



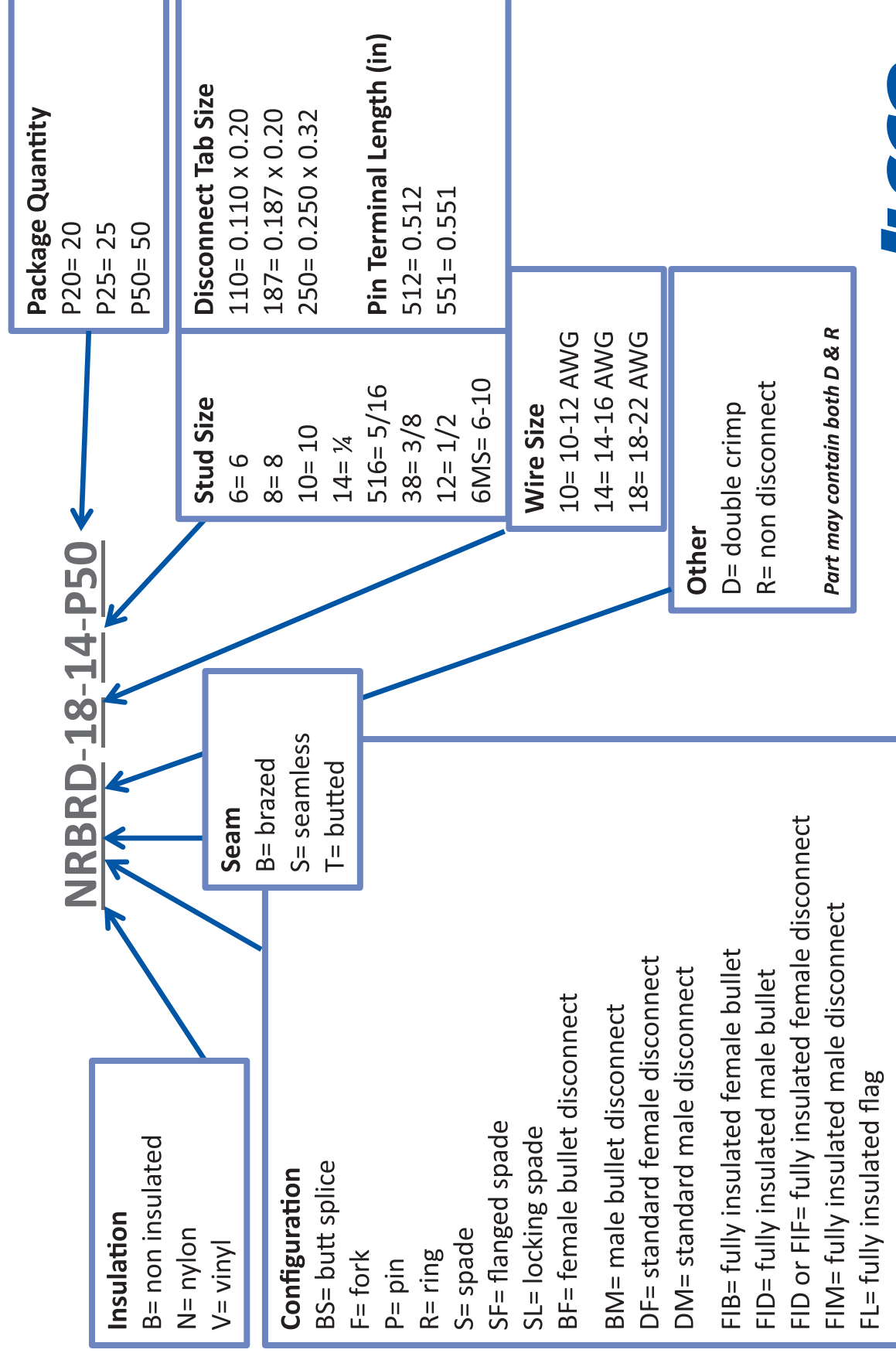
# **New Products**

## **Catalog Supplement**

**Includes Products Introduced  
After April 15, 2015**



## Connector Identification / Numbering System:



# Wire Tie (WT) and Tie Mount (TM) Connector Identification / Numbering System:

WT-040-018-N
WT-055-040-N
WT-075-050-N
WT-110-050-N
WT-145-050-N
WT-170-050-N
WT-240-175-N
WT-360-175-N
WT-480-175-N
WT-040-018-B
WT-055-040-B
WT-075-050-B
WT-110-050-B
WT-145-050-B
WT-170-050-B
WT-240-175-B
WT-360-175-B
WT-480-175-B
TM-075-N
TM-100-N

**WT-040-018-N**

**Color**  
N= neutral  
B= black

**Tensile strength**  
018= 18 lbs  
040= 40 lbs  
050= 50 lbs  
175= 175 lbs

**Length (inches)**  
040= 4 inches  
055= 5.5 inches  
075= 7.5 inches  
110= 11 inches  
145= 14.5 inches  
170= 17 inches  
240= 24 inches  
360= 36 inches  
480= 48 inches

**WT=prefix for all  
new cable ties**

**TM-075-N**

**Color**  
N= neutral

**Width (inches)**  
075= 0.75  
100= 1.0

**TM= prefix for all  
new tie mounts**

# Table of Contents

<b>Cool Seal</b> .....	1	<b>Wire Markers</b>	
<b>Splices - Insulated</b> .....	2	Wire Marker Books .....	.31
<b>Ring Terminals –Standard</b>		Wire Marker Slide On/Snap On .....	.32
non-insulated .....	.3	Wire Marker Cassette .....	.33
nylon insulated .....	.4	Wire Marker Kit .....	.34
vinyl insulated .....	.5	<b>Cable Ties &amp; Mounts</b> .....	.35
nylon insulated, heavy duty double crimp ..	.6	<b>SBJ</b> .....	.36
<b>Ring Terminals- Multi stud</b> .....	.7	<b>SGB</b> .....	.37
<b>Spade Terminals</b>		<b>ATTA</b> .....	.38
non-insulated .....	.8	<b>ATAU</b> .....	.39
nylon insulated .....	.9	<b>PBHD</b> .....	.40
vinyl insulated .....	.10	<b>PBMW</b> .....	.41
nylon insulated, heavy duty double crimp ..	.11	<b>ALNS</b> .....	.42
<b>Locking Spade Terminals</b>		<b>ALND</b> .....	.43
non-insulated .....	.12	<b>ALNN</b> .....	.44-45
nylon insulated .....	.13	<b>ASN</b> .....	.46
vinyl insulated .....	.14	<b>SCNM</b> .....	.47
nylon insulated, heavy duty double crimp ..	.15	<b>NBST</b> .....	.48
<b>Flanged Spade Terminals</b>		<b>FX</b> .....	.49-50
non-insulated .....	.16	<b>STREETWISE</b>	
nylon insulated .....	.17	PEDSS .....	.51
vinyl insulated .....	.18	STLSS .....	.52
nylon insulated, heavy duty double crimp ..	.19	<b>SURGENCY - Surge Protective Device</b>	
<b>Fork Terminals</b>		Series RE .....	.53
non-insulated .....	.20	Series SE - Type 1 .....	.54
nylon insulated .....	.21	Series SE - Type 2 .....	.55
vinyl insulated .....	.22	Series XE - Type 1 .....	.56
nylon insulated, heavy duty double crimp ..	.23	Series XE - Type 2 .....	.57
<b>Disconnect Terminals</b>			
Standard Female .....	.24		
Standard Male .....	.25		
Fully Insulated .....	.26		
Fully Insulated, Flag .....	.27		
Bullet .....	.28		
<b>Pin Terminals- Insulated</b> .....	.29		
<b>Tools</b> .....	.30		

## TYPE ILSCONS

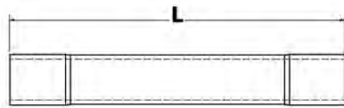
### Features

- Butted configuration
- Uses an innovative anaerobic encapsulated sealant that is heatless and solderless
- Locks out moisture and air
- Nylon insulation
- Manufactured from high strength copper alloy
- Seamless barrel
- Color coded

- UL Listed for 600 volts, 105° C

### Benefits

- Provides fast, easy wire insertion in limited space applications, simply strip and crimp
- An environmentally sealed connection which can be installed in a fraction of the time of comparable heat seal connectors
- Prevents corrosion
- Increased puncture, heat and chemical resistant qualities for more demanding applications
- Provides maximum conductivity
- Maximum crimp connection to prevent wire pull-out
- Provide easy wire range identification
  - #18-22 AWG Red
  - #14-16 AWG Blue
  - #10-12 AWG Yellow
- Ensures reliability for copper conductor



Catalog Number	Wire Range	Length - in. (mm)	Installation Tool ILST-22K	Package Quantity
CSBS-18-P50	18-22	1.000 (25.40)	Die Set A	50
CSBS-14-P50	14-16	1.031 (26.19)	Die Set A	50
CSBS-10-P25	10-12	1.500 (38.10)	Die Set A	25

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)  
Tested to UL 486 C, UL File E6207

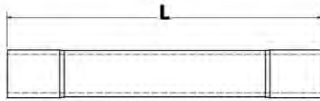
## TYPE ILSCONS

### Features

- Butted configuration
- Internal wire stops
- Funnel wire entry
- Vinyl Insulation - VBST, VBSS
- Nylon Insulation - NBSS
- Color coded
- Manufactured from high strength copper alloy
- Electro-tin plated
- Seamless barrel - VBSS, NBSS
- UL Listed, see ratings in chart below

### Benefits

- Provides fast, easy wire insertion in limited space applications, simply strip and crimp
- Ensures proper insertion length
- Smooth wire insertion into barrel
- Provides corrosion resistance and strain relief
- Increased heat and chemical resistant qualities for more demanding applications
- Provide easy wire range identification
  - #18-22 AWG Red
  - #14-16 AWG Blue
  - #10-12 AWG Yellow
- Offers maximum conductivity
- Provides low contact resistance
- Maximum crimp connection to prevent wire pull-out
- Ensures reliability for copper conductor



Catalog Number	Wire Range	Voltage Rating	Temperature Rating	Length - in. (mm)		Installation Tool ILST-22K	Package Quantity
<b>VBST- Vinyl-Insulated- Butted</b>							
VBST-18-P50	18-22	600 V	75° C	0.969	(24.61)	Die Set A	50
VBST-14-P50	14-16	600 V	75° C	0.969	(24.61)	Die Set A	50
VBST-10-P25	10-12	600 V	75° C	1.043	(26.49)	Die Set A	25
<b>VBSS- Vinyl-Insulated- Seamless</b>							
VBSS-18-P50	18-22	600 V	75° C	0.953	(24.21)	Die Set A	50
VBSS-14-P50	14-16	600 V	75° C	0.953	(24.21)	Die Set A	50
VBSS-10-P25	10-12	600 V	75° C	1.024	(26.01)	Die Set A	25
<b>NBSS- Nylon-Insulated-Seamless</b>							
NBSS-18-P50	18-22	600 V	105° C	0.992	(25.20)	Die Set A	50
NBSS-14-P50	14-16	600 V	105° C	0.992	(25.20)	Die Set A	50
NBSS-10-P25	10-12	600 V	105° C	1.110	(28.19)	Die Set A	25

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)  
Tested to UL 486A/B, UL File E6207

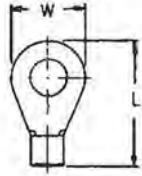
## TYPE ILSCONS

### Features

- Ring tongue
- Manufactured from high strength copper alloy
- Electro-tin plated
- Funnel wire entry
- Brazed barrel
- UL Listed

### Benefits

- Secure termination that cannot be removed unless the mounting screw is removed
- Offers maximum conductivity
- Provides low contact resistance
- Smooth wire insertion into barrel
- Stronger crimp connection that will not split open, prevents wire pull out
- Ensures reliability for copper conductor



Catalog Number	Wire Range	Stud Size	Dimensions - in. (mm)				Installation Tool ILST-22K	Package Quantity
			L		W			
BRBR-18-6-P50	18-22	6	0.622	(15.8)	0.315	(8.0)	Die Set D1322	50
BRBR-18-8-P50	18-22	8	0.622	(15.8)	0.315	(8.0)	Die Set D1322	50
BRBR-18-10-P50	18-22	10	0.622	(15.8)	0.315	(8.0)	Die Set D1322	50
BRBR-18-14-P50	18-22	1/4	0.858	(21.8)	0.457	(11.6)	Die Set D1322	50
BRBR-18-516-P50	18-22	5/16	0.858	(21.8)	0.457	(11.6)	Die Set D1322	50
BRBR-18-38-P25	18-22	3/8	1.004	(25.5)	0.535	(13.6)	Die Set D1322	25
BRBR-14-6-P50	14-16	6	0.504	(12.8)	0.260	(6.6)	Die Set D1322	50
BRBR-14-8-P50	14-16	8	0.650	(16.5)	0.335	(8.5)	Die Set D1322	50
BRBR-14-10-P50	14-16	10	0.650	(16.5)	0.335	(8.5)	Die Set D1322	50
BRBR-14-14-P50	14-16	1/4	0.858	(21.8)	0.472	(12.0)	Die Set D1322	50
BRBR-14-516-P50	14-16	5/16	0.858	(21.8)	0.472	(12.0)	Die Set D1322	50
BRBR-14-38-P25	14-16	3/8	1.004	(25.5)	0.535	(13.6)	Die Set D1322	25
BRBR-14-12-P50	14-16	1/2	1.197	(30.4)	0.756	(19.2)	Die Set D1322	50
BRBR-10-6-P50	10-12	6	0.748	(19.0)	0.374	(9.5)	Die Set D1322	50
BRBR-10-8-P50	10-12	8	0.748	(19.0)	0.374	(9.5)	Die Set D1322	50
BRBR-10-10-P50	10-12	10	0.748	(19.0)	0.374	(9.5)	Die Set D1322	50
BRBR-10-14-P50	10-12	1/4	0.886	(22.5)	0.472	(12.0)	Die Set D1322	50
BRBR-10-516-P50	10-12	5/16	1.063	(27.0)	0.591	(15.0)	Die Set D1322	50
BRBR-10-38-P25	10-12	3/8	1.063	(27.0)	0.591	(15.0)	Die Set D1322	25
BRBR-10-12-P25	10-12	1/2	1.244	(31.6)	0.756	(19.2)	Die Set D1322	25

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)  
Tested to UL 486A/B, UL File E6207

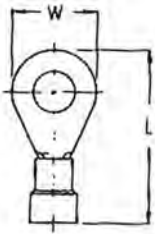
## TYPE ILSCONS

### Features

- Ring tongue
- Funnel wire entry
- Nylon insulation
- Color coded
- Manufactured from high strength copper alloy
- Electro-tin plated
- Brazed barrel
- UL Listed for 600 volts, 105° C

### Benefits

- Secure termination that cannot be removed unless the mounting screw is removed
- Smooth wire insertion into barrel
- Increased heat and chemical resistant qualities for more demanding applications
- Provide easy wire range identification
  - #18-22 AWG Red
  - #14-16 AWG Blue
  - #10-12 AWG Yellow
- Offers maximum conductivity
- Provides low contact resistance
- Stronger crimp connection that will not split open, prevents wire pull out
- Ensures reliability for copper conductor



Catalog Number	Wire Range	Stud Size	Dimensions - in. (mm)				Installation Tool ILST-22K	Package Quantity
			L		W			
NRBR-18-6-P50	18-22	6	0.858	(21.8)	0.315	(8.0)	Die Set A	50
NRBR-18-8-P50	18-22	8	0.858	(21.8)	0.315	(8.0)	Die Set A	50
NRBR-18-10-P50	18-22	10	1.094	(27.8)	0.457	(11.6)	Die Set A	50
NRBR-18-14-P50	18-22	1/4	1.094	(27.8)	0.457	(11.6)	Die Set A	50
NRBR-18-516-P50	18-22	5/16	1.094	(27.8)	0.457	(11.6)	Die Set A	50
NRBR-18-38-P25	18-22	3/8	1.240	(31.5)	0.535	(13.6)	Die Set A	25
NRBR-14-6-P50	14-16	6	0.898	(22.8)	0.335	(8.5)	Die Set A	50
NRBR-14-8-P50	14-16	8	0.898	(22.8)	0.355	(9.0)	Die Set A	50
NRBR-14-10-P50	14-16	10	0.898	(22.8)	0.355	(9.0)	Die Set A	50
NRBR-14-14-P50	14-16	1/4	1.094	(27.8)	0.472	(12.0)	Die Set A	50
NRBR-14-516-P50	14-16	5/16	1.094	(27.8)	0.472	(12.0)	Die Set A	50
NRBR-14-38-P25	14-16	3/8	1.240	(31.5)	0.535	(13.6)	Die Set A	25
NRBR-14-12-P25	14-16	1/2	1.433	(36.4)	0.512	(13.0)	Die Set A	25
NRBR-10-6-P25	10-12	6	0.894	(22.7)	0.283	(7.2)	Die Set A	25
NRBR-10-8-P25	10-12	8	1.024	(26.0)	0.374	(9.5)	Die Set A	25
NRBR-10-10-P25	10-12	10	1.024	(26.0)	0.374	(9.5)	Die Set A	25
NRBR-10-14-P25	10-12	1/4	1.161	(29.5)	0.472	(12.0)	Die Set A	25
NRBR-10-516-P25	10-12	5/16	1.339	(34.0)	0.591	(15.0)	Die Set A	25
NRBR-10-38-P25	10-12	3/8	1.339	(34.0)	0.591	(15.0)	Die Set A	25
NRBR-10-12-P20	10-12	1/2	1.520	(38.6)	0.756	(19.2)	Die Set A	20

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)  
Tested to UL 486A/B, UL File E6207



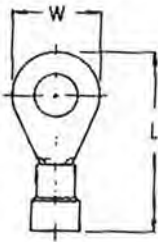
### TYPE ILSCONS

#### Features

- Ring tongue
- Funnel wire entry
- Vinyl insulation
- Color coded
- Manufactured from high strength copper alloy
- Electro-tin plated
- Brazed barrel
- UL Listed for 600 volts, 105° C

#### Benefits

- Secure termination that cannot be removed unless the mounting screw is removed
- Smooth wire insertion into barrel
- Provides corrosion resistance and strain relief
- Provide easy wire range identification
  - #18-22 AWG Red
  - #14-16 AWG Blue
  - #10-12 AWG Yellow
- Offers maximum conductivity
- Provides low contact resistance
- Stronger crimp connection that will not split open, prevents wire pull out
- Ensures reliability for copper conductor



Catalog Number	Wire Range	Stud Size	Dimensions - in. (mm)			Installation Tool ILST-22K	Package Quantity	
			L		W			
VRBR-18-4-P50	18-22	4	0.689	(17.5)	0.217	(5.5)	Die Set A	50
VRBR-18-6-P50	18-22	6	0.819	(20.8)	0.315	(8.0)	Die Set A	50
VRBR-18-8-P50	18-22	8	0.819	(20.8)	0.315	(8.0)	Die Set A	50
VRBR-18-10-P50	18-22	10	1.055	(26.8)	0.457	(11.6)	Die Set A	50
VRBR-18-14-P50	18-22	1/4	1.055	(26.8)	0.457	(11.6)	Die Set A	50
VRBR-18-516-P50	18-22	5/16	1.055	(26.8)	0.457	(11.6)	Die Set A	50
VRBR-18-38-P25	18-22	3/8	1.201	(30.5)	0.535	(13.6)	Die Set A	25
VRBR-14-6-P50	14-16	6	0.858	(21.8)	0.335	(8.5)	Die Set A	50
VRBR-14-8-P50	14-16	8	0.858	(21.8)	0.335	(8.5)	Die Set A	50
VRBR-14-10-P50	14-16	10	0.858	(21.8)	0.335	(8.5)	Die Set A	50
VRBR-14-14-P50	14-16	1/4	1.055	(26.8)	0.472	(12.0)	Die Set A	50
VRBR-14-516-P50	14-16	5/16	1.055	(26.8)	0.472	(12.0)	Die Set A	50
VRBR-14-38-P25	14-16	3/8	1.201	(30.5)	0.535	(13.6)	Die Set A	25
VRBR-14-12-P25	14-16	1/2	1.394	(35.4)	0.756	(19.2)	Die Set A	25
VRBR-10-6-P25	10-12	6	0.894	(22.7)	0.283	(7.2)	Die Set A	25
VRBR-10-8-P25	10-12	8	1.024	(26.0)	0.374	(9.5)	Die Set A	25
VRBR-10-10-P25	10-12	10	1.024	(26.0)	0.374	(9.5)	Die Set A	25
VRBR-10-14-P25	10-12	1/4	1.161	(29.5)	0.472	(12.0)	Die Set A	25
VRBR-10-516-P25	10-12	5/16	1.339	(34.0)	0.591	(15.0)	Die Set A	25
VRBR-10-38-P25	10-12	3/8	1.339	(34.0)	0.591	(15.0)	Die Set A	25
VRBR-10-12-P25	10-12	1/2	1.520	(38.6)	0.756	(19.2)	Die Set A	25

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)  
Tested to UL 486A/B, UL File E6207

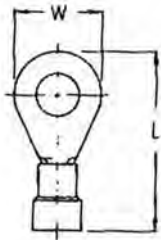
### TYPE ILSCONS

#### Features

- Ring tongue
- Barrel allows for two crimps
- Funnel wire entry
- Nylon insulation
- Color coded
- Manufactured from high strength copper alloy
- Electro-tin plated
- Brazed barrel
- UL Listed for 600 volts, 105° C

#### Benefits

- Secure termination that cannot be removed unless the mounting screw is removed
- Provides strain relief, prevents exposure of wire conductors
- Smooth wire insertion into barrel
- Increased heat and chemical resistant qualities for more demanding applications
- Provide easy wire range identification
  - #18-22 AWG Red
  - #14-16 AWG Blue
  - #10-12 AWG Yellow
- Offers maximum conductivity
- Provides low contact resistance
- Stronger crimp connection that will not split open, prevents wire pull out
- Ensures reliability for copper conductor



Catalog Number	Wire Range	Stud Size	Dimensions - in. (mm)			Installation Tool ILST-22K	Package Quantity
			L		W		
NRBRD-18-6-P50	18-22	6	0.858	(21.8)	0.315 (8.0)	Die Set B	50
NRBRD-18-8-P50	18-22	8	0.858	(21.8)	0.315 (8.0)	Die Set B	50
NRBRD-18-10-P50	18-22	10	1.094	(27.8)	0.457 (11.6)	Die Set B	50
NRBRD-18-14-P50	18-22	1/4	1.094	(27.8)	0.457 (11.6)	Die Set B	50
NRBRD-18-516-P50	18-22	5/16	1.094	(27.8)	0.457 (11.6)	Die Set B	50
NRBRD-18-38-P50	18-22	3/8	1.240	(31.5)	0.535 (13.6)	Die Set B	50
NRBRD-14-6-P50	14-16	6	0.898	(22.8)	0.335 (8.5)	Die Set B	50
NRBRD-14-8-P50	14-16	8	0.898	(22.8)	0.335 (8.5)	Die Set B	50
NRBRD-14-10-P50	14-16	10	0.898	(22.8)	0.335 (8.5)	Die Set B	50
NRBRD-14-14-P50	14-16	1/4	1.094	(27.8)	0.472 (12.0)	Die Set B	50
NRBRD-14-516-P50	14-16	5/16	1.094	(27.8)	0.472 (12.0)	Die Set B	50
NRBRD-14-38-P50	14-16	3/8	1.240	(31.5)	0.535 (13.6)	Die Set B	50
NRBRD-14-12-P50	14-16	1/2	1.433	(36.4)	0.756 (19.2)	Die Set B	50
NRBRD-10-6-P25	10-12	6	0.894	(22.7)	0.283 (7.2)	Die Set B	25
NRBRD-10-8-P25	10-12	8	1.024	(26.0)	0.374 (9.5)	Die Set B	25
NRBRD-10-10-P25	10-12	10	1.024	(26.0)	0.374 (9.5)	Die Set B	25
NRBRD-10-14-P25	10-12	1/4	1.161	(29.5)	0.472 (12.0)	Die Set B	25
NRBRD-10-516-P25	10-12	5/16	1.339	(34.0)	0.591 (15.0)	Die Set B	25
NRBRD-10-38-P25	10-12	3/8	1.339	(34.0)	0.591 (15.0)	Die Set B	25
NRBRD-10-12-P20	10-12	1/2	1.520	(38.6)	0.756 (19.2)	Die Set B	20

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)  
Tested to UL 486A/B, UL File E6207

## TYPE ILSCONS

### Features

- Ring tongue
- Multi-stud shape permits use with #6, #8, or #10 mounting screw
- Barrel allows for two crimps - NRBRD
- Funnel wire entry
- Vinyl insulation
- Nylon insulation
- Color coded
- Manufactured from high strength copper alloy
- Electro-tin plated
- Brazed barrel
- UL Listed for 600 volts, 105° C

### Benefits

- Secure termination that cannot be removed unless the mounting screw is removed
- Versatile with multiple mounting screw sizes
- Provides strain relief, prevents exposure of wire conductors
- Smooth wire insertion into barrel
- Provides corrosion resistance and strain relief
- Increased heat and chemical resistant qualities for more demanding applications
- Provide easy wire range identification
  - #18-22 AWG Red
  - #14-16 AWG Blue
  - #10-12 AWG Yellow
- Offers maximum conductivity
- Provides low contact resistance
- Stronger crimp connection that will not split open, prevents wire pull out
- Ensures reliability for copper conductor

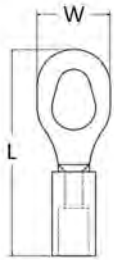


Fig. 1



Fig. 2



Fig. 3

Catalog Number	Figure Number	Wire Range	Stud Size	Dimensions - in. (mm)				Installation Tool ILST-22K	Package Quantity
				L	W				
<b>BRBR- Non-Insulated</b>									
BRBR-18-6MS-P50	1	18-22	#6-10	0.786	(19.96)	0.339	(8.61)	Die Set D1322	50
BRBR-14-6MS-P50	1	14-16	#6-10	0.786	(19.96)	0.339	(8.61)	Die Set D1322	50
BRBR-10-6MS-P50	1	10-12	#6-10	0.886	(22.50)	0.390	(9.91)	Die Set D1322	50
<b>VRBR- Vinyl-Insulated</b>									
VRBR-18-6MS-P50	2	18-22	#6-10	0.957	(24.31)	0.339	(8.61)	Die Set A	50
VRBR-14-6MS-P50	2	14-16	#6-10	0.957	(24.31)	0.339	(8.61)	Die Set A	50
VRBR-10-6MS-P25	2	10-12	#6-10	1.154	(29.31)	0.390	(9.91)	Die Set A	25
<b>NRBR- Nylon-Insulated</b>									
NRBR-18-6MS-P50	2	18-22	#6-10	0.996	(25.30)	0.339	(8.61)	Die Set A	50
NRBR-14-6MS-P50	2	14-16	#6-10	0.996	(25.30)	0.339	(8.61)	Die Set A	50
NRBR-10-6MS-P25	2	10-12	#6-10	1.154	(29.31)	0.390	(9.91)	Die Set A	25
<b>NRBRD- Nylon-Insulated-Double Crimp</b>									
NRBRD-18-6MS-P50	3	18-22	#6-10	0.996	(25.30)	0.339	(8.61)	Die Set B	50
NRBRD-14-6MS-P50	3	14-16	#6-10	0.996	(25.30)	0.339	(8.61)	Die Set B	50
NRBRD-10-6MS-P25	3	10-12	#6-10	1.154	(29.31)	0.390	(9.91)	Die Set B	25

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)  
Tested to UL 486A/B, UL File E6207

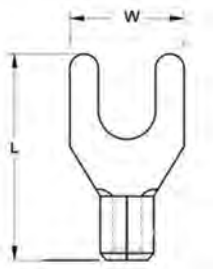
## TYPE ILSCONS

### Features

- Spade configuration
- Funnel wire entry
- Manufactured from high strength copper alloy
- Electro-tin plated
- Brazed barrel
- UL Listed

### Benefits

- Same benefit as the fork configuration, but with the added benefit of sides that are able to lie flat against barrier portion of terminal blocks
- Smooth wire insertion into barrel
- Offers maximum conductivity
- Provides low contact resistance
- Stronger crimp connection that will not split open, prevents wire pull out
- Ensures reliability for copper conductor



Catalog Number	Wire Range	Stud Size	Dimensions - in. (mm)				Installation Tool ILST-22K	Package Quantity
			L		W			
BSBR-18-4-P50	18-22	4	0.630	(16.0)	0.224	(5.7)	Die Set A	50
BSBR-18-6-P50	18-22	6	0.630	(16.0)	0.283	(7.2)	Die Set A	50
BSBR-18-8-P50	18-22	8	0.630	(16.0)	0.319	(8.1)	Die Set A	50
BSBR-18-10-P50	18-22	10	0.630	(16.0)	0.374	(9.5)	Die Set A	50
BSBR-14-6-P50	14-16	6	0.630	(16.0)	0.283	(7.2)	Die Set A	50
BSBR-14-8-P50	14-16	8	0.630	(16.0)	0.319	(8.1)	Die Set A	50
BSBR-14-10-P50	14-16	10	0.630	(16.0)	0.366	(9.3)	Die Set A	50
BSBR-14-14-P50	14-16	1/4	0.630	(16.0)	0.366	(9.3)	Die Set A	50
BSBR-10-6-P50	10-12	6	0.728	(18.5)	0.327	(8.3)	Die Set A	50
BSBR-10-8-P50	10-12	8	0.720	(18.3)	0.327	(8.3)	Die Set A	50
BSBR-10-10-P50	10-12	10	0.720	(18.3)	0.354	(9.0)	Die Set A	50
BSBR-10-14-P50	10-12	1/4	0.965	(24.5)	0.472	(12.0)	Die Set A	50
BSBR-10-516-P50	10-12	5/16	0.925	(23.5)	0.551	(14.0)	Die Set A	50

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)  
Tested to UL 486A/B, UL File E6207

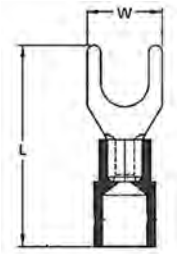
### TYPE ILSCONS

#### Features

- Spade configuration
- Funnel wire entry
- Nylon insulation
- Color coded
- Manufactured from high strength copper alloy
- Electro-tin plated
- Brazed barrel
- UL Listed for 600 volts, 105° C

#### Benefits

- Same benefit as the fork configuration, but with the added benefit of sides that are able to lie flat against barrier portion of terminal blocks
- Smooth wire insertion into barrel
- Increased heat and chemical resistant qualities for more demanding applications
- Provide easy wire range identification
  - #18-22 AWG Red
  - #14-16 AWG Blue
  - #10-12 AWG Yellow
- Offers maximum conductivity
- Provides low contact resistance
- Stronger crimp connection that will not split open, prevents wire pull out
- Ensures reliability for copper conductor



Catalog Number	Wire Range	Stud Size	Dimensions - in. (mm)			Installation Tool ILST-22K	Package Quantity	
			L	W				
NSBR-18-6-P50	18-22	6	0.866	(22.0)	0.283	(7.2)	Die Set A	50
NSBR-18-8-P50	18-22	8	0.866	(22.0)	0.319	(8.1)	Die Set A	50
NSBR-18-10-P50	18-22	10	0.866	(22.0)	0.374	(9.5)	Die Set A	50
NSBR-18-14-P50	18-22	1/4	1.102	(28.0)	0.472	(12.0)	Die Set A	50
NSBR-14-6-P50	14-16	6	0.866	(22.0)	0.283	(7.2)	Die Set A	50
NSBR-14-8-P50	14-16	8	0.866	(22.0)	0.311	(7.9)	Die Set A	50
NSBR-14-10-P50	14-16	10	0.866	(22.0)	0.366	(9.3)	Die Set A	50
NSBR-14-14-P50	14-16	1/4	1.102	(28.0)	0.472	(12.0)	Die Set A	50
NSBR-10-6-P25	10-12	6	1.004	(25.5)	0.327	(8.3)	Die Set A	25
NSBR-10-8-P25	10-12	8	1.004	(25.5)	0.327	(8.3)	Die Set A	25
NSBR-10-10-P25	10-12	10	1.004	(25.5)	0.354	(9.0)	Die Set A	25
NSBR-10-14-P25	10-12	1/4	1.240	(31.5)	0.472	(12.0)	Die Set A	25
NSBR-10-516-P25	10-12	1/3	1.201	(30.5)	0.551	(14.0)	Die Set A	25

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)  
Tested to UL 486A/B, UL File E6207

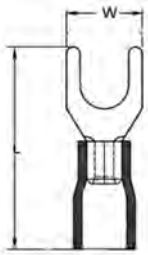
### TYPE ILSCONS

#### Features

- Spade configuration
- Funnel wire entry
- Vinyl insulation
- Color coded
- Manufactured from high strength copper alloy
- Electro-tin plated
- Brazed barrel
- UL Listed for 600 volts, 75° C

#### Benefits

- Same benefit as fork configuration, but with the added benefit of sides that are able to lie flat against barrier portion of terminal blocks
- Smooth wire insertion into barrel
- Provides corrosion resistance and strain relief
- Provide easy wire range identification
  - #18-22 AWG Red
  - #14-16 AWG Blue
  - #10-12 AWG Yellow
- Offers maximum conductivity
- Provides low contact resistance
- Stronger crimp connection that will not split open, prevents wire pull out
- Ensures reliability for copper conductor



Catalog Number	Wire Range	Stud Size	Dimensions - in. (mm)				Installation Tool ILST-22K	Package Quantity
			L		W			
VsBR-18-4-P50	18-22	4	0.827	(21.0)	0.224	(5.7)	Die Set A	50
VsBR-18-6-P50	18-22	6	0.827	(21.0)	0.283	(7.2)	Die Set A	50
VsBR-18-8-P50	18-22	8	0.827	(21.0)	0.319	(8.1)	Die Set A	50
VsBR-18-10-P50	18-22	10	0.827	(21.0)	0.374	(9.5)	Die Set A	50
VsBR-18-14-P50	18-22	1/4	1.063	(27.0)	0.472	(12.0)	Die Set A	50
VsBR-14-6-P50	14-16	6	0.827	(21.0)	0.283	(7.2)	Die Set A	50
VsBR-14-8-P50	14-16	8	0.827	(21.0)	0.311	(7.9)	Die Set A	50
VsBR-14-10-P50	14-16	10	0.827	(21.0)	0.366	(9.3)	Die Set A	50
VsBR-14-14-P50	14-16	1/4	1.063	(27.0)	0.472	(12.0)	Die Set A	50
VsBR-10-6-P25	10-12	6	1.004	(25.5)	0.327	(8.3)	Die Set A	25
VsBR-10-8-P25	10-12	8	1.004	(25.5)	0.327	(8.3)	Die Set A	25
VsBR-10-10-P25	10-12	10	1.004	(25.5)	0.354	(9.0)	Die Set A	25
VsBR-10-14-P25	10-12	1/4	1.240	(31.5)	0.472	(12.0)	Die Set A	25
VsBR-10-516-P25	10-12	5	1.201	(30.5)	0.551	(14.0)	Die Set A	25

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)  
Tested to UL 486A/B, UL File E6207

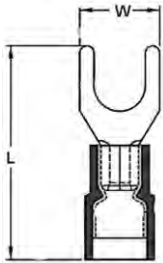
### TYPE ILSCONS

#### Features

- Spade configuration
- Barrel allows for two crimps
- Funnel wire entry
- Nylon insulation
- Color coded
- Manufactured from high strength copper alloy
- Electro-tin plated
- Brazed barrel
- UL Listed for 600 volts, 105° C

#### Benefits

- Same benefit as the fork configuration, but with the added benefit of sides that are able to lie flat against barrier portion of terminal blocks
- Provides strain relief, prevents exposure of wire conductors
- Smooth wire insertion into barrel
- Increased heat and chemical resistant qualities for more demanding applications
- Provide easy wire range identification
  - #18-22 AWG Red
  - #14-16 AWG Blue
  - #10-12 AWG Yellow
- Offers maximum conductivity
- Provides low contact resistance
- Stronger crimp connection that will not split open, prevents wire pull out
- Ensures reliability for copper conductor



Catalog Number	Wire Range	Stud Size	Dimensions - in. (mm)			Installation Tool ILST-22K	Package Quantity
			L	W			
NSBRD-18-6-P50	18-22	6	0.866	(22.0)	0.283 (7.2)	Die Set B	50
NSBRD-18-8-P50	18-22	8	0.866	(22.0)	0.319 (8.1)	Die Set B	50
NSBRD-18-10-P50	18-22	10	0.866	(22.0)	0.374 (9.5)	Die Set B	50
NSBRD-14-6-P50	14-16	6	0.866	(22.0)	0.283 (7.2)	Die Set B	50
NSBRD-14-8-P50	14-16	8	0.866	(22.0)	0.311 (7.9)	Die Set B	50
NSBRD-14-10-P50	14-16	10	0.866	(22.0)	0.366 (9.3)	Die Set B	50
NSBRD-14-14-P50	14-16	1/4	1.102	(28.0)	0.472 (12.0)	Die Set B	50
NSBRD-10-6-P25	10-12	6	1.004	(25.5)	0.327 (8.3)	Die Set B	25
NSBRD-10-8-P25	10-12	8	1.004	(25.5)	0.327 (8.3)	Die Set B	25
NSBRD-10-10-P25	10-12	10	1.004	(25.5)	0.354 (9.0)	Die Set B	25
NSBRD-10-14-P25	10-12	1/4	1.240	(31.5)	0.472 (12.0)	Die Set B	25
NSBRD-10-516-P25	10-12	5/16	1.201	(30.5)	0.551 (14.0)	Die Set B	25

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)  
Tested to UL 486A/B, UL File E6207

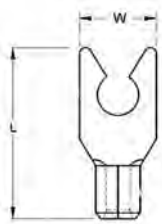
### TYPE ILSCONS

#### Features

- Locking spade configuration
- Funnel wire entry
- Manufactured from high strength copper alloy
- Electro-tin plated
- Brazed barrel
- UL Listed

#### Benefits

- Specially designed tongue that allows the ILSCON to go on like a fork, and stay on like a ring
- Smooth wire insertion into barrel
- Offers maximum conductivity
- Provides low contact resistance
- Stronger crimp connection that will not split open, prevents wire pull out
- Ensures reliability for copper conductor



Catalog Number	Wire Range	Stud Size	Dimensions - in. (mm)			Installation Tool ILST-22K	Package Quantity	
			L		W			
BSLBR-18-6-P50	18-22	6	0.630	(16.0)	0.252	(6.4)	Die Set D1322	50
BSLBR-18-8-P50	18-22	8	0.630	(16.0)	0.319	(8.1)	Die Set D1322	50
BSLBR-18-10-P50	18-22	10	0.630	(16.0)	0.374	(9.5)	Die Set D1322	50
BSLBR-14-6-P50	14-16	6	0.630	(16.0)	0.236	(6.0)	Die Set D1322	50
BSLBR-14-8-P50	14-16	8	0.630	(16.0)	0.319	(8.1)	Die Set D1322	50
BSLBR-14-10-P50	14-16	10	0.630	(16.0)	0.366	(9.3)	Die Set D1322	50
BSLBR-10-6-P50	10-12	6	0.720	(18.3)	0.307	(7.8)	Die Set D1322	50
BSLBR-10-8-P50	10-12	8	0.717	(18.2)	0.327	(8.3)	Die Set D1322	50
BSLBR-10-10-P50	10-12	10	0.717	(18.2)	0.354	(9.0)	Die Set D1322	50
BSLBR-10-14-P50	10-12	1/4	0.965	(24.5)	0.472	(12.0)	Die Set D1322	50

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)  
Tested to UL 486A/B, UL File E6207



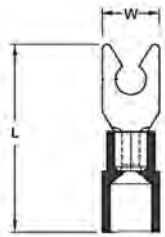
## TYPE ILSCONS

### Features

- Locking spade configuration
- Funnel wire entry
- Nylon insulation
- Color coded
- Manufactured from high strength copper alloy
- Electro-tin plated
- Brazed barrel
- UL Listed for 600 volts, 105° C

### Benefits

- Specially designed tongue that allows the ILSCON to go on like a fork, and stay on like a ring
- Smooth wire insertion into barrel
- Increased heat and chemical resistant qualities for more demanding applications
- Provide easy wire range identification
  - #18-22 AWG Red
  - #14-16 AWG Blue
  - #10-12 AWG Yellow
- Offers maximum conductivity
- Provides low contact resistance
- Stronger crimp connection that will not split open, prevents wire pull out
- Ensures reliability for copper conductor



Catalog Number	Wire Range	Stud Size	Dimensions - in. (mm)				Installation Tool ILST-22K	Package Quantity
			L		W			
NSLBR-18-6-P50	18-22	6	0.866	(22.0)	0.252	(6.4)	Die Set A	50
NSLBR-18-8-P50	18-22	8	0.866	(22.0)	0.319	(8.1)	Die Set A	50
NSLBR-18-10-P50	18-22	10	0.866	(22.0)	0.374	(9.5)	Die Set A	50
NSLBR-14-6-P50	14-16	6	0.866	(22.0)	0.236	(6.0)	Die Set A	50
NSLBR-14-8-P50	14-16	8	0.866	(22.0)	0.319	(8.1)	Die Set A	50
NSLBR-14-10-P50	14-16	10	0.866	(22.0)	0.366	(9.3)	Die Set A	50
NSLBR-10-6-P25	10-12	6	0.992	(25.2)	0.327	(8.3)	Die Set A	25
NSLBR-10-8-P25	10-12	8	0.992	(25.2)	0.327	(8.3)	Die Set A	25
NSLBR-10-10-P25	10-12	10	0.992	(25.2)	0.354	(9.0)	Die Set A	25
NSLBR-10-14-P25	10-12	1/4	1.240	(31.5)	0.472	(12.0)	Die Set A	25

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)  
Tested to UL 486A/B, UL File E6207

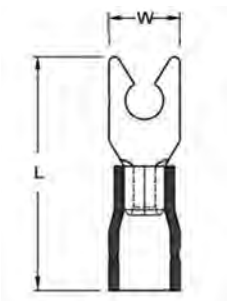
### TYPE ILSCONS

#### Features

- Locking spade configuration
- Funnel wire entry
- Vinyl insulation
- Color coded
- Manufactured from high strength copper alloy
- Electro-tin plated
- Brazed barrel
- UL Listed for 600 volts, 75° C

#### Benefits

- Specially designed tongue that allows the ILSCON to go on like a fork, and stay on like a ring
- Smooth wire insertion into barrel
- Provides corrosion resistance and strain relief
- Provide easy wire range identification
  - #18-22 AWG Red
  - #14-16 AWG Blue
  - #10-12 AWG Yellow
- Offers maximum conductivity
- Provides low contact resistance
- Stronger crimp connection that will not split open, prevents wire pull out
- Ensures reliability for copper conductor



Catalog Number	Wire Range	Stud Size	Dimensions - in. (mm)				Installation Tool ILST-22K	Package Quantity
			L		W			
VSLBR-18-6-P50	18-22	6	0.827	(21.0)	0.252	(6.4)	Die Set A	50
VSLBR-14-6-P50	14-16	6	0.827	(21.0)	0.236	(6.0)	Die Set A	50
VSLBR-14-10-P50	14-16	10	0.827	(21.0)	0.366	(9.3)	Die Set A	50
VSLBR-10-6-P25	10-12	6	0.992	(25.2)	0.327	(8.3)	Die Set A	25
VSLBR-10-8-P25	10-12	8	0.992	(25.2)	0.327	(8.3)	Die Set A	25
VSLBR-10-10-P25	10-12	10	0.992	(25.2)	0.354	(9.0)	Die Set A	25
VSLBR-10-14-P25	10-12	1/4	1.240	(31.5)	0.472	(12.0)	Die Set A	25

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)  
Tested to UL 486A/B, UL File E6207

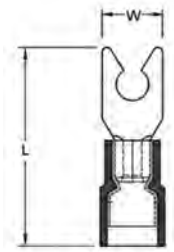
### TYPE ILSCONS

#### Features

- Locking spade configuration
- Barrel allows for two crimps
- Funnel wire entry
- Nylon insulation
- Color coded
- Manufactured from high strength copper alloy
- Electro-tin plated
- Brazed barrel
- UL Listed for 600 volts, 105° C

#### Benefits

- Specially designed tongue that allows the ILSCON to go on like a fork, and stay on like a ring
- Provides strain relief, prevents exposure of wire conductors
- Smooth wire insertion into barrel
- Increased heat and chemical resistant qualities for more demanding applications
- Provide easy wire range identification
  - #18-22 AWG Red
  - #14-16 AWG Blue
  - #10-12 AWG Yellow
- Offers maximum conductivity
- Provides low contact resistance
- Stronger crimp connection that will not split open, prevents wire pull out
- Ensures reliability for copper conductor



Catalog Number	Wire Range	Stud Size	Dimensions - in. (mm)				Installation Tool ILST-22K	Package Quantity
			L		W			
NSLBRD-18-6-P50	18-22	6	0.866	(22.0)	0.252	(6.4)	Die Set B	50
NSLBRD-18-8-P50	18-22	8	0.866	(22.0)	0.319	(8.1)	Die Set B	50
NSLBRD-18-10-P50	18-22	10	0.866	(22.0)	0.374	(9.5)	Die Set B	50
NSLBRD-14-6-P50	14-16	6	0.866	(22.0)	0.236	(6.0)	Die Set B	50
NSLBRD-14-8-P50	14-16	8	0.866	(22.0)	0.319	(8.1)	Die Set B	50
NSLBRD-14-10-P50	14-16	10	0.866	(22.0)	0.366	(9.3)	Die Set B	50
NSLBRD-10-6-P25	10-12	6	0.992	(25.2)	0.327	(8.3)	Die Set B	25
NSLBRD-10-8-P25	10-12	8	0.992	(25.2)	0.327	(8.3)	Die Set B	25
NSLBRD-10-10-P25	10-12	10	0.992	(25.2)	0.354	(9.0)	Die Set B	25
NSLBRD-10-14-P25	10-12	1/4	1.240	(31.5)	0.472	(12.0)	Die Set B	25

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)  
Tested to UL 486A/B, UL File E6207

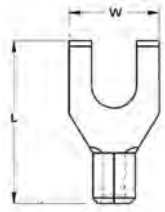
### TYPE ILSCONS

#### Features

- Spade configuration
- Flanged design
- Funnel wire entry
- Manufactured from high strength copper alloy
- Electro-tin plated
- Brazed barrel
- UL Listed

#### Benefits

- Same benefit as the fork configuration, but with the added benefit of sides that are able to lie flat against barrier portion of terminal blocks
- Provides extra secure connection on a variety of applications
- Smooth wire insertion into barrel
- Offers maximum conductivity
- Provides low contact resistance
- Stronger crimp connection that will not split open, prevents wire pull out
- Ensures reliability for copper conductor



Catalog Number	Wire Range	Stud Size	Dimensions - in. (mm)				Installation Tool ILST-22K	Package Quantity
			L		W			
BSFBR-18-6-P50	18-22	6	0.551	(14.0)	0.295	(7.5)	Die Set D1322	50
BSFBR-18-8-P50	18-22	8	0.768	(19.5)	0.335	(8.5)	Die Set D1322	50
BSFBR-18-10-P50	18-22	10	0.768	(19.5)	0.335	(8.5)	Die Set D1322	50
BSFBR-14-6-P50	14-16	6	0.709	(18.0)	0.295	(7.5)	Die Set D1322	50
BSFBR-14-8-P50	14-16	8	0.709	(18.0)	0.335	(8.5)	Die Set D1322	50
BSFBR-14-10-P50	14-16	10	0.709	(18.0)	0.335	(8.5)	Die Set D1322	50
BSFBR-10-6-P50	10-12	6	0.787	(20.0)	0.335	(8.5)	Die Set D1322	50
BSFBR-10-8-P50	10-12	8	0.787	(20.0)	0.335	(8.5)	Die Set D1322	50
BSFBR-10-10-P50	10-12	10	0.787	(20.0)	0.335	(8.5)	Die Set D1322	50

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)  
Tested to UL 486A/B, UL File E6207

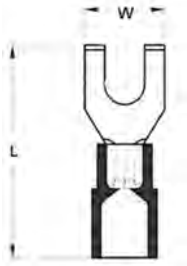
### TYPE ILSCONS

#### Features

- Spade configuration
- Flanged design
- Funnel wire entry
- Nylon insulation
- Color coded
- Manufactured from high strength copper alloy
- Electro-tin plated
- Brazed barrel
- UL Listed for 600 volts, 105° C

#### Benefits

- Same benefit as the fork configuration, but with the added benefit of sides that are able to lie flat against barrier portion of terminal blocks
- Provides extra secure connection on a variety of applications
- Smooth wire insertion into barrel
- Increased heat and chemical resistant qualities for more demanding applications
- Provide easy wire range identification
  - #18-22 AWG Red
  - #14-16 AWG Blue
  - #10-12 AWG Yellow
- Offers maximum conductivity
- Provides low contact resistance
- Stronger crimp connection that will not split open, prevents wire pull out
- Ensures reliability for copper conductor



Catalog Number	Wire Range	Stud Size	Dimensions - in. (mm)			Installation Tool ILST-22K	Package Quantity	
			L		W			
NSFBR-18-6-P50	18-22	6	0.787	(20.0)	0.295	(7.5)	Die Set A	50
NSFBR-18-8-P50	18-22	8	1.004	(25.5)	0.335	(8.5)	Die Set A	50
NSFBR-18-10-P50	18-22	10	1.004	(25.5)	0.335	(8.5)	Die Set A	50
NSFBR-14-6-P50	14-16	6	0.807	(20.5)	0.295	(7.5)	Die Set A	50
NSFBR-14-8-P50	14-16	8	0.945	(24.0)	0.335	(8.5)	Die Set A	50
NSFBR-14-10-P50	14-16	10	0.945	(24.0)	0.335	(8.5)	Die Set A	50
NSFBR-10-6-P25	10-12	6	1.063	(27.0)	0.335	(8.5)	Die Set A	25
NSFBR-10-8-P25	10-12	8	1.063	(27.0)	0.335	(8.5)	Die Set A	25
NSFBR-10-10-P25	10-12	10	1.063	(27.0)	0.335	(8.5)	Die Set A	25

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)  
Tested to UL 486A/B, UL File E6207

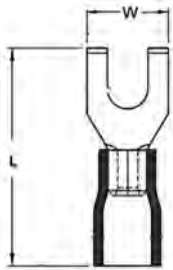
### TYPE ILSCONS

#### Features

- Spade configuration
- Flanged design
- Funnel wire entry
- Vinyl insulation
- Color coded
- Manufactured from high strength copper alloy
- Electro-tin plated
- Brazed barrel
- UL Listed for 600 volts, 105° C

#### Benefits

- Same benefit as fork configuration, but with the added benefit of sides that are able to lie flat against the barrier portion of terminal blocks
- Provides extra secure connection on a variety of applications
- Smooth wire insertion into barrel
- Provides corrosion resistance and strain relief
- Provide easy wire range identification
  - #18-22 AWG Red
  - #14-16 AWG Blue
  - #10-12 AWG Yellow
- Offers maximum conductivity
- Provides low contact resistance
- Stronger crimp connection that will not split open, prevents wire pull out
- Ensures reliability for copper conductor



Catalog Number	Wire Range	Stud Size	Dimensions - in. (mm)						Installation Tool ILST-22K	Package Quantity
			L		W		Maximum Wire Insulated Diameter			
VSFBR-18-6-P50	18-22	6	0.748	(19.0)	0.295	(7.5)	0.157	(4.0)	Die Set A	50
VSFBR-18-8-P50	18-22	8	0.748	(19.0)	0.295	(7.5)	0.157	(4.0)	Die Set A	50
VSFBR-18-10-P50	18-22	10	0.965	(24.5)	0.335	(8.5)	0.157	(4.0)	Die Set A	50
VSFBR-14-6-P50	14-16	6	0.748	(19.0)	0.295	(7.5)	0.177	(4.5)	Die Set A	50
VSFBR-14-8-P50	14-16	8	0.906	(23.0)	0.335	(8.5)	0.177	(4.5)	Die Set A	50
VSFBR-14-10-P50	14-16	10	0.906	(23.0)	0.335	(8.5)	0.177	(4.5)	Die Set A	50
VSFBR-10-6-P25	10-12	6	1.063	(27.0)	0.335	(8.5)	0.252	(6.4)	Die Set A	25
VSFBR-10-8-P25	10-12	8	1.063	(27.0)	0.335	(8.5)	0.252	(6.4)	Die Set A	25
VSFBR-10-10-P25	10-12	10	1.063	(27.0)	0.335	(8.5)	0.252	(6.4)	Die Set A	25

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)  
Tested to UL 486A/B, UL File E6207

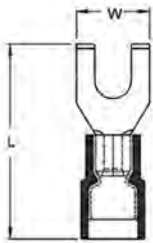
### TYPE ILSCONS

#### Features

- Spade configuration
- Flanged design
- Barrel allows for two crimps
- Funnel wire entry
- Nylon insulation
- Color coded
- Manufactured from high strength copper alloy
- Electro-tin plated
- Brazed barrel
- UL Listed for 600 volts, 105° C

#### Benefits

- Same benefit as the fork configuration, but with the added benefit of sides that are able to lie flat against barrier portion of terminal blocks
- Provides extra secure connection on a variety of applications
- Provides strain relief, prevents exposure of wire conductors
- Smooth wire insertion into barrel
- Increased heat and chemical resistant qualities for more demanding applications
- Provide easy wire range identification
  - #18-22 AWG Red
  - #14-16 AWG Blue
  - #10-12 AWG Yellow
- Offers maximum conductivity
- Provides low contact resistance
- Stronger crimp connection that will not split open, prevents wire pull out
- Ensures reliability for copper conductor



Catalog Number	Wire Range	Stud Size	Dimensions - in. (mm)			Installation Tool ILST-22K	Package Quantity	
			L		W			
NSFBRD-18-6-P50	18-22	6	0.787	(20.0)	0.295	(7.5)	Die Set B	50
NSFBRD-18-8-P50	18-22	8	1.004	(25.5)	0.335	(8.5)	Die Set B	50
NSFBRD-18-10-P50	18-22	10	1.004	(25.5)	0.335	(8.5)	Die Set B	50
NSFBRD-14-6-P50	14-16	6	0.807	(20.5)	0.295	(7.5)	Die Set B	50
NSFBRD-14-8-P50	14-16	8	0.945	(24.0)	0.335	(8.5)	Die Set B	50
NSFBRD-14-10-P50	14-16	10	0.945	(24.0)	0.335	(8.5)	Die Set B	50
NSFBRD-10-6-P25	10-12	6	1.063	(27.0)	0.335	(8.5)	Die Set B	25
NSFBRD-10-8-P25	10-12	8	1.063	(27.0)	0.335	(8.5)	Die Set B	25
NSFBRD-10-10-P25	10-12	10	1.063	(27.0)	0.335	(8.5)	Die Set B	25

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)  
Tested to UL 486A/B, UL File E6207

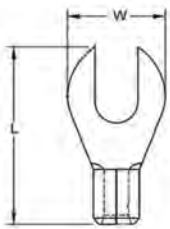
### TYPE ILSCONS

#### Features

- Fork configuration
- Funnel entry
- Manufactured from high strength copper alloy
- Electro-tin plated
- Brazed barrel
- UL Listed

#### Benefits

- Allows easy installation since mounting screw needs only to be loosened
- Smooth wire insertion into barrel
- Offers maximum conductivity
- Provides low contact resistance
- Stronger crimp connection that will not split open, prevents wire pull out
- Ensures reliability for copper conductor



Catalog Number	Wire Range	Stud Size	Dimensions - in. (mm)			Installation Tool ILST-22K	Package Quantity
			L		W		
BFBR-18-6-P50	18-22	6	0.531	(13.5)	0.260 (6.6)	Die Set D1322	50
BFBR-18-8-P50	18-22	8	0.583	(14.8)	0.315 (8.0)	Die Set D1322	50
BFBR-18-10-P50	18-22	10	0.567	(14.4)	0.315 (8.0)	Die Set D1322	50
BFBR-18-14-P50	18-22	1/4	0.799	(20.3)	0.457 (11.6)	Die Set D1322	50
BFBR-14-6-P50	14-16	6	0.531	(13.5)	0.260 (6.6)	Die Set D1322	50
BFBR-14-8-P50	14-16	8	0.626	(15.9)	0.335 (8.5)	Die Set D1322	50
BFBR-14-10-P50	14-16	10	0.614	(15.6)	0.374 (9.5)	Die Set D1322	50
BFBR-14-14-P50	14-16	1/4	0.807	(20.5)	0.472 (12.0)	Die Set D1322	50
BFBR-10-8-P50	10-12	8	0.563	(14.3)	0.283 (7.2)	Die Set D1322	50
BFBR-10-10-P50	10-12	10	0.732	(18.6)	0.374 (9.5)	Die Set D1322	50
BFBR-10-14-P50	10-12	1/4	0.835	(21.2)	0.472 (12.0)	Die Set D1322	50

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)  
Tested to UL 486A/B, UL File E6207



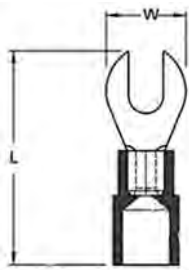
## TYPE ILSCONS

### Features

- Fork configuration
- Funnel wire entry
- Nylon insulation
- Color coded
- Manufactured from high strength copper alloy
- Electro-tin plated
- Brazed barrel
- UL Listed for 600 volts, 105° C

### Benefits

- Allows easy installation since mounting screw needs only to be loosened
- Smooth wire insertion into barrel
- Increased heat and chemical resistant qualities for more demanding applications
- Provide easy wire range identification
  - #18-22 AWG Red
  - #14-16 AWG Blue
  - #10-12 AWG Yellow
- Offers maximum conductivity
- Provides low contact resistance
- Stronger crimp connection that will not split open, prevents wire pull out
- Ensures reliability for copper conductor



Catalog Number	Wire Range	Stud Size	Dimensions - in. (mm)				Installation Tool ILST-22K	Package Quantity
			L	W	Maximum Wire Insulated Diameter			
NFBR-18-14-P50	18-22	1/4	1.035 (26.3)	0.457 (11.6)	0.157 (4.0)		Die Set D1322	50
NFBR-14-6-P50	14-16	6	0.768 (19.5)	0.260 (6.6)	0.177 (4.5)		Die Set D1322	50
NFBR-14-14-P50	14-16	1/4	1.043 (26.5)	0.472 (12.0)	0.177 (4.5)		Die Set D1322	50
NFBR-10-14-P25	10-12	1/4	1.110 (28.2)	0.472 (12.0)	0.252 (6.4)		Die Set D1322	50

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)  
Tested to UL 486A/B, UL File E6207

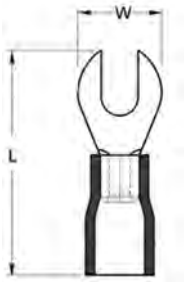
### TYPE ILSCONS

#### Features

- Fork configuration
- Funnel wire entry
- Vinyl insulation
- Color coded
- Manufactured from high strength copper alloy
- Electro-tin plated
- Brazed barrel
- UL Listed for 600 volts, 105° C

#### Benefits

- Allows easy installation since mounting screw needs only to be loosened
- Smooth wire insertion into barrel
- Provides corrosion resistance and strain relief
- Provide easy wire range identification
  - #18-22 AWG Red
  - #14-16 AWG Blue
  - #10-12 AWG Yellow
- Offers maximum conductivity
- Provides low contact resistance
- Stronger crimp connection that will not split open, prevents wire pull out
- Ensures reliability for copper conductor



Catalog Number	Wire Range	Stud Size	Dimensions - in. (mm)				Installation Tool	Package Quantity
			L		W			
VFBR-18-14-P50	18-22	1/4	0.996	(25.3)	0.457	(11.6)	Die Set A	50
VFBR-14-14-P50	14-16	1/4	1.004	(25.5)	0.472	(12.0)	Die Set A	50
VFBR-10-14-P25	10-12	1/4	1.110	(28.2)	0.472	(12.0)	Die Set A	25

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)  
Tested to UL 486A/B, UL File E6207

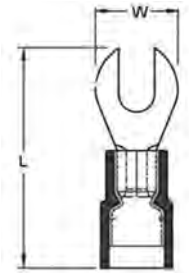
### TYPE ILSCONS

#### Features

- Fork tongue
- Barrel allows for two crimps
- Funnel wire entry
- Nylon insulation
- Color coded
- Manufactured from high strength copper alloy
- Electro-tin plated
- Brazed barrel
- UL Listed for 600 volts, 105° C

#### Benefits

- Allows easy installation since mounting screw needs only to be loosened
- Provides strain relief, prevents exposure of wire conductors
- Smooth wire insertion into barrel
- Increased heat and chemical resistant qualities for more demanding applications
- Provide easy wire range identification
  - #18-22 AWG Red
  - #14-16 AWG Blue
  - #10-12 AWG Yellow
- Offers maximum conductivity
- Provides low contact resistance
- Stronger crimp connection that will not split open, prevents wire pull out
- Ensures reliability for copper conductor



Catalog Number	Wire Range	Stud Size	Dimensions - in. (mm)				Installation Tool ILST-22K	Package Quantity
			L		W			
NFBRD-18-6-P50	18-22	6	0.768	(19.5)	0.260	(6.6)	Die Set B	50
NFBRD-18-14-P50	18-22	1/4	1.035	(26.3)	0.457	(11.6)	Die Set B	50
NFBRD-14-8-P50	14-16	8	0.862	(21.9)	0.335	(8.5)	Die Set B	50
NFBRD-14-14-P50	14-16	1/4	1.047	(26.6)	0.472	(12.0)	Die Set B	50
NFBRD-10-8-P25	10-12	8	0.839	(21.3)	0.283	(7.2)	Die Set B	25
NFBRD-10-10-P25	10-12	10	1.008	(25.6)	0.374	(9.5)	Die Set B	25
NFBRD-10-14-P25	10-12	1/4	1.110	(28.2)	0.472	(12.0)	Die Set B	25

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)

Tested to UL 486A/B, UL File E6207

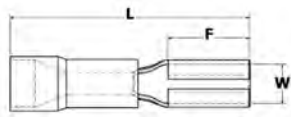
### TYPE ILSCONS

#### Features

- Female disconnect configuration
- Barrel allows for two crimps - NDFTD
- Funnel wire entry
- Vinyl insulation - VDFT
- Nylon insulation - NDFT, NDFTD
- Color coded
- Manufactured from high strength brass alloy
- Electro-tin plated
- UL Listed

#### Benefits

- Allows for fast, reliable, convenient connection to male tab without the use of tools
- Provides strain relief, prevents exposure of wire conductors
- Smooth wire insertion into barrel
- Provides corrosion resistance and strain relief
- Increased heat and chemical resistant qualities for more demanding applications
- Provide easy wire range identification
  - #18-22 AWG Red
  - #14-16 AWG Blue
  - #10-12 AWG Yellow
- Offers maximum conductivity
- Provides low contact resistance
- Ensures reliability for brass conductor



Catalog Number	Wire Range	Voltage Rating	Temperature Rating	Dimensions - in. (mm)			Tab Size	Installation Tool ILST-22K	Package Quantity
				L	W	F			
<b>VDFT- Vinyl Insulated- Female</b>									
VDFT-18-110-P50	18-22	300 V	75° C	0.732 (18.59)	0.126 (3.20)	0.256 (6.50)	.110 x .020	Die Set C	50
VDFT-18-187-P50	18-22	300 V	75° C	0.748 (19.00)	0.197 (5.00)	0.252 (6.40)	.187 x .020	Die Set C	50
VDFT-18-250-P50	18-22	300 V	75° C	0.807 (20.50)	0.260 (6.60)	0.295 (7.49)	.250 x .032	Die Set C	50
VDFT-14-110-P50	14-16	300 V	75° C	0.732 (18.59)	0.126 (3.20)	0.256 (6.50)	.110 x .020	Die Set C	50
VDFT-14-187-P50	14-16	300 V	75° C	0.748 (19.00)	0.197 (5.00)	0.252 (6.40)	.187 x .020	Die Set C	50
VDFT-14-250-P50	14-16	300 V	75° C	0.807 (20.50)	0.260 (6.60)	0.295 (7.49)	.250 x .032	Die Set C	50
VDFT-10-250-P25	10-12	300 V	75° C	0.925 (23.50)	0.260 (6.60)	0.295 (7.49)	.250 x .032	Die Set C	25
<b>NDFT- Nylon-Insulated- Female</b>									
NDFT-18-110-P50	18-22	300 V	105° C	0.772 (19.61)	0.126 (3.20)	0.256 (6.50)	.110 x .020	Die Set C	50
NDFT-18-187-P50	18-22	300 V	105° C	0.787 (19.99)	0.197 (5.00)	0.252 (6.40)	.187 x .020	Die Set C	50
NDFT-18-250-P50	18-22	300 V	105° C	0.846 (21.49)	0.260 (6.60)	0.295 (7.49)	.250 x .032	Die Set C	50
NDFT-14-110-P50	14-16	300 V	105° C	0.772 (19.61)	0.126 (3.20)	0.256 (6.50)	.110 x .020	Die Set C	50
NDFT-14-187-P50	14-16	300 V	105° C	0.787 (19.99)	0.197 (5.00)	0.252 (6.40)	.187 x .020	Die Set C	50
NDFT-14-250-P50	14-16	300 V	105° C	0.846 (21.49)	0.260 (6.60)	0.295 (7.49)	.250 x .032	Die Set C	50
NDFT-10-250-P25	10-12	300 V	105° C	0.925 (23.50)	0.260 (6.60)	0.295 (7.49)	.250 x .032	Die Set C	25
<b>NDFTD- Nylon-Insulated- Female- Double Crimp</b>									
NDFTD-18-110-P50	18-22	600 V	105° C	0.772 (19.61)	0.126 (3.20)	0.256 (6.50)	.110 x .020	Die Set A	50
NDFTD-18-187-P50	18-22	600 V	105° C	0.787 (19.99)	0.197 (5.00)	0.252 (6.40)	.187 x .020	Die Set A	50
NDFTD-18-250-P50	18-22	600 V	105° C	0.846 (21.49)	0.260 (6.60)	0.295 (7.49)	.250 x .032	Die Set A	50
NDFTD-14-110-P50	14-16	600 V	105° C	0.772 (19.61)	0.126 (3.20)	0.256 (6.50)	.110 x .020	Die Set A	50
NDFTD-14-187-P50	14-16	600 V	105° C	0.787 (19.99)	0.197 (5.00)	0.252 (6.40)	.187 x .020	Die Set A	50
NDFTD-14-250-P50	14-16	600 V	105° C	0.846 (21.49)	0.260 (6.60)	0.295 (7.49)	.250 x .032	Die Set A	50
NDFTD-10-187-P25	10-12	600 V	105° C	0.866 (22.00)	0.197 (5.00)	0.256 (6.50)	.187 x .020	Die Set A	25
NDFTD-10-250-P25	10-12	600 V	105° C	0.925 (23.50)	0.260 (6.60)	0.295 (7.49)	.250 x .032	Die Set A	25

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)  
Tested to UL 310, UL File E474613

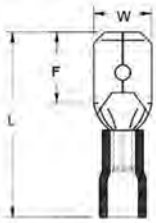
## TYPE ILSCONS

### Features

- Male disconnect configuration
- Barrel allows for two crimps - NDMTD
- Funnel wire entry
- Vinyl insulation - VDMT
- Nylon insulation - NDMT, NDMTD
- Color coded
- Manufactured from high strength brass alloy
- Electro-tin plated
- UL Listed

### Benefits

- Mates with matching female tab sizes to ensure a firm grip
- Provides strain relief, prevents exposure of wire conductors
- Smooth wire insertion into barrel
- Provides corrosion resistance and strain relief
- Increased heat and chemical resistant qualities for more demanding applications
- Provide easy wire range identification
  - #18-22 AWG Red
  - #14-16 AWG Blue
  - #10-12 AWG Yellow
- Offers maximum conductivity
- Provides low contact resistance
- Ensures reliability for brass conductor



Catalog Number	Wire Range	Voltage Rating	Temperature Rating	Dimensions - in. (mm)			Tab Size	Installation Tool ILST-22K	Package Quantity
				L	W	F			
<b>VDMT- Vinyl-Insulated- Male</b>									
VDMT-18-110-P50	18-22	300 V	75° C	0.728 (18.49)	0.110 (2.79)	0.256 (6.50)	.110 x .020	Die Set C	50
VDMT-18-187-P50	18-22	300 V	75° C	0.748 (19.00)	0.189 (4.80)	0.256 (6.50)	.187 x .020	Die Set C	50
VDMT-18-250-P50	18-22	300 V	75° C	0.827 (21.01)	0.250 (6.35)	0.303 (7.70)	.250 x .032	Die Set C	50
VDMT-14-187-P50	14-16	300 V	75° C	0.748 (19.00)	0.189 (4.80)	0.256 (6.50)	.187 x .020	Die Set C	50
VDMT-14-250-P50	14-16	300 V	75° C	0.827 (21.01)	0.250 (6.35)	0.303 (7.70)	.250 x .032	Die Set C	50
VDMT-10-250-P25	10-12	300 V	75° C	0.945 (24.00)	0.250 (6.35)	0.303 (7.70)	.250 x .032	Die Set C	25
<b>NDMT- Nylon- Insulated- Male</b>									
NDMT-18-110-P50	18-22	300 V	105° C	0.768 (19.51)	0.110 (2.79)	0.256 (6.50)	.110 x .020	Die Set C	50
NDMT-18-187-P50	18-22	300 V	105° C	0.787 (19.99)	0.189 (4.80)	0.256 (6.50)	.187 x .020	Die Set C	50
NDMT-18-250-P50	18-22	300 V	105° C	0.866 (22.00)	0.250 (6.35)	0.303 (7.70)	.250 x .032	Die Set C	50
NDMT-14-187-P50	14-16	300 V	105° C	0.787 (19.99)	0.189 (4.80)	0.256 (6.50)	.187 x .020	Die Set C	50
NDMT-14-250-P50	14-16	300 V	105° C	0.866 (22.00)	0.250 (6.35)	0.303 (7.70)	.250 x .032	Die Set C	50
NDMT-10-250-P25	10-12	300 V	105° C	0.945 (24.00)	0.250 (6.35)	0.303 (7.70)	.250 x .032	Die Set C	25
<b>NDMTD- Nylon-Insulated- Male- Double Crimp</b>									
NDMTD-18-110-P50	18-22	600 V	105° C	0.768 (19.51)	0.110 (2.79)	0.256 (6.50)	.110 x .020	Die Set C	50
NDMTD-18-187-P50	18-22	600 V	105° C	0.787 (19.99)	0.189 (4.80)	0.256 (6.50)	.187 x .020	Die Set C	50
NDMTD-18-250-P50	18-22	600 V	105° C	0.866 (22.00)	0.250 (6.35)	0.303 (7.70)	.250 x .032	Die Set C	50
NDMTD-14-187-P50	14-16	600 V	105° C	0.787 (19.99)	0.189 (4.80)	0.256 (6.50)	.187 x .020	Die Set C	50
NDMTD-14-250-P50	14-16	600 V	105° C	0.874 (22.20)	0.250 (6.35)	0.303 (7.70)	.250 x .032	Die Set C	50
NDMTD-10-250-P25	10-12	600 V	105° C	0.945 (24.00)	0.250 (6.35)	0.303 (7.70)	.250 x .032	Die Set C	25

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)  
Tested to UL 310, UL File E474613

## TYPE ILSCONS

### Features

- Female and male disconnect configurations
- Industry standard sizes
- Fully insulated

- Funnel wire entry
- Vinyl insulation - VFIDT
- Nylon insulation - NFIFT, NFIMT

- Color coded

- Manufactured from high strength brass alloy
- Electro-tin plated
- UL Listed, see ratings in chart below

### Benefits

- Allows for reliable, easy and quick connection/disconnection
- Mates with matching tab sizes to ensure a firm grip
- Provides protection from electrical shorts and eliminates the need for post installation insulation
- Smooth wire insertion into barrel
- Provides corrosion resistance and strain relief
- Increased heat and chemical resistant qualities for more demanding applications
- Provide easy wire range identification
  - #18-22 AWG Red
  - #14-16 AWG Blue
  - #10-12 AWG Yellow
- Offers maximum conductivity
- Provides low contact resistance
- Ensures reliability for brass conductor

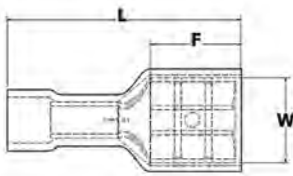


Fig. 1



Fig. 2

Catalog Number	Figure Number	Wire Range	Voltage Rating	Temperature Rating	Dimensions - in. (mm)			Tab Size	Installation Tool ILST-22K	Package Quantity
					L	W	F			
<b>VFIDT - Vinyl Insulation - Female</b>										
VFIDT-18-187-P50	1	18-22	300 V	75° C	0.768 (19.51)	0.197 (5.00)	0.252 (6.40)	.187 x .020	Die Set C	50
VFIDT-10-250-P25	1	10-12	300 V	75° C	0.957 (24.31)	0.260 (6.60)	0.295 (7.49)	.250 x .032	Die Set C	50
<b>NFIFT-Nylon Insulation - Female</b>										
NFIFT-18-250-P50	1	18-22	300 V	105° C	0.886 (22.50)	0.260 (6.60)	0.295 (7.49)	.250 x .032	Die Set C	50
NFIFT-14-250-P50	1	14-16	300 V	105° C	0.866 (22.00)	0.260 (6.60)	0.295 (7.49)	.250 x .032	Die Set C	50
NFIFT-10-250-P25	1	10-12	300 V	105° C	0.945 (24.00)	0.260 (6.60)	0.295 (7.49)	.250 x .032	Die Set C	25
<b>NFIMT-Nylon Insulation - Male</b>										
NFIMT-18-250-P25	2	18-22	300 V	105° C	0.945 (21.46)	0.250 (6.35)	0.303 (7.70)	.250 x .032	Die Set C	50
NFIMT-14-250-P25	2	14-16	300 V	105° C	0.945 (24.00)	0.250 (6.35)	0.303 (7.70)	.250 x .032	Die Set C	50
NFIMT-10-250-P25	2	10-12	300 V	105° C	0.984 (24.99)	0.250 (6.35)	0.303 (7.70)	.250 x .032	Die Set C	25

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)  
Tested to UL 310, UL File E474613

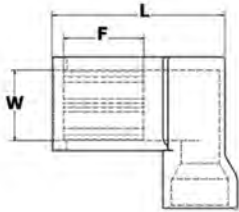
## TYPE ILSCONS

### Features

- Configuration of a right angel female disconnect
- Barrel allow for two crimps
- Funnel wire entry
- Nylon insulation
- Color coded
- Manufactured from high strength brass alloy
- Electro-tin plated
- Brazed barrel
- UL Listed for 600 volts, 105° C

### Benefits

- Allows for multiple configurations where space is limited or when a conductor is square to the connector
- Stronger crimp connection that will not split open, prevents wire pull out
- Smooth wire insertion into barrel
- Increased heat and chemical resistant qualities for more demanding applications
- Provide easy wire range identification
  - #18-22 AWG Red
  - #14-16 AWG Blue
  - #10-12 AWG Yellow
- Offers maximum conductivity
- Provides low contact resistance
- Provides strain relief, prevents exposure of wire conductors
- Ensures reliability for copper conductor



Catalog Number	Wire Range	Dimensions - in. (mm)						Installation Tooling ILST-22K	Package Quantity
		L		W		F			
<b>NFLB- Nylon-Insulated</b>									
NFLB-18-250-P25	18-22	0.598	(15.19)	0.260	(6.60)	0.299	(7.59)	Die Set A	25
NFLB-14-250-P25	14-16	0.598	(15.19)	0.260	(6.60)	0.299	(7.59)	Die Set A	25
NFLB-10-250-P25	10-12	0.650	(16.51)	0.260	(6.60)	0.299	(7.59)	Die Set A	25
<b>NFLBD- Nylon-Insulated- Double Crimp</b>									
NFLBD-18-187-P25	18-22	0.748	(19.00)	0.197	(5.00)	0.244	(6.20)	Die Set A	25
NFLBD-18-250-P25	18-22	0.819	(20.80)	0.260	(6.60)	0.295	(7.49)	Die Set A	25
NFLBD-14-187-P25	14-16	0.748	(19.00)	0.197	(5.00)	0.244	(6.20)	Die Set A	25
NFLBD-14-250-P25	14-16	0.819	(20.80)	0.260	(6.60)	0.295	(7.49)	Die Set A	25
NFLBD-10-250-P20	10-12	0.906	(23.01)	0.260	(6.60)	0.295	(7.49)	-	

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)  
Tested to UL 310, UL File E474613

## TYPE ILSCONS

### Features

- Bullet configurations in standard sizes
- Barrel allows for two crimps - NBFTD, NBMTD
- Funnel wire entry
- Vinyl insulation - VBFT, VBMT, VFIBT
- Nylon insulation - NBFT, NBFTD, NBMT, NBMTD, NFIDT
- Color coded
- Manufactured from high strength brass alloy
- Electro-tin plated
- UL Recognized

### Benefits

- Reliable, convenient in-line connection
- Provides strain relief of wire, prevents exposure of wire conductors
- Smooth wire insertion into barrel
- Provides corrosion resistance and strain relief
- Increased heat and chemical resistant qualities for more demanding applications
- Provide easy wire range identification
  - #18-22 AWG Red
  - #14-16 AWG Blue
  - #10-12 AWG Yellow
- Offers maximum conductivity
- Provides low contact resistance
- Ensures reliability for brass conductor

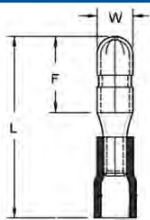


Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6

Catalog Number	Figure Number	Wire Range	Voltage Rating	Temperature Rating	Dimensions - in. (mm)			Commonly Mates With	Installation Tool ILST-22K	Package Quantity
					L	W	F			
<b>VBFT- Vinyl-Insulated- Female</b>										
VBFT-18-156-P50	1	18-22	300 V	50° C	0.846 (21.49)	0.154 (3.91)	0.276 (7.01)	VBMT-18-156-P50	Die Set C	50
VBFT-14-156-P50	1	14-16	300 V	50° C	0.846 (21.49)	0.154 (3.91)	0.276 (7.01)	VBMT-14-156-P50	Die Set C	50
VBFT-10-195-P25	1	10-12	300 V	50° C	0.965 (24.51)	0.193 (4.90)	0.276 (7.01)	VBMT-10-195-P25	Die Set C	25
<b>NBFT- Nylon-Insulated- Female</b>										
NBFT-18-156-P50	1	18-22	600 V	85° C	0.886 (22.50)	0.154 (3.91)	0.276 (7.01)	NBMT-18-156-P50	Die Set C	50
NBFT-14-156-P50	1	14-16	600 V	85° C	0.886 (22.50)	0.154 (3.91)	0.276 (7.01)	NBMT-14-156-P50	Die Set C	50
NBFT-10-195-P25	1	10-12	600 V	85° C	0.965 (24.51)	0.193 (4.90)	0.276 (7.01)	NBMT-10-195-P25	Die Set C	25
<b>NBFTD- Nylon-Insulated- Female- Double Crimp</b>										
NBFTD-18-156-P50	2	18-22	300 V	85° C	0.886 (22.50)	0.154 (3.91)	0.276 (7.01)	NBMTD-18-156-P50	Die Set A	50
NBFTD-14-156-P50	2	14-16	300 V	85° C	0.886 (22.50)	0.154 (3.91)	0.276 (7.01)	NBMTD-14-156-P50	Die Set A	50
NBFTD-10-195-P25	2	10-12	300 V	85° C	0.965 (24.51)	0.193 (4.90)	0.276 (7.01)	NBMTD-10-195-P25	Die Set A	25
<b>VFIBT- Vinyl-Fully-Insulated-Female</b>										
VFIBT-18-156-P50	3	18-22	300 V	50° C	0.906 (23.01)	0.154 (3.91)	0.276 (7.01)	NFIDT-18-156-P50	Die Set C	50
VFIBT-14-156-P50	3	14-16	300 V	50° C	0.925 (23.50)	0.154 (3.91)	0.276 (7.01)	NFIDT-14-156-P50	Die Set C	50
VFIBT-10-195-P25	3	10-12	300 V	50° C	0.945 (24.00)	0.193 (4.90)	0.276 (7.01)	N/A	Die Set C	25
<b>VBMT- Vinyl-Insulated-Male</b>										
VBMT-18-156-P50	4	18-22	300 V	50° C	0.827 (21.01)	0.157 (3.99)	0.335 (8.51)	VBFT-18-156-P50	Die Set C	50
VBMT-14-156-P50	4	14-16	300 V	50° C	0.827 (21.01)	0.157 (3.99)	0.335 (8.51)	VBFT-14-156-P50	Die Set C	50
VBMT-10-195-P25	4	10-12	300 V	50° C	0.925 (23.50)	0.197 (5.00)	0.335 (8.51)	VBFT-10-195-P25	Die Set C	25
<b>NBMT- Nylon-Insulated-Male</b>										
NBMT-18-156-P50	4	18-22	600 V	85° C	0.866 (22.00)	0.157 (3.99)	0.335 (8.51)	NBFT-18-156-P50	Die Set C	50
NBMT-14-156-P50	4	14-16	600 V	85° C	0.866 (22.00)	0.157 (3.99)	0.335 (8.51)	NBFT-14-156-P50	Die Set C	50
NBMT-10-195-P25	4	10-12	600 V	85° C	0.925 (23.50)	0.197 (5.00)	0.335 (8.51)	NBFT-10-195-P25	Die Set C	25
<b>NBMTD- Nylon-Insulated-Male-Double Crimp</b>										
NBMTD-18-156-P50	5	18-22	300 V	85° C	0.866 (22.00)	0.157 (3.99)	0.335 (8.51)	NBFTD-18-156-P50	Die Set A	50
NBMTD-14-156-P50	5	14-16	300 V	85° C	0.866 (22.00)	0.157 (3.99)	0.335 (8.51)	NBFTD-14-156-P50	Die Set A	50
NBMTD-10-195-P25	5	10-12	300 V	85° C	0.925 (23.50)	0.197 (5.00)	0.335 (8.51)	NBFTD-10-195-P25	Die Set A	25
<b>NFIDT- Nylon-Fully-Insulated-Male</b>										
NFIDT-18-156-P25	6	18-22	600 V	85° C	1.063 (27.00)	0.157 (3.99)	0.413 (10.49)	VFIBT-18-156-P50	Die Set C	25
NFIDT-14-156-P25	6	14-16	600 V	85° C	1.063 (27.00)	0.157 (3.99)	0.413 (10.49)	VFIBT-14-156-P50	Die Set C	25

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)

Tested to UL 1977, UL File E474615



## TYPE ILSCONS

### Features

- Solid pin design
- Funnel wire entry
- Barrel allows for two crimps - NPBRD
- Vinyl insulation - VPBR
- Nylon insulation - NPBR, NPBRD
- Color coded
- Manufactured from high strength copper alloy
- Electro-tin plated
- Brazed barrel
- UL Listed, 600 volts, 105° C

### Benefits

- Provides an easy and effective way to terminate stranded wire into European/metric-style terminal blocks
- Smooth wire insertion into barrel
- Provides strain relief, prevents exposure of wire conductors
- Provides corrosion resistance and strain relief
- Increased heat and chemical resistant qualities for more demanding applications
- Provide easy wire range identification
  - #18-22 AWG Red
  - #14-16 AWG Blue
  - #10-12 AWG Yellow
- Offers maximum conductivity
- Provides low contact resistance
- Stronger crimp connection to prevent wire pull-out
- Ensures reliability for copper conductor

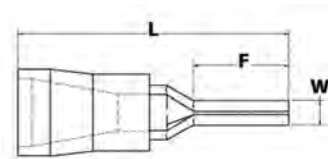


Fig. 1



Fig. 2

Catalog Number	Figure Number	Wire Range	Dimensions - in. (mm)						Installation Tool ILST-22K	Package Quantity
			L		W		F			
<b>VPBR- Vinyl Insulated</b>										
VPBR-18-512-P50	1	18-22	0.898	(22.81)	0.075	(1.91)	0.512	(13.00)	Die Set A	50
VPBR-14-512-P50	1	14-16	0.898	(22.81)	0.075	(1.91)	0.512	(13.00)	Die Set A	50
VPBR-10-551-P25	1	10-12	1.063	(27.00)	0.110	(2.79)	0.551	(14.00)	Die Set A	25
<b>NPBR- Nylon- Insulated</b>										
NPBR-18-512-P50	1	18-22	0.937	(23.80)	0.075	(1.91)	0.512	(13.00)	Die Set A	50
NPBR-14-512-P50	1	14-16	0.937	(23.80)	0.075	(1.91)	0.512	(13.00)	Die Set A	50
NPBR-10-551-P25	1	10-12	1.063	(27.00)	0.110	(2.79)	0.551	(14.00)	Die Set A	25
<b>NPBRD- Nylon- Insulated- Double Crimp</b>										
NPBRD-18-512-P50	2	18-22	0.937	(23.80)	0.075	(1.91)	0.512	(13.00)	Die Set A	50
NPBRD-14-512-P50	2	14-16	0.937	(23.80)	0.075	(1.91)	0.512	(13.00)	Die Set A	50
NPBRD-10-551-P25	2	10-12	1.063	(27.00)	0.110	(2.79)	0.551	(14.00)	Die Set A	25

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)  
Tested to UL 486A/B, UL File E6207

## TYPE ILST-22K

### Features

- Kit includes case and (5) dies
- Full cycle ratchet
- Compound action
- Cushion grip handles
- Crimps non-insulated, insulated, and double insulated wire terminals
- Wire Range: 10-22 AWG ILSCON connectors

### Benefits

- All-in-one, ease of use
- Assures proper crimp force every time
- Delivers maximum crimp force with minimum effort
- Provides user comfort
- Optimum versatility, crimps all ILSCON connectors
- Provides flexibility in use



		UL Listed for use with				
		A	B	C	D1322	FA
DIE INDEX	PRODUCT FAMILIES	NBFTD	NFBRD	NBFT	BFBR	NFLB
		NBMTD	NFBRF	NBMT	BRBR	
		NBSS	NPBRD	NDFT	BSBR	
		NDFTD	NPRBD	NDMT	BSFBR	
		NDMTD	NRBRD	NFIDT	BSLBR	
		NFLBD	NSBRD	NFIFT	NFBR	
		NPBR	NSFBRD	NFIMT	CSWS-10*	
		NRBR	NSLBRD	VBFT		
		NSBR		VBMT		
		NSFBR		VDFT		
		NSLBR		VDMT		
		VBSS		VFIBT		
		VBST		VFIDT		
		VFBR				
		VPBR				
		VRBR				
VSBR						
VSFBR						
VSLBR						

\* UL Listed and CSA Certified

## TYPE ILST-MP

### Features

- Heavy duty carbon steel construction
- Comfort grip handles
- Color coded crimp nest
- Crimp nest and indenter
- Wire cutter
- Machine screw cutters
- Wire stripper/wire gauge

### Benefits

- Rugged, durable, reliable
- Provides user comfort
- For insulated terminals
- For uninsulated terminals
- Easily cuts solid and stranded wire
- Cuts and rethreads 4-40, 6-32, 8-32, 10-24, and 10-32 machine screws
- 8-26 AWG



All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)

## TYPE WM-B

### Features

- White vinyl cloth material, permanent black marker text
- Rubber based adhesive backing
- Stitched cover
- Self-laminating unmarked vinyl material – WM-B-30-B and WM-B-60-B
- Clear over laminate vinyl material – WM-B-30-B and WM-B-60-B
- Rated to -50° to 250° F operating temperature

### Benefits

- Industry proven, easily readable
- Long lasting grip on wire
- Durable binding of book
- Write on marker tab accepts pen, pencil, ink marker or stamp
- Permanent protection of user applied markings
- Usable at temperature extremes



Catalog Number	Material	Marker Text	Dimensions - in. (mm)				Markers Per Book
			Length - in (mm)		Width - in (mm)		
WM-B-10-045	Vinyl Cloth	0-45	1.375	(34.9)	0.213	(5.4)	480
WM-B-10-4690	Vinyl Cloth	46-90	1.375	(34.9)	0.213	(5.4)	480
WM-B-10-AZ	Vinyl Cloth	A-Z, 0-15, +, -, /	1.375	(34.9)	0.213	(5.4)	480
WM-B-15-130	Vinyl Cloth	1-30	1.375	(34.9)	0.213	(5.4)	480
WM-B-15-AZ	Vinyl Cloth	A-Z	1.375	(34.9)	0.213	(5.4)	480
WM-B-40-09	Vinyl Cloth	0-9, L1-L3, T1-T3	1.375	(34.9)	0.213	(5.4)	480
WM-B-45-09	Vinyl Cloth	0-9	1.375	(34.9)	0.213	(5.4)	480
WM-B-150-ABC	Vinyl Cloth	A, B, C	1.375	(34.9)	0.213	(5.4)	480
WM-B-30-B	Self Laminating Vinyl	Write On	6.000	(152.4)	1.000	(25.4)	30
WM-B-60-B	Self Laminating Vinyl	Write On	3.000	(76.2)	1.000	(25.4)	60

# Wire Markers

## Slide/Snap-On

### TYPE WM

#### Features

- Slide-on option
- Snap-on option
- Supplied in (10) strands per re-sealable bag, each strand contains (25) of the same character
- Angular cut ends
- Temperature range -22° to +140° F

#### Benefits

- Permanently secured marking, applied before end termination
- Convenient placement of marking before or after termination
- Offers millions of character combinations per bag
- Nesting multiple characters on same conductor
- Installable at extreme temperature conditions

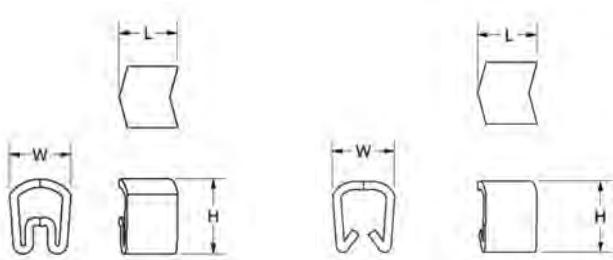


Fig. 1

Fig. 2



Catalog Number	Figure Number	Color	Attachment Style	Marker Text	Wire Range	Wire Diameter - in (mm)	Material	Dimensions - in. (mm)					
								L		H		W	
WM-023-N-09	1	NEMA*	Slide-On	0-9	16-22 AWG	.051-.118 (1.3-3.0)	Soft PVC	0.118	(3.0)	0.142	(3.6)	0.138	(3.5)
WM-023-W-09	1	White	Slide-On	0-9	16-22 AWG	.051-.118 (1.3-3.0)	Soft PVC	0.118	(3.0)	0.142	(3.6)	0.138	(3.5)
WM-023-W-AJ	1	White	Slide-On	A-J	16-22 AWG	.051-.118 (1.3-3.0)	Soft PVC	0.118	(3.0)	0.142	(3.6)	0.138	(3.5)
WM-023-W-KT	1	White	Slide-On	K-T	16-22 AWG	.051-.118 (1.3-3.0)	Soft PVC	0.118	(3.0)	0.142	(3.6)	0.138	(3.5)
WM-023-W-UZ	1	White	Slide-On	U-Z, +, -, /, ↓	16-22 AWG	.051-.118 (1.3-3.0)	Soft PVC	0.118	(3.0)	0.142	(3.6)	0.138	(3.5)
WM-13-N-09	1	NEMA*	Slide-On	0-9	10-16 AWG	.099-.197 (2.5-5.0)	Soft PVC	0.118	(3.0)	0.217	(5.5)	0.165	(4.2)
WM-13-W-09	1	White	Slide-On	0-9	10-16 AWG	.099-.197 (2.5-5.0)	Soft PVC	0.118	(3.0)	0.217	(5.5)	0.165	(4.2)
WM-13-W-AJ	1	White	Slide-On	A-J	10-16 AWG	.099-.197 (2.5-5.0)	Soft PVC	0.118	(3.0)	0.217	(5.5)	0.165	(4.2)
WM-13-W-KT	1	White	Slide-On	K-T	10-16 AWG	.099-.197 (2.5-5.0)	Soft PVC	0.118	(3.0)	0.217	(5.5)	0.165	(4.2)
WM-13-W-UZ	1	White	Slide-On	U-Z, +, -, /, ↓	10-16 AWG	.099-.197 (2.5-5.0)	Soft PVC	0.118	(3.0)	0.217	(5.5)	0.165	(4.2)
WM-103-N-09	2	NEMA*	Snap-On	0-9	16-22 AWG	.094-.118 (2.4-3.0)	Rigid PVC	0.118	(3.0)	0.142	(3.6)	0.146	(3.7)
WM-103-W-09	2	White	Snap-On	0-9	16-22 AWG	.094-.118 (2.4-3.0)	Rigid PVC	0.118	(3.0)	0.142	(3.6)	0.146	(3.7)
WM-103-W-AJ	2	White	Snap-On	A-J	16-22 AWG	.094-.118 (2.4-3.0)	Rigid PVC	0.118	(3.0)	0.142	(3.6)	0.146	(3.7)
WM-103-W-KT	2	White	Snap-On	K-T	16-22 AWG	.094-.118 (2.4-3.0)	Rigid PVC	0.118	(3.0)	0.142	(3.6)	0.146	(3.7)
WM-103-W-UZ	2	White	Snap-On	U-Z, +, -, /, ↓	16-22 AWG	.094-.118 (2.4-3.0)	Rigid PVC	0.118	(3.0)	0.142	(3.6)	0.146	(3.7)
WM-203-N-09	2	NEMA*	Snap-On	0-9	12-14 AWG	.118-.157 (3.0-4.0)	Rigid PVC	0.118	(3.0)	0.165	(4.2)	0.177	(4.5)
WM-203-W-09	2	White	Snap-On	0-9	12-14 AWG	.118-.157 (3.0-4.0)	Rigid PVC	0.118	(3.0)	0.165	(4.2)	0.177	(4.5)
WM-203-W-AJ	2	White	Snap-On	A-J	12-14 AWG	.118-.157 (3.0-4.0)	Rigid PVC	0.118	(3.0)	0.165	(4.2)	0.177	(4.5)
WM-203-W-KT	2	White	Snap-On	K-T	12-14 AWG	.118-.157 (3.0-4.0)	Rigid PVC	0.118	(3.0)	0.165	(4.2)	0.177	(4.5)
WM-203-W-UZ	2	White	Snap-On	U-Z, +, -, /, ↓	12-14 AWG	.118-.157 (3.0-4.0)	Rigid PVC	0.118	(3.0)	0.165	(4.2)	0.177	(4.5)

UL94-V0 Flammability rating

**INSTALLATION TOOL FOR SLIDE ON WIRE MARKERS SOLD SEPARATELY**

\* NEMA Colors:

0 - Black with white character  
4 - Yellow with black character  
8 - Grey with black character

1 - Brown with white character  
5 - Green with white character  
9 - White with black character

2 - Red with white character  
6 - Blue with white character

3 - Orange with black character  
7 - Purple with white character

# Wire Markers Cassette

## TYPE WM

### Features

- Compact size; 3.500" W x 2.700" D x .850" H
- Contains 500 slide-on style markers, refillable
- Double-sided entry
- Supplied with stainless steel installation tool inside the cassette
- Stainless steel installation tool features wire receiver hole
- Marker and cassette temperature rating -22° to 140° F
- Each slot holds one strand of (25) slide on wire markers

### Benefits

- Easy to carry, readily available
- Reusable and customizable to user needs
- Conveniently dispense parts on either side of cassette
- Guides markers onto un-terminated end of wire
- Aligns wire for easy marker installation
- Holds up in extreme temperature conditions
- Provides quick visual identification and marker organization



Catalog Number	Cassette Color	Grooves per Side	Includes Tool	Wire Range	Wire Diameter - in (mm)	Marker Color	Marker Text
<b>WM - Wire Marker Accessories</b>							
WM-CA02-N-09	Red	12	WM-T02-M	16-22 AWG	.051-.118 (1.3-3.0)	NEMA*	0-9
WM-CA02-W-09	Red	12	WM-T02-M	16-22 AWG	.051-.118 (1.3-3.0)	White	0-9
WM-CA02-W-AJ	Red	12	WM-T02-M	16-22 AWG	.051-.118 (1.3-3.0)	White	A-J
WM-CA02-W-KT	Red	12	WM-T02-M	16-22 AWG	.051-.118 (1.3-3.0)	White	K-T
WM-CA02-W-UZ	Red	12	WM-T02-M	16-22 AWG	.051-.118 (1.3-3.0)	White	U-Z
WM-CA10-N-09	Blue	10	WM-T10-M	10-16 AWG	.099-.197 (2.5-5.0)	NEMA*	0-9
WM-CA10-W-09	Blue	10	WM-T10-M	10-16 AWG	.099-.197 (2.5-5.0)	White	0-9
WM-CA10-W-AJ	Blue	10	WM-T10-M	10-16 AWG	.099-.197 (2.5-5.0)	White	A-J
WM-CA10-W-KT	Blue	10	WM-T10-M	10-16 AWG	.099-.197 (2.5-5.0)	White	K-T
WM-CA10-W-UZ	Blue	10	WM-T10-M	10-16 AWG	.099-.197 (2.5-5.0)	White	U-Z

## WM - Wire Marker Installation Tool



Catalog Number	Fits	Tool Dimensions - in. (mm)			
		L		W	
WM-T02-M	WM-023 Markers	3.937	(100.0)	0.122	(3.1)
WM-T10-M	WM-13 Markers	3.937	(100.0)	0.197	(5.0)

### \* NEMA Colors:

- |                                 |                                |                               |                                 |
|---------------------------------|--------------------------------|-------------------------------|---------------------------------|
| 0 - Black with white character  | 1 - Brown with white character | 2 - Red with white character  | 3 - Orange with black character |
| 4 - Yellow with black character | 5 - Green with white character | 6 - Blue with white character | 7 - Purple with white character |
| 8 - Grey with black character   | 9 - White with black character |                               |                                 |

# Wire Markers Kit

## TYPE WM

### Features

- 50 compartments
- Double latch and carry handle
- 10,000 total markers per case
- Contains 2 stainless steel installation tools
- Carrying case temperature rating -22° to +140° F

### Benefits

- Marker organization for quick identification and use
- Secured cover, easy to carry
- Offers millions of character combinations, supports large scale marking activity
- Spare tool
- Holds up in extreme temperature conditions



Catalog Number	Color	Wire Range	Wire Diameter - in (mm)	Marker Color	Application Tool	Dimensions - in. (mm)					
						L		H		W	
WM-B02-W	White	16-22 AWG	.051-.118 (1.3-3.0)	White	WM-T02-M	16.150 (410.2)	12.600 (320.0)	2.000 (50.8)			
WM-B02-NW	NEMA	16-22 AWG	.051-.118 (1.3-3.0)	NEMA*	WM-T02-M	16.150 (410.2)	12.600 (320.0)	2.000 (50.8)			
WM-B10-W	White	10-16 AWG	.099-.197 (2.5-5.0)	White	WM-T10-M	16.150 (410.2)	12.600 (320.0)	2.000 (50.8)			
WM-B10-NW	NEMA	10-16 AWG	.099-.197 (2.5-5.0)	NEMA*	WM-T10-M	16.150 (410.2)	12.600 (320.0)	2.000 (50.8)			

Kit contents include:

- 400 pieces of each number, 0-9
- 200 pieces of each letter, A-Z
- 200 pieces of each symbol, =, -, /, ↓
- 2 Application Tools

### \* NEMA Colors:

0 - Black with white character  
4 - Yellow with black character  
8 - Grey with black character

1 - Brown with white character  
5 - Green with white character  
9 - White with black character

2 - Red with white character  
6 - Blue with white character

3 - Orange with black character  
7 - Purple with white character

## TYPE WT TM

### Features

- Manufactured from Nylon 66
- Available in UV Black
- Accepts .87" - 14.65" bundle diameter
- Tensile strength from 18 to 175 lbs.
- Permanently holds cable bundle without slippage
- One piece construction
- -40 to +185° F operating temperature range
- UL Listed, Type 21 rated
- Adhesive backed mounting bases – Type TM
- Cable tie mounts accommodate common mounting hardware

### Benefits

- Resists chemicals
- Resists weather and ultraviolet light
- Versatility
- Strong and Flexible
- Self-Locking
- Precise shape for consistent performance and reliability
- Reliable in extreme temperature conditions
- Qualified positioning device
- Easy peel and stick installation
- For more stringent loading situations or difficult to adhere surfaces

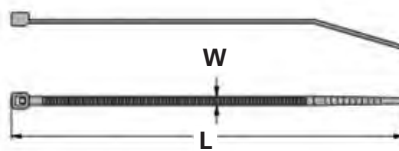


Fig. 1

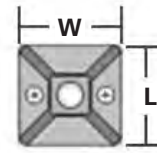


Fig. 2

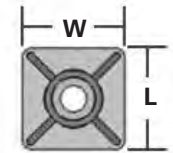


Fig. 3

Catalog Number	Figure Number	Color	Tensile Strength (lbs.)	Dimensions - in. (mm)				Max Bundle Diameter - in (mm)	
				L		W			
WT-040-018-N	1	Natural	18	3.937	(100.0)	0.098	(2.5)	0.866	(22.0)
WT-055-040-N	1	Natural	40	5.591	(142.0)	0.126	(3.2)	1.339	(34.0)
WT-075-050-N	1	Natural	50	7.480	(190.0)	0.189	(4.8)	1.929	(49.0)
WT-110-050-N	1	Natural	50	11.024	(280.0)	0.189	(4.8)	3.031	(77.0)
WT-145-050-N	1	Natural	50	14.488	(368.0)	0.189	(4.8)	4.134	(105.0)
WT-170-050-N	1	Natural	50	17.008	(432.0)	0.189	(4.8)	4.921	(125.0)
WT-240-175-N	1	Natural	175	24.016	(610.0)	0.354	(9.0)	6.969	(177.0)
WT-360-175-N	1	Natural	175	35.984	(914.0)	0.354	(9.0)	10.827	(275.0)
WT-480-175-N	1	Natural	175	47.992	(1219.0)	0.354	(9.0)	14.646	(372.0)
WT-040-018-B	1	UV Black	18	3.937	(100.0)	0.098	(2.5)	0.866	(22.0)
WT-055-040-B	1	UV Black	40	5.591	(142.0)	0.126	(3.2)	1.339	(34.0)
WT-075-050-B	1	UV Black	50	7.480	(190.0)	0.189	(4.8)	1.929	(49.0)
WT-110-050-B	1	UV Black	50	11.024	(280.0)	0.189	(4.8)	3.031	(77.0)
WT-145-050-B	1	UV Black	50	14.488	(368.0)	0.189	(4.8)	4.134	(105.0)
WT-170-050-B	1	UV Black	50	17.008	(432.0)	0.189	(4.8)	4.921	(125.0)
WT-240-175-B	1	UV Black	175	24.016	(610.0)	0.354	(9.0)	6.969	(177.0)
WT-360-175-B	1	UV Black	175	35.984	(914.0)	0.354	(9.0)	10.827	(275.0)
WT-480-175-B	1	UV Black	175	47.992	(1219.0)	0.354	(9.0)	14.646	(372.0)

Catalog Number	Figure Number	Color	Dimensions - in. (mm)						Mounting Hole	
			L		W		H			
TM-075-N*	2	Natural	0.768	(19.5)	0.768	(19.5)	0.154	(3.9)	0.126	(3.2)
TM-100-N	3	Natural	1.028	(26.1)	1.028	(26.1)	0.236	(6.0)	0.177	(4.5)

Flammability rating UL94V-2; cable ties and mounts  
\* 2pcs on a strip (Simply peel off the backing paper)

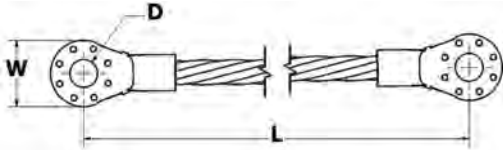
## TYPE SBJ

### Features

- Cable and ring terminals manufactured from high strength copper alloy
- Bonding washer made from Viridium® plated stainless steel
- Green color, universal to identify ground
- Complete jumper assembly

### Benefits

- Provides maximum electrical conductivity
- Maximum durability in outdoor environments, resists galvanic corrosion
- Aids visual inspection
- Quick and easy installation, no surface preparation



Catalog Number*	Wire Size	Dimensions - in. (mm)			
		L		W	
SBJ-X-6	6AWG	6.000	(152.4)	0.670	(17.0)
SBJ-X-712	6AWG	7.500	(190.5)	0.670	(17.0)
SBJ-X-9	6AWG	9.000	(228.6)	0.670	(17.0)
SBJ-X-1012	6AWG	10.500	(266.7)	0.670	(17.0)
SBJ-X-12	6AWG	12.000	(304.8)	0.670	(17.0)
SBJ-X-15	6AWG	15.000	(381.0)	0.670	(17.0)
SBJ-X-18	6AWG	18.000	(457.2)	0.670	(17.0)
SBJ-X-21	6AWG	21.000	(533.4)	0.670	(17.0)
SBJ-X-24	6AWG	24.000	(609.6)	0.670	(17.0)
SBJ-X-28	6AWG	28.000	(711.2)	0.670	(17.0)
SBJ-X-32	6AWG	32.000	(812.8)	0.670	(17.0)
SBJ-X-36	6AWG	36.000	(914.4)	0.670	(17.0)
SBJ-X-40	6AWG	40.000	(1016.0)	0.670	(17.0)
SBJ-X-44	6AWG	44.000	(1117.6)	0.670	(17.0)
SBJ-X-48	6AWG	48.000	(1219.2)	0.670	(17.0)
SBJ-X-54	6AWG	54.000	(1371.6)	0.670	(17.0)
SBJ-X-60	6AWG	60.000	(1524.0)	0.670	(17.0)
SBJ-X-66	6AWG	66.000	(1676.4)	0.670	(17.0)
SBJ-X-72	6AWG	72.000	(1828.8)	0.670	(17.0)

\*X = Bolt Size

X Value	D - in. (mm)		Bolt Size	
14	0.252	(6.4)	1/4	(M6)
516	0.331	(8.4)	5/16	(M8)
38	0.413	(10.5)	3/8	(M10)

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)

UL 467 Listed for grounding and bonding, UL File E34440

UL 2703 Listed, UL File E354420

\* Bolt not included



## TYPE SGB

### Features

- Manufactured from high strength 6061-T6 aluminum alloy
- Electro-tin plated
- Lay-in feature
- Exclusive Viridium® plating
- Green color universal to identify ground
- Serrations in conductor wire way
- Unique clamp design
- 1/4" max frame thickness (SGB-4, SGB-5)
- Meets ASTM B117-09

### Benefits

- Suitable for use with copper or aluminum conductors
- Provides low contact resistance
- Provides ease of installation
- Resists galvanic corrosion
- Aids visual inspection
- Cuts oxidation
- No mounting hardware required, reusable
- Mount to solar panel frames
- Resistance to outdoor salt spray

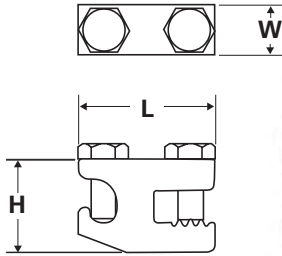


Fig. 1



Fig. 2



Fig. 3



Fig. 4

Catalog Number	Figure Number	Ground Wire Range	Dimensions - in. (mm)			Hex Size
			L	W	H	
SGB-4+	1	4 sol/str-14 sol/str	1.375 (34.9)	0.500 (12.7)	0.941 (23.9)	7/16
SGB-5+	2	4 sol/str-14 sol/str	1.375 (34.9)	0.500 (12.7)	1.440 (36.6)	7/16
SGB-1/0	3	1/0 sol/str-14 sol/str	1.508 (38.3)	0.625 (15.9)	1.241 (31.5)	3/16
SGB-250	4	250kcmil-6	1.810 (46.0)	0.750 (19.1)	1.703 (43.3)	3/16

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)  
 UL 467 for grounding and bonding. UL File E34440  
 + UL2703 Recognized E354420 Vol. 1  
 DE-OX® oxide inhibitor is recommended for all aluminum terminations  
 Patented

# Aluminum Mechanical Lugs Anti-Turn Connector Dual Rated - One Conductor

## TYPE ATTA

### Features

- Manufactured from high strength aluminum alloy
- Electro-tin plated
- Chamfered wire entry
- Anti-rotation bar
- Suitable for use in circuits rated 35KV or less; proper high voltage spacing and insulation techniques must be used
- AL9CU, rated to 90° C

### Benefits

- Suitable for use with copper or aluminum conductors
- Provides low contact resistance
- For easy conductor insertion
- Reduces risk of movement at installation
- Application versatility

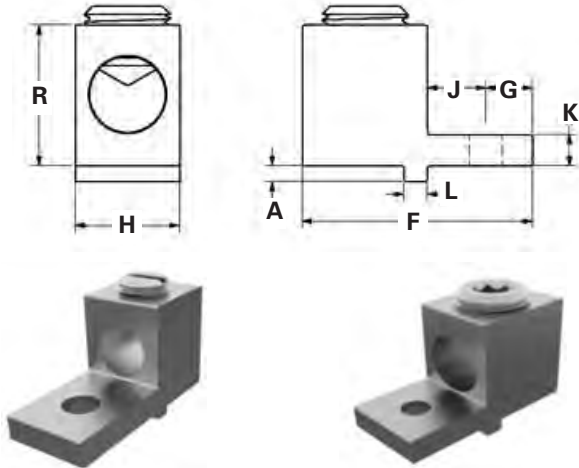


Fig. 1

Fig. 3

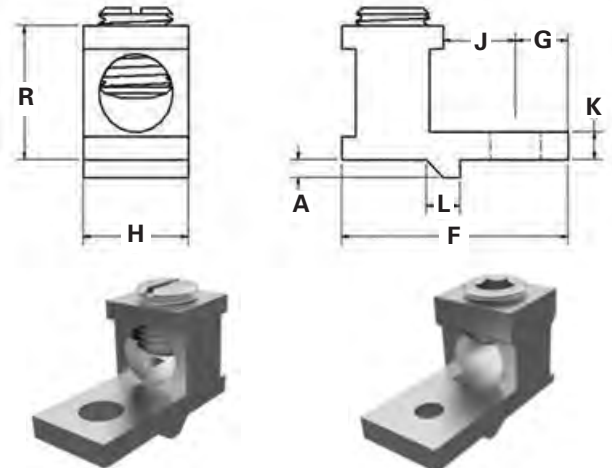


Fig. 2

Fig. 4

Catalog Number	Figure Number	Wire Range	Bolt Size	Dimensions - in. (mm)								Hex Size
				H	R	F	J	G	K	L	A	
ATTA-1/0-14	1	1/0-14	1/4	0.625 (15.9)	0.787 (20.0)	1.468 (37.3)	0.468 (11.9)	0.375 (9.5)	0.187 (4.7)	0.125 (3.2)	0.062 (1.6)	SLOT
ATTA-2/0-14	2	2/0-6	1/4	0.625 (15.9)	0.747 (19.0)	1.340 (34.0)	0.330 (8.4)	0.310 (7.9)	0.156 (4.0)	0.200 (5.1)	0.100 (2.5)	SLOT
ATTA-250-14	3	250kcmil-6	1/4	0.836 (21.2)	1.125 (28.6)	1.843 (46.8)	0.468 (11.9)	0.375 (9.5)	0.250 (6.4)	0.188 (4.8)	0.125 (3.2)	5/16
ATTA-300-14	4	300kcmil-6	1/4	1.000 (25.4)	1.125 (28.6)	2.080 (52.8)	0.330 (8.4)	0.470 (11.9)	0.250 (6.4)	0.273 (6.9)	0.100 (2.5)	3/8
ATTA-350-38	3	350kcmil-6	3/8	1.000 (25.4)	1.125 (28.6)	1.906 (48.4)	0.500 (12.7)	0.406 (10.3)	0.250 (6.4)	0.187 (4.7)	0.125 (3.2)	3/8
ATTA-350-14	4	350kcmil-6	1/4	1.000 (25.4)	1.125 (28.6)	1.760 (44.7)	0.390 (9.9)	0.330 (8.4)	0.200 (5.1)	0.273 (6.9)	0.100 (2.5)	3/8

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)

DE-OX® oxide inhibitor recommended for all aluminum terminations

Tested to UL486A/B, UL File E6207

# Aluminum Mechanical Lugs Anti-Turn Connector Dual Rated - Two Conductor

## TYPE ATAU

### Features

- Manufactured from high strength aluminum alloy
- Electro-tin plated
- Chamfered wire entry
- Anti-rotation bar
- Suitable for use in circuits rated 35KV or less; proper high voltage spacing and insulation techniques must be used
- AL9CU, rated to 90° C

### Benefits

- Suitable for use with copper or aluminum conductors
- Provides low contact resistance
- For easy conductor insertion
- Reduces risk of movement at installation
- Application versatility

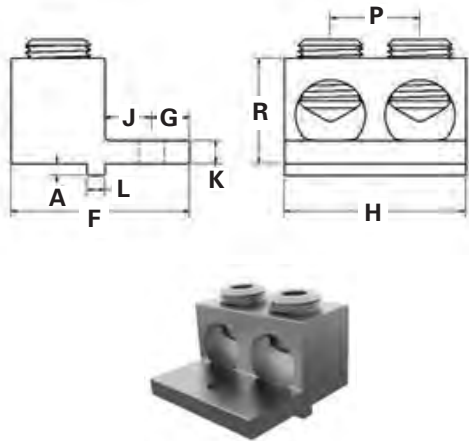


Fig. 1

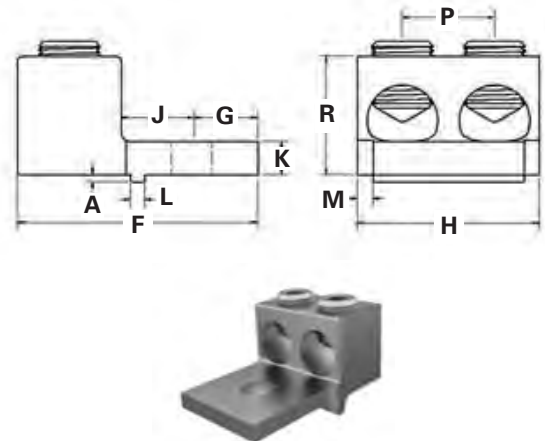


Fig. 2

Catalog Number	Figure Number	Wire Range	Bolt Size	Dimensions - in. (mm)										Hex Size
				H	R	P	M*	F	J	G	K	L	A	
ATAU-2/0-14	1	2/0-14	1/4	1.250 (31.8)	0.787 (20.0)	0.656 (16.7)	N/A	1.468 (37.3)	0.503 (12.8)	0.340 (8.6)	0.187 (4.7)	0.125 (3.2)	0.062 (1.6)	3/16
ATAU-350-14	1	350kcmil-6	1/4	1.938 (49.2)	1.125 (28.6)	0.957 (24.3)	N/A	1.906 (48.4)	0.500 (12.7)	0.406 (10.3)	0.250 (6.4)	0.187 (4.7)	0.125 (3.2)	5/16
ATAU-350-12*	2	350kcmil-4	1/2	1.900 (48.3)	1.250 (31.8)	0.957 (24.3)	0.075 (1.9)	2.875 (73.0)	0.875 (22.2)	0.875 (22.2)	0.250 (6.4)	0.250 (6.4)	0.250 (6.4)	5/16
ATAU-600-12*	2	600kcmil-2	1/2	2.406 (61.1)	1.562 (39.7)	1.219 (31.0)	0.203 (5.2)	3.000 (76.2)	0.938 (23.8)	0.687 (17.4)	0.437 (11.1)	0.187 (4.7)	0.093 (2.4)	1/2

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)

DE-OX® oxide inhibitor recommended for all aluminum terminations

Tested to UL486A/B, UL File E6207

\*Reduced tang design to accommodate physical breaker box mounting limitations

## TYPE PBHD

### Features

- Heavy duty design
- Manufactured from high strength aluminum alloy
- Electro-tin plated
- Chamfered wire entry
- Suitable for use in circuits rated 35KV or less; proper high voltage spacing and insulation techniques must be used
- Stacked design
- AL9CU, rated to 90° C

### Benefits

- Provides greater resistance to pull out
- Suitable for use with copper or aluminum conductors
- Provides low contact resistance
- Simplifies conductor insertion
- Application versatility
- Saves space and reduces installation time

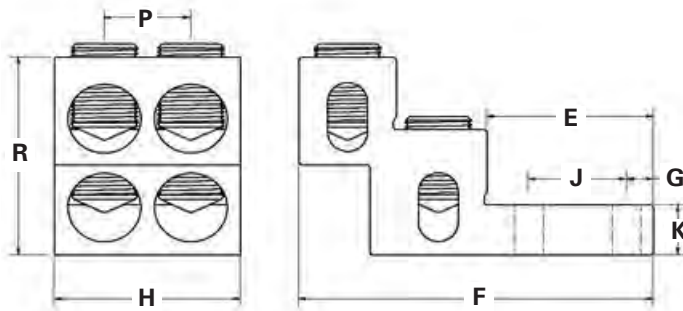


Fig. 1



Fig. 2



Fig. 3

Catalog Number	Figure Number	No. of Ports	Wire Range	Bolt Size	Dimensions - in. (mm)								Hex Size
					H	R	P	F	J	G	K	E	
PBHD2-750	1	2	750kcmil-2	3/8	1.400 (35.6)	2.960 (75.2)	N/A	5.005 (127.1)	1.380 (35.1)	0.380 (9.7)	0.750 (19.1)	2.350 (59.7)	1/2
PBHD4-750	2	4	750kcmil-2	3/8	2.620 (66.5)	2.960 (75.2)	1.220 (31.0)	5.005 (127.1)	1.380 (35.1)	0.380 (9.7)	0.750 (19.1)	2.350 (59.7)	1/2
PBHD6-750*	3	6	750kcmil-2	3/8	3.840 (97.5)	2.960 (75.2)	1.220 (31.0)	5.005 (127.1)	1.380 (35.1)	0.380 (9.7)	0.750 (19.1)	2.350 (59.7)	1/2

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)

DE-OX® oxide inhibitor recommended for all aluminum terminations

Tested to UL486A/B, UL File E6207

\* UL Recognized

### TYPE PBMW

#### Features

- Multi-Wire hole
- Manufactured from high strength aluminum alloy
- Electro-tin plated
- Chamfered wire entry
- Stacked design
- Suitable for use in circuits rated 35KV or less; proper high voltage spacing and insulation techniques must be used
- AL9CU, rated to 90° C

#### Benefits

- Can terminate two wires per port, parallel wires must be identical
- Suitable for use with copper or aluminum conductors
- Provides low contact resistance
- Simplifies conductor insertion
- Saves spaces and reduces installation time
- Application versatility



Fig. 1



Fig. 2



Fig. 3



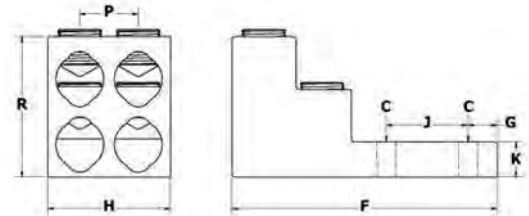
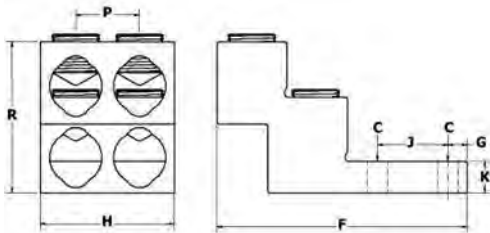
Fig. 4



Fig. 5



Fig. 6



Catalog Number	Figure Number	Wire Range	Number of Ports	Bolt Size	Dimensions - in. (mm)									Hex Size
					H	R	P	F	J	G	K	C		
PBMW-2-750-38	1	One: 750kcmil-2 *Two: 4/0-1/0	2	3/8	1.310 (33.3)	2.960 (75.2)	N/A	4.910 (124.7)	1.380 (35.1)	0.380 (9.7)	0.625 (15.9)	0.406 (10.3)	1/2	
PBMW-4-750-38	2	One: 750kcmil-2 *Two: 4/0-1/0	4	3/8	2.620 (66.5)	2.960 (75.2)	1.250 (31.8)	4.910 (124.7)	1.380 (35.1)	0.380 (9.7)	0.625 (15.9)	0.406 (10.3)	1/2	
PBMW-6-750-38	3	One: 750kcmil-2 *Two: 4/0-1/0	6	3/8	3.930 (99.8)	2.960 (75.2)	1.265 (32.1)	4.910 (124.7)	1.380 (35.1)	0.380 (9.7)	0.625 (15.9)	0.406 (10.3)	1/2	
PBMW-2-750-12	4	One: 750kcmil-2 *Two: 250kcmil-1/0	2	1/2	1.310 (33.3)	3.000 (76.2)	N/A	5.687 (144.4)	1.750 (44.5)	0.625 (15.9)	0.750 (19.1)	0.562 (14.3)	1/2	
PBMW-4-750-12	5	One: 750kcmil-2 *Two: 250kcmil-1/0	4	1/2	2.620 (66.5)	3.000 (76.2)	1.250 (31.8)	5.687 (144.4)	1.750 (44.5)	0.625 (15.9)	0.750 (19.1)	0.562 (14.3)	1/2	
PBMW-6-750-12	6	One: 750kcmil-2 *Two: 250kcmil-1/0	6	1/2	3.930 (99.8)	3.000 (76.2)	1.265 (32.1)	5.687 (144.4)	1.750 (44.5)	0.625 (15.9)	0.750 (19.1)	0.562 (14.3)	1/2	

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)

DE-OX® oxide inhibitor recommended for all aluminum terminations

Tested to UL486A/B, UL File E6207

\* Parallel wires must be identical

# SureCrimp® Aluminum Compression Lugs

## Long Barrel - Standard Tang - Dual Rated, Conductor Range: 1000kcmil - 250kcmil

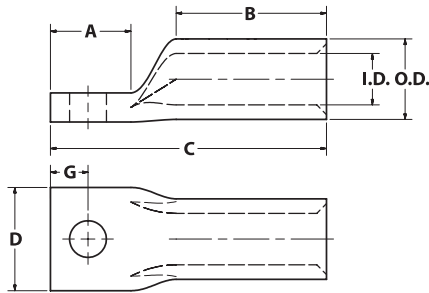
### TYPE ALNS

#### Features

- Manufactured from high strength aluminum alloy
- Electro-Tin plated
- Chamfered entry
- Color coded end cap
- Roll marked
- Pre-filled with DE-OX® oxide inhibiting compound
- Range taking
- Suitable for use in circuits rated 35KV or less, proper high voltage spacing and insulation techniques must be used
- Dual rated AL9CU to 90°C

#### Benefits

- Offers maximum conductivity and excellent crimping characteristics
- Provides low contact resistance
- For easy conductor insertion
- Identifies the proper conductor size
- For easy identification and proper location of crimps
- Prevents oxides from forming & promotes connector longevity
- Permits inventories to be kept to a minimum
- Application versatility
- For use with aluminum or copper conductor



Catalog Number	Wire Size	Expanded Wire Range*	Bolt Size	Stud Hole Dia.	Dimensions - in (mm)						Die Color Code	Die Index	
					A	B	C	D	G	O.D.			I.D.
ALNS-250-38	250kcmil	250kcmil-1/0 AWG	3/8	0.406 (10.3)	0.875 (22.2)	1.535 (39.0)	3.200 (81.3)	1.264 (32.1)	0.414 (10.5)	0.924 (23.5)	0.595 (15.1)	Red	324
ALNS-250-12	250kcmil	250kcmil-1/0 AWG	1/2	0.562 (14.3)	0.875 (22.2)	1.535 (39.0)	3.316 (84.2)	1.264 (32.1)	0.546 (13.9)	0.924 (23.5)	0.595 (15.1)	Red	324
ALNS-300-38	300kcmil	300kcmil-2/0 AWG	3/8	0.406 (10.3)	0.905 (23.0)	1.535 (39.0)	3.296 (83.7)	1.381 (35.1)	0.414 (10.5)	1.010 (25.7)	0.650 (16.5)	Blue	470
ALNS-300-12	300kcmil	300kcmil-2/0 AWG	1/2	0.562 (14.3)	1.295 (32.9)	1.535 (39.0)	3.690 (93.7)	1.381 (35.1)	0.546 (13.9)	1.010 (25.7)	0.650 (16.5)	Blue	470
ALNS-350-12	350kcmil	350kcmil-3/0 AWG	1/2	0.562 (14.3)	1.280 (32.5)	2.353 (59.8)	4.310 (109.5)	1.516 (38.5)	0.546 (13.9)	1.105 (28.1)	0.720 (18.3)	Brown	299
ALNS-400-12	400kcmil	400kcmil-4/0 AWG	1/2	0.562 (14.3)	1.302 (33.1)	2.303 (58.5)	4.250 (108.0)	1.623 (41.2)	0.546 (13.9)	1.188 (30.2)	0.762 (19.4)	Green	472
ALNS-400-58	400kcmil	400kcmil-4/0 AWG	5/8	0.656 (16.7)	1.485 (37.7)	2.303 (58.5)	4.420 (112.3)	1.623 (41.2)	0.671 (17.0)	1.188 (30.2)	0.762 (19.4)	Green	472
ALNS-500-12	500kcmil	500kcmil-4/0 AWG	1/2	0.562 (14.3)	1.303 (33.1)	2.565 (65.2)	4.745 (120.5)	1.802 (45.8)	0.546 (13.9)	1.315 (33.4)	0.854 (21.7)	Pink	300
ALNS-500-58	500kcmil	500kcmil-4/0 AWG	5/8	0.656 (16.7)	1.500 (38.1)	2.565 (65.2)	4.930 (125.2)	1.802 (45.8)	0.671 (17.0)	1.315 (33.4)	0.854 (21.7)	Pink	300
ALNS-600-12	600kcmil	600kcmil-250kcmil	1/2	0.562 (14.3)	1.372 (34.8)	2.685 (68.2)	5.250 (133.4)	1.965 (49.9)	0.671 (17.0)	1.440 (36.6)	0.920 (23.4)	Black	473
ALNS-600-58	600kcmil	600kcmil-250kcmil	5/8	0.656 (16.7)	1.528 (38.8)	2.685 (68.2)	5.350 (135.9)	1.965 (49.9)	0.671 (17.0)	1.440 (36.6)	0.920 (23.4)	Black	473
ALNS-700/750-12	700/750kcmil	750kcmil-500kcmil, 900kcmil compact Al**	1/2	0.562 (14.3)	1.380 (35.1)	2.964 (75.3)	5.492 (139.5)	2.048 (52.0)	0.546 (13.9)	1.460 (37.1)	1.030 (26.2)	Yellow	936
ALNS-700/750-58	700/750kcmil	750kcmil-500kcmil, 900kcmil compact Al**	5/8	0.656 (16.7)	1.421 (36.1)	2.964 (75.3)	5.505 (139.8)	2.048 (52.0)	0.671 (17.0)	1.460 (37.1)	1.030 (26.2)	Yellow	936
ALNS-1000-12	1000kcmil	1000kcmil-750kcmil	1/2	0.562 (14.3)	1.461 (37.1)	2.996 (76.1)	6.100 (154.9)	2.514 (63.9)	0.811 (20.6)	1.840 (46.7)	1.180 (30.0)	Brown	P302
ALNS-1000-58	1000kcmil	1000kcmil-750kcmil	5/8	0.656 (16.7)	1.800 (45.7)	2.996 (76.1)	6.350 (161.3)	2.514 (63.9)	0.671 (17.0)	1.840 (46.7)	1.180 (30.0)	Brown	P302

For Tool and Die Information Refer to Tooling Information Page Series: ALNS, ALND, ALNN, ASN

\* When installed with specified dieless tools

\*\* UL Approved 900kcmil compact Al

Tested to UL 486A/B, UL File E6207

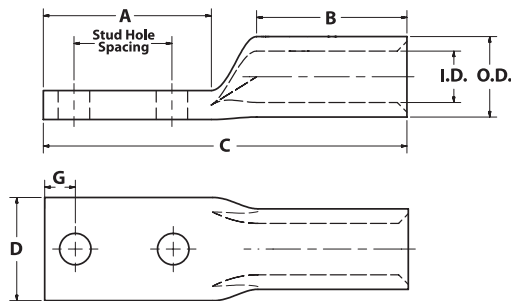
## TYPE ALND

### Features

- Manufactured from high strength aluminum alloy
- Electro-Tin plated
- Chamfered entry
- Color coded end cap
- Roll marked
- Two bolt hole pattern
- Pre-filled with DE-OX® oxide inhibiting compound
- Range taking
- Suitable for use in circuits rated 35KV or less, proper high voltage spacing and insulation techniques must be used
- Dual rated AL9CU to 90° C

### Benefits

- Offers maximum conductivity and excellent crimping characteristics
- Provides low contact resistance
- For easy conductor insertion
- Identifies the proper compression die
- For easy identification and proper location of crimps
- Provides maximum surface contact, secure attachment, and stabilization
- Prevents oxides from forming & promotes connector longevity
- Permits inventories to be kept to a minimum
- Application versatility
- For use with aluminum or copper conductor



Catalog Number	Wire Size	Expanded Wire Range*	Bolt Size	Stud Hole Dia.	Stud Hole Spacing	Dimensions - in (mm)							Die Color Code	Die Index
						A	B	C	D	G	O.D.	I.D.		
ALND-600-38-1	600kcmil	600kcmil-250kcmil	3/8	0.406 (10.3)	1.000 (25.4)	2.128 (54.1)	2.685 (68.2)	5.975 (151.8)	1.965 (49.9)	0.593 (15.1)	1.440 (36.6)	0.920 (23.4)	Black	473
ALND-600-38-134	600kcmil	600kcmil-250kcmil	3/8	0.406 (10.3)	1.750 (44.5)	2.796 (71.0)	2.685 (68.2)	6.660 (169.2)	1.965 (49.9)	0.593 (15.1)	1.440 (36.6)	0.920 (23.4)	Black	473
ALND-600-12-1	600kcmil	600kcmil-250kcmil	1/2	0.562 (14.3)	1.000 (25.4)	2.262 (57.5)	2.685 (68.2)	6.130 (155.7)	1.965 (49.9)	0.671 (17.0)	1.440 (36.6)	0.920 (23.4)	Black	473
ALND-600-12-134	600kcmil	600kcmil-250kcmil	1/2	0.562 (14.3)	1.750 (44.5)	3.150 (80.0)	2.685 (68.2)	6.973 (177.1)	1.965 (49.9)	0.546 (13.9)	1.440 (36.6)	0.920 (23.4)	Black	473
ALND-700/750-38-1	700/750kcmil	750kcmil-500kcmil, 900kcmil compact Al**	3/8	0.406 (10.3)	1.000 (25.4)	2.121 (53.9)	2.964 (75.3)	6.220 (158.0)	2.048 (52.0)	0.623 (15.8)	1.460 (37.1)	1.030 (26.2)	Yellow	936
ALND-700/750-38-134	700/750kcmil	750kcmil-500kcmil, 900kcmil compact Al**	3/8	0.406 (10.3)	1.750 (44.5)	2.812 (71.4)	2.964 (75.3)	6.900 (175.3)	2.048 (52.0)	0.623 (15.8)	1.460 (37.1)	1.030 (26.2)	Yellow	936
ALND-700/750-12-1	700/750kcmil	750kcmil-500kcmil, 900kcmil compact Al**	1/2	0.562 (14.3)	1.000 (25.4)	2.298 (58.4)	2.964 (75.3)	6.400 (162.6)	2.048 (52.0)	0.701 (17.8)	1.460 (37.1)	1.030 (26.2)	Yellow	936
ALND-700/750-12-134	700/750kcmil	750kcmil-500kcmil, 900kcmil compact Al**	1/2	0.562 (14.3)	1.750 (44.5)	3.162 (80.3)	2.964 (75.3)	7.062 (179.4)	2.048 (52.0)	0.546 (13.9)	1.460 (37.1)	1.030 (26.2)	Yellow	936
ALND-1000-38-1	1000kcmil	1000kcmil-750kcmil	3/8	0.406 (10.3)	1.000 (25.4)	2.249 (57.1)	2.996 (76.1)	6.840 (173.8)	2.514 (63.9)	0.733 (18.6)	1.840 (46.7)	1.180 (30.0)	Brown	P302
ALND-1000-38-134	1000kcmil	1000kcmil-750kcmil	3/8	0.406 (10.3)	1.750 (44.5)	2.947 (74.9)	2.996 (76.1)	7.530 (191.3)	2.514 (63.9)	0.733 (18.6)	1.840 (46.7)	1.180 (30.0)	Brown	P302
ALND-1000-12-1	1000kcmil	1000kcmil-750kcmil	1/2	0.562 (14.3)	1.000 (25.4)	2.125 (54.0)	2.996 (76.1)	6.806 (172.9)	2.514 (63.9)	0.811 (20.6)	1.840 (46.7)	1.180 (30.0)	Brown	P302
ALND-1000-12-134	1000kcmil	1000kcmil-750kcmil	1/2	0.562 (14.3)	1.750 (44.5)	3.231 (82.1)	2.996 (76.1)	7.795 (198.0)	2.514 (63.9)	0.546 (13.9)	1.840 (46.7)	1.180 (30.0)	Brown	P302

For Tool and Die Information Refer to Tooling Information Page Series: ALNS, ALND, ALNN, ASN

\* When installed with specified dieless tools

\*\* UL Approved 900kcmil compact Al

Tested to UL 486A/B, UL File E6207

# SureCrimp® Aluminum Compression Lugs

## Narrow Tang, 1 Hole, w/o Sight Hole

### Conductor Range: 1000kcmil - #4

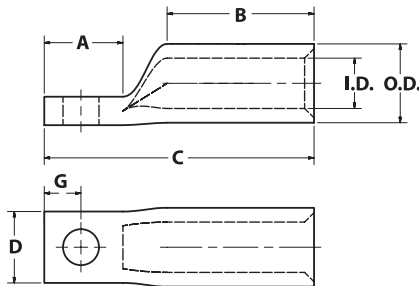
## TYPE ALNN

### Features

- Manufactured from high strength aluminum alloy
- Electro-Tin plated
- Chamfered entry
- Color coded end cap
- Roll marked
- Pre-filled with DE-OX® oxide inhibiting compound
- Range taking
- Narrow Tang
- Suitable for use in circuits rated 35KV or less, proper high voltage spacing and insulation techniques must be used
- Dual rated AL9CU to 90° C

### Benefits

- Offers maximum conductivity and excellent crimping characteristics
- Provides low contact resistance
- For easy conductor insertion
- Identifies the proper compression die
- For easy identification and proper location of crimps
- Prevents oxides from forming
- Permits inventories to be kept to a minimum
- Side by side mounting
- Application versatility
- For use with copper or aluminum conductor



Catalog Number	Wire Size	Expanded Wire Range*	Bolt Size	Stud Hole Dia.	Dimensions - in (mm)							Die Color Code	Die Index
					A	B	C	D	G	O.D.	I.D.		
ALNN-4-14	#4 AWG	4-6 AWG	1/4	0.281 (7.1)	0.875 (22.2)	0.920 (23.4)	2.029 (51.5)	0.412 (10.5)	0.321 (8.2)	0.427 (10.8)	0.247 (6.3)	Green	375
ALNN-2-14	#2 AWG	2-6 AWG	1/4	0.281 (7.1)	0.875 (22.2)	0.970 (24.6)	2.131 (54.1)	0.495 (12.6)	0.321 (8.2)	0.525 (13.3)	0.307 (7.8)	Pink	348
ALNN-1-14	#1 AWG	1-2 AWG	1/4	0.281 (7.1)	1.687 (42.8)	0.970 (24.6)	2.175 (55.2)	0.514 (13.1)	0.321 (8.2)	0.544 (13.8)	0.358 (9.1)	Gold	471
ALNN-1-516	#1 AWG	1-2 AWG	5/16	0.343 (8.7)	0.875 (22.2)	0.970 (24.6)	2.175 (55.2)	0.514 (13.1)	0.353 (9.0)	0.544 (13.8)	0.358 (9.1)	Gold	471
ALNN-1/0-516	#1/0 AWG	1/0-1 AWG	5/16	0.343 (8.7)	0.875 (22.2)	1.070 (27.2)	2.301 (58.4)	0.569 (14.5)	0.353 (9.0)	0.599 (15.2)	0.385 (9.8)	Tan	296
ALNN-2/0-38	#2/0 AWG	2/0-1 AWG	3/8	0.406 (10.3)	0.875 (22.2)	1.355 (34.4)	2.626 (66.7)	0.644 (16.4)	0.414 (10.5)	0.674 (17.1)	0.432 (11.0)	Olive	297
ALNN-3/0-38	#3/0 AWG	3/0-1 AWG	3/8	0.406 (10.3)	0.875 (22.2)	1.355 (34.4)	2.669 (67.8)	0.731 (18.6)	0.414 (10.5)	0.761 (19.3)	0.495 (12.6)	Ruby	467
ALNN-3/0-12	#3/0 AWG	3/0-1 AWG	1/2	0.562 (14.3)	1.250 (31.8)	1.355 (34.4)	3.044 (77.3)	0.731 (18.6)	0.546 (13.9)	0.761 (19.3)	0.495 (12.6)	Ruby	467
ALNN-4/0-38	#4/0 AWG	4/0-1 AWG	3/8	0.406 (10.3)	0.875 (22.2)	1.535 (39.0)	2.901 (73.7)	0.824 (20.9)	0.414 (10.5)	0.854 (21.7)	0.553 (14.0)	White	298
ALNN-4/0-12	#4/0 AWG	4/0-1 AWG	1/2	0.562 (14.3)	1.250 (31.8)	1.535 (39.0)	3.276 (83.2)	0.824 (20.9)	0.546 (13.9)	0.854 (21.7)	0.553 (14.0)	White	298
ALNN-250-38	250kcmil	250kcmil-1/0 AWG	3/8	0.406 (10.3)	0.875 (22.2)	1.535 (39.0)	2.941 (74.7)	0.894 (22.7)	0.414 (10.5)	0.924 (23.5)	0.595 (15.1)	Red	324
ALNN-250-12	250kcmil	250kcmil-1/0 AWG	1/2	0.562 (14.3)	1.250 (31.8)	1.535 (39.0)	3.316 (84.2)	0.894 (22.7)	0.546 (13.9)	0.924 (23.5)	0.595 (15.1)	Red	324
ALNN-300-38	300kcmil	300kcmil-2/0 AWG	3/8	0.406 (10.3)	0.875 (22.2)	1.535 (39.0)	2.997 (76.1)	0.980 (24.9)	0.414 (10.5)	1.010 (25.7)	0.650 (16.5)	Blue	470
ALNN-300-12	300kcmil	300kcmil-2/0 AWG	1/2	0.562 (14.3)	1.250 (31.8)	1.535 (39.0)	3.372 (85.6)	0.980 (24.9)	0.546 (13.9)	1.010 (25.7)	0.650 (16.5)	Blue	470
ALNN-350-12	350kcmil	350kcmil-3/0 AWG	1/2	0.562 (14.3)	1.250 (31.8)	2.353 (59.8)	4.226 (107.3)	1.075 (27.3)	0.546 (13.9)	1.105 (28.1)	0.720 (18.3)	Brown	299
ALNN-400-12	400kcmil	400kcmil-4/0 AWG	1/2	0.562 (14.3)	1.250 (31.8)	2.303 (58.5)	4.220 (107.2)	1.158 (29.4)	0.546 (13.9)	1.188 (30.2)	0.762 (19.4)	Green	472
ALNN-400-58	400kcmil	400kcmil-4/0 AWG	5/8	0.656 (16.7)	1.437 (36.5)	2.303 (58.5)	4.407 (111.9)	1.158 (29.4)	0.671 (17.0)	1.188 (30.2)	0.762 (19.4)	Green	472
ALNN-500-12	500kcmil	500kcmil-5/0 AWG	1/2	0.562 (14.3)	1.250 (31.8)	2.565 (65.2)	4.547 (115.5)	1.285 (32.6)	0.546 (13.9)	1.315 (33.4)	0.854 (21.7)	Pink	300
ALNN-500-58	500kcmil	500kcmil-5/0 AWG	5/8	0.656 (16.7)	1.437 (36.5)	2.565 (65.2)	4.734 (120.2)	1.285 (32.6)	0.671 (17.0)	1.315 (33.4)	0.854 (21.7)	Pink	300
ALNN-600-12	600kcmil	600kcmil-250kcmil	1/2	0.562 (14.3)	1.250 (31.8)	2.685 (68.2)	4.744 (120.5)	1.410 (35.8)	0.546 (13.9)	1.440 (36.6)	0.920 (23.4)	Black	473
ALNN-600-58	600kcmil	600kcmil-250kcmil	5/8	0.656 (16.7)	1.437 (36.5)	2.685 (68.2)	4.931 (125.2)	1.410 (35.8)	0.671 (17.0)	1.440 (36.6)	0.920 (23.4)	Black	473
ALNN-700/750-12	700/750kcmil	750kcmil-500kcmil, 900kcmil compact Al**	1/2	0.562 (14.3)	1.250 (31.8)	2.964 (75.3)	5.116 (129.9)	1.430 (36.3)	0.546 (13.9)	1.460 (37.1)	1.030 (26.2)	Yellow	936
ALNN-700/750-58	700/750kcmil	750kcmil-500kcmil, 900kcmil compact Al**	5/8	0.656 (16.7)	1.437 (36.5)	2.964 (75.3)	5.303 (134.7)	1.430 (36.3)	0.671 (17.0)	1.460 (37.1)	1.030 (26.2)	Yellow	936
ALNN-1000-12	1000kcmil	1000kcmil-750kcmil	1/2	0.562 (14.3)	1.250 (31.8)	2.996 (76.1)	5.271 (133.9)	1.578 (40.1)	0.546 (13.9)	1.840 (46.7)	1.180 (30.0)	Brown	P302
ALNN-1000-58	1000kcmil	1000kcmil-750kcmil	5/8	0.656 (16.7)	1.437 (36.5)	2.996 (76.1)	5.458 (138.6)	1.578 (40.1)	0.671 (17.0)	1.840 (46.7)	1.180 (30.0)	Brown	P302

For Tool and Die Information Refer to Tooling Information Page Series: ALNS, ALND, ALNN, ASN

\* When installed with specified dieless tools

\*\* UL Approved 900kcmil compact Al

Tested to UL 486A/B, UL File E6207



# SureCrimp® Aluminum Compression Lugs

## Narrow Tang, 2 Hole, w/o Sight Hole

### Conductor Range: 1000kcmil - 350kcmil

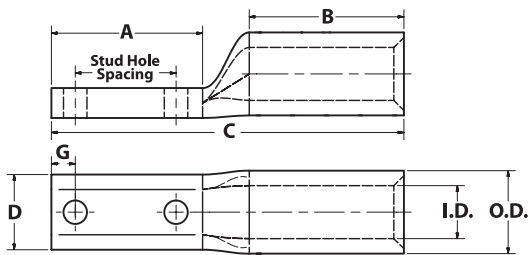
## TYPE ALNN

### Features

- Manufactured from high strength aluminum alloy
- Electro-Tin plated
- Chamfered entry
- Color coded end cap
- Roll marked
- Two bolt hole pattern
- Pre-filled with DE-OX® oxide inhibiting compound
- Range taking
- Narrow Tang
- Suitable for use in circuits rated 35KV or less, proper high voltage spacing and insulation techniques must be used
- Dual rated AL9CU to 90° C

### Benefits

- Offers maximum conductivity and excellent crimping characteristics
- Provides low contact resistance
- For easy conductor insertion
- Identifies the proper compression die
- For easy identification and proper location of crimps
- Provides maximum surface contact, secure attachment, and stabilization
- Prevents oxides from forming
- Permits inventories to be kept to a minimum
- Side by side mounting
- Application versatility
- For use with copper or aluminum conductor



Catalog Number	Wire Size	Expanded Wire Range*	Bolt Size	Stud Hole Dia.	Stud Hole Spacing	Dimensions - in (mm)						Die Color Code	Die Index	
						A	B	C	D	G	O.D.			I.D.
ALNN-350-38-1	350kcmil	350kcmil-3/0 AWG	3/8	0.406 (10.3)	1.000 (25.4)	1.937 (49.2)	2.353 (59.8)	4.913 (124.8)	1.075 (27.3)	0.414 (10.5)	1.105 (28.1)	0.720 (18.3)	Brown	299
ALNN-350-38-134	350kcmil	350kcmil-3/0 AWG	3/8	0.406 (10.3)	1.750 (44.5)	2.625 (66.7)	2.353 (59.8)	5.601 (142.3)	1.075 (27.3)	0.414 (10.5)	1.105 (28.1)	0.720 (18.3)	Brown	299
ALNN-350-12-1	350kcmil	350kcmil-3/0 AWG	1/2	0.562 (14.3)	1.000 (25.4)	2.125 (54.0)	2.353 (59.8)	5.101 (129.6)	1.075 (27.3)	0.546 (13.9)	1.105 (28.1)	0.720 (18.3)	Brown	299
ALNN-350-12-134	350kcmil	350kcmil-3/0 AWG	1/2	0.562 (14.3)	1.750 (44.5)	3.000 (76.2)	2.353 (59.8)	5.976 (151.8)	1.075 (27.3)	0.546 (13.9)	1.105 (28.1)	0.720 (18.3)	Brown	299
ALNN-400-38-1	400kcmil	400kcmil-4/0 AWG	3/8	0.406 (10.3)	1.000 (25.4)	1.937 (49.2)	2.303 (58.5)	4.907 (124.6)	1.158 (29.4)	0.414 (10.5)	1.188 (30.2)	0.762 (19.4)	Green	472
ALNN-400-38-134	400kcmil	400kcmil-4/0 AWG	3/8	0.406 (10.3)	1.750 (44.5)	2.625 (66.7)	2.303 (58.5)	5.595 (142.1)	1.158 (29.4)	0.414 (10.5)	1.188 (30.2)	0.762 (19.4)	Green	472
ALNN-400-12-1	400kcmil	400kcmil-4/0 AWG	1/2	0.562 (14.3)	1.000 (25.4)	2.125 (54.0)	2.303 (58.5)	5.095 (129.4)	1.158 (29.4)	0.546 (13.9)	1.188 (30.2)	0.762 (19.4)	Green	472
ALNN-400-12-134	400kcmil	400kcmil-4/0 AWG	1/2	0.562 (14.3)	1.750 (44.5)	3.000 (76.2)	2.303 (58.5)	5.970 (151.6)	1.158 (29.4)	0.546 (13.9)	1.188 (30.2)	0.762 (19.4)	Green	472
ALNN-500-38-1	500kcmil	500kcmil-4/0 AWG	3/8	0.406 (10.3)	1.000 (25.4)	1.937 (49.2)	2.565 (65.2)	5.234 (132.9)	1.285 (32.6)	0.414 (10.5)	1.315 (33.4)	0.854 (21.7)	Pink	300
ALNN-500-38-134	500kcmil	500kcmil-4/0 AWG	3/8	0.406 (10.3)	1.750 (44.5)	2.625 (66.7)	2.565 (65.2)	5.922 (150.4)	1.285 (32.6)	0.414 (10.5)	1.315 (33.4)	0.854 (21.7)	Pink	300
ALNN-500-12-1	500kcmil	500kcmil-4/0 AWG	1/2	0.562 (14.3)	1.000 (25.4)	2.125 (54.0)	2.565 (65.2)	5.422 (137.7)	1.285 (32.6)	0.546 (13.9)	1.315 (33.4)	0.854 (21.7)	Pink	300
ALNN-500-12-134	500kcmil	500kcmil-4/0 AWG	1/2	0.562 (14.3)	1.750 (44.5)	3.000 (76.2)	2.565 (65.2)	6.297 (159.9)	1.285 (32.6)	0.546 (13.9)	1.315 (33.4)	0.854 (21.7)	Pink	300
ALNN-600-38-1	600kcmil	600kcmil-250kcmil	3/8	0.406 (10.3)	1.000 (25.4)	1.937 (49.2)	2.685 (68.2)	5.431 (137.9)	1.410 (35.8)	0.414 (10.5)	1.440 (36.6)	0.920 (23.4)	Black	473
ALNN-600-38-134	600kcmil	600kcmil-250kcmil	3/8	0.406 (10.3)	1.750 (44.5)	2.625 (66.7)	2.685 (68.2)	6.119 (155.4)	1.410 (35.8)	0.414 (10.5)	1.440 (36.6)	0.920 (23.4)	Black	473
ALNN-600-12-1	600kcmil	600kcmil-250kcmil	1/2	0.562 (14.3)	1.000 (25.4)	2.125 (54.0)	2.685 (68.2)	5.619 (142.7)	1.410 (35.8)	0.546 (13.9)	1.440 (36.6)	0.920 (23.4)	Black	473
ALNN-600-12-134	600kcmil	600kcmil-250kcmil	1/2	0.562 (14.3)	1.750 (44.5)	3.000 (76.2)	2.685 (68.2)	6.494 (164.9)	1.410 (35.8)	0.546 (13.9)	1.440 (36.6)	0.920 (23.4)	Black	473
ALNN-700/750-38-1	700/750kcmil	750kcmil-500kcmil, 900kcmil compact Al**	3/8	0.406 (10.3)	1.000 (25.4)	1.937 (49.2)	2.964 (75.3)	5.803 (147.4)	1.430 (36.3)	0.414 (10.5)	1.460 (37.1)	1.030 (26.2)	Yellow	936
ALNN-700/750-38-134	700/750kcmil	750kcmil-500kcmil, 900kcmil compact Al**	3/8	0.406 (10.3)	1.750 (44.5)	2.625 (66.7)	2.964 (75.3)	6.491 (164.9)	1.430 (36.3)	0.414 (10.5)	1.460 (37.1)	1.030 (26.2)	Yellow	936
ALNN-700/750-12-1	700/750kcmil	750kcmil-500kcmil, 900kcmil compact Al**	1/2	0.562 (14.3)	1.000 (25.4)	2.125 (54.0)	2.964 (75.3)	5.991 (152.2)	1.430 (36.3)	0.546 (13.9)	1.460 (37.1)	1.030 (26.2)	Yellow	936
ALNN-700/750-12-134	700/750kcmil	750kcmil-500kcmil, 900kcmil compact Al**	1/2	0.562 (14.3)	1.750 (44.5)	3.000 (76.2)	2.964 (75.3)	6.866 (174.4)	1.430 (36.3)	0.546 (13.9)	1.460 (37.1)	1.030 (26.2)	Yellow	936
ALNN-1000-38-1	1000kcmil	1000kcmil-750kcmil	3/8	0.406 (10.3)	1.000 (25.4)	1.937 (49.2)	2.996 (76.1)	5.958 (151.3)	1.578 (40.1)	0.414 (10.5)	1.840 (46.7)	1.180 (30.0)	Brown	P302
ALNN-1000-38-134	1000kcmil	1000kcmil-750kcmil	3/8	0.406 (10.3)	1.750 (44.5)	2.625 (66.7)	2.996 (76.1)	6.646 (168.8)	1.578 (40.1)	0.414 (10.5)	1.840 (46.7)	1.180 (30.0)	Brown	P302
ALNN-1000-12-1	1000kcmil	1000kcmil-750kcmil	1/2	0.562 (14.3)	1.000 (25.4)	2.125 (54.0)	2.996 (76.1)	6.146 (156.1)	1.578 (40.1)	0.546 (13.9)	1.840 (46.7)	1.180 (30.0)	Brown	P302
ALNN-1000-12-134	1000kcmil	1000kcmil-750kcmil	1/2	0.562 (14.3)	1.750 (44.5)	3.000 (76.2)	2.996 (76.1)	7.021 (178.3)	1.578 (40.1)	0.546 (13.9)	1.840 (46.7)	1.180 (30.0)	Brown	P302

For Tool and Die Information Refer to Tooling Information Page Series: ALNS, ALND, ALNN, ASN

\* When installed with specified dieless tools

\*\* UL Approved 900kcmil compact Al

Tested to UL 486A/B, UL File E6207

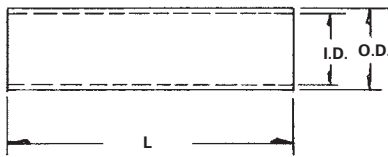
**TYPE  
ASN**

**Features**

- Manufactured from high strength aluminum alloy
- Electro-Tin plated
- Chamfered entry
- Color coded end cap
- Roll marked
- Pre-filled with DE-OX® oxide inhibiting compound
- Range taking
- Suitable for use in circuits rated 35KV or less, proper high voltage spacing and insulation techniques must be used
- Dual rated AL9CU to 90° C

**Benefits**

- Offers maximum conductivity and excellent crimping characteristics
- Provides low contact resistance
- For easy conductor insertion
- Identifies the proper compression die
- For easy identification and proper location of crimps
- Prevents oxides from forming & promotes connector longevity
- Permits inventories to be kept to a minimum
- Application versatility
- For use with aluminum or copper conductor



Catalog Number	Wire Size	Expanded Wire Range*	Dimensions - in (mm)			Die Color Code	Die Index
			Length	O.D.	I.D.		
ASN-8	#8 AWG	8 AWG	1.806 (45.9)	0.300 (7.6)	0.155 (3.9)	Blue	374
ASN-6	#6 AWG	6 AWG	1.205 (30.6)	0.338 (8.6)	0.194 (4.9)	Gray	346
ASN-4	#4 AWG	4-6 AWG	2.222 (56.4)	0.427 (10.8)	0.247 (6.3)	Green	375
ASN-2	#2 AWG	2-6 AWG	1.940 (49.3)	0.525 (13.3)	0.307 (7.8)	Pink	348
ASN-1	#1 AWG	1-2 AWG	1.940 (49.3)	0.544 (13.8)	0.358 (9.1)	Gold	471
ASN-1/0	1/0 AWG	1/0-1 AWG	2.573 (65.4)	0.599 (15.2)	0.385 (9.8)	Tan	296
ASN-2/0	2/0 AWG	2/0-1 AWG	2.710 (68.8)	0.674 (17.1)	0.432 (11.0)	Olive	297
ASN-3/0	3/0 AWG	3/0-1 AWG	2.710 (68.8)	0.761 (19.3)	0.495 (12.6)	Olive	297
ASN-4/0	4/0 AWG	4/0-1 AWG	3.070 (78.0)	0.854 (21.7)	0.553 (14.0)	Ruby	467
ASN-250	250kcmil	250kcmil-1/0 AWG	3.735 (94.9)	0.924 (23.5)	0.595 (15.1)	Red	324
ASN-300	300kcmil	300kcmil-2/0 AWG	3.070 (78.0)	1.010 (25.7)	0.650 (16.5)	Blue	470
ASN-350	350kcmil	350kcmil-3/0 AWG	5.125 (130.2)	1.105 (28.1)	0.720 (18.3)	Brown	299
ASN-400	400kcmil	400kcmil-4/0 AWG	4.606 (117.0)	1.188 (30.2)	0.762 (19.4)	Green	472
ASN-500	500kcmil	500kcmil-4/0 AWG	5.130 (130.3)	1.315 (33.4)	0.854 (21.7)	Pink	300
ASN-600	600kcmil	600kcmil-250kcmil	5.370 (136.4)	1.440 (36.6)	0.920 (23.4)	Black	473
ASN-700/750	700/750kcmil	750kcmil-500kcmil, 900kcmil compact Al**	5.928 (150.6)	1.460 (37.1)	1.030 (26.2)	Yellow	936
ASN-1000	1000kcmil	1000kcmil-750kcmil	5.992 (152.2)	1.840 (46.7)	1.180 (30.0)	Brown	P302

For Tool and Die Information Refer to Tooling Information Page Series: ALNS, ALND, ALNN, ASN

\* When installed with specified dieless tools

\*\* UL Approved 900kcmil compact Al

Tested to UL 486A/B, UL File E6207

## TYPE SCNM

### Features

- Manufactured from high strength aluminum alloy
- Configuration - 18 to 42 string inputs; 4 outputs
- Conductor Input: 4-14
- Conductor Output: 1000kcmil-6
- Designed for insulators up to 2000V

### Benefits

- Provides maximum conductivity and strength for copper and aluminum conductors
- Application versatility
- Input accepts Class B and C conductors
- Output accepts Class B, C, G, H, I, K, M and DLO conductors
- Mounting hardware fits variety of commercial insulators

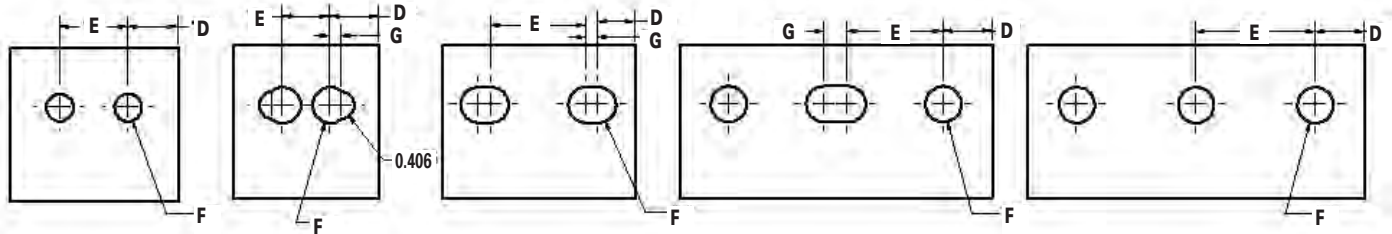


Fig. 1

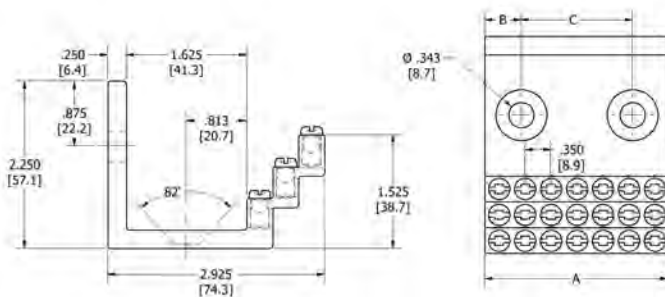
Fig. 2

Fig. 3

Fig. 4

Fig. 5

Lug Mount Configurations (See Figure Number above)



Typical Mechanical  
Lug Mount

Typical Compression  
Lug Mount

Catalog Number	Lug Mount Figure Number	PV Source Input**	String Input		Output		Dimensions - in. (mm)						
			No. of Strings	Wire Range	No. of Circuits	Wire Range	A	B	C	D	E	F	G
SCNM-18	2	540	18	4-14	1-4	1000kcmil-6	2.136 (54.25)	0.443 (11.25)	1.250 (31.75)	0.718 (18.24)	0.700 (17.78)	0.531 (13.49)	0.150 (3.81)
SCNM-21	1	630	21	4-14	1-4	1000kcmil-6	2.468 (62.69)	0.493 (12.52)	1.500 (38.10)	0.734 (18.64)	1.000 (25.40)	0.406 (10.31)	
SCNM-24	3	720	24	4-14	1-4*	1000kcmil-6	2.836 (72.03)	0.543 (13.79)	1.750 (44.45)	0.543 (13.79)	1.400 (35.56)	0.531 (13.49)	0.175 (4.45)
SCNM-27	1	810	27	4-14	1-4*	1000kcmil-6	3.186 (80.92)	0.593 (15.06)	2.000 (50.80)	0.718 (18.24)	1.750 (44.45)	0.531 (13.49)	
SCNM-30	3	900	30	4-14	1-4*	1000kcmil-6	3.536 (89.81)	0.518 (13.16)	2.500 (63.50)	0.718 (18.24)	1.750 (44.45)	0.531 (13.49)	0.175 (4.45)
SCNM-33	3	990	33	4-14	1-4*	1000kcmil-6	3.886 (98.70)	0.443 (11.25)	3.000 (76.20)	0.718 (18.24)	1.750 (44.45)	0.531 (13.49)	0.350 (8.89)
SCNM-36	3	1080	36	4-14	1-4*	1000kcmil-6	4.236 (107.59)	0.618 (15.70)	3.000 (76.20)	0.718 (18.24)	1.750 (44.45)	0.531 (13.49)	0.525 (13.34)
SCNM-39	4	1170	39	4-14	1-4*	1000kcmil-6	4.586 (116.48)	0.793 (20.14)	3.000 (76.20)	0.718 (18.24)	1.400 (35.56)	0.531 (13.49)	0.350 (8.89)
SCNM-42	5	1260	42	4-14	1-4*	1000kcmil-6	4.936 (125.37)	0.968 (24.59)	3.000 (76.20)	0.718 (18.24)	1.750 (44.45)	0.531 (13.49)	

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)

\*\*For non-fused PV string inputs, 30A per string

Each input hole contains a 1/4 - 28 UNF; slotted/square drive screw

Two 5/16-18 UNC x 1/2 screws are included for mounting to insulators (insulators sold separately, consult Customer Care for information)

\*For use with mechanical or compression components; sold separately. NEMA mounting hole configurations

UL/cUL Recognized to UL486A/B, UL File E6207

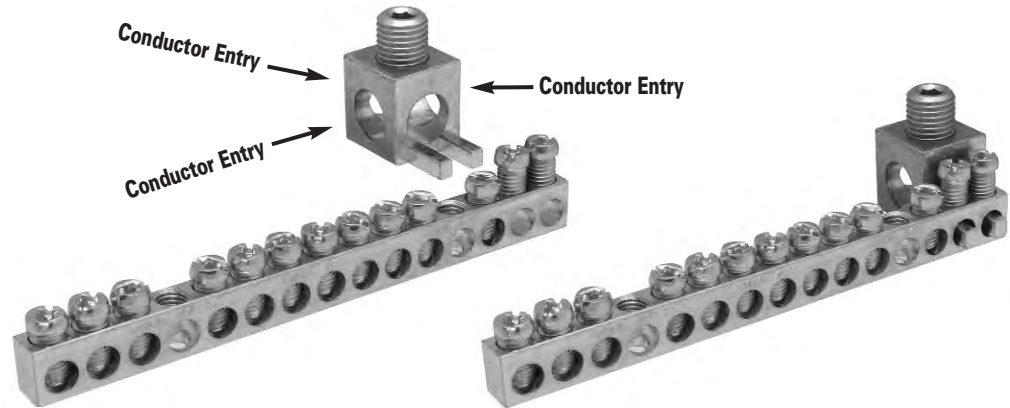
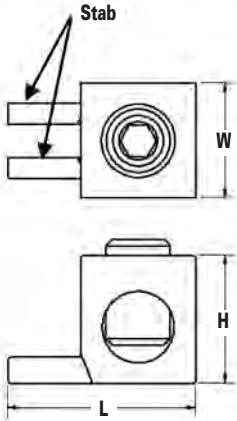
## TYPE NBST

### Features

- Connects a 2/0-14 conductor to a neutral bar
- Seamless stabs
- Conductor entry at 90° or parallel to neutral bar
- Mounts to solar nodes and neutral bars with hole spacing from .300" to .350"
- Hex socket screw included
- Manufactured from high strength aluminum
- Electro-tin plated
- UL 486 A/B and UL 467 Recognized, 90° C

### Benefits

- Enables connection of a larger conductor for application versatility
- Provide dual current path for reliability and cool operation
- Multiple conductor orientation
- For diverse field applications
- Offers higher torque rating for reliability
- Suitable for use with copper or aluminum conductors
- Provides low contact resistance
- For power and grounding applications



Catalog Number	Wire Range	Dimensions - in. (mm)			Hex Size
		L	W	H	
NBST-2/0	2/0-14	1.140 (29.0)	0.700 (17.8)	0.780 (19.8)	3/16

### UL Recognized for use with ILSCO

Neutral Bars	Solar Nodes
NB-350	SCNL
NBAS	SCNM

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)  
DE-OX oxide inhibitor is recommended for all aluminum terminations

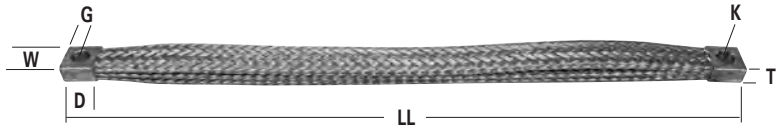
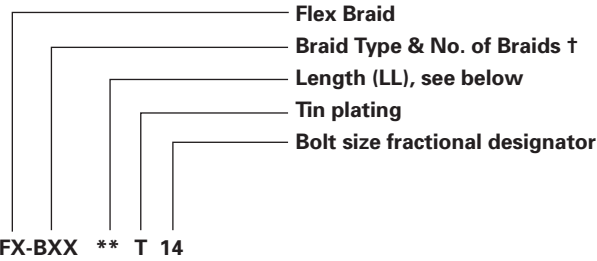
### TYPE FX

#### Features

- Manufactured from pure copper braid
- Electro-tin plated
- Seamless pure copper ferrules
- Ferrules clean cut and precision formed to braid
- Flexible braid

#### Benefits

- Provides superior ground path
- Corrosion resistant
- Low resistance
- Assures permanent low resistance connection
- Compensates for linear expansion, vibration, and other dimensional offset conditions



Catalog Number	Wire Equivalent	Amps	Number of Braids	Dimensions - in (mm)								Mounting Hole Diameter K	Bolt Size - in
				T	W		D		G				
FX-BD**T12	1 AWG	190	1	0.130 (3.3)	1.190 (30.2)	1.190 (30.2)	0.595 (15.1)	0.560 (14.2)	1/2				
FX-BE**T12	3/0 AWG	340	1	0.210 (5.3)	1.250 (31.8)	1.250 (31.8)	0.625 (15.9)	0.560 (14.2)	1/2				
FX-BF**T12	4/0 AWG	375	1	0.280 (7.1)	1.380 (35.1)	1.380 (35.1)	0.690 (17.5)	0.560 (14.2)	1/2				
FX-BG**T12	300 kcmil	510	1	0.364 (9.2)	1.630 (41.4)	1.630 (41.4)	0.815 (20.7)	0.560 (14.2)	1/2				
FX-B2D**T12	154 kcmil	380	2	0.210 (5.3)	1.190 (30.2)	1.190 (30.2)	0.595 (15.1)	0.560 (14.2)	1/2				
FX-B2E**T12	308 kcmil	530	2	0.350 (8.9)	1.250 (31.8)	1.250 (31.8)	0.625 (15.9)	0.560 (14.2)	1/2				
FX-B2F**T12	464 kcmil	600	2	0.380 (9.7)	1.380 (35.1)	1.380 (35.1)	0.690 (17.5)	0.560 (14.2)	1/2				
FX-B2G**T12	600 kcmil	875	2	0.500 (12.7)	1.630 (41.4)	1.630 (41.4)	0.815 (20.7)	0.560 (14.2)	1/2				
FX-B3D**T12	231 kcmil	470	3	0.270 (6.9)	1.190 (30.2)	1.190 (30.2)	0.595 (15.1)	0.560 (14.2)	1/2				
FX-B3E**T12	462 kcmil	700	3	0.580 (14.7)	1.250 (31.8)	1.250 (31.8)	0.625 (15.9)	0.560 (14.2)	1/2				
FX-B3F**T12	696 kcmil	900	3	0.590 (15.0)	1.380 (35.1)	1.380 (35.1)	0.690 (17.5)	0.560 (14.2)	1/2				
FX-B3G**T12	900 kcmil	1000	3	0.690 (17.5)	1.630 (41.4)	1.630 (41.4)	0.815 (20.7)	0.560 (14.2)	1/2				
FX-B4D**T12	308 kcmil	600	4	0.390 (9.9)	1.190 (30.2)	1.190 (30.2)	0.595 (15.1)	0.560 (14.2)	1/2				
FX-B4E**T12	616 kcmil	875	4	0.800 (20.3)	1.250 (31.8)	1.250 (31.8)	0.625 (15.9)	0.560 (14.2)	1/2				
FX-B4F**T12	928 kcmil	1000	4	0.870 (22.1)	1.380 (35.1)	1.380 (35.1)	0.690 (17.5)	0.560 (14.2)	1/2				
FX-B4G**T12	1200 kcmil	1200	4	1.000 (25.4)	1.630 (41.4)	1.630 (41.4)	0.815 (20.7)	0.560 (14.2)	1/2				
FX-BD06T14	1 AWG	190	1	0.130 (3.3)	1.190 (30.2)	1.190 (30.2)	0.595 (15.1)	0.280 (7.1)	1/4				
FX-BD09T14	1 AWG	190	1	0.130 (3.3)	1.190 (30.2)	1.190 (30.2)	0.595 (15.1)	0.280 (7.1)	1/4				
FX-BD10T14	1 AWG	190	1	0.130 (3.3)	1.190 (30.2)	1.190 (30.2)	0.595 (15.1)	0.280 (7.1)	1/4				
FX-BD12T14	1 AWG	190	1	0.130 (3.3)	1.190 (30.2)	1.190 (30.2)	0.595 (15.1)	0.280 (7.1)	1/4				
FX-BD14T14	1 AWG	190	1	0.130 (3.3)	1.190 (30.2)	1.190 (30.2)	0.595 (15.1)	0.280 (7.1)	1/4				
FX-BE06T716	3/0 AWG	340	1	0.210 (5.3)	1.250 (31.8)	1.250 (31.8)	0.625 (15.9)	0.460 (11.7)	7/16				
FX-BE12T716	3/0 AWG	340	1	0.210 (5.3)	1.250 (31.8)	1.250 (31.8)	0.625 (15.9)	0.460 (11.7)	7/16				
FX-BE18T716	3/0 AWG	340	1	0.210 (5.3)	1.250 (31.8)	1.250 (31.8)	0.625 (15.9)	0.460 (11.7)	7/16				
FX-BE12T58	3/0 AWG	340	1	0.210 (5.3)	1.250 (31.8)	1.250 (31.8)	0.625 (15.9)	0.660 (16.8)	5/8				
FX-BE18T58	3/0 AWG	340	1	0.210 (5.3)	1.250 (31.8)	1.250 (31.8)	0.625 (15.9)	0.660 (16.8)	5/8				
FX-BE24T58	3/0 AWG	340	1	0.210 (5.3)	1.250 (31.8)	1.250 (31.8)	0.625 (15.9)	0.660 (16.8)	5/8				
FX-BF06T716	4/0 AWG	375	1	0.280 (7.1)	1.380 (35.1)	1.380 (35.1)	0.690 (17.5)	0.460 (11.7)	7/16				
FX-BF12T716	4/0 AWG	375	1	0.280 (7.1)	1.380 (35.1)	1.380 (35.1)	0.690 (17.5)	0.460 (11.7)	7/16				
FX-BF18T716	4/0 AWG	375	1	0.280 (7.1)	1.380 (35.1)	1.380 (35.1)	0.690 (17.5)	0.460 (11.7)	7/16				
FX-BG06T716	300 kcmil	510	1	0.364 (9.2)	1.630 (41.4)	1.630 (41.4)	0.815 (20.7)	0.460 (11.7)	7/16				
FX-BG08T716	300 kcmil	510	1	0.364 (9.2)	1.630 (41.4)	1.630 (41.4)	0.815 (20.7)	0.460 (11.7)	7/16				
FX-BG12T716	300 kcmil	510	1	0.364 (9.2)	1.630 (41.4)	1.630 (41.4)	0.815 (20.7)	0.460 (11.7)	7/16				

Tested to UL 467, UL File E34440 Amp rating will vary with ambient conditions, orientation of the braid and other service conditions

\*\* Available lengths (LL): 06", 09", 12", 18", 24", 36", 48"

Contact Customer Care for custom lengths, mounting hole requirements and configurations

† Missing numerical value indicates single braid

# Flex Braid Connectors

## Double Mounting Hole

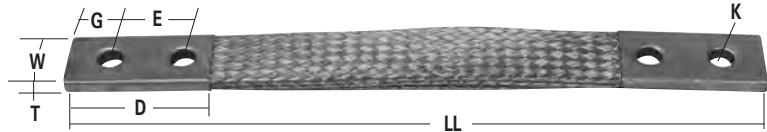
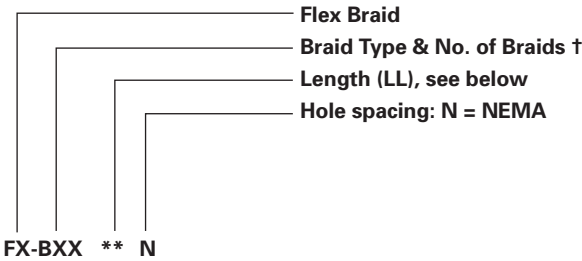
### TYPE FX

#### Features

- Manufactured from pure copper braid
- Electro-tin plated
- Seamless pure copper ferrules
- Ferrules clean cut and precision formed to braid
- Flexible braid

#### Benefits

- Provides superior ground path
- Corrosion resistant
- Low resistance
- Assures permanent low resistance connection
- Compensates for linear expansion, vibration, and other dimensional offset conditions



Catalog Number	Wire Equivalent	Amps	Number of Braids	Dimensions - in (mm)						Mounting Hole Diameter K	Bolt Size - in
				T	W	D	E	G			
FX-BD**	1 AWG	190	1	0.130 (3.3)	1.190 (30.2)	2.500 (63.5)	1.000 (25.4)	0.750 (19.1)	0.410 (10.4)	3/8	
FX-BD**N	1 AWG	190	1	0.130 (3.3)	1.190 (30.2)	3.000 (76.2)	1.750 (44.5)	0.620 (15.7)	0.560 (14.2)	1/2	
FX-BE**	3/0 AWG	340	1	0.210 (5.3)	1.250 (31.8)	2.500 (63.5)	1.000 (25.4)	0.750 (19.1)	0.410 (10.4)	3/8	
FX-BE**N	3/0 AWG	340	1	0.210 (5.3)	1.250 (31.8)	3.000 (76.2)	1.750 (44.5)	0.620 (15.7)	0.560 (14.2)	1/2	
FX-BF**	4/0 AWG	375	1	0.280 (7.1)	1.380 (35.1)	2.500 (63.5)	1.000 (25.4)	0.750 (19.1)	0.410 (10.4)	3/8	
FX-BF**N	4/0 AWG	375	1	0.280 (7.1)	1.380 (35.1)	3.000 (76.2)	1.750 (44.5)	0.620 (15.7)	0.560 (14.2)	1/2	
FX-BG**	300 kcmil	510	1	0.364 (9.2)	1.630 (41.4)	2.500 (63.5)	1.000 (25.4)	0.750 (19.1)	0.410 (10.4)	3/8	
FX-BG**N	300 kcmil	510	1	0.364 (9.2)	1.630 (41.4)	3.000 (76.2)	1.750 (44.5)	0.620 (15.7)	0.560 (14.2)	1/2	
FX-B2D**	154 kcmil	380	2	0.210 (5.3)	1.190 (30.2)	2.500 (63.5)	1.000 (25.4)	0.750 (19.1)	0.410 (10.4)	3/8	
FX-B2D**N	154 kcmil	380	2	0.210 (5.3)	1.190 (30.2)	3.000 (76.2)	1.750 (44.5)	0.620 (15.7)	0.560 (14.2)	1/2	
FX-B2E**	308 kcmil	530	2	0.350 (8.9)	1.250 (31.8)	2.500 (63.5)	1.000 (25.4)	0.750 (19.1)	0.410 (10.4)	3/8	
FX-B2E**N	308 kcmil	530	2	0.350 (8.9)	1.250 (31.8)	3.000 (76.2)	1.750 (44.5)	0.620 (15.7)	0.560 (14.2)	1/2	
FX-B2F**	464 kcmil	600	2	0.380 (9.7)	1.380 (35.1)	2.500 (63.5)	1.000 (25.4)	0.750 (19.1)	0.410 (10.4)	3/8	
FX-B2F**N	464 kcmil	600	2	0.380 (9.7)	1.380 (35.1)	3.000 (76.2)	1.750 (44.5)	0.620 (15.7)	0.560 (14.2)	1/2	
FX-B2G**	600 kcmil	875	2	0.500 (12.7)	1.630 (41.4)	2.500 (63.5)	1.000 (25.4)	0.750 (19.1)	0.410 (10.4)	3/8	
FX-B2G**N	600 kcmil	875	2	0.500 (12.7)	1.630 (41.4)	3.000 (76.2)	1.750 (44.5)	0.620 (15.7)	0.560 (14.2)	1/2	
FX-B3D**	231 kcmil	470	3	0.270 (6.9)	1.190 (30.2)	2.500 (63.5)	1.000 (25.4)	0.750 (19.1)	0.410 (10.4)	3/8	
FX-B3D**N	231 kcmil	470	3	0.270 (6.9)	1.190 (30.2)	3.000 (76.2)	1.750 (44.5)	0.620 (15.7)	0.560 (14.2)	1/2	
FX-B3E**	462 kcmil	700	3	0.580 (14.7)	1.250 (31.8)	2.500 (63.5)	1.000 (25.4)	0.750 (19.1)	0.410 (10.4)	3/8	
FX-B3E**N	462 kcmil	700	3	0.580 (14.7)	1.250 (31.8)	3.000 (76.2)	1.750 (44.5)	0.620 (15.7)	0.560 (14.2)	1/2	
FX-B3F**	696 kcmil	900	3	0.590 (15.0)	1.380 (35.1)	2.500 (63.5)	1.000 (25.4)	0.750 (19.1)	0.410 (10.4)	3/8	
FX-B3F**N	696 kcmil	900	3	0.590 (15.0)	1.380 (35.1)	3.000 (76.2)	1.750 (44.5)	0.620 (15.7)	0.560 (14.2)	1/2	
FX-B3G**	900 kcmil	1000	3	0.690 (17.5)	1.630 (41.4)	2.500 (63.5)	1.000 (25.4)	0.750 (19.1)	0.410 (10.4)	3/8	
FX-B3G**N	900 kcmil	1000	3	0.690 (17.5)	1.630 (41.4)	3.000 (76.2)	1.750 (44.5)	0.620 (15.7)	0.560 (14.2)	1/2	
FX-B4D**	308 kcmil	600	4	0.390 (9.9)	1.190 (30.2)	2.500 (63.5)	1.000 (25.4)	0.750 (19.1)	0.410 (10.4)	3/8	
FX-B4D**N	308 kcmil	600	4	0.390 (9.9)	1.190 (30.2)	3.000 (76.2)	1.750 (44.5)	0.620 (15.7)	0.560 (14.2)	1/2	
FX-B4E**	616 kcmil	875	4	0.800 (20.3)	1.250 (31.8)	2.500 (63.5)	1.000 (25.4)	0.750 (19.1)	0.410 (10.4)	3/8	
FX-B4E**N	616 kcmil	875	4	0.800 (20.3)	1.250 (31.8)	3.000 (76.2)	1.750 (44.5)	0.620 (15.7)	0.560 (14.2)	1/2	
FX-B4F**	928 kcmil	1000	4	0.870 (22.1)	1.380 (35.1)	2.500 (63.5)	1.000 (25.4)	0.750 (19.1)	0.410 (10.4)	3/8	
FX-B4F**N	928 kcmil	1000	4	0.870 (22.1)	1.380 (35.1)	3.000 (76.2)	1.750 (44.5)	0.620 (15.7)	0.560 (14.2)	1/2	
FX-B4G**	1200 kcmil	1200	4	1.000 (25.4)	1.630 (41.4)	2.500 (63.5)	1.000 (25.4)	0.750 (19.1)	0.410 (10.4)	3/8	
FX-B4G**N	1200 kcmil	1200	4	1.000 (25.4)	1.630 (41.4)	3.000 (76.2)	1.750 (44.5)	0.620 (15.7)	0.560 (14.2)	1/2	

Tested to UL 467, UL File E34440

Amp rating will vary with ambient conditions, orientation of the braid and other service conditions

\*\* Available lengths (LL): 12", 18", 24", 36", 48"

Contact Customer Care for custom lengths, mounting hole requirements and configurations

† Missing numerical value indicates single braid

**TYPE  
PEDSS**

**Features**

- Environmentally sealed design
- Encapsulated with high dielectric strength polymer
- Manufactured from high strength aluminum alloy
- Compact design
- Interchangeable wire and screw port plugs
- Cap retention hook
- Available in three circuit configurations
- Wire way seals with pre-marked trim locations
- DE-OX® oxide inhibiting compound optional
- Rated for 600 volts
- Meets or exceeds UL 486D

**Benefits**

- Resists corrosion from moisture
- Touch safe, no taping required
- Suitable for use with copper or aluminum conductors
- Easily accessible in small hand holes
- Seals any entry port of the connector
- Tethered for re-insertion if required
- Application versatility
- Accommodates wire range 1/0-14
- Prevents oxides from forming
- For use in low voltage applications
- Watertight, suitable for direct burial

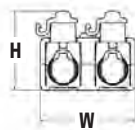
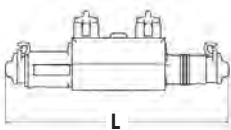


Fig. 1

Fig. 2

Fig. 3

Catalog Number	Figure Number	Wire Range	Number of Ports		Dimensions - in. (mm)					
			Inputs	Outputs	W		H		L	
PED11-1/0SS-Z	1	1/0-14	1	1	0.930	(23.6)	1.925	(48.9)	5.630	(143.0)
PED21-1/0SS-Z	2	1/0-14	2	1	2.190	(55.6)	1.925	(48.9)	4.000	(101.6)
PED22-1/0SS-Z	3	1/0-14	2	2	2.395	(60.8)	2.000	(50.8)	5.630	(143.0)

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)  
 Tested to UL File 486D  
 For DE-OX®, add "P" following the SS (e.g. PED11-1/0SSP-Z)

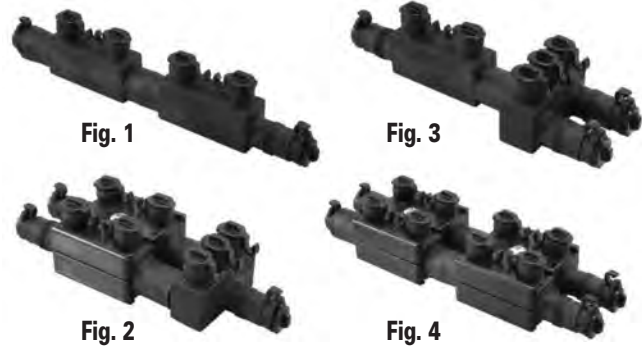
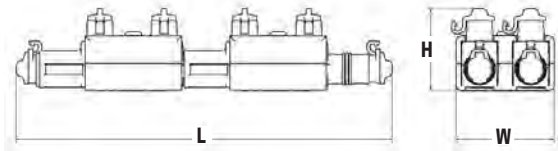
**TYPE  
STLSS**

**Features**

- Environmentally sealed design
- Encapsulated with high dielectric strength polymer
- Manufactured from high strength aluminum alloy
- Precision engineered separation joint
- Fuse capable
- Compact design
- Interchangeable wire and screw port plugs
- Cap retention hook
- Available in four circuit configurations
- Wire way seals with pre-marked trim locations
- DE-OX® oxide inhibiting compound optional
- Rated for 600 volts
- Meets or exceeds UL 486D

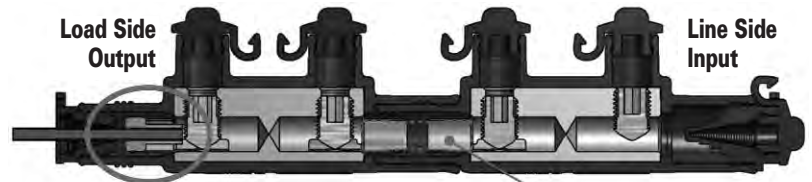
**Benefits**

- Resists corrosion from moisture
- Touch safe, no taping required
- Suitable for use with copper or aluminum conductors
- Safe breakaway on impact, theft deterrent
- Overcurrent protection
- Easily accessible in small hand holes
- Seals any entry port of the connector
- Tethered for re-insertion if required
- Application versatility
- Accommodates wire range 1/0-14
- Prevents oxides from forming
- For use in low voltage applications
- Watertight, suitable for direct burial

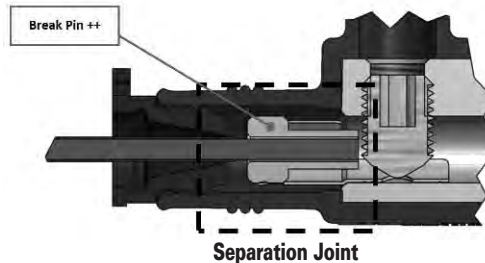


Catalog Number	Figure Number	Load Side Wire Range	Line Side Wire Range	Number of Ports		Dimensions - in. (mm)				
				Inputs	Outputs	W	H	L		
STL11-1/0SS6	1	6	1/0-14	1	1	0.930 (23.6)	1.925 (48.9)	9.130 (231.9)		
STL12-1/0SS6	2	6	1/0-14	1	2	2.395 (60.8)	1.995 (50.7)	7.510 (190.8)		
STL21-1/0SS6	3	6	1/0-14	2	1	2.190 (55.6)	1.925 (48.9)	7.525 (191.1)		
STL22-1/0SS6	4	6	1/0-14	2	2	2.395 (60.8)	1.995 (50.7)	9.130 (231.9)		
STL11-1/0SS8	1	8	1/0-14	1	1	0.930 (23.6)	1.925 (48.9)	9.130 (231.9)		
STL12-1/0SS8	2	8	1/0-14	1	2	2.395 (60.8)	1.995 (50.7)	7.510 (190.8)		
STL21-1/0SS8	3	8	1/0-14	2	1	2.190 (55.6)	1.925 (48.9)	7.525 (191.1)		
STL22-1/0SS8	4	8	1/0-14	2	2	2.395 (60.8)	1.995 (50.7)	9.130 (231.9)		
STL11-1/0SS10	1	10-14	1/0-14	1	1	0.930 (23.6)	1.925 (48.9)	9.130 (231.9)		
STL12-1/0SS10	2	10-14	1/0-14	1	2	2.395 (60.8)	1.995 (50.7)	7.510 (190.8)		
STL21-1/0SS10	3	10-14	1/0-14	2	1	2.190 (55.6)	1.925 (48.9)	7.525 (191.1)		
STL22-1/0SS10	4	10-14	1/0-14	2	2	2.395 (60.8)	1.995 (50.7)	9.130 (231.9)		

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)  
 Tested to UL File 486D  
 For DE-OX®, add "P" to end of catalog number  
 Fuse must be supplied by customer  
 ++ Break pins are supplied with the connector. Also available as Service parts, see below:



++ Break Pin	
Catalog Number	QTY
BP6	3
BP8	3
BP10	3



+ Optional Non-fused Link	
Catalog Number	QTY
NFL3	3
NFL6	6
NFL24	24



**TYPE  
SPD**

**Features**

- Whole house surge protection
- Compact NEMA polycarbonate enclosure
- Blue indicator LED
- 50 kA surge current strength
- Optional electrical noise filter
- UL 1449 Listed with advanced safety features
- Five year warranty

**Benefits**

- Protect residence from electrical surges
- Easily installed outdoors or indoors, non-submersible
- Easy monitoring of surge protection status
- Withstands severe lightning strikes
- Protects valuable electronics & appliances
- Product longevity in the most demanding environments



Fig. 1

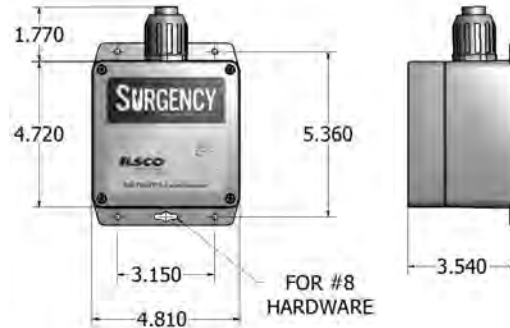


Fig. 2



Catalog Number	Figure Number	Lead Wire Size	Electrical Characteristics					Nominal Discharge Current	Short Circuit Current Rating (SCCR)	UL/CSA Type*	UL Voltage Protection Rating		Conduit Size (in.)
			Phase	System	AC Frequency	Nominal Voltage	Noise Filter†				L-G	L-L	
RE-050-1R1X-A <sup>Δ</sup>	1	12 AWG	1	SPLIT	50/60 Hz	120/240 V	-	20 kA	200 kA	1	600	1200	1/2
RE-050-1R1X-C <sup>Δ</sup>	1	12 AWG	1	SPLIT	50/60 Hz	120/240 V	Yes	20 kA	200 kA	2	700	1200	1/2
RE-050-Y3WX-A	2	10 AWG	3	WYE	50/60 Hz	208Y/120 V	-	20 kA	200 kA	1	600	1000	3/4
RE-050-Y3WX-C	2	10 AWG	3	WYE	50/60 Hz	208Y/120 V	Yes	20 kA	200 kA	2	700	1200	3/4

Tested and Certified:

Type 1 SPDs (no filter) = UL 1449 (4th Edition), CSA C22.2 No. 269.1-14

Type 2 SPDs (filter) = UL 1449, UL 1283, CSA C22.2 No. 269.2-13, CSA C22.2 No. 8-13

Operating temperature range -40 - +150° F

Enclosure is rated to NEMA/UL Type 1, 2, 3, 3R, 3X, 4 and 4X

† Advanced UL 1283 rated electrical noise filter

<sup>Δ</sup> Mounting flange kit included

\* Type 1 = Permanently connected SPDs permitted to be installed between the secondary of the service transformer and the line side of the service equipment overcurrent device, as well as the load side, permitted to be installed without an external overcurrent protective device on the line side of the service entrance

Type 2 = Permanently connected SPDs intended for installation on the load side of the service equipment overcurrent device; including SPDs located at the branch panel

# SURGENCY™ Surge Protective Device - Type 1 Series SE - Service Entrance



## TYPE SPD

### Features

- Commercial & industrial up to 4-mode surge protection
- Compact NEMA polycarbonate enclosure
- Indicator LED, blue for proper operational status, red to replace, optional audible alarm and relay contacts
- Surge current strength up to 100 kA
- UL 1449 Listed with advanced safety features
- Five year warranty

### Benefits

- First line of defense against externally generated surges
- Mounted outdoors or indoors external or internal to any electrical panel, non-submersible
- Easy monitoring of surge protection status
- Withstands severe lightning strikes, 100 kA unit provides extended service life
- Product longevity in the most demanding environments



Fig. 1

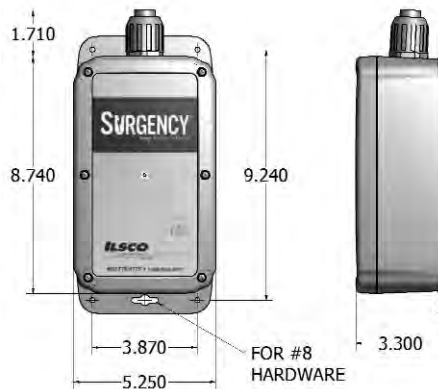


Fig. 2



Catalog Number	Figure Number	Electrical Characteristics				Nominal Voltage	Nominal Discharge Current	Short Circuit Current Rating (SCCR)	UL Voltage Protection Rating (VPR)				Conduit Size (in.)
		Phase	System	Per Mode Surge Current	AC Frequency				L-L	L-N	L-G	N-G	
SE-050-1S1X-*	1	1	SPLIT	50 kA	50/60 Hz	120/240 V	20 kA	200 kA	1200	600	1200	600	3/4
SE-100-1S1X-*	2	1	SPLIT	100 kA	50/60 Hz	120/240 V	20 kA	200 kA	1000	700	1000	700	3/4
SE-050-3Y1X-*	1	3	WYE	50 kA	50/60 Hz	208Y/120 V	20 kA	200 kA	1200	600	1200	600	3/4
SE-100-3Y1X-*	2	3	WYE	100 kA	50/60 Hz	208Y/120 V	20 kA	200 kA	1000	700	1000	700	3/4
SE-050-3Y2X-*	1	3	WYE	50 kA	50/60 Hz	480Y/277 V	20 kA	200 kA	2500	1200	2500	1200	3/4
SE-100-3Y2X-*	2	3	WYE	100 kA	50/60 Hz	480Y/277 V	20 kA	200 kA	2000	1200	2000	1200	3/4
SE-050-3N4X-*	1	3	DELTA	50 kA	50/60 Hz	480 V	20 kA	200 kA	4000	-	1800	-	3/4
SE-100-3N4X-*	2	3	DELTA	100 kA	50/60 Hz	480 V	20 kA	200 kA	4000	-	1800	-	3/4

Tested and Certified:

Type 1 SPDs (no filter) = UL 1449 (4th Edition), CSA C22.2 No. 269.1-14

Operating temperature range -40 to +150° F

Enclosure is rated to NEMA/UL Type 1, 2, 3, 3R, 3X, 4 and 4X

Type 1 = Permanently connected SPDs permitted to be installed between the secondary of the service transformer and the line side of the service equipment overcurrent device, as well as the load side, permitted to be installed without an external overcurrent protective device on the line side of the service entrance

Add on option code to catalog number

Option Code	UL/CSA Type	Indicator LED	Audible Alarm	Dry Relay Contact
A	1	•		
B	1	•	•	•

\* Indicates package and option code - A, B

## TYPE SPD

### Features

- Commercial & industrial up to 4-mode surge protection
- Compact NEMA polycarbonate enclosure
- Indicator LED, blue for proper operational status, red to replace, optional audible alarm and relay contacts
- Surge current strength up to 100 kA
- UL 1283 electrical noise filter
- UL 1449 Listed with advanced safety features
- Five year warranty

### Benefits

- First line of defense against externally generated surges
- Mounted outdoors or indoors external or internal to any electrical panel, non-submersible
- Easy monitoring of surge protection status
- Withstands severe lightning strikes, 100 kA unit provides extended service life
- Protects critical commercial and industrial equipment
- Product longevity in the most demanding environments

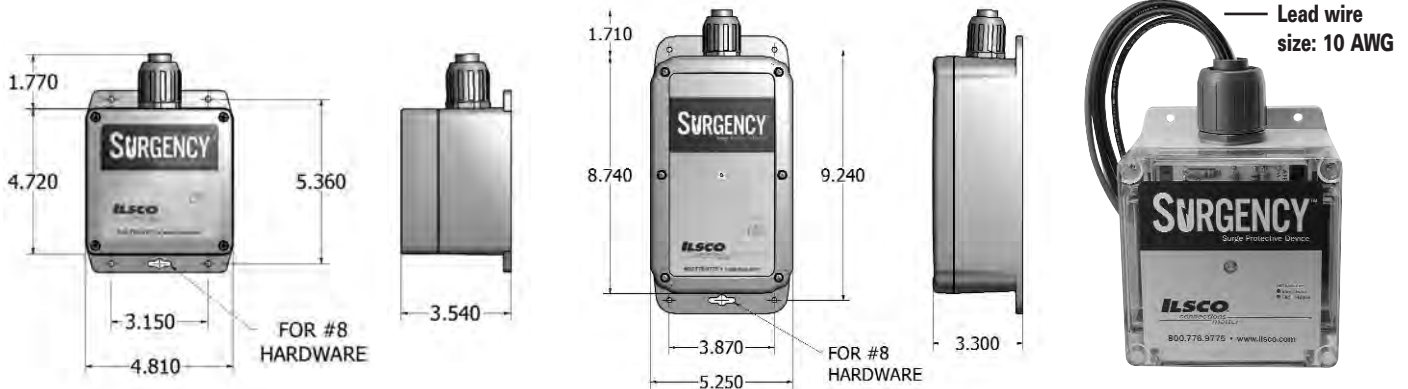


Fig. 1

Fig. 2

Catalog Number	Figure Number	Electrical Characteristics				Nominal Voltage	Nominal Discharge Current	Short Circuit Current Rating (SCCR)	UL Voltage Protection Rating (VPR)				Conduit Size (in.)
		Phase	System	Per Mode Surge Current	AC Frequency				L-L	L-N	L-G	N-G	
SE-050-1S1X-*	1	1	SPLIT	50 kA	50/60 Hz	120/240 V	20 kA	200 kA	1200	700	1200	600	3/4
SE-100-1S1X-*	2	1	SPLIT	100 kA	50/60 Hz	120/240 V	20 kA	200 kA	1200	700	1200	700	3/4
SE-050-3Y1X-*	1	3	WYE	50 kA	50/60 Hz	208Y/120 V	20 kA	200 kA	1200	700	1200	600	3/4
SE-100-3Y1X-*	2	3	WYE	100 kA	50/60 Hz	208Y/120 V	20 kA	200 kA	1200	700	1200	700	3/4
SE-050-3Y2X-*	1	3	WYE	50 kA	50/60 Hz	480Y/277 V	20 kA	200 kA	2500	1200	2500	1200	3/4
SE-100-3Y2X-*	2	3	WYE	100 kA	50/60 Hz	480Y/277 V	20 kA	200 kA	2500	1200	2500	1200	3/4
SE-050-3N4X-*	1	3	DELTA	50 kA	50/60 Hz	480 V	20 kA	200 kA	4000	-	1800	-	3/4
SE-100-3N4X-*	2	3	DELTA	100 kA	50/60 Hz	480 V	20 kA	200 kA	4000	-	1800	-	3/4

Tested and Certified:

Type 2 SPDs (filter) = UL 1449, UL 1283, CSA C22.2 No. 269.2-13, CSA C22.2 No. 8-13

Operating temperature range -40 to +150° F

Enclosure is rated to NEMA/UL Type 1, 2, 3, 3R, 3X, 4 and 4X

Type 2 = Permanently connected SPDs intended for installation on the load side of the service equipment overcurrent device; including SPDs located at the branch panel

Add on option code to catalog number

Option Code	UL/CSA Type	Indicator LED	Audible Alarm	Dry Relay Contact	Electrical Noise Filter†
C	2	•			•
D	2	•	•	•	•

\* Indicates package and option code - C, or D

† Advanced UL 1283 rated electrical noise filter

# SURGENCY<sup>™</sup> Surge Protective Device - Type 1 Series XE - Commercial & Industrial



## TYPE SPD

### Features

- Commercial & industrial surge protection, up to 7 protection modes
- Compact NEMA polycarbonate enclosure
- Indicator LED, blue for proper operational status, red to replace, optional audible alarm and relay contacts
- Surge current strength up to 100 kA
- UL 1449 Listed with advanced safety features
- Ten year warranty

### Benefits

- Protects equipment downstream of electrical service entrance
- Mounted outdoors or indoors external or internal to any electrical panel, non-submersible
- Easy monitoring of surge protection status
- Withstands severe lightning strikes, 100 kA unit provides extended service life
- Product longevity in the most demanding environments



Catalog Number	Electrical Characteristics					Nominal Discharge Current	Short Circuit Current Rating (SCCR)	UL Voltage Protection Rating (VPR)				Conduit Size (in.)
	Phase	System	Per Mode Surge Current	AC Frequency	Nominal Voltage			L-L	L-N	L-G	N-G	
XE-050-1P1X-*	1	SINGLE	50 kA	50/60 Hz	100~140 V	20 kA	200 kA	-	700	700	700	3/4
XE-100-1P1X-*	1	SINGLE	100 kA	50/60 Hz	100~140 V	20 kA	200 kA	-	700	700	700	3/4
XE-050-1P2X-*	1	SINGLE	50 kA	50/60 Hz	220~280 V	20 kA	200 kA	-	1200	1200	1200	3/4
XE-100-1P2X-*	1	SINGLE	100 kA	50/60 Hz	220~280 V	20 kA	200 kA	-	1200	1200	1200	3/4
XE-050-1S1X-*	1	SPLIT	50 kA	50/60 Hz	120/240 V	20 kA	200 kA	1000	700	700	700	3/4
XE-100-1S1X-*	1	SPLIT	100 kA	50/60 Hz	120/240 V	20 kA	200 kA	1000	700	700	700	3/4
XE-050-3Y1X-*	3	WYE	50 kA	50/60 Hz	208Y/120 V	20 kA	200 kA	1000	700	700	700	3/4
XE-100-3Y1X-*	3	WYE	100 kA	50/60 Hz	208Y/120 V	20 kA	200 kA	1000	700	700	700	3/4
XE-050-3Y2X-*	3	WYE	50 kA	50/60 Hz	480Y/277 V	20 kA	200 kA	2000	1200	1200	1200	3/4
XE-100-3Y2X-*	3	WYE	100 kA	50/60 Hz	480Y/277 V	20 kA	200 kA	2000	1200	1200	1200	3/4
XE-050-3Y3X-*	3	WYE	50 kA	50/60 Hz	600Y/347 V	20 kA	200 kA	3000	1500	1500	1500	3/4
XE-100-3Y3X-*	3	WYE	100 kA	50/60 Hz	600Y/347 V	20 kA	200 kA	3000	1500	1500	1500	3/4
XE-050-3D1X-*	3	HI-LEG DELTA	50 kA	50/60 Hz	240D/120 V	20 kA	200 kA	1200/1800	700/1200	700/1200	700	3/4
XE-100-3D1X-*	3	HI-LEG DELTA	100 kA	50/60 Hz	240D/120 V	20 kA	200 kA	1200/1800	700/1200	700/1200	700	3/4
XE-050-3N4X-*	3	DELTA	50 kA	50/60 Hz	480 V	20 kA	200 kA	1800	-	1800	-	3/4
XE-100-3N4X-*	3	DELTA	100 kA	50/60 Hz	480 V	20 kA	200 kA	1800	-	1800	-	3/4
XE-050-3N6X-*	3	DELTA	50 kA	50/60 Hz	600 V	20 kA	200 kA	3000	-	3000	-	3/4
XE-100-3N6X-*	3	DELTA	100 kA	50/60 Hz	600 V	20 kA	200 kA	3000	-	3000	-	3/4

Tested and Certified:  
Type 1 SPDs (no filter) = UL 1449 (4th Edition), CSA C22.2 No. 269.1-14

Operating temperature range -40 to +150° F

Enclosure is rated to NEMA/UL Type 1, 2, 3, 3R, 3X, 4 and 4X

Type 1 = Permanently connected SPDs permitted to be installed between the secondary of the service transformer and the line side of the service equipment overcurrent device, as well as the load side, permitted to be installed without an external overcurrent protective device on the line side of the service entrance

Add on option code to catalog number

Option Code	UL/CSA Type	Indicator LED	Audible Alarm	Dry Relay Contact
A	1	•		
B	1	•	•	•

\*Indicates Package and option code- A, B

## TYPE SPD

### Features

- Commercial & industrial surge protection, up to 7 protection modes
- Compact NEMA polycarbonate enclosure
- Indicator LED, blue for proper operational status, red to replace, optional audible alarm and relay contacts
- Surge current strength up to 100 kA
- UL 1283 electrical noise filter
- UL 1449 Listed with advanced safety features
- Ten year warranty

### Benefits

- Protects equipment downstream of electrical service entrance
- Mounted outdoors or indoors external or internal to any electrical panel, non-submersible
- Easy monitoring of surge protection status
- Withstands severe lightning strikes, 100 kA unit provides extended service life
- Protects critical commercial and industrial equipment
- Product longevity in the most demanding environments



Catalog Number	Electrical Characteristics					Nominal Discharge Current	Short Circuit Current Rating (SCCR)	UL Voltage Protection Rating (VPR)				Conduit Size (in.)
	Phase	System	Per Mode Surge Current	AC Frequency	Nominal Voltage			L-L	L-N	L-G	N-G	
XE-050-1P1X-*	1	SINGLE	50 kA	50/60 Hz	100~140 V	20 kA	200 kA	-	700	700	700	3/4
XE-100-1P1X-*	1	SINGLE	100 kA	50/60 Hz	100~140 V	20 kA	200 kA	-	700	700	700	3/4
XE-050-1P2X-*	1	SINGLE	50 kA	50/60 Hz	220~280 V	20 kA	200 kA	-	1200	1200	1200	3/4
XE-100-1P2X-*	1	SINGLE	100 kA	50/60 Hz	220~280 V	20 kA	200 kA	-	1200	1200	1200	3/4
XE-050-1S1X-*	1	SPLIT	50 kA	50/60 Hz	120/240 V	20 kA	200 kA	1200	700	700	700	3/4
XE-100-1S1X-*	1	SPLIT	100 kA	50/60 Hz	120/240 V	20 kA	200 kA	1200	700	700	700	3/4
XE-050-3Y1X-*	3	WYE	50 kA	50/60 Hz	208Y/120 V	20 kA	200 kA	1200	700	700	700	3/4
XE-100-3Y1X-*	3	WYE	100 kA	50/60 Hz	208Y/120 V	20 kA	200 kA	1200	700	700	700	3/4
XE-050-3Y2X-*	3	WYE	50 kA	50/60 Hz	480Y/277 V	20 kA	200 kA	2500	1200	1200	1200	3/4
XE-100-3Y2X-*	3	WYE	100 kA	50/60 Hz	480Y/277 V	20 kA	200 kA	2500	1200	1200	1200	3/4
XE-050-3D1X-*	3	HI-LEG DELTA	50 kA	50/60 Hz	240D/120 V	20 kA	200 kA	1200/2000	800/1200	700/1200	700	3/4
XE-100-3D1X-*	3	HI-LEG DELTA	100 kA	50/60 Hz	240D/120 V	20 kA	200 kA	1200/2000	800/1200	700/1200	700	3/4
XE-050-3N4X-*	3	DELTA	50 kA	50/60 Hz	480 V	20 kA	200 kA	2000	-	1800	-	3/4
XE-100-3N4X-*	3	DELTA	100 kA	50/60 Hz	480 V	20 kA	200 kA	2000	-	1800	-	3/4

Tested and Certified:  
Type 2 SPDs (filter) = UL 1449, UL 1283, CSA C22.2 No. 269.2-13, CSA C22.2 No. 8-13

Operating temperature range -40 to +150° F

Enclosure is rated to NEMA/UL Type 1, 2, 3, 3R, 3X, 4 and 4X

Type 2 = Permanently connected SPDs intended for installation on the load side of the service equipment overcurrent device; including SPDs located at the branch panel

Add on option code to catalog number

Option Code	UL/CSA Type	Indicator LED	Audible Alarm	Dry Relay Contact	Electrical Noise Filter‡
C	2	•			•
D	2	•	•	•	•

\*Indicates Package and option code- C or D

‡ Advanced UL 1283 rated electrical noise filter

# Notes



