

# Waterproof Breakaway Streetlight Connector & Splice Insulating Kits

- Safe and easy installation in five minutes or less
- No special equipment necessary – requires only a knife, wire stripper and crimp tool
- Unique wire entry port, cut-off design accommodates industry’s widest range of insulation diameters
- Fewer parts than competitive brands for better waterproof protection
- Built-in break-away design eliminates de-energization of complete circuits
- Safely separates upon impact without breaking wires – eliminates potential danger and electrical shock (breakaway models)
- Unique 2-in-1 one-piece crimp barrel accommodates industry’s widest range of conductors (breakaway models)
- Spring-loaded contacts compensate for thermal expansion to maintain integrity of waterproof connection (breakaway models)



## Application Guide

### Examples of Several Kit Configurations

#### For Poles with Transformer Bases, Standard Bases and Junction Boxes

##### Underground Feed Phase to Phase

Configurations	Comments
• D65 dual in-line for phases and two 84 or 84S kits for taps	Recommended
• Two 82 or 82S Y-Tap Kits for phases and taps	Cost-effective
• Two BTS4 B-CAP® Twist & Seal Wire Connectors	Non-breakaway, small gauge (8 AWG and above). See Wire Connector section.

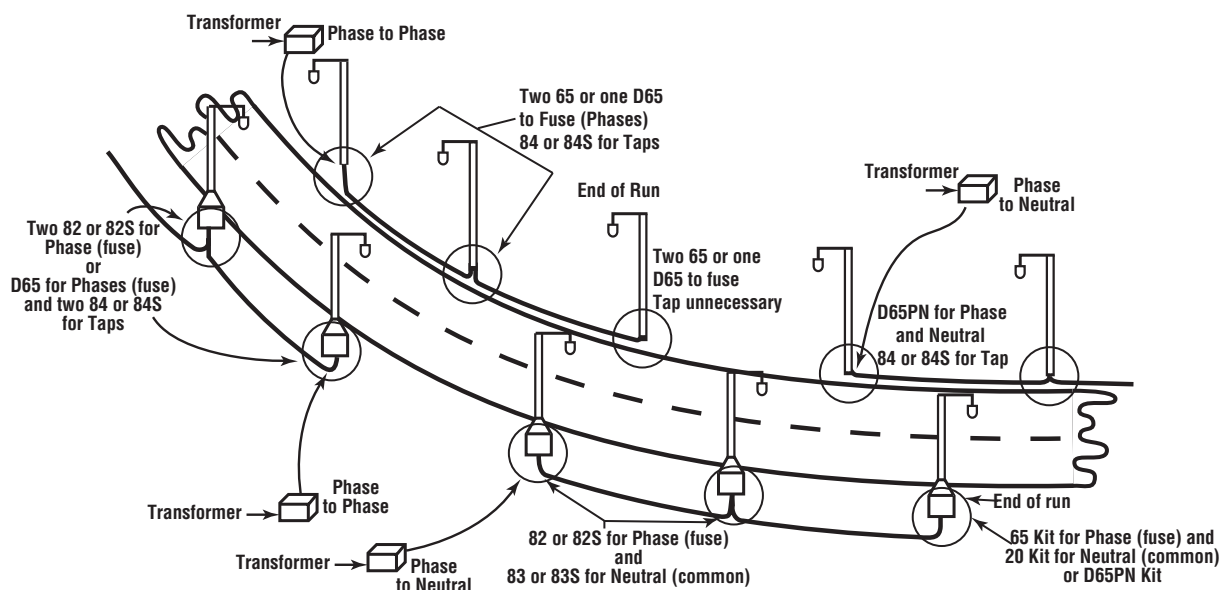
##### Underground Feed Phase to Neutral

Configurations	Comments
• D65PN dual in-line for phase and neutral and Two 84 or 84S kits for tap	Recommended configuration
• One 82 or 82S Y-Tap Kit for phase and tap and one 83 or 83S Y-Tap Kit for neutral and tap	Cost-effective
• Two BTS4 B-CAP® Twist & Seal Wire Connectors	Non-breakaway, small gauge (8 AWG and above). See Wire Connector section.

#### For Lights Mounted to Utility Poles, etc...

##### Overhead Feed

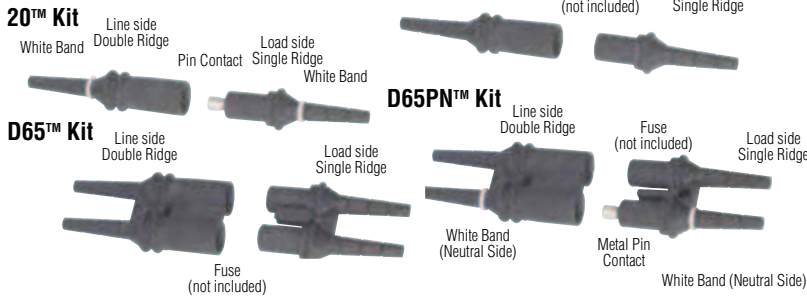
• Two B-Tap® Insulation Piercing Connectors for phase and/or tap (for insulated conductors only)	Recommended configuration, see B-Tap® Insulation Piercing Connectors in this catalog.
--------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------



## Ordering Information

Use the following chart and table to determine the correct part number by choosing model, line side, and load side ordering codes from the shaded columns. See example below, right (Page A-27).

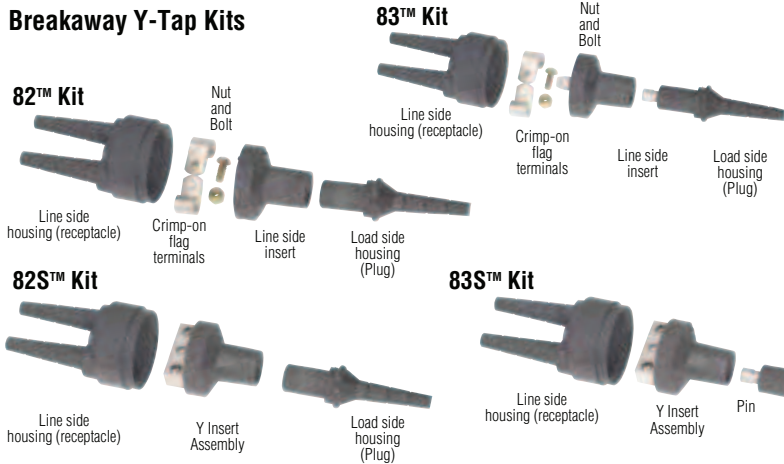
### Breakaway In-Line Kits



## MODEL

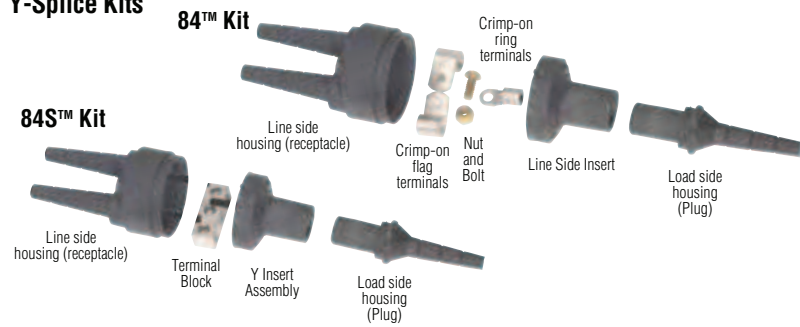
Application	Electrical Rating	Ordering Code
In-Line Neutral Non-Fused Breakaway	30 Amp 600 Volt	20 -
In-Line Phase Fused Breakaway	1/10-30 Amp 600 Volt	65 -
Dual In-Line Phase Fused Breakaway	1/10-30 Amp 600 Volt	D65 -
Dual In-Line Phase & Neutral Fused Breakaway	1/10-30 Amp Phase 30 Amp Neutral 600 Volt	D65PN -

### Breakaway Y-Tap Kits



Application	Electrical Rating	Ordering Code
Crimped Phase Fused Tap & Run	1/10-30 Amp 600 Volt	82 -
Crimp Neutral Non-Fused Tap & Run	125 Amp Line 30 Amp Load 600 Volt	83 -
Set Screw Phase Fused Tap & Run	1/10-30 Amp 600 Volt	82S -
Set Screw Neutral Non-Fused Tap & Run	70 Amp Line 30 Amp Load 600 Volt	83S -

### Y-Splice Kits



Application	Electrical Rating	Ordering Code
Crimp Splice Tap & Run	150 Amp 600 Volt	84 -
Set Screw Splice Tap & Run	70 Amp 600 Volt	84S -

Excerpts of the 1996 NEC Tables 5 & 5A Dimensions of Insulated Conductors and Fixture Wires									
Size (AWG)	Approx. Diameter in Inches for Insulation Types:						Approx. Diameter in Inches for Compact AL with Insulation Types:		
	RH	RHH, RHW-2, RHW	TW	THHW, THW-2	THHN, THWN, THWN-2	XHH, XHHW, XHHW-2	THW, THHW	THHN	XHHW
14	0.163	0.193	0.133	0.163	0.111	0.133	-	-	-
12	0.182	0.212	0.152	0.182	0.130	0.152	-	-	-
10	0.236	0.236	0.176	0.206	0.164	0.176	-	-	-
8	0.326	0.326	0.236	0.266	0.216	0.236	0.255	-	0.224
6	0.364	0.364	0.304	0.304	0.254	0.274	0.290	0.240	0.260
4	0.412	0.412	0.352	0.352	0.324	0.322	0.335	0.305	0.305
3	0.440	0.440	0.380	0.380	0.352	0.350	-	-	-
2	0.472	0.472	0.412	0.412	0.384	0.382	0.390	0.360	0.360
1	0.582	0.582	0.492	0.492	0.446	0.442	0.465	0.415	0.415
1/0	0.622	0.622	0.532	0.532	0.486	0.482	0.500	0.450	0.450

LINE SIDE				LOAD SIDE				
Insulation Diameter Range (Inches)	Stranded* Conductor Size (AWG)	Type	Ordering Code (CHOOSE 1)	Insulation Diameter Range (Inches)	Equivalent Conductor (See Table)	Stranded* Conductor Size (AWG)	Type	Ordering Code (CHOOSE 1)
	12-6	Copper Crimp	U -			12-6	Copper Crimp	U
.120-.430	12-6	Aluminum Crimp	UA -	.120-.430	1	12-6	Aluminum Crimp	UA
	4 or 2	Copper Crimp	LC -			4 or 2	Copper Crimp	LC
	4 or 2	Aluminum Crimp	LA -			4 or 2	Aluminum Crimp	LA

**NOTE: It is not necessary to use the load side ordering code if it is the same as the line side code, i.e., a 65U-U is ordered as a 65U.**

Insulation Diameter Range (Inches)	Ordering Code (CHOOSE 1)	Stranded* Conductor Size (AWG)	Type	Ordering Code (CHOOSE 1)	Insulation Diameter Range (Inches)	Equivalent Conductor (See Table)	Stranded* Conductor Size (AWG)	Type	Ordering Code (CHOOSE 1)	
.155-.430	ADB	10	Copper Crimp	6 -	.120-.430	1	12-6	Copper Crimp	C	
		8	Copper Crimp	4 -			12-6	Aluminum Crimp	A	
		6	Copper Crimp	3 -			4 or 2	Copper Crimp	LC	
		4	Copper Crimp	2 -						
.420-.785	EAFB	2	Copper Crimp	1 -						
		1	Copper Crimp	0 -						
		1/0	Copper Crimp	10 -						
.155-.430		ADB	10	Terminal Block with Set Screws Copper or Alum. Conductors	1 -	.120-.430	1	12-6	Copper Crimp	C
			8		1 -			12-6	Aluminum Crimp	A
	6		1 -		4 or 2			Copper Crimp	LC	
	4		1 -		4 or 2			Aluminum Crimp	LA	
.420-.785	EAFB	2	Terminal Block with Set Screws Copper or Alum. Conductors	1 -						
		1		10 -						
		1/0		10 -						

Insulation Diameter Range (Inches)	Ordering Code (CHOOSE 1)	Stranded* Conductor Size (AWG)	Type	Ordering Code (CHOOSE 1)	Insulation Diameter Range (Inches)	Equivalent Conductor (See Table)	Conductor Size (AWG)	Type	Ordering Code (CHOOSE 1)	
.155-.430	ADB	10	Copper Crimp	6 -	.120-.430	1	10	Copper Crimp	6	
		8	Copper Crimp	4 -			8	Copper Crimp	4	
		6	Copper Crimp	3 -			6	Copper Crimp	3	
		4	Copper Crimp	2 -			4	Copper Crimp	2	
.420-.785	EAFB	2	Copper Crimp	1 -			2	Copper Crimp	1	
		1	Copper Crimp	0 -			1	Copper Crimp	0	
		1/0	Copper Crimp	10 -						
.155-.430		ADB	10	Terminal Block	1 -	.120-.430	1	10-2	Terminal Block Copper or Aluminum Conductors	N/A
			8		1 -					
1 -	4		1 -							
.420-.785	EAFB	2	Terminal Block with Set Screws Copper or Alum. Conductors	1 -						
		1		10 -						
		1/0		10 -						

75°C / 600 Volts Max.



LR32565

NOTE:  
Fused kits require a 13/32" x 1 1/2" fuse. **DO NOT USE GLASS OR INDICATING TYPES.**  
Waterproof or direct burial wire is recommended. **THHN is NOT recommended.**

\* For solid wire: 14-4 AWG, use codes U, UA, C, or A. 2 AWG, use codes LC or LA.

**Example:**

A Y-Tap Kit with set screws for a 2 AWG phase line side conductor with a diameter of .472" and a 10 AWG copper load side conductor is ordered as an 82S-EAFB1-C.