment	Tin plated
Insulation material	Vinyl
Max. ratings	+105°C / 600Volts



Product Réf.	Wire size range [mm <sup>2</sup> ]	Colour	Stud hole size d2	Dimensions			Quantity [pieces]	Crimping tool
				W [mm]	L [mm]	D [g/100]		
VT1E-RR3	0.5 - 1.5	Red	M3	5.5	18.5	4.0	100	MCT2000A
VT1E-RR35	0.5 - 1.5	Red	M3.5	8.0	21.8	4.0	100	
VT1E-RR4	0.5 - 1.5	Red	M4	8.0	21.8	4.0	100	
VT1E-RR5	0.5 - 1.5	Red	M5	8.0	21.8	4.0	100	
VT1E-RR6	0.5 - 1.5	Red	M6	11.6	27.8	4.0	100	
VT1E-RR8	0.5 - 1.5	Red	M8	11.6	27.8	4.0	100	
VT1E-RR10	0.5 - 1.5	Red	M10	13.6	31.5	4.0	100	
VT1E-RR12	0.5 - 1.5	Red	M12	19.2	36.4	4.0	100	
VT2E-BR3	1.5 - 2.5	Blue	M3	6.6	18.8	4.5	100	
VT2E-BR35	1.5 - 2.5	Blue	M3.5	8.5	22.8	4.5	100	
VT2E-BR4	1.5 - 2.5	Blue	M4	8.5	22.8	4.5	100	
VT2E-BR5	1.5 - 2.5	Blue	M5	9.5	22.8	4.5	100	
VT2E-BR6	1.5 - 2.5	Blue	M6	12.0	27.8	4.5	100	
VT2E-BR8	1.5 - 2.5	Blue	M8	12.0	27.8	4.5	100	
VT2E-BR10	1.5 - 2.5	Blue	M10	13.6	31.5	4.5	100	
VT2E-BR12	1.5 - 2.5	Blue	M12	19.2	36.4	4.5	100	
VT6E-YR4	4.0 - 6.0	Yellow	M4	9.5	26.0	6.4	100	
VT6E-YR5	4.0 - 6.0	Yellow	M5	9.5	26.0	6.4	100	
VT6E-YR6	4.0 - 6.0	Yellow	M6	12.0	29.5	6.4	100	
VT6E-YR8	4.0 - 6.0	Yellow	M8	15.0	34.0	6.4	100	
VT6E-YR10	4.0 - 6.0	Yellow	M10	15.0	34.0	6.4	100	
VT6E-YR12	4.0 - 6.0	Yellow	M12	19.2	38.6	6.4	100	



# Vinyl-Insulated fork Easy-Entry terminals

## Spec-Kon® Insulated terminals

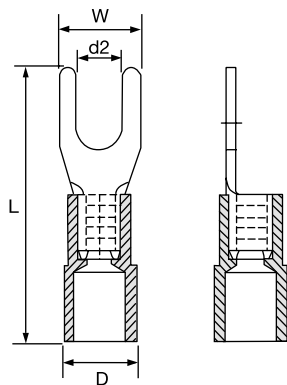
18

### Technical Information

Terminal material	Copper
Terminal surface treatment	Tin plated
Insulation material	Vinyl
Max. ratings	+105°C / 600Volts



Product Réf.	Wire size range [mm <sup>2</sup> ]	Colour	Stud hole size d2	Dimensions			Quantity [pieces]	Crimping tool
				W [mm]	L [mm]	D [g/100]		
VT1E-RF3	0.5 - 1.5	Red	M3	5.7	22.0	4.0	100	MCT2000A
VT1E-RF35	0.5 - 1.5	Red	M3.5	6.4	22.0	4.0	100	
VT1E-RF4	0.5 - 1.5	Red	M4	8.1	22.0	4.0	100	
VT1E-RF5	0.5 - 1.5	Red	M5	9.5	22.0	4.0	100	
VT1E-RF6	0.5 - 1.5	Red	M6	12.0	28.0	4.0	100	
VT2E-BF3	1.5 - 2.5	Blue	M3	5.7	22.0	4.5	100	
VT2E-BF35	1.5 - 2.5	Blue	M3.5	6.0	22.0	4.5	100	
VT2E-BF4	1.5 - 2.5	Blue	M4	7.9	22.0	4.5	100	
VT2E-BF5	1.5 - 2.5	Blue	M5	9.3	22.0	4.5	100	
VT2E-YF6	1.5 - 2.5	Blue	M6	12.0	28.0	4.5	100	
VT6E-YF4	4.0 - 6.0	Yellow	M4	9.0	25.5	6.4	100	
VT6E-YF5	4.0 - 6.0	Yellow	M5	9.0	25.5	6.4	100	
VT6E-YF6	4.0 - 6.0	Yellow	M6	12.0	31.5	6.4	100	
VT6E-YF8	4.0 - 6.0	Yellow	M8	14.0	30.5	6.4	100	



# Vinyl-Insulated blade Easy-Entry terminals

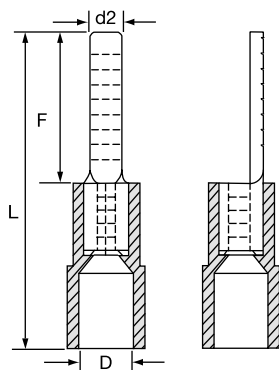
## Spec-Kon® Insulated terminals

### Technical Information

Terminal material	Copper
Terminal surface treatment	Tin plated
Insulation material	Vinyl
Max. ratings	+105°C / 600Volts



Product Réf.	Wire size range [mm²]	Colour	Stud size d2 [mm]	Dimensions			Quantity [pieces]	Crimping tool
				L [mm]	F [mm]	D [mm]		
VT1E-RB23	0.5 - 1.5	Red	2.3	21.0	9.0	4.0	100	MCT2000A
VT1E-RB28	0.5 - 1.5	Red	2.8	20.0	10.0	4.0	100	
VT1E-RB3	0.5 - 1.5	Red	3.0	22.0	11.0	4.0	100	
VT2E-BB24	1.5 - 2.5	Blue	2.4	21.0	9.0	4.5	100	
VT2E-BB28	1.5 - 2.5	Blue	2.8	20.0	10.0	4.5	100	
VT2E-BB3	1.5 - 2.5	Blue	2.4	24.0	13.0	4.5	100	
VT6E-YB28	4.0 - 6.0	Yellow	2.8	23.0	10.0	6.4	100	
VT6E-YB40	4.0 - 6.0	Yellow	4.0	27.0	14.0	6.4	100	
VT6E-YB45	4.0 - 6.0	Yellow	4.5	27.0	14.0 <td 6.4	100		



# Vinyl-Insulated pin Easy-Entry terminals

## Spec-Kon® Insulated terminals

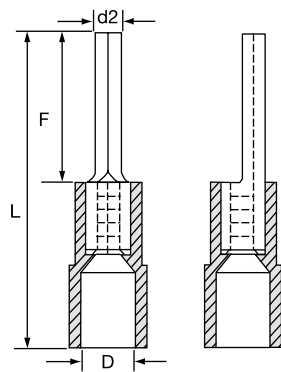
20

### Technical Information

Terminal material	Copper
Terminal surface treatment	Tin plated
Insulation material	Vinyl
Max. ratings	+105°C / 600Volts



Product Réf.	Wire size range [mm <sup>2</sup> ]	Colour	Stud size d2 [mm]	Dimensions			Quantity [pieces]	Crimping tool
				L [mm]	F [mm]	D [mm]		
VT1E-P19	0.5 - 1.5	Red	1.9	19.8	9	4.0	100	MCT2000A
VT1E-P20	0.5 - 1.5	Red	1.9	20.8	10	4.0	100	
VT1E-P22	0.5 - 1.5	Red	1.9	22.8	12	4.0	100	
VT1E-P23	0.5 - 1.5	Red	1.9	23.8	13	4.0	100	
VT1E-P24	0.5 - 1.5	Red	1.9	24.8	14	4.0	100	
VT1E-P26	0.5 - 1.5	Red	1.9	27.0	16	4.0	100	
VT2E-P19	1.5 - 2.5	Blue	1.9	19.8	9	4.5	100	
VT2E-P20	1.5 - 2.5	Blue	1.9	20.8	10	4.5	100	
VT2E-P22	1.5 - 2.5	Blue	1.9	22.8	12	4.5	100	
VT2E-P23	1.5 - 2.5	Blue	1.9	23.8	13	4.5	100	
VT2E-P26	1.5 - 2.5	Blue	1.9	27.0	16	4.5	100	
VT6E-P27	4.0 - 6.0	Yellow	2.8	27.0	14	6.4	100	



# Vinyl-Insulated butt splice terminals

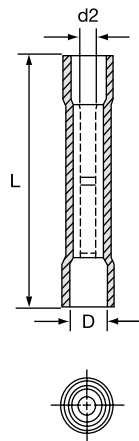
## Spec-Kon® Insulated terminals

### Technical Information

Terminal material	Copper tubular
Terminal surface treatment	Tin plated
Insulation material	Vinyl
Max. ratings	+105°C / 600Volts



Product Réf.	Wire size range [mm²]	Colour	Dimensions			Quantity [pieces]	Crimping tool
			L [mm]	D [mm]	d2 [mm]		
V1-BS-R	0.5 - 1.5	Red	24.6	4.0	1.7	100	MCT2000A
V2-BS-B	1.5 - 2.5	Blue	24.6	4.5	2.3	100	
V6-BS-Y	4.0 - 6.0	Yellow	26.5	6.3	3.4	100	



# Vinyl-Insulated female disconnect terminals

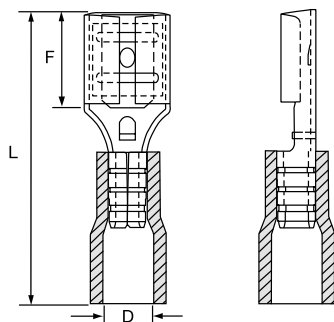
## Spec-Kon® Insulated terminals

### Technical Information

Terminal material	Brass
Terminal surface treatment	Tin plated
Insulation material	Vinyl
Max. ratings	+75°C / 300Volts



Product Réf.	Wire size range [mm²]	Colour	Tab size [mm]	Dimensions			Quantity [pieces]	Crimping tool
				L [mm]	F [mm]	D [mm]		
V1-285-RFD	0.5 - 1.5	Red	2.8 x 0.5	18.6	6.5	4.0	100	MCT2000C
V1-288-RFD	0.5 - 1.5	Red	2.8 x 0.8	18.6	6.5	4.0	100	
V1-485-RFD	0.5 - 1.5	Red	4.8 x 0.5	19.0	6.4	4.0	100	
V1-488-RFD	0.5 - 1.5	Red	4.8 x 0.8	19.0	6.4	4.0	100	
V1-638-RFD	0.5 - 1.5	Red	6.3 x 0.8	20.5	7.5	4.0	100	
V2-485-BFD	1.5 - 2.5	Blue	4.8 x 0.5	19.0	6.4	5.0	100	
V2-488-BFD	1.5 - 2.5	Blue	4.8 x 0.8	19.0	6.4	5.0	100	
V2-638-BFD	1.5 - 2.5	Blue	6.3 x 0.8	20.5	7.5	5.0	100	
V6-638-YFD	4.0 - 6.0	Yellow	6.3 x 0.8	23.5	7.5	6.4	100	
V6-941-YFD	4.0 - 6.0	Yellow	9.4 x 1.2	28.5	12.0	6.4	100	



# Vinyl-Insulated Piggy back disconnect terminals

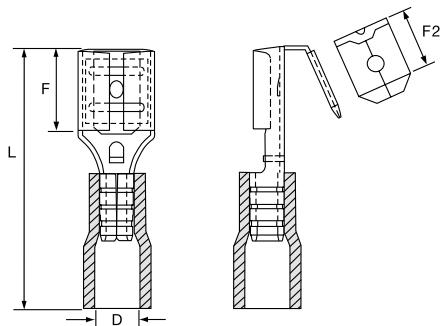
## Spec-Kon® Insulated terminals

### Technical Information

Terminal material	Brass
Terminal surface treatment	Tin plated
Insulation material	Vinyl
Max. ratings	+75°C / 300Volts



Product Réf.	Wire size range [mm <sup>2</sup> ]	Colour	Tab size [mm]	Dimensions				Quantity [pieces]	Crimping tool
				L [mm]	F [mm]	F2 [mm]	D [mm]		
V1-638-RPBD	0.5 - 1.5	Red	6.3 x 0.8	22.0	8.0	8.2	4.0	100	MCT2000C
V2-638-BPBD	1.5 - 2.5	Blue	6.3 x 0.8	22.0	8.0	8.2	4.5	100	
V6-638-YPBD	4.0 - 6.0	Yellow	6.3 x 0.8	24.0	8.0	8.2	5.5	100	





# Vinyl-Insulated receptacle disconnect terminals

## Spec-Kon® Insulated terminals

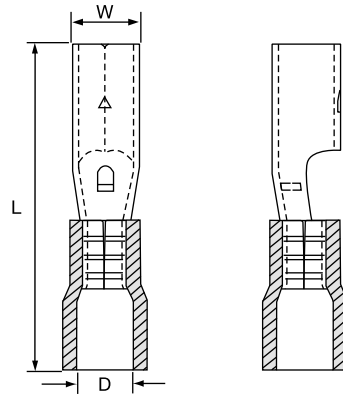
24

### Technical Information

Terminal material	Brass
Terminal surface treatment	Tin plated
Insulation material	Vinyl
Max. ratings	+75°C / 600Volts



Product Réf.	Wire size range [mm <sup>2</sup> ]	Colour	Tab size [mm]	Dimensions			Quantity [pieces]	Crimping tool
				W [mm]	L [mm]	D [mm]		
V1-39-RRD	0.5 - 1.5	Red	4.0	3.9	21.5	4.0	100	MCT2000C
V2-39-BRD	1.5 - 2.5	Blue	4.0	3.9	21.5	4.5	100	
V2-49-BRD	1.5 - 2.5	Blue	5.0	4.9	21.5	4.5	100	
V6-49-YRD	4.0 - 6.0	Yellow	5.0	4.9	24.5	5.5	100	



# Vinyl Fully Insulated female disconnect terminals

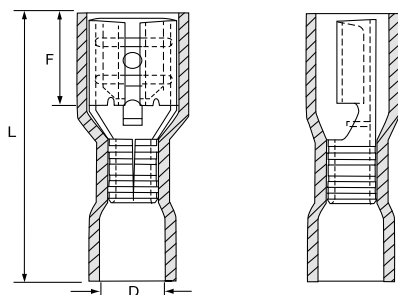
## Spec-Kon® Insulated terminals

### Technical Information

Terminal material	Brass
Terminal surface treatment	Tin plated
Insulation material	Vinyl
Max. ratings	+75°C / 300Volts



Product Réf.	Wire size range [mm <sup>2</sup> ]	Colour	Tab size [mm]	Dimensions			Quantity [pieces]	Crimping tool
				L [mm]	F [mm]	D [mm]		
V1-485F-RFD	0.5 - 1.5	Red	4.8 x 0.5	19.5	6.4	4.0	100	MCT2000C
V1-488F-RFD	0.5 - 1.5	Red	4.8 x 0.8	19.5	6.4	4.0	100	
V1-638F-RFD	0.5 - 1.5	Red	6.3 x 0.8	22.0	7.5	4.0	100	
V2-485F-BFD	1.5 - 2.5	Blue	4.8 x 0.5	19.3	6.4	4.5	100	
V2-488F-BFD	1.5 - 2.5	Blue	4.8 x 0.8	19.3	6.4	4.5	100	
V2-638F-BFD	1.5 - 2.5	Blue	6.3 x 0.8	22.0	7.5	4.5	100	
V6-638F-YFD	4.0 - 6.0	Yellow	6.3 x 0.8	24.3	7.3	5.5	100	



# Vinyl-Fully Insulated receptacle disconnect terminals

## Spec-Kon® Insulated terminals

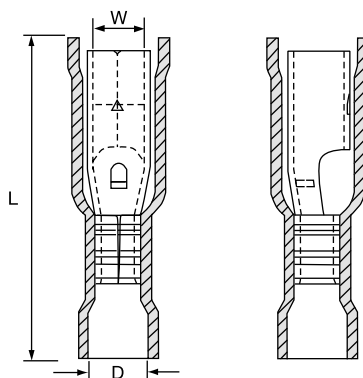
26

### Technical Information

Terminal material	Brass
Terminal surface treatment	Tin plated
Insulation material	Vinyl
Max. ratings	+75°C / 600Volts



Product Réf.	Wire size range [mm <sup>2</sup> ]	Colour	Tab size [mm]	Dimensions			Quantity [pieces]	Crimping tool
				W [mm]	L [mm]	D [mm]		
V1-39F-RRD	0.5 - 1.5	Red	4.0	3.9	23.0	4.0	100	MCT2000C
V2-39F-BRD	1.5 - 2.5	Blue	4.0	3.9	23.5	4.5	100	
V2-49F-BRD	1.5 - 2.5	Blue	5.0	4.9	24.5	4.5	100	
V6-49F-YRD	4.0 - 6.0	Yellow	5.0	4.9	24.0	5.5	100	



# Vinyl-Insulated ring Easy-Entry DIN46237 terminals

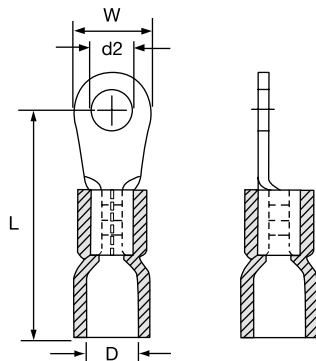
## Spec-Kon® Insulated terminals

### Technical Information

Terminal material	Copper
Terminal surface treatment	Tin plated
Insulation material	Vinyl
Flammability rating	UL94 V-0
Max. ratings	+75°C / 600Volts



Product Réf.	Wire size range [mm²]	Colour	Stud hole size d2	Dimensions			Quantity [pieces]	Crimping tool
				L [mm]	W [mm]	D [mm]		
VT1E-25RR-DIN	0.5 - 1.5	Red	M2.5	17.2	6.0	4.0	100	MCT2000A
VT1E-3RR-DIN	0.5 - 1.5	Red	M3	17.2	6.0	4.0	100	
VT1E-35RR-DIN	0.5 - 1.5	Red	M3.5	17.2	6.0	4.0	100	
VT1E-4RR-DIN	0.5 - 1.5	Red	M4	18.2	8.0	4.0	100	
VT1E-5RR-DIN	0.5 - 1.5	Red	M5	19.2	10.0	4.0	100	
VT1E-6RR-DIN	0.5 - 1.5	Red	M6	19.2	10.0	4.0	100	
VT1E-8RR-DIN	0.5 - 1.5	Red	M8	23.2	14.0	4.0	100	
VT1E-10RR-DIN	0.5 - 1.5	Red	M10	23.2	14.0	4.0	100	
VT2E-3BR-DIN	1.5 - 2.5	Blue	M3	17.5	6.0	4.5	100	
VT2E-35BR-DIN	1.5 - 2.5	Blue	M3.5	17.5	6.0	4.5	100	
VT2E-4BR-DIN	1.5 - 2.5	Blue	M4	18.5	8.0	4.5	100	
VT2E-5BR-DIN	1.5 - 2.5	Blue	M5	20.5	10.0	4.5	100	
VT2E-6BR-DIN	1.5 - 2.5	Blue	M6	22.5	11.0	4.5	100	
VT2E-8BR-DIN	1.5 - 2.5	Blue	M8	23.5	14.0	4.5	100	
VT2E-10BR-DIN	1.5 - 2.5	Blue	M10	23.5	15.0	4.5	100	
VT2E-12BR-DIN	1.5 - 2.5	Blue	M12	26.5	18.0	4.5	100	
VT6E-4YR-DIN	4.0 - 6.0	Yellow	M4	22.1	8.0	6.3	100	
VT6E-5YR-DIN	4.0 - 6.0	Yellow	M5	23.1	10.0	6.3	100	
VT6E-6YR-DIN	4.0 - 6.0	Yellow	M6	24.1	11.0	6.3	100	
VT6E-8YR-DIN	4.0 - 6.0	Yellow	M8	27.1	14.0	6.3	100	
VT6E-10YR-DIN	4.0 - 6.0	Yellow	M10	29.1	18.0	6.3	100	
VT6E-12YR-DIN	4.0 - 6.0	Yellow	M12	29.1	18.0	6.3	100	



# Vinyl-Insulated Male Disconnect terminals

## Spec-Kon® Insulated terminals

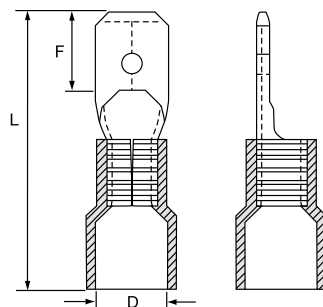
28

### Technical Information

Terminal material	Brass
Terminal surface treatment	Tin plated
Insulation material	Vinyl
Max. ratings	+75°C / 300Volts



Product Réf.	Wire size range [mm <sup>2</sup> ]	Colour	For connector dimension [mm]	Dimensions			Quantity [pieces]	Crimping tool
				L [mm]	F [mm]	D [mm]		
V1-285-RMD	0.5 - 1.5	Red	2.8 x 0.5	18.5	6.5	4.0	100	MCT2000C
V1-288-RMD	0.5 - 1.5	Red	2.8 x 0.8	18.5	6.5	4.0	100	
V1-485-RMD	0.5 - 1.5	Red	4.8 x 0.5	19.0	6.5	4.0	100	
V1-488-RMD	0.5 - 1.5	Red	4.8 x 0.8	19.0	6.7	4.0	100	
V1-638-RMD	0.5 - 1.5	Red	6.3 x 0.8	21.0	7.6	4.0	100	
V2-485-BMD	1.5 - 2.5	Blue	4.8 x 0.5	19.0	6.5	4.5	100	
V2-488-BMD	1.5 - 2.5	Blue	4.8 x 0.8	19.0	6.7	4.5	100	
V2-638-BMD	1.5 - 2.5	Blue	6.3 x 0.8	21.0	7.7	4.5	100	
V6-638-YMD	4.0 - 6.0	Yellow	6.3 x 0.8	24.0	7.7	5.5	100	



# Vinyl-Insulated fork Easy-Entry DIN46237 terminals

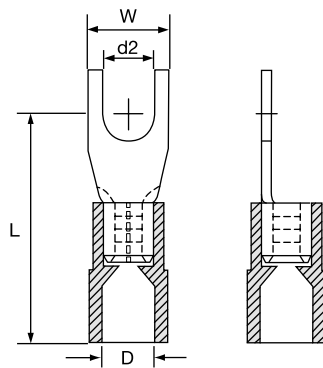
## Spec-Kon® Insulated terminals

### Technical Information

Terminal material	Copper
Terminal surface treatment	Tin plated
Insulation material	Vinyl
Max. ratings	+75°C / 600Volts



Product Réf.	Wire size range [mm²]	Colour	Stud hole size d2	Dimensions			Quantity [pieces]	Crimping tool
				L [mm]	W [mm]	D [mm]		
VT1E-3RF-DIN	0.5 - 1.5	Red	M3	17.2	6.0	4.0	100	MCT2000A
VT1E-35RF-DIN	0.5 - 1.5	Red	M3.5	17.2	6.0	4.0	100	
VT1E-4RFF-DIN	0.5 - 1.5	Red	M4	18.2	6.8	4.0	100	
VT1E-5RF-DIN	0.5 - 1.5	Red	M5	19.2	10.0	4.0	100	
VT1E-6RF-DIN	0.5 - 1.5	Red	M6	21.2	11.0	4.0	100	
VT1E-3BF-DIN	1.5 - 2.5	Blue	M3	19.5	5.5	4.5	100	
VT2E-35BF-DIN	1.5 - 2.5	Blue	M3.5	17.5	6.0	4.5	100	
VT2E-4BF-DIN	1.5 - 2.5	Blue	M4	18.5	6.8	4.5	100	
VT2E-5BF-DIN	1.5 - 2.5	Blue	M5	20.5	10.0	4.5	100	
VT2-6BF-DIN	1.5 - 2.5	Blue	M6	22.5	11.0	4.5	100	
VT6E-4YF-DIN	4.0 - 6.0	Yellow	M4	22.1	8.0	6.3	100	
VT6E-5YF-DIN	4.0 - 6.0	Yellow	M5	23.1	10.0	6.3	100	
VT6E-6YR-DIN	4.0 - 6.0	Yellow	M6	24.1	11.0	6.3	100	
VT6E-8YR-DIN	4.0 - 6.0	Yellow	M8	27.1	14.0	6.3	100	
VT6E-10YR-DIN	4.0 - 6.0	Yellow	M10	29.1	18.0	6.3	100	



# Vinyl-Insulated lipped blade Easy-Entry terminals

## Spec-Kon® Insulated terminals

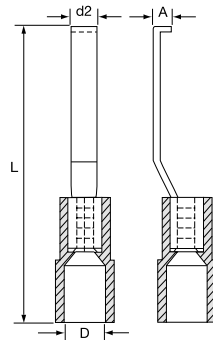
30

### Technical Information

Terminal material	Copper
Terminal surface treatment	Tin plated
Insulation material	Vinyl
Max.	105°C



Product Réf.	Wire size range [mm <sup>2</sup> ]	Colour	Stud size d2 [mm]	Dimensions			Weight [g/100]	Quantity [pieces]	Crimping tool
				L [mm]	D [mm]	A [mm]			
VT1E-RLB3	0.5 - 1.5	Red	3.0	28.2	4.0	2.1	75	100	MCT2000A
VT1E-RLB46	0.5 - 1.5	Red	4.6	28.2	4.0	2.1	77	100	
VT2E-BLB3	1.5 - 2.5	Blue	3.0	28.2	4.5	2.1	79	100	
VT2E-BLB46	1.5 - 2.5	Blue	4.6	28.2	4.5	2.1	81	100	
VT6E-YLB3	4.0 - 6.0	Yellow	3.0	30.2	6.4	2.8	83	100	
VT6E-YLB46	4.0 - 6.0	Yellow	4.6	30.2	6.4	2.8	85	100	



# Nylon-Insulated butt splice terminals

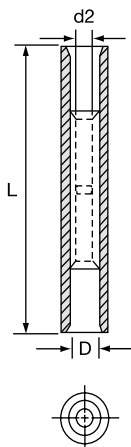
## Spec-Kon® Insulated terminals

### Technical Information

Terminal material	Copper
Terminal surface treatment	Tin plated
Insulation material	Nylon
Max. ratings	+105°C / 600Volts



Product Réf.	Wire size range [mm <sup>2</sup> ]	Colour	Dimensions			Quantity [pieces]	Crimping tool
			L [mm]	D [mm]	d2 [mm]		
N1-BS-R	0.5 - 1.5	Red	27.3	3.2	1.7	100	MCT2000A
N2-BS-B	1.5 - 2.5	Blue	27.3	3.8	2.3	100	
N6-BS-Y	4.0 - 6.0	Yellow	27.0	5.3	3.5	100	





# Nylon-Insulated fork double crimp terminals

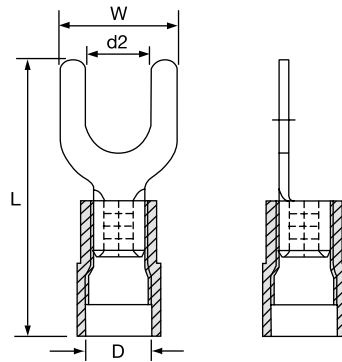
## Spec-Kon® Insulated terminals

### Technical Information

Terminal material	Copper
Double crimp	With copper sleeve on barrel
Terminal surface treatment	Tin plated
Insulation material	Nylon
Max. ratings	+105°C / 600Volts



Product Réf.	Wire size range [mm <sup>2</sup> ]	Colour	Stud hole size d2	Dimensions			Quantity [pieces]	Crimping tool
				W [mm]	L [mm]	D [mm]		
NT1-DC-RF3	0.5 - 1.5	Red	M3	5.7	22.0	4.5	100	MCT2000A
NT1-DC-RF35	0.5 - 1.5	Red	M3.5	6.4	21.5	4.5	100	
NT1-DC-RF4	0.5 - 1.5	Red	M4	8.1	22.0	4.5	100	
NT1-DC-RF5	0.5 - 1.5	Red	M5	9.5	22.0	4.5	100	
NT1-DC-RF6	0.5 - 1.5	Red	M6	12.0	28.0	4.5	100	
NT2-DC-BF3	1.5 - 2.5	Blue	M3	5.7	22.0	5.2	100	
NT2-DC-BF35	1.5 - 2.5	Blue	M3.5	6.0	22.0	5.2	100	
NT2-DC-BF4	1.5 - 2.5	Blue	M4	7.9	22.0	5.2	100	
NT2-DC-BF5	1.5 - 2.5	Blue	M5	9.3	22.0	5.2	100	
NT2-DC-BF6	1.5 - 2.5	Blue	M6	12.0	28.0	5.2	100	
NT6-DC-YF4	4.0 - 6.0	Yellow	M4	9.0	25.5	7.0	100	
NT6-DC-YF5	4.0 - 6.0	Yellow	M5	9.0	25.5	7.0	100	
NT6-DC-YF6	4.0 - 6.0	Yellow	M6	12.0	31.5	7.0	100	
NT6-DC-YF8	4.0 - 6.0	Yellow	M8	14.0	30.2	7.0	100	



# Nylon-Insulated blade double crimp terminals

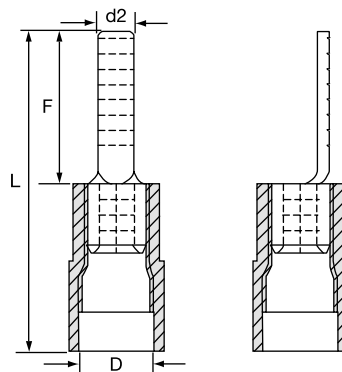
## Spec-Kon® Insulated terminals

### Technical Information

Terminal material	Copper
Double crimp	With copper sleeve on barrel
Terminal surface treatment	Tin plated
Insulation material	Nylon
Max. ratings	+105°C / 600Volts



Product Réf.	Wire size range [mm <sup>2</sup> ]	Colour	Stud size d2 [mm]	Dimensions			Weight [g/100]	Quantity [pieces]	Crimping tool
				L [mm]	F [mm]	D [mm]			
NT1-DC-RB28	0.5 - 1.5	Red	2.8	20.0	9.0	4.5	82	100	MCT2000A
NT1-DC-RB23	0.5 - 1.5	Red	2.3	21.0	10.0	4.5	82	100	
NT1-DC-RSB3	0.5 - 1.5	Red	3.0	22.0	11.0	4.5	91	100	
NT1-DC-RB3	0.5 - 1.5	Red	3.0	24.0	13.0	4.5	93	100	
NT1-DC-RLB3	0.5 - 1.5	Red	3.0	25.0	14.0	4.5	95	100	
NT1-DC-RB22	0.5 - 1.5	Red	2.2	29.0	18.0	4.5	98	100	
NT1-DC-RB2	0.5 - 1.5	Red	2.0	29.0	18.0	4.5	100	100	
NT2-DC-BSB24	1.5 - 2.5	Blue	2.4	20.8	10.0	5.2	104	100	
NT2-DC-BB24	1.5 - 2.5	Blue	2.4	23.8	13.0	5.2	106	100	
NT2-DC-BB3	1.5 - 2.5	Blue	3.0	24.0	13.0	5.2	109	100	
NT2-DC-BLB3	1.5 - 2.5	Blue	3.0	25.0	14.0	5.2	114	100	
NT2-DC-BB2	1.5 - 2.5	Blue	2.0	29.0	18.0	5.2	117	100	
NT2-DC-BB22	1.5 - 2.5	Blue	2.2	28.8	18.0	5.2	120	100	
NT6-DC-YB28	4.0 - 6.0	Yellow	4.0	23.0	10.0	7.0	126	100	
NT6-DC-YB40	4.0 - 6.0	Yellow	4.0	27.0	14.0	7.0	129	100	
NT6-DC-YB45	4.0 - 6.0	Yellow	4.5	27.0	14.0	7.0	132	100	
NT6-DC-YB2	4.0 - 6.0	Yellow	2.0	31.0	18.0	7.0	214	100	
NT6-DC-YLB45	4.0 - 6.0	Yellow	4.5	31.0	18.0	7.0	250	100	



# Nylon-Insulated female double crimp disconnect terminals

## Spec-Kon® Insulated terminals

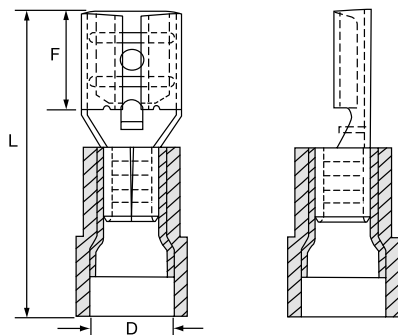
34

### Technical Information

Terminal material	Brass
Double crimp	With copper sleeve on barrel
Terminal surface treatment	Tin plated
Insulation material	Nylon
Max. ratings	+105°C / 600Volts



Product Réf.	Wire size range [mm <sup>2</sup> ]	Colour	Tab size [mm]	Dimensions			Quantity [pieces]	Crimping tool
				L [mm]	F [mm]	D [mm]		
N1-DC-285-RFD	0.5 - 1.5	Red	2.8 x 0.5	19.6	6.5	4.0	100	MCT2000A
N1-DC-288-RFD	0.5 - 1.5	Red	2.8 x 0.8	19.6	6.5	4.0	100	
N1-DC-485-RFD	0.5 - 1.5	Red	4.8 x 0.5	20.0	6.4	4.0	100	
N1-DC-488-RFD	0.5 - 1.5	Red	4.8 x 0.8	20.0	6.4	4.0	100	
N1-DC-638-RFD	0.5 - 1.5	Red	6.3 x 0.8	21.5	7.5	4.0	100	
N2-DC-485-BFD	1.5 - 2.5	Blue	4.8 x 0.5	20.0	6.4	5.0	100	
N2-DC-488-BFD	1.5 - 2.5	Blue	4.8 x 0.8	20.0	6.4	5.0	100	
N2-DC-638-BFD	1.5 - 2.5	Blue	6.3 x 0.8	21.5	7.5	5.0	100	
N6-DC-638-YFD	4.0 - 6.0	Yellow	6.3 x 0.8	23.5	7.5	6.5	100	
N6-DC-941-YFD	4.0 - 6.0	Yellow	9.4 x 1.2	28.5	12.0	6.5	100	



# Nylon-Insulated male double crimp disconnect terminals

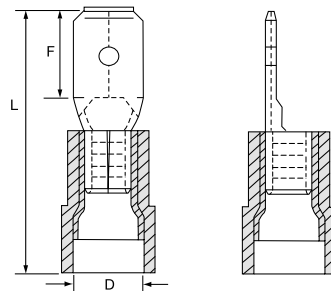
## Spec-Kon® Insulated terminals

### Technical Information

Terminal material	Brass
Double crimp	With copper sleeve on barrel
Terminal surface treatment	Tin plated
Insulation material	Nylon
Max. ratings	+105°C / 600Volts



Product Réf.	Wire size range [mm <sup>2</sup> ]	Colour	Tab size [mm]	Dimensions			Quantity [pieces]	Crimping tool
				L [mm]	F [mm]	D [mm]		
N1-DC-285-RMD	0.5 - 1.5	Red	2.8 x 0.5	19.5	6.5	4.0	100	MCT2000A
N1-DC-288-RMD	0.5 - 1.5	Red	2.8 x 0.8	19.5	6.5	4.0	100	
N1-DC-485-RMD	0.5 - 1.5	Red	4.8 x 0.5	20.0	6.5	4.0	100	
N1-DC-488-RMD	0.5 - 1.5	Red	4.8 x 0.8	20.0	6.7	4.0	100	
N1-DC-638-RMD	0.5 - 1.5	Red	6.3 x 0.8	22.0	7.6	4.0	100	
N2-DC-485-BMD	1.5 - 2.5	Blue	4.8 x 0.5	20.0	6.5	5.0	100	
N2-DC-488-BMD	1.5 - 2.5	Blue	4.8 x 0.8	20.0	6.7	5.0	100	
N2-DC-638-BMD	1.5 - 2.5	Blue	6.3 x 0.8	22.2	7.7	5.0	100	
N6-DC-638-YMD	4.0 - 6.0	Yellow	6.3 x 0.8	24.0	7.7	6.5	100	



# Nylon-Insulated piggy back double crimp disconnect terminals Spec-Kon® Insulated terminals

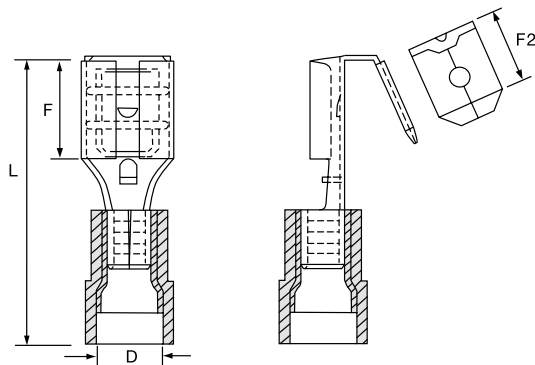
36

### Technical Information

Terminal material	Brass
Double crimp	With copper sleeve on barrel
Terminal surface treatment	Tin plated
Insulation material	Nylon
Max. ratings	+105°C / 600Volts



Product Réf.	Wire size range [mm <sup>2</sup> ]	Colour	Tab size [mm]	Dimensions				Quantity [pieces]	Crimping tool
				L [mm]	F [mm]	F2 [mm]	D [mm]		
N1-DC-638-RPBD	0.5 - 1.5	Red	6.3 x 0.8	23.0	8.0	8.2	4.0	100	MCT2000A
N2-DC-638-BPBD	1.5 - 2.5	Blue	6.3 x 0.8	23.0	8.0	8.2	5.0	100	
N6-DC-638-YPBD	4.0 - 6.0	Yellow	6.3 x 0.8	24.0	8.0	8.2	6.5	100	



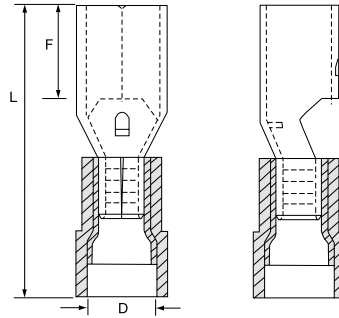
# Nylon Insulated receptacle double crimp disconnect terminals Spec-Kon® Insulated terminals

### Technical Information

Terminal material	Brass
Double crimp	With copper sleeve on barrel
Terminal surface treatment	Tin plated
Insulation material	Nylon
Max. ratings	+105°C / 600Volts



Product Réf.	Wire size range [mm <sup>2</sup> ]	Colour	Tab size [mm]	Dimensions			Quantity [pieces]	Crimping tool
				W [mm]	L [mm]	D [mm]		
N1-DC-39-RRD	0.5 - 1.5	Red	4.0	3.9	22.5	4.0	100	MCT2000A
N2-DC-39-BRD	1.5 - 2.5	Blue	4.0	3.9	22.5	5.0	100	
N2-DC-49-BRD	1.5 - 2.5	Blue	5.0	4.9	22.7	5.0	100	
N6-DC-49-YRD	4.0 - 6.0	Yellow	5.0	4.9	24.5	6.5	100	



# Nylon-fully Insulated receptacle double crimp disconnect terminals Spec-Kon® Insulated terminals

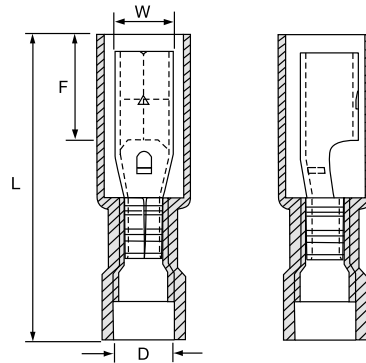
38

## Technical Information

Terminal material	Brass
Double crimp	With copper sleeve on barrel
Terminal surface treatment	Tin plated
Insulation material	Nylon
Max. ratings	+105°C / 600Volts



Product Réf.	Wire size range [mm <sup>2</sup> ]	Colour	Tab size [mm]	Dimensions				Quantity [pieces]	Crimping tool
				L [mm]	F [mm]	W [mm]	D [mm]		
N1-DC-39F-RRD	0.5 - 1.5	Red	4.0	25.2	7.0	3.9	4.0	100	
N2-DC-39F-BRD	1.5 - 2.5	Blue	4.0	25.2	7.0	3.9	5.0	100	MCT2000A



# Nylon Insulated double crimp bullet disconnect terminals

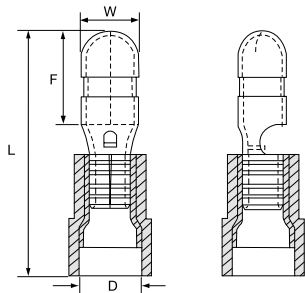
## Spec-Kon® Insulated terminals

### Technical Information

Terminal material	Brass
Double crimp	With copper sleeve on barrel
Terminal surface treatment	Tin plated
Insulation material	Nylon
Max. ratings	+105°C / 600Volts



Product Réf.	Wire size range [mm <sup>2</sup> ]	Colour	Tab size [mm]	Dimensions				Quantity [pieces]	Crimping tool
				W [mm]	L [mm]	F [mm]	D [mm]		
N1-DC-4-RBD	0.5 - 1.5	Red	4.0	4.0	22.0	8.5	4.0	100	
N2-DC-4-BBD	1.5 - 2.5	Blue	4.0	4.0	22.0	8.5	5.0	100	MCT2000A
N2-DC-5-BBD	1.5 - 2.5	Blue	5.0	5.0	22.0	8.5	5.0	100	
N6-DC-5-YBD	4.0 - 6.0	Yellow	5.0	5.0	23.5	8.5	6.5	100	





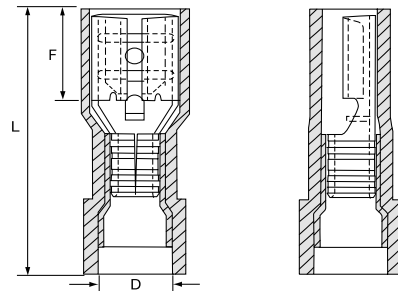
# Nylon-full Insulated female double crimp disconnect terminals Spec-Kon® Insulated terminals

### Technical Information

Terminal material	Brass
Double crimp	With copper sleeve on barrel
Terminal surface treatment	Tin plated
Insulation material	Nylon
Max. ratings	+105°C / 600Volts



Product Réf.	Wire size range [mm²]	Colour	Tab size [mm]	Dimensions			Quantity [pieces]	Crimping tool
				L [mm]	F [mm]	D [mm]		
N1-DC-285F-RFD	0.5 - 1.5	Red	2.8 x 0.5	19.5	6.5	4.0	100	MCT2000A
N1-DC-288F-RFD	0.5 - 1.5	Red	2.8 x 0.8	19.5	6.5	4.0	100	
N1-DC-485F-RFD	0.5 - 1.5	Red	4.8 x 0.5	20.2	6.4	4.0	100	
N1-DC-488F-RFD	0.5 - 1.5	Red	4.8 x 0.8	20.2	6.4	4.0	100	
N1-DC-638F-RFD	0.5 - 1.5	Red	6.3 x 0.8	21.5	7.5	4.0	100	
N2-DC-485F-BFD	1.5 - 2.5	Blue	4.8 x 0.5	20.2	6.4	5.0	100	
N2-DC-488F-BFD	1.5 - 2.5	Blue	4.8 x 0.8	20.2	6.4	5.0	100	
N2-DC-638F-BFD	1.5 - 2.5	Blue	6.3 x 0.8	21.5	7.5	5.0	100	
N6-DC-638F-YFD	4.0 - 6.0	Yellow	6.3 x 0.8	24.2	7.5	6.5	100	



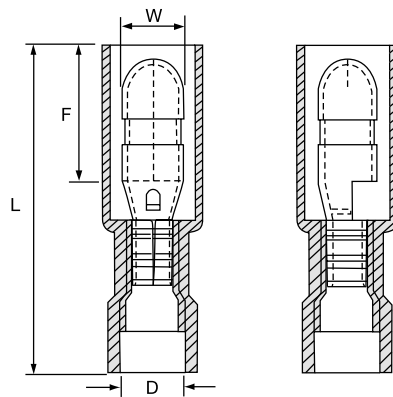
# Nylon-fully Insulated bullet double crimp disconnect terminals Spec-Kon® Insulated terminals

### Technical Information

Terminal material	Brass
Double crimp	With copper sleeve on barrel
Terminal surface treatment	Tin plated
Insulation material	Nylon
Max. ratings	+105°C / 600Volts



Product Réf.	Wire size range [mm <sup>2</sup> ]	Colour	Tab size [mm]	Dimensions				Quantity [pieces]	Crimping tool
				W [mm]	F [mm]	L [mm]	D [mm]		
N1-DC-40F-RBD	0.5 - 1.5	Red	4.0	4.0	10.5	27.0	4.0	100	MCT2000A
N2-DC-40F-BBD	1.5 - 2.5	Blue	4.0	4.0	10.5	27.0	4.8	100	



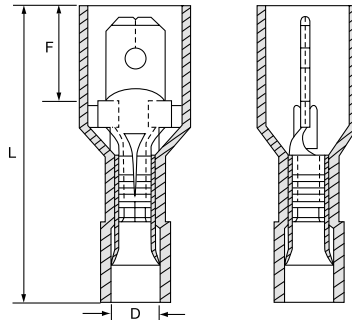
# Nylon-Fully Insulated male double crimp disconnect terminals Spec-Kon® Insulated terminals

## Technical Information

Terminal material	Brass
Double crimp	With copper sleeve on barrel
Terminal surface treatment	Tin plated
Insulation material	Nylon
Max. ratings	+105°C / 600Volts



Product Réf.	Wire size range [mm <sup>2</sup> ]	Colour	Tab size [mm]	Dimensions			Quantity [pieces]	Crimping tool
				L [mm]	F [mm]	D [mm]		
N1-DC-485F-RMD	0.5 - 1.5	Red	4.8 x 0.5	22.0	6.5	4.0	100	MCT2000A
N1-DC-488F-RMD	0.5 - 1.5	Red	4.8 x 0.8	22.0	6.5	4.0	100	
N1-DC-638F-RMD	0.5 - 1.5	Red	6.3 x 0.8	24.0	7.7	4.0	100	
N2-DC-485F-BMD	1.5 - 2.5	Blue	4.8 x 0.5	22.0	6.5	5.0	100	
N2-DC-488F-BMD	1.5 - 2.5	Blue	4.8 x 0.8	22.0	6.5	5.0	100	
N2-DC-638F-BMD	1.5 - 2.5	Blue	6.3 x 0.8	24.0	7.7	5.0	100	
N6-DC-638F-YMD	4.0 - 6.0	Yellow	6.3 x 0.8	26.0	7.7	6.5	100	



# Nylon-Insulated ring DIN46237 terminals

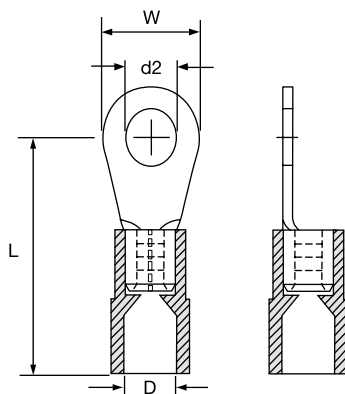
## Spec-Kon® Insulated terminals

### Technical Information

Terminal material	Copper
Terminal surface treatment	Tin plated
Insulation material	Nylon
Max. ratings	+105°C / 600Volts



Product Réf.	Wire size range [mm <sup>2</sup> ]	Colour	Stud hole size d2	Dimensions			Quantity [pieces]	Crimping tool
				L [mm]	W [mm]	D [mm]		
NT1-25RR-DIN	0.5 - 1.5	Red	M2.5	17.0	6.0	4.0	100	MCT2000A
NT1-3RR-DIN	0.5 - 1.5	Red	M3	17.0	6.0	4.0	100	
NT1-35RR-DIN	0.5 - 1.5	Red	M3.5	17.0	6.0	4.0	100	
NT1-4RR-DIN	0.5 - 1.5	Red	M4	18.0	8.0	4.0	100	
NT1-5RR-DIN	0.5 - 1.5	Red	M5	19.0	10.0	4.0	100	
NT1-6RR-DIN	0.5 - 1.5	Red	M6	19.0	10.0	4.0	100	
NT1-8RR-DIN	0.5 - 1.5	Red	M8	23.0	14.0	4.0	100	
NT1-10RR-DIN	0.5 - 1.5	Red	M10	23.0	14.0	4.0	100	
NT2-3BR-DIN	1.5 - 2.5	Blue	M3	17.0	6.0	4.5	100	
NT2-35BR-DIN	1.5 - 2.5	Blue	M3.5	17.0	6.0	4.5	100	
NT2-4BR-DIN	1.5 - 2.5	Blue	M4	18.0	8.0	4.5	100	
NT2-5BR-DIN	1.5 - 2.5	Blue	M5	20.0	10.0	4.5	100	
NT2-6BR-DIN	1.5 - 2.5	Blue	M6	22.0	11.0	4.5	100	
NT2-8BR-DIN	1.5 - 2.5	Blue	M8	23.0	14.0	4.5	100	
NT2-10BR-DIN	1.5 - 2.5	Blue	M10	23.0	15.0	4.5	100	
NT2-12BR-DIN	1.5 - 2.5	Blue	M12	26.0	18.0	4.5	100	
NT6-4YR-DIN	4.0 - 6.0	Yellow	M4	21.0	8.0	6.4	100	
NT6-5YR-DIN	4.0 - 6.0	Yellow	M5	22.0	10.0	6.4	100	
NT6-6YR-DIN	4.0 - 6.0	Yellow	M6	23.0	11.0	6.4	100	
NT6-8YR-DIN	4.0 - 6.0	Yellow	M8	26.0	14.0	6.4	100	
NT6-10YR-DIN	4.0 - 6.0	Yellow	M10	28.0	18.0	6.4	100	
NT6-12YR-DIN	4.0 - 6.0	Yellow	M12	28.0	18.0	6.4	100	



# Nylon-Insulated fork DIN46237 terminals

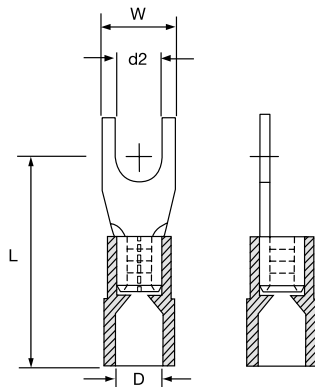
## Spec-Kon® Insulated terminals

### Technical Information

Terminal material	Copper
Terminal surface treatment	Tin plated
Insulation material	Nylon
Max. ratings	+75°C / 600Volts



Product Réf.	Wire size range [mm <sup>2</sup> ]	Colour	Stud hole size d2	Dimensions			Quantity [pieces]	Crimping tool
				L [mm]	W [mm]	D [mm]		
NT1-3RF-DIN	0.5 - 1.5	Red	M3	17.0	6.0	4.0	100	MCT2000A
NT1-35RF-DIN	0.5 - 1.5	Red	M3.5	17.0	6.0	4.0	100	
NT1-4RF-DIN	0.5 - 1.5	Red	M4	18.0	6.8	4.0	100	
NT1-5RF-DIN	0.5 - 1.5	Red	M5	19.0	10.0	4.0	100	
NT1-6RF-DIN	0.5 - 1.5	Red	M6	21.0	11.0	4.0	100	
NT2-3BF-DIN	1.5 - 2.5	Blue	M3	19.0	5.5	4.5	100	
NT2-35BF-DIN	1.5 - 2.5	Blue	M3.5	17.0	6.0	4.5	100	
NT2-4BF-DIN	1.5 - 2.5	Blue	M4	18.0	6.8	4.5	100	
NT2-5BF-DIN	1.5 - 2.5	Blue	M5	20.0	10.0	4.5	100	
NT2-6BF-DIN	1.5 - 2.5	Blue	M6	22.0	11.0	4.5	100	
NT6-4YF-DIN	4.0 - 6.0	Yellow	M4	21.0	8.0	6.4	100	
NT6-5YF-DIN	4.0 - 6.0	Yellow	M5	22.0	10.0	6.4	100	
NT6-6YF-DIN	4.0 - 6.0	Yellow	M6	23.0	11.0	6.4	100	
NT6-8YF-DIN	4.0 - 6.0	Yellow	M8	26.0	14.0	6.4	100	
NT6-10YF-DIN	4.0 - 6.0	Yellow	M10	28.0	18.0	6.4	100	



# Nylon-insulated cord end terminals 1/2

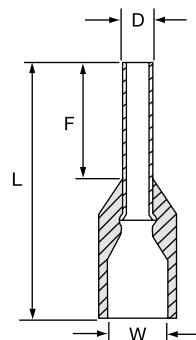
## Spec-Kon® Insulated terminals

### Technical Information

Terminal material                   Copper  
 Terminal surface treatment       Tin plated  
 Insulation material                 Nylon  
 Max. ratings                        +105°C / 600Volts



Product Ref.	Wire size range [mm <sup>2</sup> ]	Colour	Dimensions				Quantity [pieces]	Crimping tool
			F [mm]	L [mm]	W [mm]	D [mm]		
NC0206CG	0.25	Light blue	6.0	10.4	1.9	1.1	1000	MCT2000L
NC0208CG	0.25	Light blue	8.0	12.4	1.9	1.1	1000	
NC0306CG	0.34	Turquoise	6.0	10.4	1.9	1.1	1000	
NC0505CD	0.50	White	5.0	11.0	2.6	1.3	1000	
NC0508CD	0.50	White	8.0	14.0	2.6	1.3	1000	
NC0510CD	0.50	White	10.0	16.0	2.6	1.3	1000	
NC0512CD	0.50	White	12.0	18.0	2.6	1.3	1000	
NC7506CD	0.75	Grey	6.0	12.3	2.8	1.5	1000	
NC7508CD	0.75	Grey	8.0	14.3	2.8	1.5	1000	
NC7510CD	0.75	Grey	10.0	16.3	2.8	1.5	1000	
NC7512CD	0.75	Grey	12.0	18.3	2.8	1.5	1000	
NC7518CD	0.75	Grey	18.0	24.3	2.8	1.5	1000	
NC1006CD	1.00	Red	6.0	12.0	3.0	1.7	1000	
NC1008CD	1.00	Red	8.0	14.0	3.0	1.7	1000	
NC1010CD	1.00	Red	10.0	16.0	3.0	1.7	1000	
NC1012CD	1.00	Red	12.0	18.0	3.0	1.7	1000	
NC1018CD	1.00	Red	18.0	24.3	3.0	1.7	1000	
NC1506CD	1.50	Black	6.0	12.3	3.5	2.0	1000	
NC1508CD	1.50	Black	8.0	14.0	3.5	2.0	1000	
NC1510CD	1.50	Black	10.0	16.0	3.5	2.0	1000	
NC1512CD	1.50	Black	12.0	18.0	3.5	2.0	1000	
NC1515CD	1.50	Black	15.0	21.3	3.5	2.0	1000	
NC1518CD	1.50	Black	18.0	24.0	3.5	2.0	1000	
NC2508CD	2.50	Blue	8.0	15.0	4.2	2.5	1000	
NC2510CD	2.50	Blue	10.0	17.4	4.2	2.5	1000	
NC2512CD	2.50	Blue	12.0	18.0	4.2	2.5	1000	
NC2518CD	2.50	Blue	18.0	24.0	4.2	2.5	1000	
NC2525CD	2.50	Blue	25.0	32.4	4.2	2.5	1000	
NC4009CD	4.00	Grey	9.0	16.4	4.8	3.2	1000	
NC4010CD	4.00	Grey	10.0	17.0	4.8	3.2	1000	
NC4012CD	4.00	Grey	12.0	20.0	4.8	3.2	1000	
NC4018CD	4.00	Grey	18.0	26.0	4.8	3.2	1000	



# Nylon-insulated cord end terminals 2/2

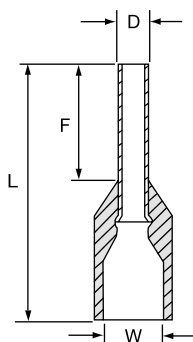
## Spec-Kon® Insulated terminals

### Technical Information

Terminal material	Copper
Terminal surface treatment	Tin plated
Insulation material	Nylon
Max. ratings	+105°C / 600Volts



Product Ref.	Wire size range [mm <sup>2</sup> ]	Colour	Dimensions				Quantity [pieces]	Crimping tool
			F [mm]	L [mm]	W [mm]	D [mm]		
NC6010CD	6.00	Yellow	10.0	18.5	6.3	3.9	1000	MCT2000M
NC6012CD	6.00	Yellow	12.0	20.5	6.3	3.9	1000	
NC6018CD	6.00	Yellow	18.0	26.5	6.3	3.9	1000	
NC10012CD	10.00	Red	12.0	20.8	7.6	4.9	1000	
NC10018CD	10.00	Red	18.0	26.8	7.6	4.9	1000	
NC16012CD	16.00	Blue	12.0	22.0	8.8	6.2	1000	
NC16018CD	16.00	Blue	18.0	28.0	8.8	6.2	1000	MCT2000N
NC25012CD	25.00	Yellow	12.0	24.0	11.2	7.9	250	
NC25015CD	25.00	Yellow	15.0	27.0	11.2	7.9	250	
NC25016CD	25.00	Yellow	16.0	28.0	11.2	7.9	250	
NC25018CD	25.00	Yellow	18.0	30.0	11.2	7.9	250	
NC25022CD	25.00	Yellow	22.0	36.0	11.2	7.9	250	
NC25025CD	25.00	Yellow	25.0	39.0	11.2	7.9	250	
NC35016CD	35.00	Red	16.0	30.0	12.7	8.7	200	
NC35018CD	35.00	Red	18.0	32.0	12.7	8.7	200	
NC35022CD	35.00	Red	22.0	36.0	12.7	8.7	200	
NC35025CD	35.00	Red	25.0	39.0	12.7	8.7	200	MCT2000P
NC50012CD	50.00	Blue	12.0	28.0	15.0	10.9	100	
NC50016CD	50.00	Blue	16.0	32.0	15.0	10.9	100	
NC50020CD	50.00	Blue	20.0	36.0	15.0	10.9	100	
NC50022CD	50.00	Blue	22.0	38.0	15.0	10.9	100	
NC50025CD	50.00	Blue	25.0	41.0	15.0	10.9	100	
NC50030CD	50.00	Blue	30.0	46.0	15.0	10.9	100	



# Nylon-insulated twin cord end terminals

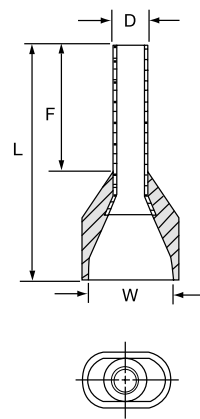
## Spec-Kon® Insulated terminals

### Technical Information

Terminal material                   Copper  
 Terminal surface treatment       Tin plated  
 Insulation material                 Nylon



Product Ref.	Wire size range [mm <sup>2</sup> ]	Colour	Dimensions				Quantity [pieces]	Crimping tool
			L [mm]	F [mm]	D [mm]	W [mm]		
NC2-0508CD	2 x 0.50	White	14.5	8.0	1.8	5.0	1000	
NC2-7508CD	2 x 0.75	Grey	14.7	8.0	2.1	5.5	1000	
NC2-7510CD	2 x 0.75	Grey	16.7	10.0	2.1	5.5	1000	
NC2-1008CD	2 x 1.00	Red	15.1	8.0	2.4	5.5	1000	
NC2-1010CD	2 x 1.00	Red	17.1	10.0	2.4	5.5	1000	MCT2000L
NC2-1508CD	2 x 1.50	Black	15.5	8.0	2.6	6.4	1000	
NC2-1512CD	2 x 1.50	Black	19.5	12.0	2.6	6.4	1000	
NC2-2510CD	2 x 2.50	Blue	18.5	10.0	3.3	8.0	1000	
NC2-2513CD	2 x 2.50	Blue	21.5	13.0	3.3	8.0	1000	
NC2-4012CD	2 x 4.00	Grey	23.1	12.0	4.2	8.8	1000	MCT2000M
NC2-6014CD	2 x 6.00	Yellow	26.1	14.0	5.3	9.5	1000	
NC2-10014CD	2 x 10.00	Red	26.6	14.0	6.9	12.6	500	MCT2000N
NC2-16014CD	2 x 16.00	Blue	31.3	14.0	8.7	19.0	200	





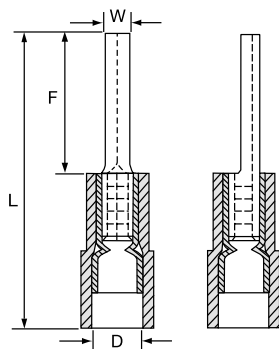
# Nylon-insulated Pin Double Crimp Terminals

## Spec-Kon® Insulated terminals

### Technical Information

Terminal material	Copper
Terminal surface treatment	Tin plated
Double crimp	With copper sleeve on barrel
Insulation material	Nylon
Max. ratings	+105°C / 600Volts

Product Ref.	Wire size range [mm <sup>2</sup> ]	Dimensions				Quantity [pieces]	Crimping tool
		F [mm]	L [mm]	W [mm]	D [mm]		
NT1-DC-RP20	0.5 - 1.5	9.0	19.5	1.9	4.5	?	MCT2000A
NT1-DC-RP21	0.5 - 1.5	10.0	20.8	1.9	4.5	?	
NT1-DC-RP23	0.5 - 1.5	12.0	22.8	1.9	4.5	?	
NT1-DC-RP24	0.5 - 1.5	13.0	23.8	1.9	4.5	?	
NT1-DC-RP25	0.5 - 1.5	14.0	24.8	1.9	4.5	?	
NT1-DC-RP27	0.5 - 1.5	16.0	27.0	1.9	4.5	?	
NT2-DC-BP20	1.5 - 2.5	9.0	19.8	1.9	5.2	?	
NT2-DC-BP21	1.5 - 2.5	10.0	20.8	1.9	5.2	?	
NT2-DC-BP23	1.5 - 2.5	12.0	22.8	1.9	5.2	?	
NT2-DC-BP24	1.5 - 2.5	13.0	23.8	1.9	5.2	?	
NT2-DC-BP27	1.5 - 2.5	16.0	27.0	1.9	5.2	?	
NT6-DC-YP27	4 - 6	14.0	27.0	2.8	7.0	?	



# Nylon-insulated Ring Double Crimp Terminals

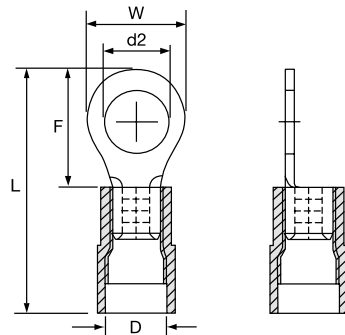
## Spec-Kon® Insulated terminals

### Technical Information

Terminal material: Copper  
 Terminal surface treatment: Tin plated  
 Double crimp: With copper sleeve on barrel  
 Insulation material: Nylon  
 Max. ratings: +105°C / 600Volts



Product Ref.	Wire size range [mm <sup>2</sup> ]	Colour	Stud hole size d2	Dimensions				Quantity [pieces]	Crimping tool
				F [mm]	L [mm]	W [mm]	D [mm]		
NT1-DC-RR3	0.5 - 1.5	Red	3.2	5.0	18.0	5.5	4.5	100	MCT2000A
NT1-DC-RR35	0.5 - 1.5	Red	3.7	7.0	21.3	8.0	4.5	100	
NT1-DC-RR4	0.5 - 1.5	Red	4.3	7.0	21.3	8.0	4.5	100	
NT1-DC-RR5	0.5 - 1.5	Red	5.3	11.0	27.3	11.6	4.5	100	
NT1-DC-RR6	0.5 - 1.5	Red	6.4	11.0	27.3	11.6	4.5	100	
NT1-DC-RR8	0.5 - 1.5	Red	8.4	11.0	27.3	11.6	4.5	100	
NT1-DC-RR10	0.5 - 1.5	Red	10.5	13.6	31.0	13.6	4.5	100	
NT1-DC-RR12	0.5 - 1.5	Red	13.0	16.0	35.9	19.2	4.5	100	
NT2-DC-BR3	1.5 - 2.5	Blue	3.2	4.8	18.3	6.6	5.2	100	
NT2-DC-BR35	1.5 - 2.5	Blue	3.7	7.4	22.3	8.5	5.2	100	
NT2-DC-BR4	1.5 - 2.5	Blue	4.3	7.4	22.3	8.5	5.2	100	
NT2-DC-BR5	1.5 - 2.5	Blue	5.3	7.4	22.3	9.5	5.2	100	
NT2-DC-BR6	1.5 - 2.5	Blue	6.4	11.0	27.3	12.0	5.2	100	
NT2-DC-BR8	1.5 - 2.5	Blue	8.4	11.0	27.3	12.0	5.2	100	
NT2-DC-BR10	1.5 - 2.5	Blue	10.5	13.9	31.0	13.6	5.2	100	
NT2-DC-BR12	1.5 - 2.5	Blue	13.0	16.0	35.9	19.2	5.2	100	
NT6-DC-YR4	4 - 6	Yellow	4.3	8.3	26.5	9.5	7.0	100	
NT6-DC-YR5	4 - 6	Yellow	5.3	8.3	26.1	9.5	7.0	100	
NT6-DC-YR6	4 - 6	Yellow	6.4	10.5	29.5	12.0	7.0	100	
NT6-DC-YR8	4 - 6	Yellow	8.4	13.3	34.0	15.0	7.0	100	
NT6-DC-YR10	4 - 6	Yellow	10.5	13.3	34.0	15.0	7.0	100	
NT6-DC-YR12	4 - 6	Yellow	13.0	16.0	39.1	19.2	7.0	100	



# Polycarbonate-Insulated ring terminals

## Spec-Kon® Insulated terminals

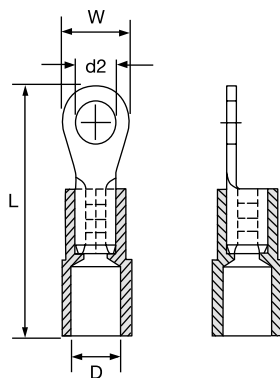
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### Technical Information

Terminal material	Copper
Terminal surface treatment	Tin plated
Insulation material	Polycarbonate
Max. ratings	+105°C / 600Volts



Product Réf.	Wire size range [mm <sup>2</sup> ]	Colour	Stud hole size d2	Dimensions			Quantity [pieces]	Crimping tool
				L [mm]	W [mm]	D [mm]		
PT1-RR3	0.5 - 1.5	Red	M3	18.5	5.5	4.0	100	MCT2000A
PT1-RR35	0.5 - 1.5	Red	M3.5	21.8	8.0	4.0	100	
PT1-RR4	0.5 - 1.5	Red	M4	21.8	8.0	4.0	100	
PT1-RR5	0.5 - 1.5	Red	M5	27.8	11.6	4.0	100	
PT1-RR6	0.5 - 1.5	Red	M6	27.8	11.6	4.0	100	
PT1-RR8	0.5 - 1.5	Red	M8	27.8	11.6	4.0	100	
PT1-RR10	0.5 - 1.5	Red	M10	31.5	13.6	4.0	100	
PT1-RR12	0.5 - 1.5	Red	M12	36.4	19.2	4.0	100	
PT2-BR3	1.5 - 2.5	Blue	M3	18.8	6.6	4.5	100	
PT2-BR35	1.5 - 2.5	Blue	M3.5	22.8	8.5	4.5	100	
PT2-BR4	1.5 - 2.5	Blue	M4	22.8	8.5	4.5	100	
PT2-BR5	1.5 - 2.5	Blue	M5	22.8	9.5	4.5	100	
PT2-BR6	1.5 - 2.5	Blue	M6	27.8	12.0	4.5	100	
PT2-BR8	1.5 - 2.5	Blue	M8	27.8	12.0	4.5	100	
PT2-BR10	1.5 - 2.5	Blue	M10	31.5	13.6	4.5	100	
PT2-BR12	1.5 - 2.5	Blue	M12	36.4	19.2	4.5	100	
PT6-YR4	4.0 - 6.0	Yellow	M4	26.0	9.5	6.4	100	
PT6-YR5	4.0 - 6.0	Yellow	M5	26.0	9.5	6.4	100	
PT6-YR6	4.0 - 6.0	Yellow	M6	29.5	12.0	6.4	100	
PT6-YR8	4.0 - 6.0	Yellow	M8	34.0	15.0	6.4	100	
PT6-YR10	4.0 - 6.0	Yellow	M10	34.0	15.0	6.4	100	
PT6-YR12	4.0 - 6.0	Yellow	M12	38.6	19.2	6.4	100	



# Polycarbonate-Insulated fork terminals

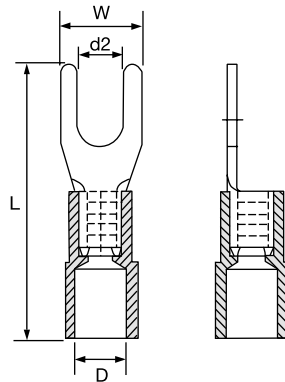
## Spec-Kon® Insulated terminals

### Technical Information

Terminal material	Copper
Terminal surface treatment	Tin plated
Insulation material	Polycarbonate
Max. ratings	+105°C / 600Volts



Product Réf.	Wire size range [mm <sup>2</sup> ]	Colour	Stud hole size d2	Dimensions			Quantity [pieces]	Crimping tool
				L [mm]	W [mm]	D [mm]		
PT1-RF3	0.5 - 1.5	Red	M3	22.0	5.7	4.0	100	MCT2000A
PT1-RF35	0.5 - 1.5	Red	M3.5	22.0	6.4	4.0	100	
PT1-RF4	0.5 - 1.5	Red	M4	22.0	8.1	4.0	100	
PT1-RF5	0.5 - 1.5	Red	M5	22.0	9.5	4.0	100	
PT1-RF6	0.5 - 1.5	Red	M6	28.0	12.0	4.0	100	
PT2-BF3	1.5 - 2.5	Blue	M3	22.0	5.7	4.5	100	
PT2-BF35	1.5 - 2.5	Blue	M3.5	22.0	6.0	4.5	100	
PT2-BF4	1.5 - 2.5	Blue	M4	22.0	7.9	4.5	100	
PT2-BF5	1.5 - 2.5	Blue	M5	22.0	9.3	4.5	100	
PT2-BF6	1.5 - 2.5	Blue	M6	28.0	12.0	4.5	100	
PT6-YF4	4.0 - 6.0	Yellow	M4	25.5	9.0	6.4	100	
PT6-YF5	4.0 - 6.0	Yellow	M5	25.5	9.0	6.4	100	
PT6-YF6	4.0 - 6.0	Yellow	M6	31.5	12.0	6.4	100	
PT6-YF8	4.0 - 6.0	Yellow	M8	30.2	14.0	6.4	100	



# Polycarbonate-Insulated pin terminals

## Spec-Kon® Insulated terminals

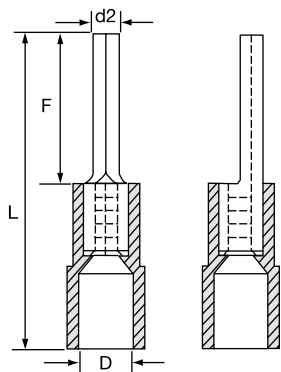
52

### Technical Information

Terminal material	Copper
Terminal surface treatment	Tin plated
Insulation material	Polycarbonate
Max. ratings	+105°C / 600Volts



Product Réf.	Wire size range [mm <sup>2</sup> ]	Colour	Stud size d2 [mm]	Dimensions			Quantity [pieces]	Crimping tool
				L [mm]	F [mm]	D [mm]		
PT1-RP20	0.5 - 1.5	Red	1.9	19.8	9.0	4.0	100	MCT2000A
PT1-RP21	0.5 - 1.5	Red	1.9	20.8	10.0	4.0	100	
PT1-RP24	0.5 - 1.5	Red	1.9	22.8	12.0	4.0	100	
PT1-RP25	0.5 - 1.5	Red	1.9	23.8	13.0	4.0	100	
PT1-RP27	0.5 - 1.5	Red	1.9	27.0	16.0	4.0	100	
PT2-BP20	1.5 - 2.5	Blue	1.9	19.8	9.0	4.5	100	
PT2-BP21	1.5 - 2.5	Blue	1.9	20.8	10.0	4.5	100	
PT2-BP24	1.5 - 2.5	Blue	1.9	22.8	12.0	4.5	100	
PT2-BP27	1.5 - 2.5	Blue	1.9	27.0	16.0	4.5	100	
PT6-YP27	4.0 - 6.0	Yellow	2.8	27.0	14.0	6.4	100	



# Polycarbonate-Insulated female disconnect terminals

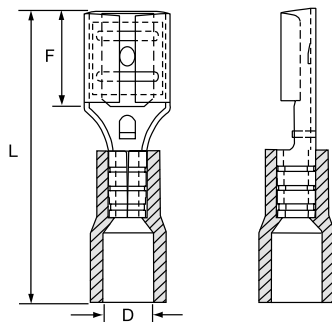
## Spec-Kon® Insulated terminals

### Technical Information

Terminal material	Brass
Terminal surface treatment	Tin plated
Insulation material	PC
Max. ratings	+125°C / 300Volts



Product Réf.	Wire size range [mm <sup>2</sup> ]	Colour	Tab size [mm]	Dimensions			Quantity [pieces]	Crimping tool
				L [mm]	F [mm]	D [mm]		
P1-285-RFD	0.5 - 1.5	Red	2.8 x 0.5	19.6	6.5	4.0	100	MCT2000C
P1-288-RFD	0.5 - 1.5	Red	2.8 x 0.8	19.6	6.5	4.0	100	
P1-485-RFD	0.5 - 1.5	Red	4.8 x 0.5	20.0	6.4	4.0	100	
P1-488-RFD	0.5 - 1.5	Red	4.8 x 0.8	20.0	6.4	4.0	100	
P1-638-RFD	0.5 - 1.5	Red	6.3 x 0.8	21.5	7.5	4.0	100	
P2-485-BFD	1.5 - 2.5	Blue	4.8 x 0.5	20.0	6.4	4.5	100	
P2-488-BFD	1.5 - 2.5	Blue	4.8 x 0.8	20.0	6.4	4.5	100	
P2-638-BFD	1.5 - 2.5	Blue	6.3 x 0.8	21.5	7.5	4.5	100	
P6-638-YFD	4.0 - 6.0	Yellow	6.3 x 0.8	23.5	7.5	6.3	100	
P6-941-YFD	4.0 - 6.0	Yellow	9.4 x 1.2	28.5	12.0	6.3	100	



# Polycarbonate-Insulated male disconnect terminals

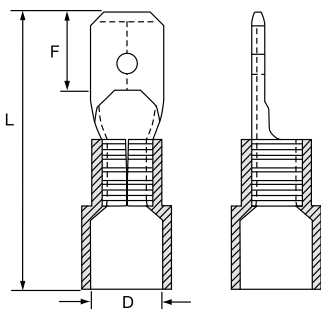
## Spec-Kon® Insulated terminals

### Technical Information

Terminal material Brass  
 Terminal surface treatment Tin plated  
 Insulation material PC  
 Max. ratings +125°C / 300Volts



Product Réf.	Wire size range [mm <sup>2</sup> ]	Colour	Tab size [mm]	Dimensions			Quantity [pieces]	Crimping tool
				L [mm]	F [mm]	D [mm]		
P1-285-RMD	0.5 - 1.5	Red	2.8 x 0.5	19.5	6.5	4.0	100	MCT2000C
P1-288-RMD	0.5 - 1.5	Red	2.8 x 0.8	19.5	6.5	4.0	100	
P1-485-RMD	0.5 - 1.5	Red	4.8 x 0.5	20.0	6.5	4.0	100	
P1-488-RMD	0.5 - 1.5	Red	4.8 x 0.8	20.0	6.7	4.0	100	
P1-638-RMD	0.5 - 1.5	Red	6.3 x 0.8	22.0	7.6	4.0	100	
P2-485-BMD	1.5 - 2.5	Blue	4.8 x 0.5	20.0	6.5	4.5	100	
P2-488-BMD	1.5 - 2.5	Blue	4.8 x 0.8	20.0	6.7	4.5	100	
P2-638-BMD	1.5 - 2.5	Blue	6.3 x 0.8	22.0	7.7	4.5	100	
P6-638-YMD	4.0 - 6.0	Yellow	6.3 x 0.8	24.0	7.7	5.5	100	



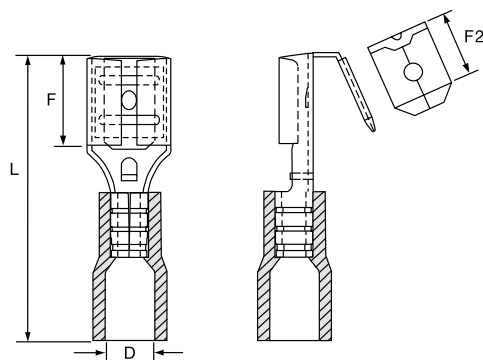
# Polycarbonate-Insulated Piggy back disconnect terminals Spec-Kon® Insulated terminals

## Technical Information

Terminal material	Brass
Terminal surface treatment	Tin plated
Insulation material	PC
Max. ratings	+125°C / 300Volts



Product Réf.	Wire size range [mm²]	Colour	Tab size [mm]	Dimensions				Quantity [pieces]	Crimping tool
				L [mm]	F [mm]	F2 [mm]	D [mm]		
P1-638-RPBD	0.5 - 1.5	Red	6.3 x 0.8	23.0	8.0	8.2	4.0	100	MCT2000C
P2-638-BPBD	1.5 - 2.5	Blue	6.3 x 0.8	23.0	8.0	8.2	4.5	100	
P6-638-YPBD	4.0 - 6.0	Yellow	6.3 x 0.8	24.0	8.0	8.2	5.5	100	





# Polycarbonate Insulated receptacle disconnect terminals Spec-Kon® Insulated terminals

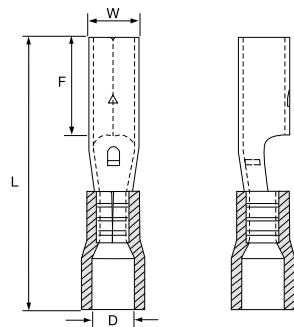
56

## Technical Information

Terminal material	Brass
Terminal surface treatment	Tin plated
Insulation material	PC
Max. ratings	+125°C / 300Volts



Product Réf.	Wire size range [mm <sup>2</sup> ]	Colour	Tab size [mm]	Dimensions				Quantity [pieces]	Crimping tool
				L [mm]	F [mm]	W [mm]	D [mm]		
P1-39-RRD	0.5 - 1.5	Red	4.0	22.5	7.0	3.9	4.0	100	MCT2000C
P2-39-BRD	1.5 - 2.5	Blue	4.0	22.5	7.0	3.9	4.5	100	
P2-49-BRD	1.5 - 2.5	Blue	5.0	22.5	7.0	4.9	4.5	100	
P6-49-YRD	4.0 - 6.0	Yellow	5.0	24.5	7.0	4.9	5.5	100	



# Polycarbonate Insulated bullet terminals

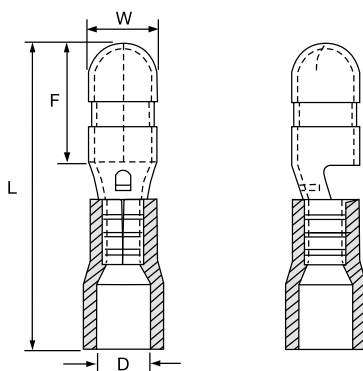
## Spec-Kon® Insulated terminals

### Technical Information

Terminal material	Brass
Terminal surface treatment	Tin plated
Insulation material	PC
Max. ratings	+125°C / 600Volts



Product Réf.	Wire size range [mm <sup>2</sup> ]	Colour	Tab size [mm]	Dimensions				Quantity [pieces]	Crimping tool
				L [mm]	F [mm]	D [mm]	W [mm]		
P1-4-RBD	0.5 - 1.5	Red	4.0	22.0	8.5	4.0	4.0	100	MCT2000C
P2-4-BBD	1.5 - 2.5	Blue	4.0	22.0	8.5	4.5	4.0	100	
P2-5-BBD	1.5 - 2.5	Blue	5.0	22.0	8.5	4.5	5.0	100	
P6-5-YBD	4.0 - 6.0	Yellow	5.0	23.5	8.5	6.3	5.0	100	



# Polycarbonate-fully Insulated female disconnect terminals Spec-Kon® Insulated terminals

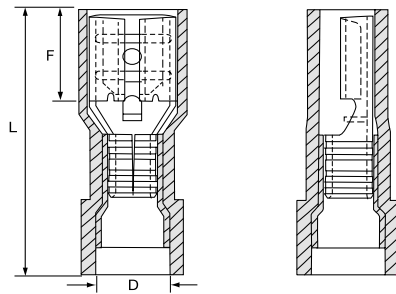
58

## Technical Information

Terminal material	Brass
Terminal surface treatment	Tin plated
Insulation material	PC
Max. ratings	+105°C / 300Volts



Product Réf.	Wire size range [mm <sup>2</sup> ]	Colour	Tab size [mm]	Dimensions			Quantity [pieces]	Crimping tool
				L [mm]	F [mm]	D [mm]		
P1-638F-RFD	0.5 - 1.5	Red	6.3 x 0.8	21.5	7.5	4.0	100	
P2-638F-BFD	1.5 - 2.5	Blue	6.3 x 0.8	21.5	7.5	5.0	100	MCT2000C
P6-638F-YFD	4.0 - 6.0	Yellow	6.3 x 0.8	23.5	7.5	6.3	100	






# Heat Shrink Fully Insulated female double crimp disconnect terminals

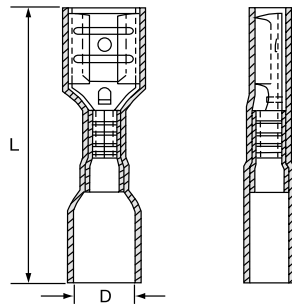
## Spec-Kon® Insulated terminals

### Technical Information

Terminal material	Brass
Terminal surface treatment	Tin plated
Insulation material	Nylon and high density PE. with copper sleeve on barrel
Operating Temp.	-40°C to +105°C
Shrink Temp.	150°C
Max. ratings	300Volts



Product Réf.	Wire size range [mm <sup>2</sup> ]	Colour	Tab size [mm]	Dimensions		Quantity [pieces]	Crimping tool
				L [mm]	D [mm]		
HS1-638F-RFD	0.5 - 1.5	Red	 6.3 x 0.8	34.0	5.5	100	MCT2000A
HS2-638F-BFD	1.5 - 2.5	Blue	 6.3 x 0.8	34.0	6.0	100	
HS6-638F-YFD	4.0 - 6.0	Yellow	 6.3 x 0.8	35.0	8.1	100	



# Heat Shrink Insulated female disconnect terminals

## Spec-Kon® Insulated terminals

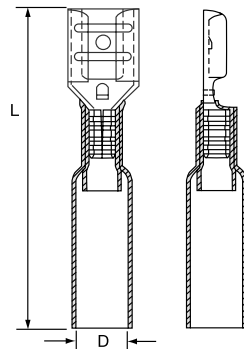
60

### Technical Information

Terminal material	Brass
Terminal surface treatment	Tin plated
Insulation material	Nylon and high density PE. with copper sleeve on barrel
Operating Temp.	-40°C to +105°C
Shrink Temp.	150°C
Max. ratings	300Volts



Product Réf.	Wire size range [mm <sup>2</sup> ]	Colour	Tab size [mm]	Dimensions		Quantity [pieces]	Crimping tool
				L [mm]	D [mm]		
HS1-638-RFD	0.5 - 1.5	Red	6.3 x 0.8	34.0	5.5	100	MCT2000C
HS2-638-BFD	1.5 - 2.5	Blue	6.3 x 0.8	34.0	6.0	100	
HS6-638-YFD	4.0 - 6.0	Yellow	6.3 x 0.8	35.0	8.1	100	

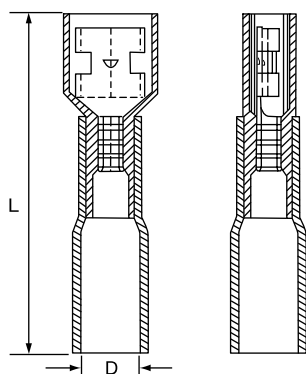


# Nylon Heat Shrink fully Insulated female disconnect terminals Spec-Kon® Insulated terminals

## Technical Information

Terminal material	Brass
Terminal surface treatment	Tin plated
Insulation material	Nylon and high density PE.
Operating Temp.	-40°C to +105°C
Shrink Temp.	150°C
Max. ratings	300Volts

Product Réf.	Wire size range [mm <sup>2</sup> ]	Colour	Tab size [mm]	Dimensions		Quantity [pieces]	Crimping tool
				L [mm]	D [mm]		
NHS1-638F-RFD	0.5 - 1.5	Red	6.3 x 0.8	36.5	6.5	100	MCT2000C
NHS2-638F-BFD	1.5 - 2.5	Blue	6.3 x 0.8	36.5	6.5	100	
NHS6-638F-YFD	4.0 - 6.0	Yellow	6.3 x 0.8	37.0	7.5	100	



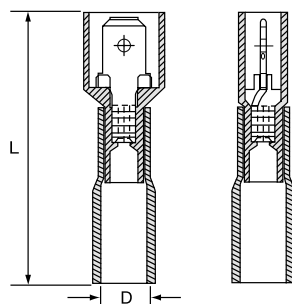
# Nylon Heat Shrink fully Insulated male disconnect terminals Spec-Kon® Insulated terminals

### Technical Information

Terminal material	Brass
Terminal surface treatment	Tin plated
Insulation material	Nylon and high density PE. with copper sleeve on barrel
Operating Temp.	-40°C to +105°C
Shrink Temp.	150°C
Max. ratings	300Volts



Product Réf.	Wire size range [mm <sup>2</sup> ]	Colour	Tab size [mm]	Dimensions		Quantity [pieces]	Crimping tool
				L [mm]	D [mm]		
NHS1-638F-RMD	0.5 - 1.5	Red	6.3 x 0.8	38.5	6.5	100	MCT2000C
NHS2-638F-BMD	1.5 - 2.5	Blue	6.3 x 0.8	39.5	6.5	100	
NHS6-638F-YMD	4.0 - 6.0	Yellow	6.3 x 0.8	39.5	7.5	100	



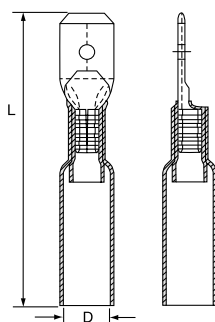
# Heat Shrink Insulated male double crimp disconnect terminals Spec-Kon® Insulated terminals

## Technical Information

Terminal material	Brass
Terminal surface treatment	Tin plated
Insulation material	Nylon and high density PE. with copper sleeve on barrel
Flammability rating	UL94 V-2
Operating Temp.	-40°C to +105°C
Shrink Temp.	150°C
Max. ratings	300Volts



Product Réf.	Wire size range [mm <sup>2</sup> ]	Colour	Tab size [mm]	Dimensions		Quantity [pieces]	Crimping tool
				L [mm]	D [mm]		
HS1-638-RMD	0.5 - 1.5	Red	6.3 x 0.8	34.0	5.5	100	MCT2000A
HS2-638-BMD	1.5 - 2.5	Blue	6.3 x 0.8	34.0	6.0	100	
HS6-638-YMD	4.0 - 6.0	Yellow	6.3 x 0.8	35.0	8.1	100	
























# Heat Shrink Insulated ring terminals

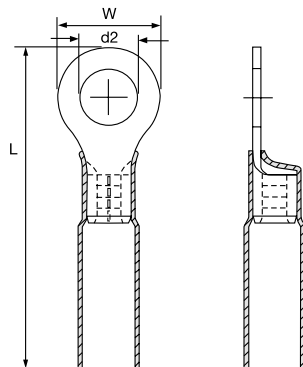
## Spec-Kon® Insulated terminals

### Technical Information

Terminal material	Copper
Terminal surface treatment	Tin plated
Insulation material	Nylon and high density PE.
Operating Temp.	-40°C to +105°C
Shrink Temp.	150°C
Max. ratings	600Volts
Metal barrel	Brazed seam



Product Réf.	Wire size range [mm <sup>2</sup> ]	Colour	Stud hole size d2	Dimensions		Quantity [pieces]	Crimping tool
				W [mm]	L [mm]		
HS1B-RR35	0.5 - 1.5	Red	 M3.5	8.0	29.7	100	MCT2000G
HS1B-RR4	0.5 - 1.5	Red	 M4	8.0	28.5	100	
HS1B-RR5	0.5 - 1.5	Red	 M5	8.0	28.5	100	
HS1B-RR6	0.5 - 1.5	Red	 M6	11.6	34.5	100	
HS1B-RR8	0.5 - 1.5	Red	 M8	11.6	34.5	100	
HS1B-RR10	0.5 - 1.5	Red	 M10	13.6	37.5	100	
HS2B-BR35	1.5 - 2.5	Blue	 M3.5	8.5	30.5	100	
HS2B-BR4	1.5 - 2.5	Blue	 M4	8.5	30.5	100	
HS2B-BR5	1.5 - 2.5	Blue	 M5	9.5	35.5	100	
HS2B-BR6	1.5 - 2.5	Blue	 M6	12.0	35.5	100	
HS2B-BR8	1.5 - 2.5	Blue	 M8	12.0	35.5	100	
HS2B-BR10	1.5 - 2.5	Blue	 M10	13.6	37.5	100	
HS2B-BR12	1.5 - 2.5	Blue	 M12	19.2	44.1	100	
HS6B-YR35	4.0 - 6.0	Yellow	 M3.5	7.2	30.2	100	
HS6B-YR5	4.0 - 6.0	Yellow	 M5	9.5	34.0	100	
HS6B-YR6	4.0 - 6.0	Yellow	 M6	12.0	37.5	100	
HS6B-YR8	4.0 - 6.0	Yellow	 M8	15.0	42.0	100	
HS6B-YR10	4.0 - 6.0	Yellow	 M10	15.0	42.0	100	
HS6B-YR12	4.0 - 6.0	Yellow	 M12	19.2	46.5	100	



# Heat Shrink Insulated ring double crimp terminals

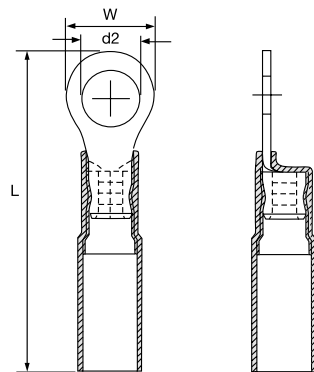
## Spec-Kon® Insulated terminals

### Technical Information

Terminal material	Copper
Terminal surface treatment	Tin plated
Insulation material	High density PE. with copper sleeve on barrel
Operating Temp.	-40°C to +105°C
Shrink Temp.	150°C
Max. ratings	600Volts



Product Réf.	Wire size range [mm²]	Colour	Stud hole size d2	Dimensions		Quantity [pieces]	Crimping tool	
				W [mm]	L [mm]			
HS1B-DC-RR35	0.5 - 1.5	Red	M3.5	8.0	30.5	100		
HS1B-DC-RR4	0.5 - 1.5	Red	M4	8.0	35.8	100		
HS1B-DC-RR5	0.5 - 1.5	Red	M5	8.0	32.8	100		
HS1B-DC-RR6	0.5 - 1.5	Red	M6	11.6	38.0	100		
HS1B-DC-RR8	0.5 - 1.5	Red	M8	11.6	38.0	100		
HS1B-DC-RR10	0.5 - 1.5	Red	M10	13.6	41.6	100		
HS1B-DC-RR12	0.5 - 1.5	Red	M12	19.2	47.4	100		
HS2B-DC-BR35	1.5 - 2.5	Blue	M3.5	8.5	31.0	100		MCT2000B
HS2B-DC-BR4	1.5 - 2.5	Blue	M4	8.5	32.8	100		
HS2B-DC-BR5	1.5 - 2.5	Blue	M5	9.5	32.8	100		
HS2B-DC-BR6	1.5 - 2.5	Blue	M6	12.0	37.5	100		
HS2B-DC-BR8	1.5 - 2.5	Blue	M8	12.0	37.5	100		
HS2B-DC-BR10	1.5 - 2.5	Blue	M10	13.6	40.2	100		
HS2B-DC-BR12	1.5 - 2.5	Blue	M12	19.2	46.4	100		
HS6B-DC-YR35	4.0 - 6.0	Yellow	M3.5	7.2	32.8	100		
HS6B-DC-YR4	4.0 - 6.0	Yellow	M4	9.5	36.8	100		
HS6B-DC-YR5	4.0 - 6.0	Yellow	M5	9.5	36.8	100		
HS6B-DC-YR6	4.0 - 6.0	Yellow	M6	12.0	39.4	100		
HS6B-DC-YR8	4.0 - 6.0	Yellow	M8	15.0	44.0	100		
HS6B-DC-YR10	4.0 - 6.0	Yellow	M10	15.0	44.0	100		
HS6B-DC-YR12	4.0 - 6.0	Yellow	M12	19.2	49.2	100		



# Heat Shrink Insulated fork terminals

## Spec-Kon® Insulated terminals

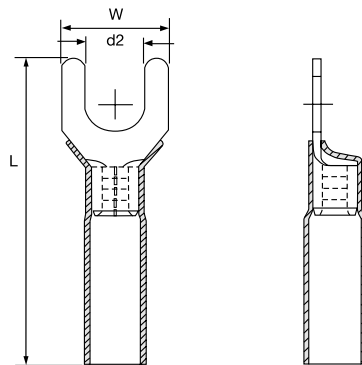
66

### Technical Information

Terminal material	Copper
Terminal surface treatment	Tin plated
Insulation material	High density PE.
Operating Temp.	-40°C to +105°C
Shrink Temp.	150°C
Max. ratings	600Volts
Metal barrel	Brazed seam



Product Réf.	Wire size range [mm²]	Colour	Stud hole size d2	Dimensions		Quantity [pieces]	Crimping tool
				W [mm]	L [mm]		
HS1B-RF35	0.5 - 1.5	Red	M3.5	6.4	29.3	100	MCT2000G
HS1B-RF4	0.5 - 1.5	Red	M4	7.2	29.6	100	
HS1B-RF5	0.5 - 1.5	Red	M5	9.5	30.0	100	
HS2B-BF35	1.5 - 2.5	Blue	M3.5	6.0	28.5	100	
HS2B-BF4	1.5 - 2.5	Blue	M4	7.2	29.5	100	
HS2B-BF5	1.5 - 2.5	Blue	M5	9.3	30.5	100	
HS2B-BF6	1.5 - 2.5	Blue	M6	12.0	36.5	100	
HS6B-YF4	4.0 - 6.0	Yellow	M4	9.0	33.5	100	
HS6B-YF5	4.0 - 6.0	Yellow	M5	9.0	33.5	100	
HS6B-YF6	4.0 - 6.0	Yellow	M6	12.0	41.0	100	



# Heat Shrink Insulated fork double crimp terminals

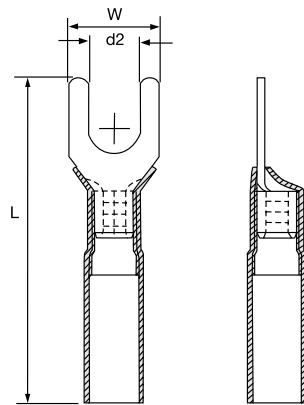
## Spec-Kon® Insulated terminals

### Technical Information

Terminal material	Copper
Terminal surface treatment	Tin plated
Insulation material	High density PE with copper sleeve on barrel
Operating Temp.	-40°C to +105°C
Shrink Temp.	150°C
Max. ratings	600Volts



Product Réf.	Wire size range [mm²]	Colour	Stud hole size d2	Dimensions		Weight [g/100]	Quantity [pieces]	Crimping tool
				W [mm]	L [mm]			
HS1B-DC-RF35	0.5 - 1.5	Red	M3.5	6.4	33.0	107	100	MCT2000B
HS1B-DC-RF5	0.5 - 1.5	Red	M5	9.5	34.0	117	100	
HS1B-DC-RF6	0.5 - 1.5	Red	M6	12.0	39.8	117	100	
HS2B-DC-BF35	1.5 - 2.5	Blue	M3.5	6.0	33.5	128	100	
HS2B-DC-BF5	1.5 - 2.5	Blue	M5	9.3	33.2	143	100	
HS2B-DC-BF6	1.5 - 2.5	Blue	M6	12.0	38.2	143	100	
HS6B-DC-YF4	4.0 - 6.0	Yellow	M4	9.0	38.0	266	100	
HS6B-DC-YF5	4.0 - 6.0	Yellow	M5	9.0	38.0	259	100	
HS6B-DC-YF6	4.0 - 6.0	Yellow	M6	12.0	44.5	333	100	



# Heat Shrink Insulated butt splice Spec-Kon® Insulated

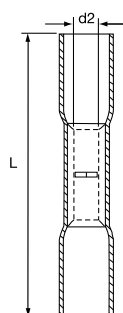
68

## Technical Information

Terminal material	Copper
Terminal surface treatment	Tin plated
Insulation material	High density PE.
Operating Temp.	-40°C to +105°C
Shrink Temp.	150°C



Product Réf.	Wire size range [mm <sup>2</sup> ]	Colour	Dimensions		Quantity [pieces]	Crimping tool
			L [mm]	d2 [mm]		
HS05-BS-C	0.2 - 0.5	Transparent	10.5	1.3	100	
HS1-BS-R	0.5 - 1.5	Red	15.0	1.7	100	MCT2000G
HS2-BS-B	1.5 - 2.5	Blue	15.0	2.3	100	
HS6-BS-Y	4.0 - 6.0	Yellow	15.0	3.4	100	



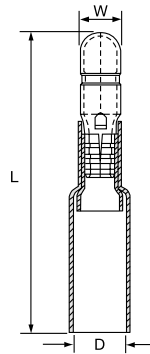
# Heat Shrink Insulated bullet double crimp terminals

## Spec-Kon<sup>®</sup> Insulated terminals

### Technical Information

Terminal material	Brass
Terminal surface treatment	Tin plated
Insulation material	Nylon & High density PE. with copper sleeve on barrel
Operating Temp.	-40°C to +105°C
Shrink Temp.	150°C
Max. ratings	300Volts

Product Réf.	Wire size range [mm <sup>2</sup> ]	Colour	Tab size [mm]	Dimensions			Quantity [pieces]	Crimping tool
				W [mm]	D [mm]	L [mm]		
HS1-4-RBD	0.5 - 1.5	Red	4.0	4.0	5.5	33.0	100	MCT2000A
HS2-4-BBD	1.5 - 2.5	Blue	4.0	4.0	6.0	33.0	100	
HS2-4.5-BBD	1.5 - 2.5	Blue	4.5	4.5	6.0	33.0	100	
HS2-5-YBD	1.5 - 2.5	Yellow	5.0	5.0	6.0	33.0	100	
HS6-5-YBD	4.0 - 6.0	Yellow	5.0	5.0	8.1	35.5	100	



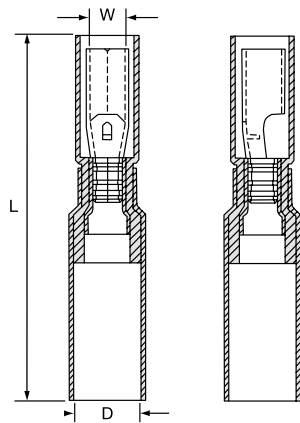
# Heat Shrink fully Insulated receptacle double crimp terminals

## Spec-Kon® Insulated terminals

### Technical Information

Terminal material	Brass
Terminal surface treatment	Tin plated
Insulation material	Nylon & High density PE. with copper sleeve on barrel
Operating Temp.	-40°C to +105°C
Shrink Temp.	150°C
Max. ratings	300Volts

Product Réf.	Wire size range [mm <sup>2</sup> ]	Colour	Tab size [mm]	Dimensions			Quantity [pieces]	Crimping tool
				W [mm]	D [mm]	L [mm]		
HS1-4-RRD	0.5 - 1.5	Red	4.0	3.9	6.5	40.5	100	MCT2000A
HS2-4-BRD	1.5 - 2.5	Blue	4.0	3.9	7.5	40.5	100	
HS2-4.5-BRD	1.5 - 2.5	Blue	4.5	4.4	7.5	40.5	100	
HS2-5-BRD	1.5 - 2.5	Blue	5.0	4.9	7.5	42.5	100	



# Crimping tools Tooling



Product Ref.: TBZ3

### Characteristics

- Ratchet type hand tool, fixed die
- Front loading
- For insulated cord ends, 0.5 to 6.0 mm<sup>2</sup>
- Shure-Stake™ mechanism to ensure a full compression every time
- Length: 195 mm
- Weight: 390 g



Product Ref.: ERG4002

### Characteristics

- Ergonomic fixed die tool with 3 die nests
- For non-insulated terminals from: 0.5 to 1.5 mm<sup>2</sup>  
1.5 to 2.5 mm<sup>2</sup>  
4.0 to 6.0 mm<sup>2</sup>
- Shure-Stake™ mechanism to ensure a full compression every time
- Length: 265 mm
- Weight: 600 g



Product Ref.: MCT2000A

### Characteristics

- Ergonomic fixed die tool, with three colour-coded die nests for easy selection
- For insulated terminals from:
  - 0.5 to 1.5 mm<sup>2</sup>: Red
  - 1.5 to 2.5 mm<sup>2</sup>: Blue
  - 4.0 to 6.0 mm<sup>2</sup>: Yellow
- Shure-Stake™ mechanism to ensure a full compression every time
- Length: 260 mm
- Weight: 565 g



Product Ref.: MCT2000B

### Characteristics

- Ergonomic fixed die tool, with three colour-coded die nests for easy selection
- For Insulated double crimp terminals from:
  - 0.5 to 1.5 mm<sup>2</sup>: Red
  - 1.5 to 2.5 mm<sup>2</sup>: Blue
  - 4 to 6 mm<sup>2</sup>: Yellow
- Shure-Stake™ mechanism to ensure a full compression every time
- Length: 260 mm
- Weight: 565 g



Product Ref.: MCT2000C

### Characteristics

- Crimping all single
- Crimp insulated female/male disconnectors from: 0.5 to 1.5 mm<sup>2</sup> : Red  
1.5 to 2.5 mm<sup>2</sup> : Blue  
4 to 6 mm<sup>2</sup> : Yellow
- Shure-Stake™ mechanism to ensure a full compression every time
- Length: 260 mm
- Weight: 566 g



# Crimping tools Tooling

72



Product Ref.: MCT2000G

### Characteristics

Crimp closed end connectors & all heat shrinkable terminals from:

- 0.5 to 1.5 mm<sup>2</sup>: Red
- 1.5 to 2.5 mm<sup>2</sup>: Blue
- 4 to 6 mm<sup>2</sup>: Yellow

- Shure-Stake™ mechanism to ensure a full compression every time
- Length: 260 mm
- Weight: 556 g



Product Ref.: MCT2000L

### Characteristics

- Crimping cord end terminals

- 0.5mm<sup>2</sup>
- 0.75mm<sup>2</sup>
- 1.0 mm<sup>2</sup>
- 1.5 mm<sup>2</sup>
- 2.5 mm<sup>2</sup>
- 4.0 mm<sup>2</sup>

- Shure-Stake™ mechanism to ensure a full compression every time
- Length : 260 mm
- Weight : 559 g



Product Ref.: MCT2000M

### Characteristics

- Crimping cord end terminals: 6 mm<sup>2</sup>  
10 mm<sup>2</sup>  
16 mm<sup>2</sup>

- Shure-Stake™ mechanism to ensure a full compression every time
- Length: 260 mm
- Weight: 576 g



Product Ref.: MCT2000N

**Characteristics**

- Crimping cord end terminals: 25 mm<sup>2</sup>  
35 mm<sup>2</sup>
- Shure-Stake™ mechanism to ensure a full compression every time
- Length: 260 mm
- Weight: 575 g



Product Ref.: MCT2000P

**Characteristics**

- Crimping cord end terminals: 25 mm<sup>2</sup>  
50 mm<sup>2</sup>
- Shure-Stake™ mechanism to ensure a full compression every time
- Length: 260 mm
- Weight: 565 g



# Color-Keyed®

## Solderless compression connectors for power cables

The better method to install solderless compression connectors on power cables. Designed to provide a tight degree of reliability in electrical wiring, this method allows electrical workers to make installations with little effort and considerable savings in time.

75

### **A simple installation method in just three steps:**

- First, the appropriate connector is chosen for the conductor size
- Next, the proper installing die is selected by matching the die colour to the connector colour
- Last, the die is installed in the tool, and the connector is compressed

### **Color-Keyed®: special lugs for special applications**

Thomas & Betts (today a member of the ABB Group ) can solve your difficult wire bending and terminating problems in power distribution panels, switchgear and motor control enclosures.

- In addition to straight lugs, 45° and 90° angle lugs let you run the cable directly to a bus bar with no bending.
- One hole or two-hole configurations.
- Cross-sections from 10-400mm<sup>2</sup>
- All lugs meet the stringent requirements of IEC61238-1 Class A to deliver a high-level of performance and safety.

### **Thomas & Betts - A Member of the ABB Group**

Since June 2012, Thomas & Betts (T&B) is a Member of the ABB Group. ABB is a leading power and automation technology group, active in more than 100 countries with about 150.000 employees worldwide.

With Thomas & Betts, this portfolio will is now completed with the following product lines and flagship brands:

- *Wire & Cable Management* - Ty-Rap® and Ty-Met® cable ties, Shrink-Kon® heat shrink, T&B Cabletray
- *Cable Protection Systems* - nylon & metallic incl. brands: PMA, Adaptaflex, Kopex-Ex, Harnessflex
- *Low Power Connection & Control* - Furse lightning & surge protection, Elastimold, Joslyn Hi-Voltage
- *Emergency lighting* - emergency lighting, battery systems incl. VanLien, Kaufel, Emergi-Lite brands
- *Hazardous location products* - DTS explosion proof light & boxes, Kopex-Ex conduits & fittings



# Table of Content

## Color-Keyed® lugs

### Spec-Kon® - Crimp terminals

4

### Color-Keyed® - power cable connectors

74

One hole straight lugs	78
Two hole straight lugs	80
45° bend lugs	81
90° bend lugs	82
Tooling	83
Stud size chart	87

### Dragon Tooth® - magnet wire terminals

88

### Shield-Kon® - shielded cable connectors

122

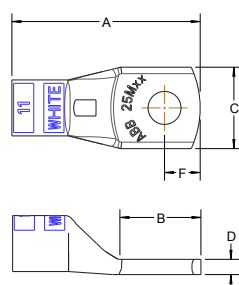
# One hole straight 1/2 Color-Keyed® lugs

## Technical Information

Material	High conductivity copper
Plating	Electro-tin plated
Metal Barrel	Copper tube
Voltage	600V to 35kV
Marking	Colour reference for die, cable size and stud hole size



Product Réf.	Cable size [mm²]	Stud hole size	Pack size	Colour	Die code	Dimensions				
						A [mm]	B [mm]	C [mm]	D [mm]	F [mm]
10M5-A	10	M5	50	Purple	8	29.9	13.0	11.5	3.0	6.0
10M6-A	10	M6	50	Purple	8	29.9	13.0	11.5	3.0	6.0
10M8-A	10	M8	50	Purple	8	32.9	16.0	13.5	2.2	7.0
10M10-A	10	M10	50	Purple	8	34.9	18.1	16.0	2.2	8.0
16M6-A	16	M6	50	Yellow	9	33.0	16.0	13.0	3.0	7.0
16M8-A	16	M8	50	Yellow	9	33.0	16.0	13.0	3.0	7.0
16M10-A	16	M10	50	Yellow	9	38.0	22.0	16.0	2.3	10.0
16M12-A	16	M12	50	Yellow	9	47.0	25.0	22.0	2.3	12.0
25M6-A	25	M6	50	White	11	37.0	17.0	16.0	3.0	7.0
25M8-A	25	M8	50	White	11	38.0	18.0	16.0	3.0	8.0
25M10-A	25	M10	50	White	11	42.0	22.0	17.0	2.7	10.0
25M12-A	25	M12	50	White	11	47.0	25.0	22.0	2.7	12.0
35M6-A	35	M6	10	Red	13	44.8	20.0	18.0	4.2	10.0
35M8-A	35	M8	10	Red	13	44.8	20.0	18.0	4.2	10.0
35M10-A	35	M10	10	Red	13	45.8	21.0	18.0	4.2	10.0
35M12-A	35	M12	10	Red	13	52.0	26.0	22.0	3.7	12.0
50M6-A	50	M6	10	Blue	14.5	50.2	23.0	21.0	3.5	11.0
50M8-A	50	M8	10	Blue	14.5	50.2	23.0	21.0	3.5	11.0
50M10-A	50	M10	10	Blue	14.5	50.2	23.0	21.0	3.5	11.0
50M12-A	50	M12	10	Blue	14.5	53.2	26.0	22.0	3.0	12.0
70M6-A	70	M6	10	Brown	17	55.0	23.0	25.0	4.0	11.0
70M8-A	70	M8	10	Brown	17	55.0	23.0	25.0	4.0	11.0
70M10-A	70	M10	10	Brown	17	55.0	23.0	25.0	4.0	11.0
70M12-A	70	M12	10	Brown	17	58.0	26.0	25.0	4.0	12.0
70M16-A	70	M16	10	Brown	17	64.0	32.0	28.0	3.7	15.0
95M8-A	95	M8	10	Green	20	69.0	32.0	29.0	5.0	15.0
95M10-A	95	M10	10	Green	20	69.0	32.0	29.0	5.0	15.0
95M12-A	95	M12	10	Green	20	69.0	32.0	29.0	5.0	15.0
95M16-A	95	M16	10	Green	20	69.0	32.0	29.0	5.0	15.0
120M8-A	120	M8	10	Pink	22	73.0	32.0	32.0	5.0	15.0
120M10-A	120	M10	10	Pink	22	73.0	32.0	32.0	5.0	15.0
120M12-A	120	M12	10	Pink	22	73.0	32.0	32.0	5.0	15.0
120M16-A	120	M16	10	Pink	22	73.0	32.0	32.0	5.0	15.0



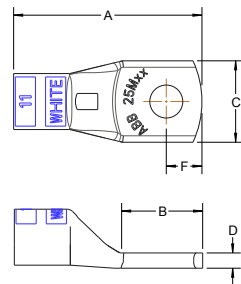
# One hole straight 2/2 Color-Keyed® lugs

## Technical Information

Material	High conductivity copper
Plating	Electro-tin plated
Metal Barrel	Copper tube
Voltage	600V to 35kV
Marking	Colour reference for die, cable size and stud hole size



Product Réf.	Cable size [mm²]	Stud hole size	Pack size	Colour	Die code	Dimensions				
						A [mm]	B [mm]	C [mm]	D [mm]	F [mm]
150M10-A	150	M10	10	Black	25	80.0	32.0	36.0	6.0	15.0
150M12-A	150	M12	10	Black	25	80.0	32.0	36.0	6.0	15.0
150M16-A	150	M16	10	Black	25	80.0	32.0	36.0	6.0	15.0
150M20-A	150	M20	10	Black	25	87.0	39.0	36.0	6.0	19.0
185M10-A	185	M10	6	Orange	27	86.0	32.0	39.0	6.0	15.0
185M12-A	185	M12	6	Orange	27	86.0	32.0	39.0	6.0	15.0
185M16-A	185	M16	6	Orange	27	86.0	32.0	39.0	6.0	15.0
185M20-A	185	M20	6	Orange	27	93.0	39.0	39.0	6.0	19.0
240M10-A	240	M10	6	Purple	30	95.0	39.0	44.0	6.0	19.0
240M12-A	240	M12	6	Purple	30	95.0	39.0	44.0	6.0	19.0
240M16-A	240	M16	6	Purple	30	95.0	39.0	44.0	6.0	19.0
240M20-A	240	M20	6	Purple	30	95.0	39.0	44.0	6.0	19.0
300M10-A	300	M10	6	Yellow	32	115.0	53.0	48.0	6.0	22.0
300M12-A	300	M12	6	Yellow	32	115.0	53.0	48.0	6.0	22.0
300M16-A	300	M16	6	Yellow	32	115.0	53.0	48.0	6.0	22.0
300M20-A	300	M20	6	Yellow	32	115.0	53.0	48.0	6.0	22.0
300M24-A	300	M24	6	Yellow	32	115.0	53.0	48.0	6.0	22.0
400M12-A	400	M12	3	White	36	124.0	53.0	51.1	6.8	22.0
400M16-A	400	M16	3	White	36	124.0	53.0	51.1	6.8	22.0
400M20-A	400	M20	3	White	36	124.0	53.0	51.1	6.8	22.0
400M24-A	400	M24	3	White	36	124.0	53.0	51.1	6.8	22.0





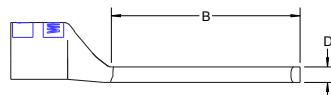
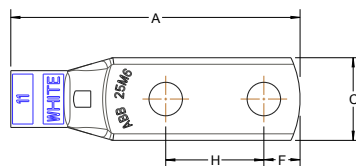
# Two hole straight Color-Keyed® lugs

## Technical Information

Material	High conductivity copper
Plating	Electro-tin plated
Metal Barrel	Copper tube
Voltage	600V to 35kV
Marking	Colour reference for die, cable size and stud hole size



Product Réf.	Cable size [mm²]	Stud hole size	Pack size	Colour	Die code	Dimensions					
						A [mm]	B [mm]	C [mm]	D [mm]	F [mm]	H [mm]
25M6-A-2	25	M6	50	White	11	56.0	38.0	16.0	3.0	7.0	19.0
25M8-A-2	25	M8	50	White	11	66.0	48.0	16.0	3.0	10.0	25.0
35M6-A-2	35	M6	10	Red	13	61.6	38.0	18.0	4.2	7.0	19.0
35M8-A-2	35	M8	10	Red	13	71.7	48.0	18.0	4.2	10.0	25.0
50M10-A-2	50	M10	10	Blue	14.5	73.7	46.9	21.0	3.5	8.9	25.0
50M12-A-2	50	M12	10	Blue	14.5	96.7	70.0	22.0	3.5	15.0	40.0
70M10-A-2	70	M10	10	Brown	17	80.6	49.0	25.0	4.0	11.0	25.0
70M12-A-2	70	M12	10	Brown	17	101.7	70.0	25.0	4.0	15.0	40.0
95M10-A-2	95	M10	10	Green	20	90.0	53.0	29.0	5.0	11.0	25.0
95M12-A-2	95	M12	10	Green	20	110.0	73.0	40.0	5.0	15.0	40.0
120M10-A-2	120	M10	10	Pink	22	98.0	57.0	32.0	5.0	14.0	25.0
120M12-A-2	120	M12	10	Pink	22	104.0	63.0	32.0	5.0	14.0	32.0
150M10-A-2	150	M10	10	Black	25	102.6	55.0	36.0	6.0	11.0	25.0
150M12-A-2	150	M12	10	Black	25	120.7	73.0	36.0	6.0	14.0	40.0
185M10-A-2	185	M10	6	Orange	27	111.0	57.0	39.0	6.0	13.0	25.0
185M12-A-2	185	M12	6	Orange	27	128.6	75.0	39.0	6.0	15.0	40.0
240M10-A-2	240	M10	6	Purple	30	115.0	59.0	44.0	6.0	12.0	25.0
240M12-A-2	240	M12	6	Purple	30	130.0	74.3	44.0	6.0	13.0	40.0
300M10-A-2	300	M10	6	Yellow	32	119.0	57.0	48.0	6.0	12.0	25.0
300M12-A-2	300	M12	6	Yellow	32	137.1	75.0	48.0	6.0	15.0	40.0



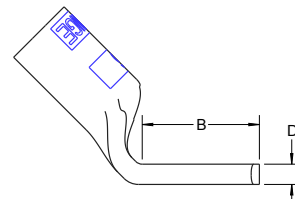
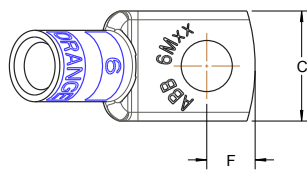
# 45° Bend Color-Keyed® lugs

## Technical Information

Material	High conductivity copper
Plating	Electro-tin plated
Metal Barrel	Copper tube
Voltage	600V to 35kV
Marking	Colour reference for die, cable size and stud hole size



Product Réf.	Cable size [mm <sup>2</sup> ]	Stud hole size	Pack size	Colour	Die code	Dimensions			
						B [mm]	C [mm]	D [mm]	F [mm]
10M6-A-45	10	M6	50	Purple	8	13.0	11.5	3.0	6.0
10M8-A-45	10	M8	50	Purple	8	16.0	13.5	2.2	7.0
16M6-A-45	16	M6	50	Yellow	9	16.0	13.0	3.0	7.0
16M8-A-45	16	M8	50	Yellow	9	16.0	13.0	3.0	7.0
25M10-A-45	25	M10	50	White	11	17.0	16.0	3.0	7.0
25M6-A-45	25	M6	50	White	11	18.0	16.0	3.0	8.0
25M8-A-45	25	M8	50	White	11	22.0	17.0	2.7	10.0
35M10-A-45	35	M10	10	Red	13	20.0	18.0	4.2	10.0
35M6-A-45	35	M6	10	Red	13	20.0	18.0	4.2	10.0
35M8-A-45	35	M8	10	Red	13	21.0	18.0	4.2	10.0
50M10-A-45	50	M10	10	Blue	14.5	23.0	21.0	3.5	11.0
50M12-A-45	50	M12	10	Blue	14.5	23.0	21.0	3.5	11.0
50M8-A-45	50	M8	10	Blue	14.5	26.0	22.0	3.0	12.0
70M10-A-45	70	M10	10	Brown	17	23.0	25.0	4.0	11.0
70M12-A-45	70	M12	10	Brown	17	23.0	25.0	4.0	11.0
70M8-A-45	70	M8	10	Brown	17	26.0	25.0	4.0	12.0
95M10-A-45	95	M10	10	Green	20	32.0	29.0	5.0	15.0
95M12-A-45	95	M12	10	Green	20	32.0	29.0	5.0	15.0
95M16-A-45	95	M16	10	Green	20	32.0	29.0	5.0	15.0
120M10-A-45	120	M10	10	Pink	22	32.0	32.0	5.0	15.0
120M12-A-45	120	M12	10	Pink	22	32.0	32.0	5.0	15.0
120M16-A-45	120	M16	10	Pink	22	32.0	32.0	5.0	15.0
150M10-A-45	150	M10	10	Black	25	32.0	36.0	6.0	15.0
150M12-A-45	150	M12	10	Black	25	32.0	36.0	6.0	15.0
150M16-A-45	150	M16	10	Black	25	32.0	36.0	6.0	15.0
185M10-A-45	185	M10	6	Orange	27	32.0	39.0	6.0	15.0
185M12-A-45	185	M12	6	Orange	27	32.0	39.0	6.0	15.0
185M16-A-45	185	M16	6	Orange	27	32.0	39.0	6.0	15.0
240M10-A-45	240	M10	6	Purple	30	39.0	44.0	6.0	19.0
240M12-A-45	240	M12	6	Purple	30	39.0	44.0	6.0	19.0
240M16-A-45	240	M16	6	Purple	30	39.0	44.0	6.0	19.0



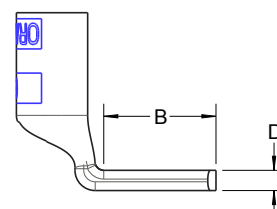
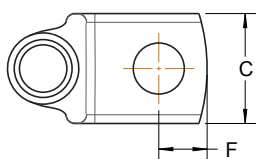
# 90° Bend Color-Keyed® lugs

## Technical Information

Material	High conductivity copper
Plating	Electro-tin plated
Metal Barrel	Copper tube
Voltage	600V to 35kV
Marking	Colour reference for die, cable size and stud hole size



Product Réf.	Cable size [mm²]	Stud hole size	Pack size	Colour	Die code	Dimensions			
						B [mm]	C [mm]	D [mm]	F [mm]
10M6-A-90	10	M6	50	Purple	8	13.0	11.5	3.0	6.0
10M8-A-90	10	M8	50	Purple	8	16.0	13.5	2.2	7.0
16M6-A-90	16	M6	50	Yellow	9	16.0	13.0	3.0	7.0
16M8-A-90	16	M8	50	Yellow	9	16.0	13.0	3.0	7.0
25M10-A-90	25	M10	50	White	11	17.0	16.0	3.0	7.0
25M6-A-90	25	M6	50	White	11	18.0	16.0	3.0	8.0
25M8-A-90	25	M8	50	White	11	22.0	17.0	2.7	10.0
35M10-A-90	35	M10	10	Red	13	20.0	18.0	4.2	10.0
35M6-A-90	35	M6	10	Red	13	20.0	18.0	4.2	10.0
35M8-A-90	35	M8	10	Red	13	21.0	18.0	4.2	10.0
50M10-A-90	50	M10	10	Blue	14.5	23.0	21.0	3.5	11.0
50M12-A-90	50	M12	10	Blue	14.5	23.0	21.0	3.5	11.0
50M8-A-90	50	M8	10	Blue	14.5	26.0	22.0	3.0	12.0
70M10-A-90	70	M10	10	Brown	17	23.0	25.0	4.0	11.0
70M12-A-90	70	M12	10	Brown	17	23.0	25.0	4.0	11.0
70M8-A-90	70	M8	10	Brown	17	26.0	25.0	4.0	12.0
95M10-A-90	95	M10	10	Green	20	32.0	29.0	5.0	15.0
95M12-A-90	95	M12	10	Green	20	32.0	29.0	5.0	15.0
95M16-A-90	95	M16	10	Green	20	32.0	29.0	5.0	15.0
120M10-A-90	120	M10	10	Pink	22	32.0	32.0	5.0	15.0
120M12-A-90	120	M12	10	Pink	22	32.0	32.0	5.0	15.0
120M16-A-90	120	M16	10	Pink	22	32.0	32.0	5.0	15.0
150M10-A-90	150	M10	10	Black	25	32.0	36.0	6.0	15.0
150M12-A-90	150	M12	10	Black	25	32.0	36.0	6.0	15.0
150M16-A-90	150	M16	10	Black	25	32.0	36.0	6.0	15.0
185M10-A-90	185	M10	6	Orange	27	32.0	39.0	6.0	15.0
185M12-A-90	185	M12	6	Orange	27	32.0	39.0	6.0	15.0
185M16-A-90	185	M16	6	Orange	27	32.0	39.0	6.0	15.0
240M10-A-90	240	M10	6	Purple	30	39.0	44.0	6.0	19.0
240M12-A-90	240	M12	6	Purple	30	39.0	44.0	6.0	19.0
240M16-A-90	240	M16	6	Purple	30	39.0	44.0	6.0	19.0



# Large hand tool

## Color-Keyed® Crimping tools



Product Ref.: TBM6SM

### Characteristics

- Large fixed die tool, with rotating head and 6 nests
- For non-insulated terminals and copper tube lugs from: 10 to 70 mm<sup>2</sup>
- According to DIN, SEN, BS, UL, Mil specifications
- Shure-Stake™ mechanism to ensure a full compression every time
- Length: 500 mm
- Weight: 2,8 kg
- Max. pressure: 130 kN

# Hydraulic tools

## Color-Keyed® Crimping tools

84



Product Ref.: TBM6H - 6-Ton hydraulic crimping head

### Characteristics

- Lightweight design - weighs less than 7 lbs., including dies
- Embosses die code on connection for easy inspection
- Uses 6-Ton Series color-coded dies for easy matching with Color-Keyed® connectors

### Die selection chart (TBM6H)

Product Ref.	Colour Code	Die code	Conductor Size [mm <sup>2</sup> ]
6TON08M	Purple	8	10
6TON09M	Yellow	9	16
6TON11M	White	11	25
6TON13M	Red	13	35
6TON145M	Blue	14,5	50
6TON17M	Brown	17	70
6TON20M	Green	20	95
6TON22M	Pink	22	120
6TON25M	Black	25	150
6TON27M	Orange	27	185
6TON30M	Purple	30	240



Product Ref.: TBM14M

### Characteristics

- Self-contained hydraulic hand tool with colour-coded interchangeable dies
- For Color-Keyed® copper tube lugs and splices from: 6 to 450 mm<sup>2</sup>
- Incorporates the Shure-Stake™ mechanism: once the pressing has commenced, the tool can be re-opened only after successful completion of the crimping cycle, ensuring a correct crimp every time
- Swiveled "C"- shaped head rotates 180°
- Complete with carrying case
- Weight: 6.8kg
- Output pressure: 14 ton

# Hydraulic tools

## Color-Keyed® Crimping tools



Product Ref.: 13100A

### Characteristics

- 14 Ton hydraulic head
- Output: 14 tons (nominal)
- Hydraulic operating pressure: 10,000 psi max., 690 bar
- Length (with coupling): 292 mm
- Width: 108 mm
- Weight (without dies): 4.5 kg
- Dies delivered separately



Product Ref.: TBM15i

### Characteristics

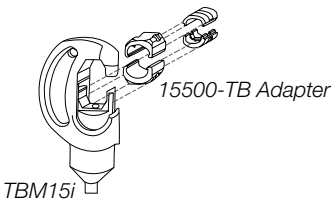
- 15 Ton hydraulic head
- New longer, slimmer profile allows easier access into tight spaces
- Wider jaw opening eases crimping of larger connectors
- Available with an insulated head
- Supplied in a carrying case in steel
- Output force: 15 tons (nominal)
- Operating pressure: 10,000 psi (nominal), 690 bar
- Weight: 7 kg (without dies)
- Dies delivered separately

155xxM Die

### Installing dies for 13100A, TBM15i tool heads and TBM14M hand tool

### Characteristics

- Material: alloy steel
- For the TBM15i, the 15500TB adapter is required



### Die selection chart (13100A and TBM15i\* and TBM14M)

Product Ref.	Colour Code	Die code	Conductor Size [mm <sup>2</sup> ]
15508M	Purple	8	10
15509M	Yellow	9	16
15511M	White	11	25
15513M	Red	13	35
155145M	Blue	14,5	50
15517M	Brown	17	70
15520M	Green	20	95
15522M	Pink	22	120
15525M	Black	25	150
15527M	Orange	27	185
15530M	Purple	30	240
15532M	Yellow	32	300
15536M	White	36	400

\* Must use adapters 15500-TB

# Smart tools

## Color-Keyed® Crimping tools

86



Product Ref.: TBM8-750

### Characteristics

- Dieless operation
- Hydraulic remote tool head
- For copper lugs from the Color-Keyed® line from 10 to 400 mm<sup>2</sup>
- Operates on standard 10,000 psi (= 690 bar) hydraulic pumps
- Length: 368 mm
- Weight: 4kg
- Output pressure: 12 ton
- Coupler: Pioneer, female





























Product Ref.: TBM8-750M-1

### Characteristics

- Dieless operation
- Self-contained hydraulic tool
- For copper lugs from the Color-Keyed® line from 10 to 400 mm<sup>2</sup>
- Length: 538 mm
- Weight: 5.9kg
- Output pressure: 12 ton
- Operating pressure: 9800 psi = 676 bar

# Stud Size Chart

## Conversion table

Stud Size					
Metric			Inches (US)		
		Diameter			Diameter
M2		2,0 mm (0.080")	#2		0.086" (2,144 mm)
M2,5		2,5 mm (0.100")	#4		0.112" (2,844 mm)
M3		3,0 mm (0.120")	#5		0.125" (3,175 mm)
M3,5		3,5 mm (0.140")	#6		0.138" (3,505 mm)
M4		4,0 mm (0.176")	#8		0.164" (4,166 mm)
M5		5,0 mm (0.20")	#10		0.190" (4,826 mm)
M6		6,0 mm (0.24")	1/4		0.250" (6,350 mm)
M8		8,0 mm (0.32")	5/16		0.3125" (7,938 mm)
M10		10,0 mm (0.40")	3/8		0.375" (9,525 mm)
M10		10,0 mm (0.48")	7/16		0.4375" (11,113 mm)
M12		12,0 mm (0.48")	1/2		0.500" (12,700 mm)
M16		16,0 mm (0.64")	5/8		0.625" (15,875 mm)
M18		18,0 mm (0.72")	3/4		0.750" (19,050 mm)

Ref: ISO 263-1973 for inch stud sizes and ISO 262-1973 for metric stud sizes.





# Dragon Tooth®

## Insulation piercing connectors

The Dragon Tooth® insulation piercing connectors for magnet wire penetrate the insulation and oxide layers to make a reliable electrical contact, eliminating the need for stripping, brazing, welding or other methods of joining magnet wire.

In the conventional methods, different techniques are used to remove the insulating varnish: scratching, brushing, burning-off, dissolving. These methods are all costly and time consuming, and they generally lead to a risk of damage to the conductors and to a risk of injury of the operator. Health and environmental considerations can also be an issue.

It can be challenging to splice and terminate magnet wire commonly used in electric motors and transformers due to the tough, high-temperature insulation. The durability of magnet wire insulation has made dip-soldering or brazing extremely difficult without stripping the insulation.

Another splicing and terminating challenge involves the use of aluminium for magnet applications. A manufacturer connecting aluminium magnet wire to copper is faced with the problem of the different coefficients of thermal expansion of the two metals, galvanic corrosion, cold flow and the rapid formation of oxide film on the wire surface.

Thomas & Betts ( today a Member of the ABB Group ) offer a solution for a highly reliable connection method for magnet wire, which eliminates welding, no longer requires removal of

insulation and which can be installed in seconds. No special operator skills are needed. The connector and matching tooling do the entire job. To meet the essential requirements of magnet wire connections, Thomas & Betts offer the insulation piercing Dragon Tooth® compression connector.

The result is a gas-tight, permanent connection with an exceptionally low contact resistance, capable of maintaining contact integrity throughout the life of the connection.

Dragon Tooth® connectors transform the perpendicular compression force, which would normally contribute to conductor creep, into distributive forces that effectively resist cold flow.

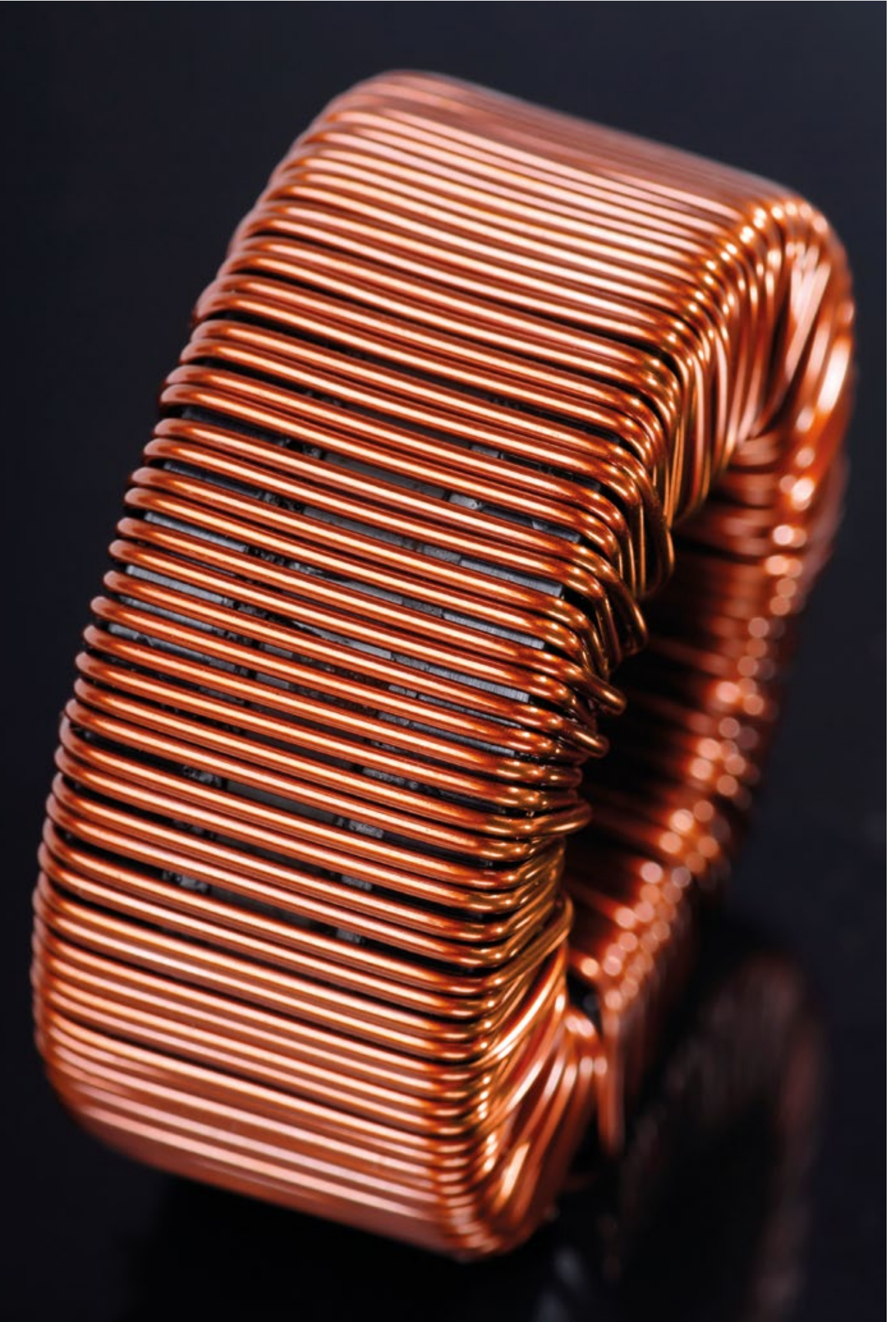
These connectors are made of copper alloy, tin plated, with a number of teeth on the inner surface. When the connector is compressed onto an insulated magnet wire, the sharp hardened teeth penetrate the insulation and the oxide and bite into the conductor. An electrically sound, low-resistance connection is established as a result of the combination of high pressures at the tip and edges of the teeth and the sliding action between the teeth and the conductor.

### Thomas & Betts - A Member of the ABB Group

Since June 2012, Thomas & Betts (T&B) is a Member of the ABB Group. ABB is a leading power and automation technology group, active in more than 100 countries with about 150.000 employees worldwide.

With Thomas & Betts, this portfolio will is now completed with the following product lines and flagship brands:

- *Wire & Cable Management* - Ty-Rap® and Ty-Met® cable ties, Shrink-Kon® heat shrink, T&B Cabletray
- *Cable Protection Systems* - nylon & metallic incl. brands: PMA, Adaptaflex, Kopex-Ex, Harnessflex
- *Low Power Connection & Control* - Furse lightning & surge protection, Elastimold, Joslyn Hi-Voltage
- *Emergency lighting* - emergency lighting, battery systems incl. VanLien, Kaufel, Emergi-Lite brands
- *Hazardous location products* – DTS explosion proof light & boxes, Kopex-Ex conduits & fittings



# Table of Content

## Dragon Tooth® - magnet wire terminals

<b>Spec-Kon® - Crimp terminals</b>	<b>4</b>
<b>Color-Keyed® - power cable connectors</b>	<b>74</b>
<b>Dragon Tooth® - magnet wire terminals</b>	<b>88</b>
Insulation piercing connectors	92
Overview	92
Splices	93
Ring terminals	101
Fork terminals	107
Disconnect terminals	108
Taps	109
Modular connectors	111
Washers	113
<b>Crimping tools</b>	<b>114</b>
Hand tools	114
Air-operated tools	115
Auto-feed tools for connectors on strip	116
Hydraulic tools	117
Connectors, tool and die selection chart	119
<b>Shield-Kon® - shielded cable connectors</b>	<b>122</b>

# Overview

## Dragon Tooth® - Insulation piercing connectors

92

Thomas & Betts Dragon Tooth® connectors and installing tools are designed to splice, tap and terminate copper magnet wire from 32 AWG to 460,000 CMA (0,03 to 120 mm<sup>2</sup>) and aluminium magnet wire from 20 AWG to 460,000 CMA (0,5 to 120 mm<sup>2</sup>) in motor and transformer applications.

- Can be installed in seconds
- Requires minimal training for installation.
- Made of copper alloy, tin plated, with a number of teeth on the inner surface
- Splices and taps have an open side permitting easy access to wire and makes internal coil tapping possible (mid-span tapping and splicing)
- For aluminium to copper, aluminium to aluminium, or copper to copper magnet wire connections
- Ring terminals with bolt holes to accommodate M3 through M12 studs
- Male and female 6.35 mm x 0.8 mm disconnects
- Splices and fork terminals accommodate wire sizes 0.21 mm<sup>2</sup> to 3.3 mm<sup>2</sup> in a variety of combinations, including combining magnet wire with stripped wire lead.
- Larger connectors accommodate cross-sections from 25 to 120 mm<sup>2</sup>
- Transition washers with teeth to penetrate aluminium and copper oxides, enabling copper to aluminium connections to be made in a bolted joint without the use of inhibiting compounds
- Transition washers also accommodate the difference in thermal expansion between copper and aluminium, and enhance

the efficiency of bolted grounding connections  
- Connector and matching tooling do the entire job

### How to select a connector

1. Define the total cross-section (CMA) of the conductors
2. In the Ordering Information tables, refer to either Round Wire column, or Rectangular column, depending on the type you are using, and check any limitations, (such as max. wire i.e. width/height). If there are limitations, you may have to make a selection from next larger size.
3. Select the appropriate tool and die

### Formula for calculating Circular Mil Area (CMA)

For square or rectangular wire:

Thickness x Width x 1.973 x 10<sup>3</sup> = CMA (for dimensions in mm)

Thickness x Width x 1.273 x 10<sup>6</sup> = CMA (for dimensions in inch)

For round wire:

Diameter<sup>2</sup> x 1.55 x 10<sup>3</sup> = CMA (for diameter in mm)

Diameter<sup>2</sup> x 106 = CMA (for diameter in inch)

Splice



Termination



Parallel Splice



Tap



# Splices

## Dragon Tooth® - Insulation piercing connectors

### Technical Information

Material Copper alloy  
 Plating Tin plated  
 Colour Metallic



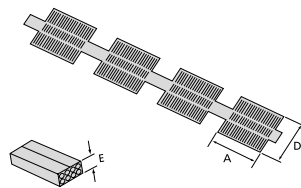
Product Ref.	Dimensions			Combined wire size [mm <sup>2</sup> ]	Round wire range min - max [mm]	Rectangular wire range		Tooling
	A [mm]	D [mm]	E* [mm]			Thickness min - max [mm]	Width min - max [mm]	
220004	4.7	2.8	0.8	0.23 - 0.87	0.20 - 1.00**	–	–	13676A
220001	8.7	4.4	2.4	0.64 - 3.30	0.40 - 1.45**	0.60 - 1.00	0.60 - 2.30	13678
220006	11.9	6.4	2.4	1.30 - 6.24	1.30 - 2.05	1.30 - 2.05	1.30 - 4.10	13696
220002-TB	8.7	6.4	2.4	1.00 - 3.30	0.50 - 1.40**	0.50 - 1.00	0.50 - 2.30	13679

\* Reference dimension (crimped height): see installing die illustration for gauging

\*\* Not recommended for aluminium magnet wire finer than 0.4 mm<sup>2</sup>

Pages 114 to 118 for tooling specifications

*NOTE: Wire sizes and combinations shown have been tested to and meet or exceed Thomas & Betts specifications. Connectors may be suitable for other wire sizes or combinations. Thomas & Betts sells these connectors with the understanding that the user will perform necessary tests to determine their suitability for the intended purpose.*



E9809

# Splices

## Dragon Tooth® - Insulation piercing connectors

94



### Technical Information

Material Copper alloy  
 Plating Tin plated  
 Colour Metallic

Product Ref.	Dimensions			Combined wire size [mm <sup>2</sup> ]	Round wire range min - max [mm]	Rectangular wire range		Tooling	
	A [mm]	D [mm]	E* [mm]			Thickness min - max [mm]	Width min - max [mm]	Hand tool	Power tool***
22L004	3.8	2.8	1.3	0.23 - 0.87	0.20 - 1.00**	–	–	ERG4804	11903A
22L001	8.1	4.1	2.5	0.20 - 2.10	0.50 - 1.45**	0.50 - 1.25	0.50 - 2.50	ERG4801	11904A
22L002	8.1	6.4	2.5	1.00 - 3.30	0.50 - 1.40**	0.50 - 1.25	0.50 - 2.80	ERG4802	13500
22L006	11.5	6.4	3.3	1.30 - 6.24	1.30 - 2.05	1.30 - 1.50	1.30 - 4.10	ERG4806	
22L008	17.8	12.7	3.8	6.50 - 15.50	1.00 - 1.30	1.00 - 1.60	1.60 - 9.53	–	13100A, 13400
22L009	17.8	14	5.6	18.30 - 43.60	1.30 - 2.58	2.00 - 4.60	2.00 - 9.50	–	TBM15i

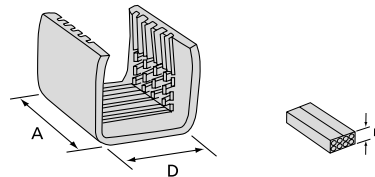
\* Reference dimension (crimped height): see installing die illustration for gauging

\*\* Not recommended for aluminium magnet wire finer than 0.4 mm<sup>2</sup>

\*\*\* Use selection chart to determine appropriate die set (pages 119 and 120)

Pages 114 to 118 for tooling specifications

*NOTE: Wire sizes and combinations shown have been tested to and meet or exceed Thomas & Betts specifications. Connectors may be suitable for other wire sizes or combinations. Thomas & Betts sells these connectors with the understanding that the user will perform necessary tests to determine their suitability for the intended purpose.*



E9809

# Splices

## Dragon Tooth® - Insulation piercing connectors

### Technical Information

Material Copper alloy  
 Plating Tin plated  
 Colour Metallic



Product Ref.	Dimensions			Combined wire size [mm <sup>2</sup> ]	Round wire range min - max [mm]	Rectangular wire range		Tooling
	A	D	E*			Thickness min - max [mm]	Width min - max [mm]	
	[mm]	[mm]	[mm]			[mm]	[mm]	
210214S	15.9	9.5	4.3	2.00 - 10.52	1.63 (a) - 2.58	2.00 - 2.30	2.00 - 4.57	13100A, 13400
204210S	17.5	13.5	6.3	5.20 - 26.60	2.05 (b) - 6.54 (c)	2.50 - 4.10	2.50 - 6.35	TBM15i

\* Reference dimension (crimped height): see installing die illustration for gauging

(a) Four wires max

(b) Six wires max

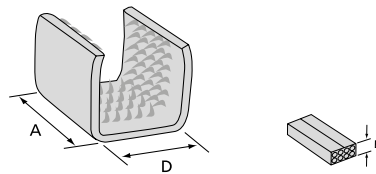
(c) Crimping dies may not bottom. Connector height will depend on number and sizes of wires in barrel.

Pump must deliver 9800 PSI minimum

Use selection chart to determine appropriate die set (pages 119 and 120)

Pages 114 to 118 for tooling specifications

*NOTE: Wire sizes and combinations shown have been tested to and meet or exceed Thomas & Betts specifications. Connectors may be suitable for other wire sizes or combinations. Thomas & Betts sells these connectors with the understanding that the user will perform necessary tests to determine their suitability for the intended purpose.*



E9809



# Splices

## Dragon Tooth® - Insulation piercing connectors

96



### Technical Information

Material Copper alloy  
 Plating Tin plated  
 Colour Metallic

Product Ref.	Dimensions			Combined wire size	Round wire range min - max	Rectangular wire range		Tooling
	A	D	E*			Thickness min - max	Width min - max	
	[mm]	[mm]	[mm]	[mm <sup>2</sup> ]	[mm]	[mm]	[mm]	
204210SH	17.5	13.5	11.9	(5.20 - 26.60) x2	2.05 (a) - 6.5 (b)	2.5 - 4.1	2.5 - 6.6	13100A, 13400, TBM15i

\* Reference dimension (crimped height): see installing die illustration for gauging

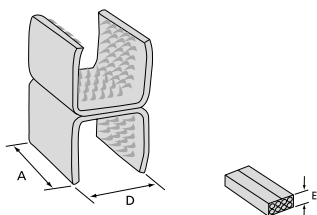
(a) Six wires max each barrel

(b) Conductors larger than 13 mm<sup>2</sup> require special dies

Use selection chart to determine appropriate die set (pages 119 and 120)

Pages 114 to 118 for tooling specifications

*NOTE: Wire sizes and combinations shown have been tested to and meet or exceed Thomas & Betts specifications. Connectors may be suitable for other wire sizes or combinations. Thomas & Betts sells these connectors with the understanding that the user will perform necessary tests to determine their suitability for the intended purpose.*



E9809

# Splices

## Dragon Tooth<sup>®</sup> - Insulation piercing connectors

### Technical Information

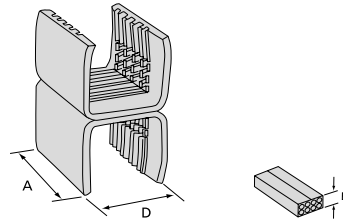
Material Copper alloy  
 Plating Tin plated  
 Colour Metallic



Product Ref.	Dimensions			Combined wire size	Round wire range min - max	Rectangular wire range		Tooling
	A	D	E*			Thickness min - max	Width min - max	
	[mm]	[mm]	[mm]	[mm <sup>2</sup> ]	[mm]	[mm]	[mm]	
22L009H	17.8	13.8	9.7	(18.25 - 33.5) x 2	1.3 - 4.6	2.0 - 4.5	2.0 - 9.7	13100A, 13400, TBM15i

\* Reference dimension (crimped height): see installing die illustration for gauging  
 Use selection chart to determine appropriate die set (pages 119 and 120)  
 Pages 114 to 118 for tooling specifications

*NOTE: Wire sizes and combinations shown have been tested to and meet or exceed Thomas & Betts specifications. Connectors may be suitable for other wire sizes or combinations. Thomas & Betts sells these connectors with the understanding that the user will perform necessary tests to determine their suitability for the intended purpose.*



# Splices

## Dragon Tooth® - Insulation piercing connectors

98



### Technical Information

Material Copper alloy  
 Plating Tin plated  
 Colour Metallic

Product Ref.	Dimensions			Combined wire size	Rectangular wire range		Tooling
	A	D	E*		Thickness min - max	Width min - max	
	[mm]	[mm]	[mm]	[mm <sup>2</sup> ]	[mm]	[mm]	
220015	38.1	22.5	(a)	25 - 58	2.5 - 4.4	7.6 - 15.9	13100A
220019**	38.1	22.5	(a)	55 - 88	4.4 - 8.3	7.6 - 15.9	TBM15i
220023	44.5	22.5	(a)	55 - 115	4.4 - 8.3	7.6 - 15.9	

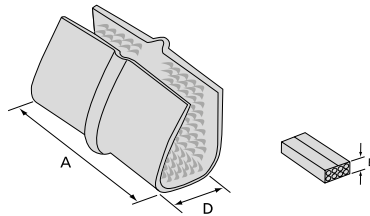
\* Reference dimension (crimped height): see installing die illustration for gauging

\*\* Not UL recognised

(a) Crimping dies may not bottom. Connector height will depend on number and sizes of wires in barrel. Pump must deliver 9.800 psi min.

Use selection chart to determine appropriate die set (pages 119 and 120)  
 Pages 114 to 118 for tooling specifications

*NOTE: Wire sizes and combinations shown have been tested to and meet or exceed Thomas & Betts specifications. Connectors may be suitable for other wire sizes or combinations. Thomas & Betts sells these connectors with the understanding that the user will perform necessary tests to determine their suitability for the intended purpose.*



**RT**  
 E9809

# Splices

## Dragon Tooth<sup>®</sup> - Insulation piercing connectors

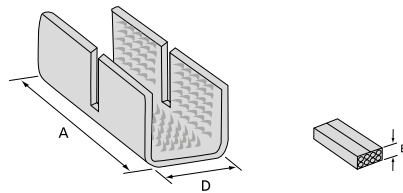
### Technical Information

Material Copper alloy  
 Plating Tin plated  
 Colour Metallic

Product Ref.	Dimensions			Combined wire size [mm <sup>2</sup> ]	Round wire range min - max [mm]	Rectangular wire range		Tooling
	A [mm]	D [mm]	E* [mm]			Thickness min - max [mm]	Width min - max [mm]	
314118S	16.0	9.7	3.3	1.65 - 6.25	1.45 - 1.83	1.27 - 1.52	1.27 - 4.57	13100A, 13400, TBM15i

\* Reference dimension (crimped height): see installing die illustration for gauging  
 Use selection chart to determine appropriate die set (pages 119 and 120)  
 Pages 114 to 118 for tooling specifications

*NOTE: Wire sizes and combinations shown have been tested to and meet or exceed Thomas & Betts specifications. Connectors may be suitable for other wire sizes or combinations. Thomas & Betts sells these connectors with the understanding that the user will perform necessary tests to determine their suitability for the intended purpose.*



# Splices

## Dragon Tooth® - Insulation piercing connectors

100

### Technical Information

Material Copper alloy  
 Plating Tin plated  
 Colour Metallic

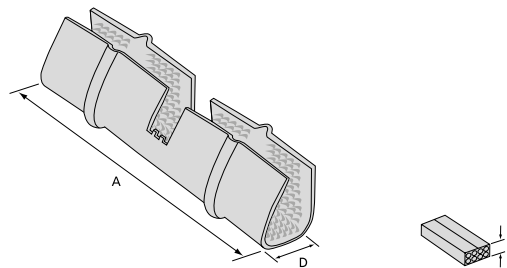
Product Ref.	Dimensions			Combined wire size [mm <sup>2</sup> ]	Rectangular wire range		Tooling
	A [mm]	D [mm]	E* [mm]		Thickness min - max [mm]	Width min - max [mm]	
220016	79.5	22.5	(a)	(25.0 - 58.0) x 2	2.5 - 4.4	7.6 - 15.9	13100A
220020	79.5	22.5	(a)	(55.0 - 88.6) x 2	4.4 - 6.35	7.6 - 15.9	TBM15i
220024	92.2	22.5	(a)	(55.0 - 116.0) x 2	6.35 - 8.25	7.6 - 15.9	

\* Reference dimension (crimped height): see installing die illustration for gauging  
 Use selection chart to determine appropriate die set (pages 119 and 120)

Pages 114 to 118 for tooling specifications

(a) Crimping dies may not bottom. Connector height will depend on number and sizes of wires in barrel.  
 Pump must deliver 9.800 psi min.

*NOTE: Wire sizes and combinations shown have been tested to and meet or exceed Thomas & Betts specifications. Connectors may be suitable for other wire sizes or combinations. Thomas & Betts sells these connectors with the understanding that the user will perform necessary tests to determine their suitability for the intended purpose.*



**RU**  
 E9809

# Ring terminals Dragon Tooth® - Insulation piercing connectors

## Technical Information

Material Copper alloy  
 Plating Tin plated  
 Colour Metallic



Product Ref.	USA stud size**	Dimensions					Combined wire size [mm <sup>2</sup> ]	Round wire range min - max [mm]	Rectangular wire range		Tooling
		A [mm]	B [mm]	C [mm]	D [mm]	E* [mm]			Thickness min - max [mm]	Width min - max [mm]	
210219	8	9.5	14.3	31.0	10.3	4.3	2.1 - 10.5	1.63 (a) - 2.58	2.0 - 2.3	2.0 - 4.5	
210217	10	9.5	14.3	31.0	10.3	4.3	2.1 - 10.5	1.63 (a) - 2.58	2.0 - 2.3	2.0 - 4.5	
210216	¼	9.5	14.3	31.0	10.3	4.3	2.1 - 10.5	1.63 (a) - 2.58	2.0 - 2.3	2.0 - 4.5	13100A
204217	10	13.5	15.5	40.1	12.7	6.4	5.2 - 26.6	2.05 (b) - 6.5 (c)	2.5 - 4.1	2.5 - 6.35	13400
204212	¼	13.5	15.5	40.1	12.7	6.4	5.2 - 26.6	2.05 (b) - 6.5 (c)	2.5 - 4.1	2.5 - 6.35	TBM15i
314125***	10	9.7	14.2	31.0	10.3	6.9	1.7 - 6.2	1.45 - 1.83	1.27 - 1.52	1.27 - 4.57	
314123***	¼	9.7	14.2	35.7	10.3	6.9	1.7 - 6.2	1.45 - 1.83	1.27 - 1.52	1.27 - 4.57	

(a) Four wires max

(b) Six wires max

(c) Conductors larger than 13 mm<sup>2</sup> require special dies

\* Reference dimension (crimped height): see installing die illustration for gauging

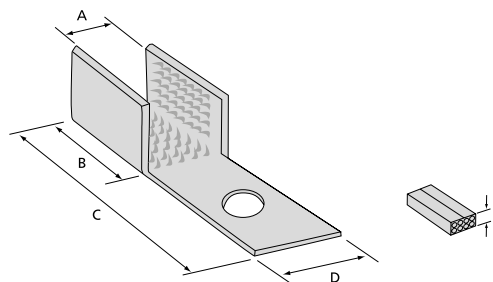
\*\* USA stud size: see page 121 for metric conversion

\*\*\* Not UL recognised

Use selection chart to determine appropriate die set (pages 119 and 120)

Pages 114 to 118 for tooling specifications

*NOTE: Wire sizes and combinations shown have been tested to and meet or exceed Thomas & Betts specifications. Connectors may be suitable for other wire sizes or combinations. Thomas & Betts sells these connectors with the understanding that the user will perform necessary tests to determine their suitability for the intended purpose.*



E9809

# Ring terminals

## Dragon Tooth® - Insulation piercing connectors

102

### Technical Information

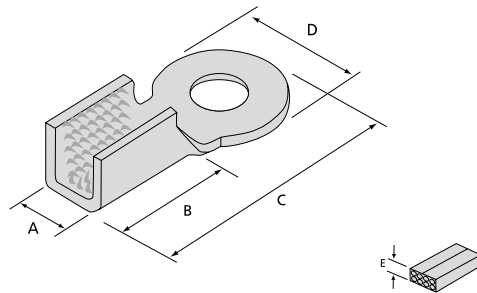
Material Copper alloy  
 Plating Tin plated  
 Colour Metallic



Product Ref.	USA stud size**	Dimensions					Combined wire size [mm <sup>2</sup> ]	Round wire range min - max [mm]	Rectangular wire range		Tooling
		A [mm]	B [mm]	C [mm]	D [mm]	E* [mm]			Thickness min - max [mm]	Width min - max [mm]	
210214-1	1/4	9.5	14.3	35.7	17.5	4.3	2.0 - 10.5	1.6 (a) - 2.58	2.0 - 2.3	2.0 - 4.6	13100A
210214-2	5/16	9.5	14.3	35.7	17.5	4.3	2.0 - 10.5	1.6 (a) - 2.58	2.0 - 2.3	2.0 - 4.6	
210214-3	3/8	9.5	14.3	35.7	17.5	4.3	2.0 - 10.5	1.6 (a) - 2.58	2.0 - 2.3	2.0 - 4.6	
204210-1	1/4	13.5	15.5	40.1	20.6	6.3	5.2 - 26.6	2.05 (b) - 6.5 (c)	2.5 - 4.1	2.5 - 6.6	13400
204210-2	5/16	13.5	15.5	40.1	20.6	6.3	5.2 - 26.6	2.05 (b) - 6.5 (c)	2.5 - 4.1	2.5 - 6.6	TBM15i
204210-3	3/8	13.5	15.5	40.1	20.6	6.3	5.2 - 26.6	2.05 (b) - 6.5 (c)	2.5 - 4.1	2.5 - 6.6	
204210-5	1/2	13.5	15.5	40.1	20.6	6.3	5.2 - 26.6	2.05 (b) - 6.5 (c)	2.5 - 4.1	2.5 - 6.6	

(a) Four wires max  
 (b) Six wires max  
 (c) Conductors larger than 13 mm<sup>2</sup> require special dies  
 \* Reference dimension (crimped height): see installing die illustration for gauging  
 \*\* USA stud size: see page 121 for metric conversion  
 Use selection chart to determine appropriate die set (pages 119 and 120)  
 Pages 114 to 118 for tooling specifications

*NOTE: Wire sizes and combinations shown have been tested to and meet or exceed Thomas & Betts specifications. Connectors may be suitable for other wire sizes or combinations. Thomas & Betts sells these connectors with the understanding that the user will perform necessary tests to determine their suitability for the intended purpose.*



# Ring terminals Dragon Tooth® - Insulation piercing connectors

## Technical Information

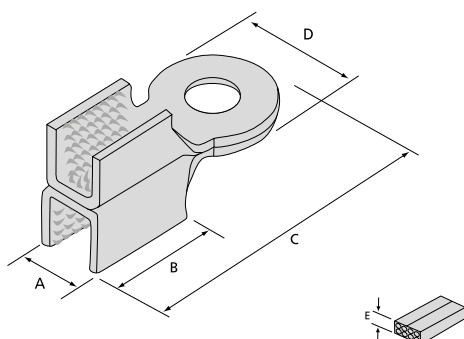
Material Copper alloy  
 Plating Tin plated  
 Colour Metallic



Product Ref.	USA stud size**	Dimensions					Com-bined wire size [mm <sup>2</sup> ]	Round wire range min - max [mm]	Rectangular wire range		Tooling
		A	B	C	D	E*			Thickness min - max [mm]	Width min - max [mm]	
		[mm]	[mm]	[mm]	[mm]	[mm]					
204210-1H	1/4	13.5	15.5	40.1	20.6	11.9	(5.2 - 26.6) x 2	2.05 (b) - 6.54 (c)	2.5 - 4.1	2.5 - 6.6	13100A, 13400
204210-3H	3/8	13.5	15.5	40.1	20.6	11.9	(5.2 - 26.6) x 2	2.05 (b) - 6.54 (c)	2.5 - 4.1	2.5 - 6.6	TBM15i

(b) Six wires max  
 (c) Conductors larger than 13 mm<sup>2</sup> require special dies  
 \* Reference dimension (crimped height): see installing die illustration for gauging  
 \*\* USA stud size: see page 121 for metric conversion  
 Use selection chart to determine appropriate die set (pages 119 and 120)  
 Pages 114 to 118 for tooling specifications

*NOTE: Wire sizes and combinations shown have been tested to and meet or exceed Thomas & Betts specifications. Connectors may be suitable for other wire sizes or combinations. Thomas & Betts sells these connectors with the understanding that the user will perform necessary tests to determine their suitability for the intended purpose.*



E9809



# Ring terminals Dragon Tooth® - Insulation piercing connectors

104



## Technical Information

Material Copper alloy  
Plating Tin plated  
Colour Metallic

Product Ref.	USA stud size**	Dimensions					Combined wire size [mm <sup>2</sup> ]	Rectangular wire range		Tooling
		A [mm]	B [mm]	C [mm]	D [mm]	E* [mm]		Thickness min - max [mm]	Width min - max [mm]	
220017	3/8	22.4	38.1	70.1	26.9	(a)	25.3 - 58.2	2.5 - 4.4	7.6 - 15.9	
220018	1/2	22.4	38.1	70.1	26.9	(a)	25.3 - 58.2	2.5 - 4.4	7.6 - 15.9	
220021 (b)	3/8	22.4	38.1	70.1	26.9	(a)	55.7 - 88.7	4.4 - 6.4	7.6 - 15.9	13100A
220022 (b)	1/2	22.4	38.1	70.1	26.9	(a)	55.7 - 88.7	4.4 - 6.4	7.6 - 15.9	TBM15i
220025	3/8	22.4	38.1	70.1	26.9	(a)	55.7 - 116.8	4.4 - 8.3	7.6 - 15.9	
220026	1/2	22.4	38.1	70.1	26.9	(a)	55.7 - 116.8	4.4 - 8.3	7.6 - 15.9	

(a) Crimping dies may not bottom. Connector height will depend on number and size of wires in barrel. Pump must deliver 9.800 psi min.

(b) Not UL approved

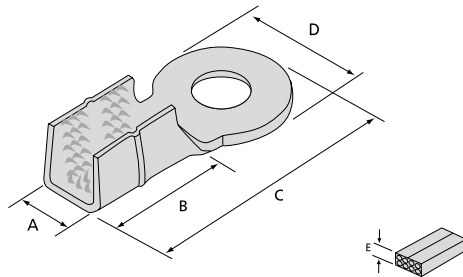
\* Reference dimension (crimped height): see installing die illustration for gauging

\*\* USA stud size: see page 121 for metric conversion

Use selection chart to determine appropriate die set (pages 119 and 120)

Pages 114 to 118 for tooling specifications

*NOTE: Wire sizes and combinations shown have been tested to and meet or exceed Thomas & Betts specifications. Connectors may be suitable for other wire sizes or combinations. Thomas & Betts sells these connectors with the understanding that the user will perform necessary tests to determine their suitability for the intended purpose.*



E9809

# Ring terminals Dragon Tooth® - Insulation piercing connectors

## Technical Information

Material Copper alloy  
 Plating Tin plated  
 Colour Metallic

Product Ref.	USA stud size**	Dimensions					Combined wire size [mm <sup>2</sup> ]	Round wire range min - max [mm]	Rectangular wire range		Tooling	
		A [mm]	B [mm]	C [mm]	D [mm]	E* [mm]			Thickness min - max [mm]	Width min - max [mm]	Hand tool	Power tool***
22R061	6	4.1	8.1	19.8	7.6	2.5	0.2 - 2.1	0.51 - 1.45 (a)	0.51 - 1.27	0.51 - 2.54		
22R081	8	4.1	8.1	19.8	7.6	2.5	0.2 - 2.1	0.51 - 1.45 (a)	0.51 - 1.27	0.51 - 2.54	ERG4801	11903A
22R101	10	4.1	8.1	19.8	7.6	2.5	0.2 - 2.1	0.51 - 1.45 (a)	0.51 - 1.27	0.51 - 2.54		11904A
22R086	8	6.4	11.5	23.1	7.6	3.3	1.3 - 6.2	1.29 - 2.05	1.27 - 2.03	1.27 - 4.06	ERG4806	13500
22R106	10	6.4	11.5	23.1	7.6	3.3	1.3 - 6.2	1.29 - 2.05	1.27 - 2.03	1.27 - 4.06		

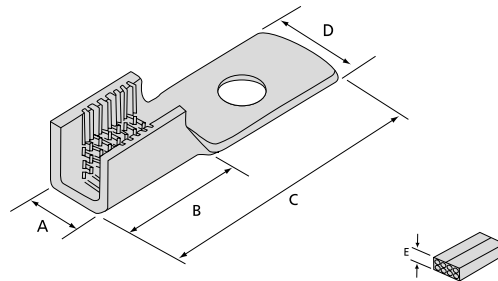
\* Reference dimension (crimped height): see installing die illustration for gauging

\*\* USA stud size: see page 121 for metric conversion

Use selection chart to determine appropriate die set (pages 119 and 120)

Pages 114 to 118 for tooling specifications

*NOTE: Wire sizes and combinations shown have been tested to and meet or exceed Thomas & Betts specifications. Connectors may be suitable for other wire sizes or combinations. Thomas & Betts sells these connectors with the understanding that the user will perform necessary tests to determine their suitability for the intended purpose.*



E9809

# Ring terminals

## Dragon Tooth® - Insulation piercing connectors

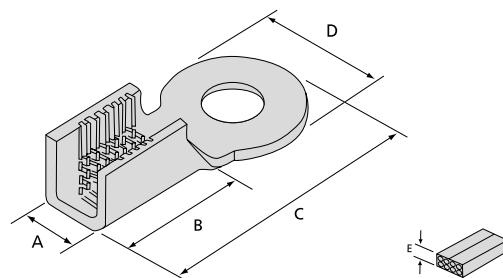
### Technical Information

Material Copper alloy  
 Plating Tin plated  
 Colour Metallic

Product Ref.	USA stud size**	Dimensions					Combined wire size [mm <sup>2</sup> ]	Round wire range min - max [mm]	Rectangular wire range		Tooling	
		A [mm]	B [mm]	C [mm]	D [mm]	E* [mm]			Thickness min - max [mm]	Width min - max [mm]	Hand tool	Power tool***
22R146	1/4	6.4	11.5	24.2	10.7	3.3	1.3 - 6.2	1.29 - 2.05	1.27 - 2.03	1.27 - 4.06	ERG4806	11903A, 11904A, 13500

\* Reference dimension (crimped height): see installing die illustration for gauging  
 \*\* USA stud size: see page 121 for metric conversion  
 Use selection chart to determine appropriate die set (pages 119 and 120)  
 Pages 114 to 118 for tooling specifications

*NOTE: Wire sizes and combinations shown have been tested to and meet or exceed Thomas & Betts specifications. Connectors may be suitable for other wire sizes or combinations. Thomas & Betts sells these connectors with the understanding that the user will perform necessary tests to determine their suitability for the intended purpose.*



# Fork terminals Dragon Tooth® - Insulation piercing connectors

## Technical Information

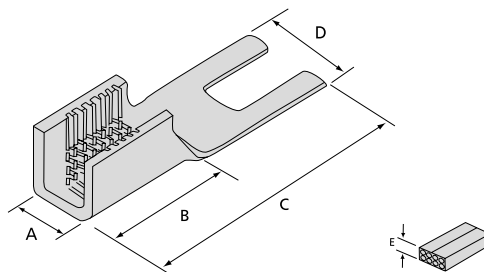
Material Copper alloy  
 Plating Tin plated  
 Colour Metallic



Product Ref.	USA stud size**	Dimensions					Combined wire size [mm <sup>2</sup> ]	Round wire range min - max [mm]	Rectangular wire range		Tooling	
		A [mm]	B [mm]	C [mm]	D [mm]	E* [mm]			Thickness min - max [mm]	Width min - max [mm]	Hand tool	Power tool***
22F061	6	4.1	8.1	19.8	7.6	2.5	0.2 - 2.1	0.51 - 1.45 (a)	0.51 - 1.27	0.51 - 2.54		
22F081	8	4.1	8.1	19.8	7.6	2.5	0.2 - 2.1	0.51 - 1.45 (a)	0.51 - 1.27	0.51 - 2.54	ERG4801	11903A
22F101	10	4.1	8.1	19.8	7.6	2.5	0.2 - 2.1	0.51 - 1.45 (a)	0.51 - 1.27	0.51 - 2.54		11904A
22F066	6	6.4	11.4	23.1	7.6	3.3	1.3 - 6.2	1.29 - 2.05	1.27 - 2.03	1.27 - 4.06		13500
22F086	8	6.4	11.4	23.1	7.6	3.3	1.3 - 6.2	1.29 - 2.05	1.27 - 2.03	1.27 - 4.06	ERG4806	
22F106	10	6.4	11.4	23.1	7.6	3.3	1.3 - 6.2	1.29 - 2.05	1.27 - 2.03	1.27 - 4.06		

(a) 0.51 - 0.64 mm diameter and equivalent rectangular wire size, copper only  
 \* Reference dimension (crimped height): see installing die illustration for gauging  
 \*\* USA stud size: see page 121 for metric conversion  
 Use selection chart to determine appropriate die set (pages 119 and 120)  
 Pages 114 to 118 for tooling specifications

*NOTE: Wire sizes and combinations shown have been tested to and meet or exceed Thomas & Betts specifications. Connectors may be suitable for other wire sizes or combinations. Thomas & Betts sells these connectors with the understanding that the user will perform necessary tests to determine their suitability for the intended purpose.*



E9809

# Disconnect terminals

## Dragon Tooth® - Insulation piercing connectors

108



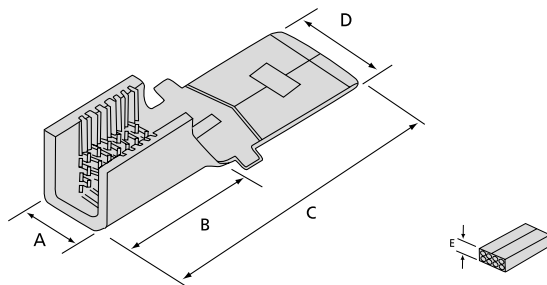
### Technical Information

Material Copper alloy  
 Plating Tin plated  
 Colour Metallic

Product Ref.	Male tab size [mm x mm]	Dimensions					Com-bined wire size [mm <sup>2</sup> ]	Round wire range min - max [mm]	Rectangular wire range		Tooling	
		A [mm]	B [mm]	C [mm]	D [mm]	E* [mm]			Thickness min - max [mm]	Width min - max [mm]	Hand tool	Power tool**
22LM01***	6.35 x 0.8	4.1	8.1	19.3	6.4	2.5	0.2 - 2.1	0.50 - 1.45***	0.51 - 1.27	0.5 - 2.5	ERG4801	11903A 11904A
22LM06	6.35 x 0.8	6.4	11.5	23.0	6.4	3.3	1.3 - 6.2	1.29 - 2.05	1.27 - 2.03	1.3 - 4.1	ERG4806	13500

\* Reference dimension (crimped height): see installing die illustration for gauging  
 Use selection chart to determine appropriate die set (pages 119 and 120)  
 \*\*\* 0.51 - 0.64 mm diameter and equivalent wire size, copper only  
 Pages 114 to 118 for tooling specifications

*NOTE: Wire sizes and combinations shown have been tested to and meet or exceed Thomas & Betts specifications. Connectors may be suitable for other wire sizes or combinations. Thomas & Betts sells these connectors with the understanding that the user will perform necessary tests to determine their suitability for the intended purpose.*



E9809

# Disconnect terminals

## Dragon Tooth® - Insulation piercing connectors

### Technical Information

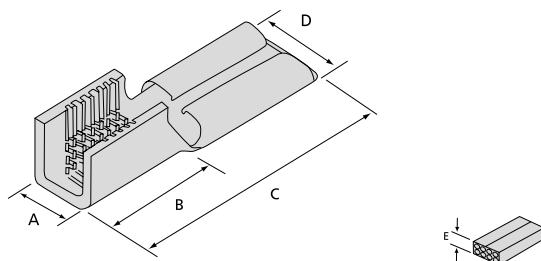
Material Copper alloy  
 Plating Tin plated  
 Colour Metallic



Product Ref.	Male tab size [mm x mm]	Dimensions					Com-bined wire size [mm <sup>2</sup> ]	Round wire range min - max [mm]	Rectangular wire range		Tooling	
		A [mm]	B [mm]	C [mm]	D [mm]	E* [mm]			Thickness min - max [mm]	Width min - max [mm]	Hand tool	Power tool***
22LF01***	6.35 x 0.8	4.1	8.1	20.1	6.4	2.5	0.2 - 2.1	0.50 - 1.45***	0.51 - 1.27	0.5 - 2.5	ERG4801	11903A 11904A
22LF06	6.35 x 0.8	6.4	11.5	23.0	6.4	3.3	1.3 - 6.2	1.29 - 2.05	1.27 - 2.03	1.3 - 4.1	ERG4806	13500

\* Reference dimension (crimped height): see installing die illustration for gauging  
 Use selection chart to determine appropriate die set (pages 119 and 120)  
 \*\*\* 0.51 - 0.64 mm diameter and equivalent wire size, copper only  
 Pages 114 to 118 for tooling specifications

*NOTE: Wire sizes and combinations shown have been tested to and meet or exceed Thomas & Betts specifications. Connectors may be suitable for other wire sizes or combinations. Thomas & Betts sells these connectors with the understanding that the user will perform necessary tests to determine their suitability for the intended purpose.*



# Taps

## Dragon Tooth® - Insulation piercing connectors

110



### Technical Information

Material Copper alloy  
 Plating Tin plated  
 Colour Metallic

Product Ref.	USA stud size**	Dimensions					Combined wire size [mm <sup>2</sup> ]	Round wire range min - max [mm]	Rectangular wire range		Tooling
		A	B	C	D	E*			Thickness min - max [mm]	Width min - max [mm]	
		[mm]	[mm]	[mm]	[mm]	[mm]					
204T14	1/4	41.2	31.0	17.8	12.7	5.6	5.2 - 26.6	2.58 - 4.1	2.3 - 2.9	2.3 - 8.1	13100A
204T38	3/8	41.2	31.0	17.8	12.7	5.6	5.2 - 26.6	2.58 - 4.1	2.3 - 2.9	2.3 - 8.1	TBM15i

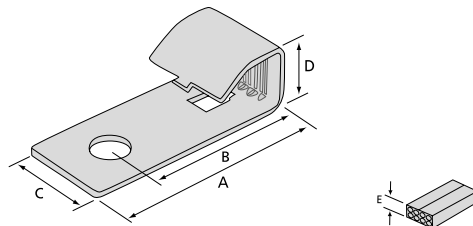
\* Reference dimension (crimped height): see installing die illustration for gauging

\*\* USA stud size: see page 121 for metric conversion

Use selection chart to determine appropriate die set (pages 119 and 120)

Pages 114 to 118 for tooling specifications

*NOTE: Wire sizes and combinations shown have been tested to and meet or exceed Thomas & Betts specifications. Connectors may be suitable for other wire sizes or combinations. Thomas & Betts sells these connectors with the understanding that the user will perform necessary tests to determine their suitability for the intended purpose.*



E9809

# Modular connectors

## Dragon Tooth® - Insulation piercing connectors

### Technical Information

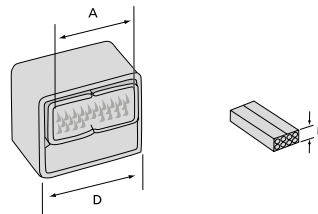
Material Copper alloy  
 Plating Tin plated  
 Colour Metallic



Product Ref.	Dimensions			Combined wire size [mm <sup>2</sup> ]	Round wire range min - max [mm]	Rectangular wire range		Tooling
	A	D	E*			Thickness min - max	Width min - max	
	[mm]	[mm]				[mm]	[mm]	
210214MT	16.0	19.1	(a)	10.1 - 53.2	1.8 - 4.62	2.0 - 3.8 (upper half) 6.4 max. (lower half)	2.0 - 12.4 (upper half) 19.1 max. (lower half)	13100A, 13400, TBM15i
204210MT	23.8	26.2	(a)	45.6 - 108.9	2.6 - 5.84	2.5 - 6.8 (upper half) 6.4 max. (lower half)	2.5 - 23.4 (upper half) 26.2 max. (lower half)	13400

\* Reference dimension (crimped height): see installing die illustration for gauging  
 (a) Crimping dies may not bottom. Connector height will depend on number and size of wires in barrel. Pump must deliver 9.800 psi min.  
 \*\* combined wire size is for the whole connector (including upper half and lower half)  
 Use selection chart to determine appropriate die set (pages 119 and 120)  
 Pages 114 to 118 for tooling specifications

*NOTE: Wire sizes and combinations shown have been tested to and meet or exceed Thomas & Betts specifications. Connectors may be suitable for other wire sizes or combinations. Thomas & Betts sells these connectors with the understanding that the user will perform necessary tests to determine their suitability for the intended purpose.*



E9809



# Modular connectors

## Dragon Tooth® - Insulation piercing connectors

112



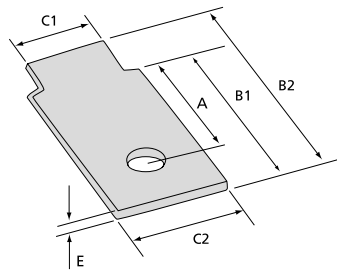
### Technical Information

Material	Copper alloy
Plating	Tin plated
Colour	Metallic

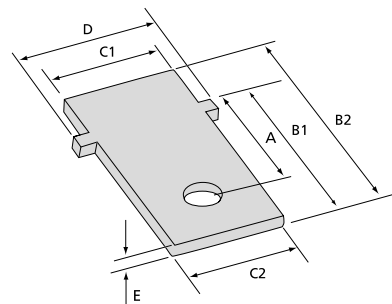
Product Ref.	USA	Dimensions							Description
	stud size**	A [mm]	B1 [mm]	B2 [mm]	C1 [mm]	C2 [mm]	D [mm]	E [mm]	
210MT14	1/4	25.4	36.3	52.1	15.9	20.6	-	2.0	Screw-on clip for connectors 210214MT
210MT38	3/8	25.4	36.3	52.1	15.9	20.6	-	2.0	Screw-on clip for connectors 210214MT
204MT14	1/4	25.4	36.8	55.4	23.2	23.2	28.6	2.5	Screw-on clip for connectors 204210MT
204MT38	3/8	25.4	36.8	55.4	23.2	23.2	28.6	2.5	Screw-on clip for connectors 204210MT

*NOTE: Wire sizes and combinations shown have been tested to and meet or exceed Thomas & Betts specifications. Connectors may be suitable for other wire sizes or combinations. Thomas & Betts sells these connectors with the understanding that the user will perform necessary tests to determine their suitability for the intended purpose.*

210MT14  
210MT38



204MT14  
204MT38



# Washers

## Dragon Tooth® - Insulation piercing connectors

### Characteristics

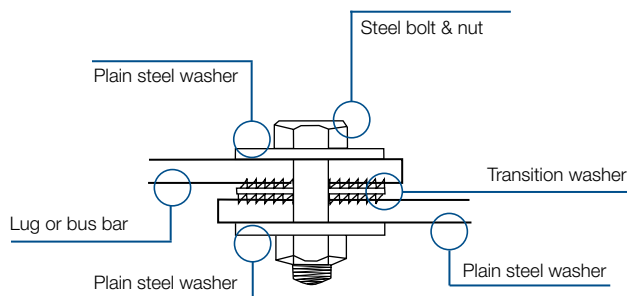
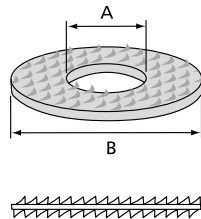
Teeth on the transition washers penetrate aluminium and copper oxides, enabling copper to aluminium connections to be made in a bolted joint without the use of inhibiting compounds. Transition washers also accommodate the difference in thermal expansion between copper and aluminium, and enhance the efficiency of bolted grounding connections.

### Technical Information

Material Copper alloy  
 Plating Tin plated  
 Colour Metallic



Product Ref.	USA stud size*	A	B	Recommended installing torque [Nm]
		[mm]	[mm]	
FPW14	1/4	6.9	17.3	5.5 - 9
FPW516	5/16	8.6	25.4	14 - 18
FPW38	3/8	10.9	25.4	18 - 27
FPW12	1/2	14.2	31.8	44 - 61
FPW58	5/8	17.3	35.6	61 - 82.5



# Hand tools

## Dragon Tooth® - Crimping tools

114

### Characteristics

These manually operated tools are suitable for prototyping and limited production usage. They are equipped with a Shure-Stake™ mechanism, which requires full closure of the dies before release. Appropriate to crimp butt splices, parallel splices, taps and terminations. Dies are self-contained.

### Product Ref. ERG4811 and ERG48XX series

- Ergonomic fixed die tool
- Incorporates the ergonomically designed Comfort Crimp™ tool handles which distribute the force more evenly across the hand
- Shure-Stake™ mechanism ensures a complete crimp cycle before the tool releases
- Rubberised thermoplastic handles combine maximum friction with a soft, comfortable feel that reduces muscle tension
- Two-piece movable die nest provides easy connector removal



Product Ref.	Tool gauging [mm]	Connector
ERG4801	1.75 max.	22,F,L,R-1 Series
ERG4802	1.93 max.	22L002
ERG4804	0.86 max.	22L004
ERG4806	2.41 max.	22,F,L,R-6 Series
ERG4811	2.62 max.	214420

# Air-operated tools

## Dragon Tooth® - Crimping tools

### Product Ref. 11903A

This pneumatic operated hydraulic crimping tool is available in hand or foot actuated models, with open "C" yoke design.

- The 3 interchangeable dies can crimp the 22xxx1, 22xxx2 and 22xxx6 series terminals and need to be ordered separately
- Product Ref. 11903A: hand-actuated tool (also requires one Product Ref. 11913 air hose).
- Material: Steel with backed enamel paint finish
- Overall length: 276 mm
- Diameter: 57 mm
- Operating Pressure: 90 - 100 PSI (6.2-6.9 bar)
- Weight: 1.4 kg

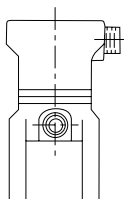
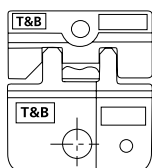
### Accessories

- Product Ref. 11913: 2.43 m long air hose with 1/4 NPT male & female fittings



### 11903A die selection chart

Product Ref.	Colour code	Connector	Die gauge	
			max. [mm]	min. [mm]
13201	Pink	22XXX1 SERIES	1.68	1.57
13202	Brown	22XXX2 SERIES	1.83	1.73
13206	Yellow	22XXX6 SERIES	2.29	2.18



# Auto-feed tools for connectors on strip

## Dragon Tooth® - Crimping tools

116

### Characteristics

Pneumatic bench mounted foot operated tool for crimping copper or aluminium magnet wire and copper lead wire, not solder dipped or bonded.

- Operates on min. 85 psi, 6.0 bar air supply
- Foot pedal contains T&B Shure-Stake™ control mechanism which ensures a full compression each time
- Insulation piercing connectors are fed on a continuous reel mounted strip
- Dies are self-contained. Includes foot valve, hoses and air treatment system



Product Ref.	Connector product ref.	Connector qty per reel	Tool weight [kg]	Tool width [mm]	Tool depth [mm]	Tool height [mm]
13676A	220004	9000	8.6	127	356	279
13678	220001	3000	12.7	152	457	356
13679	220002-TB	3000	12.7	152	457	356
13696	220006	2500	14.5	152	457	406

See page 337 for more information about the connectors on strip.

# Hydraulic tools

## Dragon Tooth® - Crimping tools



Product Ref.: 13100A

### Characteristics

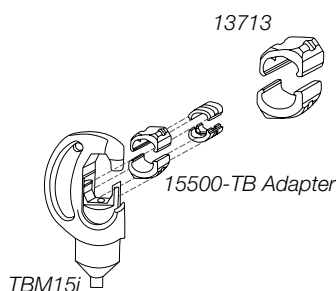
- 14 Ton hydraulic head
- Output: 14 tons (nominal)
- Hydraulic operating pressure: 10,000 psi max., 690 bar
- Length (with coupling): 292 mm
- Width: 108 mm
- Weight (without dies): 4.5 kg
- Dies delivered separately



Product Ref.: TBM15i

### Characteristics

- 15 Ton hydraulic head
- New longer, slimmer profile allows easier access into tight spaces
- Wider jaw opening eases crimping of larger connectors
- Available with an insulated head
- Supplied in a carrying case in steel
- Output force: 15 tons (nominal)
- Operating pressure: 10,000 psi (nominal), 690 bar
- Weight: 7 kg (without dies)
- Dies delivered separately



### Installing dies for 13100A and TBM15i tool heads

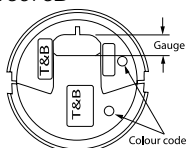
#### Characteristics

- Material: alloy steel
- For the TBM15i, the 15500TB adapter is required
- The die Nr 13713 is for the TBM15i tool head only (no adapter required)
- The die Nr 13713B is for the 13100A tool head only

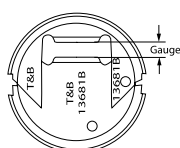
### 13100A and TBM15i die selection chart

Product Ref.	Colour code	Connector	Die gauge	
			max. [mm]	min. [mm]
13670B	Red	210xxx series	4.42	4.11
13671B	Blue	204xxx series	6.25	5.94
13673B	Green	204xxxH series	11.94	11.79
13681B	Yellow	210214MT	4.47	4.17
13683B	White	22L008	2.84	2.46
13684B	Yellow	22L009	4.93	4.55
13686B	Orange	22L009H	9.50	9.12
13689B	Purple	204Txx series	5.18	4.80
13713		220015 to 220026	2.79	2.03
13713B		220015 to 220026	2.92	2.16

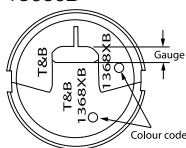
13670B, 13671B, 13673B



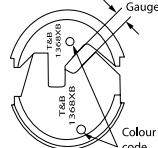
13681B



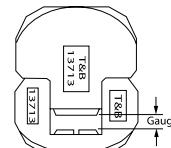
13683B, 13684B, 13686B



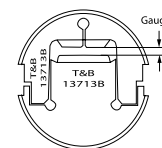
13689B



13713



13713B



# Hydraulic tools

## Dragon Tooth® - Crimping tools

118



Product Ref.: 13100A

### Characteristics

- 12 Ton hydraulic head
- Output: 12 tons (nominal)
- Hydraulic operating pressure: 10.000 psi max., 690 bar
- Length (with coupling): 368 mm
- Width: 84 mm
- Weight (without dies): 6.8 kg
- Dies delivered separately

### Installing dies for 13400

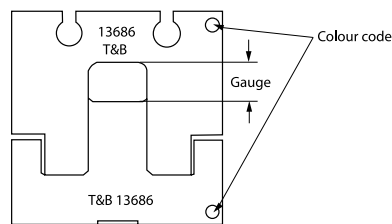
### Characteristics

- Material: alloy steel

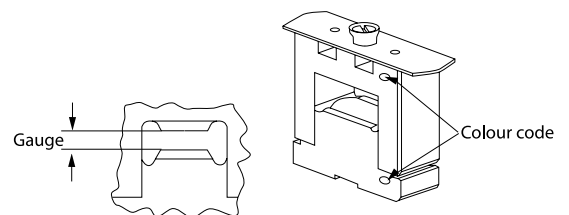
### 13400 die selection chart

Product Ref.	Colour code	Connector	Die gauge	
			max. [mm]	min. [mm]
13670A	Red	210xxx series	4.42	4.11
13671A	Blue	204xxx series	6.25	5.94
13673	Green	204xxxH series	11.94	11.79
13681	Yellow	210214MT	4.47	4.17
13682	Brown	204210MT	7.65	7.34
13683	White	22L008	A: 2.74 B: 3.10	A: 2.59 B: 2.90
13684	Yellow	22L009	4.83	4.65
13685	Black	314xxx series	3.45	3.15
13686	Orange	22L009H	9.37	9.22

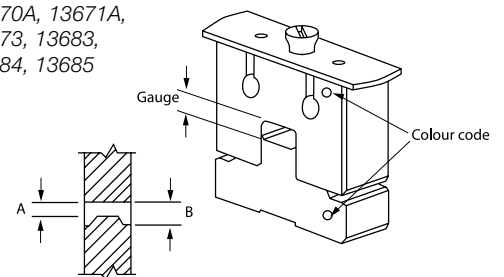
13686



13681, 13682



13670A, 13671A,  
13673, 13683,  
13684, 13685



For 13683 only

# Connectors, tool and die selection chart

## Dragon Tooth® - Crimping tools

	Hand tools (fixed die)	Pneumatic tools 11903A	Auto-feed tool for magnet wire on strip	14 ton hydraulic head 13100A	12 ton hy- draulic head 13400	15 ton hydraulic head TBM15i
TERMINALS	TOOL	DIE	TOOL	DIE	DIE	DIE + ADAPTOR
204210MT	-	-	-	-	13682	-
204210S	-	-	-	13671B	13671A	13671B with 15500TB
204210SH	-	-	-	13673B	13673	13673B with 15500TB
204210-1	-	-	-	13671B	13671A	13671B with 15500TB
204210-1H	-	-	-	13673B	13673	13673B with 15500TB
204210-2	-	-	-	13671B	13671A	13671B with 15500TB
204210-3	-	-	-	13671B	13671A	13671B with 15500TB
204210-3H	-	-	-	13673B	13673	13673B with 15500TB
204201-5	-	-	-	13671B	13671A	13671B with 15500TB
204211	-	-	-	13671B	13671A	13671B with 15500TB
204212	-	-	-	13671B	13671A	13671B with 15500TB
204217	-	-	-	13671B	13671A	13671B with 15500TB
204MT14	-	-	-	-	-	-
204MT38	-	-	-	-	-	-
204T14	-	-	-	13689B	-	13689B with 15500TB
204T38	-	-	-	13689B	-	13689B with 15500TB
210214MT	-	-	-	13681B	13681	13681B with 15500TB
210214S	-	-	-	13670B	13670A	13670B with 15500TB
210214-1	-	-	-	13670B	13670A	13670B with 15500TB
210214-2	-	-	-	13670B	13670A	13670B with 15500TB
210214-3	-	-	-	13670B	13670A	13670B with 15500TB
210216	-	-	-	13670B	13670A	13670B with 15500TB
210217	-	-	-	13670B	13670A	13670B with 15500TB
210219	-	-	-	13670B	13670A	13670B with 15500TB
210MT14	-	-	-	-	-	-
210MT38	-	-	-	-	-	-
214420	ERG4811	11956	-	-	-	-
220001	-	-	13678	-	-	-
220002-TB	-	-	13679	-	-	-
220004	-	-	13676A	-	-	-
220006	-	-	13696	-	-	-
220015	-	-	-	13713B	-	13713
220016	-	-	-	13713B	-	13713
220017	-	-	-	13713B	-	13713
220018	-	-	-	13713B	-	13713
220019	-	-	-	13713B	-	13713
220020	-	-	-	13713B	-	13713
220021	-	-	-	13713B	-	13713
220022	-	-	-	13713B	-	13713
220023	-	-	-	13713B	-	13713
220024	-	-	-	13713B	-	13713
220025	-	-	-	13713B	-	13713
220026	-	-	-	13713B	-	13713

(continued on next page)



# Connectors, tool and die selection chart

## Dragon Tooth® - Crimping tools

	Hand tools (fixed die)	Pneumatic tools 11903A	Auto-feed tool for magnet wire on strip	14 ton hydraulic head 13100A	12 ton hy- draulic head 13400	15 ton hydraulic head TBM15i
TERMINALS	TOOL	DIE	TOOL	DIE	DIE	DIE + ADAPTOR
22F061	ERG4801	13201	-	-	-	-
22F066	ERG4806	13206	-	-	-	-
22F081	ERG4801	13201	-	-	-	-
22F086	ERG4806	13206	-	-	-	-
22F101	ERG4801	13201	-	-	-	-
22F106	ERG4806	13206	-	-	-	-
22L001	ERG4801	13201	-	-	-	-
22L002	ERG4802	13202	-	-	-	-
22L004	ERG4804	-	-	-	-	-
22L006	ERG4806	13206	-	-	-	-
22L008	-	-	-	13683B	13683	13683B with 15500TB
22L009	-	-	-	13684B	13684	13684B with 15500TB
22L009H	-	-	-	13686B	13686	13686B with 15500TB
22LF01	ERG4801	13201	-	-	-	-
22LF06	ERG4806	13206	-	-	-	-
22LM01	ERG4801	13201	-	-	-	-
22LM06	ERG4806	13206	-	-	-	-
22R061	ERG4801	13201	-	-	-	-
22R081	ERG4801	13201	-	-	-	-
22R086	ERG4806	13206	-	-	-	-
22R101	ERG4801	13201	-	-	-	-
22R106	ERG4806	13206	-	-	-	-
22R146	ERG4806	13206	-	-	-	-
314118S	-	-	-	13685B	13685	13685B with 15500TB
314123	-	-	-	13685B	13685	13685B with 15500TB
314125	-	-	-	13685B	13685	13685B with 15500TB

# Unit conversion tables

## Dragon Tooth® - Crimping tools

AWG round wire size to diameter and cross-section

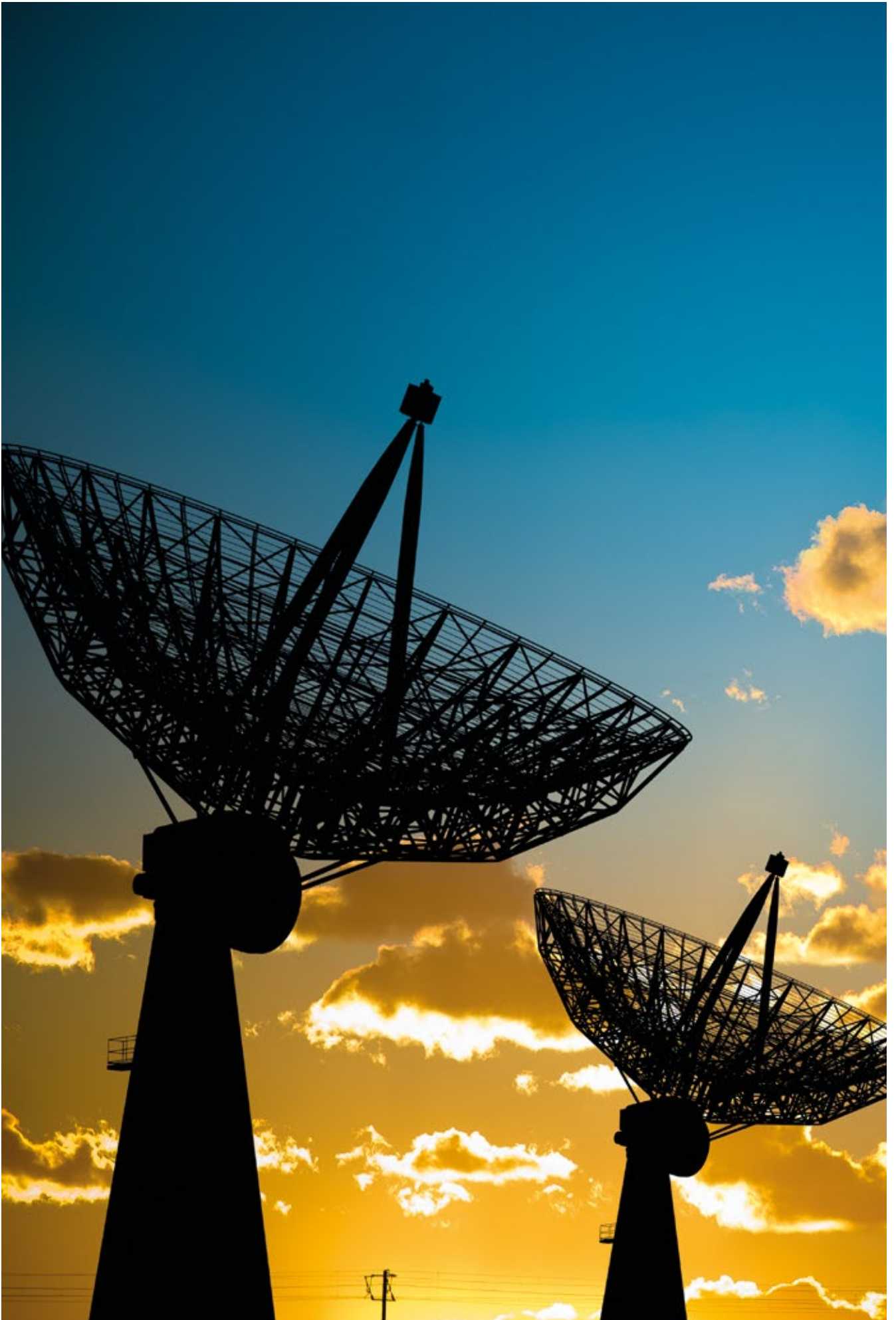
Wire size AWG	Nominal diameter [inch]	Nominal diameter [mm]	Cross-section [mm <sup>2</sup> ]	CMA circular mils [cmil]
4/0	0.4600	11.684	107.219	211600
3/0	0.4096	10.404	85.011	167800
2/0	0.3648	9.266	67.432	133100
1/0	0.3249	8.252	53.488	105600
1	0.2893	7.348	42.409	83690
2	0.2576	6.543	33.624	66360
3	0.2294	5.827	26.655	52620
4	0.2043	5.189	21.149	41740
5	0.1819	4.620	16.766	33090
6	0.1620	4.115	13.289	26240
7	0.1443	3.665	10.551	20820
8	0.1285	3.264	8.387	16510
9	0.1144	2.906	6.632	13090
10	0.1019	2.588	5.262	10380
11	0.0907	2.304	4.168	8230
12	0.0808	2.052	3.308	6530
13	0.0720	1.829	2.627	5180
14	0.0641	1.628	2.082	4110
15	0.0571	1.450	1.652	3260
16	0.0508	1.290	1.308	2580
17	0.0453	1.151	1.040	2050
18	0.0403	1.024	0.823	1620
19	0.0359	0.912	0.653	1290
20	0.0320	0.813	0.519	1020
21	0.0285	0.724	0.412	812
22	0.0253	0.643	0.324	640
23	0.0226	0.574	0.259	511
24	0.0201	0.511	0.205	404
25	0.0179	0.455	0.162	320
26	0.0159	0.404	0.128	253
27	0.0142	0.361	0.104	202
28	0.0126	0.320	0.080	159
29	0.0113	0.287	0.065	128
30	0.0100	0.254	0.051	100
31	0.0089	0.226	0.040	79
32	0.0080	0.203	0.032	64

American bolt sizes

US Bolt size	Min. hole diameter		Matching bolt in metric size
	[mm]	[inch]	
2	2.337	0.092	M2
6	3.632	0.143	M3
8	4.292	0.169	M4
10	4.978	0.196	M4
1/4	6.655	0.262	M6
5/16	8.204	0.323	M8
3/8	9.855	0.388	M8
7/16	11.506	0.453	M10
1/2	13.106	0.516	M12
5/8	16.510	0.650	M16
3/4	19.685	0.775	M18

AWG = American Wire Gauge

- 1 inch<sup>2</sup> = 645.16 mm<sup>2</sup>
- 1 mm<sup>2</sup> = 0.00155 inch<sup>2</sup>
- 1 mm<sup>2</sup> = 1973.51 cmil
- 1 inch<sup>2</sup> = 1 273 230 cmil
- 1 cmil = 1 circular mil = 0.0005067 mm<sup>2</sup>
- 1 kcmil = 1000 cmil = 0.5067 mm<sup>2</sup>



# Shield-Kon®

## The Shield termination solution

The Shield-Kon® solution from Thomas & Betts (today a Member of the ABB Group) involves a crimp technique for shield termination on shielded cables, with a proven reliability that has led to a specification for the aeronautical and space technology industry and for military applications (MIL-F-21608).

Wherever shielded cables and wires are fitted, there is the problem of finding a permanent, repeatable, safe and quick connection of the braided shield.

Conventional connection methods use soldering, which is more time-consuming and more expensive, and can often result in damage to the dielectric or to the internal shield conductor caused by heat. Moreover, the use of lead-based soldering methods can be in conflict with the latest European regulations.

### **Thomas & Betts offer two solutions:**

**The one-piece Shield-Kon® connector**, which is wrapped around the shield during the crimping process.

This solderless, wraparound connector terminates shielded cable in seconds with uniform precision. It's particularly well suited for production work in aircraft, aerospace, and electronic industries where size and weight are of importance.

Once crimped, it provides a compact, lightweight, low-resistance, high-strength connection, which meets and exceeds the performance requirements of MIL-F-21608.

The connector works equally well on braided, wrapped, or foil shields and has the added advantage of being able to be used as a mid-span termination.

Only four sizes, which can be easily identified by the colour of their insulation, are needed to cover a range of shielding diameters from 1.27 mm to 7.62 mm.

**The two-piece Shield-Kon® connector**, which consists of two sleeves, between which the shielded braid and the drain wire are compressed.

The Shield-Kon® two-piece shield termination system consists of two cylindrical sleeves: an inner sleeve with a smaller diameter, and an outer sleeve that has a larger diameter but is shorter and less hard than the inner sleeve. All inner and outer sleeves are colour-coded according to their size.

The conductors of the cable are inserted through the inner sleeve, whereas the shield (braided or foiled) and the drain wire are inserted between the two sleeves. The crimp operation is done by compressing the outer sleeve with a tool, while the inner sleeve ensures a mechanical protection to the inner conductors.

### **Thomas & Betts - A Member of the ABB Group**

Since June 2012, Thomas & Betts (T&B) is a Member of the ABB Group. ABB is a leading power and automation technology group, active in more than 100 countries with about 150.000 employees worldwide.

With Thomas & Betts, this portfolio will now be completed with the following product lines and flagship brands:

- *Wire & Cable Management* - Ty-Rap® and Ty-Met® cable ties, Shrink-Kon® heat shrink, T&B Cabletray
- *Cable Protection Systems* - nylon & metallic incl. brands: PMA, Adaptaflex, Kopex-Ex, Harnessflex
- *Low Power Connection & Control* - Furse lightning & surge protection, Elastimold, Joslyn Hi-Voltage
- *Emergency lighting* - emergency lighting, battery systems incl. VanLien, Kaufel, Emergi-Lite brands
- *Hazardous location products* - DTS explosion proof light & boxes, Kopex-Ex conduits & fittings



# Table of Content

## Shield-Kon® - shielded cable connectors

<b>Spec-Kon® - Crimp terminals</b>	<b>4</b>
<b>Color-Keyed® - power cable connectors</b>	<b>74</b>
<b>Dragon Tooth® - magnet wire terminals</b>	<b>88</b>
<b>Shield-Kon® - shielded cable connectors</b>	<b>122</b>
<b>One-piece connector</b>	<b>126</b>
Installation methods and procedures	126
Connectors	127
Selection gauge	128
Accessories: the RSK-FLAG connectors	128
Ergonomic hand tools	129
<b>Two-piece connectors - Hexagonal Range</b>	<b>130</b>
Installation methods	131
Connector and die selection	132
Tooling	133
<b>Two-piece connectors - Circular Range</b>	<b>136</b>
Installation method	136
Connector and die selection	137
Tooling	138

# Installation methods and procedure

## Shield-Kon® - One-piece connector

126



### Installation methods

#### Standard method

Use the standard method when the shielded cable or the inner conductors are embedded in a dielectric.

#### Fold-back method 1

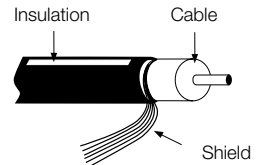
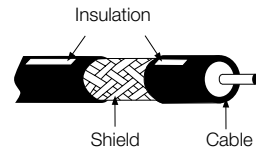
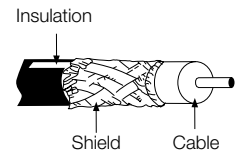
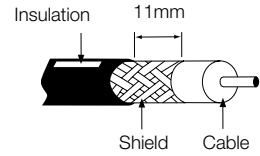
If there is no common dielectric for several interior cables but the gaps are filled by textile threads or something similar, care should be taken to ensure that the insulating thickness of the individual cables is not less than 0.38 mm for PVC, and not less than 0.25 mm for Teflon. If this insulation thickness falls below this value, fold-back method 1 should be used.

#### Mid-Span method

Allows installation anywhere along the cable.

#### Fold-back method 2

Fold-back method 2 should be used if the cable shield is applied spirally or if a foil shield is being used.



### Installation procedures

#### Step 1

Prepare shielded wire and drain wire insulation as shown. If two earth wires are required in a Shield-Kon® connection, twist both conductors before insertion into the connector.

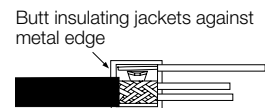
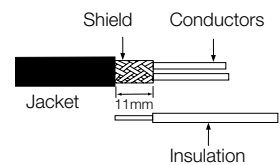
#### Step 2

Select the appropriate connector according to the size of the shielded cable (see page 127). Place the drain wire around the trap hook and the shielded wire into the bottom of the connector. When inserting the shielded cable and grounding wire, care must be taken to ensure that their insulation is overlapped by the connector's Polyester insulation film.

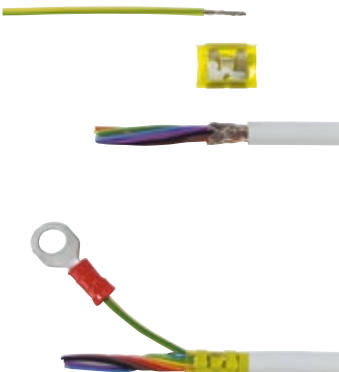
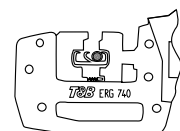
100% insulation is possible after crimping when the stripped length of outer jacket (visible shielding) is 11 mm maximum.

#### Step 3

Select the appropriate die set for the crimp tool, according to the size of the shielded cable (See page 129) and mount the dies on the tool. Insert the connector (with the shielded cable and the drain wire) between the dies of the tool. Squeeze the tool handles firmly to crimp the connector around the shielding and the drain wire.



Connector opening faces away from tool



# Connectors

## Shield-Kon® - One-piece connector

### Characteristics

- Compact, low profile connector
- One piece "Wrap-around" design
- Inventory savings: only 4 sizes
- Transparent insulation, easily inspected
- MIL specified MIL-F-21608, industry approved technology
- NO HEAT OR POWER REQUIRED to install
- No damage to inner conductor
- Less installation time required
- Uniform, precise connection every time
- Low installed cost
- Mid-span termination possible, eliminating the need to demount a cable already installed

### Technical Information

Material	Copper, conform to CDA No. 110
Plating	Tin, electro-plated (thickness 3 to 8 µm), in accordance with MIL-T-10727A
Insulation	Polyester film, colour coded for size identification
Temperature	-65°C to +125°C

### MIL-F-21608 specifications

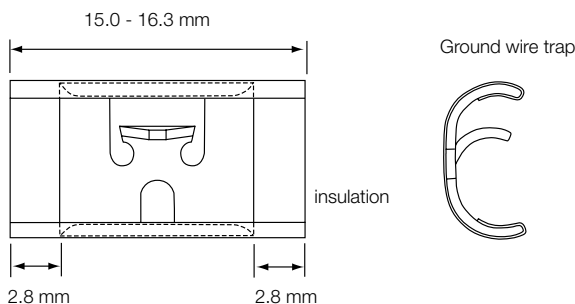
Voltage drop	9 mV max. at 1 Ampere after environmental exposure
Insulation	500 VRMS at 60 Hz for one minute dielectric strength
Corrosion resistance	48 hours in 5% salt fog
Pullout strength	67 N min. with 0.25 mm <sup>2</sup> drain wire and 85N min. with 0.5 mm <sup>2</sup> drain wire
Vibration	0.76 mm double amplitude between 10 and 55Hz for 6 hours on each of two axis



Product Ref.	Colour	Shield diameter range [mm]	Acceptable drain wire size**	Quantity [pieces]	Installation tool*
RSK101	Red	1.27 - 2.28	1 or 2 pieces 0.25mm <sup>2</sup>	1000	ERG740
RSK5101				100	
RSK201	Blue	2.29 - 3.65	1 or 2 pieces 0.25mm <sup>2</sup>	1000	
RSK5201			or 1 piece 0.5mm <sup>2</sup>	100	
RSK301	Yellow	3.66 - 5.12	1 or 2 pieces 0.25mm <sup>2</sup> ,	1000	
RSK5301			or 1 piece 0.5mm <sup>2</sup>	100	
RSK401	Green	5.13 - 7.62	1 or 2 pieces 0.5mm <sup>2</sup> ,	500	
RSK5401			or 1 piece 0.5mm <sup>2</sup>	100	

(\*) See page 129 for tooling specifications and for die selection

(\*\*) Alternatively, a special accessory (RSK-flag) can be used in place of the drain wire, with the yellow and the green connectors





# Selection gauge

## Shield-Kon® - One-piece connector

128



Product Ref.: RSK-LEHRE

### Characteristics

The choice of the appropriate connector and die set mainly depends on the size of the shielded cable.

The selection can be done very quickly with the RSK-LEHRE gauge.

1. Remove the outer jacket from the shielded cable, making the shielding visible
2. Insert this stripped end of the cable into the slots located around the gauge. The correct slot will be found when the cable can slide only in the upper part of the slot. If the cable can slide completely to the bottom of the slot, you should try with the smaller adjacent slot.
3. Once the appropriate slot is found, the corresponding RSK connector is defined by the colour of the strip around the slot, whereas the corresponding die set is given by the number marked below the slot (add prefix "D" to this number)
4. The table on page 132 summarises the different combinations of connector / die set, as well as the size of drain wire that can be used

# Accessories: the RSK-FLAG connectors

## Shield-Kon® - One-piece connector

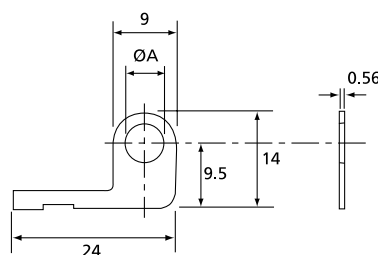


Product Ref.: RSK-FLAG

### Characteristics

- The RSK-FLAG connector is inserted into the one-piece Shield-Kon® connector and replaces the drain-wire
- Easy & direct connection of the RSK-FLAG to a piece of earthed equipment thanks to the installation hole
- Available in 3 sizes of hole
- To be used with the RSK-301 (yellow) or RSK-401 (green) connectors
- Material: Electrolytic copper
- Plating: Zinc alloy

Product Ref.	Termination screw size ØA	Weight [g/100]	Quantity [pieces]
RSK-FLAG-B3	M3	75	1000
RSK-FLAG-B4	M4	75	1000
RSK-FLAG-B5	M5	75	1000



# Ergonomic hand tools

## Shield-Kon® - One-piece connector



Product Ref.: ERG740

### Characteristics

- Robust construction: metallic frame, partially covered with plastic
- Dies are easily interchangeable (to be ordered separately)
- Parallel action crimp
- Shure-Stake™ mechanism: once pressing has commenced, the tool can be re-opened only after successful completion of the crimping cycle
- Supplied in a plastic case with: 1 tool, 1 bench-mount stand for easier use in volume production, 1 gauge (Product Ref. RSK-LEHRE) for instant selection of the die and the connector to be used
- Dimensions of tool (L x W x H): 210 x 155 x 25 mm
- Weight of tool: 470 g
- Dimensions of plastic case (L x W x H): 245 x 210 x 55 mm
- Weight of plastic case with content: 930 g



Product Ref.: ERG740-01

### Characteristics

- Same as ERG740, but in addition, supplied with 4 metal dies (D-101A, D-201D, D-301G, D-401K)
- Dimensions of plastic case (L x W x H): 245 x 210 x 55 mm
- Weight of plastic case with content: 1200 g

### Metal Dies for ERG740

#### Characteristics

- For mass production and medium to high volumes
- Made of hardened steel, does not wear
- The Product Ref. is engraved on the upper part and on the lower part of the die set and the die is marked with a dot having the same colour as the corresponding connector
- Packaging: 1 die set in a cardboard box with Euro slot
- Weight: approx. 75 g
- Packaging size (L x W x H): 45 x 45 x 70 mm

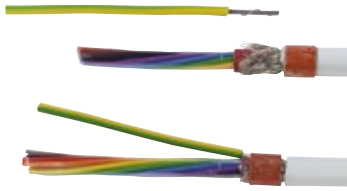
### ERG740 die selection chart

Product Ref.	Colour	Shield diameter [mm]	For connector
D-101A	Red	1.27 - 1.79	RSK 101
D-101B	Red	1.80 - 2.28	RSK 101
D-201C	Blue	2.29 - 2.55	RSK 201
D-201D	Blue	2.56 - 3.00	RSK 201
D-201E	Blue	3.01 - 3.34	RSK 201
D-201F	Blue	3.35 - 3.65	RSK 201
D-301G	Yellow	3.66 - 4.13	RSK 301
D-301H	Yellow	4.14 - 4.71	RSK 301
D-301J	Yellow	4.72 - 5.12	RSK 301
D-401K	Green	5.13 - 5.86	RSK 401
D-401L	Green	5.87 - 6.36	RSK 401
D-401M	Green	6.37 - 7.00	RSK 401
D-401N	Green	7.01 - 7.62	RSK 401

# Overview

## Shield-Kon® - Two-piece connector - Hexagonal Range

130



In the "Hexagonal Range" (diameters of dielectric between 1.1 mm and 9.4 mm), the outer sleeve is crimped with a hand tool and the result is a hexagonal-shaped crimp.

The choice of the appropriate combination of inner sleeve, outer sleeve and crimp tool / die will depend on the diameter of the dielectric.

However, a direct correlation with the diameter of the dielectric is not possible, as several different inner sleeves can be combined with the same outer sleeve (according to the type of shield).

With the directions shown below, a measuring instrument (calliper) is all that is required to make the right selection in 3 steps:

### 1. Selection of the inner sleeve (GSB)

- Strip the outer insulator and remove the shield
- Measure the maximum value of the diameter of the dielectric (diameter without shield) by gently rotating the cable. When doing so, it should be possible to turn the cable easily between the jaws of the calliper
- Add 0.13 mm to the measured value. The sum will give the Inner Diameter (I.D.) of the GSB inner sleeve
- In the table, select the GSB inner sleeve having this I.D. or the nearest larger I.D.

### 2. Selection of the outer sleeve (GSC)

Normal method:

- Slide the selected inner sleeve underneath the shield of the cable
- Measure the maximum diameter with the shield over the inner sleeve
- Add 0.8 mm to the measured value. The sum will give the Inner Diameter (I.D.) of the GSC sleeve
- In the table, select the GSC sleeve having this I.D. or the nearest larger I.D.

Quick method:

In most cases, a quicker method can be used to define the correct GSC outer sleeve:

- Once the appropriate GSB inner sleeve is found, the table will give the Outer Diameter (O.D.) of this GSB sleeve
- Add 1.5 mm to this O.D. and the sum will give the Inner Diameter (I.D.) of the GSC sleeve
- In the table, select the GSC sleeve having this I.D. or the nearest larger I.D.

### 3. Selection of the die

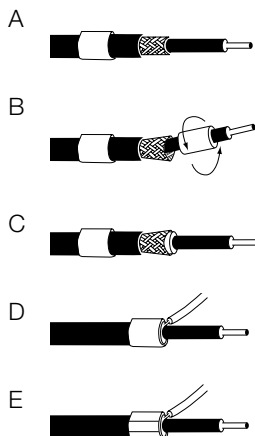
The Product Ref. for the appropriate die is given in the table hereafter, in the same row as the GSC sleeve that has just been defined and in the column of the chosen tool.

# Installation methods

## Shield-Kon® - Two-piece connector - Hexagonal Range

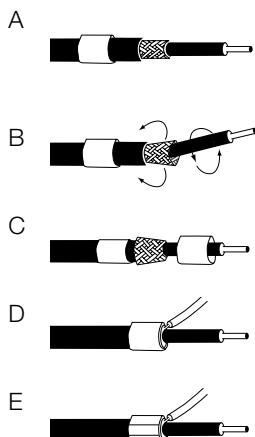
Three installation methods are possible in the hexagonal range, for a quick, neat and accurately completed termination...at a greatly reduced production cost.

### Method 1: Standard



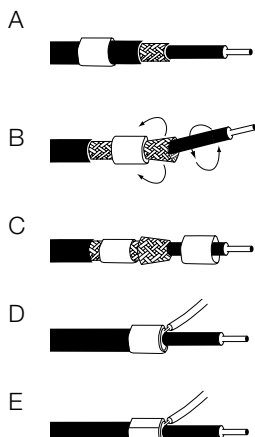
- A. After stripping the shield (12.7 mm in length), slip the outer sleeve over the outer insulation. If this is too big, slip the outer sleeve on, after method described in Fig. 3.
- B. Widen the braided shield by gently rotating the inner conductor, then slip the inner sleeve under the braided shield.
- C. Position the inner sleeve so that about 1.6 mm protrudes beyond the end of the braided shield.
- D. Slip the drain wire (0.25–0.5 mm<sup>2</sup>) under the outer sleeve (from the front or behind) and slip the outer sleeve over the braided shield.
- E. Position the outer sleeve and ensure that the ends of all wires in the braided shield and drain wire are covered. Crimp both sleeves with the correct tool and tool die. Finished.

### Method 2:



- A. After stripping the shield (12.7 mm in length), slip the inner sleeve over the outer insulation.
- B. Widen the braided shield by gently rotating the inner conductor.
- C. Fold back the braided shield over the inner sleeve and slip the outer sleeve over the braided shield
- D. Slip the drain wire (0.25–0.5 mm<sup>2</sup>) under the outer sleeve (from the front or behind) and slip the outer sleeve over the braided shield.
- E. Position the outer sleeve and ensure that the ends of all wires in the braided shield and drain wire are covered. Crimp both sleeves with the correct tool and tool die. Finished.

### Method 3:



- A. After stripping the shield (25 mm in length), slip the inner sleeve over the braided shield
- B. Widen the braided shield by gently rotating the inner conductor.
- C. Fold back the braided shield over the inner sleeve and slip the outer sleeve over the braided shield
- D. Slip the drain wire (0.25–0.5 mm<sup>2</sup>) under the outer sleeve (from the front or behind) and slip the outer sleeve over the braided shield.
- E. Position the outer sleeve and ensure that the ends of all wires in the braided shield and drain wire are covered. Crimp both sleeves with the correct tool and tool die. Finished.

# Connector and die selection

## Shield-Kon® - Two-piece connector - Hexagonal Range

132



The Thomas & Betts hexagonal compression (for diameters of dielectric up to 9.4 mm) is a reliable method for grounding, terminating and insulating shielded and coaxial cable. It has literally hundreds of millions of installations in communications, aerospace, electronic, telephone, radio and TV applications.

- Material: Hard bronze (inner sleeve), Soft bronze (outer sleeve)
- Finish\*\*\*: Tin plated (per MIL-T-10727A)
- Length: 7.9 mm (inner sleeve), 6.4 (outer sleeve)
- Standard packaging quantity: 1000 pcs. For 100 pcs packaging, add the code '5' in the Product Reference just after the "GSB" or "GSC" code. Example: GSC275 = 1000 pcs packaging, GSC5275 = 100 pcs packaging

Product Ref. GSB	Colour code	Inner Ø [mm]	Outer Ø [mm]	Product Ref. GSC	Colour code	Inner Ø [mm]	Outer Ø [mm]	Hand tool ERG4000KE	Nest number	Hand tool* WT440/WT540 MIL - Spec.
<b>INNER SLEEVES</b>			<b>OUTER SLEEVES</b>				<b>DIES</b>			
GSB 046	Silver	1.17	1.90	GSC 101	Silver	2.56	3.16	D-419403	19	4419
GSB 058	Yellow	1.47	2.10	GSC 128	Blue	3.25	3.86	D-419403	00	4400
GSB 063	Red	1.60	2.23	GSC 149	Purple	3.78	4.54	D-419403	01	4401
GSB 071	Green	1.87	2.44	GSC 156	Yellow	3.96	4.90	D-419403	02	4402
GSB 080	Blue	2.00	2.63	GSC 175	Blue	4.45	5.46	D-419403	03	4403
GSB 090	Orange	2.20	2.90	GSC 187	Orange	4.75	5.76	D-406410	06	4406
GSB 096	Purple	2.44	3.02	GSC 194	Red	4.93	5.74	D-406410	06	4406
GSB 101	Yellow	2.56	3.16	GSC 199	Silver	5.05	5.97	D-406410	06	4406
GSB 109	Red	2.76	3.36	GSC 205	Yellow	5.20	6.22	D-406410	08	4408
GSB 115	Silver	2.92	3.70	GSC 219	Green	5.56	6.35	D-406410	08	4408
GSB 124	Green	3.14	3.68	GSC 225	Purple	5.71	6.50	D-406410	09	4409
GSB 128	Silver	3.25	3.86	GSC 232	Orange	5.90	6.70	D-406410	10	4410
GSB 134	Orange	3.40	4.00	GSC 261	Yellow	6.63	7.54	D-411414	11	4411-SK
GSB 149	Blue	3.78	4.54	GSC 275	Silver	6.98	7.77	D-411414	12	4412
GSB 156	Red	3.96	4.90	GSC 281	Purple	7.14	8.40	D-411414	14	4414
GSB 165	Silver	4.20	4.92	GSC 287	Blue	7.29	8.30	D-411414	14	4414
GSB 175	Green	4.44	5.46	GSC 297	Green	7.54	8.50	D-411414	14	4414
GSB 187	Yellow	4.75	5.76	GSC 312	Yellow	7.92	9.20	D-415417	15	4415
GSB 194	Blue	4.93	5.76	GSC 327	Silver	8.30	9.45	D-415417	16	4416
GSB 205	Orange	5.20	6.22	GSC 348	Orange	8.84	9.98	D-415417	17	4417
GSB 219	Silver	5.56	6.35	GSC 359	Purple	9.12	10.13	D-450451	50	5450
GSB 225	Yellow	5.71	6.50	GSC 375	Yellow	9.53	10.31	D-450451	51	5451
GSB 232	Red	5.90	6.70	GSC 405	Red	10.28	11.50	D-452	52	5452
GSB 250	Green	6.35	7.14	GSC 415	Blue	10.54	11.76	D-452	52	5452
GSB 261	Blue	6.63	7.54	GSC 425	Silver	10.80	12.06	D-454	54	5454
GSB 266	Silver	6.75	7.54	GSC 460	Silver	11.68	12.95	ERG5456**	56	5456
GSB 275	Orange	6.98	7.77	GSC 500	Green	12.70	13.97	ERG5457**	57	5457
GSB 281	Yellow	7.14	8.40	GSC 460	Silver	11.68	12.95	ERG5456**	56	5456
GSB 287	Silver	7.29	8.30							
GSB 297	Red	7.54	8.50							
GSB 312	Purple	7.92	9.20							
GSB 348	Orange	8.84	10.20							
GSB 375	Blue	9.52	10.30							

\* Dies 4419 and 4400 to 4417 are for the hand tool WT440. Dies 5450 to 5457 are for the hand tool WT540

\*\* Note: Product Ref. ERG-5456 and ERG-5457 are complete hand tools with pre-mounted die set

\*\*\* For Nickel plated terminals, add suffix NP to the Product Reference. Example: GSB128NP, GSC128NP

# Tooling

## Shield-Kon® - Two-piece connector - Hexagonal Range



Product Ref.: WT440 and WT540

133

### Characteristics

- MIL-specified parallel action hand tool
- A versatile tool, one frame with a selection of interchangeable dies covers the whole range of shield diameters in the Hexagonal Range
- Shure-Stake™ mechanism: once pressing has commenced, the tool can be re-opened only after successful completion of the crimping cycle
- Packaging: box containing 1 frame (dies to be ordered separately)
- Length: 203 mm (WT440), 264 mm (WT540)
- Weight: 450 g (WT440), 540 g (WT540)

### Dies for WT440 and WT540

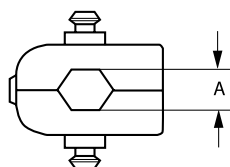
#### Characteristics

- Interchangeable dies with single nest
- Hexagonal crimp
- Material: alloy steel
- Finish: black oxide
- 44xx series dies (for WT440 tool): crimping range (outer sleeves): from GSC101 to GSC348
- 54xx series (for WT540 tool): crimping range (outer sleeves): from GSC359 to GSC500
- 54xx series dies are marked with the die number and a colour-coded dot
- Go/no-go gauges are available for inspection

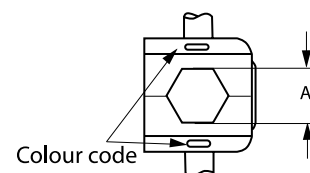
### WT440 and WT540 die selection chart

Product Ref.	Dim. A across flats (+/- 0.10) [mm]	Colour code	For connector	Go / no-go gauge	Tooling
4419	2.67	-	GSC101	4419-G	
4400	3.25	-	GSC128	4400-G	
4401	3.84	-	GSC149	4401-G	
4402	4.06	-	GSC156	4402-G	
4403	4.52	-	GSC175	4403-G	
4406	5.00	-	GSC187, GSC194, GSC199	4406-G	
4408	5.41	-	GSC205, GSC219	4408-G	
4409	5.54	-	GSC225	4409-G	WT440
4410	5.87	-	GSC232	4410-G	
4411-SK	6.48	-	GSC261	4411-G	
4412	6.81	-	GSC275	4412-G	
4414	7.37	-	GSC281, GSC287, GSC297	4414-G	
4415	7.85	-	GSC312	4415-G	
4416	7.98	-	GSC327	4416-G	
4417	8.23	-	GSC348	4417-G	
5450	8.71	Purple	GSC359	5450-G	
5451	9.12	Yellow	GSC375	5451-G	
5452	9.75	Red	GSC405, GSC415	5452-G	WT540
5454	10.90	Silver	GSC425	5454-G	
5456	11.53	Silver	GSC460	5456-G	
5457	12.07	Green	GSC500	5457-G	

Dies for WT440 tool



Dies for WT540 tool



# Tooling

## Shield-Kon® - Two-piece connector - Hexagonal Range

134



Product Ref.: ERG4000KE

### Characteristics

- Ergonomic hand tool
- A versatile tool, one frame with a selection of interchangeable dies covers a wide range of shield diameters in the Hexagonal Range
- Most dies have several nests (identified with a number) to allow the crimp of several GSC outer sleeves with the same die set.
- Shure-Stake™ mechanism: once pressing has commenced, the tool can be re-opened only after successful completion of the crimping cycle
- Length: 265 mm, Weight: 550 g
- Packaging: cardboard box containing 1 frame (dies to be ordered separately)

### Dies for ERG4000KE



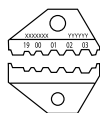
### Characteristics

- Interchangeable dies (hexagonal crimp), with single or multiple nest
- Material: alloy steel
- The dies are marked with the die number
- Each nest is marked with a number to identify the GSC outer sleeves that can be crimped (see table)
- Crimping range (outer sleeves): from GSC101 to GSC425
- Packaging: 1 die set in a cardboard box with Euro slot
- Weight: approx. 50 g
- Packaging size (L x W x H): 45 x 45 x 70mm

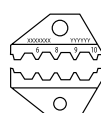
### ERG4000KE die selection chart

Product Ref.	Nest nr.	For connector	Dimension of the nest	Gauge dimensions	
				Ø Go [mm]	Ø No-go [mm]
D-419403	19	GSC101	HEX 2.68	2.63	2.73
	00	GSC128	HEX 3.24	3.19	3.29
	01	GSC149	HEX 3.80	3.75	3.85
	02	GSC156	HEX 4.03	3.98	4.08
	03	GSC175	HEX 4.50	4.45	4.55
D-406410	6	GSC187, GSC194, GSC199	HEX 5.00	4.95	5.05
	8	GSC205, GSC219	HEX 5.36	5.31	5.41
	9	GSC225	HEX 5.56	5.51	5.61
	10	GSC232	HEX 5.84	5.79	5.89
D-411414	11	GSC261	HEX 6.46	6.41	6.51
	12	GSC275	HEX 6.78	6.73	6.83
	14	GSC281, GSC287, GSC297	HEX 7.32	7.27	7.37
D-415417	15	GSC312	HEX 7.74	7.69	7.79
	16	GSC327	HEX 7.86	7.81	7.91
	17	GSC348	HEX 8.32	8.27	8.37
D-450451	50	GSC359	HEX 8.66	8.61	8.71
	51	GSC375	HEX 9.10	9.05	9.15
D-452	52	GSC405, GSC415	HEX 9.72	9.67	9.77
D-454	54	GSC425	HEX 10.88	10.83	10.93

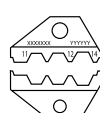
D-419403



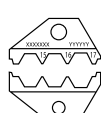
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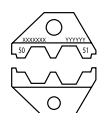
D-411414



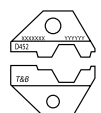
D-415417



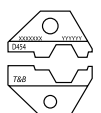
D-450451



D-452

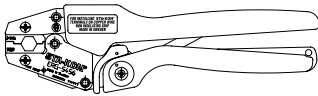


D-454



## Tooling

# Shield-Kon® - Two-piece connector - Hexagonal Range

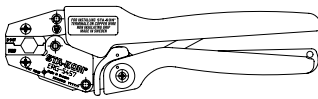


Product Ref.: ERG5456

### Characteristics

- Fixed die, ergonomic hand tool
- Designed to crimp the GSC460 outer sleeve
- Shure-Stake™ mechanism: once pressing has commenced, the tool can be re-opened only after successful completion of the crimping cycle
- Length: 252 mm
- Weight: 460 g
- Packaging: cardboard box containing 1 tool with pre-mounted die set

135



Product Ref.: ERG5457

### Characteristics

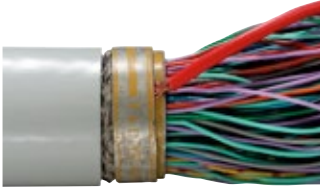
- Fixed die, ergonomic hand tool
- Designed to crimp the GSC500 outer sleeve
- Shure-Stake™ mechanism: once pressing has commenced, the tool can be re-opened only after successful completion of the crimping cycle
- Length: 252 mm
- Weight: 460 g
- Packaging: cardboard box containing 1 tool with pre-mounted die set



## Installation method

# Shield-Kon® - Two-piece connector - Circular Range

136



The "Circular Range", for Multiple or Overall shielded cables, refers to larger diameters of dielectric (between 9.5 and 36 mm) and owes its name to the circular shape of the crimp.

The Shield-Kon® Connector System for multiple-conductor shielded cable is based on the principle of cold swaging. It uses a two-piece compression connector, which is colour-coded to match the proper die. The connector consists of a hard brass collector inner sleeve (ring) and a soft copper compression outer sleeve (ring). Each set of rings and matching installing die will connect a minimum of 5 shielding braids with one ground wire. The maximum number of braids is limited only by the space between the inner and outer rings.

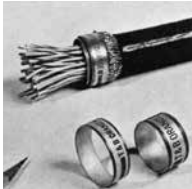
### The design advantages are:

1. Positive selection of inner and outer rings and installing die by a complete colour-coded system.
2. A more reliable grounding termination because only one ground wire connection is made - conventional daisy chain jumper method is eliminated.
3. Smaller, more compact bundle is easy to inspect.
4. Only one ground wire is required, however additional ground wires may be used if needed.
5. Smooth insulator protects conductor insulation.
6. With one stroke of the tool, the interlace die will produce a 360° compression uniformly securing all individual shields around the connector.

### Installation method:



1. After overall insulation is removed to expose shielded cables, each conductor must be freed from the shielding braid. The braid is then folded back until all conductors are freed.



2. Flattened shielding braids are evenly distributed around the periphery of the GSB inner ring.



3. Position the GSC outer ring over the flattened shielding braid, locating it over the centre of the GSB inner ring. Braid may be trimmed even with the edge of the outer compression ring before or after compression. Ground wire or wires may be inserted between the outer ring and the shield prior to compression.

# Connector and die selection

## Shield-Kon® - Two-piece connector - Circular Range



The choice of the appropriate combination of inner ring, outer ring and crimp tool / die will depend on the overall diameter of the inner conductors (underneath the shield)

In the case of the Circular range, there is a direct correlation between the diameter of the inner conductors and the inner and outer rings.

With the directions shown below, a measuring instrument (calliper) is all that is required to make the right selection.

### Selection of the GSB inner ring

- Measure the maximum value of the overall diameter of the inner conductors (underneath the flattened shield) by gently rotating the cable. When doing so, it should be possible to turn the cable easily between the jaws of the calliper
- Add 0.13 mm to the measured value. The sum will give the Inner Diameter (I.D.) of the GSB inner ring
- In the table, select the GSB inner ring having this I.D. or the nearest larger I.D

### Selection of the GSC outer ring and of the die

Once the appropriate GSB inner ring is found, the table hereafter immediately gives the corresponding GSC outer ring and the appropriate die for the 13640 hydraulic head.

### Technical Information

Material: Copper alloy ASTM B135  
 Finish: Electro tin plated (per MIL-T-10727A)  
 Length: 15.2 mm

### Technical Information

Material: Copper ASTM B188  
 Finish: Electro tin plated (per MIL-T-10727A)  
 Length: 11.2 mm

Product Ref. GSB	Colour code	Inner Ø [mm]	Outer Ø [mm]	Product Ref. GSC	Colour code	Inner Ø [mm]	Outer Ø [mm]	Hydraulic crimp head 13640 MIL - Spec.
<b>INNER SLEEVES</b>				<b>OUTER SLEEVES</b>				<b>DIES</b>
GSB 430	Red	10.92	12.70	GSC 590	Red	14.99	17.02	GS590
GSB 550	Blue	13.97	15.75	GSC 710	Blue	18.03	20.07	GS710
GSB 670	Silver	17.02	19.05	GSC 840	Silver	21.34	23.37	GS840
GSB 810	Brown	20.57	22.35	GSC 1010	Brown	25.65	27.61	GS1010
GSB 920	Green	23.37	25.40	GSC 1130	Green	28.70	30.73	GS1130
GSB 1040	Pink	26.42	28.45	GSC 1250	Pink	31.75	33.78	GS1250
GSB 1122	Orange	28.50	30.28	GSC 1332	Orange	33.83	35.87	GS1332
GSB 1224	Purple	31.09	32.87	GSC 1440	Purple	36.58	38.61	GS1440
GSB 1353	Yellow	34.37	36.14	GSC 1563	Yellow	39.70	41.73	GS1563
GSB 1425	Red	36.20	39.24	GSC 1670	Red	42.42	44.45	GS1670

Standard packaging quantity: 50 pcs

# Tooling

## Shield-Kon® - Two-piece connector - Circular Range

138



Product Ref.: 13640

### Characteristics

- Hydraulic tool head
- For all 2-piece Shield-Kon® terminals in the circular range
- Quickly interchangeable steel dies (to be ordered separately)
- 3.5 ton nominal pressure (output)
- Pioneer coupling, for quick assembly
- Requires a 9800 PSI (approx. 676 bar) operating service pressure (input)
- Length: 400 mm approx.
- Weight: 5.5 kg approx.

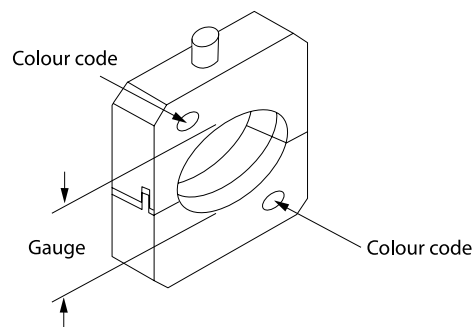
### Dies for 13640

#### Characteristics

- Interchangeable dies with single nest
- Circular crimp
- Material: alloy steel
- Finish: black oxide
- Marked with the die number and a colour-coded dot
- Crimping range (outer sleeves): from GSC590 to GSC1670
- Go/no-go gauges are available for inspection

### 13640 die selection chart

Product Ref.	Gauge Ø		Colour code	For connector	Go / no-go gauge
	Min. [mm]	Max. [mm]			
GS590	14.91	15.16	Red	GSC590	GS590-G
GS710	17.96	18.21	Blue	GSC710	GS710-G
GS840	21.26	21.51	Grey	GSC840	GS840-G
GS1010	24.59	24.84	Brown	GSC1010	GS1010-G
GS1130	27.66	27.91	Green	GSC1130	GS1130-G
GS1250	30.71	30.96	Pink	GSC1250	GS1250-G
GS1332	32.54	32.79	Orange	GSC1332	GS1332-G
GS1440	35.13	35.38	Purple	GSC1440	GS1440-G
GS1563	38.40	38.66	Yellow	GSC1563	GS1563-G
GS1670	41.00	41.25	Red	GSC1670	GS1670-G

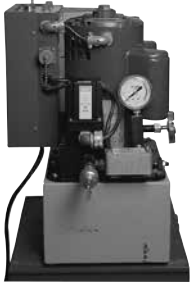


# Tooling

## Shield-Kon® - Two-piece connector - Circular Range

A small selection of pumps to operate the 13640 head is shown below (please contact your Sales Office for availability of other types of pumps).

139



### Product Ref.: 13810E

#### Characteristics

- Hydraulic pump, electrical power
- Service pressure (output): 10.000 psi (690 bar)
- Motor power: 1 1/2 HP - 12 Amp
- Voltage & frequency: 230V - 50 Hz
- Capability: 3800 cc / min at 200 psi (13.8 bar) 1000 cc / min at 8000 psi (552 bar)
- Reservoir volume: 7.6 l
- Coupling: Pioneer fitting
- Dimensions (L x W x H): 275 x 381x 522 mm
- Weight: 27 kg without oil
- The Pump 13810E also requires one 13611 hand switch or one 13612 foot switch and one 13613 hydraulic hose



### Product Ref.: 13606

#### Characteristics

- Hydraulic pump, foot (or hand) activated
- Service pressure (output): 10.000 psi (690 bar)
- Over-pressure security valves
- Coupling: Pioneer fitting
- Dimensions (L x W x H): 597 x 133 x 165 mm
- Weight: 10.4 kg
- The pump 13606 also requires one 13613 hydraulic hose

### Product Ref.: 13611

#### Characteristics

- Hand switch

### Product Ref.: 13612

#### Characteristics

- Foot switch

### Product Ref.: 13613

#### Characteristics

- Hydraulic hose 1.82 m long, with Pioneer couplings

### Product Ref.: 21061

#### Characteristics

- Hydraulic oil (0.95l can)

# Contact

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